MAY 23, 2008

BART-Fi Moves Closer: Negotiation Under Way

BY GLENN FLEISHMAN

WiFi Rail gets a nod **from the Bay Area Rapid Transportation (BART) authority's board:** The board of the giant SF bay people mover has given a kind of tacit go-ahead for negotiations with **WiFi Rail** (http://www.wifirail.net/index.html) , a company that has been testing a unique form of **delivering Wi-Fi using coaxial cable as antenna extensions** (http://wifinetnews.com/archives/008153.html) . Cooper Lee, founder and CEO, told me that the approval lets them focus on nailing down a contract with the authority, which he believes should take just a couple of weeks, as WiFi Rail is eating the costs of the project.

While this may sound familiar to those following municipal Wi-Fi, this deal is substantially different: it's much more like unwiring an airport than a city, and thus the expense in unwiring should be quickly

outweighed by the uptake by passengers. City-wide Wi-Fi promised 1 to 4 Mbps in most cases; WiFi Rail has tested out at 10s of Mbps—their technology turns rail segments into wireless LANs with excellent reception. They terminate with fiber all over, so aggregation and backhaul isn't an issue. And unlike an airport, where travelers might turn to 3G cell data, those solutions don't work in the underground portions of BART and many other places along the rights of way due to obstructions.

And this isn't a "we have a great idea, let us build it" scenario. WiFi Rail has had test projects running for nearly a year, with a segment in San Francisco active for part of that time, and those tests determined the board's interest in proceeding. WiFi Rail **told IDG News Service** (http://news.yahoo.com/s/pcworld/20080523/tc_pcworld/146275) that 9,000 people have signed up for the current system and used 42,000 sessions.

WiFi Rail's network is currently free, and charges won't commence until the first stage is done. Lee said that fees, which will be about a dollar a day with subscriber discounts but are part of the negotiation with BART, will be charged at a 50-percent rate after the first phase is done until the whole network is complete. IDG notes that the company will be required to resell access at wholesale rates, and I expect aggregators like iPass (based in the Bay Area) and Boingo (further south in Santa Monica) will leap at reselling BART service, just as they do ferry-Fi here in the greater Puget Sound region.

The first route to be unwired will run from Balboa Park in San Francisco to two ends of a Y in Oakland, Lake Merritt and 19th St (see **system map** (http://www.bart.gov/stations/map/systemMap.asp)). For the 180,000 regular business commuters of the system, of which WiFi Rail wants to achieve an initial 20-percent uptake among, continuous Wi-Fi service should be a godsend against boredom and overwork. Yes, I know, for some, it will mean *more expectation of work*, but for others, it's a way to be mildly productive while en route, avoiding longer hours in the office or more work at home.

I need to go ride the ferries here during rush hour to talk to commuters and see what usage is likely on BART. There are tens of thousands of regular ferry commuters with an average 30-minute crossing as part of a longer (45 to 90 minute) trip each way into Seattle and other communities. It's a reasonable comparison with BART both in scale and nature of passengers.

What say you, Californian BART riders? Do you look forward to iPod touch, iPhone, BlackBerry (with Wi-Fi), and laptop connectivity? Or do you want to stay unplugged?

Posted by Glenn Fleishman at 3:18 PM | Permanent Link | Categories: Commuting | Comments (1)

MAY 23, 2008

Mobile Post: Rural Wireless Broadband

BY GLENN FLEISHMAN

MOBILE POST

What will happen to wireless broadband in less-populated areas? I discuss what I said to the Rainier Communications Commission in Pierce County, Wash., about the coming growth of mobile broadband across larger territories.

Map It: Clover Park Technical College, Lakewood, WA
(http://r1.fmpub.net/r.php?r=http%3A%2F%2Fmaps.live.com%2F%3Fwhere1%3DClover%2BPark%2BTechnical%2BCollege%252C%2BLa

Mobile posting sponsored by Windows Mobile
(http://dynamic.fmpub.net/adserver/adclick.php?bannerid=26266&zoneid=1779&dest=http%3A%2F%2Fr1.fmpub.net/r.p

Posted by Glenn Fleishman at 10:03 AM | Permanent Link | Categories: 2.5G and 3G, 4G, Cellular, Rural | Comments (0)

MAY 20, 2008

Three Essays on Muni-Fi You Should Read

BY GLENN FLEISHMAN

In the aftermath of the last man standing, MetroFi, announcing its metro-scale Wi-Fi endgame, three useful essays have appeared: If you're trying to understand the past, present, and future of the space, I recommend you read these short opinion pieces.

First, Karl Edwards of Excelsio, a firm that consults on municipal

broadband, **lays out a pretty straight case**
(http://www.muniwireless.com/2008/05/20/what-went-wrong-with-muni-wi-fi-what-cities-can-do-now/)
as to why EarthLink, Kite, and MetroFi's networks, among other
one-offs, were designed to fail. I've written about aspects of this over
the last four years, but Edwards is succinct. In part, EarthLink offering
to build Philadelphia's network at no cost to the city set the mold
wrong for all networks to follow. We're resetting now, and Wi-Fi's
moment may have passed.

