

## **BILL ANALYSIS**

Senate Research Center  
87R11013 ANG-F

S.B. 1072  
By: Hinojosa  
Natural Resources & Economic Development  
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As Filed

### **AUTHOR'S / SPONSOR'S STATEMENT OF INTENT**

The Texas Spatial Reference Center (center) is the state's official repository for its spatial datum. In 2007, the 80th Texas Legislature established the center (Section 88.503, Education Code) to facilitate the National Height Modernization program. Since then, the center has been responsible for establishing and maintaining the state's spatial reference system for geodetic control and mapping.

The United States horizontal and vertical control components of all mapping will change in 2022. Chapter 21, Natural Resources Code, must be modified to allow the use of these changes in Texas and to direct its periodic changes.

The National Geodetic Survey is scheduled to introduce a new dynamic spatial reference which will replace the static North American Datum of 1983. This update requires each state to update its State Coordinate System project zones. Texas will increase its current five zone definitions (Section 21.071, Natural Resources Code) to 50 low distortion zones. Additionally, the National Institute of Standards and Technology will allow the definition of the United States Survey Foot to expire, leaving the International Foot to take its place.

S.B. 1072 proposes to address the changes to our datum by seeking an avenue that does not clutter Chapter 21 with defining 50 zones, which may change at every datum update. The bill assigns the Texas Spatial Reference Center to facilitate the adoption and publication of the definitions for the public. The bill also reflects the changes needed in Chapter 21 with the Field Notes of a Survey of Public Land (Section 21.041, Natural Resources Code) and definition of the International Foot.

As proposed, S.B. 1072 amends current law relating to the procedure for conducting surveys of public land, including the requirements regarding field notes and coordinate systems.

### **RULEMAKING AUTHORITY**

This bill does not expressly grant any additional rulemaking authority to a state officer, institution, or agency.

### **SECTION BY SECTION ANALYSIS**

SECTION 1. Amends Section 21.041, Natural Resources Code, as follows:

Sec. 21.041. FIELD NOTES OF A SURVEY OF PUBLIC LAND. Requires that the field notes of a survey of public land state certain information, including the State Plane Coordinates based on the Texas Coordinate System of 1927, the Texas Coordinate System of 1983, or an alternative coordinate system adopted under Section 21.0711, rather than based on the Texas Coordinate System of 1927 or the Texas Coordinate System of 1983, values for the beginning point on the survey with appropriate reference to zone, mapping angle, grid distances, acreage and the N.G.S. Station to which the survey is tied.

SECTION 2. Amends Subchapter D, Chapter 21, Natural Resources Code, by adding Section 21.0711, as follows:

Sec. 21.0711. ALTERNATIVE COORDINATE SYSTEMS. (a) Authorizes the Texas Spatial Reference Center (center) at Texas A&M University--Corpus Christi established under Section 88.503 (Spatial Reference Center), Education Code, to adopt a revised state coordinate system that may be used for purposes of Subchapter D (Texas Coordinate Systems) under the authority granted to the center as the state's facilitator of the National Spatial Reference System.

(b) Provides that a revised coordinate system adopted under Subsection (a) is an official state coordinate system.

SECTION 3. Amends Section 21.077, Natural Resources Code, as follows:

Sec. 21.077. UNIT OF MEASUREMENT. Provides that the unit of measurement in Subchapter D has the following values, based on the International Meter established by the National Bureau of Standards:

(1) makes no changes to this subdivision;

(2) one U.S. survey foot = 0.3048006096 meter, rather than one foot = 12.00 inches exactly;

(3) makes a nonsubstantive change to this subdivision; and

(4) one international foot = 0.3048 meter exactly.

SECTION 4. Effective date: September 1, 2021.