WEST VIRGINIA CODE: §1-1-5

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

(a) The systems of plane coordinates which have been established by the National Ocean Service/National Geodetic Survey (formerly the United States Coast and Geodetic Survey) or its successors for defining and stating the geographic position or locations of points on the surface of the earth within West Virginia are to be known and designated as the West Virginia Coordinate System of 1927 and the West Virginia Coordinate System of 1983.

(b) For the purpose of the use of this system the state is divided into a North Zone and a South Zone.

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

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

(c) As established for use in the North Zone, the West Virginia Coordinate System of 1927 or the West Virginia Coordinate System of 1983 shall be named and in any land description in which it is used it shall be designated the West Virginia Coordinate System of 1927 North Zone or West Virginia Coordinate System of 1983 North Zone.

As established for use in the South Zone, the West Virginia Coordinate System of 1927 or the West Virginia Coordinate System of 1983 shall be named and in any land description in which it is used it shall be designated the West Virginia Coordinate System of 1927 South Zone or West Virginia Coordinate System of 1983 South Zone.

(d) The plane coordinate values for a point on the earth's surface, used to express the geographic position or location of the point in the appropriate zone of this system, shall consist of two distances, expressed in U.S. Survey feet and decimals of a foot when using the West Virginia Coordinate System of 1927 and determined in meters and decimals when using the West Virginia Coordinate System of 1983, but which may be converted to and expressed in feet and decimals of a foot. 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.

These coordinates shall be made to depend upon and conform to plane rectangular

coordinate values for the monumented points of the North American Horizontal Geodetic Control Network as published by the National Ocean Service/National Geodetic Survey (formerly the United States Coast and Geodetic Survey) or its successors and whose plane coordinates have been computed on the system defined by this section. Any such station may be used for establishing a survey connection to either West Virginia Coordinate System.

(e) For purposes of describing the location of any survey station or 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 survey station or land boundary corner on the system of plane coordinates defined in this section. 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 either West Virginia Coordinate System.

(f) When any tract of land to be defined by a single description extends from one into the other of the coordinate zones specified in this section, the position of all points on its boundaries may refer to either of the two zones. The zone which is being used specifically shall be named in the description.

(g)(1) For purposes of more precisely defining the West Virginia Coordinate System of 1927, the following definition by the United States Coast and Geodetic Survey (now National Ocean Service/National Geodetic Survey) is adopted:

The West Virginia Coordinate System of 1927 North Zone is a Lambert conformal conic projection of the Clarke Spheriod of 1866, having standard parallels at north latitudes 39 degrees and 00 minutes and 40 degrees and 15 minutes, along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 79 degrees 30 minutes west of Greenwich and the parallel 38 degrees 30 minutes north latitude. This origin is given the coordinates: x = 2,000,000 feet and y = 0 feet.

The West Virginia Coordinate System of 1927 South Zone is a Lambert conformal conic projection of the Clarke Spheriod of 1866, having standard parallels at north latitudes 37 degrees 29 minutes and 38 degrees 53 minutes, along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 81 degrees 00 minutes west of Greenwich and the parallel 37 degrees 00 minutes north latitude. This origin is given the coordinates: x = 2,000,000 feet and y = 0 feet.

(2) For purposes of more precisely defining the West Virginia Coordinate System of 1983, the following definition by the National Ocean Service/National Geodetic Survey is adopted:

The West Virginia Coordinate System of 1983 North Zone is a Lambert conformal conic projection of the North American Datum of 1983, having standard parallels at north latitudes 39 degrees and 00 minutes and 40 degrees and 15 minutes, along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 79 degrees 30 minutes west of Greenwich and the parallel 38 degrees 30 minutes north latitude. This origin is given the coordinates: x = 600,000 meters and y = 0 meters.

The West Virginia Coordinate System of 1983 South Zone is a Lambert conformal conic projection of the North American Datum of 1983, having standard parallels at north latitudes 37 degrees 29 minutes and 38 degrees 53 minutes, along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 81 degrees 00 minutes west of Greenwich and the parallel 37 degrees 00 minutes north latitude. This origin is given the coordinates: x = 600,000 meters and y = 0 meters.

(h) No coordinates based on the West Virginia Coordinate System, 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 the point is based on a public or private monumented horizontal control station established in conformity with the standards of accuracy and specifications for first order or better geodetic surveying as prepared and published by the Federal Geodetic Control Committee of the United States Department of Commerce. Standards and specifications of the Federal Geodetic Control Committee or its successor in force on the date of the survey apply. The publishing of the existing control stations, or the acceptance with intent to publish the newly established control stations, by the National Ocean Service/National Geodetic Survey is evidence of adherence to the Federal Geodetic Control Committee specifications. The limitations specified in this section may be modified by a duly authorized state agency to meet local conditions.

(i) The use of the term “West Virginia Coordinate System of 1927 North or South Zone” or “West Virginia Coordinate System of 1983 North or South Zone” on any map, report or survey or other document shall be limited to coordinates based on the West Virginia Coordinate System as defined in this section.

(j) A plat and a description of survey must show the basis of control identified by the following:

(1) The monument name or the point identifier on which the survey is based;

(2) The order of accuracy of the base monument; and

(3) The coordinate values used to compute the corner positions.

(k) Nothing in this section prevents the recordation 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 West Virginia Coordinate System established by this section, nor does nonconformity with the system invalidate any deed, map, plat, survey, description or other document which is otherwise proper.

(l) For purpose of this section a foot equals a United States Survey foot. The associated factor of one meter equals 39.37/12 feet shall be used in any conversion necessitated by changing values from meters to feet.