

The air around us carries a wide variety of signals — satellite, radio, microwave, cellular. They are invisible to the casual passer-by, but with the right devices, these signals can be received, interpreted, and used. Increasingly, the air is also filled with wi-fi signals that allow laptop and PDA users to connect to the Internet wirelessly. Some of these wi-fi networks are “open,” and anyone can access them for free, but commercial providers have countered by signing up coffeeshop chains, hotels, and other businesses to provide wi-fi access for a fee.

This wi-fi coverage is not quite as comprehensive as, for example, cellular coverage. When purchasing a mobile phone, consumers expect it to work nearly everywhere; cellular providers have responded by installing cellular towers to provide this consistent coverage. When a consumer purchases a laptop with wi-fi capability, however, there are no such guarantees, and it is often the case that the consumer will also purchase a wi-fi access point and simply install a home wireless network.

But as wi-fi is rolled out by commercial providers in semi-public spaces in major cities around the world, ad-hoc groups of citizens are responding by forming groups to provide free access to the technology for anyone who wishes to use it. One of these groups is *Ille Sans Fil* in Montreal. ISF has over 30 locations where free access is provided, in fully public places such as parks and semi-public places such as bars and cafes.

Other cities have taken the situation into their own hands and have deployed sweeping wi-fi access over an area, particularly in underserved areas. In St. Cloud, Florida, for example, a lack of commercial high-speed Internet service inspired the municipality to install its own wireless network. Other small and not-so-small municipalities in the US have plans to roll out their own wireless networks as well,

# WELCOME TO MY eCITY

Community groups can give free wireless access to the city before big business sells it to us

by Michelle Kasprzak

though current legislation before the American Senate may make municipal wireless ventures such as these impossible to create. The proposed legislation wouldn't outlaw municipal wi-fi networks outright, but it would offer the right of first refusal to telecommunications companies — who can then effectively stall the process indefinitely and offer no service while also tying the hands of the municipality.

Some pundits also argue that in the time it would take for a municipality to jump through the inevitable bureaucratic hoops to deploy these networks, another replacement technology will have arrived, rendering their efforts outdated before they begin. Some recently unveiled plans, such as Philadelphia's plan to create a massive network and sell access at subsidized rates, will cost US\$10 million for the first year alone. Securing the budget while also beating back the storm that the telcos are causing (legislation is before ten states that in some way opposes or blocks municipal wi-fi efforts) may take a great deal of time, and by that point in the

future, other technologies such as WiMax and internet over the power grid (BPL) may have replaced wi-fi to some extent, if not completely.

Current prices being charged for wi-fi access by major corporations (\$15 per day or more) make access unreasonably expensive for most of us, and municipal efforts are being hampered by the inertia of bureaucracy and opposition from telcos, community groups like *Ille Sans Fil* have the speed and collective know-how to deploy quickly. It is this flexibility and grassroots approach that makes community wireless groups able to quickly roll out while the technology is still hot, offer it for free on principle, and enjoy word-of-mouth, one of the most effective marketing methods available.

Toronto has wi-fi coverage in the form of typical commercial pay-per-hour wireless services, and the serendipitous spurring of free wi-fi hotspots that result from residents and businesses letting their signal leak into public and semi-public places. Because wi-fi is seen as a “loss leader” that attracts customers to busi-

nesses, especially when offered for free, a group of 50 businesses in Forest Hill has also created a free “wireless village.” The only no-strings-attached solution that is also relatively stable remains the grassroots community group, which can quickly implement open wi-fi networks that cover the areas of most concern to residents, not tourists, and remain untainted by the pop-up ads that some “free” networks offer while remaining totally free of charge.

Happily for Torontonians, the new Wireless Toronto group proposes to take up this challenge. The group is in its early stages, but expect great things, since they have consulted with *Ille Sans Fil*, and plan to offer the same type of excellent service, for example incorporating advertisement-free portal pages with relevant local content.

Toronto was named one of the Top Seven Intelligent Cities of 2005 by the Intelligent Community Forum. In the Intelligent Cities report, Toronto is cited mostly because of its eCity initiative, which, among other things, proposed to “build a next generation technology infrastructure tailored to user needs (wireless, networks).” The other foci of the eCity project — which are intended to make dealing with the city easier by offering more online, interactive services (such as applying for tenders or permits) — are laudable as well. With regards to the technology infrastructure goals of eCity, it makes good sense to support and encourage citizen-led efforts like Wireless Toronto. The energy and flexibility of a group of volunteers is unwiring Montreal, and could certainly have the same effect in Toronto. Supporting community wireless as part of Toronto's technology goals would also be a welcome show of support for citizen initiative. Using interactive city services while connected to a locally-run, open wireless network sounds like my idea of harmony for Toronto's digital future. **f**