

# WEST VIRGINIA CODE: §1-1-5

## **§1-1-5. West Virginia coordinate systems; definitions; plane coordinates, limitations of use; conversion factor for meters to feet; official geodetic datum.**

(a) The following acronyms used throughout this section shall have the following meanings:

(1) "FGDC" means the Federal Geographic Data Committee or its successors;

(2) "NSRS" means the National Spatial Reference System or its successors;

(3) "NGS" means the National Geodetic Survey or its successors;

(4) "SPCS" means the State Plane Coordinate System or its successors; and

(5) "WVCS" means the West Virginia Coordinate System.

(b) The most recent system of plane coordinates which has been established by the NGS, based on the NSRS, and known as the SPCS, for defining and stating the positions or locations of points within West Virginia shall be known and designated as the West Virginia Coordinate System.

(c) The plane coordinate values used to express the position or location of a point in this system shall consist of two distances, expressed in feet and decimals of a foot or in meters and decimals of a meter. One of these distances, to be known as the x-coordinate, shall give the position in an east-and-west direction. The other, to be known as the y-coordinate, shall give the position in a north-and-south direction.

(d) The associated factor of one meter equals 1/0.3048 feet shall be used in any conversion necessitated by changing values from meters to feet.

(e) Information and mathematical data for defining the WVCS, and previous versions thereof, including but not limited to, the West Virginia Coordinate System of 1927 and the West Virginia Coordinate System of 1983, and information and mathematical data for translating or converting coordinates between the WVCS and the previous versions thereof, shall be the information and data published by the NGS for such purposes.

(f) For purposes of describing the location of any survey station in the State of West Virginia, it shall be considered a complete, legal, and satisfactory description of the location to give the position of the survey station on the WVCS as defined in this section.

(g) Any survey that establishes WVCS coordinates to express definite positions, which is to be used or relied upon by any federal, state, or local government entity, or by the public generally, shall be performed:

(1) By a professional surveyor licensed to practice surveying in the State of West Virginia pursuant to §30-13A-1 *et seq.* of this code;

(2) In compliance with all other laws, rules, or regulations governing surveying in the State of West Virginia; and

(3) In compliance with the Geospatial Positioning Accuracy Standards established and published by the FGDC, and in effect at the time the survey is performed.

(h) In addition to any other requirements imposed by law, rule or regulation, any map, plat, report, description or geospatial product that claims to report WVCS coordinates to express definite positions, to be used or relied upon by any federal, state, or local government entity, or by the public generally, shall show, or have attached thereto, metadata that meets the requirements established by the FGDC in effect at the time the map, plat, report, description, or geospatial product was produced, including a description of the methodology used to establish the WVCS coordinate values reported that is adequate for users to evaluate the accuracy of the coordinates.

(i) For purposes of describing the location of any land boundary corner in the State of West Virginia, it shall be considered a complete, legal, and satisfactory description of the location to give the position of the land boundary corner on the WVCS as required in this section, in addition to other location information as may otherwise be required by law, rule, or regulation: *Provided*, That nothing contained in this section requires a purchaser or mortgagee of real property to rely wholly on a land description, any part of which depends exclusively upon the WVCS.

(j) No coordinates based on the WVCS, purporting to define the position of a point on a land boundary, may be presented to be recorded in any public records or deed records unless a certification is attached thereto and, recorded simultaneously therewith, certifying the coordinates were established in compliance with the laws, rules, and regulations governing surveying in West Virginia by a professional surveyor licensed to practice surveying in West Virginia pursuant to §30-13A-1 *et seq.* of this code.

(k) A plat and a description of survey purporting to define the position of a point on a land boundary by the use of the WVCS must show the following:

(1) The accuracy of the coordinates stated at the 95 percent confidence level and in compliance with the Geospatial Positioning Accuracy Standards established and published by the FGDC in effect at the time of the survey. The coordinate accuracies reported by the surveyor shall take into account the network accuracy of existing control, as well as additional systematic effects;

(2) The applicable datum, datum tag, epoch date in a decimal year format, and the zone that are the basis of the coordinates. The datum, datum tag, epoch date, and zone shall be as published by the NGS and shall be shown by an appropriate note, or by suffix such as

"NAD83 (2011) epoch 2010.00, WVCS, South Zone"; and

(3) The signature and seal of the professional surveyor licensed to practice surveying in West Virginia pursuant to §30-13A-1 *et seq.* of this code.

(l) The use of the term "West Virginia Coordinate System" on any map, report, or survey, or other document shall be limited to coordinates based on the WVCS as defined in this section.

(m) Nothing in this section prevents the recording in any public record of any deed, map, plat, survey, description, or of any other document or writing of whatever nature which would otherwise constitute a recordable instrument or document even though the same is not based upon or done in conformity with the WVCS established by this section, nor does nonconformity with the WVCS invalidate any deed, map, plat, survey, description, or other document which is otherwise proper.

(n) The official geodetic datums to which geodetic coordinates (including, but not limited to, latitude, longitude, ellipsoid height, orthometric height, or dynamic height) are referenced within the State of West Virginia shall be as defined for the NSRS.

(o) Any map, plat, report, description, or geospatial product that establishes or reports geodetic positions referenced to the NSRS for the purpose of expressing definite positions that is to be used by or relied on by any federal, state, or local government entity or by the public generally shall comply with the accuracy and reporting requirements set forth above for the WVCS.

(p) The provisions of this chapter may not be construed to prohibit the appropriate use of other coordinate systems, datums, and other geodetic reference networks.