Edwards offers as one the constraints set by cities, "Expectation that
the network would cover 90-95% of the City with wireless coverage as
opposed to just in the areas where there was a solid business case."
This has been a problem I've had for a couple of years when it started
to become clear that 90-plus percent coverage wasn't in the interest of
the ISP—nor in the city's interest because these networks couldn't be
completed.

Edwards also notes that when consulting for Grand Rapids, Mich.,
which chose Clearwire as its wireless partner, EarthLink told the city
that they expected a conservative 22-percent uptake for their Wi-Fi
service by end of the fourth year. Given that in mature markets, a
high-single-digit uptake is considered very good, that's shows how the
Excel spreadsheets were skewed. USI Wireless's estimates for
break-even require less than 10 percent of the population in their
covered areas to subscribe, and their numbers of subscribers to date
are tracking that number closely.

He closes with a set of eight principles for wireless network builders to
come to the table with and cities to adopt, all of which I agree with.

Next, **Esme Vos suggests a very modest proposal:**
(http://www.muniwireless.com/2008/05/17/how-sf-and-other-cities-could-have-created-citywide-wi-fi-access-the-easy-way/
San Francisco should have required all its cafes to offer free Wi-Fi, and
then Fon or others could have aggregated and bundled access to these
locations. There's a long set of comments accusing Esme of
communism, socialism, utopianism, and other isms. The post and the
comments make for lively reading.

Finally, Craig Plunkett, who operates hotspot networks around New
York City and Long Island, chimes in with a summary of these opinions
and the notion that **muni-Fi jumped the shark**
(http://www.cedx.com/2008/05/when-did-muniwi.html?cid=115472508#comment-115472508)

when Ocean City, N.J., decided to put Wi-Fi in garbage cans. He points out that "an infill strategy" of providing service where needed and then extending from there is effective.

Posted by Glenn Fleishman at 12:50 PM | Permanent Link | Categories: Municipal | Comments (0)

Free Wi-Fi for AT&T Laptop Mobile Broadband Subscribers

BY GLENN FLEISHMAN

AT&T extends its free Basic Wi-Fi package to laptop-based mobile broadband subscribers, but not to smartphone users, including iPhones:
(http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=25723)
This is a logical move, vastly overdue, because it's a better experience for a laptop user to have access in a Wi-Fi hotspot, while simultaneously removing load from AT&T's 3G network. This was predicted many years ago—as early as 2001 by EarthLink, Boingo Wireless, and Helio founder Sky Dayton—that 3G spectrum was scarce enough and expensive enough to operate that using Wi-Fi like a local heat sink to bleed usage off would keep 3G usable.

The other advantage, of course, is that 3G laptop users that find themselves out of the HSPA coverage area offered by AT&T don't fall back to EDGE or GPRS as long as they can find an AT&T-included hotspots. No hotspot operator likes to guarantee a particular local network speed, but I know that Wayport—which has or will build nearly all of the 17,000 locations in question here—aims for T-1 speed (1.5 Mbps each way) and quality (guaranteed uptime), depending on availability.

Windows laptop users with AT&T's Communication Manager software (version 6.8) installed will be automatically logged onto hotspots—and, I would guess, logged *off* 3G whether the user wants that or not! I'll be curious about reports from the field.

A 5G/month ($60/month or greater) plan is requierd for free Wi-Fi service.

The Boy Genius Report **quotes**

(http://www.boygeniusreport.com/2008/05/19/att-launching-free-wifi-for-laptop-connect-all-smartphones-later-in-2008/) what appears to be an internal AT&T memo about today's launch that free Wi-Fi for smartphones is coming later in 2008. Boy Genius has a remarkably good track record for a rumor/leak site, so I'm inclined to believe their report.

Posted by Glenn Fleishman at 9:32 AM | Permanent Link | Categories: 2.5G and 3G, Cellular, Free, Hot Spot | Comments (0)

MAY 19, 2008

Wee-Fi: Portland Coverage of MetroFi; Boston's Measured Pace

BY GLENN FLEISHMAN

The (Portland) Oregonian writes about the impending shutdown of MetroFi's network there:

(http://www.oregonlive.com/business/oregonian/index.ssf?/base/news/1210992908135060.xml&coll=7) As I reported last week, MetroFi plans to sell or shutdown the nine networks it operates on its own; I don't have a status on Riverside, Calif., where they act as an AT&T contractor. The Oregonian's Mike Rogoway notes that the city's expense includes a $250,000 feasibility study and the cost of a staffer who manages the project. Given the level of usage—the April numbers from MetroFi are 306,000 hours of use and 16,000 users—and despite the reported problems, that wasn't money wasted in light of citizen benefits. MetroFi **wants about $900,000**

(http://blog.oregonlive.com/siliconforest/2008/05/what_wifi_wants.html) to sell its nearly 600 SkyPilot nodes. I can't imagine the city or anyone paying for this, because that would tie the city not just to ongoing expense in operating a network that covers a small part of the city, but to SkyPilot. SkyPilot reported in April that they raised $3.4m for a lifetime total of $70m in financing, but they **haven't talked about**

(http://www.skypilot.com/newsevents/) new customer wins, deployment status, or units shipped since early 2007 (with one small network exception). It's unlikely any of MetroFi's or EarthLink's cities will purchase the gear on poles because even at bargain-basement prices, the cities would be buying into the engineering assumptions and vendor decisions of firms that decided to exit the business due to a lack of

return on investment. Hardly wise.

