2012-2015: A Bleak Broadband Future Awaits America: Here's 14 Facts You Need to Know About.

FCC, National Broadband Plan, 2010

> "The United States must lead the world in the number of homes and people with access to affordable, world-class broadband connections. As such, 100 million U.S. homes should have affordable access to actual download speeds of at least 100 Mbps and actual upload speeds of at least 50 Mbps by 2020. This will create the world's most attractive market for broadband applications, devices and infrastructure."

PART TWO: Examining the Facts

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1) America's Broadband Reality: Tin Cans and String

The FCC's last statistics on broadband in America should scare the reader, especially if you think that broadband is a key economic driver. FCC's Internet speed report, published in May, 2011 (the data is from June 2010).

- Only 48,000 have anything 'at least 100 Mbps' in one direction.
- Only 1.2 million have anything above 25 Mbps in one direction.
- We need to add that the report starts with the speed of 200kbps, which is1/5 of a Mbps.

And while the hype of 'wireless' for broadband has been spreading; the speeds do not match the hype.

- 91% of the population has speeds of less than 6 Mbps in one direction.
- 96% can't do an upstream speed of "at least 3 Mbps".

FCC's Internet report on speed
http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db1007/DOC-310261A1.pdf

2) America's Status in Broadband: 3rd World Nations are doing Better.

Ivan Seidenberg, Chairman of Verizon, claims that America is number 1 in the Internet. Trying to rebut a NY Times op Ed by Susan Crawford, he wrote,
http://www.nytimes.com/2011/12/08/opinion/bringing-high-speed-internet-to-all.html?_r=2

> "The 2011 World Economic Forum global survey ranks the United States first in Internet competition."

Tim Karr of Free Press checked the stats. He found that:
http://www.commondreams.org/view/2011/12/08-8?

> "the most recent WEF "Global Competitiveness" report (pdf) features its U.S. rankings on page 363. The good news is that America ranked first in the world for available airline seats. But our Internet rankings are terrible. We're 18th in the availability of the latest technology, 18th in Internet users per capita and 26th in Internet bandwidth per capita."

But this is only one of many international rankings.

- Ookla, a broadband testing service which tracked 50 million broadband speed tests, found that America ranked 33rd. http://www.fiercetelecom.com/story/us-broadband-outlook-not-what-was-expected/2011-12-19#ixzz1h8qWm9wl

3) The FCC's National Broadband Plan Is Giving $50-75 billion to the Phone Companies of Your Money.

The FCC has no plan that will get America to 100 Mbps in full deployment. In fact, the FCC is about to spend almost $50-$75 billion dollars of customers' money (as this money is being created using rate increases, new fees and new taxes) over the next 5 years, to get, well, snail-band.

This equates to $40-$75 dollars for residential customers and $150.00-$300.00 for small businesses and it gets worse the more services you have. And this does not include the 15% Universal Service Fund Tax. Verizon and AT&T are the 2 largest recipients.

Here are two of the additions:

- Connect America Fund (CAF) is a new tax to pay for broadband.
- Access Recovery Charge – Is the addition of a new fee on the bill, which is essentially an increase of a current charge on the bill, known as the FCC Subscriber Line Charge, which does not fund the FCC but is direct revenue to the phone companies.

For a more detailed examination of the new ways that the FCC is working with the phone companies to increase your phone rates, wireline and wireless, see:
http://www.newnetworks.com/FCCraisesrates.htm

4) What Do We Get for $50-75 Billion Dollars of Additional Monies to the Phone Companies ---4 Mbps for Wireline, 768 kbps for Wireless Services.

This is from the FCC's "Connect America Fund" Order, part of the National Broadband Plan. Personal favorites: "wireless: 4G (768 kbps/200 kbps minimum at cell edge)" or " wireline: 4 Mbps/1 Mbps to all supported locations".

Component of CAF Broadband Performance Characteristics

Price Cap CAF (Phase I) (Incremental support)

- Speed of at least 4 Mbps/1 Mbps to a specified number of locations, depending on level of incremental support

CAF in Price Cap Areas (Phase II)

- Speed of at least 4 Mbps/1 Mbps to all supported locations, with at least 6 Mbps/1.5 Mbps to a number of supported locations to be specified by model

Areas with no terrestrial backhaul

- Speed of at least 1 Mbps/256 kbps in locations where otherwise would be obligated provide 4 Mbps/1 Mbps

Mobility Fund, Phase I

- 3G (200 kbps/50 kbps minimum at cell edge) OR
- 4G (768 kbps/200 kbps minimum at cell edge)

Please don't laugh. In 1999, the FCC decided to redefine the speed of broadband as 200 kbps in one direction. This was to increase the number of 'broadband connections'.

