

I want to use this rather lengthy story to reflect on the importance computers and the Internet on my own and others' lives and of bringing high speed Internet connectivity to rural Wisconsin in specific, and to rural America in general.

The small town of my birth (population 500) seems a fitting example of how economic and social development follows economic investment. The eastern part of this town that connected with the lake, was called Hika and the shipping dock was in Hika Bay. From the early days of settlement in the early nineteenth century, the lake provided opportunity for commerce via water transportation of goods and much later for recreational activities. So this is naturally where the commerce related businesses, mills, blacksmith shops, school, church, cemetery, hotel, and taverns were built. Much later it also contained a tourist attraction in the form of famous supper club and motel which reportedly drew wealthy customers and tourists from as far away as Milwaukee and Chicago.

In the later nineteenth century, the railroad came through parallel to the lake but up on higher ground a mile or so further west. This part of the town was called Centerville. These transportation rails provided opportunity for commerce and personal and business travel. Because of the value of rail transport over water transport, this part of town grew much faster than Hika to eventually have two lumber yards, a cabinet shop, two baseball fields, an additional school, an additional church, an additional cemetery, a railroad depot for passenger travel, sidings for loading and unloading freight cars, a bank, a post office, a telephone company, a chicken hatchery, a dairy/cheese factory, a mink and turkey farm, numerous dairy farms, an orchard, a canning factory, a grain elevator, a farmers co-op, a farm implement dealer, a Ford car garage, several taverns, a number of small home based businesses, (typewriter repair, small engine repair, blade sharpening, etc.)a fuel oil distributor, a volunteer fire department, (nicknamed the basement savers) an outdoor ice skating rink, a butcher shop/meat market, a grocery store, a hardware store, a feed store, a funeral home, and a small bowling alley. In addition, there was an electrical and plumbing contractor shop where my father worked. My maternal Grandfather owned and ran the Matthias Dairy there with his three sons for more than thirty years, bottling milk, and making cheese. But I digress.

In the mid nineteenth century, a state highway was put in a mile or so further west of the railroad line on even higher ground, connecting Milwaukee to northern Wisconsin which fed the transport of goods and services as well as the tourism industry. This new area was known as St. Wendel based on name of the church and elementary school there, which was once considered to be a remote outpost of the original Hika church. The St. Wendel area grew to include an auto junkyard, a supper club, and bar with dance hall including an indoor roller-skating rink where I skated to Beatles music as a teenager, and also concert hall where Jay and the Americans once played. I attended St. Wendel School, was an unmotivated and unimpressive student, Altar Boy and Boy Scout but also an All Star Little League pitcher who pitched our little C-of-C team to a Championship game, by throwing 38 strikeouts, across 21 innings in three consecutive tournament games. But I digress yet again.

Eventually these three areas were merged and called Cleveland, in the town of Centerville.

In the later part of the twentieth century, an Interstate highway was put in even further west of the state highway chewing up many acres of irreplaceable and valuable farm land. This highway facilitated travel from Milwaukee all the way north to Menominee to serve commercial and tourism needs. This time the highway mostly bypassed St. Wendel and provided only for exit but facilitated the additional establishment of a technical

college, a now closed restaurant, a gas station and convenience store, a few apartment buildings and subdivisions, as well as a VA clinic.

The lake, rail, highway, electrical, water, street and road, civic and educational infrastructure enabled all of this development to happen over the course of a couple hundred years. Public investments made for the public good, democratic socialism actually, made this economic and social growth happen.

As I write this in the second decade of the twenty-first century, most everything that employed people in the village of my birth is long gone. It is a shell of its former self. Successive governments has not made the necessary economic investments in the past five decades, with the exception of NSF funding that ended up creating the Internet. Over the past twenty five years however the Internet has developed into a vehicle that we can use to plot a path forward to better days.

Citizens are not blameless victims in this however. They have chosen to save a nickel by buying cheap Chinese and foreign goods built from near slave labor rather than supporting their local businesses. Meanwhile the Walmart's, super stores, and union busting warehouses of the world have eliminated two jobs for every one they create. The young people moved away for jobs or school, businesses closed as they could not find employees, tax revenue dropped so infrastructure investments were not made. No housing, no decent Internet connectivity, no entertainment, no future. No local employment for the graduates of the local technical school.

Now however we are in a position to make the necessary investments for the future. All we need to do is run the fiber optic Internet cable to ensure our future. The right-a-ways are already there. They have already been built. The highways, the power and telephone poles, the storm sewer pipes already exist and conduits for these cables. History has proven that if you build it (infrastructure) they will come. They will not only come, they will build, they will innovate, and we will all be better for it.

1990's dial-up telephone Internet connections did not allow for video conferencing, online education, interactive web sites, and telehealth doctor visits. Imagine if the technology would have stopped there because of a poor vision of the future needs of a society? In the early 2000's ISDN and DSL telephone Internet connections did not allow for many of the previously mentioned services including streaming movies, online game playing, Imagine if the technology would have stopped there because of a poor vision of the future needs of a society? Now two decades in to this millennium, we have a cobbled together a monopoly run converted cable TV system delivering Internet to the urban or semi-urban fortunate few and DSL delivered over vintage WWII era tapped-out corroded copper phone lines to the rural many. Many more however rural citizens are left to see what they can do with 3G or 4G wireless cellphone service.

