

21st Century Equipment Project Diagram

Diagram: 21st Century Equipment seeks to serve its customers by increasing the ability for connectivity across the area of western Nebraska. The project diagram will include 6 central hubs as follows:

- a. 6742 NE-27 Gordon, NE 69343
- b. 1520 W 10th St Alliance, NE 69301
- c. 3609 US-26 Scottsbluff, NE 69361
- d. 9738 US-26 Bridgeport, NE 69336
- e. 1901 Link 17J Sidney, NE 69162
- f. 101 E County Rd 80 Ogallala, NE 69153

These 6 locations will act not only as the central hub for this connectivity project, but also the main distribution point. Each location will serve their connected customers by providing remote support, remote troubleshooting, and agronomic data gathering. The advantage of having multiple central hubs for this project allows us to impact a larger number of unconnected customers for them to utilize advancements in agricultural technology and service.

The components included in this project (discussed in attachment C.) allow for wireless connectivity from agricultural machinery back to the 6 previously mentioned central hub. With the modems providing wireless connectivity, our connectivity routes will utilize cellular coverage currently and in the future satellite communication.

- The main connectivity of this project will include John Deere modems connecting wirelessly to a cloud-based server feeding information back to central hubs.
- The second connection type will be a wired connection between the John Deere modems and the equipment that the modems are in. This allows for information from the equipment to be transferred via a wired connection to the modem, and then wirelessly transferred from the modem to the central hubs.

The total amount of key operational locations that this project will impact is 345 agricultural equipment pieces varying in model, spanning across a total area of +/- 10.5 million acres. The key operational locations for this project will include unconnected machines across western Nebraska. By having these machines connected to John Deere modems, this allows for farmers to utilize technology advancements and to better track agronomic data. Having these machines connected will also allow for 21st Century's 6 central hubs (listed above) to monitor and diagnose these machines to better serve farmers in western Nebraska.

Key operational location for post project speed testing will include the six 21st Century Equipment location in the western Nebraska panhandle.

- Gordon, Nebraska- This key location will provide project service and support to the western part of Cherry County, NE as well as Sheridan and Dawes County. Connectivity speed will be tested by verifying active modem connection to John Deere operations center, then monitoring that machine information is being transferred back to the project's central hub in accordance with John Deere standard connection speed.
- Alliance, Nebraska- This key location will provide project service and support to Box Butte County and Sioux County. Connectivity speed will be tested by

verifying active modem connection to John Deere operations center, then monitoring that machine information is being transferred back to the project's central hub in accordance with John Deere standard connection speed.

- Scottsbluff, Nebraska- This key location will provide project service and support to Scottsbluff County and Banner County. Connectivity speed will be tested by verifying active modem connection to John Deere operations center, then monitoring that machine information is being transferred back to the project's central hub in accordance with John Deere standard connection speed.
- Bridgeport, Nebraska- This key location will provide project service and support to Morrill and Garden County. Connectivity speed will be tested by verifying active modem connection to John Deere operations center, then monitoring that machine information is being transferred back to the project's central hub in accordance with John Deere standard connection speed.
- Sidney, Nebraska- This key location will provide project service and support to Kimball County and Cheyenne County. Connectivity speed will be tested by verifying active modem connection to John Deere operations center, then monitoring that machine information is being transferred back to the project's central hub in accordance with John Deere standard connection speed.
- Ogallala, Nebraska- This key location will provide project service and support to Kieth County and Deuel County. Connectivity speed will be tested by verifying active modem connection to John Deere operations center, then monitoring that machine information is being transferred back to the project's central hub in accordance with John Deere standard connection speed.