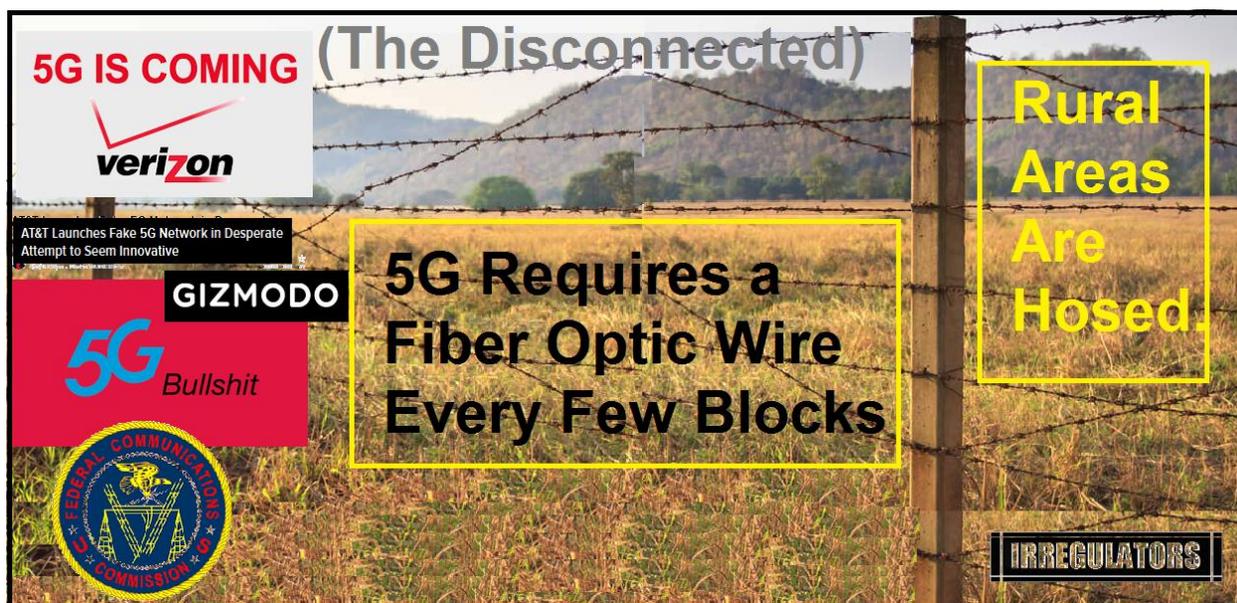


“5G” Wireless Is the New Fiber Optic, Bait-and-Switch Scandal

Bruce Kushnick | Medium | March 2018

You can fool most of the people most of the time. With “5G”, you can fool almost everyone except those in on the joke.



Why should you care? This is just the latest in a long list of scandals by AT&T and Verizon to use the promise of a new technology to get rid of regulations, kill off competition and to raise rates. And this scheme relies on the FCC, not to mention their friendly state and federal politicians, to push it through.

The FCC is very gung-ho about 5G and is backing this plan, but after recently getting rid of Net Neutrality and dumping your basic privacy protections, the FCC’s endorsement of 5G should trigger your distrust — to put it mildly.

[C/Net's headline](#) features current Chairman of the FCC, Ajit Pai (and former Verizon attorney), March 6th, 2018:

"Ajit Pai tweets praise for House passage of 5G support bill

"The Ray Baum Act reauthorizes the FCC and encourages deployment of next-generation wireless services in the US."

Meanwhile, [Fierce Wireless](#) quotes Commissioner Brendan Carr, (former lawyer for CTIA, the wireless association, and Verizon):

"A key obstacle [to 5G] is our country's outdated infrastructure regulations, which were written for previous generations of wireless technology,"... He has proposed a plan to streamline the federal historic and environmental review procedures that apply to wireless infrastructure deployments in hopes of reducing regulatory financial burdens on wireless providers deploying 5G."

This has been going on for years, but has intensified with the FCC's attacks on the public interest.

You might first want to read: "[Verizon Wireless's 5G Deployment is a 1 Gig Fairy Tale](#)". Written in January 2016, it details how 4G has also been a stream of hype.

In fact, America is not even close to Number 1. OpenSignal's new report, "[The State of LTE](#)", published February 2018, details that **America is 62nd in the world** in 4G speeds.

And if you think this 5G plan is going to fix this, the history of fiber optic broadband in America should have every person calling for investigations of these 'new networks'.

Let me be clear: 5G wireless technology is going to be part of the future, sooner or later. But this plan is much more about the subplot.

Here's part of the subplot that most are missing.

- **5G Wireless requires a fiber optic wire to be attached to the small cell site every block or two.** No company is going to roll out fiber to lots of new areas.
- 5G doesn't really exist yet and history shows that almost all "trials" are rigged to be 'successful' or you never hear about them. (See the [5G Gig Fairy Tale](#).)
- And, as *Gizmodo* pointed out about [AT&T's fake 5G announcements](#), 5G is just a marketing term. So there is now, "5G-really-really", "4G evolution LTE-soon-to-be-5G" — blah, blah, blah — and anything else you can make up.

