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PART 1: The History and Continuing Financial Cross-subsidies of Verizon Pennsylvania.

The current BEAD proposal Volume 1, is missing critical material facts about what happened in Pennsylvania, and thus no 5 year plan created by the SBO can possibly eliminate the Digital Divide. This failure to include these basic material facts is due to a regulatory failure based on an ongoing corporate financial quagmire that the state failed to identify and correct.

And yet, the state has announced it is giving away \$1.16 billion in government subsidies.



Our Point is Simple: Everything you are about to read was never mentioned in any State broadband 5 year plan or any other document pertaining to giving out over \$1 billion with the claim that it will solve the Digital Divide. And we will present basic, basic material facts that need to be investigated.

Verizon PA is the state telecommunications public utility, (established in 1879), that had commitments to have 100% of their entire territory completed with a fiber optic wireline infrastructure that could handle 45 Mbps in both directions that was supposed to be

completed by 2015, and the first deployments circa 1994. Yet, through a series of slippery dealings between the state and the corporation, Pennsylvania ended up with a corporate bait-and-switch where a wireless service at 1.5Mbps became the de facto standard.

By the end of 2014 we estimated that over \$18 billion dollars had been charged to basic telephone service customers -ratepayers- and there was no serious wireline fiber deployment. And we have updated this story with a series of new investigations, including Pennsylvania, though 2023.

But, in the end, the Pennsylvania Broadband Authority, never mentions that there is a 140 year old telecommunication public utility, now called Verizon PA, or that there have been commitments for upgrades to fiber optics, starting in the 1990's, or that state laws were changed to provide investment, which turned out to be charged to local phone customers as rate increases, or that there has been an ongoing bait and switch with the wireless services using the construction budgets for fiber to the home, among other financial questions. Worse, the fiber optic wires have been installed for FTTP, fiber to the premises, are classified as "Title II" and are part of this telecommunications public utility--and this has its own series of issues, tied to Net Neutrality.

The Story of how the Digital Divide was Created in Pennsylvania.

We will start with the story of how the Digital Divide was created in Pennsylvania, and explain that unless the core issues we bring up in this analysis and the related documents are addressed, no amount of government subsidies will fix the issues, especially when the largest recipients of the government subsidies have been the state telecommunications utilities, which can include Universal service fund and other government subsidies, and the cable companies they work with. Comcast and Charter are now reselling Verizon's wireless service under their own brand name. Moreover, the prices of all services are now controlled by the Verizon networks, known as "Backhaul", that are hiding in plain sight.

We also have sent along other parts to these comments, as well as important questions that must be answered.

- By the end of 2007, the FCC claimed that Verizon PA sent \$624 Million on construction, and that by 2022, Verizon PA could have spent \$6.7 billion on the PA infrastructure buildout. This is the utility network upgrade funds that should have been spent to build out the fiber optic network. Where did all the money go?
- Dark Fiber -- 3.3 million KM of fiber optic wires were installed in Pennsylvania at the end of 2007, and 64% was dark, meaning not in service; Verizon PA had approximately 82% of the state as their telecommunications utility territory. By 2022, how much of these network wires are still dark (unlit)? How much of the dark fiber or lit fiber is in an unserved or underserved area?

- More importantly, how much of the wires were illegally used to provide wireless services from 2008-2022?
- Were there illegal cross-subsidies of wireless, diverting billions of dollars to wireless services? How much was charged to local phone customers?
- Using Verizon NY Annual Reports, we assume that the accounting manipulations for construction expenditures and all of the other expenses now have the majority of all of the major expenses being charged to local phone and wired utility customers. Where are the audits?

In short, we are not telling this as a history lesson. We believe that immediate investigations need to be started in PA to halt the cross-subsidies of the wireless network that we have identified, and to halt the manipulation of the current accounting used by Verizon NY that allows for all of these various affiliated services to be cross-subsidized.

