

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, 47-20.2-05, and  
2 47-20.2-06 of the North Dakota Century Code, relating to the North Dakota coordinate system  
3 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 systems, the state is divided into a north zone and a south zone:

16 ~~4.~~ a. The area now included in the following counties constitutes the north zone:  
17 Divide, Williams, McKenzie, Mountrail, Burke, Renville, Ward, McLean, Bottineau,  
18 McHenry, Sheridan, Pierce, Rolette, Towner, Benson, Wells, Foster, Eddy,  
19 Ramsey, Cavalier, Pembina, Walsh, Nelson, Grand Forks, Griggs, Steele, Traill.  
20 ~~2.~~ b. The area now included in the following counties constitutes the south zone:  
21 Dunn, Golden Valley, Slope, Bowman, Adams, Hettinger, Stark, Mercer, Oliver,  
22 Morton, Grant, Sioux, Emmons, Burleigh, Kidder, Logan, McIntosh, Stutsman,  
23 Barnes, LaMoure, Dickey, Cass, Ransom, Sargent, Richland.

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

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

27        **47-20.2-02. North Dakota coordinate system names defined.**

- 28        1. As established for use in the north zone, the North Dakota coordinate system of 1927  
29        or the North Dakota coordinate system of 1983 is named, and in any land description  
30        in which it is used it must be designated the North Dakota coordinate system of 1927,  
31        north zone, or the North Dakota coordinate system of 1983, north zone. As established

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

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

8 3. As established for use in the:

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

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

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

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

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

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

27 g. Devils Lake zone, the North Dakota coordinate system of 2022 is named, and in  
28 any land description in which it is used, it must be designated the Devils Lake  
29 zone of the North Dakota coordinate system of 2022;

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

28           **SECTION 3. AMENDMENT.** Section 47-20.2-05 of the North Dakota Century Code is  
29 amended and reenacted as follows:

1       **47-20.2-05. North Dakota coordinate system origins defined.**

2       1. For the purposes of more precisely defining the North Dakota coordinate system of  
3       1927, the following definitions by the United States coast and geodetic survey are  
4       adopted:

5       a. The North Dakota coordinate system of 1927, north zone, is a Lambert conformal  
6       conic projection of the Clarke spheroid of 1866, having standard parallels at north  
7       latitudes, forty-seven degrees twenty-six minutes and forty-eight degrees  
8       forty-four minutes along which parallels the scale shall be exact. The origin of  
9       coordinates is at the intersection of the meridian one hundred degrees thirty  
10      minutes west of Greenwich and the parallel forty-seven degrees zero minutes  
11      north latitude. This origin is given the coordinates:  $x = 2,000,000$  feet [609.6  
12      kilometers], and  $y = 0$  feet [0 kilometers].

13     b. The North Dakota coordinate system of 1927, south zone, is a Lambert  
14     conformal conic projection of the Clarke spheroid of 1866, having standard  
15     parallels at north latitudes forty-six degrees eleven minutes and forty-seven  
16     degrees twenty-nine minutes along which parallels the scale shall be exact. The  
17     origin of coordinates is at the intersection of the meridian one hundred degrees  
18     thirty minutes west of Greenwich and the parallel forty-five degrees forty minutes  
19     north latitude. This origin is given the coordinates:  $x = 2,000,000$  feet [609.6  
20     kilometers], and  $y = 0$  feet [0 kilometers].

21     2. For the purposes of more precisely defining the North Dakota coordinate system of  
22     1983, the following definition by the national ocean survey/national geodetic survey is  
23     adopted:

24     a. The North Dakota coordinate system of 1983, north zone, is a Lambert conformal  
25     conic projection of the North American datum of 1983, having standard parallels  
26     at north latitude of forty-seven degrees twenty-six minutes and forty-eight  
27     degrees forty-four minutes along which parallels the scale shall be exact. The  
28     origin of coordinates is at the intersection of the meridian one hundred degrees  
29     thirty minutes west of Greenwich and the parallel forty-seven degrees zero  
30     minutes north latitude. This origin is given the coordinates:  $x = 600,000.0000$   
31     meters, and  $y = 00.0000$  meters.

