

PROPOSED AMENDMENTS TO

SENATE BILL NO. 2260

Introduced by

Senators Burckhard, Barta, Roers

Representatives Berg, Satrom

1 | A BILL for an Act to amend and reenact sections 47-20.2-01, 47-20.2-02, 47-20.2-03,
2 | 47-20.2-05, and 47-20.2-06 of the North Dakota Century Code, relating to the North Dakota
3 | coordinate system zones.

4 | **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

5 | **SECTION 1. AMENDMENT.** Section 47-20.2-01 of the North Dakota Century Code is
6 | amended and reenacted as follows:

7 | **47-20.2-01. North Dakota coordinate system zones defined.**

8 | 1. The systems of plane coordinates which have been established by the national
9 | oceanic and atmospheric administration national ocean survey/national geodetic
10 | survey or its successors for defining and stating the geographic positions or locations
11 | of points on the surface of the earth within this state are, ~~as of July 1, 1989,~~ to be
12 | known and designated as the North Dakota coordinate system of 1927 ~~and~~ the North
13 | Dakota coordinate system of 1983, the North Dakota statewide coordinate system of
14 | 2022, and the North Dakota low-distortion coordinate system of 2022. For the purpose
15 | of the use of ~~these~~ the North Dakota coordinate systems of 1927 and 1983, the state is
16 | divided into a north zone and a south zone:

17 | 4. a. The area now included in the following counties constitutes the north zone:
18 | Divide, Williams, McKenzie, Mountrail, Burke, Renville, Ward, McLean, Bottineau,
19 | McHenry, Sheridan, Pierce, Rolette, Towner, Benson, Wells, Foster, Eddy,
20 | Ramsey, Cavalier, Pembina, Walsh, Nelson, Grand Forks, Griggs, Steele, Traill.

- 1 2. b. The area now included in the following counties constitutes the south zone:
2 Dunn, Golden Valley, Slope, Bowman, Adams, Hettinger, Stark, Mercer, Oliver,
3 Morton, Grant, Sioux, Emmons, Burleigh, Kidder, Logan, McIntosh, Stutsman,
4 Barnes, LaMoure, Dickey, Cass, Ransom, Sargent, Richland.
- 5 2. For the purpose of the use of the North Dakota statewide coordinate system of 2022,
6 the state is covered by one, statewide zone.
- 7 3. For the purpose of the use of the North Dakota low-distortion coordinate system of
8 2022, the state has been divided into sixteen, low-distortion projection zones:
- 9 a. Beulah zone, which includes Dunn, McLean, and Mercer counties.
10 b. Bismarck zone, which includes Burleigh, Kidder, Morton, and Oliver counties.
11 c. Bottineau zone, which includes Bottineau, Cavalier, Rolette, and Towner
12 counties.
13 d. Bowman zone, which includes Adams, Bowman, Hettinger, and Slope counties.
14 e. Cannon Ball zone, which includes Grant and Sioux counties.
15 f. Carrington zone, which includes Eddy, Foster, Griggs, Sheridan, and Wells
16 counties.
17 g. Devils Lake zone, which includes Benson, McHenry, Nelson, Pierce, and Ramsey
18 counties.
19 h. Dickinson zone, which includes Billings, Golden Valley, and Stark counties.
20 i. Fargo zone, which includes Cass, Ransom, Richland, and Sargent counties.
21 j. Grand Forks zone, which includes Grand Forks, Pembina, Steele, Traill, and
22 Walsh counties.
23 k. Jamestown zone, which includes Barnes and Stutsman counties.
24 l. Linton zone, which includes Emmons, Logan, and McIntosh counties.
25 m. Minot zone, which includes Renville and Ward counties.
26 n. New Town zone, which includes Burke and Mountrail counties.
27 o. Oakes zone, which includes Dickey and LaMoure counties.
28 p. Williston zone, which includes Divide, McKenzie, and Williams counties.

29 **SECTION 2. AMENDMENT.** Section 47-20.2-02 of the North Dakota Century Code is
30 amended and reenacted as follows:

1 **47-20.2-02. North Dakota coordinate system names defined.**

2 1. As established for use in the north zone, the North Dakota coordinate system of 1927
3 or the North Dakota coordinate system of 1983 is named, and in any land description
4 in which it is used it must be designated the North Dakota coordinate system of 1927,
5 north zone, or the North Dakota coordinate system of 1983, north zone. As established
6 for use in the south zone, the North Dakota coordinate system of 1927 or the North
7 Dakota coordinate system of 1983 is named, and in any land description in which it is
8 used it must be designated the North Dakota coordinate system of 1927, south zone,
9 or the North Dakota coordinate system of 1983, south zone.

