



Issue 23 January 2021

# NSRS Modernization News

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

## New Technical Paper Released

A new paper relating to the modernized NSRS was released recently. It is:

[NOAA Technical Memorandum NOS NGS 86  
\(Quantifying Systematic Error When Using Axial  
Rotation Rates Rather Than Geographic Euler Pole  
Parameters When Describing Tectonic Plate Rotation\)](#)

## Updates to Blueprint Documents

The release of updated versions of the three “Blueprint” documents was slightly delayed. All three are now expected to be released in the first quarter of calendar year 2021.

## Retiring U.S. Survey Foot

On October 5, 2020, a [Federal Register Notice](#) announced the final decision to deprecate the U.S. survey foot on December 31, 2022. After that date, the U.S. survey foot will be superseded by the international foot definition (1 foot = 0.3048 meter exactly) in all applications. This action is coordinated with the National Institute of Standards and Technology (NIST) and is independent of the NSRS modernization timeline.

Although the deprecation date is prior to rollout of the *modernized* NSRS, it will have no effect on users of the *existing* NSRS. NGS will continue to provide the U.S. survey foot in products and services where it is currently supported, such as the State Plane Coordinate System of 1983 and 1927, but it will not be available for any component of the modernized NSRS (including SPCS2022 and vertical

coordinates). Retiring the U.S. survey foot before NSRS modernization ensures a timely and orderly transition to the international foot definition for NGS and the geospatial community.

## Progress in Ongoing Projects

There are currently **23 ongoing projects** directly related to NSRS modernization around NGS. Here are highlights from one:

### **GRAV-D airborne campaign (Project Manager: Jeffery Johnson)**

GRAV-D completed data collection for three blocks in the fall of 2020. The blocks completed and queued for processing are: ES08 over Alabama, eastern Mississippi, and much of Georgia; CS11 over parts of Arkansas, Kansas, Missouri, Oklahoma, and Tennessee; and PN04 over eastern Oregon and western Idaho. Flights to complete coverage of Hawaii are scheduled to begin on January 15.

Also, a new GRAV-D schedule was adopted, aligning with the delayed release of the modernized NSRS as announced in June 2020. The new 100% completion target for GRAV-D is June 30, 2024.

-----  
**GRAV-D progress last quarter: up 2.1% to 84.0%**  
**ON (new) Schedule!**

Recently: AL, MS, GA, AR, KS, MO, OK, TN, OR, ID

