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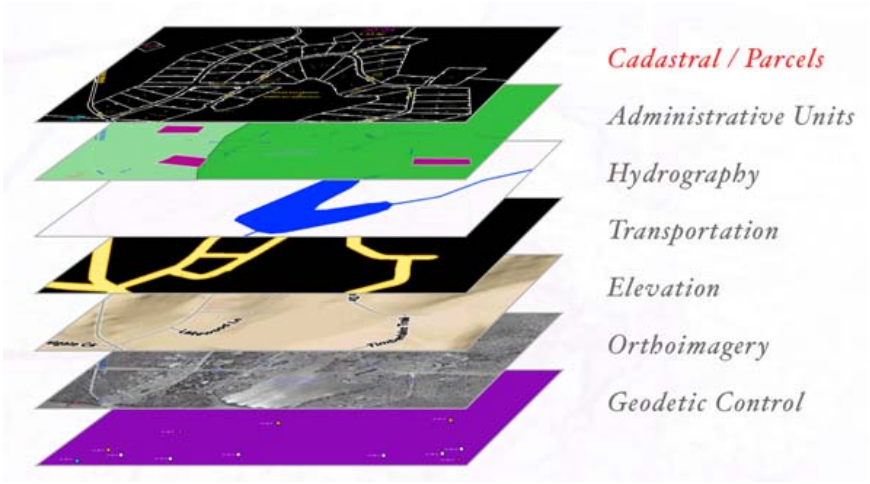
Mr. Chairman, members of the Subcommittee, it is my privilege to testify before the subcommittee on behalf of Smart Data Strategies, Inc, a woman owned enterprise established in 1989.

As the owner of a small geospatial business with many government clients, I have seen the geospatial market mature, both technologically and professionally. The introduction of Google Earth and Microsoft Virtual Earth and the disasters of 9/11 and Hurricane Katrina have all had a significant impact on the rapid adoption and application of location based technologies. The geospatial market is expanding into every area of business through the enhancement of visualization and analytical capabilities. Any database with an address has the ability to be georeferenced to a location on the earth. The use of this decision support technology has been identified as critical to all levels of government. While significant milestones have been accomplished by federal agencies, such as the creation of the FGDC and the concept of the National Spatial Data Infrastructure (NSDI), there is still much to do in order to complete these initiatives. All levels of government (local, state, federal, tribal) spend millions of dollars each year for single purpose geospatial data collection. One of the missing components of making the NSDI a reality is ***a model and governance plan for data sharing and geospatial coordination***. By comparison, most industrialized nations throughout Europe, Asia, and Latin America already have a coordinated national geospatial database with many of them being funded by U.S. tax dollars through the World Bank. The US has the intellectual capital and the technology necessary to create the most accurate geospatial database in the world by coordinating efforts and funding.

Created in 1994 through Executive order 12906, the NSDI defined seven base framework layers as critical information that needed to be centralized. These include hydrography, elevation, cadastral, digital orthoimagery, governmental units, transportation, and geodetic control layers. The vision of the FGDC in creation of the NSDI was designed by thought leaders throughout the geospatial community. Each layer has a defined set of standards and a lead agency responsible for that particular layer.



We have spent years and countless hours with some of the brightest people in the geospatial profession defining what the framework should be as well as the standards associated with each layer. While that is good in concept, it has not been carried out in practicality. After 14 years, the framework layers are still incomplete. While I won't speak to every layer, I will draw some parallels to all layers using the parcel layer as an example of failed coordination and a lack of standardization.

1. The parcel layer is collected at a local level primarily for tax purposes. This means that each local jurisdiction has the ability to define their own data standard based on their unique needs. The end result is 3200 plus puzzle pieces that don't quite fit together. While millions of dollars are spent on the creation and maintenance of this data at the local level, the investments are not being realized at the federal level due to a lack of coordination.

2. The Bureau of Land Management (BLM) has been assigned the parcel layer (cadastral layer), however it is not part of BLM's core mission to collect parcel information for the entire country. They manage only the property owned by the U.S.

3. Appropriate accuracy levels must be considered as part of standardization. The parcel layer is the most detailed and requires a higher level of accuracy. As an example, the USGS quad maps are at an accuracy of plus or minus 30-40 feet depending on the terrain. Now imagine if your property lines were at the same accuracy level, it's obvious that you and your neighbors may have a few issues with that.

Similar issues exist for each layer. If the NSDI is to be a reality we need to provide each lead agency the proper funding, governance structure, and coordination authority to move beyond the development of content standards into data creation, implementation, and maintenance. This should be accomplished in coordination with the private sector which has the resources and expertise to partner with government agencies to complete the framework layers.

