



MONT BELVIEU'S MB LINK FIBER NETWORK: AN INTERNET SERVICE BUILT JUST FOR YOU

By **Dalton Rice**, Management Analyst
Brian Ligon, Communications and Marketing Director
Dwight Thomas, Broadband and IT Services Director
Scott Swigert, Assistant City Manager; and
Nathan Watkins, City Manager, City of Mont Belvieu

Imagine a family moving into a new home which is located in a new area with new schools and new careers. The closing documents signed, they prepare for the daunting task of moving in and setting up the essential services – water, electric, gas, and internet. After being on hold for an hour, they learn from the cable provider that there is no internet service in the area. Mont Belvieu citizens faced this reality for years until the City developed MB Link, Texas' first municipally owned and operated gigabit internet utility, providing high-speed, reliable internet to residents.

History of MB Link

The idea for MB Link stemmed from residents and businesses suffering from inadequate internet service coverage throughout the area. In 2016, the City opened discussions with telecommunications companies about providing faster and more reliable internet, but the talks were unsuccessful even after Mont Belvieu offered to pay to install the needed infrastructure. A feasibility study confirmed that more than

60 percent of residents and 80 percent of businesses considered local internet access inadequate. With the large national telecommunications companies declining to expand their services in Mont Belvieu, the city council, leadership, and staff seized the opportunity to develop an innovative solution. For a city to provide internet service in a competitive market unparalleled to a municipality, there are three essential components: fast and reliable speed, affordable pricing, and excellent customer service.

The City confronted the problem in 2017 by filing a lawsuit to address a 1900's state statute that allowed home rule cities to provide electrical service. This move highlighted that in the 21st century, fast and reliable internet access is as essential as water and electricity were at the turn of the last century. The judge ruled in favor of Mont Belvieu allowing the City to provide internet access as a utility. The City began working with consultants, the new Broadband and Information Technology Services Director Dwight Thomas, and the MB



Link team to develop a business model, establish the necessary infrastructure, install over 75 miles of fiber, connect existing homes and businesses, and establish a framework to fully own and operate the broadband service.

Funding

This extraordinary feat, accomplished with full community and city council support, was funded through a bond issuance that required no additional taxes. The initial project to design the network, build the infrastructure, connect existing homes, and hire MB Link staff came in under budget at \$13 million out of the initial \$14 million bond issuance. The remaining capital is covering MB Link network expansion and new projects to ensure all new businesses and residents can enjoy the service. To keep up with the substantial growth of new commercial and residential properties, the city council passed an ordinance in 2018 requiring developers to add fiber infrastructure by installing handholes and the conduit through which the fiber passes. To include reducing capital expenditures, the ordinance increases MB Link's penetration rates in new developments resulting in getting residents connected with minimal delay.

Revenue

By fully owning and operating MB Link, the City has the benefit of being a one-stop-shop for its citizens. When residents call or visit the City's website, they are able to sign up for water, trash, and internet services at one time, and billing now includes MB Link services. At this time, residential services are \$75 per month for up to 1000 Mbps (1 Gbps) upload and download, and commercial services have tiered packages based on business needs. Current projections show MB Link being cash flow positive in the next five to eight years; however, these projections do not assume potential revenue sources such as long-term leases of fiber and data center co-location agreements.

Opportunities

Operating as an enterprise within the City, the necessity to innovate and expand is essential. Although MB Link services are exclusive to residents and businesses, the City's business development activities ensure the enterprise operates and expands using best practices and that align with technological advances. MB Link has opened the door for discussions with cellular companies to bring new or expanded services into rural areas. These alternate revenue sources also provide improved services to our community and the surrounding areas. Furthermore, these companies often move more quickly since the City is a single source for internet backhaul, right-of-way acquisition, antenna placement (i.e. water towers), and agreement negotiations. MB Link is a testament to the success that municipalities can achieve in the best interests of the community and a self-sustainable revenue stream to carry the City beyond the 21st century.