OpenAirBoston advisor editorializes that slow and steady is the way to figure out muni-Fi:

(http://www.boston.com/bostonglobe/editorial_opinion/oped/articles/2008/05/18/the_journey_to_a_wireless_boston/)

An op-ed by Brian Worobey of the Museum of Science in Boston notes that the local non-profit's slow pace—accidental, he notes, as it intended to roll out faster—could produce more information and a better result than the many failed all-at-once attempts for deployment. My current line on this is that Wi-Fi's likely utility in a city is in site-specific, limited area networks designed to solve particular problems. Call it reverse redlining or bridging the digital divide or simply gapfilling, but Wi-Fi could be used effectively and relatively inexpensively as a tool to bring broadband where it is not. But that has to be coupled with goals and plans: what is the point of bringing broadband? Job opportunities? Education? Entertainment? Having these answers would help produce the right kind of network.

Posted by Glenn Fleishman at 1:10 PM | Permanent Link | Categories: Wee-Fi | Comments (1)

MAY 16, 2008

Mobile Post: The End of Muni-Fi As We Know It

BY GLENN FLEISHMAN

MOBILE POST

MetroFi's plan to sell or shutter its networks spells end of first muni-Fi era: But it's not the end of municipal wireless.

Map It: Fremont, Seattle, Washington

(http://r1.fmpub.net/r.php?r=http%3A%2F%2Fmaps.live.com%2F%3Fwhere1%3DFremont%252C%2BSeattle%252C%2BWashington%26

Mobile posting sponsored by ⊞ Windows Mobile

(http://dynamic.fmpub.net/adserver/adclick.php?bannerid=26266&zoneid=1779&dest=http%3A%2F%2Fr1.fmpub.net/r.

Posted by Glenn Fleishman at 3:29 PM | Permanent Link | Categories: Municipal | Comments (0)

Wee-Fi: Go, Go, Wires! Go, Go, Cablevision!

BY GLENN FLEISHMAN

OSnews explains why wiring a house still makes sense in the 21st century c.e.:

(http://www.osnews.com/story/19748/Wired_vs_Wireless:_Sometimes_Theres_No_Substitute_for_a_Cable)
A very well-reasoned article from OSnews explains why the site still backs residential wiring. They're involved in the build-out of a Utah home partly as a technology demonstration, and they've put coax and Cat 5E Ethernet cable throughout, as well as conduits for future wire pulls. Fundamentally, wire has more capacity; I'd argue it does across several dimensions, too. You can run 1 Gbps raw across a Cat 5E or 6 Ethernet cable *in both directions at the same time* versus best performance of unidirectional nearly 100 Mbps in my testing of Draft N. But you also get switching with Ethernet—multiple simultaneous symmetrical 1 Gbps—and if you need more capacity you simply pull more wires and put in more switches. Wire is cheap and switches are now, too. It's a good read if you're thinking of rewiring (or unwiring) your home.

Cablevision's already started its rollout:

(http://www.cablerant.com/index.php?topic=697.0) An observant tri-stater at the Cable Rant site spotted Cablevision installers putting up BelAir gear on their cable line. He took some photos.

Posted by Glenn Fleishman at 11:12 AM | Permanent Link | Categories: Wee-Fi | Comments (0)

MAY 15, 2008

MetroFi Plans Market Exit: Sale or Shutter

BY GLENN FLEISHMAN

MetroFi will sell its networks, but plans to shutter if there are no buyers: Ah, folks, the trifecta has arrived, and I'm nothing but sad about it. MetroFi's chief Chuck Haas emailed me this evening with the news that his firm has decided that they will sell their networks in nine cities, including their first cities in the Bay Area (Cupertino, Santa Clara, and
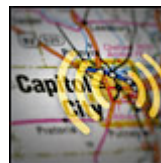
Sunnyvale), and their largest muni deployment in Portland, Ore. If no buyers emerge—including the cities in question—Haas said that MetroFi would have a shutdown plan for gradually unlighting the networks. **Update:** Portland has been offered **its network for $894,000** (http://www.kgw.com/sharedcontent/APStories/stories/D90MV4M82.html) ; the city is "considering it."

MetroFi was one of the three most prominent pure play metro-scale Wi-Fi firms, if you count EarthLink's municipal wireless division as a separate operation, and Kite Networks, which was a subsidiary of a larger telecom firm. Each company had made a unique network hardware choice—MetroFi, SkyPilot; Kite, Strix; and EarthLink Tropos plus Motorola—and each had a sort of specialty. Interestingly, a fifth firm, BelAir powers Toronto (a small but super-fast Wi-Fi network) and Minneapolis (the only putatively completed large-city Wi-Fi network), and will be behind Cablevision's nearly $350m New York Wi-Fi plan.