This next quote is the speed of broadband, as stated in Verizon, New Jersey's state law from 1993. The speed of broadband was supposed to be 45 Mbps in both directions and this was in multiple state laws as broadband was supposed to be capable of handling HD video in both directions.

> "Broadband Digital Service — Switching capabilities matched with transmission capabilities supporting data rates up to **45,000,000 bits per second** (45mps) and higher, which enables services, for example, that will allow residential and business customers to receive high definition video and to send and receive interactive (i.e., two way) video signals."

5) AT&T and Verizon Have Slowed Down/Stopped to Upgrade Most of America.

That's right. The companies figure ---why bother spending and building out wireline networks if they can get the wireline part of the business to fund wireless or get government subsidies to do build outs.

The Washington Post writes that Verizon will stop its buildout of FiOS Television, (which they announced over a year ago and are just selling and completing areas they already wired or have franchise obligations to finish).

> "Verizon ends satellite deal, FiOS expansion as it partners with cable
> Verizon Chief Executive Lowell McAdam said the telecom giant plans to end its wireless LTE partnership with satellite provider DirecTV and will stop its buildout of FiOS television and Internet services in the next couple years…."

http://www.washingtonpost.com/blogs/post-tech/post/verizon-ends-satellite-deal-fios-expansion-as-it-partners-with-cable/2011/12/08/gIQAGANrfO_blog.html

AT&T is even more brazen about ending U-Verse. DSLPrime reports on statements by AT&T at a Citibank event. http://bit.ly/kAIbd1

> "AT&T U-Verse Build Essentially Ending
> My article at DSL Reports is straight from AT&T President John Stankey at Citibank: after reaching the 2011 goal of 30M homes passed, there will be very little additional U-Verse buildout. He announced 55-60% as their ultimate goal - about the same 30M homes. He suggested that 25-30% of AT&T homes will only be offered ADSL. 20% are "not a heavy emphasis for investment," i.e. 5-10 million of AT&T's 50 million homes are screwed unless they have a decent cable alternative. (Yes, rounding means not necessarily equal to 100 %.)"

AT&T's U-verse was an inferior product as it is not fiber to the home but fiber to the neighborhood, using that same old copper wire to complete the service, which has a top speed of 25 Mbps, not 100 Mbps.

Thus, AT&T was harming 22 states by not upgrading to fiber, but at least that was some upgrade. Now, almost ½ of America is being harmed by the incumbent carrier, AT&T. And if Verizon is also not going to upgrade the networks in their states, how does America get to 100 Mbps?

6) The Communications Trust Colludes. Wires and Wireless in One, Big, Happy Family.

Another Washington Post story revealed that Verizon and the cablecos are now going to be in bed with each other.

> "Under the deal announced Friday, Verizon will pay $3.6 billion to Comcast, Time Warner and Bright House Networks to use a swath of cellphone airwaves that the cable giants own but do not use. That would cement Verizon's status as the dominant wireless carrier and give it access to valuable spectrum at a time when its primary rival — AT&T — is struggling to expand its network through a controversial proposed merger with T-Mobile."
>
> "But perhaps the most extraordinary aspect of the deal is its cooperative marketing arrangement, which calls for the cable companies and Verizon to "become agents to sell one another's products.
>
> "That would allow, for example, a consumer to walk into a Comcast store and get a Verizon Wireless plan tacked on to his television, Internet and landline phone service. Eventually, Verizon's name might not appear on those bundled plans, the firms said.
>
> "The cable companies would essentially kill plans to move into the cellular industry. Meanwhile, Verizon would promote the cable companies even where it offers its fledgling cable and home Internet service known as FiOS."

http://www.washingtonpost.com/business/economy/verizon-wireless-makes-marketing-airwave-deal-with-three-cable-companies/2011/12/02/gIQARvPYMO_story.html

If the wireless companies are owned by the wireline companies then, this is nothing more than collusion as it's clear that the wireline companies has slowed, if not halted

anything that could compete with cable service. It closes down Verizon expanding its own competitive cable service in the future.

