Representative News Coverage Supports Municipal Networks

COPYRIGHT NOTICE: Except where noted, these articles have been copied intact, reformatted and gathered into a convenient package for educational purposes. In most cases, a copyright notice with All Rights Reserved protects the content, so this material may not be published, broadcast, rewritten or redistributed and is only to be used for its intended purpose.

Contents:

USA Today – Tech leaders warn that U.S. risks losing competitive edge	2
Forbes – Singapore Surpasses U.S. As Top Tech Nation	3
Free Wi-Fi faces challenge	4
American-Statesman – Lobbyists lining up for phone deregulation fight	6
American-Statesman – House OKs deregulation of phone rates	9
American-Statesman – Municipal broadband faces limits	.11
American-Statesman – To ensure Texas' future, we must rewrite the rules on telecom	.13
American-Statesman – Wireless Internet: a wise investment for our cities	. 15
American-Statesman – Internet superhighway is in South Korea	. 17
Austin Chronicle – Will the Lege Shut Down Public Broadband?	.20
Houston Chronicle – Wireless networks don't click with some	.22
Houston Chronicle – House backs new phone plan	.24
San Antonio Express-News – Broadband via power lines is advancing	.25
Silicon Investor – The High Tech Broadband Coalition (HTBC): Policy Position on Municipal Broadband Networks	.27
Quorum Report – House Passes Telecom Dereg but Kills TIF Tax	.29
eWEEK – Municipal Broadband Bills Come Under Fire	. 30
AboveTheCrowd.com – Believe It or Not: Your State Leaders May Be Acting to Slow the Proliferation of Broadband	. 33
c net News.com – Hands off our Wi-Fi network!	. 36
CMP TechWeb.com – Broadband 'Redlining' Issue Raised In Fiber Deployment	. 37
California Redevelopment Assn – WiFi Hot Zones: A Fad or the Future?	. 38
Broadband Front Lines: Broadband wars taking toll on smaller competitors	.41
CAZITech Consulting – False Predictions	.44
BLOGS – Random clippings from various Web logs	.46

About SaveMuniWireless.org

We are a coalition of Texas organizations and citizens concerned about the provisions in HB 789 that would outlaw any municipal involvement in networks or information services. We are working to ensure HB 789 supports competition and innovation and helps Texans, not just the incumbent communication providers.

USA Today – Tech leaders warn that U.S. risks losing competitive edge

By Erica Werner, Associated Press, 3/9/2005 (http://www.usatoday.com/tech/news/techinnovations/2005-03-09-competitive-edge_x.htm)

WASHINGTON — The country risks losing its competitive edge without significant new investments in education, research and development and the spread of **broadband technology**, leaders of high-tech companies warned.

"The world is changing a little bit, and frankly there is a significant amount of concern that if we don't make some adjustments, follow the right public policies, do some things that are important, we could find ourselves very quickly losing the advantage we've had for so long," Rick White, president and chief executive of high-tech lobby TechNet, said Tuesday at a press conference.

The Palo Alto, Calif., group represents about 200 high-tech leaders, including: Microsoft, Intel, Cisco Systems and Hewlett Packard. TechNet made its annual lobbying trip to Capitol Hill to meet with Cabinet members and congressional leaders.

White and other TechNet officials cited some troubling indications that the United States is falling behind in high-tech development:

- ?? Some 7% of U.S. households have the fastest kind of broadband access, compared with 30% in Korea, 20% in Japan and over 10% in France, TechNet leaders said. When slower connection speeds are counted, some 20% of U.S. households have broadband, according to a report issued last fall by the U.S. Department of Commerce.
- ?? U.S. investment in research and development has stayed flat for the past three decades, while growing dramatically among competitors such as Brazil, India, China and Israel.
- ?? Students in the United States are behind counterparts in other countries in math and science. Some Asian countries are graduating five times as many engineers.

The officials announced formation of a CEO Education Task Force to try to come up with solutions.

They also called on Congress to increase basic research funding and make permanent a research and development tax credit; promote broadband development, in part by minimizing regulations; enact a U.S.-Central America-Dominican Republic Free Trade Agreement; promote cybersecurity initiatives; and continue to take steps to reduce frivolous lawsuits.

Forbes – Singapore Surpasses U.S. As Top Tech Nation

Forbes.com staff, 03.09.05, 9:45 AM ET (<u>http://www.forbes.com/2005/03/09/cx_0309wef_print.html</u>)

Singapore has displaced the United States as the top economy in information technology competitiveness, according to the World Economic Forum's latest annual Global Information Technology Report released today.

The U.S. drops from first to fifth in the rankings, which measures the propensity for countries to exploit the opportunities offered by information and communications technology (ICT).

Iceland, Finland and Denmark occupy positions two, three and four out of 104 countries surveyed, with Iceland achieving the most improvement among the top countries, moving up from tenth last year.

India and China significantly improved their positions climbing to numbers 39 and 45, compared to 45 and 51 in 2003, respectively.

The index examines the readiness of economies according to the general macroeconomic and regulatory environment for ICT, the readiness of individuals, businesses and governments to use and benefit from ICT, and their current usage. (Click here to see full rankings.)

"Singapore's remarkable performance," the report says, "is a consequence of the government's consistent and continuous efforts in fostering ICT penetration and usage, as well as the quality of the country's educational system and its able use of foreign technology."

Singapore, which moved up from second place last year, ranked first in a number of subcategories used to determine the overall ranking, known as the Network Readiness Index. These include quality of math and science education, affordability of telephone connection charges and government prioritization and procurement of information and communications technology.

The World Economic Forum says the end of the United States' years as number one, "is less due to actual erosion in performance with respect to its past history and more to continuing improvements by its competitors."

The U.S. remains number one in the business readiness subcategory and in the quality of its scientific research institutions and business schools, the availability of training opportunities for the labor force and the existence of a well-developed venture capital market.

"Singapore's experience highlights the increasingly central role played by technology as an engine of growth and competitiveness," says Augusto Lopez-Claros, Director of the Global Competitiveness Program at the World Economic Forum and co-author of the report.

"There is a strong correlation between ICT spending and productivity at the national level, which is demonstrated in this research as a strong correlation between the rankings and global competitiveness," says John Chambers, president and chief executive of Cisco Systems (nasdaq: CSCO - news - people), which sponsored the report.

To see full rankings: http://www.forbes.com/technology/2005/03/09/cx_0309wefranking.html

Free Wi-Fi faces challenge

By, Colin Pope, Austin Business Journal, 3/24/2005 (http://www.bizjournals.com/industries/high_tech/internet/2005/03/14/austin_story2.html)

It would be downright embarrassing to Austin if state lawmakers passed House Bill 789 as it's written now -- at least that's the prevailing thought at City Hall.

As city leaders seek ways to provide Internet access to more residents and as Austin, a high tech hub, prepares to host the 2006 World Congress on Information Technology, state lawmakers are considering a bill that would make it illegal for Texas cities to connect their residents to the Internet.

The bill could have a dramatic effect on Austin, which has provided gateways to the Internet for about 10 years. The city already helps residents surf the Web at places such as libraries, the airport, schools, the convention center, public parks and recreation centers.

Plus, the city is working on expanding its wireless network. When the WCIT convenes in Austin next year -- considered the Super Bowl of high tech events -- some city officials are even talking about the possibility of blanketing downtown with a wireless "hot spot." That would allow just about anyone who's anywhere downtown to access the Web with a laptop computer.

But that dream, and many others of city leaders, would have to be scrapped if House Bill 789 is passed as written.

The bill's author, state Rep. Phil King, R-Weatherford, says cities shouldn't be put in a position to compete with private companies that offer telecom services.

Spearheaded by private telecommunications companies, the legislation is buried in a telecommunications bill that's more than 300 pages long. If approved, it would prevent Texas cities from providing Internet access -- wired or wireless -- to people who don't work for those cities.

King, a former law enforcement officer, contends that clearer lines need to be drawn outlining municipalities' "acceptable involvement" in telecom. King's roster of donors includes Internet service providers such as SBC Communications Inc., Time Warner Inc. and San Marcos-based Grande Communications Inc.

King, who is chairman of the House Committee on Regulated Industries, says appropriate services might include Internet access in libraries, schools and city buildings. But watchdog groups point out that the bill's existing language doesn't clarify those distinctions.

King says the bill's language is being tweaked by his committee to keep government-provided Internet connections in public libraries and schools, but sources say there's no talk about allowing Austin and other cities to provide wireless access in places such as parks or on downtown sidewalks.

Opponents of the bill say it should be defeated altogether if municipalities are to be protected.

"What people don't realize is that this kind of legislation, once it becomes law, can be manipulated," says David Deans, founder of the nonprofit Economic TeleDevelopment Forum, based in Austin.

Austin city officials say HB 789 even threatens wireless Internet capabilities at Austin-Bergstrom International Airport. Although the "hot spot" there is technically run by Austin-based Wayport

Inc., the airport is owned by the city, so Wayport is a city contractor. HB 789, as it's written now, would outlaw those types of business contracts.

Opponents of the bill claim government Internet access is crucial to the economic and educational strength of communities, particularly in poor and rural areas.

"Cities and towns ought to be able to make their own decisions about what will bring economic development to their area," says Adina Levin of the Austin-based advocacy group Save Muni Wireless, which is leading the charge against the proposed ban.

That's the way Rondella Hawkins sees it.

"There is no citywide initiative to provide wireless Internet access, but we do want to be able to provide it in certain places," says Hawkins, who is the city's telecommunications and regulatory affairs officer.

Dean agrees that stifling Internet access -- either at public buildings or through "hot spots" around a city where free or inexpensive wireless services can be accessed by laptop users -- doesn't bode well for economic development.

"We might find, at some point, that a company would rather relocate to another city or town where the environment is conducive to facilitating a global network economy," Dean says.

"In other words, a forward-looking community -- not the telecom backwaters."

Colin Pope can be reached at (cpope@bizjournals.com) | (512) 494-2522. Jenna Colley of the Houston Business Journal, an affiliate of the Austin Business Journal, contributed to this report.

American-Statesman – Lobbyists lining up for phone deregulation fight

Phone companies fear they'll lose millions of dollars in deregulation. By Claudia Grisales, American-Statesman Staff, 2/7/2005 (http://www.statesman.com/news/content/shared/tx/legislature/stories/02/7telecom.html)

State Sen. Troy Fraser is bracing for what's expected to be one of the most intense lobbying campaigns of this legislative session.

Hundreds of millions of dollars are up for grabs in the first rewrite of the state's telecommunications laws in a decade, an undertaking that affects a raft of big corporations that employ some of the most powerful lobbyists.

Fraser, R-Horseshoe Bay, introduced a bill that would end regulation of local phone rates in Texas within two years, one of two major telecommunications bills up for debate. To avoid being swarmed by lobbyists, he has declared that he'll deal with only one representative from each company.

"I don't know that I've ever seen an issue with this number of lobbyists hired," said Fraser, who filed the bill last week. "The number of lobbyists is proportionate to the amount of money involved in the transaction."

His decision could be challenging for lobbyists accustomed to free access to legislators. SBC Communications Inc., for example, has dozens of registered lobbyists, including Mike Toomey, former chief of staff to Gov. Rick Perry, and Bill Messer, a former state representative who is close to House Speaker Tom Craddick, R-Midland.

For now, however, Fraser is dealing only with Jan Newton, president of SBC Texas.

AT&T has signed up former lawmakers Neal "Buddy" Jones of Hillco Partners and David Sibley, Fraser's predecessor as head of the Senate Business and Commerce Committee, according to recent filings at the Texas Ethics Commission.

Messer referred calls to a spokesman for SBC; Jones referred calls to a spokesman for AT&T, and the others didn't return phone calls last week.

Fraser aside, industry lobbyists won't lack for legislators to tackle, including the eight other members of Fraser's committee and the Regulated Industries Committee in the House, where Rep. Phil King, R-Weatherford, has introduced his own bill.

Both bills would end regulation of rates for local phone service by 2007, on the premise that more competition would benefit consumers. Fraser's bill would have the Public Utility Commission determine whether there's sufficient competition in a particular area of the state to end regulation. King would leave it up to the existing phone companies in a region to decide whether they want to open their area to competition, in a system similar to the method used in deregulating the Texas electric market.

High stakes

In exchange for allowing companies to set their own rates, both bills would require SBC and other local phone companies to significantly reduce the access fees they charge long-distance competitors for in-state toll calls.

Under King's bill, companies that opt for competition also would have to give up the money they receive from the Texas Universal Service Fund, which subsidizes phone service in rural areas. King would restructure the fund, which paid providers \$583 million in 2003. The two biggest beneficiaries were SBC, which received \$195 million, and Verizon, which received \$110 million.

The stakes are high; Texans spent \$2.8 billion on basic phone service in 2003. And the deregulation debate involves numerous companies with divergent interests, which will add to the lobby activity.

SBC, the state's dominant phone company, wants an unregulated market but says it isn't ready to give up Universal Service Fund subsidies or access fees.

Verizon, which provides service in many high-cost rural areas, also says it can't afford to give up service fund revenue, which prevents the company from choosing deregulation in those areas.

"We simply wouldn't be able to take advantage of the new law," said Steve Banta, Verizon's Southwest regional president.

Millions at stake

Consumer groups worry about what SBC might do if it gets out from under state control.

