13.0   Conclusions

The NSDI, under the auspices of the FGDC, holds out the promise through its policies, standards, and activities, to establish more comprehensive, integrated, and available geospatial data than has ever existed. The NSDI is a national resource capable of leveraging economic activity well beyond what the NSDI framers ever envisioned. The private sector is an important stakeholder in this national initiative, and should be both an important contributor as well as a significant beneficiary.

This report attempts to better understand private sector drivers (motivators), and puts forth a strategy to address the present perception of low private sector participation in the NSDI initiative. Further, the report identifies concerns of the private sector with the NSDI that limit private sector participation.

The evolution of satellite navigation systems developed and deployed for national defense have been made available for civilian purposes. Remote sensing technologies, long the domain of the U.S. defense intelligence community, have been developed for commercial purposes since the early 1990's. And, geographic information systems have evolved with information technology, database technology, display technology, and IT architecture advances.

Early on, it was recognized that data to support the evolution of geographical information systems (GIS) accounted for as much as 80% to 90% of the cost of developing and deploying geospatial technologies for decision support. It was no surprise that spatial databases were expensive to create and, equally or more so, expensive to maintain.

The Federal sector recognized the need in the early 1990's to coordinate spatial data development and usage. The realization that significant benefits, and cost savings, could be realized though a national effort to address the need to coordinate and share spatial data lead to the creation of the National Spatial Data Infrastructure (NSDI).

President Clinton, in 1994, directed the Executive Branch of the Federal government to develop, in cooperation with state, local, tribal governments, and the private sector, a coordinated national spatial data infrastructure.

Since the NSDI's inception, private sector consultation and advice has been sought to aid in the development and implementation of the objectives of the President's order.

In the Fall of 1999, the Spatial Technologies Industry Association (STIA) proposed to the FGDC to examine the level of private sector cooperation in the development of the NSDI.

As a private sector trade association, STIA was interested in exploring why private industry was reluctant to participate in the development of the NSDI. Was it because of lack of awareness of the program? Was it due to a lack of understanding of the benefits that would accrue to private sector participating companies? Or was it due to other factors such as industry input into the NSDI process or the differences between private sector economic drivers and public sector policy drivers?

In this Phase I Project and Report, we have examined 1) the expectations of the Executive Branch for private sector participation in the NSDI, 2) economic and business factors that drive private sector business decisions, and 3) potential actions or suggestions to increase private sector awareness and participation in the NSDI.

The STIA is excited about the opportunities that will evolve and believes that the NSDI is potentially a critical national enabler that could assist with significant economic expansion over the next decade. A robust and successful NSDI, focused on the needs of both the public and private sectors, could accelerate this economic expansion. For these reasons, the STIA is pleased to be able to contribute to this important national program.

In summary, the drivers of private sector participation and the conclusions put forth in this report are:

Drivers of Private Sector Participation in the NSDI
• *Private sector participation in the NSDI must consider firms private sector drivers*
• *Economic: increased revenues and profits; decreased costs*
• *Competitive Advantage: uniqueness, security, and privacy*
• *Time-to-market: completeness, availability, ease of use*
• *Quality: accuracy and completeness*
• *Cultural: Expectations of geospatial providers and end-users*

Conclusions
• *NSDI must address private sector interests and accommodate the private sector's role*
• *NSDI must complement the private sector's activities*
• *NSDI lacks a business plan focused on action not process*
• *Multiple NSDI and NSDI related activities at the Federal level confuse the private sector marketplace*
• *Knowledge of NSDI offerings and advantages to the private sector are*

lacking
• *The NSDI must address demand factors in the marketplace – both public sector and private sector*
• *Security and availability of information needs to be improved*
• *NSDI must address scale and accuracy of data*

Recommendations
• *Redefine the NSDI articulating public sector responsibilities and the private sector's role*
• *Evaluate the existing NSDI framework program and develop a plan for building and maintaining the framework layers*
• *Examine OMB oversight role to ensure federal programs sponsored by federal agencies do not overlap with the NSDI initiative*
• *FGDC needs to better understand private sector needs and how the public and private sectors can become complementary*
• *FGDC should refocus its efforts on coordinating federal spatial data activities with expanded liaison with the private sector*
• *Convene a private sector advisory group to tackle the higher level issues outlined in section 12.3*
• *Seek private sector consultations and input on NSDI initiatives such as the GeoData Alliance, Aurora Partnership, and the I Teams Initiative*
• *Develop outreach to private sector targeted toward specific industry sectors*
• *Establish a NSDI Private Sector Advocate*
• *Build and maintain a database of companies that make up the spatial technologies industry and end-user community to better understand their needs from the NSDI*
• *Use this database for marketing activities designed to increase awareness and participation*