

Broadband and Precision Agriculture

In 2016, the U.S. had 2.1 million farms covering 911 million acres of land. These had an average size of 442 acres and about 99% of them were operated by families, according to the [USDA National Agricultural Statistics \(NASS\)](#). The FAO ([Food and Agriculture Organization of the United Nations](#)) predicts that food production must increase by 70% by 2050 in order to feed the predicted world population.

The agricultural industry is increasingly relying on “precision agriculture” to meet these challenges. According to the [USDA](#), “Precision technologies—such as tractor guidance systems using a global positioning system (GPS), GPS soil and yield mapping, and variable-rate input applications (VRT)—help farms gather information on changing field conditions to adjust production practices.” Tapping into broadband wireless networks and embedding information technology (IT) devices in farm machinery such as tractors and harvesters, allow farmers to use “telematics” to optimize machine use for field preparation, precision planting, water optimization, harvesting and overall production efficiency. Wearables for tracking the whereabouts and health of animals is another area under development. In addition, broadband enhances competitiveness by providing an online platform to monitor real-time market prices and trends, purchase supplies, increase their customer base and market their products locally, regionally, nationally and globally.

Here are just a few examples of how precision agriculture or “smart farming” has made a difference in some communities:

- [Health trackers for cows: thousands of Pennsylvania cattle wearing new technology](#)
- [South Dakota Poised to Benefit From Precision Agriculture](#)
- [Nebraska Senator Deb Fisher and the FCC's Brendan Carr on Agriculture and Connectivity](#)
- [Study showing yield correlations to soil type shows how precision agriculture technology could pay off in greater yields, water savings](#)

Have a success story from your own community? Contact us at BroadbandUSA@ntia.doc.gov.

Broadband News and Updates

Federal News

- Wireless Siting: [GSA: Requests for Comments: New Federal Property Profile Information for Communications Facility Installation](#)
- [Notice of NTIA 2018 Spectrum Policy Symposium](#)
- [Trump Administration Teeing Up Spectrum Policy 'Strategy'](#)
- [Dynamic Protection Areas Will Spur Spectrum Sharing](#)
- Pew Research Center: [If we want better broadband, more research needs to come first](#)

State News

- North Carolina: [Budget earmarks \\$10M to expand rural broadband](#)
- Oregon: [Brown signs bill boosting broadband for rural schools](#)
- Delaware: [Delaware Is Dead Set on Putting Your State's Broadband to Shame](#)
- Missouri: [New state office seeks to bring high-speed internet to rural Missouri](#)
- Michigan: [Ambitious Plan Would Bring Statewide Public Broadband to Michigan](#)
- West Virginia: [Efforts to Expand and Improve Broadband in WV](#)
- New Hampshire: [Senator Hassan Announces FCC Public Meeting in Concord on Mobile Broadband Mapping](#)
- Mississippi: [Video: Wicker Shares Mississippi Efforts to Develop Tech Workforce, Close Broadband Gaps](#)
- Alaska: [House passes bill to identify internet gaps in Alaska](#)
- Virginia Representative [Rob Wittman: Many rural areas need access to high-speed internet](#)

Broadband Mapping

- [NTIA Requests Feedback on Improving Broadband Availability Data](#)
- [Request for Comments on Improving the Quality and Accuracy of Broadband Availability Data](#)

Public Safety/FirstNet

- [Diverse Small Businesses Discuss FirstNet Opportunities at Matchmaking Event](#)
- [FirstNet is "Boston Strong" at the 2018 Marathon](#)
- [Global Government Leaders Forum Highlights Innovation in Public Safety Broadband](#)

Stakeholder Resources

- [CTA's Entire Library of Industry Standards Now Free to Everyone](#)

Funding

- FCC: [Mobility Fund Phase II](#)
- [Secretary of Energy Rick Perry Announces \\$68.5 Million for Advanced Vehicle Technologies Research](#)

Smart Community and 5G News

- [Making Way for 5G: The next generation of wireless communications could present weighty challenges for co-ops](#)
- [New York, Others Added for Sprint 5G Rollout](#)
- [Los Angeles to Be Among First Four Cities with Verizon's Fixed Wireless 5G](#)
- [State of the Satellite Industry Report – Briefing and Data Release Wednesday, June 13](#)

BroadbandUSA Spotlight

Diverse Small Businesses Discuss FirstNet Opportunities at Matchmaking Event

On May 9, 2018, the U.S. Commerce Department brought together more than 100 small businesses for matchmaking opportunities with AT&T and five first-tier vendors helping AT&T build FirstNet, a nationwide broadband network and related services for first responders. The matchmaking event attracted diverse small businesses owned by service-disabled veterans, minorities, and women, as well as firms that are part of the U.S. Small Business Administration's Historically Underutilized Business Zones (HUBZone) program. Commerce procurement officials from the Census Bureau, National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration (NOAA), U.S. Patent and Trademark Office (USPTO), and Enterprise Services shared information about upcoming federal contracts. NTIA, the FirstNet Authority, Veterans Affairs Office of Small & Disadvantaged Business Utilization (OSDBU) staff and the Department's Office of Acquisition Management are working together to help small businesses gain opportunities through FirstNet and subcontracting opportunities through AT&T and its large business subcontractors. [See the complete blog on the BroadbandUSA website.](#)

Events

NTIA Events

June 20, 2018

[BroadbandUSA Practical Broadband Conversations Webinar Series: Smart Agriculture: Increasing Productivity Through Technology](#) (See details in column on right.)