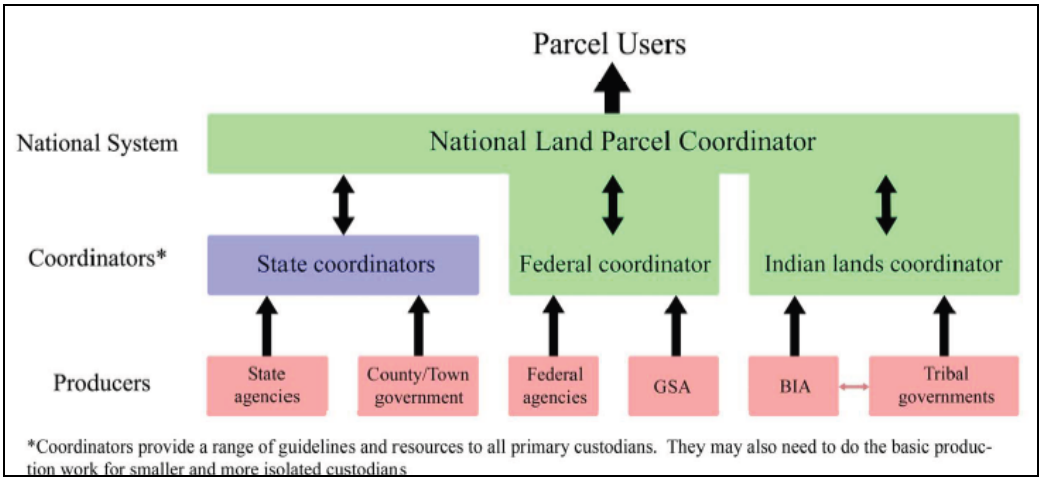
An example of how this can work has been presented by the National Research Council's study National Land Parcel Data: A Vision for the Future. These recommendations define a strategy for developing sustained coordination between government agencies and stakeholders to create and maintain the parcel layer. While these are specific to the parcel layer, they can serve as a road map to complete all seven framework layers. The recommendations are as follows:

1. In order to achieve nationally integrated land parcel data, there should be both a federal land parcel coordinator and a national land parcel coordinator. A panel should be established to determine whether BLM has the necessary and sufficient authority and capacity to serve as the federal and/or national land parcel coordinator, and if not, either it should be given the authority and resources, or some other agency should be named. The panel should conduct a review of BLM's existing stewardship responsibilities for cadastral and federal land ownership status under OMB Circular A-16, as well as its current legislative authorities and budget priorities.

2. As part of the Geospatial Line of Business process, the FGDC should identify the role of parcel data in the collection and maintenance of the following data themes: Buildings and Facilities, Cultural Resources, Governmental Units, and Housing.

3. The Federal Land Parcel Coordinator should coordinate the development and maintenance of a single, comprehensive, and authoritative geographically referenced database for land parcels managed by the

federal government, including public lands. This database should include the ownership, area, and use of all federally managed lands. (H.R. 1520, the Federal Land Asset Inventory Reform Act of 2009)



4. The National Land Parcel Coordinator should develop and oversee a land parcel data business plan for the nation. This plan should serve as the basis for evaluation of the program and as a model for state and local governments. Metrics should be based on the FGDC Parcel Management Program Business Plan Template.

5. The Office of the Special Trustee for Tribal lands should establish an Indian Lands Parcel Coordinator who would manage a program to coordinate and fund the development and maintenance of a geographically referenced database for Indian trust parcels. The data should then be made available to the National Land Parcel Coordinator to be integrated with national land parcel data.

6. Congress and the Bureau of the Census should explore potential policy options, including modifications to Title 13, that would allow its digital data on building addresses and their geographical coordinates to be placed in the public domain while also maintaining important privacy protections. If publicly available, these street addresses and coordinates could be used to assist in the development of parcel data in areas where parcel data sets do not exist.

7. The National Land Parcel Coordinator should embrace the Fifty States Initiative and require that every state formally establish a state parcel coordinator. State coordinators should develop a parcel data business plan and manage the relationships among all levels of government involved in parcel production. The plan and program should achieve comprehensive border-to-border parcel coverage for all public and privately owned property within the state. The state parcel coordinator should either work with the state office responsible for the Census Bureau's Boundary and Annexation program or with local government offices if a statewide program does not exist.

8. The National Land Parcel Coordinator should develop a plan for a sustainable and equitable intergovernmental funding program for the development and maintenance of parcel data. The plan must provide financial incentives to local governments that will produce and maintain the majority of the parcel data. Many of the funds for this program should come from existing federal programs that require parcel data; however, new funding will be required to establish an initial baseline, integrate the data, and make them available through a web interface.

9. To participate in federal geospatial programs such as federal collection and dissemination of orthoimagery, a local or state government should be required to make the parcel geometry and

limited set of attributes needed for the national land parcel data system available in the public domain. Further, in order to be eligible to receive federal funds that are directly associated with property, such as for disaster relief or community development assistance, digital land parcel data necessary to effectively administer the program should be made available by local and state governments.

