

City Wide Mesh Network

What is it, and why you should care

City Wide Mesh Network

- First: What is it?
 - It's a computer network available over wireless technology
 - Decentralized
 - No ISP
 - No “Master”
 - Community Supported
 - Community is US

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- What do you mean, "Computer Network"
 - The network is much like the internet
 - We'd like to think it's "Better"
 - Connects all computers together that access this network

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- Decentralized?
 - There's no “master controller” to this network
 - Anyone may participate as an equal peer
 - All nodes route traffic
 - The network is able to self-heal
 - This means if a node is turned off, traffic routes around it

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- Community supported? That's SOCIALISM!
 - No, not really. Nobody is forced to use it, or participate in it
 - There are no “users” to this, only participants
 - Individuals own the routing nodes, and are free to offer access to whomever they want
 - We'd like you to offer access publicly, if possible
 - Individual operators are free to spin up member nodes
 - They just need to meet some standards, to keep things smooth

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- Why should you care?
 - Publicly accessible wifi is a neighborhood enabler
 - Brings foot traffic into local businesses
 - Keeps customers there longer
 - Acts as a community “amenity”
 - Brings members of the regional community together to build something together

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- Why should you care?
 - Publicly accessible wifi is a neighborhood enabler
 - Enables community groups free “internet” presence, at no cost to the group (Churches, block clubs, etc etc)
 - This “internet” wouldn't be generally available on the public internet
 - But, it's available where it needs to be: locally
 - Does the same for businesses
 - Local reach
 - High ROI on website, due to low investment

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- Why should you care?
 - A mesh network can improve employment rates
 - Most wanted postings are online
 - Internet access required to obtain jobs
 - Often times, email addresses are required too
 - Increased access to internet == more people employed

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- Why should you care?
 - A mesh network allows easier access to public services
 - Buffalo-Erie County Library has tons of audiobooks, ebooks, and movies available online
 - Most city bills are paid online
 - 311 reports can be done online as well
 - This means elderly, young children, and low income people get better access to things we all take for granted

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- Why should you care?
 - A mesh network serves the public during disasters
 - During Hurricane Sandy, normal internet was down. Red Hook Community Mesh was still up, and providing internet access to people for email and updates
 - During Katrina, amateur radio operators assisted people building an ad-hoc wireless system for public and government use to provide services for communications
 - During widespread outages here in Buffalo, a mesh network can serve to keep neighbors in communication to check in on elderly neighbors, or to chat to kill time while “Staying home, and drinking a six pack”

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So, I still have your attention?

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- How can you help?
 - For starters: Not asking you for money
 - We are in search of people
 - We need space.

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- We don't want your money.
 - We do want you to purchase hardware for yourself
 - You own it, we help you with it
 - We can help give advice on:
 - Hardware to buy
 - Setup location(s)
 - Installation
 - We can help with:
 - Hardware installs, software installs, and node management, client (Your inside network stuff) installs

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- If you don't want/can't purchase the hardware
 - That's fine!
 - We need space for nodes on roofs/etc
 - A potential node owner buys/owns the hardware
 - The potential node owner installs on your property
 - Maybe you can help install :)
 - Much like a barn raising
 - We all help get the network running

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- If you don't want/can't purchase the hardware
 - We also need muscle/climbers
 - Help node owners do installations
 - Help do site surveys

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- If you don't want/can't purchase the hardware
 - We also need outreach people
 - These people meet with potential site owners
 - They also produce presentations like this one
 - ... and produce other outreach documents

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It's a community effort!

We build it...

We maintain it...

We police it...

We use and enjoy it!

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Questions?