



Twin Cities Broadband No Match For Community Network

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If you live in the Twin Cities, your internet connection is slower and more expensive than small town Monticello due to a reliance on big national phone and cable companies. Over the past several years, communities in the Twin Cities have considered building a community owned broadband network to increase competition, lower prices, and ensure everyone has access to the connections required for success in the digital economy. The failure to do so is costing consumers millions and communities untold amounts in lost business opportunity.

This analysis examines broadband prices in the Minneapolis / St. Paul metro area of Minnesota and compares them to the community fiber network located 40 miles northwest of Minneapolis. Monticello's prices and speeds are similar to other recent community fiber networks across the nation.

The most recent data shows that Monticello's community owned network offers much faster connections at lower prices than the private sector operators in the Twin Cities. Below, we compare similar levels of service from Monticello FiberNet, Qwest, Comcast, USIW Wi-Fi (Minneapolis only), and Clear Wi-Max wireless (available soon).

Broadband Tiers by Provider and Cost

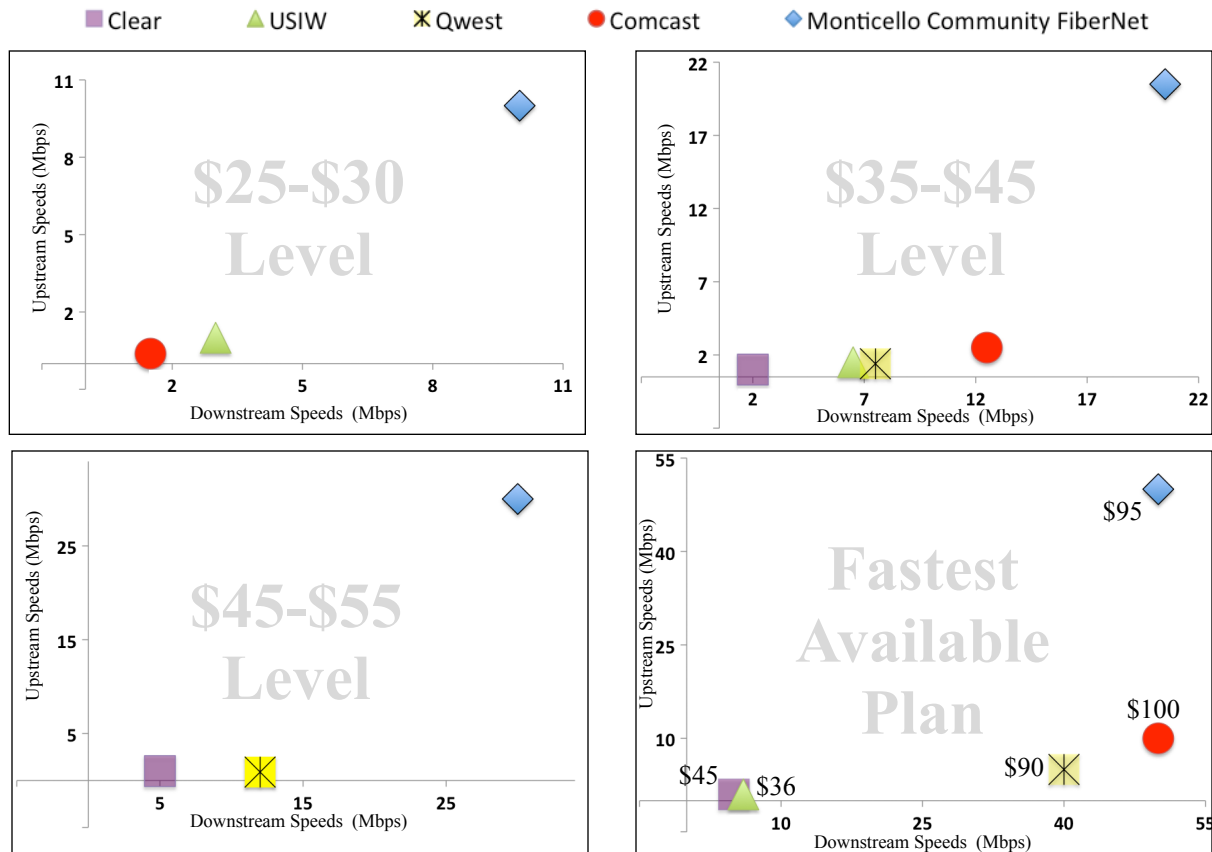


Figure 1
Pricing data from published, non-promotional rates.

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Broadband in the Twin Cities

Incumbent providers claim the broadband market is quite robust and competitive. Yet, nearly all broadband subscribers have settled for Comcast cable or Qwest DSL. The existing Minneapolis Wi-Fi provider and the Clear Wi-Max option are both slower and less reliable, a trend unlikely to change anytime soon. Locally, as well as nationally, wireless options have done little to change what is fundamentally a cable/DSL duopoly that offers little incentive to lower costs or invest in next-generation networks.