- 1           b. The North Dakota coordinate system of 1983, south zone, is a Lambert  
2           conformal conic projection of the North American datum of 1983, having standard  
3           parallels at north latitude of 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:  $x = 600,000.0000$  meters, and  
8            $y = 00.0000$  meters.
- 9           3. For the purposes of more precisely defining the statewide zone North Dakota  
10           coordinate system of 2022, the definition by the national ocean survey or national  
11           geodetic survey is the North Dakota coordinate system of 2022, statewide zone, a  
12           Lambert conformal conic projection of the North American datum of 2022, the origin of  
13           coordinates is at the intersection of the meridian one hundred fifteen minutes west of  
14           Greenwich and the parallel forty-seven degrees thirty minutes north latitude. This  
15           origin is given the coordinates:  $x = 838,200.0000$  meters, and  $y = 342,900.0000$   
16           meters.
- 17           4. For the purposes of more precisely defining the low-distortion projections as described  
18           under subsection 3 of section 47-20.2-01, the following definition by the national ocean  
19           survey or national geodetic survey is adopted:
- 20           a. The North Dakota coordinate system of 2022, Beulah zone, is a Lambert  
21           conformal conic projection of the North American datum of 2022, the origin of  
22           coordinates is at the intersection of the meridian one hundred one degrees  
23           fifty-one minutes west of Greenwich and the parallel forty-seven degrees  
24           twenty-seven minutes north latitude. This origin is given the coordinates:  $x =$   
25            $2,286,000.0000$  meters, and  $y = 152,400.0000$  meters;
- 26           b. The North Dakota coordinate system of 2022, Bismarck zone, is a Lambert  
27           conformal conic projection of the North American datum of 2022, the origin of  
28           coordinates is at the intersection of the meridian one hundred degrees forty-five  
29           minutes west of Greenwich and the parallel forty-six degrees forty-eight minutes  
30           north latitude. This origin is given the coordinates:  $x = 3,200,400.000$  meters, and  
31            $y = 114,300.0000$  meters;

- 1           c. The North Dakota coordinate system of 2022, Bottineau zone, is a Lambert  
2           conformal conic projection of the North American datum of 2022, the origin of  
3           coordinates is at the intersection of the meridian ninety-nine degrees forty-two  
4           minutes west of Greenwich and the parallel forty-eight degrees thirty-six minutes  
5           north latitude. This origin is given the coordinates:  $x = 1,371,600.0000$  meters,  
6           and  $y = 152,400.0000$  meters;
- 7           d. The North Dakota coordinate system of 2022, Bowman zone, is a Lambert  
8           conformal conic projection of the North American datum of 2022, the origin of  
9           coordinates is at the intersection of the meridian one-hundred three degrees west  
10          of Greenwich and the parallel forty-six degrees eighteen minutes north latitude.  
11          This origin is given the coordinates:  $x = 3,810,000.0000$  meters, and  $y =$   
12           $114,300.0000$  meters;
- 13          e. The North Dakota coordinate system of 2022, Cannon Ball zone, is a Lambert  
14          conformal conic projection of the North American datum of 2022, the origin of  
15          coordinates is at the intersection of the meridian one-hundred one degrees  
16          eighteen minutes west of Greenwich and the parallel forty-six degrees eighteen  
17          minutes north latitude. This origin is given the coordinates:  $x = 4,114,800.0000$   
18          meters, and  $y = 114,300.0000$  meters;
- 19          f. The North Dakota coordinate system of 2022, Carrington zone, is a Lambert  
20          conformal conic projection of the North American datum of 2022, the origin of  
21          coordinates is at the intersection of the meridian ninety-nine degrees eighteen  
22          minutes west of Greenwich and the parallel forty-seven degrees thirty--three  
23          minutes north latitude. This origin is given the coordinates:  $x = 2,590,800.000$   
24          meters, and  $y = 152,400$  meters;
- 25          g. The North Dakota coordinate system of 2022, Devils Lake zone, is a Lambert  
26          conformal conic projection of the North American datum of 2022, the origin of  
27          coordinates is at the intersection of the meridian ninety-nine degrees  
28          twenty-seven minutes west of Greenwich and the parallel forty-eight degrees  
29          nine minutes north latitude. This origin is given the coordinates:  $x =$   
30           $1,676,400.0000$  meters, and  $y = 152,400.0000$  meters;