Cable companies, now getting into Internet phone service even as phone companies are starting to offer video service, want equalization of the fees that telecom providers pay to cities so that cable and phone companies are treated the same.

In the last regular legislative session, the telecommunications industry, including phone companies, cable operators and Internet service providers, spent up to \$13.7 million on lobbyists, and the amount is expected to be higher this session, according to Texans for Public Justice, an Austin group that tracks money in politics.

SBC alone reported lobby contracts worth up to \$7.2 million in that session; companies are allowed to report spending ranges instead of exact amounts. By comparison, the Texas Cable & Telecommunications Association had lobby contracts worth up to \$625,000.

The early figures "understate the reality," said Andrew Wheat, research director for Texans for Public Justice. "Generally, what we find is that lobby registrations climb all year long and especially in the legislative frenzy period, especially in a case such as telecom. It's a good time to be a telecom lobbyist."

Newton says the lobby figures for SBC may be misleading because "we do ask, in the spirit of caution, anyone that might even be remotely involved to register" as a lobbyist.

But SBC doesn't deny it intends to fight to protect its interests.

"We're a large Texas-based telecommunications company and we have over 30,000 employees," she said. "Telecom policy is a really criticalarea of economic growth, and we certainly want to be active in the process."

Rival companies are worried about SBC's clout.

"SBC's lobby prowess is legendary, and they are unmatched in spending," said Kathy Grant, vice president of government relations for the Texas Telecommunications & Cable Association, which represents the cable industry. "There is no company that spends more to lobby their interests in the state capital. We'd have to be crazy not be concerned about that."

Cities worried

The Texas Municipal League is concerned about how the bills might affect the right-of-way and franchise fees telecom providers pay cities. Overall, fees from phone, cable and gas utilities account for 9 percent of the average city budget, and telecom is *"a substantial chunk"* of that, said Executive Director Frank Sturzl.

"We want to make sure whatever happens there keeps us whole," he said.

Some Capitol watchers are concerned that consumers won't be well-represented on the telecommunications issue. One key advocacy group, Consumers Union, has significantly scaled back its day-to-day presence at the Capitol.

"We are probably outnumbered 400 to 1 in terms of total lobby power," said Tom "Smitty" Smith, Texas executive director of Public Citizen. Without Consumers Union in the trenches, *"it's going to be worse than ever."*

Tim Morstad, policy analyst for Consumers Union, says the group hopes to get consumers involved, with e-mail campaigns and other efforts asking them to contact their legislators or attend committee hearings on the legislation.

"Our strategy this session is to really do all we can to amplify the voice of consumers in this debate," Morstad said. "We are hoping to generate a small movement to provide avenues for people to voice concerns . . . and have a strong impact this time around."

American-Statesman – House OKs deregulation of phone rates Bill would let firms set their own rates for customers with extras such as caller ID.

By Claudia Grisales, Austin American-Statesman, 3/24/2005 (www.statesman.com/business/content/business/stories/03/24telecom.html)

Major telephone companies would be able to set their own rates without state approval in October under a bill that passed the state House on Wednesday.

The bill will let SBC Communications Inc. and Verizon Communications Inc., the state's dominant phone companies, charge what they want for phone service if it's packaged with extras such as caller ID, removing that control from the Public Utility Commission.

It also requires those companies to reduce the access fees they charge competitors for using their networks by 2008. Those fees represent tens of millions of dollars a year in revenue to the major phone companies, but competitors say they are unreasonably high.



(photo by Harry Cabluck, Associated Press) A bill proposing deregulation of the state's phone companies sparked hours of heated debate in the Texas House on Wednesday. Rep. Sylvester Turner, D-Houston, sponsored an amendment that would ban major phone providers from changing rates for people who buy only basic service until 2008.

Consumer groups say the bill sets the stage for higher phone rates, although its sponsor disagrees, contending that there's enough competition to keep rates down.

"Some are afraid that deregulation will lead to higher prices," said Rep. Phil King, R-Weatherford, "All I can say is, it hasn't happened yet," referring to the state's first deregulation efforts in 1995.

House Bill 789 passed 145 to 1, with Rep. Harold Dutton, D-Houston, the lone opponent,

The bill prompted hours of heated debate and nearly 40 amendments, 26 of which passed.

One successful amendment, sponsored by Rep. Sylvester Turner, D-Houston, would ban major phone providers from changing rates for Texans who buy only basic, stand-alone phone service, until 2008. SBC estimates that about 10 percent of Texans get only basic service.

An amendment by Rep. Senfronia Thompson, D-Houston, would kill the Telecommunications Infrastructure Fund, a 1.5 percent fee on bills that generates about \$250 million a year. The fee originally was used to help pay for technology at hospitals, libraries and schools. Most of the projects have been completed, Thompson said.

"The mission has been accomplished," she said. "The tax should be repealed and the people ought to be able to keep their money."

Other key amendments that were passed include:

- ?? A ban on cities operating Wi-Fi Internet networks except in public buildings and areas such as parks, or for limited purposes, such as bill-paying or emergency services.
- ?? A proposal requiring the PUC to study the Universal Service Fund, which provides millions of dollars a year in subsidies, chiefly to SBC and Verizon, to ensure phone

service in rural areas. Legislators say they want to know whether the money is being spent as intended or whether the fund should be eliminated.

- ?? A proposal clarifying the PUC's role in handling complaints about "cramming and slamming," in which companies sign up or bill customers for service for which they didn't ask. King's bill had removed that consumer protection role from the PUC.
- ?? A proposal that would require Internet phone companies to inform customers whether the service includes 911 emergency service. On Tuesday, the state sued Vonage Holdings Corp. over the issue.

The bill could face trouble in the Senate, where Sen. Troy Fraser, R-Horseshoe Bay, says it gives the major phone companies everything they want without requiring tradeoffs.

Fraser had submitted a rival bill that authorized the PUC to decide whether there was sufficient competition in a particular area of the state to merit deregulating rates. He's pulled that bill down for now.

"It is becoming increasingly obvious to me that the incumbent telephone companies are not interested in competition and are only interested in raising revenue by increasing rates on the consumer and maintaining subsidies at their current levels," Fraser said.

cgrisales@statesman.com; 912-5933. This article includes material from The Associated Press.

American-Statesman – Municipal broadband faces limits

Texas cities fight plan that would bar them for offering fast Web connections. By Claudia Grisales, American-Statesman Staff, 3/2/2005 (<u>http://www.statesman.com/search/content/auto/epaper/editions/today/business_245237edf1022</u> 1dd0093.html)

Texas cities of all sizes are joining forces to lobby against part of a major telecommunications reform bill that would bar municipalities from offering high-speed Internet access to residents.

Cities such as Austin are worried that the provision would shut down their ability to offer free highspeed service in libraries, parks and other public areas. They say it also would stop plans for creating a free wireless district downtown one day.

Rural advocates say private companies are unlikely to invest the money to offer broadband service in small towns because costs are higher there, leaving it up to municipalities to provide what has become an essential service.

Only 16 Texas counties have no broadband service, but 93 have only one provider, according to the Public Utility Commission. Also, coverage in rural areas may be limited to a tiny part of town or to only one town in an entire county.

"For economic development, it is a death blow in the 21st century if you don't have broadband," said **Texas Agriculture Commissioner Susan Combs**. "If I wanted to encourage some company to move to small-town Texas, . . . they will ask about education and housing. And then they will ask about broadband."

The provision is one sentence in a massive bill that would overhaul how the state regulates phone and other communications services in Texas.

But it was the hot topic during hearings last week as officials from Austin and other Texas cities, representatives from rural communities and advocates of free wireless service testified against the provision. No one testified in support.

State Rep. Phil King, the sponsor of House Bill 789, said he was taken aback by the intensity of the opposition and said he will go back to the drawing board to make sure cities can continue to offer the service in libraries and other public facilities.

"I had no idea we would have 2 1/2 days of testimony on broadband," King, R-Weatherford, said Tuesday. "But the toothpaste is out of the tube. . . . This deal is a brave new world of emerging technologies, and we have to kind of muddle through it."

Asked where the provision originated, King said it arose from hearings of the Regulated Industries Committee, which he chairs.

"It was just me, sitting in the hearings," listening to industry representatives talk about broadband, he said.

King used an analogy. A city shouldn't get into the grocery business, even if there's none in town, he said. Instead, he said, the state should provide incentives to companies in places where there is no competition.

"It's the idea of a free enterprise system," King said. "As a matter of public policy, we can't let the public sector compete with the private sector."

Broadband is emerging as a crucial technology and source of revenue for private companies, the backbone for services including Internet-based phone service and video.

Across the country, a growing number of cities is going head to head with private companies over their right to offer broadband service, including programs for free or reduced-rate service to residents with low incomes or to areas that private industry has ignored or underserved. Companies say cities, which don't pay taxes, have an unfair advantage.

"SBC Texas is not opposed to cities providing Wi-Fi or other information services . . . (in) city parks, libraries or other city branches," said Gene Acuña, spokesman for SBC Communications Inc., the state's biggest phone company. "They are able to do that with telephone services, and they should be able to provide that with new technology as well."

But, "when a city seeks to provide such information services to nonpublic locations in direct competition with the private sector," he added, "then we would have some real concerns."

King and his staff are poring over proposals from communities across the state, including Austin, and hope to sort out a compromise this week.

"We are not seeking to compete with the private sector," said John Hrncir, government relations officer for the **City of Austin**. "Many cities are stepping in to provide service, certainly not as a money-making scheme, but as a much-needed service."

Combs said that while rural communities are less affluent, broadband can cost \$70 a month, compared with \$30 a month in Austin.

She wants cities and towns to have the option to offer broadband if no one else will.

"You can't possibly abandon small town after small town if the big boys want to cherry pick," Combs said. "Let the home folks have a shot at it."

King is looking at several proposals to meet concerns from rural communities such as publicprivate partnerships to offer service or using the state's Universal Service Fund, which pays subsidies to companies to ensure that rural communities have phone service.

Meanwhile, Texas cities have joined forces with advocates for free wireless services to start SaveMuniWireless.org to launch a grass-roots movement. Consumers Union signed on to support free wireless initiatives, with a Web site dedicated to the issue and a form letter to lawmakers to stop any bans.

These projects "are good for economic development, quality of life, education," said Adina Levin, who has coordinated efforts for the Web site. "Telcos are trying to hold cities hostage, preventing them from providing services to citizens. It's like requiring all roads to be for-profit toll roads. Or like making it illegal to have city buses."

cgrisales@statesman.com; 912-5933

COMMENTARY American-Statesman – To ensure Texas' future, we must rewrite the rules on telecom

By Gary Chapman, Regular Contributor, Austin American-Statesman, Saturday, March 05, 2005

Ten years ago, the Texas Legislature tackled telecommunications reform, producing a dramatic overhaul of phone service via House Bill 2128. Its main features were from the wish list of SBC, the huge parent company of Southwestern Bell, which demonstrated its commitment to the Texas market by moving its headquarters from St. Louis to San Antonio. The bill turned out to be a preview of the Federal Telecommunications Act of 1996, signed into law by President Clinton.

Now we're having déjà vu all over again, as the saying goes. The Legislature is again considering telecommunications reform, again at the behest of large corporations. And the U.S. Congress is making noises about rewriting the federal law. Changes in the telecommunications industry and new technologies have altered the landscape, the argument goes, and the rules of a decade ago are obsolete.

But what have we gotten out of 10 years of telecommunications deregulation?

As consumer groups warned then, the result was massive industry consolidation. We quickly went from seven regional "Baby Bells" to four, and two of those are now weak and vulnerable to takeover. In the past few months, we've witnessed proposed mergers of the two strongest Baby Bells, SBC and Verizon, with two former telecom titans AT&T and MCI.

The cable TV industry has concentrated as well, with a handful of major players left, led by Comcast and Time Warner. Wireless cell phone providers have dwindled and may further decrease soon.

The result has been a striking turnaround. Instead of opening up the telecommunications networks to competition — the goal of telecom reform in the mid-90s — we have now strengthened monopolies in areas such as telephone and cable. Increasingly, customers are faced with a telecom "duopoly" — if they're lucky enough to have two companies competing for their business.

With this limited competition, consumers' bills for telecom services have drifted upward. And the United States is falling behind other countries in its use of high-speed Internet services, dropping from fourth to 10th since 2000. Many communities, especially in rural areas like much of Texas, have few or no choices for broadband Internet, and the prices are out of reach for many customers.

There are three problems that need solutions. First, the major telephone companies such as SBC and Verizon have objected to sharing their networks with competing firms. The Baby Bells argue that they have no incentive to build high-speed networks if they have to turn around and share them with other companies. The competing firms counter by saying that if we want competition, we have to enforce line-sharing — making new entrants in the market build their own networks is cost-prohibitive and redundant. We've been stuck at this roadblock for nearly 10 years.

The second problem is that cable and telephone companies — which now view each other as major competitors — are treated differently by regulators. Cable companies are not required to carry whatever their networks will bear, like telephone companies, nor are they subject to universal service requirements. Cable companies don't have to share their networks the way telephone companies do. Telephone companies want "broadband equity," meaning a level playing field in regulation of these two sectors.

