

Is it Good to Share? A Case Study of the FON and Meraki Approaches to Broadband Provision

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What is this paper about?

- Case study of two organized efforts to develop 'user generated' infrastructure
- Assessment in terms of development of good public broadband infrastructure
- Conclusion that these sorts of approaches, while beneficial in the short to medium term, are not able to deliver robust, reliable, high quality infrastructure

The Case for Shared Infrastructure

- Efficiency
 - use excess capacity in installed broadband connections
- Alternative to existing operators
 - develop a parallel infrastructure
 - VoIP instead of calls through mobile operators
- Revenue generation
- Cooperation
 - Community Wireless Networks (e.g. Île Sans Fil here in Montréal)

Requirements for Good Infrastructure

- Usable
- Useful
- Reliable
- High quality
- Sustainable
- Ubiquitous
- Secure
- Affordable



- The 'Wi-Fi revolution'
- 'Community' for Wi-Fi sharing
- Build a better internet, on a person by person basis
- Pay for broadband at home, use it everywhere (reciprocity)
- Make a little money selling your connection to non-'Foneros'



- 830,000 Foneros
- 332,000 *registered* hotspots
- 212,000 *active* hotspots

- These figures are hotly disputed in the blogosphere

Example: FON in Linz, Austria



Visible FON hotspot, can't connect



Non-existent FON hotspot?



'Usable' FON hotspot



FON in downtown Montréal



LOGIN

WiFi EVERYWHERE

Menu EN

Map Satellite Hybrid

King-Edward

Quai Victoria

Prom Du Vieux-Port

Rue St-Sulpice

Rue Saint-Paul Ouest

Rue de la Cathédrale

Rue de la Commune Ouest

Rue Prince

Rue Duke

Rue William

Rue Murray

Rue Ottawa

Rue Shannon

Rue Brevin

Parc du Canada de Lachine

Autoroute 10

Rue Peel

Rue St-Mathieu

Rue de la Montagne

Rue Drummond

Rue Stanley

Rue de la Montagne

Rue Bishop

Rue Mackay

Boulevard René-Lévesque

Rue Saint-Mathieu

Rue Saint-Catherine

Rue Guy

Rue Lincoln

Avenue Du Musée

Rue Redpath

Rue Simpson

Avenue Du Parc

Parc Rutherford

University

138

112

720

1

1000 ft

200 m

Map Data © 2008 Tele Atlas

Terms of Use

LOGIN

FONERO INFO

jpeach
1160 Rue St-Mathieu, Montreal, H3H2P4, CA

Add Contact

Share Location

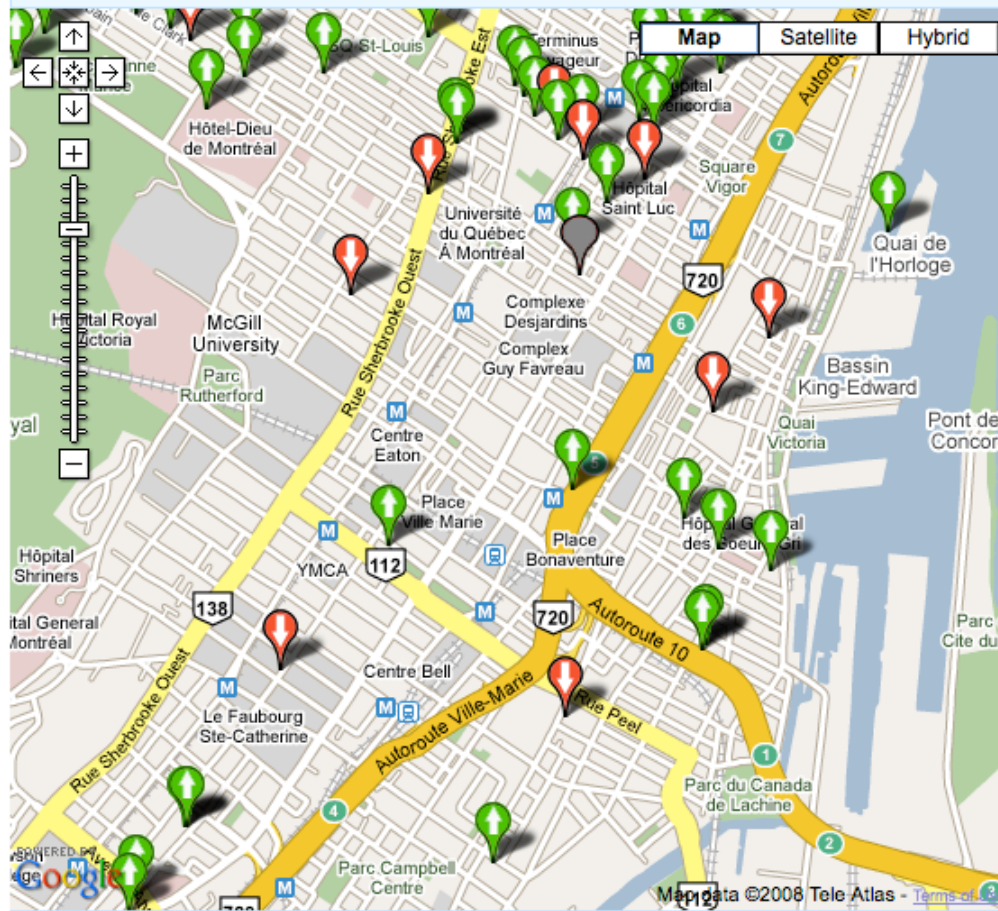
Send Message

View FON Spot

Compare: Île Sans Fil (www.ilesansfil.org)

Network: Île Sans Fil

Deployed HotSpots map



Show me the closest hotspot

Refresh map

Aréna Raymond Bourque – Hall
2345, Boul Thimens,
Montréal, QC,
H4R 1A1, Canada

Show me on the map

Arhoma
15, Place Simon-Valois,
Montréal, QC,
H1W 0A6, Canada
514 526-4662
Metro Joliette, autobus 125
[Homepage](#)

Show me on the map

Artneuf
3819, Calixa-Lavallée,
Montréal, QC,
H2L 2A7, Canada
514-872-3947
[Homepage](#)

Show me on the map

Arts Café

- "Bringing affordable Internet access to the next billion people"
- "Address the needs of the underserved market worldwide"
- Micro Internet service provider approach
- Community-based

- Legally share broadband connections
- Mesh networks
- Designed to work inside and outside
- Reliant upon goodwill of participants to host equipment





So Cal Free Net.org



99494 users



**100668 users
and growing**

What We Do

We make wireless internet work for low income communities. We work with building owners to survey and prepare a property, and then organize an installation day. Our volunteers work with local residents and staff to create the network. Then we help residents get their computers online. Afterwards we continue to monitor and maintain the network using state of the art technologies.





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Assessing User Generated Infrastructure

| |  |  |
|--------------|--|---|
| Usable | ? | ✓ |
| Useful | ? | ✓ |
| Reliable | x | ? |
| High quality | ? | ? |
| Sustainable | x | ? |
| Ubiquitous | x | x |
| Secure | ? | ? |
| Affordable | ✓ | ✓ |

Conclusions

Is it good to share?

- Both FON and Meraki provide some benefits
- Meraki's approach is likely to be more successful
- FON appears to be on shaky ground, model is unworkable
- As 'interim' infrastructures, these efforts are useful, but scale, central coordination are not easily achieved in community-centric models

Contact Information

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- For case studies of other wireless networks and detailed information on 'desiderata' for good public broadband information, visit the Community Wireless Infrastructure Research Project site: www.cwirp.org