Burning Question
Why isn’t wireless Internet access available everywhere yet?

You might remember a time when everyone—from telco giants to corner coffee shops—was furiously serving up Wi-Fi. McDonald’s became an Internet café, and dozens of municipalities nationwide were racing to set up open hot spots. Your broadband connection was about to be as portable as your cell phone. That was like five years ago.

What happened next? Zilch. “There has been a complete lack of leadership from the regulatory agencies, service providers, and device makers,” says Ashvin Vellody, senior vice president for enabling technologies at communications research firm Yankee Group. Fortunately, cellular providers are stepping up to fill the motivational vacuum. Omnipresent broadband access is almost here. Again. Really.

Even skeptics have to concede that the odds look pretty good this time. The technology won’t be your familiar 802.11—it never had the bandwidth or range to be viable anyway. The airwaves will instead be paved with a new generation of wireless broadband. Some of these so-called 4G networks will use the 700-MHz spectrum that the government auctioned off last year, and they promise to blanket every medium to large city in Net-ready radio waves.

It’s about time. Cell phone companies have been asleep at the wheel for years, loath to upgrade to expensive new networks when their old ones “work just fine.” The iPhone slapped them awake. Before Apple’s smooth-talker, portable broadband didn’t look juicy enough to chase—cellular data usage was slim. But the typical iPhone owner uses five times more data than the average cell user.

“It took Apple and its ecosystem of apps and interactivity to prove the pent-up demand for ubiquitous broadband,” Vellody says.

And now, mobile devices like netbooks and Google phones have joined in to force the issue. Clearwire introduced a WiMax service in Baltimore and Portland, Oregon, with a commitment to add 30 more markets by the end of 2010. Verizon is testing a related technology, Long Term Evolution, and aims to roll out coverage by 2010; Motorola, Sony Ericsson, and Nokia are all building compatible devices. Both WiMax and LTE will offer about the same DSL-ish speed (5-6 Mbps), but bitrates could grow to 15 Mbps by 2012.

Unfortunately, the current economic malaise is slowing some capital expansion plans. (How convenient.) “It won’t be overnight, but you’re eventually going to see mobile broadband replace your at-home connection,” says Barry West, Clearwire’s president and chief architect. A bright forecast—but believe it when you actually see the sun.—CLIFF KUANG