The fastest -- and one of the most affordable -- citywide networks in the state is actually in Monticello, a small town 40 miles northwest of Minneapolis. The network is owned by the City and operated by Hiawatha Broadband Communications, which also happens to offer faster broadband packages in its cities (mostly in SE MN) than are available in the metro area.

Broadband for Businesses

Internet speed and cost is already a driver of business location. Upstream and downstream speeds impact the effectiveness of digital age business necessities that increasingly depend on “the cloud.” And as businesses rely more and more on internet connectivity, that local advantage will grow.

Businesses increasingly use video chats to decrease expensive business travel; routinely exchange very large files with clients and vendors; and depend on off-site backups to safeguard essential data. Slow connections sap productivity and efficiency, allowing competitors a significant advantage.

Figure 2 plots the available upstream speeds along the y axis and downstream speeds along the x-axis. The width of the bubble is proportional to the price for that service. As the chart shows, Monticello’s offerings are not only faster than competitors but are considerably less expensive (as shown by the smaller size of the blue bubbles).

For businesses, the most significant difference between Twin Cities broadband providers and community networks like Monticello comes from the available upstream speeds. Cable and telephone companies, limited by their last-generation technology, offer much slower upstream speeds (when a user is uploading or sending a file, for instance) than downstream speeds (when a user is downloading email). Community fiber networks tend to offer symmetrical speeds, where both the upstream and downstream are very fast.

A note about comparing broadband across multiple providers: Advertised speeds can vary greatly based on the technology. For instance, DSL speeds quickly decrease the further a subscriber is from the DSLAM. Cable networks aggregate hundreds of subscribers on the same connection and often cannot deliver promised speeds during periods of high demand.

For the purposes of this report, we compare advertised claims despite the reality that full fiber networks are considerably more likely to consistently deliver those speeds than wireless, cable, and DSL alternatives. For a greater explanation, see our [Municipal Broadband: Demystifying Wireless and Fiber-Optic Options](#) report, which explains the key points.

Another business priority is reliability. While we have no way of measuring and comparing reliability among service providers in this brief, others have looked at this and found that full fiber-optic networks are much more reliable than cable and DSL networks. Thus, one would strongly expect Monticello FiberNet to be superior in that metric as well. Because communities view these networks as essential infrastructure, they have taken extra care to ensure redundancy to a degree beyond common practice in the private sector.

Community networks have a structural advantage over incumbent networks in the matter of increasing economic development. While national providers care little whether a business settles in town A or town B, locally owned networks work with potential businesses to ensure their needs are met. Between the better customer service, lower prices, and faster speeds, businesses served by community networks have many advantages over those served by national carriers.

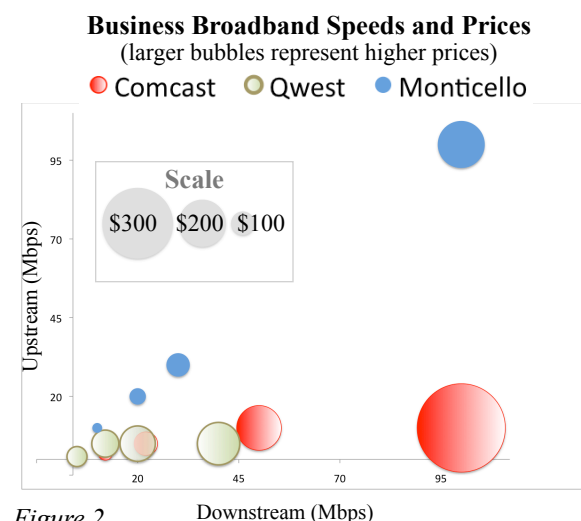


Figure 2
Speeds and prices based on published, non-promotional rates.

Figure 3 compares a commonly subscribed tier of service from each provider as well as the maximum. Monticello offers the fastest available speeds in aggregate (though Comcast also advertises 50Mbps downstream packages) and the highest value.

Every \$1 for Monticello FiberNet offers 0.33/0.33 Mbps (download, upload), compared to 0.28/0.05 from Comcast, 0.16/0.02 from Qwest, and 0.10/0.03 from USIW Wi-Fi.