The third problem is that new technologies are available now or coming soon — such as telephone service and video over the Internet — that make much of our installed infrastructure obsolete. Ideally, we'd like ubiquitous, universal Internet access at high speed and low cost, so that the entire state could migrate to these new technologies as quickly as possible. Total coverage with wireless broadband Internet is another important goal. These are important technologies for economic development, education and economic equity, as well as fostering businesses.

So how do we get past all the squabbling and build what we need at a reasonable cost? Real competition is one answer, but we also need a plan, or at least a clear set of goals that serve the citizens of Texas, instead of again writing into law whatever the most powerful companies want. We should develop policies that foster new alternatives, such as smaller entrepreneurial companies in rural areas and low-income urban neighborhoods. We should allow local governments to offer their own services if they can't get broadband Internet from big companies. Studies have shown that municipal networks attract new service providers instead of deterring them.

Texas' telecommunications landscape is critical to the state's future and a matter of public interest. We need policies that get us to where we want to be in another 10 years, not another effort that is thwarted by big companies maneuvering against each other and stalling our state's development.

Chapman is director of The 21st Century Project at the LBJ School. He can be reached at gary.chapman@mail.utexas.edu.

(**Wayne Caswell** – SBC-driven telecom reform in 1995 was arguably the #1 cause of the economic depression that caused untold loss of wealth among individuals & companies.) Now the same big phone & cable companies, which spend more on lobbyists than R&D and avoid installing new FTTP & wireless technologies that would cannibalize old markets [e.g. DSL at \$40/mo vs. T-1 at \$1000/mo), want to ban municipal networks in underserved markets. As Chapman says, we need goals and plans that take us to where we want to be in 10 years, not another 10 years of anti-competitive industry consolidation among big monopolies.)

COMMENTARY American-Statesman – Wireless Internet: a wise investment for our cities

By Gary Chapman, Regular Contributor, Austin American-Statesman, Friday, April 01, 2005 (<u>http://www.statesman.com/opinion/content/editorial/04/1chapman_edit.html</u>)

On Wednesday, this page featured an opinion article by Frank Rizzo, Jr., a member of the Philadelphia City Council and the son of Philadelphia's former, famous mayor of the same name. Rizzo wrote about how cities around the country are contemplating municipally owned wireless high-speed Internet networks, a plan already approved in Philadelphia. Having failed to persuade his fellow council members in Philadelphia about the folly of such a plan, Rizzo apparently felt the need to warn other cities, including Austin.

It seems more than coincidental that Rizzo would decide to warn Austin at the same time that the Texas Legislature is deciding whether to pass a bill, House Bill 789, that is strongly supported by the large telecommunications carriers, including SBC and Verizon, the two titans of the telephone business. Verizon, the dominant company in Philadelphia, opposed Philadelphia's municipal wireless plan and eventually helped push through a bill in the Pennsylvania legislature that prohibits any other Pennsylvania city from following Philadelphia's example.

Here in Texas, HB 789 originally included a total ban on municipal wireless networks, with language so vague that it might have outlawed the free wireless already available in, for example, Austin's public libraries.

Last week, the bill's provision on municipal wireless in Texas was revised and relaxed, and it now allows cities and counties to continue currently offered services and to submit for approval, by the Public Utility Commission, plans for more services, up to a deadline of June 15, 2006. After that, no city or county in Texas could implement any new network services that reach the public. This new language is meant to "freeze" the status quo in Texas and ensure that any new services are left to the big telecom companies.

Rizzo, in his opinion article, intended to scare Texans off any support for municipally owned wireless networks. In his first paragraph, he wrote, "In Austin and elsewhere, city administrators are considering a massive, open-ended public works project: municipally owned and subsidized wireless (Wi-Fi) networks."

This is simply not true. No one in Austin has proposed or recommended an *"open-ended"* or *"massive"* city-owned network like the plan Rizzo opposed in Philadelphia. The City of Austin has no interest in competing with or displacing the telecommunications companies that serve the region now, such as SBC, Time Warner or Grande Communications. The city not only receives significant revenue from these companies from the lease of rights-of-way, but city officials understand that our economic competitiveness depends on a robust, diverse and competitive market of broadband service providers.

What Austin and other Texas cities want is the flexibility to offer wireless broadband in ways that enhance the city's technological and information infrastructure, outside of the free market for services, and for purposes that serve the interests of citizens.

For example, in May 2006, Austin will host a major international event, the World Congress on Information Technology. We expect our city will be visited by up to 2,000 delegates from more than 100 countries, and by many of the most influential people in the high-tech industry. One of the ways that we might impress these visitors is to offer seamless, free, high-speed wireless Internet access throughout the downtown area near the Convention Center and the hotels and restaurants nearby. The city and the local event planners should not have to simply depend on *"market forces"* and hope this will happen at the right time — they'll want to make sure it happens.

We can make this happen under the current provisions of HB 789 because we can meet the bill's deadline for municipal plans. But if another, similar need were to arise two or five years from now, we'd be out of luck. The bill's language would hamstring the city and other groups and keep us from doing everything possible to enhance our city's technological assets.

More importantly, there are many small Texas towns where a public strategy for getting highspeed Internet access is the only viable solution. And for many of these towns, it is the catalyst of public investment that jump-starts a local entrepreneur to get into the business of offering Internet services. In Haskell, the hometown of Gov. Rick Perry, a grant from the state's Telecommunications Infrastructure Fund allowed that town's public agencies to buy wireless service from a local business, West Texas Internet, which in turn could offer service to the town's residents and private businesses.

What Rizzo and other opponents of municipal wireless networks don't understand is that the key to broadband competitiveness in the future is ubiquity — the availability of wireless, high-speed connectivity everywhere, literally everywhere, no matter where the service originates or who runs it. The idea that municipal networks will displace or deter private investment is a red herring — studies have shown that the availability of broadband attracts more investment. **To block any means for rapidly expanding broadband access in Texas will retard the state's potential for growth and turn us into self-crippled laggards.**

Chapman is director of The 21st Century Project at the LBJ School. He can be reached at gary.chapman@mail.utexas.edu.

American-Statesman – Internet superhighway is in South Korea

A high-tech manufacturing haven, country is tops in broadband. By Birgitta Forsberg, San Francisco Chronicle (from Austin American-Statesman, 3/28/2005) (http://www.statesman.com/business/content/business/stories/03/28koreatech.html)

SAN FRANCISCO — Pick up your mobile phone and watch your favorite TV show. At home, on your computer, download a feature-length movie in no time at all.

If you live in South Korea, it is an everyday reality to have always-on superfast Internet — broadband — both in your cell phone and in your home.

South Korea is the most wired country on the planet. Some South Koreans can get up to 20 megabits of data per second — breakneck speed by today's standards. Americans are lucky if they get 4 mbps.

While South Korea leads in the rollout of broadband, the United States — supposedly the world's technology leader — comes in no better than No. 13, according to experts. About 76 percent of households have broadband in South Korea. The figure is 30 percent in the United States.

Broadband widens the digital data pipeline to allow complicated files, including pictures, graphics and video, to be downloaded at nearinstant speed. Experts consider the development of broadband networks to be the single most important step for expanding digital technology and bringing cutting-edge computer applications directly into people's lives.

Though broadband is usually associated with computers, wireless phones are also an important part of the picture. Here the situation is similar to computers. About 75 percent of South Koreans have a mobile phone, compared with 60 percent of Americans. And South Koreans generally do more and cooler things with their phones.

"There is no point in Korea where you can stand without receiving a signal," said Joy King, director of industry marketing at Hewlett-Packard Co. "In the U.S., we are still at the 'canyou-hear-me-now' level. When Europe and Asia are moving to multimedia text messaging, the U.S. has just started text messages. The U.S. is a Third World country in this aspect."



Seokyong Lee 2004 BLOOMBERG NEWS Home to tech giants such as Samsung, South Korea is one of the most wired, and unwired, places in the world with a high penetration of high-speed Internet access and wireless-phone coverage.



Seokyong Lee BLOOMBERG NEWS KT Corp., South Korea's largest Internet service provider, is just one of many companies that make the nation the most wired in the world. About 76 percent of households have broadband Internet service, compared to just 30 percent of U.S. homes. Some South Koreans can get up to 20 megabits of data per second — breakneck speed by today's standards. Silicon Valley used to be hailed as the world's high-tech capital. Now many consider South Korea the king.

"From my perspective, Silicon Valley does not have that role. The lead is in Asia, in Korea and Japan, no question," King said.

Advantage, Korea

South Korea has managed to leapfrog the United States in both broadband and mobile phone usage thanks to a <u>population density</u> that makes connectivity easier and <u>government policies</u> that promote development. South Korea also has a <u>culture</u> where people are crazy about playing online games and don't go home after work. Instead, they go to dinner, to karaoke or to a bar — all the while using their mobile phones.

U.S. technology leaders are sounding the alarm that the nation is falling dangerously behind in broad areas of digital innovation, including broadband.

Last week, technology executives affiliated with the lobbying group TechNet traveled to Washington to press for government policies that would promote broadband development.

The U.S. information superhighway has turned into a *"bumpy, two-lane country road"* compared with broadband development in other countries, the group said.

As Silicon Valley's biggest corporations complain about the relative backward state of broadband in this country, they are rushing to South Korea to see if their products pass muster with some of the world's most demanding customers.

Silicon Valley companies view South Korea as a sort of time machine when testing broadband applications, a place where they can get a glimpse of what Americans will use in the future.

Samsung, the giant South Korean electronics company, tests its new products in Korea first for six to eight months.

"It collects feedback from customers (to) remodel and fix things before introducing the products worldwide," said Jong Kap Kim, executive director of South Korea's iPark Silicon Valley. "And several U.S. companies are doing the same."

Microsoft brought MSN Mobile, which enables instant messaging on mobile phones, to South Korea two years ago. It introduced the service in the United States six months later.

"It's still much more popular in Korea," said Brooke Richardson, MSN lead product manager. "It's not only that the U.S. is not so advanced in broadband. Mobile phone usage is not so high here either. MSN is bridging the two worlds of PCs and mobile phones, and Korea has that connectivity. We have incubated some of our stuff in Korea, like mobile instant messaging and mobile e-mail. We have also launched services there that the rest of the world was not ready for."

Catalysts for growth

South Korea's success story began when the country was hit by a financial crisis in 1997 and 1998.

"At that time, the Korean government turned to the high-tech industry as a solution to overcome the crisis. Broadband was a new market with new demand for modems, routers, servers, computers, a new infrastructure. It caused a lot of activity and created many jobs," iPark Silicon Valley's Kim said.

The South Korean government <u>ensured competition by ending state-owned Korea Telecom's</u> <u>monopoly</u>. The government <u>spent billions of dollars building a fiber grid</u>, reaching schools and government buildings, and offered another billion in financial incentives to phone companies that strung broadband links to homes. **Tough competition drove prices down, demand surged** and the country was on a roll.

South Korea also is a small country where 30 percent of its 48.6 million inhabitants live in the three main cities — and most of them in dense apartment blocks.

"It's unbelievably dense," said Ward Hanson, a research fellow at the Stanford Institute for Economic Policy Research who recently returned from a visit to South Korea.

"When you drive in to Seoul along the Han River, you see thousands of high-rise buildings, 20 to 30 stories high. It's much like Manhattan in New York, but even denser than that."

And it is much cheaper and much easier to wire an apartment building than a typically spread-out U.S. city and its suburbs, not to mention the nation's vast rural areas.

Experts also point to computer games as a crucial catalyst for Korea's explosive broadband growth.

"Until very recently, Korea strictly limited the impact of Japanese culture, remembering colonial Japan, and prohibited videos, movies, video games and PlayStations from Japan," Hanson said. "Koreans therefore played PC games and a whole industry with game parlors grew. Now there are more than 100,000. And if you competed with somebody who had broadband, you were killed."

President Bush has said all Americans should have access to broadband by 2007.

Hanson said he doubts that the United States will reach its broadband goals by 2007.

"In Korea, competition has been a driving force. In the U.S., you often only have one cable company, and the company is not forced to upgrade its speed," he said. "I have had DSL for three years, and I have never been approached about an upgrade. In Korea, you can even watch television on DSL.

"What we have now is good for print, but multimedia is very challenging. We haven't invested in infrastructure the way other countries have. If you have very high speed, the whole system upgrades around that, you get applications for it, and congestions and bugs get fixed," Hanson said.

Right now South Korea is changing over to wireless broadband, Wi-Bro, and it will also have digital multimedia broadcasting.

"While I drive my car, I can enjoy my cellular phone that broadcasts over the Internet while I simultaneously have Yahoo map service up," Kim said. "I can just switch between the two."

Austin Chronicle – Will the Lege Shut Down Public Broadband?

By Jeff Tonn, AustinChronicle.com, 4/22/2005 (www.austinchronicle.com/issues/dispatch/2005-04-22/pols_feature6.html)

Although the high-profile matters this Lege session are the usual lightweights like public school finance, property taxes, and, of course, the budget, other questions – like the continuing controversies over how to regulate the high tech economy – are also in the mix. Among the most prominent are two bills filed by Rep. Phil King, R-Weatherford, that attempt to define telecommunications policy in the wake of a slew of new technologies that have transformed the industry. In their current form, HB 3179 and HB 789 would impose statewide standards that will erode cities' influence over the telecom industry. Proponents, including such major telecom players as San Antonio-



Rep. Phil King, R-Weatherford photo by Jana Birchum

based SBC Communications, say the bills will remove barriers to local markets, thereby spurring robust competition. Critics, however, fear these bills will instead prematurely bar municipalities from implementing broadband initiatives, and thereby leave too many communities without broadband access.