Moreover, the state has never examined the Title II requirement for insuring the 'affordability of services' nor the continuous rate increases that were created through the promise of building out the fiber optic networks. And there is no accounting of what was and was not built under the broadband plan that was supposed to have covered Verizon PA 100% with fiber to the home.

MISSING HISTORY: The Pennsylvania Fiber Optic Broadband Debacle

By the end of 2015, Verizon Pennsylvania, the largest state telecommunications public utility, was supposed to have completed an upgrade to fiber optics that would cover 100% of their territory and originally at speeds of 45Mbps in both directions, in urban, suburban and rural areas. In fact, Philadelphia and Pittsburgh had been singled out to have a fiber optic upgrade completed by the end of the year 2000.

These were based on a plan called "Opportunity Pennsylvania", which was announced in 1992 and pushed through the Pennsylvania Public Utility Commission by 1994.

• In 1991, the Clinton-Gore presidential ticket put forward a plan called the "Information Superhighway", to replace the existing copper wires in the state utilities, (that could have been 20-70 years old), with a fiber optic wireline infrastructure that could offer new digital services and compete directly with cable TV.

The marketing hype for these fiber networks back then made today's 5G Wireless noise sound like a whisper.

- "PA Senate OKs Fiber Optics Bill" June 24, 1993, Philadelphia Daily News.
- "PA Legislature Compromises on Fiber-Optics Bill. The Measure Calls for the State to Be Wired By 2015", June 25, 1993, Philadelphia Inquirer

 "Phone Bill Goes To House. The Measure Would Limit Rate Increases and Require A Fiber-Optic Network by 2015". May 24, 1993, Philadelphia Inquirer

"Opportunity Pennsylvania" was a cookie-cut plan created by Deloitte & Touche that was used in NJ, PA, IA, OH and IL.

- Instead of having the government build this networks, the incumbent phone companies-including Bell Atlantic, (now part of Verizon), which controlled Bell of PA, claimed they would do the work if there were changes in the state laws; Verizon PA was granted "alternative regulations" (also called "Price Caps" or "incentive regulations").
- 1993, the PA state legislature created Chapter 30 which modified the State utility code.
- Then the PA Public Utility Commission (PAPUC) put together an agreement to Verizon PA would upgrade their entire territory,100%, rural, urban and suburban areas equally, by the year 2015, with speeds of 45 Mbps in both directions.
- At the same time, Bell Atlantic filed "video dialtone" applications with the FCC to upgrade the copper wires to fiber, which included PA. In fact, almost every phone company submitted similar proposals, and these were approved by the FCC.

By 1996, the hype hit a crescendo, with Bell Atlantic (now Verizon), announcing 12 million homes with coverage in Philadelphia and southern PA starting in 1996.

Bell Atlantic Press Release, 1996

"The fiber-to-the-curb architecture that Bell Atlantic will build is the next step in the company's ongoing, aggressive network modernization program.... Bell Atlantic plans to begin its network upgrade in **Philadelphia** and southeastern Pennsylvania later this year. The company plans to expand this Full-Service Network deployment to other key markets over the next three years. Ultimately, Bell Atlantic expects to serve most of the 12 million homes and small businesses across the mid-Atlantic region with switched broadband networks."

NOTE: "Switched broadband" and "IP broadband" all use the exact fiber optic wire, and they are all 'digital', and this was about wires being installed.

 But, by 2002, Verizon had done no serious upgrades of the existing state telecom infrastructure and it did not replace the copper with fiber,

A number of analysts knew what was going on. <u>Economics & Technology</u> wrote there was \$2.5 billion in 'windfall gains'', by 2002.

September 10th, 2002

"Under Chapter 30, Verizon has amassed profit levels that had been unthinkable for "regulated" telephone monopolies. Verizon was also able to shift its yellow pages business out of regulation altogether, producing a windfall gain to its shareholders that is conservatively worth upwards of \$2.5 billion."