10 2. As established for use in the statewide zone, the North Dakota statewide coordinate
11 system of 2022 is named, and in any land description in which it is used, it must be
12 designated the North Dakota statewide coordinate system of 2022.

13 3. As established for use in the:

14 a. Beulah zone, the North Dakota coordinate system of 2022 is named, and in any
15 land description in which it is used, it must be designated the Beulah zone of the
16 North Dakota coordinate system of 2022;

17 b. Bottineau zone, the North Dakota coordinate system of 2022 is named, and in
18 any land description in which it is used, it must be designated the Bottineau zone
19 of the North Dakota coordinate system of 2022;

20 c. Bismarck zone, the North Dakota coordinate system of 2022 is named, and in
21 any land description in which it is used, it must be designated the Bismarck zone
22 of the North Dakota coordinate system of 2022;

23 d. Bowman zone, the North Dakota coordinate system of 2022 is named, and in any
24 land description in which it is used, it must be designated the Bowman zone of
25 the North Dakota coordinate system of 2022;

26 e. Cannon Ball zone, the North Dakota coordinate system of 2022 is named, and in
27 any land description in which it is used, it must be designated the Cannon Ball
28 zone of the North Dakota coordinate system of 2022;

29 f. Carrington zone, the North Dakota coordinate system of 2022 is named, and in
30 any land description in which it is used it must be designated the Carrington zone
31 of the North Dakota coordinate system of 2022;

- 1 g. Devils Lake zone, the North Dakota coordinate system of 2022 is named, and in
2 any land description in which it is used, it must be designated the Devils Lake
3 zone of the North Dakota coordinate system of 2022;
- 4 h. Dickinson zone, the North Dakota coordinate system of 2022 is named, and in
5 any land description in which it is used, it must be designated the Dickinson zone
6 of the North Dakota coordinate system of 2022;
- 7 i. Fargo zone, the North Dakota coordinate system of 2022 is named, and in any
8 land description in which it is used, it must be designated the Fargo zone of the
9 North Dakota coordinate system of 2022;
- 10 j. Grand Forks zone, the North Dakota coordinate system of 2022 is named, and in
11 any land description in which it is used, it must be designated the Grand Forks
12 zone of the North Dakota coordinate system of 2022;
- 13 k. Jamestown zone, the North Dakota coordinate system of 2022 is named, and in
14 any land description in which it is used, it must be designated the Jamestown
15 zone of the North Dakota coordinate system of 2022;
- 16 l. Linton zone, the North Dakota coordinate system of 2022 is named, and in any
17 land description in which it is used, it must be designated the Linton zone of the
18 North Dakota coordinate system of 2022;
- 19 m. Minot zone, the North Dakota coordinate system of 2022 is named, and in any
20 land description in which it is used, it must be designated the Minot zone of the
21 North Dakota coordinate system of 2022;
- 22 n. New Town zone, the North Dakota coordinate system of 2022 is named, and in
23 any land description in which it is used, it must be designated the New Town zone
24 of the North Dakota coordinate system of 2022;
- 25 o. Oakes zone, the North Dakota coordinate system of 2022 is named, and in any
26 land description in which it is used, it must be designated the Oakes zone of the
27 North Dakota coordinate system of 2022; and
- 28 p. Williston zone, the North Dakota coordinate system of 2022 is named, and in any
29 land description in which it is used, it must be designated the Williston zone of
30 the North Dakota coordinate system of 2022.

1 | **SECTION 3. AMENDMENT.** Section 47-20.2-03 of the North Dakota Century Code is
2 | amended and reenacted as follows:

3 | **47-20.2-03. North Dakota coordinate system defined.**

4 | The plane coordinate values for a point on the earth's surface, used in expressing the
5 | geographic position or location of such point in the appropriate zone of this system, shall consist
6 | of two distances, expressed in United States survey feet [meters] and decimals of a foot [meter]
7 | when using the North Dakota coordinate system of 1927. One of these distances, to be known
8 | as the X-coordinate, shall give the position in an east-west direction; the other, to be known as
9 | the Y-coordinate, shall give the position in a north-south direction. These coordinates shall be
10 | made to depend upon and conform to plane rectangular coordinate values for the monumented
11 | points of the North American horizontal geodetic control network as published by the national
12 | ocean survey/national geodetic survey, or its successors, and the plane coordinates which have
13 | been computed on the systems defined in this chapter. Any such station may be used for
14 | establishing a survey connection to either North Dakota coordinate system. For the purposes of
15 | converting coordinates of the North Dakota coordinate ~~system~~systems of 1983 and 2022 from
16 | meters to feet, the international ~~survey~~ foot must be used. The conversion factor is: one foot
17 | equals 0.3048 meter exactly.