MetroFi was the only major firm to back ad-supported no-fee access, coupled with paid, no-ads service, and higher tiered commercial offerings. They built mostly smaller cities, with Portland being their only real big city win. The firm began with the notion of building Wi-Fi out gradually as a way to provide broadband in communities that lacked service, with no municipal involvement. That plan required sparser networks and typically a home signal booster designed by SkyPilot. (Kite mostly focused on the Southwest; EarthLink on big cities.)

EarthLink was in many ways largely responsible for the mess that all Wi-Fi providers found themselves in last year by offering to build Philadelphia's network back in 2005 at no cost to the city—in fact, paying the city and the local utility fees. That set the stage for nearly all the RFPs that followed where, if EarthLink were a bidder or the city was aware of the alternatives, the notion was that no city dollars would be spent, even if taxpayer money wasn't "at risk"—that is, even if a city could save money by switching current line items in their telecom and data budget to a wireless network.

Haas noted via email that MetroFi has been working towards anchor commitments by cities for nearly two years, but the inertia of those early networks led municipalities to reject those options. In Toledo,

where MetroFi had negotiated an anchor commitment, a change in administration led a new mayor to retreat from the plan.

Is there a future for metro-scale Wi-Fi? Yes. With thoughtfully constructed, outdoor-focused deployments centered on municipal purposes, with public access a secondary issue, it seems like these networks could still provide an inexpensive way for relatively high bandwidth compared to the alternative of cell data networks.

However, that advantage is likely short lived in larger markets. The near-future certainty now that there will be multiple provides offering wired broadband speed service starting later this year with Sprint/Clearwire's WiMax, and continuing through into 2012 with significant network buildout by Verizon and AT&T in several bands (including their new 700 MHz holdings).

While Sprint/Clearwire is talking about 120m to 140m homes passed by 2010 with their network, obviously focusing only on major markets, many of the 700 MHz licenses purchased by AT&T and Verizon carry buildout requirements with penalties. So cities outside the top 100 population markets and rural areas will still see some benefit. In those mid-tier markets, there's also the 3.65 GHz band for shared licensed use, which is a model that Azulstar is pursuing with new WiMax deployments, as **I wrote about recently (http://wifinetnews.com/archives/008313.html)** .

Competition will likely push the cost of mobile broadband far below its $60 per month 2-year contract rate of today, which then would beg the question why a city or county with good commercial coverage would need to build its own Wi-Fi network. There are still plenty of reasons to build dedicated, first-responder 4.9 GHz public safety networks, of course.

I've always described Wi-Fi on a metropolitan scale as the *best, worst technology*. The best, because everyone has Wi-Fi in their laptops and increasingly in handhelds and gadgets. The worst, because the technology is absolutely not designed for the purpose, unlike CDMA and GSM evolved cell standards and mobile WiMax.

It's possible that in the long term, looking five years out, that Wi-Fi on a metro-scale will only be needed in small towns, odd markets, and for highly particular purposes. Or, perhaps in a bit of irony, where companies like Cablevision feel Wi-Fi is necessary to retain the loyalty

of their highly wired customer base.

Posted by Glenn Fleishman at 9:47 PM | Permanent Link | Categories: 4G, Financial, Free, Metro-Scale Networks, Municipal | Comments (4) | TrackBack (0)

MAY 14, 2008

Phila. Gives Up on EarthLink

BY GLENN FLEISHMAN

IDG News Service reports that Philadelphia won't pursue further efforts to keep the EarthLink network up and running:

(http://www.infoworld.com/article/08/05/14/Philly-wont-fight-to-save-Wi-Fi-network_1.html)
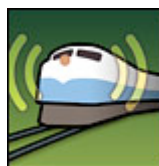The last paragraph is quite classic:

> Without going into details, city spokesman [Douglas] Oliver said there clearly were maintenance and upgrading challenges that came with the free infrastructure. "How many times has someone not taken $17 million worth of something without there being a pretty good reason?" he said.

Posted by Glenn Fleishman at 8:55 PM | Permanent Link | Categories: Municipal | Comments (0) | TrackBack (0)

Thalys Hits Glitch in Impressive Train Launch

BY GLENN FLEISHMAN

Thalys has launched Internet service on high-speed train routes between Paris, Brussels, Amsterdam, and Cologne:
(http://news.yahoo.com/s/pcworld/20080514/tc_pcworld/145901)
The service hit glitches in its big press rollout, but glitches shouldn't be mistaken for actual performance. The satellite-backed service pulls down 2 Mbps of ruinously expensive backhaul, compressed to provide speeds that feel like 4 Mbps. (Read: faster for email, TIFF images, certain PowerPoint presentations, and Web pages with gzip disabled; normal rate for JPEGs, GIFs, compressed Web pages, and PDFs.)

The service will cost first-class passengers not a thing, but coach will

pay €6.50 (US$10) per hour or €13 (US$20) for an entire trip. The train operator is initially equipping 7 trains, but will complete work on all 26 trains by October. Trip durations run from 1 hour 20 minutes to 3 hours.

Most impressively, the consortium that built the system is using a pretty modest antenna that moves automatically to stay in contact with the satellite. It's 80 by 72 cm (31.5 by 28.3 inches), and plans are to shrink that to something 2/3rds the height when a new dish is certified. Ultimately, IDG News Service reports, the group plans to use 3 cm (1 in) high phased-array antennas that would cover the train's roof. Very, very clever, as it jettisons any moving parts.

