

**SENATE BILL No. 424**

By Committee on Federal and State Affairs

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1 AN ACT concerning the Kansas plane coordinate system act; providing for  
2 geographic positions or locations of points within the state of Kansas;  
3 amending K.S.A. 58-20a01, 58-20a02, 58-20a03, 58-20a04, 58-20a05  
4 and 58-20a07 and repealing the existing sections; also repealing K.S.A.  
5 58-20a06.  
6

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

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

14 New Sec. 2. The Kansas coordinate systems of 1983 and 1927 were  
15 established for defining and stating the geographic positions or locations  
16 of points on the surface of the earth within the state of Kansas. The 1983  
17 system is based on the geodetic reference system 1980 ellipsoid of the  
18 North American datum of 1983 and was adopted in K.S.A. 58-20a06, prior  
19 to its repeal. The 1927 system is based on the Clarke 1866 ellipsoid of the  
20 North American datum of 1927 and was not adopted in Kansas statute but  
21 was widely used in Kansas prior to adoption of the 1983 system. Both  
22 systems are divided into a north zone and a south zone. The area north of  
23 the south line of the following counties constitutes the north zone:  
24 Wallace, Logan, Gove, Trego, Ellis, Russell, Ellsworth, Saline, Dickinson,  
25 Morris, Wabaunsee, Shawnee, Douglas and Johnson. The area south of the  
26 north line of the following counties constitutes the south zone: Greeley,  
27 Wichita, Scott, Lane, Ness, Rush, Barton, Rice, McPherson, Marion,  
28 Chase, Lyon, Osage, Franklin and Miami. The plane coordinate values of a  
29 point on the earth's surface, to be used to express the geographic position  
30 or location of such point in the appropriate zone of the Kansas coordinate  
31 systems of 1983 and 1927, consist of two distances, expressed in feet and  
32 decimals of a foot or meters and decimals of a meter. If the values are  
33 expressed in feet, a definition of one foot equals 1200/3937 meter exactly  
34 shall be used as the standard foot for the Kansas coordinate systems of  
35 1983 and 1927. One of the distances, known as the "Northing" or "N" for  
36 the 1983 system, or "y" for the 1927 system, gives the position in a north

1 and south direction. The other distance, known as the "Easting" or "E" for  
2 the 1983 system, or "x" for the 1927 system, gives the position in an east  
3 and west direction. For purposes of more precisely defining the Kansas  
4 coordinate systems of 1983 and 1927, the following definitions shall  
5 apply:

6 (a) The Kansas coordinate systems of 1983 and 1927 north zone  
7 (zone code 1501) means a Lambert conformal conic projection, having  
8 standard parallels at north latitudes 38 degrees 43 minutes and 39 degrees  
9 47 minutes along which parallels the scale is exact. The origin of  
10 coordinates is at the intersection of the meridian 98 degrees zero minutes  
11 west of Greenwich and the parallel 38 degrees 20 minutes north latitude.  
12 For the 1983 system, this origin is given the coordinates  $N = 0$  meters and  
13  $E = 400,000$  meters. For the 1927 system, this origin is given the  
14 coordinates  $y = 0$  feet and  $x = 2,000,000$  feet.

15 (b) The Kansas coordinate systems of 1983 and 1927 south zone  
16 (zone code 1502) means a Lambert conformal conic projection, having  
17 standard parallels at north latitudes 37 degrees 16 minutes and 38 degrees  
18 34 minutes along which parallels the scale is exact. The origin of  
19 coordinates is at the intersection of the meridian 98 degrees 30 minutes  
20 west of Greenwich and the parallel 36 degrees 40 minutes north latitude.  
21 For the 1983 system, this origin is given the coordinates  $N = 400,000$   
22 meters and  $E = 400,000$  meters. For the 1927 system, this origin is given  
23 the coordinates  $y = 0$  feet and  $x = 2,000,000$  feet.

24 New Sec. 3. The provisions of K.S.A. 58-20a01 through 58-20a08,  
25 and sections 1 through 3, and amendments thereto, shall be known and  
26 may be cited as the Kansas plane coordinate system act.

27 Sec. 4. K.S.A. 58-20a01 is hereby amended to read as follows: 58-  
28 20a01. ~~The system of plane coordinates which has been established by the~~  
29 ~~national ocean survey/national geodetic survey (formerly the United States~~  
30 ~~coast and geodetic survey) or its successors for defining and stating the~~  
31 ~~geographic positions or locations of points on the surface of the earth~~  
32 ~~within the state of Kansas shall be known as the Kansas coordinate system~~  
33 ~~of 1983.~~

34 For the purpose of the use of this system, the state is divided into a  
35 north zone and a south zone.

36 The area now included north of the south line of the following counties  
37 shall constitute the north zone: Wallace, Logan, Gove, Trego, Ellis,  
38 Russell, Ellsworth, Saline, Dickinson, Morris, Wabaunsee, Shawnee,  
39 Douglas and Johnson.

