



THIS STORY HAS BEEN FORMATTED FOR EASY PRINTING

CONSUMER BEAT

The Boston Globe

Tap into neighbors' WiFi? Why not, some say

By Bruce Mohl, Globe Staff | July 4, 2004

Like a Robin Hood of the Internet age, Carrie Russell of South Boston takes bandwidth from the rich (neighbors who have wireless high-speed Internet connections) and uses it herself to surf for free.

"I don't think of it as stealing," Russell said. "They've left their network open. If they're going to leave it open, then it's there for the taking."

The savings are substantial. High-speed Internet access typically costs \$30 to \$60 a month or more, depending on the speed and whether it's packaged with other services offered by the provider.

Michael Oh, president and founder of Tech Superpowers, a Boston-based specialist on wireless networking, said it's difficult to tell how many people are piggybacking on or sharing the wireless high-speed Internet access of their neighbors. But he is convinced a lot of people are trying it in densely populated neighborhoods where wireless connections overlap.

"People do it all the time," Oh, of Tech Superpowers, said. "It's a big problem for the big Internet service providers because they don't have any control over the situation."

The number of wireless Internet access points that can be tapped by outsiders is surprisingly large, in part because consumers like the convenience of WiFi yet rarely activate security systems that would prevent outsiders from gaining access to their networks. Oh says most wireless base stations come from the manufacturer with security protections deactivated. Consumers in a hurry to get them up and running never bother to turn them on.

On a ride through a very small portion of the Back Bay, downtown Boston, Cambridge, and Somerville, Oh detected 2,676 wireless Internet access sites, of which 2,465 were residential. He said half of the sites were unprotected, meaning anyone within 100 to 150 feet, and in some cases much farther away, could tap into them.

Tom Russell, who helped his sister and his mother piggyback on their neighbors' WiFi high-speed Internet access, said the setup procedure is relatively simple, although it may take some patience. All you need is a wireless network adapter for your computer, which can cost between \$35 and \$80. Some laptops come fully equipped to access a WiFi connection.

Russell, who lives in Cambridge and pays for his own high-speed Internet access, said consumers could find out very cheaply whether they are near a wireless access point by borrowing a friend's adapter or buying one and returning it if no access point is nearby.

Russell's mother, who lives in the Back Bay, had about four wireless access points to choose from. His sister in South Boston couldn't find any access points initially, so she moved her computer to the rear of her building and found three, only one of which was protected.

Carrie Russell, who goes on the Internet about three hours a week, said the speed of her piggyback service has been good and the price has been right.

She said her biggest concern has been whether her benefactors -- she doesn't know who they are -- will cut off access to their WiFi networks, stranding her temporarily. (Owners of WiFi access points can detect whether others are using them, but it requires a bit of work pulling up the software, so most people don't bother.)

There are some downsides to sharing a wireless high-speed Internet connection. The service speed can drop if several people are using the same access point and downloading big files like music, pictures, or software. Just

surfing the Internet is not likely to cause any speed deterioration, however.

The users of an unprotected wireless access point also run the risk of having their e-mails, downloaded files, and other information "sniffed" out. It takes a bit of technical expertise, but Oh said that sort of information is not secure.

He said financial information provided for Internet purchases would be safe because in most cases it's encrypted.

The legality of piggybacking on the Internet access of a neighbor who is a subscriber to [Comcast](#), [Verizon](#), or another major provider depends on the situation. Company officials say their rules apply only to subscribers, so a third party who piggybacks without the subscriber's knowledge is difficult to discipline.

Bobbi Henson, a Verizon spokeswoman, said she still believes it's wrong ethically. "I myself would feel guilty doing that," she said.

Comcast spokeswoman Jennifer Khoury said she feels that someone who piggybacks is stealing a signal paid for by the subscriber. "It's similar to cable theft," she said.

Verizon and Comcast subscribers who knowingly share their WiFi connection with a neighbor are violating the terms of their contracts. Verizon, for example, states in its terms of service that its DSL subscribers are not allowed to resell broadband service, directly or indirectly, or connect devices outside the subscriber's home. Comcast has similar language in its customer contracts.

Although Verizon states in its contract language that it reserves the right to audit connections electronically to ensure compliance, Oh says that in reality it is very hard for an Internet service provider to prevent neighbors from sharing a broadband connection.

"If you keep quiet and it's between you and your neighbor, there's not much they can do," he said.

Speakeasy, a Seattle provider of high-speed Internet service (www.speakeasy.net), figures piggybacking is gaining steam, so why fight it? Hungry to gain market share, the company encourages its customers to share the cost of their high-speed Internet service with neighbors through a WiFi connection. It even makes it easy for them, handling the billing (in return for 20 percent of the fees) and providing the piggyback customers with e-mail and other services.

"We recognize the trend in wireless sharing as a necessary evolution in broadband deployment," the Speakeasy website says. "Rather than clamp down on customers who want to explore this innovative way of networking, we have created the tools and systems to make it easy on you."

Speakeasy provides this example of how its WiFi NetShare could work. John Smith, paying \$60 a month for his broadband connection, sets up a WiFi NetShare administrator account and invites his neighbors to piggyback for \$30 a month. If three sign on, Speakeasy bills them a total of \$90 a month and credits 80 percent, or \$72, to Smith's account. Smith ends up getting his Internet service for free (and even has \$12 left over to spend on other services), while his neighbors pay half the regular price.

Bruce Mohl can be reached at mohl@globe.com. ■