House Bill 789 originally had a provision that would ban Austin and other municipalities outright from providing free or reduced-rate broadband service, including Wi-Fi connectivity. Telecom providers did not want to compete against municipal broadband initiatives. Said Rep. King, "No business should have to compete with public tax dollars." The provision generated an outcry among cyber-lobby citizens' groups and advocates for cities, who argued that the market chases only dollars and therefore cares little about providing services for small or impoverished communities. The digital divide, they were concerned, would grow larger, leaving unwired communities economically vulnerable. As a consequence of that debate, the effects of HB 789 have been softened a little, or at least delayed – as the bill stands now (passed by the House, pending in the Senate), the ban won't apply to broadband projects started before Sept. 1, 2006. That deadline still leaves municipalities little time to make big decisions. And cities that might come up with innovative broadband programs after the deadline will simply be out of luck.

King's other telecom bill, HB 3179, is still pending in Regulated Industries, and it's possible that it will die there. But the bill may still serve as a bellwether for future trends in telecommunications policy – it would replace local right-of-way use agreements with a statewide standard for access to local markets. Traditionally, municipalities have used right-of-way agreements to ensure that the interests of the general public are served by telecom businesses. Rondella Hawkins, manager of Austin's Office of Telecommunications and Regulatory Affairs, says, *"We ensure that a cable company cannot come in here and cherry-pick and only provide service to affluent areas. ... We are able to negotiate a lot of assets and in-kind contributions."* Austin, for instance, requires that cable companies provide eight PEG (public educational government) channels, free cable for schools and city buildings, and the nation's only economic development channel dedicated to music.

Municipalities can also generate revenue through leasing rights-of-way, through fees charged to cable and telecom providers in exchange for the use of public streets. Last year, Austin took in just under \$22 million in rights-of-way fees from cable and telecom providers. But under HB 3179, cities would no longer be able to negotiate right-of-way use agreements. A statewide standard would determine such things as the maximum number of PEG channels any cable provider was

required to offer, and right-of-way fees would be replaced by a statewide 3.95% fee on each sale of a communications service. The precise provisions are still to be worked out (should the bill advance), but municipalities fear a legislated sweetheart deal for providers, with a consequent loss in revenue for cities.

It's a pattern familiar from this Lege in its approach to similar questions affecting local revenues, like the fight over property tax caps. The defense relies inevitably on *"free market"* rhetoric. As currently drafted, for example, HB 789 would amend the Utilities Code to read, *"As new technologies become available, all public policy must be driven by free market principles for the benefit of consumers in this state consistent with the public interest."* That sounds just peachy – although in telecom policy, as in many things, the state-defined market is only as *"free"* as the Lege allows it to be, and cities therefore won't be "free" to charge for public resources what the telecom market will actually bear, because the companies simply don't want to pay that much.

Critics fear that leaving broadband deployment solely up to the markets, however defined, will leave many Texans behind. Because of growing international competition, it's even become a national policy question – Foreign Affairs noted, *"In the first three years of the Bush administration, the United States dropped from 4th to 13th place in global rankings of broadband Internet usage."* The prestigious policy journal blames a lack of government leadership. Critics of the current telecom bills believe that by sidelining municipalities, the legislature is removing a major player in the effort to cover Texas with broadband access.

Houston Chronicle – Wireless networks don't click with some

Telecom bill would ban free Internet access like that in model East End program By Eric Berger, Houston Chronicle, 3,3,2005

Will Reed envisions a mouse in every house — computers, that is — and high-speed Internet connections for all. A wired community, he says, is an empowered one. From his nonprofit group's East End offices, Reed is turning his vision into a reality. Although Pecan Park neighborhood residents may not realize it, e-mail, pictures and commerce now zip above their tree-lined streets. This high-speed, wireless Internet access is free for the taking.

Reed's organization, Technology for All, has pioneered this program to bridge the digital divide with help from Rice University and an enthusiastic Mayor Bill White, who has asked city libraries to join the effort. This small, wired neighborhood may eventually become a model for providing everyone in the city free, or low-cost, Internet access.

Or not.

Rep. Phil King, R-Weatherford, has filed a massive telecommunications bill in Austin this session that, in part, bans Texas cities from participating in wireless information networks.

"I'm not real pleased," Reed said. "As it currently stands, the bill eliminates competition, innovation and a huge research opportunity."

Several telecommunications companies, which provide both dial-up Internet access as well as faster broadband connections through cable and DSL lines, say they were not involved in writing the bill.

That's not to say they disagree with the wireless provision. SBC Communications, which has more DSL customers in the nation than any other provider, said cities should be allowed to offer wireless Internet access in public places, such as parks and libraries. But they should not directly compete with private enterprises by providing services to residents and businesses, said company spokesman Gene Acuña.

"If they do, then we would have some real concerns," he said.

Other cities considering

Houston, which also is considering ideas such as putting Internet antennas on parking meters, is not alone in exploring wireless Internet. Philadelphia has said it will offer free, citywide access. Los Angeles and San Francisco also are studying how to do the same thing. In Texas, small towns such as Linden and Granbury have experimented with wireless networks, as have larger cities such as Austin and Corpus Christi.

The catalyst has been an explosion of innovations in technology — from antennas to modem-like devices — that allow personal computers to capture signals from the air. This has driven down costs.

Telecommunications companies have taken notice as cities, nonprofit organizations and startup companies have begun using these technologies to offer free or steeply reduced Internet access, said Bill Gurley, a Silicon Valley-based venture capitalist with Benchmark Capital who closely follows the issue.

Legislators in a dozen states, including Texas, have filed bills to remove competition for telecommunications companies, he said. Most are pending, but an Indiana effort failed, while a

similar law in Pennsylvania passed, although it omitted Philadelphia because of that city's existing efforts.

"These are very disruptive, low-cost technologies, and it's not in the incumbent telecommunication companies' best interest to embrace them," Gurley said. "But these are technologies that can be very beneficial to communities."

King's chief of staff, Trey Trainor, said they are rewriting the telecommunications bill to recognize that there are legitimate uses for municipal networks, such as public safety communication, meter-reading and other city services. King's basic objection, Trainor said, stands — in a free-market system it's not acceptable to let public government compete with private businesses.

As the public-private fight heats up in Austin, Francisca de Leon and her family are, for the first time, enjoying Internet access in their East End home.

With the e-mail address for an older daughter in California taped to the monitor, de Leon uses the computer to keep in touch with family. Another daughter, Janet, a Milby High School senior, uses the computer for instant messaging and college searches. "My children use this much more than me," de Leon admitted.

Melissa Noriega, the acting state representative for the area covered by Technology for All, called the effort to ban municipal participation in wireless Internet efforts "short-sighted," and said she will work to prevent it from becoming law.

Noriega said families that cannot speak fluent English can be transformed by learning to use a computer and crossing the digital divide — they learn how to spell-check, can find translation services online, e-mail family in their home countries, and much more.

"This may be the single biggest step we can take to close the gap between the haves and havenots," she said.

Signal beamed to library

Technology for All's plan works by transmitting its fiber-optic Internet connection from a large antenna on its offices. The organization beams the signal directly to Melcher Library, about two-thirds of a mile away. Residents within a few hundred yards of either spot can pick up signals now.

Within a month or two, Reed says, several residents, as well as a YMCA and other organizations, have agreed to install antennas to spread access across the entire neighborhood.

Residents can sign up at the library for in-home access. Technology for All provides free computers to high school students who take a computer course, but is looking for a sponsor to help provide \$125 modems that plug into computers and capture the wireless signal.

The fledgling network offers Rice engineers and students a real-life environment to test the optimal placement of antennas, and how to maximize access speed while minimizing needed equipment. This research is funded with a five-year, \$2.5 million National Science Foundation grant to develop the next generation of technology, with the eventual goal of beaming Internet connections 250 times the speed of DSL or cable into 100 million homes.

"This is a step toward that goal," said Ed Knightly, a Rice engineer leading the research project. "In this case, we're pushing as much bandwidth as we can achieve per square mile for the lowest cost. It's inspiring to see our research get directly into the community."

eric.berger@chron.com

Houston Chronicle – House backs new phone plan

Bill to give rate control to local providers still needs Senate OK Associated Press, HoustonChronicle.com, 3/24/2005 (http://www.chron.com/cs/CDA/ssistory.mpl/politics/3099985)

AUSTIN - Texas' largest telephone companies could set their own local rates if the service is bundled with other products, such as long-distance, under a bill approved Wednesday in the House.

In approving the bill, the House also adopted an amendment that repealed a fee on consumers' telephone bills that raised \$250 million a year for technology projects.

The price flexibility would take effect in January 2008 or sooner if companies, including San Antonio-based SBC Communications Inc. and Verizon Communications Inc., reduce their access charges for long-distance calls.

Basic, stand-alone telephone service would be frozen at its current level until 2008. The rate, set by the Public Utilities Commission, ranges from about \$7 to \$11 depending on where the person lives. The companies would be required to reduce long-distance access fees by 2008.

House Bill 789 by Rep. Phil King, R-Weatherford, was approved 145-1, with Rep. Harold Dutton, D-Houston, voting against it. King said the bill's aim is to move toward a more competitive market.

"We (have) the opportunity for Texas to once again provide national leadership in the telecommunications industry," King said.

The future of King's bill is unclear now that it goes to the Senate.

Sen. Troy Fraser, who chairs the Senate Business and Commerce Committee, where the bill will be heard, said he will not push for his version of telecommunications reform. He has said, however, that he will review the House bill.

Fraser is concerned that consumer rates will increase and that providers are getting everything they want without giving up anything.

"It is becoming increasingly obvious to me that the incumbent telephone companies are not interested in competition and are only interested in raising revenue by increasing rates on the consumer and maintaining subsidies at their current levels," said Fraser, R-Horseshoe Bay.

The push for an updated law comes as new technologies have emerged that allow consumers to get phone service from a variety of sources rather than standard telephone lines.

For instance, some cable operators offer phone service, and wireless telephone companies remain unregulated.

Rep. Senfronia Thompson, D-Houston, filed the amendment to repeal the Telecommunications Infrastructure Fund fee on telephone bills, originally used to help fund technology at hospitals, libraries and schools. Most of the projects have been completed, Thompson said.

Two years ago, lawmakers facing a nearly \$10 billion budget shortfall used that money for other things, she said.

"The tax should be repealed, and the people ought to be able to keep their money," she said.

San Antonio Express-News – Broadband via power lines is advancing

By Sanford Nowlin, Express-News Business Writer, 03/24/2005 (http://www.mysanantonio.com/business/stories/MYSA032405.1E.powerlines.1695eedb4.html)

Castroville City Councilman Darren Bond had heard plenty of complaints from his constituents about their lack of fast Internet service.

Phone giant SBC Communications Inc. offers speedy DSL Internet access in the small town west of San Antonio, but people who live on the outskirts either can't obtain the service or make it work at full speed. And Charter Communications, the city's cable franchisee, doesn't offer cable modem service there.

So Castroville, which has a population of 2,600, is turning to an increasingly popular solution — equipping the city-owned electric utility's power lines to carry broadband signals.

"Being a small community, it's been hard to attract those kind of services from the phone and cable company," Bond said. "I think there's a lot of interest from our residents to see this happen."

More than 40 utilities have experimented with broadband over power lines, or BPL, in recent months. Utilities serving Manassas, Va., and Cincinnati have taken their projects commercial.

Meanwhile, President Bush and former Federal Communications Commission Chairman Michael Powell have endorsed power lines as a means of bringing fast Internet access to rural residents.

Although broadband access has spread briskly in recent years, some estimate that 60 percent of U.S. ZIP codes still don't have access to cable modem or DSL service.

"It's an economics game in these small towns," said Robert Gwin, chief executive officer of Broadband Horizons, the company that's helping Castroville set up its BPL project. "It just doesn't make sense for a phone company or a cable company to bring their fiber (optic lines) out there."

Gwin's Austin-based company also is conducting pilot projects in the cities of <u>Weimar</u>, <u>Burnett</u> and <u>Blanco</u>. Weimar is the furthest along, with its power grid now delivering broadband to the downtown business district. There are plans to serve the entire 2,200-resident town by early June.

The concept of delivering Internet access over electrical lines has been talked about for years — power companies have long been able to send and receive certain kinds of data over the wires. But only recently has the technology advanced enough that they can effectively carry speedy Internet traffic.

Electrical power and Internet signals can both be carried along copper lines like the ones most power companies use. Both can share the same line, so long as the electric current and the data signal run on different frequencies.

A user equipped with a BPL modem simply receives the data signal from the same wall socket where his or her modem and computer are plugged in.

In most cases, providers offer BPL service for \$20 to \$60 a month, about the same price range consumers can expect to pay for DSL or cable modem service. Its speeds are comparable to those available with DSL or a cable modem.

Though developing fiber phone or cable lines into a small town can run \$3,000 for each home, upgrading the power grid to carry broadband costs only \$300 per home, said Sabodh Nayar, operations director for Powerline Telco, a BPL consultant based in Washington, D.C.

Rather than string new power lines, the utility needs only to install equipment — such as an Internet network hub and repeater boxes that strengthen the Internet's signal — on its existing grid. The installation process can take weeks, as opposed to the months or even years it takes to build out a fiber network.