40 The area now included south of the north line of the following counties  
41 shall constitute the south zone: Greeley, Wichita, Scott, Lane, Ness, Rush,  
42 Barton, Rice, McPherson, Marion, Chase, Lyon, Osage, Franklin and  
43 Miami *The most recent system of plane coordinates established by the*

1 *national oceanic and atmospheric administration's national geodetic*  
2 *survey, or a successor agency, based on the national spatial reference*  
3 *system, for defining and stating the geographic positions or locations of*  
4 *points on, within or above the surface of the earth within the state of*  
5 *Kansas are hereafter to be known and designated as the Kansas plane*  
6 *coordinate system.*

7 Sec. 5. K.S.A. 58-20a02 is hereby amended to read as follows: 58-  
8 20a02. ~~As established for use in the north zone, the Kansas coordinate~~  
9 ~~system of 1983 shall be named. In any land description in which it is used,~~  
10 ~~it shall be designated the "Kansas coordinate system 1983 north zone."~~

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

18 Sec. 6. K.S.A. 58-20a03 is hereby amended to read as follows: 58-  
19 20a03. The plane coordinate values for a point on the earth's surface used  
20 to express the geographic position or location of such point in the  
21 appropriate zone of ~~this~~ *the Kansas plane coordinate system*, shall consist  
22 of two distances expressed in *feet and decimals of a foot* or meters and  
23 decimals of a meter ~~when using the Kansas coordinate system of 1983.~~  
24 ~~One of the distances, to be known as the "Northing" or "N" shall give the~~  
25 ~~position in a north and south direction; the other, to be known as the~~  
26 ~~"Easting" or "E" shall give the position in an east and west direction.~~  
27 ~~These coordinates shall be made to depend upon and conform to plane~~  
28 ~~rectangular coordinate values for the monumented points of the North~~  
29 ~~American national geodetic horizontal network as published by the~~  
30 ~~national ocean survey/national geodetic survey (formerly the United States~~  
31 ~~coast and geodetic survey), or its successors, and whose plane coordinates~~  
32 ~~have been computed on the system defined in the act. Any such station or~~  
33 ~~point may be used for establishing a survey connection to the Kansas~~  
34 ~~coordinate system of 1983. If the values are expressed in feet, a definition~~  
35 ~~of one foot equals 0.3048 meter exactly is used as the standard foot for the~~  
36 ~~Kansas plane coordinate system. One of the two distances, to be known as~~  
37 ~~the east or x-coordinate, gives the distance east of the y-axis. The other~~  
38 ~~distance, to be known as the north or y-coordinate, gives the distance~~  
39 ~~north of the x-axis. The y-axis of any zone is parallel with the central~~  
40 ~~meridian of that zone. The x-axis of any zone is at right angles to the~~  
41 ~~central meridian of that zone. Height is the coordinate value of the vertical~~  
42 ~~elements of the national spatial reference system expressed in feet or~~  
43 ~~meters and identified as ellipsoid height or orthometric height.~~

1       Sec. 7. K.S.A. 58-20a04 is hereby amended to read as follows: 58-  
2 20a04. Descriptions of tracts of land by reference to subdivisions, lines or  
3 corners of the United States public land survey, or other original pertinent  
4 surveys, are hereby recognized as the basic and prevailing method for  
5 describing such tracts. Whenever coordinates of the Kansas *plane*  
6 coordinate system are used in such descriptions they shall be construed as  
7 being supplementary to descriptions of such subdivisions, lines or corners  
8 contained in official plats and field notes of record; and, in the event of  
9 any conflict, the descriptions by reference to the subdivisions, lines or  
10 corners of the United States public land surveys, or other original pertinent  
11 surveys shall prevail over the description by coordinates.

12       Sec. 8. K.S.A. 58-20a05 is hereby amended to read as follows: 58-  
13 20a05. When any tract of land to be defined by a single description  
14 extends from one *zone* into the other of the above coordinate *adjacent*  
15 zones, the position of all points on its boundaries ~~may~~ shall be referred to  
16 ~~either of the two~~ *exclusively to only one of the multiple zones, the zone*  
17 ~~which that~~ *is used being specifically named shall be specified* in the  
18 description.

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

24       Sec. 10. K.S.A. 58-20a01, 58-20a02, 58-20a03, 58-20a04, 58-20a05,  
25 58-20a06 and 58-20a07 are hereby repealed.

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