

# National Geodetic Survey: 2009 Strategic Plan

## “Strategic Goals and Tactical Milestones Looking Forward 3 Years”

### NGS Mission:

*To define, maintain, and provide access to the National Spatial Reference System to meet our nation’s economic, social, and environmental needs”*

### **Strategic Goal #1: Modernize the 3-D Geometric Reference System:**

*Promote the capability for users to easily obtain accurate values for latitude, longitude, ellipsoid height, and other related geometric coordinates.*

Finalize and announce (in 2010) the definition of new geometric reference system for the United States in preparation for its adoption for official use by in 2018.

Prepare the user community before, during, and after implementation of the new geometric datum, providing outreach and education, tools, specifications, and guidelines.

Determine and disseminate a consistent set of 3-D coordinates and velocities for all Continuously Operating Reference Stations (CORS) in a global reference frame by reprocessing relevant GPS data collected since 1994.

Define the foundation CORS system (2009), develop a plan for its implementation (2009) and begin executing that plan (2010).

Provide users with tools and education to obtain accurate geometric positional coordinates in all three dimensions and to deal with coordinate changes due to crustal motion.

Write a plan outlining the level of service NGS will provide in low latency GNSS data distribution.

Develop guidelines for both the administration and use of real-time GNSS networks and especially for ensuring that these networks are compatible with the NSRS.

Create models to predict the 3-D crustal velocity at any location in the United States.

Develop the capability to process all types of current GNSS data.

Implement process to produce predicted GPS orbits once every six hours.

### **Strategic Goal #2: Modernize the Geopotential (“Vertical”) Datum:**

*Provide easier access to accurate elevation data.*

Finalize and announce (in 2009) the definition of new datum in preparation for re-definition in 2018.

Prepare the user community before, during, and after implementation of the new vertical datum through a combined effort of the NGS’s National Height Modernization Program with outreach and education, tools, specifications, and guidelines.

Complete two-fifths of all GRAV-D (Gravity for the Redefinition of the American Vertical Datum) areas, including flights, data processing and merging with existing terrestrial data and storage.

Establish and publish the geoid theory necessary to achieve <1 cm absolute accuracy, for all non-mountainous regions of the United States, allowing for rock density unknowns in the mountains, and with unknowns not exceeding 1 cm at the coast.

Make the online leveling adjustment tool (LOCUS) fully operational (2010) .

### **Strategic Goal #3: Migrate the Coastal Mapping Program Toward Integrated Ocean and Coastal Mapping (IOCM):**

*Serve a wider range of coastal customers and geospatial data needs by implementing the IOCM vision and leveraging collaborative partnerships and technological innovation.*

Develop and enhance collaborative partnerships with Federal and state agencies, academia, and the private sector to streamline operations, improve efficiencies, develop common standards, stimulate innovation in ocean and coastal mapping, and deliver a metric for GRAV-D and its application to improve the GEOID.

Continue to develop and support the vertical datum in the continental United States including tying to local tidal and water level datums.

Test and evaluate remote sensing platforms, sensors, and data products.

Complete and evaluate IOCM demonstration projects and transition results to operations.

Develop and test standards, specifications, and workflows for new coastal geospatial products, including orthomosaics and lidar data.

### **Strategic Goal #4: Maintain and Develop Core Capabilities:**

*Anticipate changing customer needs, leverage emerging science and technology, and address other opportunities or threats.*

Implement a system to define and adjust NGS' core capabilities, e.g., aeronautical surveys.

Formalize a system and a process for understanding existing and evolving customer requirements, including emerging non-traditional requirements, (such as those of the FAA), and align products and services to suit their needs.

Support, as possible, student internships, visiting scientists, and training of existing employees.

Assign a mentor to every new hire beginning in 2009.

Develop the core values of NGS and encourage leadership according to these values.

### **Strategic Goal #5: Increase Agency Visibility**

*Expand our customer base to reach all those who may benefit from NGS products and services.*

Develop an NGS culture that embodies and demonstrates a customer focus, with a broadened definition of "customer."

Design and implement strategic training and outreach programs to anticipate and satisfy customer and partner needs.

Leverage internal NOAA partnerships to reach a broader customer base, and adjust our suite of products and services to ensure a customer focus and product usability.