And to add insult to injury,

"Verizon Pennsylvania has realized financial gains in excess of \$4-billion as a direct result of Chapter 30 'alternate regulation'."

Meanwhile, the PA Public Utility Commission, in their review of the progress of the Chapter 30 law, laid out some specifics.

The State required universal broadband capable of 45 Mbps in both directions by 2015: (Taken from the PA PUC meeting and <u>Order</u> about the commitments, March, 2002.)

"Bell commits to deploy the technologies necessary to provide universal broadband availability in 2015. In order to meet this commitment, Bell plans to deploy a broadband network using fiber optics or other comparable technology that is capable of supporting services requiring bandwidth of at least 45 megabits per second or its equivalent."

It would be bi-directional, meaning it would be fast in both directions. The Commission also stated:

"In view of Bell's commitment to providing 45 Mbps for digital video transmission both upstream and downstream, we look forward to Bell's providing this two-way digital video transmission at 45 Mbps."

This 'information superhighway' was also to go equally to rural, urban and suburban areas. According to the PA Public Utility Commission:

"Verizon PA has committed to making 20% of its access lines in each of rural, suburban, and urban rate centers broadband capable within five days from the customer request date by end of year 1998; 50% by 2004; and 100% by 2015."

And it would be delivered to a customer within five business days.

"Bell Atlantic-Pennsylvania can provide services at speeds of 45 Mbps or greater to a customer location within five business days..."

In 2003, 2 decades ago, we (New Networks Institute and our group Teletruth), <u>filed a</u> <u>complaint</u> with the state.

"Requesting An Investigation Into Fraud And Collusion ---Verizon Couldn't Build The Fiber Optic Networks When They Signed The Commitments With The State A Decade Ago...."Customers Paid An Estimated \$1,135 Per Household For Non-Existent Networks They Will Never Receive."

- By 2004, Verizon was supposed to have rewired 50% of the state in both rural, suburban and urban areas equally with a fiber-optic to the home wireline network. Instead, they only provided a DSL service with a download speed of 1.5Mbps that was distance limited over their 50-100-year-old-copper wiring.
- Fraud At the end of 2003, we estimated PA customers paid \$1,135 per household for a total of \$3.9 billion.
- From 2000-2003, there was a 62% drop in Capital Expenditures, and since the Alternate Regulation went into effect in 1993, there has been a 43% drop in employees 6,510 employees were let go.
- Instead, the money went to increase Verizon PA dividends distribution to investors, which went up 131% from 2000-2003.
- Excessive Tax Savings Verizon wrote-off over \$1.2 billion stating they were replacing the old copper with new fiber but they never did.

Our complaint was ignored.

The Second Bait & Switch -- Company Got Billions for Fiber, Yet the State Law Immortalized 1.5 Mbps Instead of 45 Mbps.

In 2003, because of a 'fine print' issue in the original law, (also known as 'weasel room'), Verizon was allowed to replace the commitments of 45 Mbps in both directions with 1.5 Mbps in one direction, through a decision of an administrative law judge.

This abysmal speed is 19 times slower than what was committed to and paid for. In fact, there would have been no reason to change the law in the first place for 1.5 Mbps services because it can't do HD quality video or offer cable competition, which was one of the main selling points to give the company more money to do the build outs in the original agreement.

And let us be clear-- even the articles we just pointed to, and the statements made by Bell Atlantic, both on a national basis as well as in the Pennsylvania, it was always a fiber optic connection and it was always being done to compete with the cable companies -- not just for broadband-high speed, but for cable TV.

On Jun 7, 2015, we <u>wrote a summary report</u> about what happened by 2015 to Verizon Pennsylvania's Commitment and wrote an article for HuffPost.

(It would require extensive work to recreate what happened post 2015 with the FiOS fiber optic deployments in PA or the overcharging of customers, as we know of no attempt to do audits of the financial books or even an analysis of the ratepayer costs.)

"<u>Verizon Pennsylvania's Commitment</u> to have 100 Percent Coverage of High-Speed Broadband by 2015? — A Quadruple Bait-and-Switch."