Three companies worked on the technology: Telenet, handling the billing and authentication, is a Belgian ISP that also runs hotspots; Nokia Siemens is a well-known systems integrator, and is providing some gear and handling installation and integration; 21Net, perhaps the least-well known partner, has the satellite technology.

This project dates back to at least 25-April-2005, a point at which 21Net and Nokia Siemens announced a successful test on the Thalys run from Brussels to Paris.

Posted by Glenn Fleishman at 3:50 PM | Permanent Link | Categories: Rails | Comments (0)

MAY 13, 2008

Mobile Post: Where's the Price?

BY GLENN FLEISHMAN

MOBILE POST

Why don't service providers tell you what it costs? In this mobile post, I inveigh against the practice of hiding one's prices coyly, like the menu at an expensive restaurant.

Map It: Fremont, Seattle, WA

(http://r1.fmpub.net/r.php?r=http%3A%2F%2Fmaps.live.com%2F%3Fwhere1%3DFremont%252C%2BSeattle%252C%2BWA%26style%3l

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(http://dynamic.fmpub.net/adserver/adclick.php?bannerid=26266&zoneid=1779&dest=http%3A%2F%2Fr1.fmpub.net/r.

Posted by Glenn Fleishman at 11:31 AM | Permanent Link | Categories: Financial |
Comments (1)

Wee-Fi: iPass Flies; Riverside (Calif.) Approaches

BY GLENN FLEISHMAN

iPass announces roaming deal with Aircell Gogo in-flight network:

(http://ipass.com/pressroom/pressroom_releases.html?rid=322)

Gogo isn't yet aloft, though it's well into testing, but iPass has a contract in hand to allow its subscribers broadband access. The press release sidesteps cost, and an iPass spokesperson clarified for me that pricing hasn't yet been determined; additional fees will be required, but how much isn't yet set. Given that Aircell has spoken about fees of about $10 to $12 for cross-country flights, iPass can't include unlimited service at a fixed rate, I wouldn't think. But many terrestrial venues charge $7 to $12 for 24 hours access and iPass, Boingo, and other retailer partners pay those venues as little as 50 cents per session. (**Correction:** This item originally stated that iPass wasn't planning at this time to charge for Gogo service. That was an error: iPass hasn't yet set the fees, but expects to charge something on top of their flat rate.)

Riverside network should launch soon:

(http://www.pe.com/localnews/inland/stories/PE_News_Local_R_rwifi13.410f6b6.html)

I recall a **ribbon (or cable) cutting ceremony**
(http://cbs2.com/consumer/Wi.Fi.Internet.2.533189.html) for AT&T's MetroFi-built Riverside, Calif., network some time ago, but the full launch beyond a trial network in 2007 appears ready to go by the end

of May. The network was **originally billed**
(http://www.dailywireless.com/press-releases/att-riverside-citywide-101806/) as
planning to cover the 80+ sq mi of the city; this article says just 55 will
be covered. And AT&T's local project manager told the audience at a
training session, that the service is "mainly meant for outdoor use."
Huh. Service is free with ads at a rate that's not easily found (512
Kbps?); a premium ad-free service at 1 Mbps is free to AT&T's 1.5
Mbps or faster DSL subscribers and fiber users, as well as by paying a
monthly rate that isn't yet disclosed. The 24-hour rate is a crazily high
$7.99.

Posted by Glenn Fleishman at 10:15 AM | Permanent Link | Categories: Air Travel,
Municipal | Comments (0)

EarthLink Will Shutter Philadelphia Network, Company Says

BY GLENN FLEISHMAN

It's the end of the cycle, folks:

(http://news.yahoo.com/s/ap/20080513/ap_on_hi_te/wireless_philadelphia_2) The
first shall be last and the last shall, apparently, be first to sue. The
Philadelphia Wi-Fi network will be shuttered under plans by EarthLink
that they announced via **press release today**
(http://ir.earthlink.net/releasedetail.cfm?ReleaseID=310055) .

The company plans to pull all its gear from the poles starting
12-June-2008. The company's press release said it offered to give the
network at no cost to an unnamed non-profit, as well as to the city, but
claimed that "unresolved issues" led to the effort falling apart.
EarthLink offered cash and more equipment, as well, in undisclosed
quantities. Wireless Philadelphia, the non-profit in charge of managing
the network provider and administering digital divide programs, was
apparently not the non-profit mentioned.

EarthLink filed a lawsuit to allow it to remove its Wi-Fi nodes and cap
its liability at $1m. That's a pretty hostile move, given that the city
would have been the more likely party to feel aggrieved and file suit
against EarthLink for failing to live up to the terms of their agreement.

EarthLink's claims of offering the network to "a non-profit" or the city for free skirts the issue that EarthLink may have certain liabilities for electrical power and other fees that haven't yet been paid; Wireless Philadelphia had agreed to pick up or defer certain charges as part of the deal that brought the network provider in. But without a completed network, and the contract therefore perhaps susceptible to being declared in default in court, it's unlikely that this will play out nicely.

