

# Broadband as a COVID-19 Cure

New technologies, new funding programs, and the vastly expanded need for work-at-home broadband have trashed old business plans but made many new plans possible. Here are key strategies for deployers to consider, and ways to fund their dreams and to make necessary changes in federal rules on such issues as spectrum use and lien priority.

By Steven S. Ross / *Broadband Communities*

**A**n anyone paying close attention to the COVID-19 pandemic has recognized some obvious truths:

- Bandwidth use is way up as jobs, education, shopping and health care now all happen at home. The need will continue even if vaccines and better treatment methods for this particular virus appear. For the near future, Homeland Security planners are nervous about the expanded potential for bioterrorism as well as for more “natural” bio-disasters.
- Video subscriptions are climbing, even without live sports.
- Normal activities in urban areas could be somewhat restricted for up to two years, although rural areas likely will get back to business earlier.
- Investors are fleeing to cash, or to what they consider the next best thing – U.S. treasury bonds. But broadband has been a standout in the past decade, with publicly held U.S. deployers alone spending around \$80 billion a year for new deployments and to improve old networks. No other consumer or industrial “product” segment in the United States or in the world economy has attracted that much investment. Major carriers, many with heavy debt on their balance sheets, had planned on pulling back a bit this year; since the onset of COVID-19, many have announced spending increases anyway. Smaller deployers, especially in low-density areas, are expanding or seeking to expand.
- Wireless, especially 5G, is somewhat overhyped but offers multiple opportunities, especially for expanding the fiber backhaul wireless requires.

But there is another key factor that is not immediately obvious: People and financial institutions converting investments to cash are usually loath to spend it on investing in anything else.

If your organization is planning to improve or establish a broadband network, what talking points will you use to pry some of that cash out of the hands of those who have it? And when might you actually be able to put that money to work if you get it?

The situation is very different from 2009, when financial institutions’ assets evaporated, and the \$7 billion for

broadband in the Obama stimulus program literally saved the U.S. broadband vendor infrastructure – equipment, construction, design and servicing.

One huge problem is the astounding amount of misinformation spreading around Wall Street hedge funds and other investment sources with regard to shiny, new technologies such as 5G. No, it does not spread COVID-19 and it is unlikely to cause cancer. No, the spectrum-impervious nature of modern construction is a minor technical issue, not a game-stopper. No, 5G does not replace fiber; 5G requires fiber and improves the business case for fiber.

## MAKING THE CASE FOR CASH

Today, there’s plenty of cash in play from private and public sources. The federal government alone had put more than \$3 trillion in new cash into circulation as of early June. That’s on top of about \$22 trillion already on deposit or in circulation.

Many major carriers are highly leveraged, however. That is, they have already borrowed a lot. In the past three years, many have used their cash flow and borrowing to buy entertainment companies and 5G spectrum and to buy back their own stock. They may find new cash harder to get.

That may make them more vulnerable to competition, but it also could make them more willing to partner with smaller, regional deployers on projects that don’t make a bigger mess of their own weak balance sheets. Smaller carriers should also not ignore opportunities to partner with each other in regional broadband projects. And, of course, they should not ignore grant and public loan money, which is flowing in copious amounts. More details on that later.

## PUBLIC MONEY

Public money is flowing, and so far this year, it is flowing more toward regional and local carriers and new entrants who wish to build robust networks. The U.S. Department of Agriculture Rural Utilities Service (RUS) ReConnect Loan and Grant Program has handed out more than \$700 million in loans and grants this year – mostly from \$2.35 billion appropriated in 2018 but with an extra \$100 million tucked into the CARES Act for rural broadband.

A new round of \$550 million is on the way, on schedule to award all the current RUS funds over the next three years as loans and grants. That money is restricted to service areas where there is almost no service now. But RUS also has a small extra pile of money to loan – about \$40 million per year – from carriers paying back older loans. Those funds have fewer restrictions. Almost all the RUS loans and grants have gone to small carriers (private, co-ops and municipal systems) deploying new, fiber-rich networks. The money must go for capital costs and engineering.

