



# NSRS Modernization News

Issue 4, July 2016

For all issues of NSRS Modernization News, visit:  
[geodesy.noaa.gov/datums/newdatums/TrackOurProgress.shtml](http://geodesy.noaa.gov/datums/newdatums/TrackOurProgress.shtml)

## Nomenclature

NGS has been working with the Canadian Geodetic Survey (CGS) and the Instituto Nacional de Estadística y Geografía (INEGI) on a mutually agreeable naming scheme for the replacements for NAD 83, NAVD 88 and IGLD 85. The process has been iterative and cautiously executed, but a decision should be made by the next newsletter.

## Legislation

The NSPS/AAGS/NGS Advisory Committee on National Spatial Reference System Legislation completed its initial draft of a new template legislation. That template seeks to address states' needs to modify their laws as NAD 83 becomes superseded in 2022.

## Major Projects

A variety of NGS projects are currently underway; all contributing in their own way to the modernization of the NSRS. Significant milestones are highlighted below.

### Geometric Transformation Consistency

Lead: *Dr. Dru Smith*

Nicknamed "NADCON 5" for its replacement of the current NADCON v4.2 (as well as GEOCON v2.0). The grids for transforming datums in CONUS, Alaska, Hawaii, Puerto Rico/Virgin Islands, American Samoa, Guam/CNMI, St. Paul Island, St. George Island, and St. Lawrence Island have been completed. The grid for the HARN/FBN transformation in CONUS remains to be done, and this particular grid takes extra care, as only 19 states have the transformation, and the remaining states must be kept rigidly at zero. The functionality of using the transformation grids are currently being inserted into the geodetic toolkit: <http://beta.ngs.noaa.gov/gtkweb/>.

### Geoid Slope Validation Survey 2017

Lead: *Dr. Derek Van Westrum*

NGS will begin setting the final approximate 80 marks in Colorado over the course of July and August this year. Field work will begin as soon as weather permits in spring 2017.

### GPS Campaign for Transformations

Lead: *Galen Scott*

Recently chartered, this project will attempt to collect the GNSS data on passive control around the country, which will support transformation tools to move geospatial data from NAD 83 and/or NAVD 88 to the new datums. Field plans will be established later this year, and the project will likely be a combination of NGS field work and partner field work. The project is expected to span multiple years leading up to 2022.

### OPUS Projects into the IDB

Lead: *Dr. Mark Schenewerk*

The initial analysis of projects were completed in May 2016, and results conclusively demonstrated the accuracy of OPUS Projects. A new round of analysis is being performed to ensure absolute consistency with existing bluebook procedures. This analysis is expected to take the better part of the summer. NGS continues to expect its first "bluebooked through OPUS Projects" submission to enter the NGS IDB by the end of the calendar year.

**GRAV-D progress last quarter: up 3.5% to 53.0% Ahead of Schedule!**

