

WEST VIRGINIA LEGISLATURE

2024 REGULAR SESSION

Committee Substitute

for

Senate Bill 540

BY SENATOR WOODRUM

[Originating in the Committee on Government

Organization; reported February 2, 2024]

1 A BILL to amend and reenact §1-1-5 of the Code of West Virginia, 1931, as amended, relating to
2 updating the West Virginia coordinate systems.

Be it enacted by the Legislature of West Virginia:

ARTICLE 1. LIMITS AND JURISDICTION.

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

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

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

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

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

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

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

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

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

17 (d) The associated factor of one meter equals ~~39.37/12 United States Survey~~ 1/0.3048
18 feet shall be used in any conversion necessitated by changing values from meters to ~~United~~
19 ~~States Survey~~ feet.

20 ~~(e) For the purpose of the use of this system the state is divided into a North Zone and a~~
21 ~~South Zone.~~

22 ~~The area now included in the following counties is the North Zone: Barbour, Berkeley,~~
23 ~~Brooke, Doddridge, Grant, Hampshire, Hancock, Hardy, Harrison, Jefferson, Marion, Marshall,~~
24 ~~Mineral, Monongalia, Morgan, Ohio, Pleasants, Preston, Ritchie, Taylor, Tucker, Tyler, Wetzel,~~
25 ~~Wirt and Wood.~~

26 ~~The area now included in the following counties is the South Zone: Boone, Braxton,~~
27 ~~Cabell, Calhoun, Clay, Fayette, Gilmer, Greenbrier, Jackson, Kanawha, Lewis, Lincoln, Logan,~~
28 ~~McDowell, Mason, Mercer, Mingo, Monroe, Nicholas, Pendleton, Pocahontas, Putnam, Raleigh,~~
29 ~~Randolph, Roane, Summers, Upshur, Wayne, Webster and Wyoming.~~

30 ~~(f) As established for use in the North Zone, the WVCS shall be named and in any land~~
31 ~~description, map, survey or geospatial product in which it is used it shall be designated the WVCS~~
32 ~~North Zone.~~

33 ~~As established for use in the South Zone, WVCS shall be named and in any land~~
34 ~~description, map, survey or geospatial product in which it is used it shall be designated the WVCS~~
35 ~~South Zone.~~

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

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

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

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

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

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

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

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

68 ~~(l) When any tract of land to be defined by a single description extends from one into the~~
69 ~~other of the coordinate zones specified in this section, the position of all points on its boundaries~~

70 ~~may refer to either of the two zones. The zone which is being used shall be specifically named in~~
71 ~~the description.~~

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

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

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

84 (2) The applicable datum, datum tag, epoch date in a decimal year format, and the zone
85 that are the basis of the coordinates. The datum, datum tag, epoch date, and zone shall be as
86 published by the NGS and shall be shown by an appropriate note, or by suffix such as "NAD83
87 (2011) epoch 2010.00, WVCS, South Zone"; and

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

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

93 ~~(p)~~ (m) Nothing in this section prevents the recording in any public record of any deed,
94 map, plat, survey, description, or of any other document or writing of whatever nature which would
95 otherwise constitute a recordable instrument or document even though the same is not based

96 upon or done in conformity with the WVCS established by this section, nor does nonconformity
97 with the WVCS invalidate any deed, map, plat, survey, description, or other document which is
98 otherwise proper.

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

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

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