Moreover:

- The FCC rarely, if ever, mentions that "5G" requires a fiber optic wire. Commissioner Carr's 5G [statement](#) never mentions the words "fiber" or 'state utility'.
- Meanwhile, there are proposed state-based "5G" bills that have been promulgated by [AT&T-Verizon funded politicians](#) based on "model legislation" that AT&T and Verizon [created with a group called ALEC](#), the American Legislative Exchange Council, and others.
- Cross-Subsidy Heaven: Right now, AT&T and Verizon get to dump a large part of the costs of their wireless build outs into the state-based wireline utilities and charged to local customers.

In short, this is a regulatory play to a) remove all regulations b) allow the companies to take over the state utility wired networks, c) i.e.; have customer-funded networks handed over for private use for whatever they want and d) the FCC's proposed rules will block any city or state actions.

Fact: 5G Requires a Lot of Fiber to be Deployed.

Government Technology's [headline](#) details the flaw in the 5G deployment, quoting a study by Deloitte. (Ironically, this is the same consulting firm that did the original 1990's state-based fiber optic plans, including Opportunity New Jersey.)

“Deploying 5G Will Cost at Least \$130 Billion in Fiber, Study Says

“Deploying 5G wireless speeds 10 to 100 times faster than 4G will cost \$130 to \$150 billion in fiber optic cabling alone over the next 5 to 7 years.”

The article continues and claims that 90% of the current internet traffic relies on the wireline networks and the fiber optic wires.

“To illustrate how crucial fiber is, Deloitte reports 90 percent of all internet traffic travels over wireline fiber, even if it ultimately terminates on a wireless device.”

And, according to Deloitte, without this fiber, 5G will fall short of expectations — widening the digital divide.

“Withholding that investment could be even more costly, according to the study. Falling short of fiber deployment will not only impede the deployment of 5G, it’ll mean a dwindling number of broadband provider choices for Americans the ‘widening of the digital divide’.”

Moreover, according to Gov Tech, Deloitte claims that less than 1/3 of homes have a fiber optic wire nearby; it also quotes the FCC’s data detailing how the majority of the US only has one broadband provider over 25Mbps.

“The divide is already significant. According to Deloitte’s figures, fiber passes less than one third of homes in the U.S., and only 39 percent of consumers have access to more than one broadband provider of 25 Mbps service — the minimum speed definition of broadband according to the Federal Communications Commission.”

FULL STOP:

Wait a second... If 5G requires a fiber optic wire and, regardless of the hype, there are no companies that are going to be rewiring America, especially in the more rural areas, with fiber optics...? Then, what the...?

Missed the subplot? We are being misled about 5G and misled about the fiber deployments and everyone reading this should know that this is a serious bait-and-switch — promise them tech to get rid of regulations.

Subplot

Verizon Announced It Was Going to Stop Doing Fiber-to-the-Home Because Wireless Makes Them More Money.

Lowell McAdam, CEO Verizon Communications, pointed out in the [2017 second quarter investor call](#) that — I paraphrase: *‘Well, wireless is so much cheaper (and more profitable), why bother doing fiber to the home? (‘‘ONT’’ is an ‘‘Outside Network Terminal’’.)*

‘‘From a pure cost perspective, again I think it’s a little too early to tell, but what I will tell you is about half of our cost to deploy FiOS is in the home today and the next biggest thing outside the home is the drop. And so our take is that with the router roughly costing the same — and, remember, we wouldn’t have to have an ONT as we think about it today.

‘‘So when we deploy 4G and densify the small cell antennas (to provide) 5G (service) for very little incremental cost. With the router in the house being probably less than an ONT and router combination today and losing the wiring in the house and losing the drop, we expect there to be a significant cost reduction.’’

Subplot 2

Wireless Is Cheaper Because Most of the Expenses are Paid for by the Wireline Utility — and Local Phone Customers.

Based on Verizon’s ability to use the [‘‘Title II’’, FTTP networks](#) for wireless and claim that they are part of the state utility, of course wireless is cheaper, though this fact doesn’t get discussed in the cost models or profit margins.

Fran Shammo, Verizon's former CFO, [told investors in 2012](#) that the wireless company's construction expenses have been charged to the wireline business.

“The fact of the matter is Wireline capital — and I won't get the number but it's pretty substantial — is being spent on the Wireline side of the house to support the Wireless growth. So the IP backbone, the data transmission, fiber to the cell, that is all on the Wireline books but it's all being built for the Wireless Company.”

As we pointed out, the 5G wireless state-based ALEC bills are designed to capitalize on this saving of money for the companies and misleading the public about what is being actually deployed.

They will cross-subsidize the wireless build via the wireline customers by dumping the expenses into the state utility wireline construction costs so that wireless has a very high profit margin, and it will roll out 4G and call it 5G (or until it evolves).

Lowell McAdam, [speaking at the Goldman](#), Sachs 26th Communacopia Conference on September 13th, 2017 stated it will be substituting wireless to the home (commonly called “the last mile”). And they are doing this throughout the East Coast.

