

# The I-Team Initiative: Innovating Organizational and Financial Infrastructure for the NSDI (the United States National Spatial Data Infrastructure)

An Abstract submitted by Bruce B. Cahan (President, Urban Logic) to the Global Spatial Data Infrastructure 5 Conference, being held in Cartagena, Columbia

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*Where* you are has everything to do with *where* you want to go and how to get *there*. Governments, businesses, NGOs and the private sector use location to see people, environment, buildings, services and budgets in their neighborhood context, and to put change where it will do the most good. GPS receivers in cell phones, Web-Mapping and remote sensed environmental and traffic data are providing streams of location-based data about our world.

Harnessing this data into information for citizen, consumer, business and government decisions requires vision at the technical, organizational and financial levels. First is the technical vision for the multiple sources of data to use common language in building and transferring their data. Interoperable software means nothing without intelligent data: data that anticipates how users will combine it with data from other sources. For a decade, the Federal Geographic Data Committee (**FGDC**) has stewarded the technical specifications and the technology and community demonstrations for the National Spatial Data Infrastructure (**NSDI**). The NSDI exists as a network of clearinghouses (like card catalogs) where interoperable spatial data can be retrieved from public and private sources. Yet the US NSDI has lacked a comprehensive set of financial and institutional incentives to take it from a series of technical standards to a mainstream information foundation for e-business, e-government and digital democracy.

With the technology and technical challenges well framed and advancing through public-private collaborative interoperability design processes, it's time to innovate the organizational and financial mechanisms that will support a sustainable, robust NSDI. The Office of Management and Budget (**OMB**) administers much of the federal government's laws relating to information technology capital planning, regulatory reform, paperwork reduction and other aspects of the economies of scale achievable through the NSDI. The I-Team Geospatial Information Initiative (**I-Team Initiative**) is a joint project of FGDC, OMB, the Council for Excellence in Government (**CEG**), Urban Logic, TIE and other strategic partners to foster open, decentralized development of the NSDI and to achieve more efficient government and business operations.

Instead of top-down mandates, the Initiative relies on locally formed, interdependent information consortia (**I-Teams**) to steward a plan for spatial data infrastructure that serves the plan's state, region and other natural cluster of users according to national strategies, interoperability specifications, and data standards. The planning by the I-Teams is highly leveraged and efficient. Three other teams collaborate with the I-Teams. The four teams are interdependent, and their focus on spatial data infrastructure as capital assets reduces the implementation delays and technology risks

and increases the resources and effectiveness of intergovernmental and e-government programs that depend on spatial data. A **Federal Partners Team** composed of senior Federal officials will review the I-Team plans so that inter-agency (horizontal) and intergovernmental (vertical) uses for spatial data can be identified and pooled. A sustainable source of reliable, federally-qualified data makes federal collaboration with local efforts more timely and effective. Examples include: In Texas to deal with economic development, human, water quality and environmental management. In North Carolina to deal with hurricane and flood mitigation. In New York City to deal with public health (West Nile Virus), mass transit and economic development challenges. Aligning spatial data investments and the business case and financial mechanisms to improve those alignments is stewarded by the **Financial Solutions Team**. And to make sure that the “biggest bang for the buck” technologies are demanded by and available to I-Teams, an open **Technology Advisory Group** represents the spatial technology industries, letting them improve the price: performance ratio for the I-Teams and Federal Partners Team.

Summing up, the I-Team model is bottom-up and locally driven. I-Teams analyze the driving issues and need for data. They use perennial federal, state and local data mandates to drive agreement on multi-year capital asset plans for spatial data information services. They decide which government body or private entity should collect and maintain it, in the most cost-effective manner and at the most needed scale and resolution consistent with public policy goals (public access, privacy, security and data reliability). They use the Federal Partners Team as a "one-stop" approval process to get all affected federal agencies on board according to data standards that promote the NSDI. Data is collected once and shared many times, leading to improved analysis and decision making at all levels of government, including for such complex issues as emergency management, drug interdiction, economic development, national security, health, and public safety. By aligning resources, I-Teams not only will reduce costs significantly, but also will help build the business case for financing public sector GIS investment as a long-term capital asset instead of an annual operational expense.

For more information visit <http://www.fgdc.gov/I-Team.html>, or contact Bruce Cahan at [bcahan@urbanlogic.org](mailto:bcahan@urbanlogic.org) or Ronald Matzner at [rmatzner@fgdc.gov](mailto:rmatzner@fgdc.gov).

#### Bibliography

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