State of Arkansas
95th General Assembly
Regular Session, 2025

A Bill

HOUSE BILL 1441

By: Representative S. Meeks

For An Act To Be Entitled

AN ACT TO AMEND THE LAW CONCERNING THE ARKANSAS COORDINATE SYSTEM OF 1983; AND FOR OTHER PURPOSES.

Subtitle

TO AMEND THE LAW CONCERNING THE ARKANSAS COORDINATE SYSTEM OF 1983.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. Arkansas Code § 15-21-206(4), concerning powers and duties of the State Surveyor, is amended to read as follows:

(4) To extend throughout the state a triangulation and leveling net of precision whereby the Arkansas Plane Coordinate System ~~1983~~, § 15-21-301 et seq., already initiated in this state by the National Geodetic Survey may be made to cover to the necessary extent those areas of the state that do not now have enough geodetic control stations to permit the general use of the system by land surveyors and others;

SECTION 2. Arkansas Code § 15-21-301 is amended to read as follows:

15-21-301. Designation of system.

The system of plane coordinates which has been established by the National Geodetic Survey or its successors, based on the National Spatial Reference System or its successors, and known as the State Plane Coordinate System or its successors for defining and stating the positions or locations ~~of points on the surface of the earth~~ within the State of Arkansas ~~is to~~ shall be known ~~and designated~~ as the "Arkansas Plane Coordinate System ~~1983~~".

SECTION 3. Arkansas Code § 15-21-302 — 15-21-303 are repealed.

~~15-21-302. Creation of zones.~~

~~(a) For the purpose of the use of the Arkansas Coordinate System 1983 the state is divided into a "North Zone" and a "South Zone".~~

~~(b) The area now included in the following counties shall constitute the North Zone: Baxter, Benton, Boone, Carroll, Clay, Cleburne, Conway, Craighead, Crawford, Crittenden, Cross, Faulkner, Franklin, Fulton, Greene, Independence, Izard, Jackson, Johnson, Lawrence, Logan, Madison, Marion, Mississippi, Newton, Perry, Poinsett, Pope, Pulaski, Randolph, Scott, Searcy, Sebastian, Sharp, St. Francis, Stone, Van Buren, Washington, White, Woodruff, and Yell.~~

~~(c) The area now included in the following counties shall constitute the South Zone: Arkansas, Ashley, Bradley, Calhoun, Chicot, Clark, Cleveland, Columbia, Dallas, Desha, Drew, Garland, Grant, Hempstead, Hot Spring, Howard, Jefferson, Lafayette, Lee, Lincoln, Little River, Lonoke, Miller, Monroe, Montgomery, Nevada, Ouachita, Phillips, Pike, Polk, Prairie, Saline, Sevier, and Union.~~

~~15-21-303. Designations within zones.~~

~~(a) As established for use in the North Zone, the Arkansas Coordinate System 1983 shall be named and in any land description in which it is used it shall be designated the "Arkansas Coordinate System 1983, North Zone".~~

~~(b) As established for use in the South Zone, the Arkansas Coordinate System 1983 shall be named and in any land description in which it is used it shall be designated the "Arkansas Coordinate System 1983, South Zone".~~

SECTION 4. Arkansas Code § 15-21-304 is amended to read as follows:

15-21-304. Land lying in ~~both~~ multiple zones.

When any tract of land to be defined by a single description extends from one (1) coordinate zone into ~~the~~ other ~~of the~~ coordinate zones ~~established by § 15-21-302~~, the positions of all points on its boundaries may be referred to ~~either~~ one (1) of the ~~two (2)~~ zones, the zone which is used being specifically named in the description.

SECTION 5. Arkansas Code § 15-21-305 is amended to read as follows:

15-21-305. Coordinates.

(a)(1) The plane coordinates of a point ~~on the earth's surface~~ to be used in expressing the geographic position or location of ~~such a~~ the point in the appropriate zone of the Arkansas Plane Coordinate System ~~1983~~ shall consist of two (2) distances, expressed in feet and decimals of a foot or meters and decimals of a meter.