Privately Owned Networks Offer Less

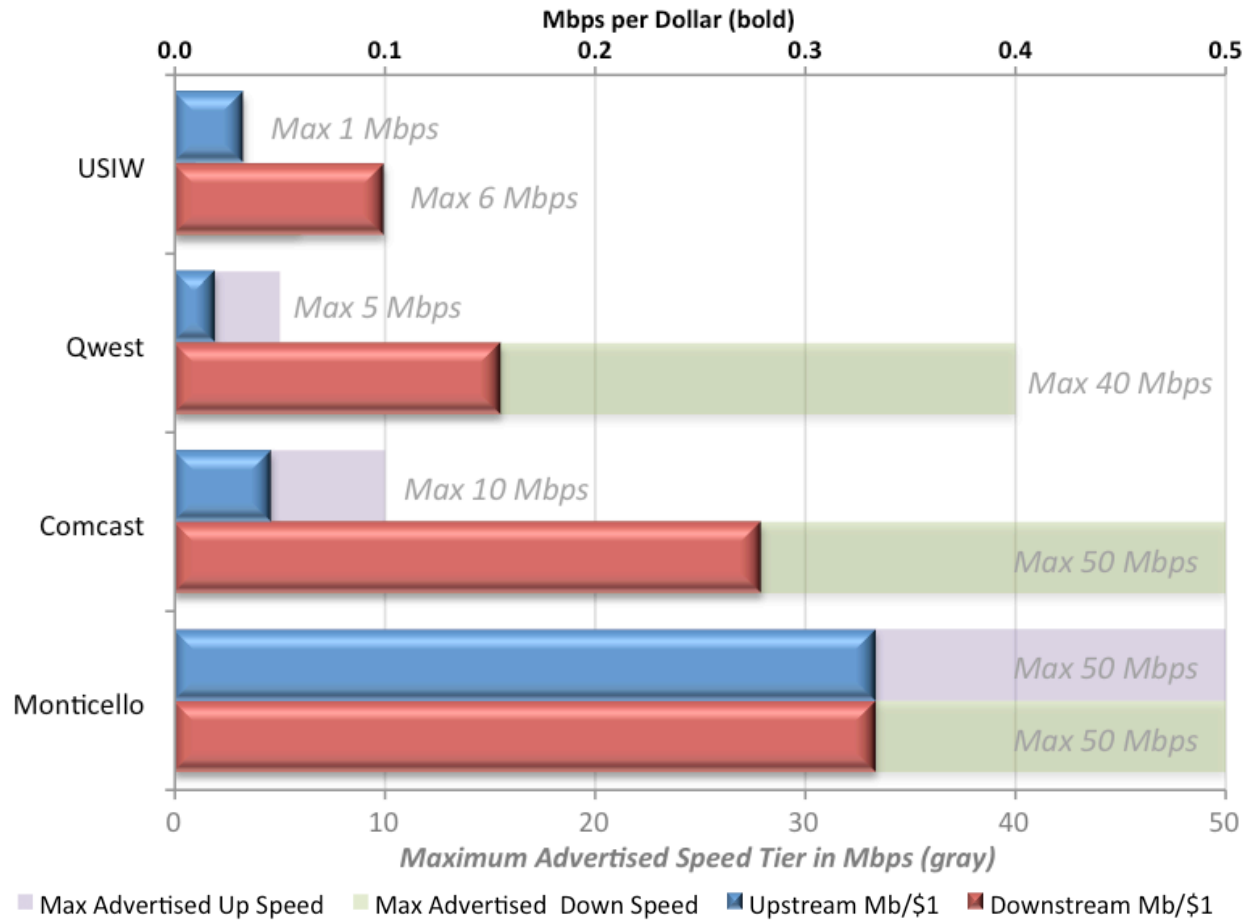


Figure 3
Comparing broadband from different providers can be challenging. Here we show a normalized value (Mbps/\$1) for a commonly used tier of each broadband provider (scale at top) as well as the fastest available speeds (scale at bottom). Compared plans include Monticello's 10/10; USIW's 3/1; Qwest's 7/.896; and Comcast's 12/2. Prices are based on published, non-promotional rates.

Community Networks: The Secret Sauce

Confronted with the facts that community broadband networks consistently offer faster speeds at lower prices, some question how it is possible and wonder if communities are somehow cheating or using tools not available to the private sector providers. In fact, incumbent providers spend a lot on lobbyists to convince state governments to outlaw community networks or create barriers to prevent communities from investing in this essential infrastructure.

The reality, as we explained in our comprehensive report, [Breaking the Broadband Monopoly: How](#)

[Communities Are Building the Networks They Need](#), is that communities face many more hurdles in building these networks than do massive national carriers who, as incumbents, have tremendous advantages over any competing network.

However, because communities treat the networks as infrastructure rather than a profit-maximizing investment, they can compete by using longer-term financing and pricing at a level not designed with the overarching goal to maximize profits for absentee shareholders.

But more importantly, communities invest in state-of-the-art fiber-to-the-home networks rather than the outdated technology most often used by incumbents who are unwilling or unable to make the necessary investments to keep pace with community needs. These all fiber-optic networks have much lower operating costs, allowing them to offer faster speeds at affordable prices.