Bait & Switch Three: They Got Laws Changed to Substitute Wireless?

In 2015, Verizon <u>filed with the State</u> claiming that they have 96% of their Verizon Pennsylvania territory was finished and <u>on schedule for completion by the end of 2015</u>. (Verizon now also includes "Verizon North", which was part of the old independent GTE and Contel territories, which increased the total coverage to 82% of the state.)



The Numbers Don't Add Up to Anything Close to Completion.

Going through the coverage area maps of Pennsylvania using Census data, and then calculating the percentage that Verizon PA covers of Pennsylvania, based on FCC data, as well as incorporating the statements made by the company about deployments, we find that when cross checked, most of the State was not completed with a wired fiber network capable of delivering high-speed digital services.

(NOTE: Verizon PA filed with the State additional information that was not public and may contradict their other public statements, such as the information below.)

Let's Go through the Numbers:

A)	Pennsylvania Facts, Census	
	Housing Units	5,565,157
	Business	981,501
	Total	6,546,658
B)	FCC: Verizon % of PA Is 82%	
C)	Housing Units	4,563,429
	Business	804,831
	Total Locations Without Overlap	5,368,260
	Coverage. Source: Verizon	
D)	DSL to Homes	1,000,000
E)	FiOS Homes and Business	2,000,000
F)	Total Without Overlap	3,000,000
G)	FiOS & DSL & Housing Units	66%
H)	FiOS & DSL for Housing and Business	56%
I)	FiOS Compared to Housing Units	44%
J)	FiOS Compared "Locations"	37.3%
	Caveats	
K)	20-50% Overlap of DSL and FiOS	
L)	5%-20% Our Of Range For DSL	
M)	Holes in Deployment, 10%-30%	

Verizon Pennsylvania's Coverage of Broadband Based on Housing Units and Businesses, 2015

NOTE: There is a series of caveats about the language used by Verizon. "Housing units", "households", "homes", "businesses", "firms", "establishments", "locations", and "premises" all have different technical meanings. For example, Verizon claims FiOS passes 2 million 'homes and businesses', which is different than the claim it passes 1 million "homes" with DSL, alone.

- A) <u>Census data</u> shows that there were 5.6 million housing units and 981,000 businesses in Pennsylvania as of 2013, for a total of 6.5 million 'locations'.
- B) The FCC data shows that Verizon PA had 82% of the State covered in 2007, and this would include Verizon PA and Verizon North. (2007 is the latest available data.)
- C) This would mean that Verizon covered approximately 4.6 million housing units and 800,000 businesses, for a total of 5.4 million 'locations'.
- D) Verizon states that DSL is available to 1 million 'homes'.

- E) <u>Verizon's press release</u> for the end of 2014 states Verizon had covered, with FiOS, 2.0 million 'households and businesses' that could get the service.
- F) Adding these two numbers gives us 3.0 million available 'broadband' 'locations', (though it includes businesses for FiOS and not for DSL.)
- G) Just comparing this 3.0 million with the Census (adjusted) for housing units comes to 66% coverage.
- H) Using the same 3 million-- If you take the Verizon numbers for FiOS and DSL and compare them to 'locations', there is only 56% coverage in the State.
- I) If you do FiOS and Housing units, we get 44%.
- J) Bottom Line: FiOS and "Locations" 37.3%

Caveats lower these numbers even further.

- K) There could be at least a 20%-50% overlap between DSL and where FiOS was deployed.
- L) At least 5%-20% of rural area customers could be 'out of range' to get the service.
- M) Accounting holes: 10%-30%. Throughout the US, from the union installers of FiOS to the customers who can't get service, reports abound about customers who can't get FiOS in areas that are supposed to be completed.

Who's kidding who? These numbers are appalling. As of 2015, Fiber optic FiOS covered only 37%-44% of Verizon's PA territory, and the rest was either DSL or not covered. Anyone can check this math as we are using publicly available Census and FCC data and Verizon Pennsylvania's own press statements.