18 | **SECTION 4. AMENDMENT.** Section 47-20.2-05 of the North Dakota Century Code is
19 | amended and reenacted as follows:

20 | **47-20.2-05. North Dakota coordinate system origins defined.**

- 21 | 1. For the purposes of more precisely defining the North Dakota coordinate system of
22 | 1927, the following definitions by the United States coast and geodetic survey are
23 | adopted:
- 24 | a. The North Dakota coordinate system of 1927, north zone, is a Lambert conformal
25 | conic projection of the Clarke spheroid of 1866, having standard parallels at north
26 | latitudes, forty-seven degrees twenty-six minutes and forty-eight degrees
27 | forty-four minutes along which parallels the scale shall be exact. The origin of
28 | coordinates is at the intersection of the meridian one hundred degrees thirty
29 | minutes west of Greenwich and the parallel forty-seven degrees zero minutes
30 | north latitude. This origin is given the coordinates: $x = 2,000,000$ feet [609.6
31 | kilometers], and $y = 0$ feet [0 kilometers].

- 1 b. The North Dakota coordinate system of 1927, south zone, is a Lambert
2 conformal conic projection of the Clarke spheroid of 1866, having standard
3 parallels at north latitudes forty-six degrees eleven minutes and forty-seven
4 degrees twenty-nine minutes along which parallels the scale shall be exact. The
5 origin of coordinates is at the intersection of the meridian one hundred degrees
6 thirty minutes west of Greenwich and the parallel forty-five degrees forty minutes
7 north latitude. This origin is given the coordinates: $x = 2,000,000$ feet [609.6
8 kilometers], and $y = 0$ feet [0 kilometers].
- 9 2. For the purposes of more precisely defining the North Dakota coordinate system of
10 1983, the following definition by the national ocean survey/national geodetic survey is
11 adopted:
- 12 a. The North Dakota coordinate system of 1983, north zone, is a Lambert conformal
13 conic projection of the North American datum of 1983, having standard parallels
14 at north latitude of forty-seven degrees twenty-six minutes and forty-eight
15 degrees forty-four minutes along which parallels the scale shall be exact. The
16 origin of coordinates is at the intersection of the meridian one hundred degrees
17 thirty minutes west of Greenwich and the parallel forty-seven degrees zero
18 minutes north latitude. This origin is given the coordinates: $x = 600,000.0000$
19 meters, and $y = 00.0000$ meters.
- 20 b. The North Dakota coordinate system of 1983, south zone, is a Lambert
21 conformal conic projection of the North American datum of 1983, having standard
22 parallels at north latitude of forty-six degrees eleven minutes and forty-seven
23 degrees twenty-nine minutes along which parallels the scale shall be exact. The
24 origin of coordinates is at the intersection of the meridian one hundred degrees
25 thirty minutes west of Greenwich and the parallel forty-five degrees forty minutes
26 north latitude. This origin is given the coordinates: $x = 600,000.0000$ meters, and
27 $y = 00.0000$ meters.
- 28 3. For the purposes of more precisely defining the statewide zone of the North Dakota
29 coordinate system of 2022, the definition by the national ocean survey or national
30 geodetic survey is the North Dakota coordinate system of 2022, statewide zone, a
31 Lambert conformal conic projection of the North American datum Terrestrial Reference

1 Frame of 2022, ~~the~~. The origin of coordinates is at the intersection of the meridian one
2 hundred degrees fifteen minutes west of Greenwich and the parallel forty-seven
3 degrees thirty minutes north latitude. This origin is given the coordinates: x =
4 838,200.0000 meters, and y = 342,900.0000 meters.

