

## SENATE BILL No. 424

AN ACT concerning the Kansas plane coordinate system act; providing for geographic positions or locations of points within the state of Kansas; amending K.S.A. 58-20a01, 58-20a02, 58-20a03, 58-20a04, 58-20a05 and 58-20a07 and repealing the existing sections; also repealing K.S.A. 58-20a06.

*Be it enacted by the Legislature of the State of Kansas:*

New Section 1. The provisions of this act shall not be construed to prohibit the appropriate use of other datums and other geodetic reference networks, established by a state agency or county, such as the Kansas regional coordinate system, which was developed and implemented by the Kansas department of transportation and is based upon the North American datum of 1983.

New Sec. 2. The Kansas coordinate systems of 1983 and 1927 were established for defining and stating the geographic positions or locations of points on the surface of the earth within the state of Kansas. The 1983 system is based on the geodetic reference system 1980 ellipsoid of the North American datum of 1983 and was adopted in K.S.A. 58-20a06, prior to its repeal. The 1927 system is based on the Clarke 1866 ellipsoid of the North American datum of 1927 and was not adopted in Kansas statute but was widely used in Kansas prior to adoption of the 1983 system. Both systems are divided into a north zone and a south zone. The area north of the south line of the following counties constitutes the north zone: Wallace, Logan, Gove, Trego, Ellis, Russell, Ellsworth, Saline, Dickinson, Morris, Wabaunsee, Shawnee, Douglas and Johnson. The area south of the north line of the following counties constitutes the south zone: Greeley, Wichita, Scott, Lane, Ness, Rush, Barton, Rice, McPherson, Marion, Chase, Lyon, Osage, Franklin and Miami. The plane coordinate values of a point on the earth's surface, to be used to express the geographic position or location of such point in the appropriate zone of the Kansas coordinate systems of 1983 and 1927, consist of two distances, expressed in feet and decimals of a foot or meters and decimals of a meter. If the values are expressed in feet, a definition of one foot equals 1200/3937 meter exactly shall be used as the standard foot for the Kansas coordinate systems of 1983 and 1927. One of the distances, known as the "Northing" or "N" for the 1983 system, or "y" for the 1927 system, gives the position in a north and south direction. The other distance, known as the "Easting" or "E" for the 1983 system, or "x" for the 1927 system, gives the position in an east and west direction. For purposes of more precisely defining the Kansas coordinate systems of 1983 and 1927, the following definitions shall apply:

(a) The Kansas coordinate systems of 1983 and 1927 north zone (zone code 1501) means a Lambert conformal conic projection, having standard parallels at north latitudes 38 degrees 43 minutes and 39 degrees 47 minutes along which parallels the scale is exact. The origin of coordinates is at the intersection of the meridian 98 degrees zero minutes west of Greenwich and the parallel 38 degrees 20 minutes north latitude. For the 1983 system, this origin is given the coordinates N = 0 meters and E = 400,000 meters. For the 1927 system, this origin is given the coordinates y = 0 feet and x = 2,000,000 feet.

(b) The Kansas coordinate systems of 1983 and 1927 south zone (zone code 1502) means a Lambert conformal conic projection, having standard parallels at north latitudes 37 degrees 16 minutes and 38 degrees 34 minutes along which parallels the scale is exact. The origin of coordinates is at the intersection of the meridian 98 degrees 30 minutes west of Greenwich and the parallel 36 degrees 40 minutes north latitude. For the 1983 system, this origin is given the coordinates N = 400,000 meters and E = 400,000 meters. For the 1927 system, this origin is given the coordinates y = 0 feet and x = 2,000,000 feet.

New Sec. 3. The provisions of K.S.A. 58-20a01 through 58-

20a08, and sections 1 through 3, and amendments thereto, shall be known and may be cited as the Kansas plane coordinate system act.