In yet another deal, Verizon is buying the spectrum and making a deal with Cox cable. According to Zacks Equity Research,

> "Verizon and Cox would be able to market and sell each other's residential and commercial products and services, thereby solidifying their respective competitive positions in the telecom sector."

http://finance.yahoo.com/news/Verizon-Cox-Spectrum-Deal-zacks-1884408106.html

Since the cable companies don't compete with each other, and the wireline companies don't compete for phone service or broadband with each other, this entire set of announcements means that the cable companies get cable, the telcos and cable companies split broadband, and internet, broadband, the phone companies get wireless and the remaining wireline products and every customers loses choice and prices can continue to climb.

Ironically, the FCC's entire reason for closing down competition on the wireline networks was to create "inter-modal" competition claming --- all we need is cable to compete with the other wire and wireless.

But wait, there's more. Even though the AT&T and T-Mobile deal fell through, the FCC approved a $1.9 billion dollar spectrum takeover of Qualcomm, consolidating the market even more. http://www.bloomberg.com/news/2011-12-22/qualcomm-1-93-billion-airwaves-sale-to-at-t-wins-u-s-approval.html

7) Closing Down the FCC Instead of the PSTN

In 2009, AT&T filed to have the Public Switch Telephone Networks closed down. http://www.newnetworks.com/ATTharms.pdf

In 2010, the FCC created the Technology Advisory Committee, the majority of the members are either the phone companies or their suppliers/hardware, software applications companies, such as Google, Apple and Motorola.

The Committee's reasons for shutting down America's utilities are based on 2 arguments:

- "More than 25% of U.S. consumers aged 18 or older have already given up their voice landline for voice wireless-only service."
- By 2014, the United States will have fewer than 42M access lines – Access line losses were nearly 6.6 million between 2Q09 and 2Q10, a drop of 7.3%.

This is all, well, garbage. Wireless-only numbers leave out key data and the phone line accounting used by the FCC, which is supplied by the phone companies – is pure manipulation of basic facts the FCC should have investigated.

Discussion of the Flawed Access Line Accounting and Wireless-Only Statistics

Let's us be very specific about the FCC's presentation and use of the line losses accounting and Wireless-Only statistics.

8) Line Losses. The FCC's Own Data Collection Showed that the "Switched" Lines Are a Subset of Total Lines.

This next exhibit is directly from the FCC's Statistics of Common Carriers, published in 2008. It was the last data the FCC collected on phone lines in America. It showed that there were 379 million access lines at the end of 2006 and that only 34% were "switched access" lines. There were 250 million "Special Access" lines and the FCC has refused our calls repeatedly to include all lines in their line accounting.

Using FCC data for the last 2 decades shows that since 1984, "Bell Switched Access increased 17%", but that total lines increased 247%.

Bell "Switched" Lines Vs Bell "Total Lines", 1985-2006
(In the millions)

	1985	1990	1995	2000	2005	2006	change
Switched	110,153,844	126,388,961	148,410,289	174,178,811	136,292,186	128,645,200	17%
Special	1,390,896	4,035,297	17,603,651	70,604,556	213,138,243	250,621,476	17919%
Total	111,544,740	130,424,258	166,013,940	244,783,367	349,430,429	379,266,676	240%
switched %	99%	97%	89%	71%	39%	34%	

Source: FCC using phone company supplied data.

One other very interesting thing about these numbers – in just one year, 2005 to 2006, Special Access lines increased 38 million lines; there was only a 7 million line loss of switched access lines – a total gain of about 30 million lines.

NOTE: We have presented this information to the FCC multiple times.

"Special Access" is not 'special', as it can be items like an alarm circuit or a dedicated data line used for an ATM machine. More importantly, most of these services still travel over the PSTN wiring. Special Access is also important because even wireless services require a wire from the cell tower that aggregates the calls and sends them to the networks via a wire.

State Examples of Access Line Accounting from FCC's Reports

Here is another example of total access lines vs the subset "switched access", this time by state from the same FCC Statistics of Common Carriers, report using 2006 data, (the last data the FCC collected and made public) supplied by the phone companies.

FCC Statistics of Common Carriers, Verizon New York and New Jersey December 2006.

	Verizon NJ	**Verizon, NY**
Total Switched Access Lines	4,909,917	7,960,486
Total Access Lines (Switched and Special)	21,319,502	42,993,193
	23%	19%

It shows that in Verizon, New Jersey and New York the "switched" lines were only 19% and 23% respectively of the total lines. Thus, this information clearly shows that Verizon is only using "switched' access and not the total lines, which include special access lines when it discusses its line losses.

