ADDRESSING NATIONAL PRIORITIES THROUGH GEOSPATIAL TECHNOLOGIES
Recommendations for the 2017 Presidential Transition

National Geospatial Advisory Committee
December 2016

Geospatial programs, technologies, and data are essential to the success of many of the new Administration's priorities—including the rebuilding of vital infrastructure. The National Geospatial Advisory Committee (NGAC) urges the Federal Geographic Data Committee (FGDC) and the Administration to commit to a strategic investment in geospatial programs and technologies to underpin and support the health, safety, security, and efficiency of the Nation. "Where" matters - everything happens somewhere. Geospatial technologies tie the "where" together in a way that makes the relationships between location and the information about that place understandable, usable, and powerful. The use of geospatial data and tools enable countless government programs, services, and economic activities to run more efficiently and effectively. These capabilities are an increasingly vital part of everyone's daily lives.

Geospatial Technology and Data at Work

Geospatial technology enables the integration of disparate information from many sources to support decision making across broad sectors of the economy. The growing geospatial industry acts as an enabler for other technologies, including location applications on mobile devices, unmanned aircraft systems, autonomous vehicles, geospatial intelligence, and the Internet of Things. Geospatial technology is a critical component of our Nation's digital infrastructure. This deep integration of location into the day-to-day lives of citizens drives economic growth throughout the country and creates high-paying jobs. The Federal government, working in partnership with state and local governments, tribal nations, and the private sector has the opportunity to solidify a truly national geospatial infrastructure in order to ensure our country's competitive edge and serve the citizens of the United States.

Geospatial technology and data provide base-level map information with which other topic-specific data can be integrated, including topography, boundaries, road and river networks, and demographics. By combining base data with specific location-based information, citizens are handed valuable tools to make informed decisions using powerful mapping applications such as visualizing the weather, analyzing transportation networks, and understanding areas of potential economic growth.

Geospatial technology and data allow government at all levels to be more efficient and effective. For example, policymakers are provided tools to monitor conditions associated with the outbreak of the Zika virus and may view predictive models that anticipate its spread from any given occurrence. Interactive flood modeling allows decision makers to more accurately identify populations at risk for flooding due to rising waters from hurricanes or other storm events. Inundation mapping using near real-time data streams allows emergency managers to direct emergency responders to appropriate trouble spots and head off life-threatening situations. Additionally, scientific analysis of environmental impacts supports the adoption of sustainable practices, such as increasing community resilience to severe weather, and adapting food production methods to reduce drought impacts and ensure sustainable food production and food security for all citizens.

Jobs using geospatial technology are growing at an astonishing rate. The Boston Consulting Group in 2012 estimated that the United States geospatial industry employs at least 500,000 people with expected job growth

from 2010 through 2020 at 16% to 35%.[1] These jobs pay well, are highly technical in nature, and are part of the information economy – the type of good jobs that create a stable, robust, and innovative workforce for American workers. Furthermore, the Geospatial Information & Technology Association (GITA) notes that the geospatial market is growing at a rate of 35% a year with 100% expansion per year in the commercial subsection of that market.[2]

A strong geospatial infrastructure allows leaders across our country to address national and international priorities. This infrastructure is a public good that requires attention and resources. The United States is a worldwide leader in the geospatial sector, both in the commercial arena and in the government's creation and stewardship of data and infrastructure. Only through continued focus on this increasingly important sector will we continue to stay at the forefront of this technology that impacts the lives of every American on a daily basis. The Federal government must be willing to lead and continue to invest in this critical piece of the nation's infrastructure.

What can the Federal Government do?

- **Fund and support the development of critical national datasets.** Efforts are currently underway that will create and support a more robust geospatial infrastructure. This investment will have a national impact far beyond the Federal sphere. We urge the Administration to support efforts to establish a National Address Database, implement the 3D Elevation Program, and develop a national imagery program.

- **Update the national geospatial policy framework.** The NGAC strongly supports updating Office of Management and Budget (OMB) Circular A-16 and the National Spatial Data Infrastructure (NSDI). An updated national geospatial policy framework will better support federal geospatial investments and activities, ensuring that the information needed in the public sector is cultivated to produce the greatest return on investment.

- **Champion the expansion of the National Geospatial Platform**. Geoplatform.gov is the national registry for geospatial data and maps. It is a powerful tool for collaboration and dissemination of data that supports better governing through transparent accessible information. National Geospatial Data Assets are subsets of the many geospatial datasets used daily and account for a large portion of Federal geospatial data used across multiple programs, Federal agencies, and partner organizations.

- **Develop new geospatial partnerships to address national priorities.** Under the leadership of the FGDC, expand and leverage partnerships with state and local governments, tribal nations, and the private sector to address critical national issues. Continue to align Federal data needs with data production at all levels. Building the NSDI must be the work of a team, and incentives should be considered to create the best possible infrastructure.

- **Support the coordination and leadership of national geospatial activities.** The Federal Geographic Data Committee (FGDC) is an interagency body (32 members) designed to foster coordination across disparate agencies and with non-Federal partners. The FGDC works horizontally across agencies and with other partners to find and support cross-cutting initiatives that leverage shared infrastructure and goals. We recommend the Administration provide active support for the FGDC and hold agencies accountable for full participation in achieving national geospatial priorities.

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[1] The Boston Consulting Group, https://www.bcg.com/documents/file109372.pdf
[2] Geospatial Information & Technology Association, Australia and New Zealand, http://www.gita.org.au/geospatial.php

About the National Geospatial Advisory Committee

The National Geospatial Advisory Committee (NGAC) is a Federal Advisory Committee established to provide advice and recommendations related to management of Federal and national geospatial programs, the development of the National Spatial Data Infrastructure (NSDI), and the implementation of OMB Circular A-16 and Executive Order 12906. The NGAC reviews and comments upon geospatial policy and management issues and provides a forum to convey views representative of non-federal stakeholders in the geospatial community. The NGAC reports to the Chair of the Federal Geographic Data Committee.

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Federal Geographic Data Committee (www.fgdc.gov)
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