



North Carolina Department of Public Safety

Emergency Management

Roy Cooper, Governor
Eddie M. Buffaloe, Jr., Secretary

William Ray, Director

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Contact: Brian R. Haines 919-825-2390
brian.haines@ncdps.gov

The Retirement of the United States Foot

RALEIGH: Now that we have stepped into a new year it is time to put an international foot forward. The U.S. survey foot was retired at the end of 2022 by the National Institute of Standards and Technology (NIST) and the international foot is stepping up to take its place. This is due in part to the modernization of the National Spatial Reference System (NSRS) and to provide national uniformity in measuring length.

In North Carolina, the U.S. survey foot is defined in NC General Statute 102-1.1 as the conversion from meters, with one meter being equal to 39.37 inches or a little over 3.28 feet. North Carolina will continue to use the U.S. survey foot for surveying, mapping and other activities that utilize the current North Carolina State Plane Coordinate System until the National Oceanic and Atmospheric Administration's (NOAA's) National Geodetic Survey (NGS) publishes the 2022 datums in 2025. The North Carolina Geodetic Survey recommend that the U.S. survey foot be used with the current horizontal (North American Datum of 1983/2011) and vertical (North American Vertical Datum of 1988) datums. The international foot will be used in North Carolina when the new datums are published by NGS in 2025 unless required by contract requirements to use the international foot.

The U.S. survey foot was originally adopted in 1893 but was updated in 1959 by a difference of two parts per million shorter, or the equivalent of approximately 1/100 of a foot per mile. This change was adopted by several other nations and came to be known as the international foot, moving the world a tiny leap forward. Tiny unless you are measuring hundreds of miles or more or working in the State Plane Coordinate System, then that difference can be measured in feet and that impacts things such as mapping and surveying.

The NSRS standard unit of measurement is a meter, which is in line with the international foot and many applications in the United States have been using the international foot for a long time. However, the 1959 change allowed for a temporary use of the U.S. survey foot for geodetic surveying until the geodetic control networks of the United States could be adjusted. The readjustment was completed in 1986 but the U.S. survey foot continued to march on in most of the states. The intent of the [**Federal Register Notice to retire the U.S. survey foot**](#) by NIST and NGS is to finalize its departure into the history books and use the international foot in conjunction with the modernization of the NSRS in 2025.

[**Read more about the retirement of the U.S. Survey Foot.**](#)