“Well, I think that's where 5G and over-the-top come in because even in the markets where we have our FiOS footprint from Washington to Boston, the preferred method, the preferred architecture for us is going to be that last mile being 5G.”

As we pointed out, [the City of Boston residential customers](#) were NOT told about this bait-and-switch — the agreement is for fiber optics to the home.

Finally, this entire bait-and-switch with fiber is not new.

History Shows 5G Is Just another “We Will Bring New Tech if You Get Rid of Regulations” Scam.

The 5G frenzy is like any of the previous techno-bait-and-switch schemes — and this one is ironically similar to the super-hyped 1990's “Info-Highway” when America was

supposed to get a fiber optic network that would replace the existing copper wires. The companies, changing the state laws, collected (overcharged) over \$400 billion from this hype, and worse, the original rate increases were built into most of the current rates.

In fact, a lawyer came up with Kushnick's Law:

"A regulated company will always renege on promises to provide public benefits tomorrow in exchange for regulatory and financial benefits today."

And anyone who thinks this is different should travel back to the techno-hype that was thrown at the public hourly; it was everywhere, it was all pervasive and it was using a 'new technology' — the new shiny bauble, as the lure.

Example: It's the spring of 1993 and the fiber optic Info Bahn is just a few months away. [The April 12th, 1993 cover of Time Magazine](#) proclaims: "The Info Highway: Bringing a Revolution in Entertainment, News and Communication: Coming Soon to your TV Screen....". The story continues: ([Click to get/view/purchase/tweet the cover.](#))

"It's not here yet, but it's arriving sooner than you think. Suddenly the brave new world of videophone and smart TVs that futurists have been predicting for decades is not years away but a few months.... We won't have to wait long. By this time next year, vast new video services will be available at a price to millions of Americans."

Ironically, America should have started on the path of a fiber optic future 25 years ago.

- [AT&T \(Pacific Bell\) California](#) claimed it would spend \$16 billion from 1993–2000 to complete 5.5 million households with fiber. Never deployed; pocketed the tax breaks and rate increases.
- Verizon Bell Atlantic claimed it would spend \$11 billion from 1993–2000 to have eventually 12 million households wired with fiber. (Most of the East Coast — never deployed; pocketed the tax breaks and rate increases.)

And 25 years later we have little to show for it. AT&T California never deployed the fiber optics in the 1990's and then pulled a bait-and-switch with U-Verse in 2005, claiming it was 'fiber-based' when it is really a copper-to-the-home service. Verizon deployed virtually no residential fiber from 1993–2005, even though they got billions per state. They ended up finally deploying FiOS in 2005, then stopped in 2010–2012, leaving less than ½ of the utility territories covered (and with major gaps). Unfortunately, we know of no state that gave refunds or lowered rates based on the state-based incentives and the removal of 'barriers to investment'.

Now we know why the previous FCC stats showed that there is little or no competition for high-speed broadband in America — AT&T and Verizon never showed up.

And just to show you how crazy this is, we again face a situation where a new technology is being touted as superior to upgrading the networks to fiber optics, even though 5G doesn't exist yet as advertised, may never fulfill its projected destiny and requires fiber optics. But now, the FCC is giving companies the ability to dismantle the state utilities and hand them over to an affiliate company — wireless. And there are no commitments of any sort that once they get deregulated they will do what they say.

Based on history... this needs to be stopped. Where are the audits of the financial books? The FCC is now 'weed-whacking' them to cover over the cross-subsidies.

And if you think there are no similarities to the fiber promises of the past and the 'wireless' promises of today (that ironically require the fiber to be deployed...)

Compare:

Brendan Carr's 2018 statement about 5G claims that there will be a \$500 billion dollar boost to the economy.

"Deploying 5G, the next-generation of wireless service, could mean 3 million new jobs, \$275 billion in private sector network investment, and \$500 billion added to the GDP."

To this:

In 2001, when what is now Verizon et al. wanted to prove to America that increasing broadband deployment (their way, of course), could add \$500 billion to the US economy, Verizon hired the Brookings Institute to prove the case.

“While the great broadband debate rages on at Capitol Hill, a new study released yesterday said widespread use of high-speed Internet service in the near future could pump as much as \$500 billion annually into the U.S. economy.

“The study, conducted by the Brookings Institute in Washington, D.C. and titled ‘The \$500 Billion Opportunity: The Potential Economic Benefit of Widespread Diffusion of Broadband Internet Access....’

This 2001 study and others helped to create the Net Neutrality issues. They were used, in part, to convince the Republican FCC (and Congress) our fiber optic future was just a few years away — and we needed to get rid of competitors, including small ISPs. This was done by combining the broadband service and the internet service and calling it broadband-internet.

I note that by the end of 2017, about \$500 billion has been overcharged in the name of broadband in the US; (\$400 billion extended from 1992 through 2014, and this accounting process started in 1998.) And this is the low number based on our uncovering that the wireline customers have been charged for the wireless deployments.

In short, 5 comes after 4. Thus 5G.