
**Rural Development, Agriculture, &
Natural Resources Committee**

HB 2860

Brief Description: Concerning the Washington plane coordinate system.

Sponsors: Representatives Orcutt and Fey.

Brief Summary of Bill

- Updates provisions and definitions related to the Washington plane coordinate system.

Hearing Date: 2/4/20

Staff: Robert Hatfield (786-7117).

Background:

The Department of Natural Resources is required to provide a reference system to identify and preserve survey points. These survey points are widely used in land surveying, Geographic Information Systems (GIS) applications, and map production. This reference system is known as the Washington Coordinate System.

In 1945 Washington adopted, as part of the Washington Coordinate System, a federal reference system supported and maintained by the National Geodetic Survey (NGS). This system was known as the North American Datum of 1927 (NAD27). A new reference system based on the North American Datum of 1983, known as NAD83, was developed to reflect improved technology and accuracy. Since 1990 persons using the Washington Coordinate System have been required to use NAD83.

Using NAD83, the Washington Coordinate System provides a common language for identifying location coordinates that are expressed in terms of an "x" value (an east-west direction) and a "y" value (a north-south direction). The Washington Coordinate System requires that reference

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

points be expressed in meters. These values expressed in meters, or converted to feet, can then be entered into a database and be shared with anyone who chooses to use the Washington Coordinate System.

The National Geodetic Survey is scheduled to provide a new, more accurate coordinate system beginning in 2022. At that time, NAD83 will no longer be supported.

Summary of Bill:

The following definitions are added to the law governing the Washington Coordinate System:

- "NSRS" means the National Spatial Reference System or its successor.
- "WPCS" means the Washington Plane Coordinate System, the system of plane coordinates as determined by the National Geodetic Survey (NGS).
- "Metadata" means, for purposes of the WPCS, the geodetic reference system utilized, the applicable epoch, the date of observation, and other metadata as appropriate.

The WPCS shall consist of the most recent system of plane coordinates established by the NGS for defining and stating the positions or locations of points on the surface of the earth within the state of Washington.

The plane coordinates of a point on the earth's surface, to be used in expressing the position or location of the point in the appropriate zone of the WPCS, consist of two distances, expressed in feet and decimals of a foot or meters and decimals of a meter, along with the metadata of the observations used to determine the coordinates. One of these distances, to be known as the "east x-coordinate," must give the distance east of the Y axis; the other, to be known as the "north y-coordinate," must give the distance north of the X axis. The Y axis of any zone must be parallel with the central meridian of that zone. The X axis of any zone must be at right angles to the central meridian of that zone.

When a land record or deed refers to coordinates for the purpose of defining the position of a point on a land boundary, the method and source for establishing the coordinates must be described in the land record or deed.

The official geodetic datums to which the geodetic coordinates are referenced within the State of Washington shall be as defined for the NSRS.

When values are expressed in feet, one foot equals 0.3048 meters.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.