Tennessee Code Annotated

TITLE 66 - PROPERTY

CHAPTER 6 - TENNESSEE COORDINATE SYSTEM

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Designation of geodetic survey system - Tennessee Coordinate System of 1927 - North American Datum of 1983.

- (a) The system of plane coordinates, known as the North American Datum of 1983, which has been established by the national ocean survey/national geodetic survey (formerly, the United States coast and geodetic survey) for defining and stating the geographic positions or locations of points on the surface of the earth within this state is hereafter to be known and designated as the "Tennessee Coordinate System of 1983."
- (b) The system of plane coordinates which was established in 1927 by the United States coast and geodetic survey for defining and stating the positions or locations of points on the surface of the earth within this state is hereafter to be known and designated as the "Tennessee Coordinate System of 1927."
- (c) For the purpose of the use of either system, the state has one (1) zone as defined by the national ocean survey.
- (d) After December 31, 1992, the Tennessee Coordinate System of 1983 shall be the sole system recognized and utilized in Tennessee for the purposes of this chapter. Any computer software designed prior to such date may continue to use the Tennessee Coordinate System of 1927 in its applications relative to redistricting.

[Acts 1991, Ch. 42, § 2]

66-6-102. Coordinates used.

The plane coordinate values for a point on the earth's surface, used to express the geographic position or location of such point, shall consist of two (2) distances expressed in United States survey feet and decimals of a foot when using the Tennessee Coordinate System of 1927, and expressed in meters and decimals of a meter when using the Tennessee Coordinate System of 1983. Coordinate values may also be expressed in United States survey feet and decimals of a foot for the Tennessee Coordinate System of 1983 as specified in § 66-6-103(c). 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 certain monumented points of the North American horizontal geodetic control network as published by the national ocean survey/national geodetic survey (formerly United States coast and geodetic survey), or its successors, and whose plane coordinates have been computed on the systems defined in this chapter. Such monumented points of the North American horizontal geodetic control network shall be those existing or newly established in conformity with the standards of accuracy 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.

[Acts 1991, Ch. 42, § 3]

66-6-103. Technical definitions of systems.

(a) For purposes of more precisely defining the Tennessee 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 "Tennessee Coordinate System of 1927" is a Lambert conformal conic projection of the Clarke spheroid of 1866, having standard parallels at north latitudes $35\emptyset$ 15' and $36\emptyset$ 25', along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian $86\emptyset$ 00' west of Greenwich and the parallel $34\emptyset$ 40' north latitude. This origin is given the coordinates: x (easting) = two million feet (2,000,000') and y (northing) = one hundred thousand feet (100,000').

(b) For purposes of more precisely defining the Tennessee Coordinate System of 1983, the following definition by the national ocean survey/national geodetic survey is adopted:

The "Tennessee Coordinate System of 1983" is Lambert conformal conic projection of the North American Datum of 1983, having standard parallels at north latitudes $35\emptyset$ 15' and $36\emptyset$ 25', along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian $86\emptyset$ 00' west of Greenwich and the parallel $34\emptyset$ 20' north latitude. This origin is given the coordinates: x (easting) = six hundred thousand meters (600,000 m.) and y (northing) = zero meters (0 m.).

(c) The definition of the "U.S. Survey Foot," with the associated factor of 1 m = 39.37/<u>12</u> feet, shall be used in any conversion necessitated by changing values associated with the Tennessee Coordinate System of 1983, from meters to feet.

[Acts 1991, Ch. 42, § 4]

66-6-104. Proximity to horizontal control monuments required for use of coordinates.

No coordinates based on either Tennessee coordinate system, purporting to define the position of a point on a land boundary, shall be presented to be recorded in any public land records or deed records unless such point is within five (5) kilometers of a horizontal control monument existing or newly established in conformity with the standards of accuracy 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 of the FGCC or its successor in force on the date of such survey shall apply. The accuracy limitations described in this section may be modified by any governmental agency to meet local conditions.

[Acts 1991, Ch. 42, § 5]

66-6-105. Description of location of survey stations or land boundary corners - Reliance on system not required.

- (a) For purposes of describing the location of any survey station or land boundary corner in this state, it shall be considered a complete, legal, and satisfactory description of such location to give the position of such survey station or land boundary corner on either system of plane coordinates defined in this chapter; provided, that any person choosing to use a system of plane coordinates to describe any such survey station or land boundary after December 31, 1992, shall use the Tennessee Coordinate System of 1983.
- (b) Nothing contained in this chapter shall require a purchaser or mortgagee of real property to rely wholly on a property description, any part of which depends exclusively upon either Tennessee coordinate system.

[Acts 1991, Ch. 42, § 6]

66-6-106. Use of term "system" on documents - Designation of system used.

- (a) The term "Tennessee Coordinate System of 1927" or "Tennessee Coordinate System of 1983" shall not be used on any map, report of survey, or other document, unless the coordinates contained within such document are based on the Tennessee coordinate system as defined in this chapter.
- (b) Any document containing coordinates based upon either system of plane coordinates defined in this chapter shall contain a statement that indicates whether the Tennessee Coordinate System of 1927 or the Tennessee Coordinate System of 1983 was used.

[Acts 1991, Ch. 42, § 7]

66-6-107. [Repealed.]