"It's very rare that we can't show a utility that they'll break even," Nayar said. "Even on a very short time horizon."

But not everyone is sure BPL is poised to take off.

The technology has faced opposition from radio operators who argue it can interfere with their signals. And the Texas Legislature is now hearing proposals that could make it more difficult for municipalities to become broadband providers.

What's more, companies trying to bring BPL to market face skepticism from some small cityowned utilities.

"One of the biggest obstacles this technology faces is the conservative attitudes of the utilities," said Nicole Klein, analyst for Boston-based Yankee Group. "After everything else their industry has been through and with the bursting of the tech bubble, they're a little bit wary of investing in the technology."

Analysts also wonder whether BPL will take off outside of small communities.

In most large and midsize cities, both a phone company and a cable company — and sometimes other providers — offer broadband service. And they usually have a substantial head start. Indeed, there already are more than 30 million broadband subscribers across the country.

"Where this is going to work is in the rural pockets that aren't being served," Klein added. "There's really not a lot of market demand for it outside of those areas."

But such talk doesn't quell the enthusiasm of Castroville's Bond.

Until phone and cable companies start bringing fiber into small towns, power lines may be the best way to serve residents interested in speedy surfing. What's more, as businesses decide whether to relocate to the city, many will expect to have broadband access.

"Broadband is like cellular," Bond said. "Once you've used it, it's hard to imagine life without it."

Silicon Investor – The High Tech Broadband Coalition (HTBC): Policy Position on Municipal Broadband Networks

By Frank A. Coluccio, Silicon Investor posting, 4/1/2005 (<u>frank@fttx.org</u>) (<u>www.siliconinvestor.com/readmsg.aspx?msgid=21190558</u>)

The High Tech Broadband Coalition ("HTBC") is an industry alliance formed by the leading trade associations of the computer, telecommunications equipment, semiconductor, consumer electronic, software, and manufacturing sectors in the United States. The six trade associations that comprise HTBC – the Business Software Alliance, the Consumer Electronics Association, the Information Technology Industry Council, the National Association of Manufacturers, the Semiconductor Industry Association, and the Telecommunications Industry Association – represent more than 12,000 corporations engaged in all aspects of the high-technology industry. Continued success of HTBC member companies increasingly depends upon consumer adoption of broadband.

HTBC has been a strong proponent of ubiquitous broadband deployment. HTBC believes that the overwhelming majority of such deployment will come from private sector investment. HTBC has been a leader in advocating policies that remove regulatory barriers to private sector investment in new broadband facilities. History has shown that competitive markets using private capital provide the best services for consumers. However, governmental entities, pursuant to their mandate to advance or protect the public interest and public safety, may identify broadband needs that are best met through some form of governmental action or partnership with the private sector.

Nationwide, municipalities are considering ways to promote broadband networks in their communities with these goals in mind. Often, these municipal efforts are intended to complement wireline and cable networks by extending reach to areas that these incumbent networks do not, or cannot, reach. A number of promising cooperative efforts between municipalities and multiple private sector partners already exist and are underway. While legitimate concerns have been raised about municipal involvement, municipalities can and should find solutions that are open, transparent, and reasonably competitively neutral.

Because circumstances vary across municipalities, there is no one-size-fits-all prescription. Accordingly, no statewide statutory barriers to municipal participation, whether explicit or de facto, should be erected. Some municipalities may find private sector partners able to provide all of their services. Others may find private partners able to provide some, but not all, of the services they require. Still others – because of their small size, remote location, or other unique characteristics – may not find any private sector partners able to make the business case to provide their required services. The key and overarching principle is that municipalities, to the extent practical, should use open, competitively neutral processes to determine the private sector involvement and maintain those principles throughout the network's operational life.

This approach gives municipalities the flexibility to address their particular circumstances. Because competitive circumstances vary greatly, what is practical will also vary. But this approach also admonishes municipalities to use open, transparent processes that will give ample opportunity for all stakeholders to be heard and will encourage the maximum practical private sector involvement. Many acceptable implementations of this approach are possible and, in fact, are being demonstrated in the marketplace voluntarily.

As a general guideline, however, municipalities should first assess unmet needs, underserved areas, and future requirements, as well as develop a technology-neutral requirements document. This process might involve working with private-sector consulting firms. A vendor-neutral evaluation process would then determine the best-suited technology, capabilities, and providers. In keeping with competitive neutrality, new private sector entrants, established firms with existing facilities, and out-of-region established firms would be free to bid on the service provision and

network operational requirements as they see fit. Also, municipal efforts would not get preferred access to rights-of-way or other favored treatment.

In summary, HTBC opposes state laws that erect explicit or de facto barriers to municipal participation. Municipalities must be allowed to pursue broadband network solutions, and private sector firms must not be foreclosed from choosing to invest in and partner with municipalities. A framework of open processes and reasonable competitive neutrality allows all stakeholders to be heard. Reasonable examples are already being demonstrated in the marketplace voluntarily and without statutory mandates. We believe such a framework can encourage public-private partnerships that advance the goal of making affordable and high quality broadband available to all Americans.

HIGH TECH BROADBAND COALITION

The six trade associations that comprise HTBC are:

a. The **Business Software Alliance (BSA)** is an international organization representing leading software and e-commerce developers in 65 countries around the world.

b. The **Consumer Electronics Association (CEA)** is the preeminent trade association promoting growth in the consumer technology industry through technology policy, events, research, promotion and the fostering of business and strategic relationships. CEA represents more than 2,000 corporate members involved in the design, development, manufacturing, distribution and integration of audio, video, mobile electronics, wireless and landline communications, information technology, home networking, multimedia and accessory products, as well as related services that are sold through consumer channels. Combined, CEA's members account for more than \$113 billion in annual sales.

c. The **Information Technology Industry Council (ITI)** is an elite group of 31 of the world's leading providers of information technology products and services, including computer, networking, data storage, communications, and Internet equipment, software, and services. ITI helps member companies achieve their policy objectives through building relationships with Members of Congress, Administration officials, and foreign governments; organizing industry-wide consensus on policy issues; and working to enact tech-friendly government policies.

d. The **National Association of Manufacturers (NAM)** is the largest United States industrial trade association, with more than 12,000 members and 350 member associations in every industrial sector and all 50 States.

e. The **Semiconductor Industry Association (SIA)** is the premier trade association representing the \$100 billion United States microchip industry. SIA member companies account for more than ninety percent of United States-based semiconductor production.

f. The **Telecommunications Industry Association (TIA)** is the leading trade association serving the communications and information technology industry, with proven strengths in standards development, domestic and international public policy, and trade shows. Through its worldwide activities, TIA facilitates business development opportunities and a competitive market environment. The association also provides a forum for its over 600 member companies, the manufacturers and suppliers of products, and services used in global communications.

While its members each serve as a major force for advocating the public policy objectives of their own members, HTBC was established to highlight their common interest in, and to ensure sustained advocacy for, public policies that promote broadband deployment and competition.

Quorum Report – House Passes Telecom Dereg but Kills TIF Tax

Amendment provides compromise on muni Wi-Fi issue.

by Harvey Kronberg, www.quorumreport.com, 3/23/2005

The House passed out Rep. Phil King's (R-Weatherford) telecommunications deregulation bill on Wednesday evening but not without a compromise on municipal wireless access and stripping out the Telecommunications Infrastructure Fund tax.

The House moved through a series of discussions on House Bill 789: general clean-up language of the bill, followed by the municipal wireless issue, the equity of the Universal Service Fund and the abolition of the Telecommunications Infrastructure Fund tax, which was intended to fund the technology allotment in House Bill 2.

Rep. Robert Puente's (D-San Antonio) amendment on municipal Wi-Fi access, which would have limited competition between cities and wireless carriers, was pulled. In its place was an amendment crafted on the floor by Reps. Vilma Luna (D-Corpus Christi), Todd Baxter (R-Austin) and Sefronia Thompson (D-Houston) that recast the motion.

In many ways, the compromise is a type of placeholder. Under the compromise, cities offering municipal wireless by Jan. 1, 2006 would be grandfathered. Those cities that are in the process of offering municipal wireless can proceed with their plans as long as they don't intend to charge a fee. And those cities that intend to offer wireless can file a statement of intent with the Public Utility Council, which will be reviewed for viability.

In the meantime, the PUC will conduct a study of current and pending municipal projects. Baxter said the plan would consider all aspects of those projects and whether they present competition to private providers. The information would be reviewed during the next legislative session. In addition, Puente exemption Wi-Fi used for utility reading.

A number of Democrats took a swing at the Universal Service Fee. Rep. Harold Dutton (D-Houston) called it *"the telecommunications Robin Hood"* because the fees were being taken from inner-city neighborhoods to fund access in rural communities that already had access. In recent years, however, many of the areas receiving money no longer needed assistance, leaving the telephone co-ops to rebate funding to rural customers. Bottom line, rural service providers were paying people to be telephone customers.

King acknowledged the problem, saying the committee had discussed it at length. The problem appeared to be once-rural areas like Weatherford that still received USF funds, although the areas were clearly now suburban rather than rural. Dutton agreed to pull down his amendment. Rep. Sylvester Turner (D-Houston) offered an amendment, which passed, that would provide a study of the USF.

Democrats took a number of swings at the TIF fund, offering new labeling and then a study and then, finally, the abolition of the fund. The TIF fund was intended to be a 10-year \$1.5 billion fund to wire libraries and schools. That work has been completed.

In the most recent session, the \$250 million generated from TIF was diverted to the General Revenue fund, which appeared to draw the ire of both Democrats and some Republicans. When it was apparent Thompson could pass an amendment to strip the tax from the bill, King chose to accept the amendment repealing the tax.

This leaves the Public Education Committee in an interesting position. Fees from TIF were expected to be consolidated into the textbook-technology fund.

eWEEK – Municipal Broadband Bills Come Under Fire

By Carol Ellison, eWEEK, March 16, 2005 (http://www.eweek.com/article2/0,1759,1776559,00.asp)

If not for politics and broadband, Ben Gould and Ron Sege might not have much in common. As chief marketing officer for DynamicCity, Gould sells fiber to the premises, or FTTP, solutions. As CEO of Tropos Networks, Sege delivers metro-scale broadband solutions wirelessly over mesh networks.

In some ways these are competing technologies. In other ways, they are perfectly compatible. Sooner or later, even wireless technologies have to link to a broadband backbone. But at the moment, their chief point of unison is the fight for municipalities' rights to self-determination.

Both men and their companies oppose legislation, floating about a growing number of states that rob municipalities and local voters of the right to determine whether their municipal governments should provide broadband services. Instead of leaving the question up to localities and their voters, the bills deliver monopolistic control of the question to "incumbent carriers" (as they are identified in the bills). That would be the dominant carrier in your neck of the woods.

Ironically, most do so in the name of competition, but the experiences of Tropos Networks, DynamicCity and their clients testify to the array of local solutions—and the technologies that support them—that the anti-muni bills would wipe out.

Tropos Networks (www.tropos.com) sells metro-scale mesh routers to cities that want to use broadband wireless to automate mobile remote and location-based city services. The centerpiece of DynamicCity's work (www.dynamiccity.com) is an open service provider network, called Utah Telecommunication Open Infrastructure Agency, or UTOPIA, that is bringing broadband to homes in a 14-community political subdivision in Utah. UTOPIA provides the backbone. An array of private companies use it to provide service.

DynamicCity's business model is focused on bringing the pipe into homes. Tropos Networks provides mesh wireless networks designed to accommodate an array of municipal communications. Residential access to the Internet is an attractive extra but rarely the driver that brings clients to their door.

Tropos Networks is now working with Philadelphia, the city that has put muni-wireless in the public spotlight. But few of Tropos' other clients are attempting anything on the scale of what Philadelphia has in mind.

Until recently, said Sege, the focus for wireless mesh networks has been on public safety and municipal efficiency. Tropos clients such as North Miami Beach, Fla.; Frisco, Texas; and San Mateo and Milpitas, Calif., put mesh networks to work to communicate Amber Alerts and allow police and public safety officers to access crime databases. "Up until metro-scale Wi-Fi came along they had to be sitting at their desk to access that stuff," he explained.

Once the meshes were in place, he said, "clients began asking if they couldn't connect other things. Generally there's so much bandwidth the police can't consume it all. You'd be silly not to use it for other things if it's sitting there half idle."

Some of those "other things" include using the mesh to wirelessly read residential utility meters in Corpus Christi, Texas (another state with an anti-muni bill pending). Not only has the municipal mesh made the city utility more efficient, it addresses the public worries that result from meter readers entering private homes. New Orleans installed 100 security cameras in high crime areas around the city to keep an eye on activity. That makes sense; officers can't be everywhere all the time but a mesh-cam system can.

Munis that he's worked with, says Sege, tend to follow one of the following models:

- ?? Munis using the mesh strictly as a private network for police, fire, emergency and other city services. This model is currently in use in Framingham, Mass.; Milpitas and San Mateo, Calif.; and Franklin, Tenn.
- ?? Munis acting as an ISP for their residents, a model followed in Chaska, Minn.
- ?? Munis owning the network for use with city services but selling excess capacity to ISPs, which, in turn, offer services to residents.
- ?? Munis engaging in a cable TV franchise-style model, making rights of way available to a private operator in exchange for some sort of consideration. Madison, Wis., and Tucson and Tempe, Ariz., currently use this model.