But it gets worse because Verizon appears to be counting customers that can't get service and includes this caveat, below, in their 1 million DSL line accounting. Simply put, it says that while the company has 'deployed' higher speed services, customers may not be able to get any service due to 'distance' from the Verizon main location (central office) for DSL service or other factors.

Verizon PA had about 20 years to make sure that this problem was solved as the law requires that rural, suburban and urban areas were treated equally but it was still undone as of 2015.

And on top of this, as we know from the other Verizon states, like New Jersey or New York, whatever the company submitted had major holes in deployment, and unless there were audits, Verizon could be fudging the numbers 10%-50% or more.

We present this investigation into Verizon FiOS' franchise commitments and failure to supply accurate information about the fulfillment of obligations, as we know that what happened in New York City has happened in every state we examined.

Verizon New York has a commitment to New York City for 100% coverage of the City to all residential locations for a fiber optic FiOS service.

On Jun 4, 2015, <u>we covered the Verizon New York City commitments</u>; In a hearing in front of the NYC Council, Verizon had testified that they had completed New York City. And yet, the facts showed Verizon had not completed almost ½ of the requirement.

"Verizon NY (VNY) is supposed to have 100% of New York City upgraded, replacing the aging copper-based networks with a fiber optic infrastructure for the delivery of a service called FiOS that offers cable TV, High-speed Internet and Digital Phone services. Being done as part of a cable franchise that was signed in 2008, the construction was to be completed by June 30th, 2014.

"Unfortunately, in April 2013, then NYC Public Advocate, now-Mayor Bill de Blasio <u>presented facts</u> that Verizon's buildout was way behind schedule. Using data from July-through-December 2012 (and published in April 2013), Verizon only had 51% of NYC residential 'housing units' capable of ordering FiOS service. According to the City, there are 3.4 million housing units and Verizon had "passed" only 1.7 million of them."

And even after Verizon was taken to court, in 2020, <u>there was still 26% of residences that</u> <u>could get FiOS and the areas not served were the low income areas</u>. We suggested that the City not renew the FiOS franchise, and the <u>City followed our advice</u>.

"According to the plan, Verizon's FiOS is only available to 74% of residences. Moreover, there are still gaps in neighborhoods that are supposed to have been upgraded, in all neighborhoods, with very little attempt to quantify how many households really can't get the service."

Was there ever an official audit of Verizon Pennsylvania's deployments for fiber optics, either under Opportunity Pennsylvania (Chapter 30) or in cities with franchises?

Techdirt <u>relates a story in 2017</u> how even the copper based networks have been deteriorating.

"And the problem isn't just that Verizon didn't upgrade its networks, it's that the company has been neglecting the aging DSL network equipment already in place. In 2015, for example, frustrated Verizon union employees submitted a complaint to the Pennsylvania Public Utility Commission highlighting just what Verizon's network hardware currently looks like in many parts of a state that was supposed to have been upgraded to fiber years ago.

"Verizon was <u>forced by Pennsylvania regulators</u> to at least repair some of the worst parts of its neglected network: "The telecom giant will repair the worst of its legacy copper network in areas without FiOS and replace 15,000 unsightly and dangerous 'double poles' on Pennsylvania roadsides, according to the deal between the company and the company's Pennsylvania unionized workers who are part of the Communications Workers of America."

"The agreement falls well short of requiring Verizon to admit fault of any kind, or forcing Verizon to upgrade these networks to fiber as per a <u>1993</u> agreement with the state — that critics say was supposed to result in uniform fiber coverage statewide"

The Kicker: The Replacement of the Obligation of Fiber with Wireless, which is part of Bait & Switch 3.

In 2011, Verizon Pennsylvania got the State to allow Verizon PA to use Verizon Wireless's services instead of upgrading the utility's wired infrastructure to fulfill their obligation of broadband coverage. This means that the remaining 60% will not get upgraded. Talk about a bait and switch...

