

# Mega-Opportunities for Fiber

Traditional ways of doing business in the broadband industry are being upended – but in a good way. Entire industries are now looking to fiber to solve *their* problems.

By Steven S. Ross ■ *Broadband Communities*

Yes, Wall Street (and some in government) think cellular systems will “solve” the broadband problem. Yes, capital for new builds has been expensive and hard to get. Yes, regulatory uncertainty – unavoidable, given the mandate to reform the Universal Service Fund – has been a drag on new builds. And yes, supporters of municipal broadband have been busy fending off attacks by commercial broadband providers in many states – providers who have no plans to serve smaller, rural communities with fiber but who can’t stand the idea that the communities could build systems themselves.

Amid the wreckage, however, are many new initiatives. Some, such as Google’s 1 Gbps network – now going live in Kansas City – and Gig.U, have gotten a lot of attention; others, not so much. Still others are in flux.

Video is being rethought, for instance. The American Cable Association is now supporting over-the-top video initiatives in large part because programming content owners have ratcheted up prices too high for carriers to profit consistently. Must-carry rules and deals that force carriers to buy channels they don’t want slice video margins even thinner.

For several years, Apple tried to sell TV programming through a set-top box that bypasses cable operators but uses the data bandwidth that the operators provide. Now, in an about-face, Apple is looking to partner with major cable companies instead. A company Apple’s size doesn’t make small-scale deals. However, small incumbent carriers in the aggregate have a quarter of all FTTH customers and could be quite interested

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*Financing fiber-to-the-home networks is challenging today, but new applications that require fiber’s speed and reliability are changing the economics of FTTH.*

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in what Apple is trying to sell, especially because their subscribers, or Apple itself, would front the cost of the box.

## NEW APPLICATIONS FOR FIBER

The smart grid presents another opportunity. A recent presentation by Craig Bowden for the New England Fiber-optic Council points to new wind farms and solar energy sites as major opportunities for fiber interests, which could manage not only the output but also the sites themselves. The market is bigger than most people think – new domestic wind capacity is pushing 50,000 MW, the equivalent of 40 nuclear power plants. Almost 7,000 MW was installed last year alone. The presentation can be found at [www.nefc.com](http://www.nefc.com) (click on Presentations), and many statistics are available at [www.AWEA.org](http://www.AWEA.org), the site of the American Wind Energy Association, which has 2,400 members worldwide.

The solar energy industry is smaller but topped \$6 billion in 2010 in the United States, according to the 1,100-member Solar Energy Industries Association ([www.seia.org](http://www.seia.org)).

Colleges are counting on savings from delivering courses online to help blunt the tuition increases that have been getting so much attention lately. The health care industry is looking to telehealth and telemedicine to help rein in ballooning health care costs.

IBM now says there’s an increasing role for solid-state data drives in its cloud computing centers. They cost 10 times more than spinning disk drives (and will still be three times more expensive in 2015), but the need for speed is driving the technology – speed only fiber can exploit.

**BROADBAND COMMUNITIES** is getting the message out through the magazine and the new custom seminar business (see [www.bbcmag.com/classes](http://www.bbcmag.com/classes)). Our new series of local economic development conferences begins in Danville, Va., in November (see [www.bbcmag.com/danville](http://www.bbcmag.com/danville)). Finally, make plans to attend this year’s Fiber-to-the-Home Council annual conference in Dallas (see [www.ftthcouncil.org](http://www.ftthcouncil.org)). ❖

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