The National Geospatial Program – an Update the NGAC

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USGS Science Strategy

- Written in 2006, covers 2007 to 2017
- Lays out six science “mission areas”:
  - Ecosystems
  - Climate and Land-Use Change
  - Energy, Minerals, & Environmental Health
  - Natural Hazards
  - Water Resources
  - Core Science Systems
    - Biological Informatics
    - Cooperative Geologic Mapping
    - Geological and Geophysical Data Preservation
    - Core Science Integration
    - National Geospatial Program
NGP in the USGS Budget Context

The chart illustrates the budget distribution across various programs within the USGS, showing the amounts as millions of dollars for the years 2010 Enacted, 2011 Operating Plan, and 2012 President’s Request. The chart also converts these amounts into percentages of the 2010 budget.
Provide the geospatial baseline of the Nation’s topography, natural landscape, and built environment.

- The National Map
- Partnerships and External Coordination
- Emergency Operations
- Center of Excellence for Geospatial Information Science

Foster a general understanding of broad geographic patterns.

- The National Atlas of the United States of America®
Balancing the Needs of Users and Availability of Partners

- **Desired characteristics**
  - National coverage
  - High quality – compliance with standards, completeness, spatial accuracy, consistency, and currentness
  - Broad utility – no (or few) restrictions on data use (e.g. licensing)

- **Challenges to finding the balance**
  - Varied interests of users
  - Availability of partners (at the right time) and their resources (of the right type; i.e. money, in-kind, etc.)
  - Minimize total costs, not just acquisition costs (i.e., minimize integration costs)
  - Available USGS resources (limited)
Products and Services

- National datasets available for data download and as web services.
  - National Hydrography Dataset (NHD)
  - National Elevation Dataset (NED)
  - Best Practices Database – transportation, boundaries and structures
  - Geographic Names Information System (GNIS)
  - Orthoimagery
  - Land Cover
- Digital topographic maps
US Topo

- Electronic topographic map
- Three-year revision cycle:
  - 18,000 published annually
  - 42,186 published as of June 1
  - 419,000 downloaded as of April (does not include those distributed by third parties).
- Compiled from *The National Map* databases
- Available for free over the Internet
- Can be directly linked to GPS input
- Very user-friendly format (GeoPDF)
- Paper products available through USGS are printed on demand

Availability: April 24, 2010

May 16, 2011
The National Map in Action

National Hydrography Dataset

- Modeled streamflow, and the effects of divergences across the Continental Divide
Suitable for national and regional views.
- Interactive map maker.
- More than 300 layers of data for download.
- Published maps available for download and printing.
- Wall maps.
- Dynamic maps.
- Articles.

Base map data at 1:1,000,000 scale to be released in 2011.
Partnerships and External Coordination

- National network of geospatial liaisons
  - Organize cooperative projects with other Federal, State, and local governments.
  - Leverage funding with cooperators to receive $8-to-$10 of data for each $1 from USGS.
- Support users and interact with communities of use.
Emergency Operations

- Geospatial operations to support emergency response
  - Provide pre- and post-event geospatial data, services, and maps for responses to natural and man-made disasters.
  - First USGS hazard response team activated for the Deepwater Horizon oil spill.

Maps for National Level Exercise (NLE) 2011
Discussion