

## Wi-fi cities spark hotspot debate

By Matthew Davis  
BBC News, Washington

**A growing number of cities in the US are treating high-speed internet as a basic amenity for citizens, like running water or the electricity grid. But as the concept expands so does the battle with big business.**

Earlier this month, Philadelphia - one of America's oldest and most historic cities - thrust itself onto the technological frontline by announcing plans to build the biggest municipal wireless internet system in the country.

The 135-square-mile network will be built and managed by Earthlink, and will offer low-income residents a service for about \$10 (£5.70) a month.

A clutch of other cities are hoping to follow suit with free or low-cost services aimed at reconnecting poor communities, growing local businesses and giving new flexibility to the emergency services.

In a couple of weeks, San Francisco will announce the results of its call for proposals on providing a wireless service to the city's 750,000 inhabitants.

One bid that sent shockwaves through the industry came from Google, which offered to blanket the city with free wireless high-speed internet access - funded by advertising.

San Francisco Mayor Gavin Newsom said: "This is inevitable - wi-fi. It is long overdue. It is to me a fundamental right to have access universally to information."

### 'Wasting their money'

Where traditional wired broadband networks required massive investment, new technology means wireless networks can provide similar levels of service, at a fraction of the cost.

#### **TOP FIVE COUNTRIES FOR HOTSPOTS**

United States 31,074  
United Kingdom 12,004  
Germany 8,714  
France 4,014  
Japan 2,738  
*Source: Jiwire*

But the big telecoms firms - who have invested billions in cable or fibre optic links to millions of US homes - are waging a legislative and PR campaign against municipal initiatives.

Currently there is a bill going through Congress, sponsored by the Texan Republican Pete Sessions, that aims to ban cities from building municipal broadband networks under most circumstances.

But there is also an opposing bill in favour of the city networks, a bill backed by Republican John McCain and Democrat Frank Lautenberg

There are already fears that the rise of Voice Over Internet Protocol (Voip) calling - where net-connected computers can make cheap phone calls - will damage profits.

The companies argue that public competition puts private enterprise at a disadvantage and that cities are rushing into the market without a sound business case.

One industry group has just launched a new TV ad backing a bill before Congress that opponents say would empower the private sector to block community internet services.

Elsewhere, telecoms and cable giants are lobbying hard and spending big at local and national levels.

Verizon, which will compete with Earthlink when the Philadelphia project goes online sometime in 2006, told the BBC it did not support a ban on municipal networks, but said the city's move made no sense.

Link Hoewing, Verizon vice-president for internet policy, said officials were at risk of "wasting their money", adding: "I think the market has done a good job of addressing the issue already."

Supporters of municipal broadband disagree, however, saying the big business model is failing.

### **Rural access**

Recent figures suggest that since 2000, the US has dropped from third to 16th among nations worldwide in terms of per capita broadband access.

Studies suggest that 86% of households with income of more than \$75,000 have broadband access. But the share is just 38% for those with an income of less than \$30,000.

Huge areas of US countryside outside major towns and cities are also poorly served.

Ironically, one of the frontiers of wireless accessibility is found in a rural swathe of Oregon, which is thought to have one of the world's largest wireless hotspots.

Here a 600-square mile cloud of wireless connectivity provides free, high-speed internet coverage to schools, emergency services and residents alike.

The brains behind the network is Fred Ziari, an Iranian immigrant who is CEO of EZ Wireless, a Portland-based hi-tech firm that contracted with local authorities to provide the wireless service.

Police in the city of Hermiston now carry wireless computers with which they can download images from video monitors, floorplans of buildings and, soon, access a database of suspects' fingerprints.

### **Mobile future**

The Free Press, a non-profit group that favours the development of municipal wireless, says that across the US there are hundreds of community internet initiatives, some wireless, many not.

In the Texas state capital Austin, a local not-for-profit group runs a network of more than 100 hotspots, with 57,000 registered subscribers, providing free public Wi-Fi.