The FCC has vastly strengthened its rules for handing out funds from Universal Service Fund receipts – a total of slightly more than \$2 billion per year in a program now called RDOF (Rural Digital Opportunity Fund). The money comes to winners of reverse auctions – the lowest per-premises bid for monthly 10-year subsidies wins.

Previous FCC subsidies of this type have gone mainly to major carriers and to satellite providers, so I had little hope for this program.

My expectations were particularly depressed by the Microsoft Airband Initiative to use fragments of open TV spectrum and Elon Musk's expanding constellation of low Earth orbit SpaceX satellites – far less expensive and far more capacious than older satellite services.

My fears may be unfounded. The rules have changed. RDOF is similar to the auction component of the old Connect America Fund only in that they have the same application mechanism (reverse auction) and the same money source, the Universal Service Fund.

In addition, smaller operators are in many ways better positioned financially and technically. There are about 4,000 smaller operators on paper but, due to cross-ownership, really only about 2,000; another 1,000 new entrants, including electric co-ops, are poised to enter the field. The FCC's technical staff has expressed annoyance about the sketchy nature of SpaceX's promises, especially on latency. As of early June,

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FCC commissioners backed the staff, barring SpaceX from gigabit and low-latency tiers in the auction. SpaceX has promised more data and in early June launched an extra 60 satellites (there are now more than 400 in orbit) to try to get that data. White space is looking more like a nifty fill-in technology than a universal solution.

The big decision point for grant and loan applicants is that they can receive only FCC or USDA funding under current laws. They cannot get both.

The House has passed a \$3 trillion COVID-19 spending bill, HEROES, that offers \$2 billion in direct \$50 monthly subsidies to broadband customers (major carriers like it), and about \$1.5 billion for deployers (smaller carriers like it). It is unclear what might survive a Senate vote.

Funding mechanisms at the state level are still evolving. In January, most states had announced plans – ranging from a modest few million dollars up to \$200 million or more – to promote deployments in poor neighborhoods and rural districts and for commercial or industrial development.

Necessary state spending on unemployment benefits, testing and other COVID-19 responses and huge shortfalls in state and local tax collection have reduced the ability of states to fund even modest plans out of operating budgets.

But many states see a need for economic stimulus and see historically low interest rates, along with historic expansions in the money supply, as a once-in-a-generation opportunity for infrastructure enhancement – including broadband. Vermont's ambitious program could put as much as \$200 million into the mix, or about \$1,000 per household currently lacking fiber broadband.

**Bottom line:** From about half the states, expect help for building or enhancing networks but not for operating subsidies.

### LOOK FOR PARTNERS

Cooperation with regional stakeholders has always been a good idea. But right now, it is looking particularly attractive for broadband deployers. COVID-19 crushed the economy but it created new winners as well as losers – therefore, new potential partners.

**Winners:** Regional banks, which have always been more flexible than Wall Street in forming syndicates to make loans. Now the country is flooded with cash seeking places to go. Federal Reserve Bank "overnight" deposits in regional banks (just one measure) went from about \$12 billion every three weeks last summer to \$30 billion by the start of 2020 and are now well over \$100 billion.

**Winners:** Joint regional deployment ventures. I've detailed several benefits on the cost side over the past few years. For instance, when spectrum owners can combine all usable spectrum into shared 5G microcells, deployment cost drops 20 percent or more. When multiple operators jointly operate a regional network, cash needs drop, technical and management risks decline, and aligning fiber trunk becomes easier.

Partners apportion existing facilities, cash and non-cash assets. Partners may be incumbent or competitive phone or cable carriers, public operators, co-ops, real estate developers, broadband-consuming businesses, health care providers and academic institutions. Stakeholders usually combine the network operations but usually do not merge the corporate entities. New entities without

established credit, especially those that bid in RDOF, will probably need letters of credit; these days, local lender syndicates are a good place to get them.

**Winners:** Value-seeking deployers. There is nothing wrong with running a broadband company that manages entire municipal systems *and* provides local trunk *and* runs its own customer-facing system *and* runs a regional trunk. You know who you are. Investors should value your diverse bets in an age when other seemingly good bets can go very wrong, very quickly thanks to lockdowns.