5 4. For the purposes of more precisely defining the low-distortion projections as described
6 under subsection 3 of section 47-20.2-01, the following definition by the national ocean
7 survey or national geodetic survey is adopted:

8 a. The North Dakota coordinate system of 2022, Beulah zone, is a Lambert
9 conformal conic projection of the North American datum ~~Terrestrial Reference~~
10 Frame of 2022, the origin of coordinates is at the intersection of the meridian one
11 hundred one degrees fifty-one minutes west of Greenwich and the parallel
12 forty-seven degrees twenty-seven minutes north latitude. This origin is given the
13 coordinates: x = 2,286,000.0000 meters, and y = 152,400.0000 meters;

14 b. The North Dakota coordinate system of 2022, Bismarck zone, is a Lambert
15 conformal conic projection of the North American datum ~~Terrestrial Reference~~
16 Frame of 2022, the origin of coordinates is at the intersection of the meridian one
17 hundred degrees forty-five minutes west of Greenwich and the parallel forty-six
18 degrees forty-eight minutes north latitude. This origin is given the coordinates: x =
19 ~~3,200,400.0000~~3,200,400.0000 meters, and y = 114,300.0000 meters;

20 c. The North Dakota coordinate system of 2022, Bottineau zone, is a Lambert
21 conformal conic projection of the North American datum ~~Terrestrial Reference~~
22 Frame of 2022, the origin of coordinates is at the intersection of the meridian
23 ninety-nine degrees forty-two minutes west of Greenwich and the parallel
24 forty-eight degrees thirty-six minutes north latitude. This origin is given the
25 coordinates: x = 1,371,600.0000 meters, and y = 152,400.0000 meters;

26 d. The North Dakota coordinate system of 2022, Bowman zone, is a Lambert
27 conformal conic projection of the North American datum ~~Terrestrial Reference~~
28 Frame of 2022, the origin of coordinates is at the intersection of the meridian
29 one-hundred three degrees west of Greenwich and the parallel forty-six degrees
30 eighteen minutes north latitude. This origin is given the coordinates: x =
31 3,810,000.0000 meters, and y = 114,300.0000 meters;

- 1 e. The North Dakota coordinate system of 2022, Cannon Ball zone, is a Lambert
2 conformal conic projection of the North American datum Terrestrial Reference
3 Frame of 2022, the origin of coordinates is at the intersection of the meridian
4 one-hundred one degrees eighteen minutes west of Greenwich and the parallel
5 forty-six degrees eighteen minutes north latitude. This origin is given the
6 coordinates: $x = 4,114,800.0000$ meters, and $y = 114,300.0000$ meters;
- 7 f. The North Dakota coordinate system of 2022, Carrington zone, is a Lambert
8 conformal conic projection of the North American datum Terrestrial Reference
9 Frame of 2022, the origin of coordinates is at the intersection of the meridian
10 ninety-nine degrees eighteen minutes west of Greenwich and the parallel
11 forty-seven degrees thirty--three minutes north latitude. This origin is given the
12 coordinates: $x = 2,590,800.0000$ meters, and $y =$
13 ~~152,400~~ $152,400.0000$ meters;
- 14 g. The North Dakota coordinate system of 2022, Devils Lake zone, is a Lambert
15 conformal conic projection of the North American datum Terrestrial Reference
16 Frame of 2022, the origin of coordinates is at the intersection of the meridian
17 ninety-nine degrees twenty-seven minutes west of Greenwich and the parallel
18 forty-eight degrees nine minutes north latitude. This origin is given the
19 coordinates: $x = 1,676,400.0000$ meters, and $y = 152,400.0000$ meters;
- 20 h. The North Dakota coordinate system of 2022, Dickinson zone, is a Lambert
21 conformal conic projection of the North American datum Terrestrial Reference
22 Frame of 2022, the origin of coordinates is at the intersection of the meridian one
23 hundred three degrees three minutes west of Greenwich and the parallel
24 forty-seven degrees north latitude. This origin is given the coordinates: $x =$
25 $2,895,600.0000$ meters, and $y = 114,300.0000$ meters;
- 26 i. The North Dakota coordinate system of 2022, Fargo zone, is a transverse
27 mercator projection of the North American datum Terrestrial Reference Frame of
28 2022, the origin of coordinates is at the intersection of the meridian ninety-seven
29 degrees twelve minutes west of Greenwich and the parallel forty-five degrees
30 forty-five minutes north latitude. This origin is given the coordinates: $x =$
31 $4,991,100.0000$ meters, and $y = 00.0000$ meters;