In 2012, we examined the prices for Verizon's very expensive wireless broadband service cost, besides the basic monthly fees, an additional \$60.00 for 10 gigs; that's just a few HD movies on Netflix. DSL is at least a flat fee at \$19.99-\$29.99 advertised rate, (but requires 'home phone service' as well), but it doesn't cost hundreds of dollars extra per month, especially for those who watch streaming video or want a substitute for cable TV. See <u>chart for comparison</u> of DSL, FiOS and Wireless.

A survey would be needed in 2023 to do an inclusive, accurate analysis of what was available in the state, and the prices for each service, etc.

Bait-&-Switch 4: Massive Cross-Subsidies of the Wireless Company

And finally, like <u>our revelations about Verizon's New York's massive cross-subsidies</u> of the wireless business where the wireless company appears to be able to dump the wireless expenses, like fiber wires to the cell towers and local antennas, into the State fiber upgrade construction budgets for FiOS services and other perks, Verizon PA appears to be using the same shell game mathematics.

One PA PUC Commissioner was <u>concerned about the ties</u> between Verizon Wireless and Verizon PA's wired networks and wrote this as part of his dissenting statement in a case where customers were denied DSL service and forced to use wireless, in 2013.

B. The Potential Cross-Subsidization Issue Requires An In-Depth Examination

The Verizon PA — Verizon Wireless arrangement for the provision of 4G LTE retail broadband access services has raised serious cross-subsidization concerns because Verizon Wireless is an unregulated affiliate providing wireless competitive services. Verizon PA has substantial intrastate operations and non-competitive services that are subject to the jurisdiction of this Commission and are governed by relevant statutes and regulations, including the alternative regulation plan and its price stability mechanism formula in the Company's NMP.

As my previous Dissenting Statement noted:

Although it can be conceivably argued that the price cap formula based price stability mechanism (PSM) of Verizon PA's amended NMP may shield on a going-forward basis the Company's regulated non-competitive services and its end-user ratepayers against any potential cross-subsidization effects because of its joint venture funding arrangements for the Verizon Wireless 4G LTE services,⁸ the matter remains that such Verizon PA funding may inevitably include a mix of "revenues earned or expenses incurred in conjunction with noncompetitive services," thus potentially invoking the statutory prohibition of 66 Pa.C.S. § 3016(f)(1).

Furthermore, it is unclear at this time if the Company's contemplated funding for the Verizon Wireless 4G LTE services will be limited or otherwise dedicated only for the benefit of Verizon PA end-user customers to whom the Company must extend broadband availability consistent with its amended NMP, or whether such Verizon PA funding will also be utilized by Verizon Wireless for the general offering of its competitive 4G LTE services to the broader public. For example, a Verizon Wireless cellular tower that will be constructed or upgraded through Verizon PA funding will be able to render 4G LTE services not only to Company end-users that need to be provided with Chapter 30 broadband availability, but it can also provide the same wireless services to other interested users, and can potentially also accommodate the operations of other non-affiliated wireless carriers.

Simply put -- instead of upgrading customers who paid thousands of dollars for wireline upgrades, Verizon has diverting funds to build and give financial help to their other affiliated businesses, including Verizon Wireless.

Overcharging -- Our last analysis was to call attention to the claim that in 2015 Verizon had not completed its commitments for broadband in the State.

We estimated that by the end of 2014, Verizon PA overcharged customers about \$18 billion for a fiber optic future they never got; this doesn't include the monies from the cross-subsidies of the wireless networks and other lines of business which we recently uncovered. However, audits would be needed to determine the exact amount.

Based on these cross-subsidies, not to mention a history of the bait and switch tactics, shouldn't the State Auditor General and other government agencies investigate these financial issues and answer the question -- Why is Pennsylvania not a completely

upgraded fiber optic state and how were customers continuously charged over the last two decades for a fiber optic, 'info highway' and instead got a digital dirt road in much of the State?