(2) When the value expressed under subdivision (a)(1) of this section is in feet, one (1) foot shall equal three thousand forty-eight ten-thousandths (0.3048) meters exactly.

(b) One (1) of these distances, to be known as the "east(x)-coordinate", shall give the position in the east-and-west direction, and the other, to be known as the "north(y)-coordinate", shall give the position in a north-and-south direction.

~~(c) These coordinates shall be made to depend upon and conform to the coordinates on the Arkansas Coordinate System 1983 of the triangulation and traverse stations of the National Geodetic Survey within the State of Arkansas as those coordinates have been determined by the National Geodetic Survey.~~

~~(d)(1) The official conversion for meters to feet shall be the United States survey foot.~~

~~(2)(A) Meters shall be converted to United States survey feet by multiplying the number of meters by 39.37 and dividing that result by twelve (12).~~

~~(B) One (1) meter shall equal 39.37 inches.~~

~~(C) 3.280833333 United States survey feet are equal to one (1) meter.~~

SECTION 6. Arkansas Code § 15-21-306 is repealed.

~~15-21-306. Technical definition of system — Marking of coordinates on ground.~~

~~(a) For purposes of more precisely defining the Arkansas Coordinate System 1983, the following definition by the National Geodetic Survey is adopted:~~

~~(1)(A) The Arkansas Coordinate System 1983, North Zone, is a Lambert conformal projection of the North American Datum of 1983 (NAD83), having standard parallels at north latitudes of thirty-four degrees fifty-six minutes (34° 56′ north) and thirty-six degrees fourteen minutes (36° 14′~~

~~north), along which parallels the scale shall be exact.~~

~~(B) The origin of coordinates is at the intersection of the meridian ninety-two degrees zero minutes west of Greenwich (92° 00′ west) and the parallel thirty-four degrees twenty minutes north latitude (34° 20′ north). This origin is given the coordinates: East equals four hundred thousand meters (400,000 m.) and north equals zero meters (0.0 m.); and~~

~~(2)(A) The Arkansas Coordinate System 1983, South Zone, is a Lambert conformal projection of the North American Datum of 1983 (NAD83), having standard parallels at north latitudes of thirty-three degrees eighteen minutes (33° 18′ north) and thirty-four degrees forty minutes (34° 40′ north), along which parallels the scale shall be exact.~~

~~(B) The origin of coordinates is at the intersection of the meridian ninety-two degrees zero minutes west of Greenwich (92° 0′ west) and the parallel thirty-two degrees forty minutes north latitude (32° 40′ north). This origin is given the coordinates: East equals four hundred thousand meters (400,000 m.) and north equals four hundred thousand meters (400,000 m.).~~

~~(b) The position of Arkansas Coordinate System 1983 shall be marked on the ground by triangulation or traverse stations established in conformity with standards adopted by the National Geodetic Survey for first-order and second-order work, whose geodetic positions have been rigidly adjusted on the North American Datum of 1983 and whose coordinates have been computed on the system herein defined. Any such station may be used for establishing a survey connection with the Arkansas Coordinate System 1983.~~

SECTION 7. Arkansas Code § 15-21-308 is repealed.

~~15-21-308. References to system on maps and surveys.~~

~~The use of the term "Arkansas Coordinate System 1983" on any map, report of survey, or other document shall be limited to coordinates based on the Arkansas Coordinate System 1983 as defined in this subchapter.~~

SECTION 8. Arkansas Code §§ 15-21-309 and 15-21-310 are amended to read as follows:

15-21-309. Description by coordinates supplemental to references to public land surveys.

Wherever coordinates based on the Arkansas Plane Coordinate System ~~1983~~

are used to describe any tract of land which in the same document is also described by reference to any subdivision, line, or other corner of the United States Public Land Survey, the description by the coordinates shall be construed as supplemental to the basic description of such subdivision, line, or corner contained in the official plats and field notes filed of record, and in the event of any conflict, the description by reference to the subdivision, line, or corner of the United States Public Land Survey shall prevail over the description by coordinates.

15-21-310. Reliance on system not required.

Nothing contained in this subchapter shall require any purchaser or mortgagee to rely on the description, any part of which depends exclusively upon the Arkansas Plane Coordinate System ~~1983~~.