- 1 j. The North Dakota coordinate system of 2022, Grand Forks zone, is a transverse
2 mercator projection of the North American datumTerrestrial Reference Frame of
3 2022, the origin of coordinates is at the intersection of the meridian ninety-seven
4 degrees twenty-four minutes west of Greenwich and the parallel forty-six degrees
5 thirty minutes north latitude. This origin is given the coordinates: x =
6 1,981,200.0000 meters, and y = 00.0000 meters;
- 7 k. The North Dakota coordinate system of 2022, Jamestown zone, is a Lambert
8 conformal conic projection of the North American datumTerrestrial Reference
9 Frame of 2022, the origin of coordinates is at the intersection of the meridian
10 ninety-eight degrees thirty-six minutes west of Greenwich and the parallel
11 forty-six degrees fifty-seven minutes north latitude. This origin is given the
12 coordinates: x = 3,505,200.0000 meters, and y = 114,300.0000 meters;
- 13 l. The North Dakota coordinate system of 2022, Linton zone, is a Lambert
14 conformal conic projection of the North American datumTerrestrial Reference
15 Frame of 2022, the origin of coordinates is at the intersection of the meridian
16 ninety-nine degrees fifty-one minutes west of Greenwich and the parallel forty-six
17 degrees eighteen minutes north latitude. This origin is given the coordinates: x =
18 4,381,500.0000 meters, and y = 114,300.0000 meters;
- 19 m. The North Dakota coordinate system of 2022, Minot zone, is a transverse
20 mercator projection of the North American datumTerrestrial Reference Frame of
21 2022, the origin of coordinates is at the intersection of the meridian one hundred
22 one degrees twenty-seven minutes west of Greenwich and the parallel forty-six
23 degrees thirty minutes north latitude. This origin is given the coordinates: x =
24 1,104,900.0000 meters, and y = 00.0000 meters;
- 25 n. The North Dakota coordinate system of 2022, New Town zone, is a transverse
26 mercator projection of the North American datumTerrestrial Reference Frame of
27 2022, the origin of coordinates is at the intersection of the meridian one hundred
28 two degrees twenty-seven minutes west of Greenwich and the parallel forty-six
29 degrees thirty minutes north latitude. This origin is given the coordinates: x =
30 762,000.0000 meters, and y = 00.0000 meters;

1 o. The North Dakota coordinate system of 2022, Oakes zone, is a transverse
2 mercator projection of the North American datum Terrestrial Reference Frame of
3 2022, the origin of coordinates is at the intersection of the meridian ninety-eight
4 degrees eighteen minutes west of Greenwich and the parallel forty-five degrees
5 forty-five minutes north latitude. This origin is given the coordinates: x =
6 4,686,300.0000 meters, and y = 00.0000 meters; and

7 p. The North Dakota coordinate system of 2022, Williston zone, is a transverse
8 mercator projection of the North American datum Terrestrial Reference Frame of
9 2022, the origin of coordinates is at the intersection of the meridian one hundred
10 three degrees twenty-seven minutes west of Greenwich and the parallel forty-six
11 degrees thirty minutes north latitude. This origin is given the coordinates: x =
12 457,200.0000 meters, and y = 00.0000 meters.

13 **SECTION 5. AMENDMENT.** Section 47-20.2-06 of the North Dakota Century Code is
14 amended and reenacted as follows:

15 **47-20.2-06. North Dakota coordinate system - Use of term.**

16 The use of the North Dakota coordinate system of 1927 north zone or south zone, ~~or the~~
17 North Dakota coordinate system of 1983 north zone or south zone, ~~the North Dakota statewide~~
18 coordinate system of 2022, or the North Dakota low-distortion coordinate system of 2022 on
19 any map, report of survey, or other document must be limited to coordinates based on the North
20 Dakota coordinate systems as defined in this chapter. The map, report, or document must
21 include a statement describing the standard of accuracy, as defined by the national ocean
22 survey/national geodetic survey, maintained in developing the coordinates shown therein. The
23 coordinates must be established in conformity with these standards:

- 24 1. No coordinates based on the North Dakota coordinate system, purporting to define the
25 position of a point on a land boundary, may be presented to be recorded in any public
26 records or deed records unless the point is connected to ~~a triangulation or traverse~~
27 station the national spatial reference system and established in conformity with the
28 standards prescribed in this chapter.
- 29 2. Coordinate values used in land descriptions under this section must be certified by a
30 duly registered professional land surveyor under the laws of this state.