Events of Interest

June 3 – 6, 2018

[National Association of Regional Councils \(NARC\) Annual Conference & Exhibition](#), Orlando, FL. The program will feature a diverse slate of expert panels, educational sessions, and keynote presentations to help address challenges back home and NARC's annual Awards Gala Dinner celebrating regional excellence among members. *BroadbandUSA speaker:* Katherine Bates

June 8 – 11, 2018

[United States Conference of Mayors Annual Meeting](#), Boston, MA. The United States Conference of Mayors (USCM) is the official non-partisan organization of cities with populations of 30,000 or more. Each city is represented in the Conference by its chief elected official, the mayor. BroadbandUSA will be attending.

June 19, 2018

[Upper Midwest E-Connectivity Listening Session – June 19 in Faribault, MN](#). Farm Foundation, NTCA-The Rural Broadband Association, NRECA, CFC, and CoBank are partnering with the U.S. Department of Agriculture (USDA) to organize a series of listening sessions across the nation to gather insights into the tools that are needed to improve e-connectivity in rural America.

June 20 – 22, 2018

[2018 GCTC-SC3 Tech Jam](#), Portland, OR. The Global Tech Jam brings together research institutions, federal agencies, leading private sector companies, and municipalities interested in preparing their infrastructure for the latest technologies to provide better, more equitable services. This three-day conference will feature Transportation/Mobility with participation from other policy areas including Energy/Water/Waste Management, Public Safety, Wireless, City Platform/Dashboard, Data Governance and Exchange, and Agriculture and Rural. *BroadbandUSA speaker:* Jean Rice

June 20 – 22, 2018

[National Association of Latino Elected and Appointed Officials \(NALEO\) and NALEO Educational Fund 35th Annual Conference](#), Phoenix, AZ. The conference is a source of professional development specifically tailored for Latino elected and appointed officials. Sessions at the Conference are designed to enhance the governance skills of participants and deepen understanding of critical policy issues in a cross-jurisdictional context. *BroadbandUSA speaker:* Scott Woods

June 21 – 26, 2018

[American Library Association \(ALA\) Annual Conference and Exhibition](#), New Orleans, LA. The conference brings together librarians, authors, publishers, business professionals, educators and students - anyone who is passionate about books, libraries, and eager to learn and shape the future of the industry.

June 21 – 22, 2018

[Digital Inclusion Policy and Research Conference](#), University of Liverpool, London, UK. The conference will draw upon over two decades of research, policy, and practice. Over this time digital inequalities and digital inclusion practice have changed in response to developments in digital technologies and media. *BroadbandUSA Speaker:* Doug Kinkoph

Policy Corner

On May 17, 2018, David J. Redl, Assistant Secretary for Communications and Information and NTIA Administrator spoke at the Media Institute Communications Forum Luncheon. Mr. Redl observed that “there are many facets to the digital divide, but one of the toughest challenges is getting broadband networks deployed in rural areas with difficult terrain and low population density. Progress has also been slowed by bureaucracy, including expensive and lengthy application processes and regulatory reviews.” Mr. Redl noted that NTIA is working to improve federal coordination through an interagency working group, co-chaired with the Department of Agriculture's Rural Utilities Service. The working group is focusing on three areas: federal permitting, federal funding and leveraging federal assets for broadband deployment. [See the complete remarks on the NTIA website.](#)



Webinars

BroadbandUSA Practical Broadband Conversations Webinar Series

Topic: [Smart Agriculture: Increasing Productivity Through Technology](#)

Date: Wednesday, June 20, 2018

Time: 2:00 PM Eastern

Overview: Smart agriculture engages technologies such as Big Data, GPS, IoT and connected devices to help farmers and ranchers better manage their production. Using these technologies, farmers and ranchers can improve water efficiency, produce higher quality crops and raise healthier livestock. Reliable and robust rural connectivity are fundamental to helping farmers gain benefits from new technologies. The speakers will cover advances in smart agriculture equipment and sensors, the use of big data analytics for decision-making and highlight new innovation hubs, entrepreneurial support and test beds. The webinar will also feature the work of the NTIA/NIST jointly facilitated Global Cities Team Challenge Smart Agriculture and Rural SuperCluster to develop best practices.

Speakers:

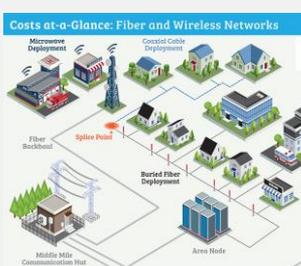
- Mark Lewellen, Manager of Spectrum Advocacy, John Deere
- Aaron Ault, Senior Research Engineer for the Open Ag Technology and Systems Group, Purdue University
- John Selep, President of AgTech Innovation Alliance
- *Moderator:* Don Williams, Senior Specialist for Broadband Development, BroadbandUSA, NTIA

[Register here](#)

Want to access past Practical Broadband Conversations webinars?

Visit our [Webinar Archives](#) for past presentations, transcripts and audio recordings.

BroadbandUSA Resources



[Costs at-a-Glance: Fiber and Wireless Networks](#) (PDF)

BroadbandUSA collected information about network construction expenses to increase awareness of some costs associated with deploying a broadband network. This information can help project leaders better engage with broadband providers and network operators in their area.



NTIA's BroadbandUSA program promotes innovation and economic growth by supporting efforts to expand broadband connectivity and digital inclusion across America. In this role, BroadbandUSA serves state and local government, industry and non-profits that want to expand broadband infrastructure and promote digital inclusion.

Contact Us

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