SECTION 9. Arkansas Code Title 15, Chapter 21, Subchapter 3, is amended to add an additional section to read as follows:

15-21-311. Superseded legacy Arkansas plane coordinate systems.

(a)(1) Two (2) plane coordinate systems were previously defined in statute:

(A) The most recent based on the North American Datum of 1983; and

(B) The prior version based on the North American Datum of 1927.

(2) Both of the plane coordinate systems referenced in subdivision (a)(1) of this section are superseded by the Arkansas Plane Coordinate System under § 15-21-301.

(3) If either of the legacy systems referenced in subdivision (a)(1) of this section are used, the legacy system shall be referred to as either of the following to clearly distinguish the legacy systems from each other and the Arkansas Plane Coordinate System:

(A) Arkansas Coordinate System 1983; or

(B) Arkansas Coordinate System 1927.

(b)(1) For both the Arkansas Coordinate System 1983 and the Arkansas Coordinate System 1927, if a coordinate value is expressed in feet, the United States survey foot shall be used.

(2) To calculate the United States survey foot required under

subdivision (b)(1) of this section, one (1) foot equals 1200/3937 meters exactly.

(c)(1)(A) Both the Arkansas Coordinate System 1983 and the Arkansas Coordinate System 1927 are divided into a north and south zone.

(B) The north zone is assigned code 0301, and the south zone is assigned code 0302.

(2) The zones in both systems are Lambert conformal conic map projections.

(d)(1)(A) Both the Arkansas Coordinate System 1983 and the Arkansas Coordinate System 1927 north zone have standard parallels at north latitudes of thirty-four degrees fifty-six minutes (34° 56′ north) and thirty-six degrees fourteen minutes (36° 14′ north), along which parallels the scale is exact.

(B) The origin of coordinates is at the intersection of the meridian ninety-two degrees zero minutes west of Greenwich (92° 00′ west) and the parallel thirty-four degrees twenty minutes north latitude (34° 20′ north).

(C) For the Arkansas Coordinate System 1983, this origin is given the coordinates of east equals four hundred thousand meters (400,000 m.) and north equals zero meters (0.0 m.).

(D) For the Arkansas Coordinate System 1927, this origin is given the coordinates x equals two million United States survey feet (2,000,000′) and y equals zero (0′) United States survey feet.

(2)(A) Both the Arkansas Coordinate System 1983 and the Arkansas Coordinate System 1927 south zone have standard parallels at north latitudes of thirty-three degrees eighteen minutes (33° 18′ north) and thirty-four degrees forty minutes (34° 46′ north), along which parallels the scale shall be exact.

(B) The origin of coordinates is at the intersection of the meridian ninety-two degrees zero minutes west of Greenwich (92° 0′ west) and the parallel thirty-two degrees forty minutes north latitude (32° 40′ north).

(C) For the Arkansas Coordinate System 1983, the origin is given the coordinates of east equals four hundred thousand meters (400,000 m.), and north equals four hundred thousand meters (400,000 m.).

(D) For the Arkansas Coordinate System 1927, the origin is

given the coordinates x equals two million United States survey feet (2,000,000′), and y equals zero (0′) United States survey feet.

(e) The Arkansas Coordinate System of 1983 north zone consists of the following counties listed from west to east, and all counties to the north:

(1) Scott County;

(2) Yell County;

(3) Perry County;

(4) Pulaski County;

(5) Faulkner County;

(6) White County;

(7) Woodruff County;

(8) St. Francis County; and

(9) Crittenden County.

(f) The Arkansas Coordinate System of 1983 south zone consists of the following counties listed from west to east, and all counties to the south:

(1) Polk County;

(2) Montgomery County;

(3) Garland County;

(4) Saline County;

(5) Grant County;

(6) Jefferson County;

(7) Lonoke County;

(8) Prairie County;

(9) Monroe County; and

(10) Lee County.

(g) The Arkansas Coordinate System of 1927 north zone and south zone consist of the same counties as the Arkansas Coordinate System of 1983 provided in subsections (e) and (f) of this section, except that Pulaski County is in the south zone rather than the north zone.