- 1           h. The North Dakota coordinate system of 2022, Dickinson zone, is a Lambert  
2           conformal conic projection of the North American datum of 2022, the origin of  
3           coordinates is at the intersection of the meridian one hundred three degrees  
4           three minutes west of Greenwich and the parallel forty-seven degrees north  
5           latitude. This origin is given the coordinates: x = 2,895,600.0000 meters, and y =  
6           114,300.0000 meters;
- 7           i. The North Dakota coordinate system of 2022, Fargo zone, is a transverse  
8           mercator projection of the North American datum of 2022, the origin of  
9           coordinates is at the intersection of the meridian ninety-seven degrees twelve  
10          minutes west of Greenwich and the parallel forty-five degrees forty-five minutes  
11          north latitude. This origin is given the coordinates: x = 4,991,100.0000 meters,  
12          and y = 00.0000 meters;
- 13          j. The North Dakota coordinate system of 2022, Grand Forks zone, is a transverse  
14          mercator projection of the North American datum of 2022, the origin of  
15          coordinates is at the intersection of the meridian ninety-seven degrees  
16          twenty-four minutes west of Greenwich and the parallel forty-six degrees thirty  
17          minutes north latitude. This origin is given the coordinates: x = 1,981,200.0000  
18          meters, and y = 00.0000 meters;
- 19          k. The North Dakota coordinate system of 2022, Jamestown zone, is a Lambert  
20          conformal conic projection of the North American datum of 2022, the origin of  
21          coordinates is at the intersection of the meridian ninety-eight degrees thirty-six  
22          minutes west of Greenwich and the parallel forty-six degrees fifty-seven minutes  
23          north latitude. This origin is given the coordinates: x = 3,505,200.0000 meters,  
24          and y = 114,300.0000 meters;
- 25          l. The North Dakota coordinate system of 2022, Linton zone, is a Lambert  
26          conformal conic projection of the North American datum of 2022, the origin of  
27          coordinates is at the intersection of the meridian ninety-nine degrees fifty-one  
28          minutes west of Greenwich and the parallel forty-six degrees eighteen minutes  
29          north latitude. This origin is given the coordinates: x = 4,381,500.0000 meters,  
30          and y = 114,300.0000 meters;



- 1           m. The North Dakota coordinate system of 2022, Minot zone, is a transverse  
2           mercator projection of the North American datum of 2022, the origin of  
3           coordinates is at the intersection of the meridian one hundred one degrees  
4           twenty-seven minutes west of Greenwich and the parallel forty-six degrees thirty  
5           minutes north latitude. This origin is given the coordinates: x = 1,104,900.0000  
6           meters, and y = 00.0000 meters;
- 7           n. The North Dakota coordinate system of 2022, New Town zone, is a transverse  
8           mercator projection of the North American datum of 2022, the origin of  
9           coordinates is at the intersection of the meridian one hundred two degrees  
10           twenty-seven minutes west of Greenwich and the parallel forty-six degrees thirty  
11           minutes north latitude. This origin is given the coordinates: x = 762,000.0000  
12           meters, and y = 00.0000 meters;
- 13           o. The North Dakota coordinate system of 2022, Oakes zone, is a transverse  
14           mercator projection of the North American datum of 2022, the origin of  
15           coordinates is at the intersection of the meridian ninety-eight degrees eighteen  
16           minutes west of Greenwich and the parallel forty-five degrees forty-five minutes  
17           north latitude. This origin is given the coordinates: x = 4,686,300.0000 meters,  
18           and y = 00.0000 meters; and
- 19           p. The North Dakota coordinate system of 2022, Williston zone, is a transverse  
20           mercator projection of the North American datum of 2022, the origin of  
21           coordinates is at the intersection of the meridian one hundred three degrees  
22           twenty-seven minutes west of Greenwich and the parallel forty-six degrees thirty  
23           minutes north latitude. This origin is given the coordinates: x = 457,200.0000  
24           meters, and y = 00.0000 meters.

25           **SECTION 4. AMENDMENT.** Section 47-20.2-06 of the North Dakota Century Code is  
26 amended and reenacted as follows:

27           **47-20.2-06. North Dakota coordinate system - Use of term.**

28           The use of the North Dakota coordinate system of 1927 north zone or south zone or the  
29 North Dakota coordinate system of 1983 north zone or south zone, the North Dakota statewide  
30 coordinate system of 2022, or the North Dakota low-distortion coordinate system of 2022 on  
31 any map, report of survey, or other document must be limited to coordinates based on the North

- 1 Dakota coordinate systems as defined in this chapter. The map, report, or document must  
2 include a statement describing the standard of accuracy, as defined by the national ocean  
3 survey/national geodetic survey, maintained in developing the coordinates shown therein. The  
4 coordinates must be established in conformity with these standards:
- 5 1. No coordinates based on the North Dakota coordinate system, purporting to define the  
6 position of a point on a land boundary, may be presented to be recorded in any public  
7 records or deed records unless the point is connected to a ~~triangulation or traverse~~  
8 station the national spatial reference system and established in conformity with the  
9 standards prescribed in this chapter.
  - 10 2. Coordinate values used in land descriptions under this section must be certified by a  
11 duly registered professional land surveyor under the laws of this state.