

CASE STUDY

How South Carolina launched the United States' first free broadband map store with Ookla data

Policy makers in the United States need accurate, up-to-date broadband coverage maps to determine which communities are underserved and to better understand where local, state and federal resources can provide the most impact on connectivity.

South Carolina Congressman and House Majority Whip Jim Clyburn partnered with Revolution D Founder and CEO Jim Stritzinger and Ookla for Good™ to create accurate, reliable maps of South Carolina's broadband network performance. These data-driven maps help South Carolinians determine how to secure and allocate resources to provide reliable internet access to households in underserved areas, improving educational opportunities, economic growth and quality of life.

“Affordable high-speed internet service is no longer a luxury; it is an essential service.”

— United States House Majority Whip James E. Clyburn

Benefits



Established nation's first broadband map store with 250+ maps available for free download



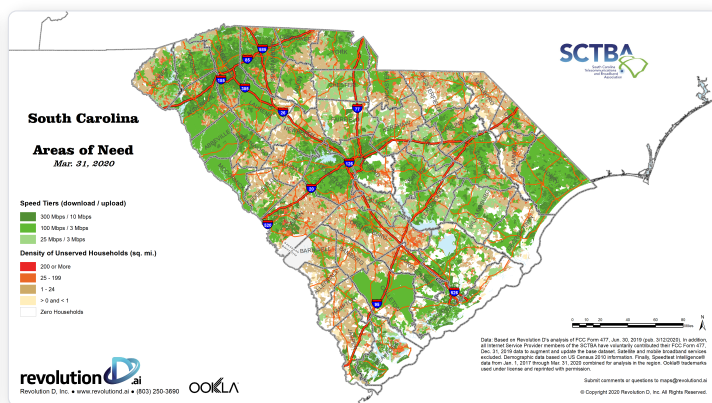
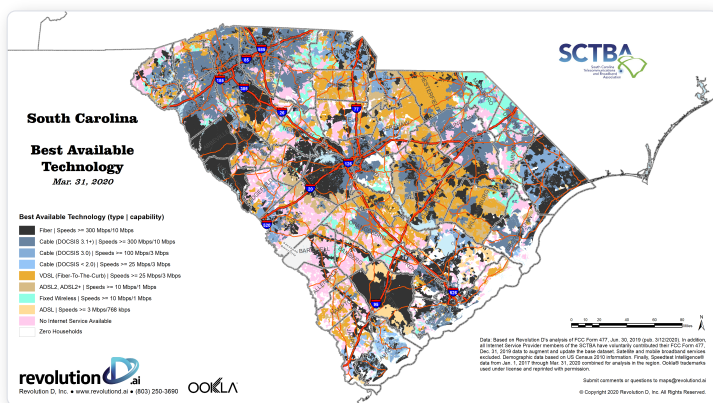
Secured \$27 million in USDA ReConnect grants to expand reliable broadband access to an estimated 30,000 residents

The situation

Many homes in rural South Carolina do not have access to a fast and reliable internet connection, which has created challenges in education, healthcare and economic development. For example, more than 40,000 children were unable to continue their education in 2020 after school closures during the pandemic due to lack of broadband access. Policy makers in the state needed to understand the best available network technology in each area, which areas were underserved and where network improvements could have the most impact.

The solution

Ookla partnered with Revolution D to develop broadband maps inclusive of real-world network performance data, rather than relying only on self-reported network speeds advertised by internet service providers. Stritzinger, who led the broadband mapping efforts, developed a new mapping methodology to determine the best deployed technology in each census block (e.g., fiber, cable, DSL) and then built a model to calculate the likely available download and upload speeds for that area. Ookla then ensured the integrity of the model by comparing predicted values with actual consumers' network performance results from Speedtest Intelligence®.



The outcome

Ookla and Revolution D delivered the first comprehensive set of South Carolina broadband maps on August 31, 2019. In October 2019, Ookla and Revolution D presented the maps to the House Democratic Broadband Caucus at the United States Capitol. Soon after, Revolution D launched the South Carolina Digital Drive website to host the rendered broadband maps of all 46 counties for free public download. The maps will be updated on an ongoing basis to reflect changes in network availability and performance and to track progress toward South Carolina’s goal of closing the digital divide. The site also hosts a Speedtest Custom™ instance so that South Carolinians can test their own internet speeds.

Since the beginning of this project, localities and broadband providers have used the information provided by the broadband maps to win grants to expand broadband access in the state — including three USDA ReConnect grant awards:

- Kershaw County received \$9.1 million in funding to give fast, reliable internet access to 6,251 rural households, 24 farms, 15 businesses, four critical community facilities, three educational facilities and a health care center.
- Underserved areas of Charleston and Berkeley counties won \$8.1 million to deploy 96 miles of fiber-optic cable and improve connectivity in more than 3,780 homes.
- Orangeburg County was granted \$9.75 million in funding to provide 3,911 rural households access to reliable internet.

As an initial result of this project, it is projected that over 30,000 residents and 12,500 homes in the state will gain access to broadband, improving educational and economic opportunities, as well as quality of life for South Carolinians.

"Our data model requires a huge volume of reliable network performance information. Ookla delivered millions of accurately geo-tagged records with granular broadband performance data for the entire state of South Carolina. With this extraordinary data, we were able to bring our broadband maps to life, launch the SC Digital Drive map store, and work toward our goal of ensuring that every home has access to the Internet by 2025."

— Jim Stritzinger, Founder and CEO of Revolution D