State Plane Coordinate System (SPCS) for WV Counties

SOURCE: West Virginia State Code (1931). Chapter 30. Professions and Occupations.
Article 13. Engineers. Article 13A. Land Surveyors. Section 17.
http://www.legis.state.wv.us/Code/toc1.html

30-13A-17."West Virginia Coordinate Systems"; **definition, plane coordinates,**
limitations of use.
(a) The systems of plane coordinates which have been established by the national ocean
survey/national geodetic survey (formerly the United States Coast Geodetic Survey) or its
successors for defining and stating the geographic position or locations of points on the
surface of the earth within the state of West Virginia are hereafter to be known and
designated as the "West Virginia Coordinate System of 1927" and the "West Virginia
Coordinate System of 1983."
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 shall constitute 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 shall constitute 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.
(b) 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."
(c) The plane coordinate values for a point on the earth's surface, used to express the
geographic position or location of such 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 expressed in meters and decimals when
using the West Virginia Coordinate System of 1983. 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 Survey/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.
(d) 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 such location to give the position of said survey station or land boundary
corner on the system of plane coordinates defined in this section.

Nothing contained in this section shall require 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.

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

(f) (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 Survey/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 Survey/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.

(g) No coordinates based on the West Virginia coordinate system, purporting to define the position of a point on a land boundary, shall be presented to be recorded in any public records or deed records unless such point is within one kilometer of a public or private monumented horizontal control station established in conformity with the standards of accuracy and specifications for first or second-order geodetic surveying as prepared and published by the Federal Geodetic Control Committee (FGCC) of the United States department of commerce. Standards and specifications of the FGCC or its successor in force on date of said survey shall apply. The publishing of the existing control stations, or the acceptance with intent to publish the newly established control stations, by the National Ocean Survey/National Geodetic Survey will constitute evidence of adherence to the FGCC specifications. The above limitations may be modified by a duly authorized state agency to meet local conditions.

(h) 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 of survey or other document shall be limited to coordinates based on the West Virginia coordinate system as defined in this section.

(i) Nothing in this section shall prevent the recordation in any public record of any deed, map, plat, survey, description or of any other document or writing of whatsoever 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 shall such nonconformity with such system invalidate any deed, map, plat, survey, description or other document which is otherwise proper.

Other cited references:

1991. West Virginia Association of Land Surveyors.
"West Virginia Land Surveyors Laws and Regulations."
The Michie Company, Charlottesville, VA.