The idea that 81% of lines in New York and 77% of lines in New Jersey are not counted, even though almost all of these services go over the same PSTN wiring, seems lost on the FCC.

What does all this mean? DSL, FIOS, and "special access" lines are not being included, making the line counts meaningless as they are no longer counting the wire but through a regulatory sleight of hand, they can omit whole classes of services.

The FCC's definition of the PSTN, then, is to only deal with "voice calling", and it doesn't even cover all voice calling products, and therefore is helping AT&T, Verizon and the other telecommunications incumbents who want to close down America's entire utility system.

The FCC will argue that this is about a change in technology – Poppycock. An alarm circuit, an ATM data line and millions of others lines are over the PSTN wiring and they can be 'non-switched'. Also, when other services are added to regular voice lines, Verizon stops counting them as well, even though they are voice calls over the PSTN.

9) All of These Actions Are Being Used on the State Level to Lower Taxes, Raise Rates and Remove Consumer Protections.

We need to make clear that the FCC's failure to do a full line accounting and closing down the state utilities has direct harms to customers as these losses are now being used to claim that there is 'competition' and loss of revenues.

This slight of hand is a manipulation being done in some states to:

a) Raise Rates. The loss of lines is also an accounting of revenues and network assets. As items become deregulated and no longer counted, the revenues go into different buckets so that the companies show losses, then, as Verizon did in New York, the company goes to the state commission to raise rates complaining that they are losing money and lines.

b) Not Pay Taxes:

- In New York it is clear that Verizon has used this manipulation of accounting to avoid billions of dollars in taxes. In New York alone, Verizon claimed to have lost $2.2 billion in 2010, resulting in over $716 million in 'income tax benefits'.
- In New Jersey, Verizon has stopped paying personal property taxes to some municipalities claiming they lost over 50% of lines.

c) Removing the Remaining Regulations and Safeguards in Every State: In New Jersey and other states, an AT&T-Verizon funded group named ALEC has created model legislation to remove basic safeguards and consumer protections, such as not being able to get a refund if you are put on a package you didn't order or can't complain if your service goes out and they are slow to repair it. Being pitched by state politicians who receive campaign donations from AT&T and Verizon, this model legislation is based on the phone companies' statement that they are losing lines and thus there's competition.

The FCC is oblivious to these machinations and thus is backing the closing of the PSTN.

10) Wireless-Only Data Are Flawed.

The most quoted materials pertaining to wireless-only statistics and used by the FCC comes from the Center for Disease Control (CDC) who claim that wireless-only households are now at a whopping 25%. As quoted from the FCC's Technology Advisory Committee: (FCC Technology Advisory Council, Critical Legacy Transition Working Group (CLT□WG), Status of Recommendations, June 29, 2011)

> "More than 25% of U.S. consumers aged 18 or older have already given up their voice landline for voice wireless-only service."

Unfortunately, when these numbers are examined there are 2 missing components that are relevant and not mentioned by the CDC or the FCC.

- The CDC does not count the wire but only 'voice calling phone service'. So, the household may indeed have a wire coming into the home, which could be for broadband or DSL or Internet or cable.

- The CDC doesn't count businesses and there are few, if any all wireless-only large businesses much less small businesses. Main Street USA still has a wire into the business, especially for ATM machines or alarm services.

There is no data available from the CDC or the FCC or any other source to specifically address then how many wireless-only households or businesses there are when the actual wire and other services are taken into account.

However, according to a new study by Strategy Analytics, as reported by Broadband Reports only "6 million U.S. residents now exclusively use wireless as their only in-home broadband service."
http://www.dslreports.com/shownews/6-Million-Only-Use-Wireless-Broadband-117445

The FCC claims there were 169 million total US broadband connections in 2010, which would mean that 6 million is 3.6% of those connections. (Strategy Analytics believes it is 6.9% of total broadband connections.) Regardless of the accounting, it is not 25%, and when business customers, who are still using the PSTN wiring are included, the number of actual wireless-only customers for telecommunication is a fraction of the FCC's claims.

11) Wireless Is Not a Substitute for Wireline or for Cable

Even if the FCC were to actually do something about special access, it is clear that the phone companies would most likely not change the pricing of their wireless services.

According to multiple sources it takes 100-250 gigabits of downloads to match basic current cable viewing. AT&T's Iphone and Ipad packages have tiered pricing.

