

Issue 17, October 2019



NSRS Modernization News

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

The NOAA Foundation CORS Network

The count of operational stations in the NOAA Foundation CORS Network (NFCN) increased from 3 to 5 recently, with the addition of ASPA (Tutuila, American Samoa) and CNMR (Saipan, Commonwealth of the Northern Mariana Islands). When completed, the NFCN will consist of 36 stations. For more information, visit the [NFCN](#) page.

ITRF2014 Coordinate Functions

NGS released ITRF2014 coordinate functions for the NOAA CORS Network (NCN) on August 23, 2019. This is a major step toward NSRS modernization, as all four terrestrial reference frames in the modernized NSRS will be defined relative to ITRF2014 (See [Blueprint for 2022, Part 1](#)).

Deprecation of the U.S. Survey Foot

After 2022, the U.S. survey foot will no longer be supported for any component of the NSRS, including State Plane coordinates. Only a single definition of 1 foot = 0.3048 meter (exactly) will be used. This definition is identical to that of the international foot, but will simply be called the foot. This change was announced in a [Federal Register Notice](#) co-issued by the National Institute of Standards and Technology (NIST) and NGS. For more resources visit the [NIST Physical Measurement Lab](#) site.

Progress in Ongoing Projects

There are currently 24 ongoing NGS projects directly related to NSRS modernization. Here are highlights from a select few:

xGEOID19 (Project Manager: Dr. Yan Wang)

NGS has released xGEOID19. In a first for NGS, this experimental geoid model contains time-dependencies, incorporating NGS's fledgling Geoid Monitoring Service (or GeMS; see Section 7 of [Blueprint for 2022, Part 2](#)).

IFVM2022 (Project Manager: Dr. Daniel Roman)

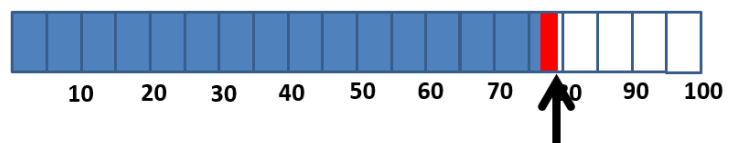
The Scripps Institute of Oceanography has begun a scoping study on the elements needed to accurately and cost-effectively develop a sustainable IFVM2022. The study should conclude in summer 2020. Discussions have also begun with NASA and USGS on the development of a National Land Level Change program.

VERTCON 3.0 (Project Manager: Dr. Dru Smith)

NGS has released new transformations called "VERTCON 3.0 release 20190601" which are incorporated into the [NGS Coordinate Conversion and Transformation Tool \(NCAT\) version 2.0](#) and available for beta testing. These transformations replace all earlier versions of VERTCON, and expand the NGS supported transformations to include Alaska, and all island territories of the USA. Visit the [VERTCON 3.0](#) page to learn more.

GRAV-D progress last quarter: **up 2.0% to 79.0%**
ON Schedule!

Recently: Colorado, Idaho, Oklahoma



Schedule: 79%