Legislation being considered in Colorado (curiously just next door to DyanamicCity's UTOPIA project—perhaps Colorado legislators should pay their neighbors a visit before voting) scotches the dream that any of these models or anything like UTOPIA could connect Colorado's communities.

Declaring that "there is a need for statewide uniformity in the regulation of all public and private entities that provide cable television service, telecommunications service and advanced service," Colorado's Senate Bill 05-152 forbids local governments from providing such service, which includes broadband of any kind—wireless or wired, to even one subscriber.

Read that again if you missed it the first time. Not even one. Not if the municipality wants to engage a private provider in a partnership or joint venture. Not if the municipality wants to subcontract the whole darned operation. Not if the municipality wants to franchise the operation in the way most cable TV franchises presently operate.

Obviously, companies like Tropos Networks and DynamicCity have good reason to denounce such legislation. It robs them of the ability to do business with municipalities and, instead, forces them to negotiate with competing providers (with their own aging infrastructures to protect) if they hope to do business there at all.

Understandably, they're not happy. The anti-muni bills present a scenario where their companies aren't submitting bids to win the business. They're forced into negotiations with a competitor, the incumbent carrier, which understandably will want to protect the market and keep its competition out.

"One could argue that if these laws were in place at the dawn of cable TV, there wouldn't be cable TV right now," said Sege. Certainly, in Colorado they could. Not only does the bill disenfranchise the municipality from entering into any sort of negotiation with providers, it disenfranchises local voters from participating in any local initiative in authorizing city fathers to develop any kind of communications services in their communities.

Colorado's bill may be the most egregious in stealing local control from municipalities. It makes services of any sort verboten. But legislation pending in other states, even when it offers municipalities some wiggle room to negotiate their fates with big broadband companies, likewise removes the decision from local voters and their municipalities and grants incumbent carriers monopolistic control of the cities' broadband future.

Gould believes anti-competitive practices in the United States—and he counts state antimunicipal legislation among them—as the reason why Americans pay comparatively more for Internet access than citizens of other developed nations. He cites a recent report from the International Telecommunications Union that shows the United States in 2004 ranked 13th in broadband penetration, falling from fourth in 2001. "We believe the reason we're underserved and overcharged is because there hasn't been fair competition," said Gould.

To his mind the original Ma Bell—which was subsidized by the government and given rights of way, capital, guaranteed rates of return and captive rate payers—was never fully decontrolled, and recent mergers that have reduced the number of competing telecoms to six raise the specter that it never will be.

"On a local level you went from the original Ma Bell to multiple Ma Bells," he said. Long-distance rates went down as a result of decontrol but "at the local level it didn't happen. You still had the original Bell footprint."

The Telecom Act of 1996, which opened local carriers' networks to allow other ISPs to run on them, "hasn't delivered the desired result" of fostering lively competition. "The motivation of the municipality is to be able to bring quality of life into a community," said Gould.

Author's list of additional reading:

- ?? UTOPIA to Connect Rural Businesses (http://www.eweek.com/article2/0,1759,1626912,00.asp)
- ?? How Philadelphia is working with Tropos Networks (http://www.eweek.com/article2/0,1759,1759948,00.asp)
- ?? Legislation Pending in other states (http://www.civitium.com/states.htm)
- ?? Senators Call for More Scrutiny of Telecom Mergers (http://www.eweek.com/article2/0,1759,1776773,00.asp)

AboveTheCrowd.com – Believe It or Not: Your State Leaders May Be Acting to Slow the Proliferation of Broadband

by J. William Gurley, AboveTheCrowd.com, 3/11/2005

A very important battle is emerging between the cities and towns of America and the incumbent telecommunications carriers (ILECs) and cable operators (MSOs). The former are fighting to retain the rights to control the destiny of their own telecommunications services, while the latter want to ensure that these cities do not become a competitive threat to their core monopolies. In March of 2004, the Supreme Court ruled (Nixon vs. Missouri) that states "can" restrict their cities from offering telecommunications services if they choose. The Supreme Court did not say that they "should" outlaw this behavior, but simply that they "could." The ILECs and MSOs jumped at the opportunity, calling into action their massive state-by state lobbying campaign contribution efforts to push forward legislation that would attempt to stall the rising competitive threat of very low cost, citywide, wireless networks. Currently, the most high profile battle is in Texas, where <u>Sec 54.202 of the Texas House Bill 789</u> seeks to strip the municipalities of such rights. There is also proposed legislation in 11 other states including Florida and Colorado.

New technologies, such as 802.11, mesh networking, and eventually WiMax, allow for the quick and easy deployment of high-performance broadband networks. Consider the town of <u>Chaska</u>, <u>Minnesota</u>. Last summer, Chaska, through an ISP that is associated with the city-owned utility, deployed a 16 square-mile, 802.11 citywide network, leveraging <u>Tropos Networks' 5110 mesh</u> <u>routers</u> (Benchmark is an investor in Tropos). This multi-megabit network, operating at speeds similar to DSL and cable, and much higher than 3G wireless technologies such as EVDO, offers coverage to its citizens throughout the entire town (picture an umbrella of 802.11 coverage). The city priced its broadband service at a competitive <u>\$15.99/month</u>, and the citizens voted with their pocketbooks. In twelve short weeks, over 25% of its citizens signed up for and installed the service. Chaska believes it has an asset that differentiates itself relative to other cities. This asset improves quality of life, improves the quality of education, and attracts businesses and jobs. What's more, due to the low-cost of the infrastructure, Chaska expects to pay for the entire network in less than 18 months.

Some state legislatures, and the above-mentioned ILECs and MSOs, feel that the citizens of tens of thousands of towns and cities across America should not be allowed to make a decision like they made in Chaska. To protect their rights of self-determination, it is imperative that these cities and towns, and their citizens, do everything they can to prevent these state laws from being passed. Smartly, the states of Indiana and Illinois, and the city of Philadelphia, have already said "no way" to such initiatives.

Here are six key reasons why other states should do the same:

1. The primary reason these legislators are proposing to "take rights" from these towns and cities is to reduce or eliminate competition for the ILECs and MSOs. Allowing incumbent carriers with little to no competition to push laws onto the books that blatantly impinge on the rights of the municipalities is unprecedented. This is equivalent to allowing auto manufacturers to introduce legislation that cities shouldn't be able to fund city buses or other forms of mass transit. Or imagine a large real estate developer urging state legislators to outlaw cities from building low-income housing, simply because they compete with their apartment projects. The ILECs and MSOs wouldn't even exist if it wasn't for government cooperation in the form of eminent domain, franchise agreements, etc. The most restrictive of the proposed antimuni network legislation (such as that in Colorado) would prevent cities from leasing pole attachment rights. This is a clear violation of Title 47, 253(a) of the United States Code. Obviously, this is a direct effort to reduce competition and increase monopoly rents. The incumbents also argue that the municipalities are ill prepared to deploy the network and provide proper customer service. Isn't it ironic that they want to protect them from competition that is in

their own view inept and uncompetitive? It is as if the Harlem Globetrotter's found out that their nemesis, the Washington Generals, were actually holding practice and now they are up in arms about it.

2. An oligopoly does not a marketplace make. Some conservative legislators argue that cities simply shouldn't be in competition with these private service providers. However, there is no proof whatsoever that open competition exists in markets were there are only one or two alternatives for service. In fact, in cases where there are only one or two providers, monopolistic and duopolistic actions tend to work to the detriment of the consumer. Chaska.net proved wildly popular with consumers because DSL and cable modem services in town cost 2-3 times as much as the wireless network. Guess what is going to happen to broadband prices in that town now? The FCC is quite proud of the fact that it was not until a third cellular provider was introduced to most regions (with the auction of the PCS licenses), that competition increased to the point of aiding the consumer. One proof point that this lack of competition harms customers can be found in the numerous cases around the country where ILECs are being sued for a practice known as "redlining." Redlining refers to the practice of only pushing new services and technologies in wealthy communities and ignoring the poorer communities. In Texas, 93 counties have only one service provider and 70% of rural areas have absolutely zero access to broadband. On top of all this, the US ranks 13th worldwide in terms of broadband penetration per capita, and is falling in the ranking. Is this really an environment where competition needs to be reduced?

3. Taking these rights from municipalities will have a negative overall impact on American innovation. The technology industry at large has a ton to lose if initiatives like these are adopted. Why? Because it is the efforts of the more progressive cities and towns that push the envelope forward in terms of technology and innovation, especially when it comes to communications services. Additionally, more broadband competition leads to faster and cheaper broadband, which will obviously have a huge impact on the demand for technology products and services. Faster and cheaper broadband will greatly expand the breadth of services that can be offered into the home. Services such as IP video on demand, VOIP, video telephony, and streaming online education are all dependent on a massive broadband footprint. Considering that this is at a time when many Americans are concerned about high-tech job growth and innovation shifting to Asia, why are we considering proposals that will cause America to fall further behind?

4. Even if a city has no intention of deploying wireless services, it is still in that city's best interest to retain the right to do so. Consider the example of two cities, City A and City B. City A has the right to deploy telecommunications services if it so chooses, whereas City B is in a state where the legislators have taken away its rights to do the same. Now consider what happens when the ILEC that serves each city begins to drag its feet on a new broadband deployment, or it decides it is going to "raise rates" on its DSL service. Which city is more likely to be able to negotiate a better outcome: the city that retains the leverage or threat of being able to be able to deploy its own services (City A), or the city that negotiation (City B)? Anyone that has ever sat down to the negotiation table knows the answer to this one. <u>Over the next 5-10</u> years, the states that restrict the rights of their cities will be surprised to find that the ILECs and MSOs moved much faster in deploying services, and deployed them at much lower prices, in the other states that allowed their municipalities the right to compete.

5. In 2005, isn't it reasonable and potentially enlightened for a city to choose to offer broadband as a community service? It is common practice in American for a municipality to provide services to its citizens in areas where (1) there are economies of scale for the city providing those services, and (2) where it is in the best interest of the community. As such, local government agencies are the primary provider of schools, libraries, road construction and maintenance, security, fire protection, judicial services, and certain registrations and licenses. In 3,600 cities across the US, cities currently provide utilities such as power, water and electricity. Today's 21st century American city finds itself concerned with (1) the quality of education of its children, (2) whether or not those students will be competitive in a global marketplace for jobs, (3)

the reduction of employment opportunities in such staple American industries as agriculture, manufacturing, and textiles, and (4) the fact that even "new economy" jobs such as call centers, help desks, and even software engineering are increasingly moving overseas. In such an environment, who is to say that the future citizens of any municipality will not be better served by having subsidized or perhaps even free access to the Internet? Isn't this the library of tomorrow? The reason America is 13th in the world in per capita broadband is precisely because government entities in other countries invested in broadband as a community service to the people. Perhaps Michael Copps, FCC Commissioner, said it best in a recent interview, <u>"I think we do a grave injustice in trying to hobble municipalities. That's (municipal wireless) an entrepreneurial approach, that's an innovative approach. Why don't we encourage that instead of having bills introduced?"</u>

6. A founding American principle - localized government whenever possible. Perhaps the most insupportable aspect of these efforts to take rights from American cities is that the effort reeks of heavy-handed, centralized government. One can be certain that these same legislators seethe whenever our national government attempts to impose rules and regulations on the states. Those states recognize that their local constituency is smart enough to make decisions for themselves. The effort to restrict the rights of these municipalities from a state level is denying the citizens of these communities the right to make their own decisions. Moreover, it infers that these citizens, and their elected officials, are not intelligent enough to make these decisions themselves.

In what is ostensibly the cornerstone "democracy" on the planet, one would think that the citizens in each of America's cities could simply "vote" on the services they believe make sense for their city to provide. Running a wireless network in a city like Topeka, Kansas simply has no overriding impact on the state as a whole. As Thomas Jefferson aptly wrote in a letter to William Jarvis in 1820, *"I know of no safe depository of the ultimate powers of society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform them."*

If you would like to ensure your town or community has the right to deploy innovative broadband services (and you don't live in Indiana, Illinois, or Minnesota), please send letters, emails, faxes and phone calls to your local legislators to urge them not to pass laws that take broadband service rights away from your city. In Texas, please let the <u>members of the house and senate</u> telecommunications committees know where you stand on this. Save Municipal Wireless.

The Above the Crowd newsletter focuses on the evolution and economics of high-technology business and strategy. The information contained herein has been obtained from sources believed to be reliable but not necessarily complete, and its accuracy cannot be guaranteed. Any opinions expressed herein are subject to change without notice. The author is a General Partner of Benchmark Capital and its affiliated companies and/or individuals may have economic interests in the companies discussed herein. J. William Gurley 2003. All rights reserved.

If you would like to be added to the Above the Crowd distribution list, please visit <u>http://www.benchmark.com/about/bill.html</u> and submit your email address. You will be added to the list immediately.

c|net News.com – Hands off our Wi-Fi network!

