



BROADBAND ENABLES PRECISION AGRICULTURE

Help the Smart Rural CommunitySM network build a brighter future for small-town America.



Bringing broadband to agriculture driven communities enables precision agriculture; improving efficiencies and empowering farmers to make better production decisions.

THE FUTURE OF AGRICULTURE DEMANDS TECHNOLOGY

Since 1948, the amount of land and labor in U.S. farms has declined, yet total farm output has increased by



Net farm income for 2019 was projected by USDA to reach \$69.4 billion,



Precision allows for the critical data collection and analysis needed to maximize livestock and crop production margins.



THE POWER OF PRECISION AGRICULTURE

When precision agriculture is deployed, hired labor costs for small corn farms are

60% to 70% lower.



IoT can improve grain silo management, reducing the risk of injuries while increasing operational efficiencies.



ACCESS TO PRECISION AGRICULTURE TECHNOLOGY STARTS WITH BROADBAND

Cloud-based systems, coupled with artificial intelligence, can lower input costs while increasing yield. As precision ag adoption increases, technology prices are decreasing, enabling smaller farmers to realize critical gains.



CASE STUDY



PREMIER COMMUNICATIONS

Sioux Center, IA (pop. 9,000)

Broadband-powered cameras enable livestock producers to monitor livestock through live video feeds. At the same time, advanced alarm systems issue mobile and email alerts. Broadband-enabled sensors in feeding bins can measure and dispense the exact amount of feed. Other broadband-enabled sensors in the soil monitor soil condition and track rainfall, enabling farmers to calibrate planting and create a mapping database of crop harvest by the acre.



GREEN HILLS COMMUNICATIONS

Breckenridge, MO (pop. 3,300)

A special fiber build connects a Union Pacific railway loading point accessible to farmers in North Central Missouri and Southern Iowa. Corn and grain are moved, stored, and delivered with advanced broadband-enabled logistics. Automated scanning and weighing systems allow an average load to be delivered in less than 10 minutes. The connected facility can load nearly 400,000 bushels into a 110-railcar train in less than eight hours.

Smart Rural CommunitySM is an initiative of NTCA-The Rural Broadband Association. Smart Rural Community comprises programming to promote the rural broadband networks and broadband-enabled applications that rural communities can leverage to foster innovative economic development, education, health care and other vital services.

Broadband Enabled. Locally Driven. Globally Connected.®

www.ntca.org/smart