And I'll say bluntly: If someone offered you $17m of outdated equipment on a network that never worked to specification that wasn't completed, and that already had known high annual costs, and which a private firm gave up as a bad job that they couldn't turn a dime on—would you take that deal? No. EarthLink will ultimately have to pay much more than $1m, I predict, and I suspect some of the settlement will leave gear in selected neighborhoods behind for more modest networking purposes. It's not going to be as easy as releasing a press release, although I haven't read the contract's provisions for this set of circumstances, and I'm not a lawyer.

The failure in Philadelphia, and EarthLink's exiting the entire muni-Fi business, represents the end of a bad model in which a company agreed to assume all risk and costs associated with building a public access network. When the assumptions were that networks would be cheaper and easier to build in 2005, and that citizens in many larger cities had few affordable broadband options, it made some sense to build a network on spec.

Three years into this, however, it's clear that that capital investment is 2 to 3 times higher than what was anticipated to reach a level of service quality that people will expect; that, when presented with potential competition, DSL and cable operators will slash prices and offer cheap 1-year or "lifetime" rates with long-term contracts; and that wireless broadband delivered via Wi-Fi isn't the best of ideas for indoor service.

Minneapolis may wind up being the only large city, if the network quality and subscriber rates play out, that has a public access network that works and produces a return.

Update: Wireless Philadelphia released a statement from its chief, Greg Goldman, that WP is still hoping to work out a resolution. They "remain optimistic."

Posted by Glenn Fleishman at 9:48 AM | Permanent Link | Categories: Legal, Municipal | Comments (0)

MAY 12, 2008

Wee-Fi: Your Brain on Wi-Fi; Zipit Offers Free SMS; Wi-Fi Alliance Model Trade Group

BY GLENN FLEISHMAN

Cell phones interfere with brain waves?

(http://www.sciam.com/article.cfm?id=mind-control-by-cell) I often write about studies that show no connection between electromagnetic radiation and health, so it's only fair I highlight credible ones that suggest a connection. In what appears to be two well-conducted and well-controlled studies, cell phones appeared to **affect alpha waves**

(http://www.ncbi.nlm.nih.gov/pubmed/17786925?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPan (related to one's focus on external v. internal stimulus and sleep), and **delta waves**

(http://www.ncbi.nlm.nih.gov/pubmed/17548154?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPan (related to deep sleep). While no particular health result was measured, both studies, Scientific American explains, demonstrate a connection between EMF and mental behavior.

Zipit gives away text messaging for a year, changes prices, options:

(http://www.businesswire.com/portal/site/home/news/sections/?ndmViewId=news_view&newsLang=en&newsId=200805 The Zipit Wireless Messenger 2 (Z2) was **introduced in Dec. 2007** (http://wifinetnews.com/archives/008091.html) with a number of interesting features for a messaging appliance targeted at teens—and their fretting parents. With no Web portal, the $150 device included unlimited Wi-Fi on Wayport's McDonald's network (now nearly 10,000 locations), and support for popular IM clients. It also included SMS with major cell carries, charging $5 per month for 1,500 incoming and 1,500 outgoing messages. Uptake must have been poor, as the manufacturer announced today that purchases until 31-July-2008 would include a year of free text messages. The company also modified its plan without noting that fact, increasing messages to a "reasonable personal usage" of 5,000 incoming and 5,000 outgoing messages per month. There are no overage charges. The service will now cost $30

per year instead of $5 per month for new purchasers starting 1-August-2008. That's a 50-percent price reduction (over $5 times 12), but it's often much cheaper to bill annually in advance.

Wi-Fi Alliance cited in WSJ as model for multipartner alliance:

(http://online.wsj.com/article/SB121018817892074495.html?mod=googlenews_wsj)
An interesting analysis in the Wall Street Journal's Business Insight section points to the Wi-Fi Alliance standards based, no-company-on-top approach as one that led it to win out through both technology and organization over other standards that might have taken precedence. I've been stunned over the years how a group that has a board comprised of the most powerful and competitive interests in this market segment, and which has hundreds of much smaller members, has managed to keep alive the notion of interoperability for the greater good of the industry and customers. 802.11n's long delay certainly threatened harmony—especially with some ugly proprietary slap-ons to 802.11g—but the alliance continues to keep the technology in equilibrium, while still allowing individual companies to differentiate their products with little difficulty.

Posted by Glenn Fleishman at 1:26 PM | Permanent Link | Categories: Wee-Fi | Comments (0)

MAY 11, 2008

Eye-Fi Adds Geotagging, Splits Up Product Line

BY GLENN FLEISHMAN

(http://www.flickr.com/photos/69628725@N00/1907044776) **The folks who brought us simple Wi-Fi for digital cameras add locations, modify pricing:**
(http://www.eye.fi/a-wireless-memory-card/) Eye-Fi developed a supremely simple 2 GB Secure Digital card that can work with any digital camera and transfer photos over known Wi-Fi networks with no effort. Now they've split their original $99 product offering into three items differentiated by features: Eye-Fi Explore, with Wi-Fi-based geotagging ($129); Eye-Fi Share, for uploading to photo-sharing systems ($99); and Eye-Fi Home, which is a cable-replacement service ($79). The Eye-Fi Explore will be available starting 9-June-2008.