Why are Wireless Philadelphia and other city wireless programs such a big threat? More precisely, why do the big boys keep trying to kill our Wi-Fi networks? By Dianah Neff, City of Philadelphia's CIO, 2/10/2005 (http://news.com.com/Hands+off+our+Wi-Fi+network/2010-1071_3-5571655.html)

Tell me who among incumbent local exchange carriers (ILECs)--have deployed ubiquitous, highspeed wireless networks that support roaming/mobile capabilities. No ILEC. Who provides highspeed, broadband, ubiquitous services at dial-up rates for the underserved populations? No ILEC. Who is working to get equipment and training into the homes of low-income and disadvantaged portions of our community? Again, no ILEC.

No, they'd rather charge the city governments with having an unfair competitive advantage because of the governments' access to tax-exempt financing. But who says we are financing Wireless Philadelphia with tax-exempt funding? What about all the incentives the ILECs have received the past two decades? When was the last time they were elected to determine what is best for our communities? If they're really concerned about what is important to all members of the community, why haven't they built this type of network that meets community needs or approached a city to use their assets to build a high-speed, low-cost, ubiquitous network?

For all the money they've spent lobbying against municipal participation, they could have built the network themselves. The truth, of course, is that the incumbent local exchange carriers want unregulated monopolies over all telecommunications.

On this point, Dr. Mark N. Cooper, research director at the Consumer Federation of America, notes that about 95 percent of high-speed Internet access service customers are served by ISPs associated with cable or phone companies. In a paper he wrote for the Journal of Telecommunications and High Technology Law, Cooper found that this dominance was the result of leveraging control of physical facilities, not the result of winning in a competitive market.

"Cable companies have not sold Internet service in any product and geographic market where they do not control a monopoly wire," Cooper wrote. "Telephone companies have done very poorly as ISPs in the dial-up market. Consequently, 95 percent of the customers in the dial-up market take their service from independent ISPs--treating AOL as an independent in the dial-up market. In other words, incumbent monopolists have a 95 percent market share where they can leverage their market power over their wires, and a 5 percent market share where they cannot."

Since the 1980s, ILECs have been talking about installing fiber as long as they were given incentives to protect their investments. Now, in Pennsylvania, they've been given another 12 years, and they promise to upgrade some share of the homes passed to fiber optics if, and only if, they don't have to let competitive local exchange carriers (CLECs), Internet service providers or video program providers onto their network. (And by the way, let's prohibit governments from serving their community with low-cost Internet access to strengthen economic development in the neighborhoods, to help overcome the digital divide or to help families with children better communicate with teachers and the administration to improve their kids' education.)

Who says the government is going to be the ISP or build the network? What about the old publicprivate partnership models? Maybe--just maybe--they should see what the City of Philadelphia is proposing before they attack.

CMP TechWeb.com – Broadband 'Redlining' Issue Raised In Fiber Deployment

By W. David Gardner, CMP's TechWeb.com, 2/11/2005

Broadband "redlining"--the deployment of network upgrades in upscale neighborhoods rather than in low-income urban areas --is becoming a hot issue, as telephone companies continue to roll out their advanced broadband technologies across the nation.

In the latest episode, Massachusetts Congressman Edward Markey--a long-time crusader against all forms of redlining--has focused on Verizon Communications' Massachusetts fiber rollout, which has been targeted primarily at upscale, mostly white, suburban communities.

Markey, who hails from the working-class community of Malden, told the Boston Globe: "I would be very interested to see which communities are going to be on Verizon's next list of deployment to see whether places like Malden that have diverse populations and more moderate incomes are going to be provided with these competitive services."

Elsewhere in the nation, SBC Communications was recently charged by a group of Chicago inner-city clergymen with favoring upscale neighborhoods for deployment of its high-speed fiber Project, Lightspeed. Part of the debate centers on new "hands off" regulatory measures, which the telephone companies believe enable them to install fiber-optic networks without first obtaining local and state regulatory approval.

The telecommunications-redlining issue has a long history, and federal legislators, including Markey, made sure the issue was addressed in the Telecommunications Act of 1996. Markey, who is the senior ranking Democrat on the U.S. House telecommunications subcommittee, is monitoring the issue, not only in his district, but nationally.

The latest Massachusetts issue was prompted by Verizon's move this week to deploy its advanced fiber-optic network in four upscale Boston suburbs. The Boston Globe pointed out that Verizon still hasn't revealed any plans to install the coveted fiber service in Boston.

A Verizon spokesman pointed out that fiber deployment is faster and easier in the suburbs, noting that the firm plans to provide fiber also to urban customers "without question, unequivocally." An urban community that will receive fiber will be named soon, Verizon said.

SBC—which, like Verizon, is rolling out TV-capable fiber to compete with cable companies--said the redlining charges leveled against it were "a red herring." The firm said it will target "high-value customers" wherever they are, with no regard to race or income.

Earlier, in 2002, AT&T Broadband had been charged in a class-action lawsuit in Florida for redlining high-speed.

California Redevelopment Assn – WiFi Hot Zones: A Fad or the Future?

A New Technology for Redevelopment Project Areas

By Curt Gibbs, Sr. Resource Development Officer, California Redevelopment Association, 3/2005 (<u>http://www.etopiamedia.net/ula/pdfs/gibbs1.pdf</u>)

When technologically savvy redevelopment practitioners envision future project areas, many of them see "Hot Zones," entire city blocks where information from the Internet can be accessed via WiFi (Wireless Fidelity)-enabled devices. They see residents, workers, and tourists firing up notebook computers and WiFi-enabled Personal Digital Assistants (PDAs) and cell phones to glean – for free – online information about events and services available within walking distance in project areas. That future is now!

Local redevelopment and economic development agencies are increasingly recognizing the draw of WiFi technology. With initial deployment and first-year operation costing between \$25,000 and \$50,000, WiFi can provide redevelopment agencies a big bang for relatively small bucks.

Furthermore, as travelers decide to stay in certain hotels based on WiFi availability, corporations provide WiFi access for their conference rooms, and search engines and online retailers tailor products to serve location specific markets, WiFi can be viewed not only as an added draw, but also as a requirement for commercial and downtown redevelopment projects.

WiFi Beginnings

WiFi "Hot Spots" arose when small, pioneering private companies launched Internet services in coffee shops, hotels, airports, and convention centers. Hot Zones developed after the introduction of WiFi "mesh technology" allowed for cost-effective deployment for multi-block areas. Cities are now considering how such technology can be used citywide. As competition for the "voice market" now begins to intensify between cable companies, traditional telephone companies, and cell phone companies, WiFi has become a wild card in the market place.

Companies like Aiirmesh, Verge Wireless, and local start-ups began partnering with cities and redevelopment agencies about two years ago.

Because redevelopment agencies work closely with the business community and other stakeholders, agencies have been able to help finance and/or coordinate the WiFi projects.

Meanwhile, convention center operators offering WiFi services onsite realized that they needed adjacent outdoor service as well. As a result, they too have approached redevelopment agencies for assistance.

In January 2003, the City of Long Beach pioneered public involvement in WiFi service when it created a Hot Zone along four blocks of Pine Avenue within its downtown redevelopment project area. The action garnered immediate national and international publicity.

Since then, local governments throughout the United States have taken the lead in creating public WiFi districts or Hot Zones with redevelopment agencies playing an important part in coordinating and financing this effort.

WiFi Technology

WiFi has been around for only a few years, but technological advancements are allowing easier access in communities. WiFi uses the unlicensed 2.4 GHz frequency – the same frequency used for a home microwave, a portable home phone, or a wireless home computer network. WiFi operates at a much faster broadband speed connections and is a technological leap over ordinary, and much slower, current cell phone access to the Internet.

To access the Internet via WiFi, computers or other hand-held devices lock onto radio-like devices. A major asset cities provide is the use of overhead streetlights or other poles to mount the WiFi radio devices.

By using mesh technology – a form of communication technology originally designed for military use – the radio devices communicate with each other which eliminates the need for a central device mounted on a special tower as in cell phone technology. Thus, the devices provide a seamless canopy of WiFi service.

A single enterprise quality device can provide service for a city block or larger area, while several of these linked devices can service entire business communities or residential neighborhoods.

The speed at which WiFi has been deployed is, in part, a result of consumer enthusiasm over new technology and, in part, from aggressive promotion by technology companies. In addition, more and newer mobile WiFi devices are entering the marketplace such as smaller notebook computers, smart phones, PDAs, and hand-held gaming devices, which are creating greater interest by the public in accessing this technology.

Current WiFi Projects

Examples of redevelopment agencies involved in WiFi projects include the cities of Fullerton and West Hollywood. In January 2005, Fullerton launched a WiFi project covering 24 downtown blocks. That same month, the City of West Hollywood received proposals for a pilot project on Santa Monica Boulevard from La Brea Boulevard to Fairfax Avenue and other commercial areas.

The Community Redevelopment Agency of the City of Los Angeles (CRA/LA), in partnership with the City of Los Angeles Recreation and Parks Department, expects its WiFi project in Pershing Square to be up and running in March. The project will be marketed to downtown residents, workers, and tourists to increase the number of Pershing Square visitors by offering broadband Internet access. Users will log onto an entry page for the Pershing Square WiFi District that incorporates information from CRA/LA sponsored, ExperienceLA.com – a website listing countywide culture events, institutions and transit information. Other links will provide information on the park, the neighborhood, and CRA/LA. Revenues are being identified for additional services as part of the business model.

Meanwhile, the cities of San Jose, Culver City, Hermosa Beach, Cerritos, Los Angeles, and Riverside have all launched WiFi projects as part of economic development initiatives, often with redevelopment agency involvement.

Furthermore, Hermosa Beach is considering expanding its system across the entire city and Los Angeles has created a mayoral panel to study how WiFi can help to meet the broadband needs of the entire city. Recently, Los Angeles also issued a Request for Information to determine the potential use of and revenues from leasing city-owned assets for telecommunication needs. In addition, San Francisco has WiFi plans in the works and Anaheim is now studying how to provide WiFi.

Adopting WiFi

In deciding to deploy public WiFi, several important initial steps must be taken, according to government strategist, Matt Stone. They include the following:

- ?? Determining if the community will benefit from WiFi.
- ?? Building a team with critical stakeholders.
- ?? Developing partnerships with leading technology companies.
- ?? Educating the community about WiFi.
- ?? Developing a strategy to work with existing telecommunication providers.

Other considerations include planning for future expansion of the WiFi zone, investing in mesh technology to cover large areas, considering the amount of bandwidth to provide, determining how the Hot Zone will connect to the main telecommunications hub for the region, and deciding whether to mount WiFi devices on street lighting standards or other places. Although redevelopment agencies have created public-private partnerships and have provided capital for two-year pilot projects, sustainability is still in question as agencies search for a self-sustaining business model or decide whether to offer it as an ongoing service funded by the business community with local government incentives.

The Future of WiFi

Even as cities install existing WiFi technology, Intel is preparing to launch the next step, WiMAX technology, which uses the same core technology as WiFi, but is able to carry more information in a higher bandwidth and over longer distances. WiMAX would provide cost-effective hookups to regional telecommunication hubs for local WiFi networks or enable WiMAX-equipped computers to reach the Internet at distances of up to 30 miles.

While the incorporation of WiMAX into mobile devices is still many years away, there are currently over 75 million WiFi-enabled devices worldwide. Meanwhile, major corporations are looking at opportunities to compete against traditional telecommunication firms using Voice over Internet Protocol (VoIP) connections for the home or the office, with some considering WiFi for VoIP.

Recently, SBC announced a partnership with the California Department of Parks and Recreation to create 85 Hot Spots in state parks throughout California. After a two-year test period, the project will be expanded to nearly 400 parks. (*Wayne Caswell – Rather than fighting against municipal networks, SBC benefits from public-private partnerships.*)

Many hotels now offer free WiFi in their public spaces or in rooms. While Starbucks and T-Mobile first provided paid WiFi, competing coffee shop retailers now see WiFi as a necessary free amenity for their customers. Within traditional shopping centers, WiFi, once restricted to the food court, is being deployed throughout the center. Business Improvement Districts are considering WiFi technology in mobile devices for their staff and in security cameras.

The day is fast approaching when WiFi will be as commonplace as other telecommunication infrastructure. Redevelopment agencies in consultation with their stakeholders should consider weather WiFi will become another standard feature in developing urban and commercial project areas. (*Wayne Caswell – This won't happen if municipalities are prohibited from offering network services themselves or through partnerships with private industry.*)

You can learn more about WiFi and how redevelopment agencies are playing an important role in WiFi deployment by attending CRA's annual conference. A session entitled, Public WiFi and Redevelopment, is being held on Thursday, March 10 at 11:00 a.m. The session will feature a panel that will discuss the use of public WiFi as an economic development tool in redevelopment project areas. This writer will serve as the moderator, and representatives from Long Beach, Culver City, Verge Wireless, and Tropos Networks will serve as panelists. For further information on this session as well as additional information on the conference, go to CRA's website at www.calredevelop.org.

For further information on WiFi, go to the following websites: www.muniwireless.com, www.WiFiplanet.com, or www.Dailywireless.org.

Broadband Front Lines: Broadband wars taking toll on smaller competitors

By Carol Wilson, Telephony Online, 3/28/2005 (http://telephonyonline.com/home/news/wts_transcom_verizon_032805/)

In theory, a competitive broadband communications market allows small companies to carve out a niche, providing services that larger companies don't. But as a couple of small Texas firms are finding out, surviving in a broadband world dominated by giants can be practically impossible.