If you look at development nationally or even internationally, you will see that development follows Internet infrastructure. (In South Korea, a 1Gbps Internet connection for \$30 per month) While in the US we have fallen to 11th in the world in Internet availability and connectivity, with an average of about 200Mbps. In Wisconsin we average less than half of that, and remember we were the ones who invested tax monies to develop the Internet in the first place. So why does rural Wisconsin's Internet infrastructure resemble that of a third world country?

The *median* download speeds across Wisconsin are considerably below the current minimal acceptable level of 100Mbps, and should be closer to ten times that, or 1Gbps. And yet, the higher Internet speeds advertised by

the monopoly broadband provider incumbents are just an illusion. They are repeatedly caught lying about speed, coverage and pricing and are punished with small inconsequential fines. Annually, the Internet provider companies file Federal broadband reports lying about coverage areas and speed delivered which no one in or out of government believes.

From my own personal experience I know that advertised Internet speeds represent a massive fraud being perpetrated on the American public, who mostly do not know when asked what speed they are paying for, or even to whom they are paying it. The FCC, FTC, and Wisconsin DATCP (consumer protection) are aware of this but are feckless agencies that are not interested in resolving it.

Our current national telecommunication system, much like our national healthcare system, does not serve anyone well, completely fails many, while having the highest cost and poorest outcomes in the developed world. As with most problems we face the root cause is greed and corruption, which eventually may very well be the primary cause of the end of us as a democracy, a nation, and as a civilization. Laws are the operating system of a democracy, and the failure of our legal system will likely cause it to crash.

Oh, did I just get a bit dark here? Perhaps it is because:

- We have been in a pandemic for more than a year now, extended by our own actions or lack of them
- Self-inflicted climate change is destroying much of our natural resources and what infrastructure our civilization has built
- Graft, corruption, and greed are now endemic in our government and business institutions
- Decades of underfunding public education has come home to roost to where a majority of our citizens will believe anything from anyone that comes from Facebook or Twitter. Horse medicine for virus prevention anyone?
- A third of our citizens show strong evidence of mental illness with delusional thinking and denial of the reality in front of them.
- The surveillance state, the parasitic and predatory corporate app cesspool, the mobile phone cloud shit storm most live in now

Ok, back again, where was I?

Oh yea, not only do we need high speed broadband Internet to spur economic and social development, and end our increasingly jobless economy and social and economic decline. We may very well need the 1Gb symmetric Internet connections from fiber optic cables to deliver mental telehealth services to as much as one third of our national population, now lost in the delusions of alternate realities and cellphone enabled mass hallucinations. We will also need to provide PTSD telehealth therapy to the millions of exceptional health care workers needlessly put through endless emotional trauma by these noncompliant selfish and sociopathic people who were cured or died on their watch.

According to the recent US population census, populations are moving south and west, with the largest populations in the coastal areas. I believe however that climate change will reverse these trends in the decades to come. Accordingly, this is where economic growth is expanding and the necessary infrastructure to support this including fast Internet connections.

- Slow internet speed results in productivity loss. A good broadband connection can offer cost savings through increased productivity and reduced stress levels.
- Faster Internet allows more users due to more bandwidth that which allows more users and devices to access the internet without any interruptions. Many of the latest business tools available require fast Internet to access applications and data that are cloud-(remote server) based.
- Insufficient bandwidth negatively impacts your employee's ability to connect, coordinate, and communicate with your co-workers and business counterparts.

<https://aws.asianetbroadband.in/business-benefits-of-high-speed-internet-connection/>

Technology is driving business growth in every sector of our economy across this nation. This also means new businesses and new jobs. For businesses in this technology space, such as IT, website development, computer repair, tech consultant, high speed Internet is a necessity. Not only will customers expect fast service, but your business will rely on increased processing speeds. Administrative Assistants, Customer Service Representatives, and Writers will benefit from these changes. In our increasingly technological world, continuing education via online colleges will become the new normal.

Due to the pandemic, which has not become endemic, more people are working from home and even more wish to. I believe that this situation will span a number of future generations. This desire to not work in a centralized office, is due in part to the state of child care, the cost of fuel and clothing, and the poor state of transportation systems in this nation. This situation is aggravated by the lack of competence and innovation in the area of virtual schooling.