The Eye-Fi Explore product relies on Skyhook Wireless's system of analyzing the signal strength of nearby Wi-Fi networks to extrapolate latitude and longitude. Eye-Fi ties that into their system to stamp images with locations. This deal also ties into Wayport's domestic network of 10,000 hotspots, most of which are McDonald's outlets, allowing free uploading via those systems. The purchase price covers one year of hotspot service. All three products work with Mac OS X Tiger and Leopard, and Windows XP/Vista.

Because Skyhook needs a live Web connection to look up the Wi-Fi environment, Eye-Fi can store the Wi-Fi snapshot when the picture is taken, and manage inserting the appropriate photo metadata (EXIF format) at upload for Flickr (http://flickr.com/help/organizr/#199) and other services that support geotagging.

Geotagging is a very popular idea, something that I'm quite taken with because it pairs the act of taking a photograph with the location at which the picture is taken, making a digital photograph seem a little less untied to reality. But until now, it's been generally quite involved to match a picture with coordinates. A handful of specialized cameras embed GPS chips, and there's software to facilitate other methods, but the cost and battery drain of GPS chips have apparently so far kept it from being a widely deployed feature, while the wonkiness of alternatives doesn't appeal to mainstream users.

Sony once sold this wacky GPS companion (http://www.sonystyle.com/webapp/wcs/stores/servlet/ProductDisplay?catalogId=10551&storeId=10151&langId=-1&partN (which I just found out isn't available in either released model) that would track your location over time, and use that information to geotag images via a special software program that let you pair its stream of data with your photographs.

Eye-Fi and Skyhook are doing something almost the same, since the camera isn't capturing the GPS data, and the Eye-Fi isn't applying the information live, much of the time. But it's eminently more usable than the Sony system, because the Eye-Fi handles the assembly seamlessly for you.

Now there's just one thing to worry about. Think about this: McDonald's are everywhere, and nearly all of the U.S. locations have Wi-Fi. The Eye-Fi uploads whenever it can, as long as the camera is turned on. You're geotagging images without any effort. Okay, got it?

So…you call in sick to work, and run off to take some photos. Your boss, using RSS to subscribe to your Flickr feed, not only sees your pictures as you wander the town, unknowingly promiscuously uploading them via quick-serve restaurants' networks, but also knows precisely where you are.

This makes me suggest that you might set your Flickr upload preferences to keep images private and your geotagging preferences the same. You can then expose the images you want for public consumption. The Panoptican (http://www.cartome.org/panopticon1.htm) is…us!

Posted by Glenn Fleishman at 9:01 PM | Permanent Link | Categories: Hot Spot, Location, Photography | Comments (0)

MAY 9, 2008

Can Azulstar Make WiMax Work without Buying Spectrum?

BY GLENN FLEISHMAN

Azulstar once pinned its fortunes on city-wide Wi-Fi, but now looks to a special licensed spectrum band to make WiMax work where Wi-Fi failed: Azulstar (http://www.azulstar.com/) has been the also-ran in Wi-Fi for some years, I'll just state bluntly and upfront. They built a network in Grand Haven, Mich., in 2003 that's one of—if not the—longest running metro-scale Wi-Fi networks in the world designed for public access. The mayor of Grand Haven since 2003, Roger Bergman, told me, "I got on board personally right away, and I am still on."

Azulstar soon answered several RFPs and partnered up with major firms to bring Wi-Fi to Rio Rancho, N.M., Winston-Salem, N.C., Sacramento, Calif., and most notably Silicon Valley—a set of dozens of cities along with county government and private enterprise all wanting some kind of tiered Wi-Fi across 1,500 sq mi.

While EarthLink, MetroFi, and even Kite Networks (with their extensive Arizona buildout in Tempe launched a bit before any other large competing network) seized the headlines, and later made news about their stalls, failures, and exits, Azulstar seemed quietly to sink

into the sand. The Wireless Silicon Valley deal fell apart, as did Sacramento after efforts to get stakeholder and outside investment seemed to fail to materialize, and the marquee partners—Cisco, IBM, and Intel—just wouldn't step up to the plate to make the project move forward. Azulstar was the lead techology firm, but the money just didn't come. (Both California projects are moving forward with a different set of partners and expectations now.)

Rio Rancho was perhaps one of the biggest letdowns. City manager Jim Payne explained in an interview a few weeks ago, "They had a number of things that were going against them from the start, and they did make an attempt to meet the requirements of the contract." But Rio Rancho voted to not just terminate the contract after years of attempts to make the network work, but rejected a proposal from Azulstar a few weeks ago to switch over equipment on the poles. Azulstar now has to remove all its devices.

All of this might make the typical company head a bit depressed about his firm's future, and less than sanguine about the potential for wireless broadband to work at all. Not so for Tyler van Houwelingen, Azulstar's chief, and I have to admit that he convinced me that the wireless provider has a fighting chance, due to a good combination of timing, spectrum policy, and a large dollop of can-do spirit.

Continue reading "Can Azulstar Make WiMax Work without Buying Spectrum?"