(**Wayne Caswell** – The giants can apply their extensive resources – attorneys, lobbyists, campaign contributions, and capital – to drive small companies out of business. The dwindling number of CLECs and ISPs is cause for concern, and it can't all be blamed on poor management, as the giants claim.)

In <u>Brownwood, Texas</u>, WTS Online is trying to compete with Verizon Online, while buying DSL service wholesale from its parent company, Verizon. As the retail prices for DSL service continue to drop, however, WTS is getting badly squeezed, says Larry Summers, general manager.

He is convinced VOL is selling service below its costs, and driving the competition out of business in the process.

Less than 200 miles away in <u>Irving, Texas</u>, Scott Birdwell has even more tangible proof that another giant, SBC Communications, is trying to put his enhanced services company out of business. SBC has sued Transcom Enhanced Services in a Missouri court, claiming the company owes access charges for the voice-over-IP features it is selling on a wholesale basis. SBC's access claims have cost Transcom a contract with AT&T, as well as major customers, forcing the company to file for bankruptcy as a strategic move. Birdwell is hoping the bankruptcy court will take action on what he says is illegal behavior by SBC.

Who loses?

Both Summers and Birdwell say the failure of companies such as theirs will leave consumers with fewer choices. In Summers' case, he sees his base of rural customers being lured to Verizon by lower DSL prices, even though the service they ultimately receive may be less.

"The bottom line is simple," Summers wrote in a filing with the Federal Communications Commission this year. "Verizon has retail and wholesale contracts with independent providers at a cost that is higher than their lowest priced 'retail' bundled price and an unbundled price little more than the wholesale price. The result is that over 90 percent of DSL customers have chosen to save money--temporarily in my opinion--by taking the lower price from the unregulated subsidiary instead of an independent. This is monopolistic practice, by any definition, in my opinion."

He estimates Verizon Online's costs at a minimum of \$39, when the tariffed wholesale cost of the line is added in with universal service fees, and the cost of bandwidth, customer service and acquisition, billing and collections, payment to partner MSN, and administrative overhead. Verizon Online currently sells DSL for \$29.95--or three dollars more than the tariffed wholesale rate-and throws in a free wireless router.

Summers' company provides computer repair and IT services, in addition to being an ISP. But companies such as his won't survive if they can't compete on a level playing field in the broadband world, Summers said in a telephone interview.

"Verizon isn't going to help them fix their computer when it's infected with spyware," he said. "In fact, the worst spyware I've ever seen came with a Verizon Online ad, and their customers couldn't get rid of it."

In major cities, getting computer repair assistance is no big deal but in rural communities, a shrinking pool of IT shops stands to shrink further, Summers said. *"I can't stay in business competing with Verizon Online, when every customer who calls Verizon for anything hears a commercial for Verizon Online, and every Verizon technician is getting a credit for referring customers."*

A spokeswoman for Verizon denied any intent to drive small ISPs out of business, saying Verizon wants the revenue generated by those companies.

She added, however, that the "FCC has certified our business as competitive," and said smaller ISPs "have other options for access," including wireless service.

Summers has explored those options and said wireless access is too costly for the Brown County area he serves. In his lengthy filing with the FCC, in response to Verizon's petition for forbearance seeking regulatory relief for its DSL service, Summers asks the FCC to investigate whether Verizon and other former Bell companies are selling DSL service below cost, and if so, to step that predatory practice.

He's not holding out a lot of hope, however, because companies such as WTS Online can't afford the legal assistance needed to fight the lobbying influence of the Bell companies. *"I don't have the \$75,000 I'd need to hire a lawyer to fight this at the FCC,"* Summers said.

Unusual step

Birdwell and Transcom also aren't taking their case to the FCC, even though that's where it's likely to wind up. Birdwell, the company's CEO, believes that would take too long and eat up too many resources. Transcom has been operating an IP-based network since 1998, aggregating bandwidth on a wholesale basis and reselling enhanced VoIP-based services to other carriers.

About a year ago, its problems with SBC began when that company used an FCC ruling regarding AT&T as the grounds for collecting access fees from Transcom and others.

"SBC took that ruling and said it applies to all enhanced service providers and began to come after us and some of our competitors," said Birdwell. "They essentially said, 'You are subject to access fees, anybody that uses you owes us access fees, and anybody that sells services to you owes us access fees.""

SBC declined to comment on the matter, because it is in litigation.

Birdwell and Transcom President Chad Frazier believe the FCC's ruling on AT&T does not apply to their company.

"We felt that the AT&T ruling, rather than negate our exemption, solidified our exemption," Birdwell said. "AT&T didn't meet the standards, but in our situation, there is a change in content on each call we handle and, in a lot of calls, a net change in form. So that ruling specifically said it didn't apply to us."

But SBC and now AT&T disagree with that interpretation. AT&T terminated its contract with Transcom in early February with four days notice, Birdwell said.

"AT&T had supported our exemption status for last two years and had been a supplier of ours, but the same week they announced they were being purchased by SBC, they did an about face-- they said we were doing something illegal and unlawful, and they were terminating services in four days time," Birdwell said. Transcom is fighting that contract cancellation as well.

The decision to file for bankruptcy was made to try to force the core complaint – that SBC is unfairly imposing access fees – into a courtroom as quickly as possible, said Frazier. The company is fighting SBC's lawsuit against Transcom and others, claiming the Missouri court in which SBC filed has no jurisdiction over matters involving two companies based in Texas.

But while it awaits a ruling, Transcom is losing customers and suppliers, because, Birdwell said, SBC has been in contact with both groups by letter. *"There is a tremendous amount of fear factor, because of SBC,"* he commented. *"A lot of our supporters and our suppliers are afraid to come forward and speak on our behalf, because of SBC. Our largest supplier has said they won't testify for us unless subpoenaed."*

Like Summer, Birdwell doesn't expect a lot of support from regulators or politicians.

"It's hard to go to a legislator and say, 'We want to go up against these guys who've given you \$10,000, and we're a little bitty company with 12 employees,'" he said.

CAZITech Consulting – False Predictions

(Extracted from http://www.cazitech.com/press_quotes.htm, with the author's added comments.)

Note that it's risky to say that something can't or won't be done, especially when technology is concerned. Ask, "Where will innovation come from?" Public or private sector? Corporations or individuals? Domestic or abroad? Encourage them all and don't count any of them out.

Encouraging innovation and competition is a good reason why states should NOT prohibit American cities, towns and neighborhoods from installing community networks. In arguing against these networks, the ILECs and MSOs are making false predictions about the impact on competition, network reliability, jobs, and other issues.

Here are other false predictions that still haunt us today:

Invention – "Everything that can be invented has been invented." Charles H. Duell, commissioner of the US Patent Office, recommending that his office should be abolished (1899) Since necessity is the mother of invention and municipalities need broadband access and can't get it, they are applying new technologies and inventing new business models.

Computers – "There is no reason for any individual to have a computer in their home." Kenneth Olson, founder of Digital Equipment Corporation (1977) And no need for broadband?

Computers – "640 K [of computer memory] ought to be enough for anybody." Bill Gates, founder and CEO of Microsoft (1981) Is dialup enough? Or cable & DSL speeds? Modern apps already need more.

Computers – "So we went to Atari and said, 'Hey, we've got this amazing thing, even built with some of your parts, and what do you think about funding us? Or we'll give it to you. We just want to do it. Pay our salary, we'll come work for you.' And they said, 'No.' So then we went to Hewlett-Packard, and they said, 'Hey, we don't need you. You haven't gone through college yet.'" Steve Jobs attempts to get Atari and HP interested in his Apple PC

We have this amazing Wi-Fi technology, and you won't let citizens use it?

Internet – "Almost all of the many predictions now being made about 1996 hinge on the Internet's continuing exponential growth. But I predict the Internet will soon go spectacularly supernova and in 1996 catastrophically collapse."

Robert Metcalfe, founder of 3Com and inventor of Ethernet (1995) And municipal networks will fail?

Telephone – "This telephone has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us." Western Union internal memo (1876)

Do municipal networks based on Wi-Fi have too many shortcomings?

Telephone – "The Americans have need of the telephone, but we do not. We have plenty of messenger boys."

Sir William Preece, chief engineer of Britain's Post Office (1876) Other nations have a broadband policy, but we don't need one? **Television** – "While theoretically and technically television may be feasible, commercially and financially I consider it an impossibility, a development of which we need waste little time dreaming."

Lee DeForest, radio development pioneer and inventor of the vacuum tube Community networks are feasible, but a waste of time?

Electricity – "Fooling around with alternating current is just a waste of time. Nobody will use it, ever."

Thomas Edison (1889) Is fooling around with Wi-Fi and community networks a waste of time?

Space – "There is practically no chance communications space satellites will be used to provide better telephone, telegraph, television, or radio service inside the United States."

T. Craven, FCC Commissioner (1961) But he didn't make space satellites illegal.

New Businesses – "The concept is interesting and well-informed, but in order to earn better than a 'C' the idea must be feasible."

Yale professor's comments on a term paper submitted by Fred Smith for an overnight delivery system. Two years later, Smith founded Federal Express. FedEx and UPS both found ways to compete against the US Postal Service.

New Businesses– "A cookie store is a bad idea. Besides, market research and focus groups confirm that America wants soft, not chewy, cookies."

Investor rejection letter to Debby Fields, founder of Mrs. Fields' Cookies If you believe in yourself, go for it. – Don't outlaw this thinking.

Stocks – Would you have invested in this 10-person company? Local ingenuity sometimes trumps corporate greed.



BLOGS – Random clippings from various Web logs

These clips are selected because they make important points that are not covered elsewhere.

Government as Competition

ILECs complain:

"No business can compete, on equal footing, with the <u>government</u>. Not even Wal-Mart could compete with the local <u>government</u>. TALK ABOUT A MONOPOLY! The <u>government</u> is a MONOPOLY with LAW-MAKING POWER!"

But government (in a democracy) is the collective will of the people. The people should rightly have a "monopoly" over their own lives. Let's replace "government" with "people" and see how this argument reads:

"No business can compete, on equal footing, with the <u>people</u>. Not even Wal-Mart could compete with the local <u>people</u>. TALK ABOUT A MONOPOLY! The <u>people</u> are a MONOPOLY with LAW-MAKING POWER!"

Would you prefer that corporations wielded the law-making power instead of the people?

Were it not for "government big brother monopoly," the DARPA initiative that spawned the Internet lore would not have happened. Further, when the time came for government to move aside and commercialize what had been created, it did so.

Elected and appointed officials in major cities are focused on 1) decreasing the cost of government, 2) bringing affordable services to low-income and disadvantaged residents and businesses and 3) working to foster higher rates of economic development. Those are three things that shareholders in private organizations are not directly incented to do (which is understandable), therefore elected officials must take up the charge. So I ask, "Who put you in office? Was it the citizens of the state of Texas or SBC and other monopolies with large lobby and campaign budgets?"

If objections to municipal Wi Fi are that government has an unfair advantage, or that government will do a poor job of managing such projects - we should talk about guiding them to address these shortcomings, not take such drastic steps as precluding them from fully leveraging the very assets we have already paid for, or from meeting the needs of the citizenry that are not being met by the private sector.

The telecom providers' actions in this case are despicable. Since when does a corporation get to override the wishes of the people? This is what government is all about -- people getting together to build up their community in any way they see fit. Telecom corporations have no business telling the people they cannot build their own infrastructure. Their actions are undemocratic and un-American.

South Korea was one of the hardest hit by the Asian currency crisis in the 90's. One of the major reasons that Korea recovered so rapidly from an economic depression (not even recession) was the focus by the government on building broadband and other telecommunications infrastructure above the commercial interest of telcos.

This is another step by "big telecom" to convince the public that communications NEEDS to be regulated – by ILECs and the government bureaus they control. So, its implications go way beyond hotspots. This is a big one and lots of folks should gear up. If this is not stopped, big telecom will further its strangle hold on all forms of communications and set the stage for making Wi-Max and fiber optics – in the hands of anyone but the ILECs – as illegal and demonized as crack.

Jobs

One possible argument against government getting involved is that, businesses going out of business would lead to lay-offs, dragging down the whole economy, which is not what the government likes to see. However, job-churning has been a common phenomenon in U.S. economy for decades. Disruptive technologies often lead to lay-offs in old occupations, but these same technologies would create new jobs in other areas. People need to get training from time to time to catch up with the tides of technologies. That's just the way a modern economy is supposed to grow. It is these monopolic businesses trying to protect their own interests that slows the overall pace of progress of technologies and economy...

Cities using Unproven Technology

Referring to Wi-Fi as a "cheap home networking technology" is grounded in naivety. Looking at this historically, I could refer to Ethernet (the 802.3 predecessor to Wi-Fi) as a "cheap local area, workgroup technology". Just as Ethernet has continued to evolve, now supporting multi-gigabit speeds, and used as the backbone technology by many large enterprises, so too does Wi-Fi continue to evolve beyond it's initial use.

When a technology becomes a breakaway success and ubiquitous like Wi-Fi has, increasing returns are possible through the armies of engineers around the world who continue to refine, enhance and build on its underpinnings. Remember Linux being scoffed at by certain software companies? Remember the Web browser being considered a toy? Remember how Client/Server ruled and Web architectures were a joke? Were Kodak and Nikon worried about camera phones before the number of them sold annually became greater than all digital cameras combined? I've learned that scoffing at technologies based on their roots, where they came from, is a dangerous practice.