

COMMUNITY INTERNET

{ *broadband as a public service* }



HIGH-SPEED INTERNET access is fast becoming a basic public necessity — just like water, gas or electricity. But a majority of Americans are finding themselves on the wrong side of the digital divide, unable to get connected or afford high-priced commercial service. Community Internet is the answer.

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COMMUNITY INTERNET

is the future of communications. Soon all media — TV, telephone and the Web — will be delivered over the Internet. New wireless and wired technologies allow local governments, schools, public-private partnerships, nonprofits and community groups to offer affordable, universal broadband access.

What are the benefits of Community Internet?

Universal Affordability: Rural and low-income urban areas are badly underserved by providers of DSL and cable modem broadband. Service is scarce and prices are high. No community should be denied opportunity due to a lack of technology. Community Internet treats broadband access as a public necessity, not a privilege.

Public Access: Community Internet increases the number of voices in the public sphere. Using local networks, communities can offer citizens numerous advanced media services for everything from public safety and political forums to church services and Internet radio stations.

Community Development: Broadband access has become essential to economic growth, education and health care. Affordable broadband keeps jobs and attracts new businesses. It gives children computer skills to succeed in college and the work force. It expands opportunities to benefit from telecommuting and breakthroughs in telemedicine.

Competitive Advantage: The United States is falling far behind other world leaders in broadband availability. We pay more than 10 times as much as the Japanese or Koreans. Community Internet brings innovation and competition to the broadband marketplace.



How does Community Internet work?

Community Internet can be provided via different technologies:

Fiber: Dozens of towns nationwide — from Provo, Utah, to Cedar Falls, Iowa, to Kutztown, Pa. — have built state-of-the-art fiber-optic networks to provide high-speed broadband to their communities. These systems require a large capital investment, but, once built, they offer the “triple play” of telephone, cable TV and the Internet.

Hot-Spot Wireless: Wi-Fi hot spots are the most common Community Internet technology. Cafés, public parks, libraries, community centers and even entire downtown areas now offer bubbles of wireless connectivity for public access.

Mesh Networks: The most advanced Community Internet technology is the “mesh network,” a system of interconnected antennas placed on top of city street lights, residential rooftops, buildings, or even rural grain silos that creates a cloud of wireless connectivity over a campus, neighborhood or entire city. Mesh networks are even being developed using free, “open source” software.

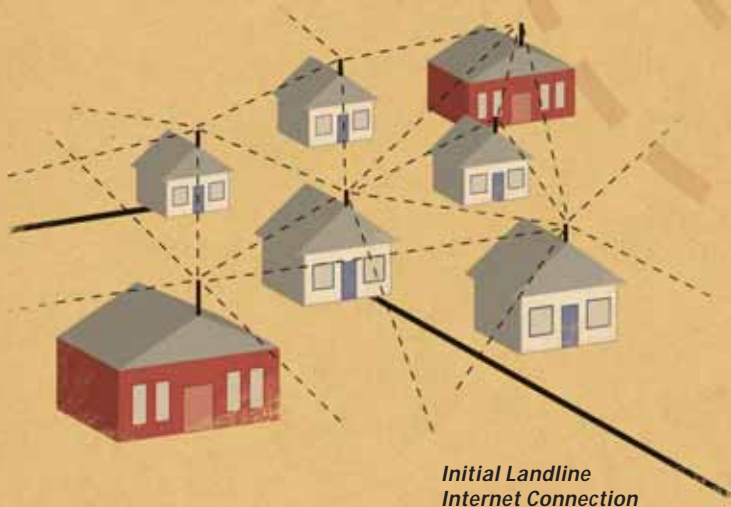
The term “mesh” simply means that the antennas which transmit the broadband signal through the network are arrayed across a town or city like a web. Each point of intersection on the web represents a small antenna with a data router, or “node.” Each “node” broadcasts a bubble of connectivity.

“Scottsburg didn’t wake up one morning and say we want to be in the broadband business. Scottsburg had business and industry that was going to leave our community because what we had was not fast enough.”

*– Mayor Bill Graham,
Scottsburg, Indiana*

The bubbles from each node then overlap with one another, forming a cloud of connectivity over the entire network for PCs, laptops and other wireless devices. The network is versatile, automatically sending data around obstacles and finding new pathways to utilize all the available capacity.

A mesh network has no identifiable center and no large, expensive towers that serve as “hubs.” The nodes in a mesh network are relatively small and inexpensive. Much like the Internet itself, the more nodes that are in the network, the more robust the system becomes.



**Initial Landline
Internet Connection**

Mesh networks: *Universal wireless broadband service at a low cost.*



The future of the Internet: Corporate or local control?

The major barrier to establishing Community Internet is not technological or economic. It's political.

Municipal Broadband, Corporate Backlash: In recent years, hundreds of municipal governments have started exploring how to provide high-speed broadband through local networks. But the big telephone and cable companies have responded by using their lobbying clout in state capitals and Washington, D.C., to outlaw municipal broadband systems, to undercut local control, and to prevent competition. Free Press is fighting back.

More Choices, Local Voices: In the future, all media content — video, audio, voice and text — will come through the same broadband network. Cable and telephone companies want exclusive control over the conduits. Free Press is committed to ensuring that communities can choose the broadband provider and technology that offers the best service at the lowest price.

Unlicensed Airwaves, Unlimited Access: Most Community Internet networks operate in the “unlicensed” portions of the public airwaves, tiny slices of the radio spectrum not exclusively licensed for government or commercial use. As new technologies emerge and the demand for unlicensed spectrum increases, Free Press is seeking government policies that open up more of the airwaves to the public.


Where can I find out more information?

Visit www.freepress.net/communityinternet

for the latest news and analysis on Community Internet and municipal broadband.

Free Press is organizing opposition across the country to legislation that threatens universal, affordable broadband access. The Web site contains constant updates and original reports that counter the latest corporate misinformation efforts. You'll also find extensive background information and links to model Community Internet projects and other groups working on the issue.

How do I learn how to build a network?

 Imagine a community networking system that any municipality, company or group of neighbors could set up themselves without expensive, proprietary equipment, overpriced "experts," or technology no one understands. Free Press believes community networking should be user-friendly, low-cost, and available to all.

The www.communityinternet.us Web site is a resource for people who:

- Want to learn more about Community Internet technologies;
- Are interested in setting up their own networks;
- Need reliable information from a source that isn't trying to sell them anything.

Contributors to the Web site include experts from across the community networking field who believe that technologies should maximize the public good, not just profit margins. The site is an open forum. If you want to help build this resource, go online and get involved.



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