Here are 2 current (November 2011) AT&T data plans:
http://www.att.com/shop/wireless/plans/data-plans.jsp?wtSlotClick=1-005DYZ-0-1

- DataPlus: 200 MB of data for $15 per month. If you go over, you'll get an additional 200 MB automatically for $15.
- DataPro: 2GB of data for $25 per month. If you go over, you'll get an additional 1 GB automatically for only $10.

Compare that to Netflix's data speeds for watching video:

- "Good" —The default setting with good picture quality and lowest data use per hour (about 0.3 GBytes/hour)
- "Better" — Better picture quality and medium data use per hour (about 0.7 GBytes/hour)
- "Best" — Best picture quality and highest date use per hour (generally about 1.0 GBytes/hour or up to 2.3 GBytes/hour when streaming HD content)

Watching 1 HD movie at 2.5 hours costs over $40.00 and uses up all of the time of the "DataPro" plan.

12) Special Access Should Be Renamed Special Excess.

As we discussed, Special Access lines are essentially not special, they are mainly 'data lines', but the category includes everything from alarm circuits to the backhaul networks that carry wireless phone calls from the towers or broadband and Internet traffic.

America's broadband is incredibly expensive and slow as other countries are offering 100 Mbps, bi-directional speeds for less than US DSL. How can they do it? They don't let the monopolies gouge and control the market.

According to Economics & Technology's report "Special Access Overpricing and the US Economy", 2007, Verizon and AT&T now have monopoly controls over these essential services – which in 2006 had rate of returns of 78%. Originally set by the FCC at 11.25%, the report concludes that if the companies were returned to the original rate-of-return, as they are monopolies, the price of these services would be cut in half, representing $8.3 billion dollars annually.

And, according to the report:

> "Bell special access rates of return have continued to mushroom, and as of year-end 2006 were on average about 77.9%. A 53.3% price reduction would be required to bring these returns back down to a competitive level – i.e., in line with the FCC's last authorized rate of return (11.25%) – representing an $8.3-billion reduction in RBOC special access rates."

There has also been new data pertaining to this topic, which the reader should pursue as this discussion has been around for years and new data keeps appearing… go to

No Choke Points Coalition for the latest on this topic. They write:
http://nochokepoints.org/

> "Special access, high-speed, high capacity broadband lines are the central nervous system of the United States' broadband network. Special access lines are used by nearly every American each day. A few giant phone companies like AT&T and Verizon control these special access lines, creating chokepoints along the middle mile and holding back wireless broadband deployment.

13) The Fix Is In.

Over the last 15 years there has been a massive takeover of the regulatory landscape by what are now AT&T and Verizon. This includes being able to control whole legislatures, public utility commissions and the FCC, as well as the advisory committees, not to mention a wide swath of Congressmen and Senators.

We recently wrote an article to outline just how Verizon and AT&T were able to create a massive skunkworks campaign called "Connect 2 Compete", designed to cover over the fact that there is no plan for high speed broadband in America, but there are major rate increases and taxes being applied, much of which eventually ends up giving the phone companies more money, with little, if any oversight.

See:
http://www.alternet.org/story/153109/why_telecoms_get_away_with_screwing_customers_to_pump_up_their_massive_profits

14) **What's $340 billion dollars of customer overcharging for fiber optic broadband got to do with anything?**

As we've written about extensively, Verizon and AT&T in the previous incarnations as "Baby Bells" went to each state's Public Service Commission or state legislator and was able to get massive financial incentives to do a full upgrade of the state utility plant, replacing the old copper wiring to a new fiber optic service, capable of 45 Mbps in both directions, as we quoted in item number 4, directly from New Jersey state law.

The idea that no one bell company who received these massive financial incentives were ever required to build out what they were paid to do, is one of the largest scandals in American history as everything you just read would have been moot – we would have been number 1 in the world as these plans started in 1992 with the call to have a national fiber optic Information Superhighway was part of the Clinton-Gore campaign.

We estimate that by 2011, the companies collected $340 billion dollars to do these upgrades of everything from homes and offices to schools, libraries and even hospitals and government buildings.

We've written extensively about this and have been sending comments and complaints to the FCC to investigate these issues since 1998. – As we wrote--- the fix is in.

The History, Financial Commitments and Outcomes of Fiber Optic Broadband Deployment in America: 1990-2004, The Wiring of Homes, Businesses, Schools, Libraries, Hospitals and Government Agencies
http://www.newnetworks.com/FCCCITIbroadband.pdf