

The US Government's Geodesy Community of Practice: Addressing the Geodesy Crisis

Co-Chairs

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Scan for
TheGeodesyCrisis.pdf
From AAGS



Hydrographic Services Review Panel

Fall Committee Meeting

September 27th, 2023

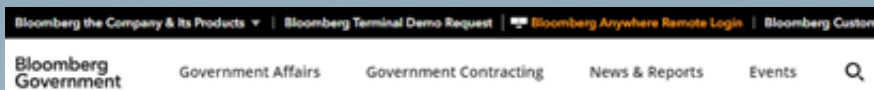
HYDROGRAPHIC SERVICES REVIEW PANEL



The Geodesy Crisis

In January 2022, a group of 15 of the nation's preeminent scientists released a White Paper:

[“The Geodesy Crisis: America’s loss of capacity and international competitiveness in geodesy, the economic and military implications, and some modes of corrective action”](#).



US Facing Crisis in GPS Workforce With China Poised to Dominate

- US officials, academics warn of 'geodesy crisis'
- Government scientist wants 'national thrust' in

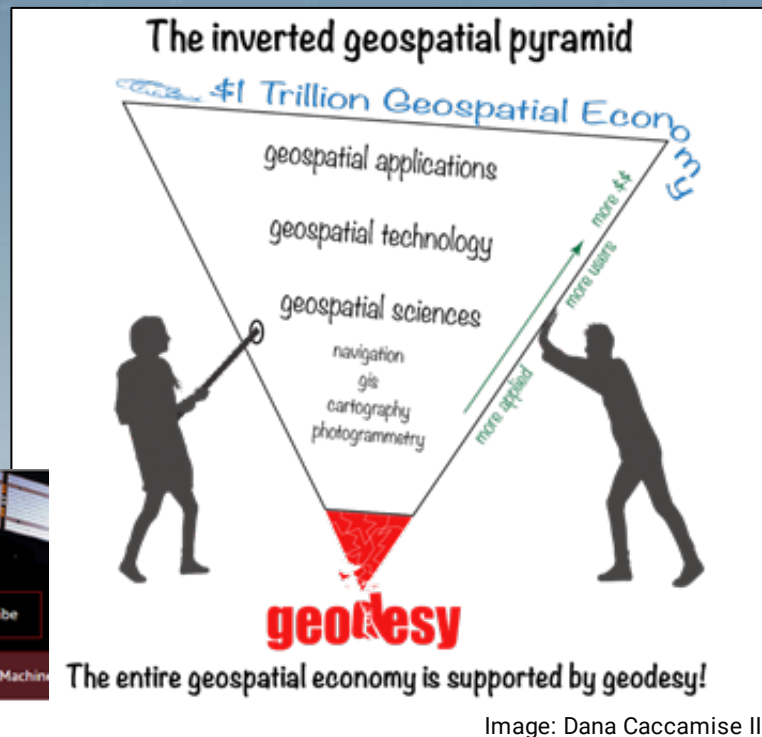
April 5, 2023 5:45 AM
By Jack Fitzpatrick

The header for the GPS WORLD website. It features the text "GPS WORLD" in large white letters on a dark background, with "GNSS POSITIONING NAVIGATION TIMING" in smaller text to the right. Below the main title is a navigation bar with colored buttons for "GNSS", "DEM", "Autonomous", "Survey", "Mapping", "Transportation", "Defense", "Mobile", and "Machine Learning". There are also social media icons for Facebook, Twitter, LinkedIn, YouTube, and Instagram, along with a search bar and a "subscribe" button.

The inverted geospatial pyramid shows our vulnerability

November 1, 2022 - By David B. Zikoski

Est. reading time: 14 minutes



Federal Geodesy Community of Practice

Current Participants:

- National Geospatial-Intelligence Agency, Office of Geomatics (NGA)
- NOAA, National Geodetic Survey (NGS)
- National Aeronautics and Space Administration (NASA)
- Department of Interior, United States Geological Survey (USGS)



September 20-21, 2023 - NGA hosted NGS, NASA, and USGS for Summit at Moonshot Labs in St. Louis

Recap of Year 1: FY 2023



FY 23, Q1: Stood up the NGA / NGS Community of Practice, with an MOU

FY 23, Q2: Showcased NGA and NGS 101 Overview of the programs



FY 23, Q3:

- Invited NASA to join COP
- Held first face to face session in Silver Spring, MD
- Formed (4) Technical and (4) Strategic, Intra-Agency Working Groups
- Preliminary Coordination is organized around common themes



FY 23, Q4:

- Invited USGS to join COP
- Held first Geodesy COP Summit, Sept 19-20, 2023 | Moonshot Lab
 - ✓ 65 Agency Geodesy COP Representatives Currently In Place
 - ✓ 36 In Person Attendance



Geodesy COP Working Groups and Synergy Themes

COP Working Groups (1-8)	
Technical Working Groups	*Sub Topic
(1) Surveys	Site Surveys / Airport Surveys
(2) Reference Frames & Modeling	NSRS / WGS 84 / Gravity (EGM) / Magnetics (WMM) etc
(3) GNSS	Precise Orbit Determination / CORS
(4) Lunar	Space-Based Geodetic Techniques
Strategic Working Groups	Sub Topic
(5) Academic Partnership Sync	Tradecraft/Competencies
(6) Forums Sync	GEO-ESCON / FACA / FGDC / NAS
(7) Hard Problems Review/Sync	
(8) Strategic Planning: Geodesy National Framework & Geodesy COP Charter Development	

Key Collaboration Themes: To help Technical WGs organize collaboration topics

- (1) Data Sharing
- (2) Equipment Sharing
- (3) Software Sharing
- (4) Production Collaboration
- (5) Modeling Collaboration
- (6) Capabilities Enhancements
- (7) Standards Coordination
- (8) Certification Programs
- (9) Professional Training/Cross Training/Details
- (10) Cooperative Agency Research
- (11) Opportunities to link and leverage National and International Geodesy Forums
- (12) Other



Addressing Geodesy Tradecraft (in FY24)

- We would like the COP to be the coordinating body for training future geodesists

Spectrum in Preserving the Geodesy Tradecraft