**If we roll back time to when people said you'd one day be able to use a mobile phone almost anywhere in the country, you might not have been convinced**

Richard MacKinnon  
Austin Wireless

Seventy percent of Austin Wireless' (AW) partners are small businesses like cafes and book stores who want to attract customers with free internet access - the rest are city-controlled venues like parks or libraries.

The group's president, Richard MacKinnon, hopes the initiative will be a model for other cities across the US and beyond. Already there are four AW hotspots in Bangkok. Another is run by Fairplay, an international shipping periodical based in Redhill, England.

Mr MacKinnon told the BBC: "If we roll back time to when people said you'd one day be able to use a mobile phone almost anywhere in the country, you might not have been convinced.

"For the most part it has come to pass, but in many ways it is not the ideal scenario we would have envisioned at the outset with coverage or with costs.

"If you ask where we will be with wireless in the future, I'd say look at the phone market and ask yourself if you are happy."

*What do you think of the issues covered in this story? Send us your comments and experiences using the postform.*

#### **Your comments**

**Wireless is the new electricity**  
Dave Mack, Adelaide, Australia

Just like oil replaced coal through industrialisation and revolutionised energy creation and transport, wireless is the new electricity allowing us to enter an age where information becomes contextualised geographically as well as personally. My hope is that we seize the opportunity to make wireless access free for all and so to strengthen community and commerce without the hideous economic dependencies that we are all too well aware of from the Age Of Oil.

***Dave Mack, Adelaide, Australia***

I fear for wireless internet city wide. Similar plans have been put forth in Minnesota. Although this may be useful and good for many, we neglect to take into account the citizens who will neglect it. On the news we have seen stories of people viewing porn on library computers, another misuse of public internet. I think it may be good however, if some bugs are worked out.

***John Richardson, Minneapolis, MN, USA***

I cannot afford broadband rates so free WiFi is attractive. But with the state of the telecom industry they need to re-coop their cost. So I don't know how the telecom industry is to survive and provide us with state-of-the-art products and services without being able to profit.

**Mary L, Long Branch, NJ**

At a first glance this does seem like a good deal - free internet for all. However, the broadband push is set to deliver much more than the web in the near future, there will be higher bandwidth services such as on-demand TV, as well as VoIP. Blanket Wi-Fi access is not going to be able to deliver that level of bandwidth, and they'll be left with a 2nd class, web only, service.

**Chris Dodkin, San Diego, USA**

**Wireless internet has become an inevitability**

Gregg Gerdau, Chapel Hill, NC, USA

Ubiquitous connectivity to the internet via wireless technologies provides a level playing field for the underprivileged, students, the elderly and all classes of people to engage in their own socio-economic milieu equally, and the same opportunity to engage in others. Along with wireless radio, television and telephone, the wireless internet has become an inevitability.

**Gregg Gerdau, Chapel Hill, NC, USA**

I think that providing free wireless internet is an excellent idea. Access to information would not only help emergency services and the police, who perhaps could use it most, but also to schools and lower-income families whose lack of access to technology doubtless hurts them. Big business should stop asking what's in it for them, but what's in it for their customers. A loss of profits will not doom any of these companies to extinction, but being the first to step up would get them praise.

**Jennifer Zarr, Iowa, USA**

What a great idea by Google to provide free WLAN to San Francisco. Personally, I would be happy to put up with a few ads if it meant surfing for free.

**Paul, London**

A good trend. We (London, at least) should have one covering the West-End and the City. Charges could be included in the Council Tax?

**Nasir Fazal, UK**

I look forward to a time when we have free universal access to wireless broadband in the UK, and hope that the government here will not support big business in blocking it.

**Chris Jones, Bristol, UK**

Wow. Come on UK we could do with this.

**Andy Marshall, Carrickfergus, UK**

Name:

Email address:

Town and Country:

Phone number (optional):

Comments:

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