

Implementation of the 3-D GSDM

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TO: Geospatial Policy Makers

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RE: Issues associated with implementation of the 3-D Global Spatial Data Model

The [Second](#) Edition of “The 3-D Global Spatial Data Model” is scheduled for release in July 2017. This posting is more than an advertisement for the book because it transcends that incidental result by highlighting the impact that the digital revolution is having on the use of 3-D digital spatial data.

Distribution of this information is unlimited. But links to this page were specifically sent to:

- A. Update Team for COGO [Report Card](#) – Scott Freundsuh, Chair
- B. Federal Geographic Data Committee – Ivan DeLoatch, Executive Director
- C. National Geospatial Advisory Committee – Julie Sweetkind-Singer, Chair
- D. National Geodetic Survey – Julie Blackwell, Director
- E. National Council of Examiners for Engineering and Surveying – Daniel Turner, President
- F. American Society of Civil Engineers – Norma Jean Mattei, President
- G. National Society of Professional Surveyors – Curt Sumner, Executive Director
- H. Management Association of Private Photogrammetric Surveyors - John Palatiello, Ex. Director

This web page posting was prompted by [reading](#) “Geospatial Standards: a National Asset,” A Report of the National Geospatial Advisory Committee, dated March 2017. Another motivation came from reading and [reacting](#) to the 2015 COGO Report Card. There are many bases to be covered as many disciplines, agencies, organizations, corporations, businesses, and individuals are affected. This summary should be considered only a modest beginning of an important discussion.

Brief Background:

- A. The digital revolution has made an enormous impact on society – not the least of which is our use of 3-D digital spatial data.
- B. Many organizations and users are challenged by the associated [Disruptive Innovation](#).
- C. The [back cover](#) of the 2nd Edition carries a message that the 3-D Global Spatial Data Model (GSDM) is an important improvement over traditional spatial data models.
- D. Buried in the technical detail is the fact that the GSDM contains specific algorithms for handling spatial data accuracy – both in the “global” sense and “local” sense. Those concepts are fundamental to monitoring driverless vehicles – whether intelligent vehicles on the ground or drones (of all kinds) in the air. Development and implementation of standards is essential.
- E. The book only scratches the surface with respect to spatial data management. But, key to any successful management plan is understanding what causes spatial data to lose its value.

Question: What needs to happen as various stakeholders continue to participate in the revolution?