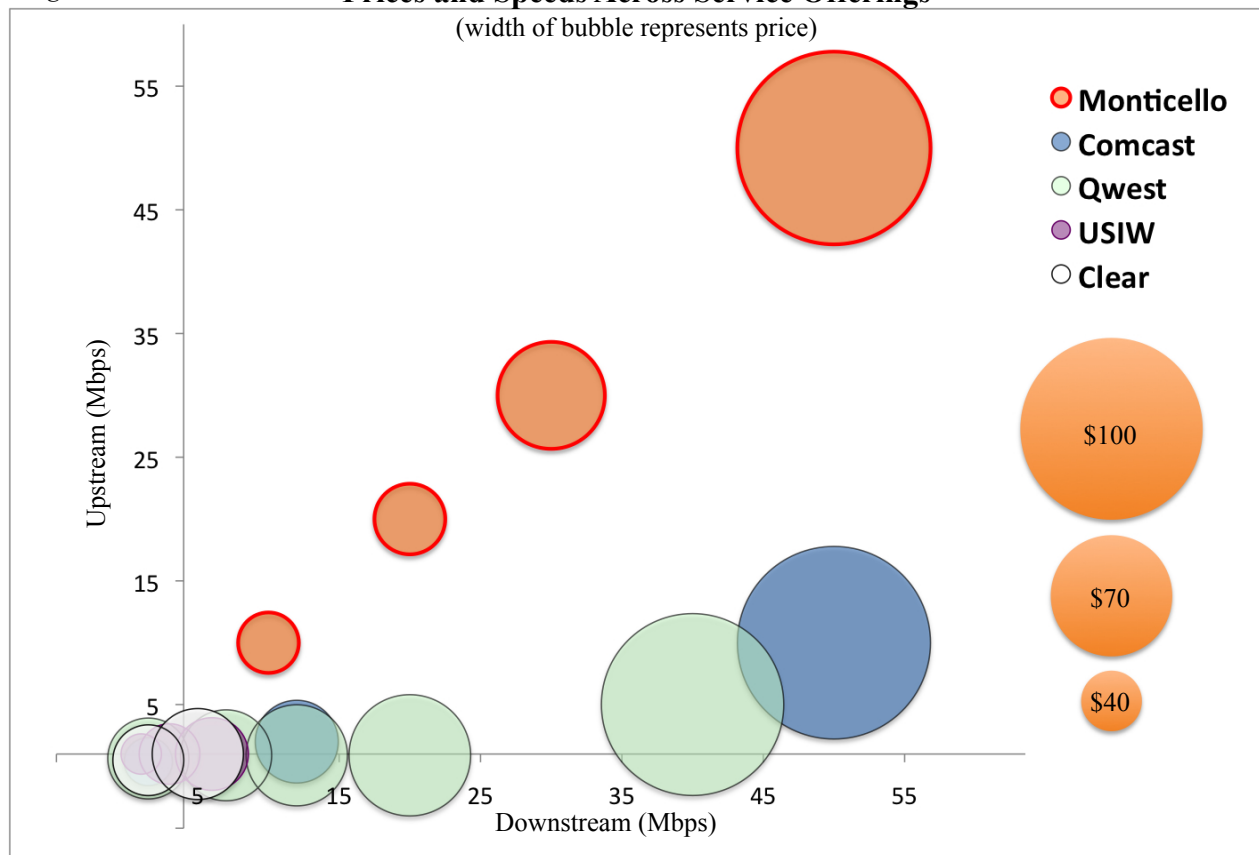
Consider two trucking companies carrying the same load across the country, obeying the same laws and regulations. If one can only use dirt roads while the other uses Interstates, the operating costs of the dirt road truckers will be much higher. And when more truck are required, the Interstate can accommodate a significantly larger number. Fiber-optic networks have the same advantages over copper-based networks.

When you compare all the tiers of residential service from Monticello against the providers in the Twin Cities (figure 4), you can quickly see that Monticello has invested in a network that offers far faster speeds for less money than any of the providers in the Twin Cities. Whether communities in the metro are competing with Monticello or internationally for jobs and quality of life, they would be smart to consider investing in community fiber networks.

This chart actually uses the new FCC definition for “basic broadband,” which is 4 Mbps downstream and 1 Mbps upstream. The packages that are plotted below and to the left of the origin are no longer technically broadband. **Notice how many of the plans offered by private providers barely qualify as broadband.**

Residential Broadband: Prices and Speeds Across Service Offerings

Figure 4



Since 1974, the Institute for Local Self-Reliance (ILSR) has worked with citizen groups, governments, and private businesses to extract the maximum value from local resources.

A program of ILSR, the New Rules Project helps policymakers to design rules as if community matters.

For more information, visit MuniNetworks.org where we offer a variety of reports and daily coverage of community networks.

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