Sec. 4. ~~K.S.A. 58-20a01 is hereby amended to read as follows: 58-20a01. The system of plane coordinates which has been established by the national ocean survey/national geodetic survey (formerly the United States coast and geodetic survey) or its successors for defining and stating the geographic positions or locations of points on the surface of the earth within the state of Kansas shall be known as the Kansas 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 north of the south line of the following counties shall constitute the north zone: Wallace, Logan, Gove, Trego, Ellis, Russell, Ellsworth, Saline, Dickinson, Morris, Wabaunsee, Shawnee, Douglas and Johnson.~~

~~The area now included south of the north line of the following counties shall constitute the south zone: Greeley, Wichita, Scott, Lane, Ness, Rush, Barton, Rice, McPherson, Marion, Chase, Lyon, Osage, Franklin and Miami. The most recent system of plane coordinates established by the national oceanic and atmospheric administration's national geodetic survey, or a successor agency, based on the national spatial reference system, for defining and stating the geographic positions or locations of points on, within or above the surface of the earth within the state of Kansas are hereafter to be known and designated as the Kansas plane coordinate system.~~

Sec. 5. K.S.A. 58-20a02 is hereby amended to read as follows: 58-20a02. ~~As established for use in the north zone, the Kansas coordinate system of 1983 shall be named. In any land description in which it is used, it shall be designated the "Kansas coordinate system 1983 north zone."~~

~~As established for use in the south zone, the Kansas coordinate system of 1983 shall be named. In any land description in which it is used, it shall be designated the "Kansas coordinate system 1983 south zone." The Kansas plane coordinate system shall be named in any land description in which it is used, and the zone used shall be specified in the description, and if applicable, the geodetic datum and the epoch of the coordinates in decimal years.~~

Sec. 6. K.S.A. 58-20a03 is hereby amended to read as follows: 58-20a03. 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 the Kansas plane coordinate system~~, shall consist of two distances expressed in *feet and decimals of a foot* or meters and decimals of a meter ~~when using the Kansas coordinate system of 1983. One of the distances, to be known as the "Northing" or "N" shall give the position in a north and south direction; the other, to be known as the "Easting" or "E" shall give the position in an east and west direction. These coordinates shall be made to depend upon and conform to plane rectangular coordinate values for the monumented points of the North American national geodetic horizontal 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 in the act. Any such station or point may be used for establishing a survey connection to the Kansas coordinate system of 1983. If the values are expressed in feet, a definition of one foot equals 0.3048 meter exactly is used as the standard foot for the Kansas plane coordinate system. One of the two distances, to be known as the east or x-coordinate, gives the distance east of the y-axis. The other distance, to be known as the north or y-coordinate, gives the distance north of~~

*the x-axis. The y-axis of any zone is parallel with the central meridian of that zone. The x-axis of any zone is at right angles to the central meridian of that zone. Height is the coordinate value of the vertical elements of the national spatial reference system expressed in feet or meters and identified as ellipsoid height or orthometric height.*

Sec. 7. K.S.A. 58-20a04 is hereby amended to read as follows: 58-20a04. Descriptions of tracts of land by reference to subdivisions, lines or corners of the United States public land survey, or other original pertinent surveys, are hereby recognized as the basic and prevailing method for describing such tracts. Whenever coordinates of the Kansas *plane* coordinate system are used in such descriptions they shall be construed as being supplementary to descriptions of such subdivisions, lines or corners contained in official plats and field notes of record; and, in the event of any conflict, the descriptions by reference to the subdivisions, lines or corners of the United States public land surveys, or other original pertinent surveys shall prevail over the description by coordinates.

Sec. 8. K.S.A. 58-20a05 is hereby amended to read as follows: 58-20a05. When any tract of land to be defined by a single description extends from one *zone* into the other of the above coordinate adjacent zones, the position of all points on its boundaries ~~may~~ shall be referred to either of the two ~~exclusively to only one of the multiple zones, the zone which~~ that is used ~~being specifically named~~ shall be specified in the description.

Sec. 9. K.S.A. 58-20a07 is hereby amended to read as follows: 58-20a07. The use of the term "~~Kansas coordinate system of 1983 north zone~~" or "~~Kansas *plane* coordinate system of 1983 south zone~~" on any map, report of survey, or other document shall be limited to coordinates based on the Kansas *plane* coordinate system ~~as defined in this act.~~

Sec. 10. K.S.A. 58-20a01, 58-20a02, 58-20a03, 58-20a04, 58-20a05, 58-20a06 and 58-20a07 are hereby repealed.

Sec. 11. This act shall take effect and be in force from and after its publication in the statute book.

I hereby certify that the above BILL originated in the SENATE, and passed that body

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\_\_\_\_\_  
*President of the Senate.*

\_\_\_\_\_  
*Secretary of the Senate.*

Passed the HOUSE \_\_\_\_\_

\_\_\_\_\_  
*Speaker of the House.*

\_\_\_\_\_  
*Chief Clerk of the House.*

APPROVED \_\_\_\_\_

\_\_\_\_\_  
*Governor.*