Posted by Glenn Fleishman at 10:58 AM | Permanent Link | Categories: Future, Metro-Scale Networks, Municipal, Unique, WiMAX | Comments (0)

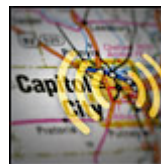**MAY 8, 2008**

Cablevision Antes up $350m for Wi-Fi Network in New York

BY GLENN FLEISHMAN

Cablevision will offer free Wi-Fi to its customers across a swath of New York:

(http://ap.google.com/article/ALeqM5hEgQXp_pH8K5QHOLxtW_qYtTddOwD90HKPNo0)
The company will spend an astounding $350m over two years—roughly

$100 per customer—to put in service that they peg at offering 1.5 Mbps downstream rates. Broadband subscribers to their **Optimum Online** (http://www.optimum.com/online/why/faster.jsp) broadband service, which has rates of 15/2 and 30/5 Mbps. Others will pay for access. The company has 3.1m cable customers in New York.

This is the first large-scale Wi-Fi network announced that had no public/private component to it. While Verizon once said they'd blanket New York City with payphone-based Wi-Fi nodes, that never materialized, and it was unclear how seamless the coverage would ever be. This is a full-blown metro-scale network that's not beholden to any political interest, and which can likely use mounting rights already available to Cablevision. (In the past, I've said this, and folks have said that franchising agreements would exclude additional mounted equipment of this kind. Years later, I have to say I've never found anything to support that opinion, but welcome more documented information in the comments.)

The idea is for Wi-Fi to act as a mobile broadband component for Cablevision, to dilute the impact of the Sprint/Clearwire deal announced yesterday. While cable companies rarely compete in a given territory, the Sprint/Clearwire joint venture will make it easier for a customer to get home and mobile broadband and voice from one company, and then turn to another firm for video. This buys Cablevision a quadruple play (voice, video, data, mobile broadband) with a future quintuple play by adding (as they say they will) voice over Wi-Fi service.

Sources indicate that BelAir equipment will be used, which makes sense given BelAir's release nearly three years ago of a **cable-plant compatible Wi-Fi node** (http://www.belairnetworks.com/products/ba100s.cfm) designed essentially for precisely this contingency. This is a nice win for BelAir, which will likely be selling somewhere north of 15,000 nodes based on the coverage area and service described. BelAir gear also powers Minneapolis, the only successfully completed big-city Wi-Fi network in North America.

Posted by Glenn Fleishman at 1:21 PM | Permanent Link | Categories: Financial, Free, Hot Spot, Metro-Scale Networks | Comments (1)

iPhone Wi-Fi Hotspot Access Now in AT&T

Plan Details

BY GLENN FLEISHMAN

It's on, it's off, it's on again: Access to AT&T hotspots is back on again, at least in the fine print, as the company now includes the statement that all iPhone plans in the U.S. include "access to AT&T's more than 17,000 Wi-Fi hotspots, including Starbucks." (Click the Plans tab at top to see that text.)

AT&T appeared to have flipped a switch several days ago on its "attwifi" SSID that has appeared alongside T-Mobile's during this several-month transition at Starbucks from one operator to another. iPhone users were presented with a custom login screen that prompted them for their phone number to obtain free access. That gateway page disappeared a few days. I haven't tested if it's back, but at least AT&T has, at long last, made the connection that its iPhone customers might enjoy the same free access to hotspots as its 7m fiber and qualifying DSL customers.

Update: And….that information is now gone, **Computerworld reports (http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=9084358&sour** . It'll be back.

Posted by Glenn Fleishman at 9:39 AM | Permanent Link | Categories: Free, Hot Spot | Comments (0)

MAY 7, 2008

Wee-Fi: E-Path Loses Delray Beach

BY GLENN FLEISHMAN

Long Island unwirer E-Path loses local contract:

(http://www.palmbeachpost.com/localnews/content/south/epaper/2008/05/06/s3b_dbmeet_0507.html)
The small Florida firm that signed up to build out Wi-Fi across two counties in Long Island—and hasn't seemingly raised funding yet to build even the pilot stage—has had its contract to build Delray Beach, Flor.'s network terminated. "This has been an unfortunate waste of staff time," one city commissioner is quoted as saying, even as the city

now turns to figure out how to find another contractor. E-Path had previously seen its Trenton, NJ, deal terminated when that city couldn't agree to purchase services on the network that would be built.

Posted by Glenn Fleishman at 1:06 PM | Permanent Link | Categories: Wee-Fi |
Comments (0)

Buh-Bye, Philly

BY GLENN FLEISHMAN

Metro Philadelphia is reporting that the city's Wi-Fi network may halt operations as soon as tomorrow, 08-May-2008:

(http://philly.metro.us/metro/local/article/Citywide_WiFi_could_be_shut_down/12422.html)
The site reports that EarthLink stopped accepting new customers last week, and told Philadelphia that without a plan by the city to assume control of the network by tomorrow, it would start dismantling the network, after a previous deadline set for last Wednesday passed. EarthLink owes the city a $1m payment on May 23, the site reports.

Posted by Glenn Fleishman at 10:33 AM | Permanent Link | Categories: Municipal |
Comments (0)