The State has been supplied with what is presented herein, more recently, through testimony by Sascha Meinrath, Palmer Chair in Telecommunications, Penn State University, in 2019 and 2021.

- <u>Research presented in Testimony</u> Before the Pennsylvania State House Democratic Policy Committee Hearing on Net Neutrality Monday, March 29, 2021
- <u>Research presented in Written Testimony</u> of Sascha. Meinrath, Palmer Chair in Telecommunications, The Penn State University, Before the Pennsylvania State Senate Communications and Technology Committee Hearing on: Improving Access to High-Speed Broadband Internet, Monday, September 23, 2019
- <u>FACT SHEET 1:</u> The History of Fiber Optic Broadband in Pennsylvania
- Verizon PA overcharged customers about \$18 billion for a fiber optic future they never got; this doesn't include the monies from the cross-subsidies of the wireless networks and other lines of business which we recently uncovered.
- <u>FACT SHEET 2:</u> Verizon PA Broadband Coverage Estimates
- By the end of 2015, we estimate that Verizon PA only had 40% or less of their FiOS, fiber optic deployments covered; and that (space needs to be deleted)they claimed that they fulfilled their requirements for 100% of the state with wireless at a speed of 1.5 Mbps, not 45 Mbps.

ANSWERING:

- Comments on Requirement 3 "Existing Broadband Funding"
- Comments on Requirement 5 "Unserved and Underserved Locations"
- Comments on Requirement 6 "Community Anchor Institutions"
- Comments on Requirement 7 "Challenge Process"
- 10.Comments on Volume I Public Comment
- Additional Comments on Volume I Comments on Volume I Public Comment

There is no mention in the Pennsylvania Bead proposal of Verizon PA-- how can this be?

Simply put, the state has been negligent in that it has failed to include basic, fundamental material facts. How is it possible that it did not even mention Verizon Pennsylvania, the state telecommunications public utility for over 100 years, or include any of the facts we just presented?

The Digital Divide was caused by Verizon PA, as it failed to properly upgrade the state telecommunications public utility, even though the company got paid to do so.

Worse, there has been a bait-and-switch with Verizon's wireless build out, and an accounting manipulation that has occurred, having the state construction budgets be used for wireless, but still charged to local phone customers via 'harvesting', a continuous raising of ratepayer charges.

Broadband Funding? Halt the cross-subsidies and examine where the construction budgets have been diverted to, which is mainly wireless.

Moreover, there are fiber optic "dark" wires that are fiber that has been installed but is not turned on. We have been told by multiple Verizon installers, in multiple states, that it was put in unserved and underserved areas. This could be a massive cost saving in bringing the Digital Divide to a close, as it could be put in use by municipalities. But the state must ask -- Why wasn't it put into service over the last 2 decades?

We base many of our observations on the research we've been doing on the fiber optic deployments (or lack there of), since they were originally announced in 1992.

However, Verizon New York is required to publish a full annual report, the latest being for the year 2022, and published May 26, 2023. We know of no similar public report on Verizon PA, but, the financials are all based on using identical USOA accounting standards.

We stand ready to help the State of Pennsylvania do what we had called for since 2003--100% coverage with a fiber optic wire; holding Verizon accountable, and using the networks to solve the Digital Divide in the state, as well as lower prices, and bring competition to the cable companies. However, it is also time to combine the strengths of municipalities and the need to finally bring broadband and the services it can provide. Thus, it is time for the state to investigate new and enhanced, hybrid fiber based, wired telecommunications public utility model to everyone in the state, which incorporates municipalities, but is state and county based.

And it should not be a wireless substitution, which also requires a fiber optic wire. It may require interim solutions, but building critical infrastructure for the state, which should have already been done, and the fact that it has already been paid for, should be paramount for the public interest. It must not be more of the compromised, slow, one-way-directional speeds that has already become inadequate before they are even completed.