

# HOUSE BILL REPORT

## HB 2860

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### As Passed Legislature

**Title:** An act relating to the Washington plane coordinate system.

**Brief Description:** Concerning the Washington plane coordinate system.

**Sponsors:** Representatives Orcutt and Fey.

### Brief History:

#### Committee Activity:

Rural Development, Agriculture, & Natural Resources: 2/4/20, 2/7/20 [DP].

#### Floor Activity:

Passed House: 2/18/20, 98-0.

Passed Senate: 3/6/20, 48-0.

Passed Legislature.

### Brief Summary of Bill

- Updates provisions and definitions related to the Washington Coordinate System.

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### HOUSE COMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE, & NATURAL RESOURCES

**Majority Report:** Do pass. Signed by 15 members: Representatives Blake, Chair; Shewmake, Vice Chair; Chandler, Ranking Minority Member; Dent, Assistant Ranking Minority Member; Chapman, Dye, Fitzgibbon, Kretz, Lekanoff, Orcutt, Pettigrew, Ramos, Schmick, Springer and Walsh.

**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.

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

The NGS is scheduled to provide a new, more accurate coordinate system beginning in 2022. At that time, the 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); and
- "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 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.

**Staff Summary of Public Testimony:**

(In support) The state needs to be in compliance with updates at the federal level. The bill is needed in order to provide the most accurate, most consistent boundaries possible. The 2022 update at the national level will eliminate certain discrepancies that date back over 100 years. The bill will make Washington efficient and adaptable to changes in the future without the need for additional legislative updates.

Surveyors are the stakeholders who will be most affected by this legislation. The bill will allow Washington surveyors to remain in step with updates at the federal level. Coordinates are a key tool used by surveyors, and they must be related to a standard reference frame. The National Geodetic Survey is the keeper of the federal reference frame. In 2022, when that reference frame changes, this bill will allow Washington to stay current and compliant.

The proposed changes will track updates made at the federal level. The bill will reduce confusion and inefficiencies that would be caused by having multiple standards to comply with.

(Opposed) None.

**Persons Testifying:** Representative Orcutt, prime sponsor; Patrick Beehler, Department of Natural Resources; Kathryn Schalk, Land Surveyors Association of Washington; and Joanne Markert, Office of the Chief Information Officer Geographic Information Systems Program.

**Persons Signed In To Testify But Not Testifying:** None.