**Winners:** RDOF reverse-auction bidders. There are tough anti-collusion rules to keep the bidders honest. But the FCC also allows joint bidding! Service providers and would-be providers must declare their partners before bidding, however. The deadline for that is tentatively July 15 at the

latest. Complete your deals before July 1 so you will be ready when you have to declare your intention to participate in the auction.

**Winners:** Large national carriers, which would not have to put up much (if any) capital to build new facilities. They would simply rent them. OK, it is not that simple. Long-term leases are usually treated as capital expenses on the balance sheet. Cooperation, which expands available spectrum by reusing it from microcell to microcell, helps consumers (more spectrum, fewer annoying cell sites). But there could be a legal or accounting carve-out for this circumstance. Spectrum utilization would go up, but spectrum bids come with FCC requirements for utilization, and the rules never envisioned sharing this way. Congress should allow the FCC to modify the rules, with oversight for consumer protection.

**Losers (in theory although probably not in reality):** Some banks. Federal and state broadband deployment loans usually come with mortgage lien priority. That is, when a growing network still paying off a federal (say, RUS) loan wants to raise more money or share operations, the RUS priority can get in the way. CoBank and a few other specialized lenders have long had ways of dealing with this and keeping RUS and other federal lenders happy. More banks will need to learn.

**Losers:** Some multifamily property owners and their mortgage holders. Renters have received some rent and eviction relief, but property owners and mortgage holders have not. Making matters worse, states and localities are running huge operating deficits thanks to falling sales and income tax collections. A version of the HEROES bill pending in the Senate could help ease state finances and thus reduce pressure on property. Adding broadband to the value mix in an apartment building or real estate development could help reduce pressure from local governments; tenants get an extra benefit as owners get tax relief. Cherry-pick healthy buildings and planned unit developments for deployment opportunities.

**Losers if they do not pay attention:** Some telecom companies. Expanding deployment cooperation can get consumers the broadband they need, and get it in a shorter period of time. But it can also lead down the road to less competition – tenants can be locked into the building's broadband.

The dazzle of immediate construction jobs and other economic benefits must be balanced with future community needs, too. This all can be done, and done quickly. But given the dearth of local media following broadband, it is all too often done in the dark. Shine a light in your community. ❖

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## FOR MORE INFORMATION

### FCC:

- The list of census blocks, census block groups and census tracts on the RDOF Auction 904 website: [www.fcc.gov/auction/904](http://www.fcc.gov/auction/904)
- The Auction 904 Initial Eligible Areas map: [www.fcc.gov/reports-research/maps/auction-904-preliminary-eligible-areas](http://www.fcc.gov/reports-research/maps/auction-904-preliminary-eligible-areas). Final rules are pending.
- The COVID-19 Telehealth Program: [www.fcc.gov/covid-19-telehealth-program](http://www.fcc.gov/covid-19-telehealth-program)

### USDA:

- The U.S. Department of Agriculture's ReConnect Loan and Grant Program: [www.usda.gov/reconnect](http://www.usda.gov/reconnect)

### THE PEW CHARITABLE TRUSTS:

- An overview of state broadband programs: <https://tinyurl.com/y7sfsfx3>.
- More details as of late 2019: <https://tinyurl.com/y8l34qx2>

### BROADBAND COMMUNITIES:

- **BROADBAND COMMUNITIES'** rural broadband coverage: [www.bbcmag.com/rural-broadband](http://www.bbcmag.com/rural-broadband)
- Financial analyzer tools to understand the financial implications and viability of any FTTH project: [www.bbcmag.com/tools-and-resources/ftth-financial-analyzers](http://www.bbcmag.com/tools-and-resources/ftth-financial-analyzers)
- Fiber Dominates First Batch of ReConnect Awards: <https://tinyurl.com/y7voo6aq>
- Help Is on the Way: Rural Broadband Funding Update: <https://tinyurl.com/ya2dkezj>