Of these nine recommendations, only recommendation number three has pending legislation. On March 16th, 2009 Representatives Kind (D-WI) and Bishop (R-UT) introduced H.R. 1520, the Federal Land Asset Inventory Reform (FLAIR) Act of 2009. This legislation called for the federal government to act on the recommendations by the Government Accountability Office and the National Research Council to create an inventory of all federally owned properties. The current status of existing inventories of federal properties is known to be unacceptable. They are incomplete, outdated, and inaccurate thus resulting in excess and underutilized property, deteriorating buildings, and the continuation of costly accounting and leasing errors. The FLAIR Act will only impact the current status of the federal governments' effort to properly inventory property if government agencies agree to coordinate geospatial data management efforts.

If the government decides to coordinate efforts and complete the NSDI, the available data and potential combinations of data would provide numerous opportunities for research, strategic planning, and ongoing data accuracy efforts and utilization initiatives. For example, the following results were identified as potential benefits of a national parcel layer to the federal government in the 1983 and 2007 National Research Council studies:

- Provides a flow of standardized data for updating federal maps and statistics, e.g., for the federal censuses
- Provides a database for monitoring objects of national concern, e.g., agricultural land use and foreign ownership of U.S. real estate
- Provides a reliable record of the locations of federal ownerships or other interests in land
- Provides standardized records for managing federal assistance to local programs such as housing, community development, and historic preservation

In addition to benefitting the federal government, a completed national parcel layer would provide long reaching benefits to other jurisdictions and stakeholders.

Potential Benefits to Local Governments

- Assures that the best available data are used in each public transaction
- Avoids conflicts among land records of different public offices
- Improves accuracy of real-property assessments
- Provides base maps for local planning and preliminary engineering studies
- Provides a standardized data base for neighborhood, municipal, county, or regional development plans
- Avoids costs of maintaining separate map systems and land-data files
- Encourages coordination among separate map systems affecting land
- Improves public attitudes toward administration of local government programs

Potential Benefits to State Governments

- Provides accurate inventories of natural assets
- Provides accurate locational references for administration of state regulations such as pollution controls
- Accurately locates state ownership or other interests in land
- Provides a standardized database for management of public lands

- Provides large-scale base maps for siting studies
- Simplifies coordination among state and local offices

Potential Benefits to Private Firms

- Produces accurate inventories of land parcels, available as a public record
- Produces standard, large-scale maps that can be used for planning, engineering, or routing studies
- Speeds administration of public regulations

Potential Benefits to Individuals

- Provides faster access to records affecting individual rights, especially land title
- Clarifies the boundaries of areas restricted by zoning, wetland restrictions, pollution controls, or other user controls
- Produces accurate maps that can be used for resolving private interests in the land
- Reduces costs of public utilities by replacing present duplicative base-mapping programs
- Improves efficiency of tax-supported government services as described earlier in this table

Currently, there exist numerous reports, analyses, and studies that endorse coordination at a national level. Of particular note are the following studies:

The Need for a Multipurpose Cadastre (1980) recommended a nationwide land parcel system with strong coordination from the federal government.

Toward a Coordinated Spatial Data Infrastructure for the Nation (1993) helped define the National Spatial Data Infrastructure (NSDI) which identified the parcel layer as one of seven critical layers.

National Land Parcel Data: A Vision for the future (2007) conducted by the National Research Council reviewed the 1980 report as well as the current status parcel data in the United States, concluding that a national property database is necessary, feasible, and affordable.

Land Parcel Data for the Mortgage Crisis: Results of the Stakeholders Meeting (2009) concluded that there are three key recommendations that could improve the ability to track and monitor the status and progress of mortgage and property value conditions in the U.S: 1. Add the local Parcel ID to the Home Mortgage Disclosure Act (HMDA) data, 2. Develop a Parcel Early Warning System, 3. Complete the standardization and availability of parcel data nationwide.

Mr. Chairman, 30 years of reports and research have called for the parcel layer yet it remains unfunded and incomplete. The problem is not technical, it is political and institutional. While FedEx can track the location of millions of packages per day moving around the world, the federal government does not track the location of land, and it is stationary. The ability and privilege of land ownership is an important characteristic of any free and democratic society; it's why we refer to it as the *American Dream*. The current mortgage crisis leaves no doubt that land ownership and the associated rights, interests, and value of property is foundational to our entire socioeconomic system. While the federal government has identified numerous needs for parcel data such as efficient emergency preparedness and response, disease tracking, agricultural management and land use, community development and zoning, energy and resource development, there still is only sporadic use due to the lack of availability and accessibility of usable parcel related data as a result of failed coordination between local, state, federal, and tribal agencies. I urge congress to accept the research and enact legislation to provide funding and agency coordination to complete the parcel layer and all other NSDI framework layers.