

## **New Geodetic Datums (2022): Replacing NAVD88 and NAD 83**

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In 2022, the National Geodetic Survey (NGS) will replace all components of the National Spatial Reference System (NSRS), including NAD 83 and NAVD 88, with a new system that is geocentric, not reliant upon passive control, and time-dependent. Every survey, map or geolocation created today will be incompatible with the new system by as much as 4 meters, depending on where in the United States you are working. This misalignment could apply to every latitude and/or longitude and/or height in your work.

In order to assist users in understanding and adapting to the new system, two technical reports were released by NGS in 2017, under the title “Blueprint for 2022”, with a third, companion report released in 2019. The first two reports provided the scientific and definitional aspects of four new time-dependent terrestrial reference frames and their companion “geopotential datum” (replacing and expanding upon the historic concept of a “vertical datum”). The third report focused on the user community and how it can work within this new paradigm of time-dependent geodetic control.

This talk will focus on all of the changes to expect in the future and ways that all geospatial professionals can adapt and thrive in the new system.