THE FUN BUILDERS
KRAFTSMAN
KRAFTSMANPLAY.COM

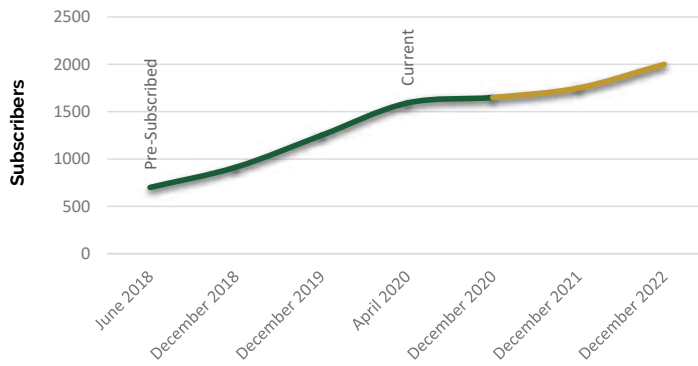
CALL FOR A FREE QUOTE!
800.451.4869

PLAYGROUNDS
WATERPARKS
FITNESS
AMENITIES
SHADE & SHELTER

BuyBoard
Community Solutions

Building Fun Since 1981

MB Link Subscribers



MB Link Subscribers

The connectivity that MB Link provides has been paramount during the recent unprecedented COVID-19 pandemic. With the global economy and operations shifting to new requirements, the need for telecommuting has substantially increased, emphasizing the essential need for reliable internet services.

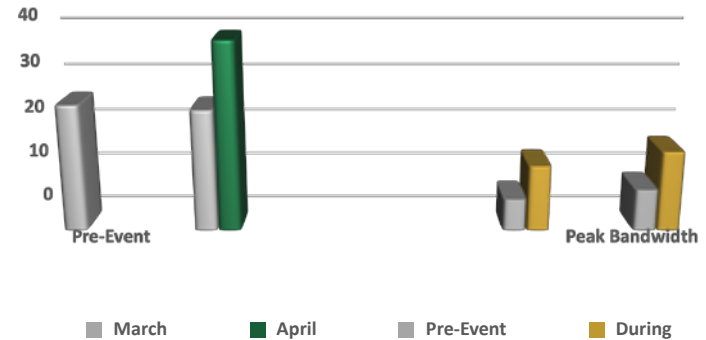
Current Service

Before going live in 2018, MB Link had over 700 pre-subscribers, and has since achieved a 60 percent penetration rate with over 1,500 residential customers and 30 business partners. The 1,000 customer celebration occurred on March 6, 2019. MB Link continues to make strides in an area, which the *Houston Business Journal* in 2018 considered the fourth fastest-growing city in the Houston metropolitan statistical area. Figure 1 shows the current and projected subscribers since going live. Highly-rated, industry-standard equipment ensures the community maintains fast and reliable speeds. Installation standards, which include cutting-edge gateways and battery backups, keep subscribers connected and informed through unforeseen power outages and various incidents.

Award-Winning Customer Service

The proven customer service model gives MB Link a competitive advantage. The customer service representatives (CSR) establish this advantage by proactively monitoring services, often detecting and restoring service-related issues before the resident knows they occurred. The CSR team keeps residents and businesses informed through active communication and relationships instead of reacting to negative events. Residents continuously praise the team for their professionalism.

Pandemic Subscriber and Bandwidth



MB Link 2020 Pandemic Subscribers and Bandwidth Usage

This chart illustrates the impact on subscribers and bandwidth usage with the community working and learning from home during the pandemic. Dwight Thomas mentioned his team observed some points in time where peak utilization reached 19.22 Gbps but was not sustained.

Innovation

The City of Mont Belvieu's achievement has caught the attention of cities and internet service providers throughout the state and nation. In April 2019, Mont Belvieu's key staff were invited to speak at the Broadband Communities Summit in Austin. The presentation left attendees and members of the press asking how a city of just 15.3 square miles could drive this technological innovation into reality. While MB Link is indeed a testament to innovation and success, it also demonstrates how municipal broadband can be a reality for other cities and local governments. MB Link is not a one-size-fits-all solution. It is a framework that can be used by other communities to develop business models that best fit their needs and population.

Mont Belvieu's MB Link is only the beginning. The effort by this small, far-east Houston suburb shows that this new utility can be successfully launched by cities large and small. And, Mont Belvieu's City staff hope they can help your city build a network like MB Link – an internet service built for your community. ★