The fastest growing business segment in this country is small businesses, such as buying products in bulk and selling them online, selling homemade products, starting a drop shipping store, starting a print-on-demand business, offering online services, teaching online classes, productizing your service or expertise, growing an audience you can monetize, buying an existing ecommerce business, starting a subscription box business, getting involved with pets, selling unwanted items, or playing lay video games. Companies will actually pay you to do this. <https://www.shopify.com/blog/home-business>

But now back to the business at hand:

Here is what the Federal government thinks as it dispenses hundreds of millions of tax dollars to existing incumbent monopoly Internet providers to encourage them to subsidize and deliver Internet access for millions of underserved people: (it should be known that this has not worked for the past 30 years to the tune of 400 billion dollars)

"We are in the middle of a pandemic. So much of modern life has migrated online. As a result, it has become painfully clear there are too many people in the United States who lack access to broadband. In fact, if this crisis has revealed anything, it is the hard truth that the digital divide is very real and very big"

<https://docs.fcc.gov/public/attachments/FCC-21-18A3.pdf>

Here is what AT&T thinks:

"There would be significant additional cost to deploy fiber to virtually every home and small business in the country, when at present there is no compelling evidence that those expenditures are justified over the service quality of a 50/10 or 100/20Mbps product," AT&T wrote. (That would be 50Mbps download speeds with 10Mbps

*upload speeds or 100Mbps downloads with 20Mbps uploads.) AT&T said that "overbuilding" areas that already have acceptable speeds "would **needlessly devalue private investment** and waste broadband-directed dollars."*
[AT&T lobbying against proposals to subsidize fiber-to-the-home deployment across the U.S.](#)

Here is what I think:

The above mentioned "Overbuilding" is what the monopoly broadband industry calls one ISP building in an area already served by another ISP, whereas Internet users desperate for cheaper, faster, and more reliable service. I call that "broadband competition." In the end, corporate monopolies do not like local economic development. It cuts into their profit margins. But in reality economic development, betters the lives for people (housing, jobs, education), and follows infrastructure investments. Chickens lay eggs. It is actually as simple as that.

The incumbent monopoly Internet providers lie about speed and coverage areas, the use tax subsidies designed to discount Internet service, but only after first raising their prices. They use tax payer monies to inflate executive compensation, do stock buy backs, and pay dividends to shareholders.

The corporations and the wealthy have decided that they no longer have an obligation or any generational responsibility to fund these investments by paying appropriate taxes. They believe that their ill-gotten gains should be paid in dividends to those will money to make more money from this money. The government has decided to no longer serve it's legal role of the cop on the beat to enforce tax laws and regulate the prevailing unbridled corporate greed. It feeds corporate interests to have people travel distances to work at jobs that pay less than a living wage, and keep people in check by having them living paycheck to paycheck.

After leaving Manitowoc County for some fifty years I came back to retire but I chose not to live again in the town of my birth, because it is now far too sad with all the things of my memories lost, removed, and destroyed by time, but mostly by the rise of corporate vulture capitalism. Many of my childhood friends and classmates who remained here, have devolved during this time into barely functioning alcoholics and drug addicts or have since died, as their work and lives have been hollowed out in this repressive winner takes all corporate predatory economy. This is sadly the case with many rural areas in this state and in this country. Had I stayed, I don't know if my life experience would have been much different. Sad but true.

My technical bio:

My very first online connection, circa 1988, was with a 2.4kbps dialup connection to the ExecPC Bulletin Board System or BBS, in Milwaukee and eventually to CompuServe via Racine, Milwaukee, and Chicago modem numbers. I went at significant expense, wherever the modem speeds were fastest. My very first Internet connection circa 1992 was a 9.6kbps dial-up connection via an 800 phone number to Spry in Seattle and later via CompuServe. My second Internet connection was with the Microsoft Network (MSN) with a free account as a Windows 95 beta tester via 64/128kbps ISDN circa 1995. My third Internet connection was with Wisconsin Bell with a 256kbps DSL connection circa 1998. Over time I created and ran a 400-customer dialup Internet Service Provider or ISP called BridgeNet in Racine, I also designed and built a Wireless Broadband Internet Service Provider or WISP in Racine. I have also connected to the Internet with Broadband Wireless (both urban and rural), T1's, 512Kbps DSL, and over time via advertised 30-400Mbps cable connections. (10 to 100Mbps actual)

I began beta testing versions of the MS Windows software, beginning with the multimedia extensions and Video for Windows 3.1, (1992) and then later with Windows 95, 98, Windows XP, Vista, and Windows 7, 8, and finally Windows 10. (2014)

I operated a SE Wisconsin Tri-County for profit business as President/CEO, involved in the production, sale, and support of business computer systems. I also created and supported specially adapted computer systems for the disabled. I was also the founding Executive Director of Tech Corps Wisconsin, Inc. a statewide non-profit volunteer agency dedicated to helping provide children with computer and Internet technology access. I founded and managed these two businesses for more than two decades.

Computers and Internet access were critical for running these businesses. I used them for invoicing, general accounting, payroll, creating advertising materials, flyers, proposals, digital presentations, email and chat communications, web research, document creation, and the creation of user manual publications.

These computers were essential to my mostly nonprofit business clients for word processing, financial data manipulation, invoicing, database recording. The Internet and VPN technology allowed sharing of customer data regarding services across their three county service area.

They were essential to my school clients in delivering academic curricula to primary and secondary level students. They became critical for providing preschool and homeschool opportunities to young children, and for providing afterschool environments to keep these children away from harmful activities. They became essential to help cash strapped business entrepreneurs create businesses especially in times of economic downturns. Computers and the Internet had helped me and many other people further their education online, stay in touch with the wider world around them, and participate in our participatory democracy.