

## RATIONED FREEDOM OF SPEECH

This 9/4/09 essay by Craig McAllister, PhD (Managing Director/CEO, Local Information Networks) draws attention to Free Speech issues from the perspective of telecommunications infrastructure. Minor edits, illustration and highlighting by Wayne Caswell.

I think you might get a kick out of this article about [QUEST delivering 100 Gbps fiber-optic service to large commercial customers](#). It alerts me to a continuing trend of how the transfer of wealth is being concentrated into the hands of fewer and distant 3rd parties --- taken in this case in the form of communication capabilities. As a fact as well as an example of virtually all infrastructure evolution, greater capability affects all of us, if only because of what we DON'T have. You and I are definitely NOT, nor likely to be qualified as 'edge customers' unless we adjust how telecommunications and infrastructure in general is operated to benefit its users rather than its operators.

Food for thought... [See **BANDWIDTH PERSPECTIVE OF COMPARATIVE SPEEDS, below**]

You might appreciate the following comparisons for perspective (based on \$1 = 10 dimes = 1/2" stack for illustration being equivalent to dialup Internet 50 kbps bandwidth). Note that HDTV requires 15-20 Mbps (15-20,000 kbps) bandwidth per channel, and if you ever want to run a local business from home, you'll need just as fast bandwidth UP as DOWN (symmetrical) so you could send files out as fast as you might like to download them from others. Currently, consumers have asymmetrical bandwidth services, with their outbound upload speed intentionally restricted to 5-20% of available inbound download speeds.

- **10 dimes** = 1/2" stack ~ **50 kbps** for illustration 100 dimes = 5" stack ~ 500 kbps (already faster than FCC's 'broadband' definition at 200 kbps)
- **1,000 dimes** = 50" stack ~ 5,000 kbps = **5 Mbps** (typical cable Internet, faster than most DSL, yet still not capable of supporting even ONE TV channel)
- **10,000 dimes** = 500" = 42' = 4 story building ~ **50 Mbps** (now capable of 3 simultaneous TV channels and nowhere generally available in the US today, except to corporate centers) 100,000 dimes = 415' = 40 story building ~500 Mbps (and far out of reach of even most corporate accounts except those connected by FIBER and major entertainment networks).
- **1,000,000 dimes** = 4150' = 400 story building ~5,000 Mbps = **5 Gbps** (quite typical capability for ONE fiber connection less than a human hair in diameter, among 30-60 fiber connections in a 1/2" bundle typically being deployed to selected 'edge customers' every day by AT&T without a lot of public attention)

Over the years it's not gone un-noticed that, like in so many other communities in the US (all?), our community's general citizen trust in its elected (and their appointed) government oversight on all matters of communication has fallen to representatives who have NOT really served community interests as well as they might. *Large* commercial interests naturally *served* (donors all), private interests surely (more donors), perhaps some municipal interests (keeps the staff happier), but few community citizen interests have been served -- yet 110% of the bill is still being paid by these citizens.

In former times, considerably less taxation without representation was cause for public demonstration in Boston harbor, for example. We can and should be doing better for ourselves -- not falling behind the

rest of the world, and falling into the pockets of exploitive 3rd parties. Truth: Its all about reversing the transfer of wealth OUT of our community.

That history being an accurate depiction, and despite considerable moral intention by our representatives as 'individuals' (yet hardly enough as legislative or administrative leaders in their efforts to compromise our freedoms for the sake of consensus), its still a wonder in this 21st Century that we mire in 19th Century strategies, albeit using some (but hardly all) 20th Century capabilities being used by other communities worldwide.

For years now, it's been physically and economically possible to deploy, locally manage, individually and socially utilize and routinely enjoy = ubiquitously appreciate VAST technological capabilities to make our everyday lives better, more comfortable, more convenient, more easily controlled to our individual advantage (versus somebody else's), and completely flexible with respect to affordable change, choice, and modification. You might recognize the contrary claims by incumbents seeking higher prices and term maintenance contracts for their shrink-wrapped services (rather than encourage competitive pricing or competition from local initiative --- just look at the health insurance debate for a current example of this reality).

Its been physically demonstrated that rapidly deployable and locally owned telecommunication services earns self-sustainable net local income and creates new local jobs -- versus encrusting yet another top-down, trickle-down, un-dependable philanthropic dependency, or worse, paying external 3rd parties more to do less. You might recognize the frustrating and (intentionally) poorly articulated debate surrounding local renewable micro-generation and re-distribution of electricity versus the financial exploitation of local creditworthiness to invest in external power supply alternatives and more delays in performance.

Need a tighter focus? **We DON'T have any parts of the technological communication bundle that today assures either 1st Amendment rights or community economic independence.** We could have them. Others do. They work. They make money for their owners.

We don't have any of the 3 types of services operating in our community:

1. **Content and services** -- exclusively controlled, often under government license, by large 3rd parties that certainly offer 'more channels' but never inquire what content our community wants, when or where it might be needed, and thereby control WHAT and WHEN we can exercise our 1st Amendment rights to talk with each other. The Internet is changing this situation, but don't kid yourself about who coordinates the vast majority of content and services choice and availability.
2. **Connectivity** -- exclusively controlled, often under government license, by large 3rd parties that specifically sell higher performance to merchant customers and restricted lower performance to consumer users (asymmetric bandwidth), even while they deny universal access and coverage.
3. **Community choice** -- given short shrift and virtually zero, except in rare instances when organized and operated as a pseudo-merchant account.

There are alternatives available which reverse the colonial exploitation of consumers in favor of better economic balance. There are rapidly deployable and field tested business plans that create new local

jobs, recirculation of local economic benefit (instead of exporting it), and describe HOW to recapture local Freedom of Speech. Collateral benefits are not trivial either.

A locally owned and managed communications bundle (content, connectivity, community) serves far more than entertainment and news interests. It supports ubiquitously available (anybody, anytime, anywhere) live interactive remote access to education, public health services, energy and water conservation and efficiency, automated renewable electricity self sufficiency, personal and property safety and security, public transportation efficiency, and immediate measurable economic growth. Not bad, and well worth the examination and test, don't you think?

I believe I can directly help to organize the redirection we need. I'm interested in working with others who believe we need a better direction. I look forward to contact and further discussion

