

Minnesota Fiber Exchange Business Plan

Goal: Create an entity that would be a clearinghouse for fiber assets within the state of Minnesota: Minnesota Fiber Exchange (MFE) would create long-term IRU's with existing infrastructure owners to utilize their fiber assets bringing them currently unfound revenues. MFE will work with alternative fiber owners (i.e.: private infrastructure owners, local units of government and school districts) to create a metro-wide fiber network and then expand its reach to outstate Minnesota. In addition MFE will work with Economic Development Departments within counties and cities to build new business-focused fiber networks to increase their economic development opportunities. These networks will be "open-access" meaning MFE would not provide the finished bandwidth services but instead sell dark fiber and wavelength services to both businesses and finished service providers including CLEC's and ISP's. This business plan allows a business choice of any provider who has an agreement with MFE to utilize its infrastructure.

Structure: MFE would be created as an LLC with "A" and "B" class members.

- "A" class members will include U-reka Broadband Ventures. These members would have full voting rights and manage the company. U-reka Broadband Ventures would provide sales/marketing, design, installation and business development for MFE.
- "B" class members will include companies/entities contributing fiber assets to MFE. Their voting rights would be limited and they would receive revenue share of profits determined by the use of their assets. Members would include: local units of government, school districts, private fiber operators and economic development groups.

Questions others will ask:

1. **What is the tipping point for these services?**
2. **Why open access?**
3. **Why wholesale services?**
4. **Network Connections-how will others connect?**
5. **How will you get retail providers on board and who?**
6. **Will these "B" members participate?**
7. **What are the future opportunities for growth?**

Question 1: What is the tipping point for these services?-MFE believes that 2009 is the year of "Big Bandwidth" services as the existing CLEC market will continue find it difficult to compete with the incumbent phone companies and cable companies in providing services above integrated T1 services to its customers. "Big Broadband" (defined here as above 100 meg connection) will continue to become a requirement of not only large businesses but also the small and medium business market, especially those who are technology based or may require large bandwidth capabilities to share data across their companies or with their customers and vendors). Currently these "Big Bandwidth" services are

priced outrageously by the incumbent community. A current U-reka Broadband Ventures client has priced out a 100 meg fiber connection from Qwest for 3 locations within the same city, the pricing came out at \$2,600.00/month for each connection (the customer requiring two) or if they were interested in a Gig-E connection that price would have been \$13,500.00/month. For customers like this it does not take long to justify an investment in their own infrastructure for these types of services. In addition, fiber transport has become a plug and play technology allowing an IT department with two mid-range routers/switches and GBIC or SFP optics the ability to create Gig-E connectivity between their locations if they have access to the layer one connectivity that MFE would enable. As more and more local government units build their own fiber assets for public service and competitive wireless offerings more local fiber is available for MFE to leverage. So from a tipping point perspective both the infrastructure is available and the service is needed in the marketplace. With MFE beginning operations in 2007 it will well position itself for the bandwidth explosion of the coming year.

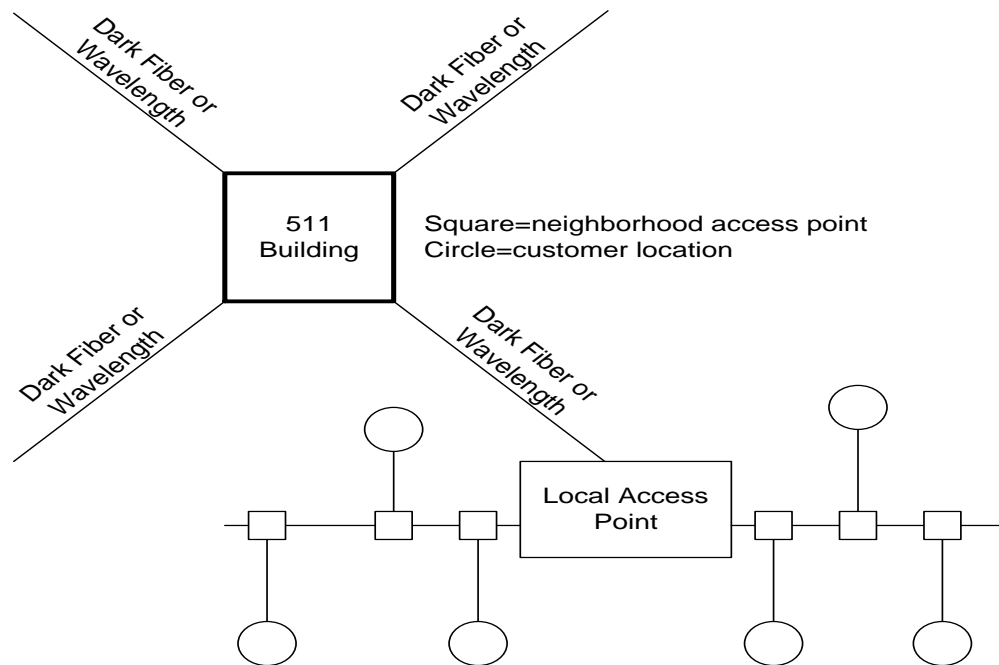
Question 2: Why “Open Access”? Open Access provides a level of neutrality not only to U-reka Broadband Ventures but it also provides a defensible solution for the public entities who contribute their fiber assets. If a municipality were to enter the competitive telecom space there would still only be three providers in the marketplace and the incumbent providers would still cry foul. If a municipality were to contribute its existing assets in partnership with MFE then multiple new providers could compete in that marketplace and additional new services would be available besides (data back-up, storage and VOIP). The open access model allows the municipality to have a competitive economic advantage against other municipalities who do not have a fiber infrastructure to leverage and also would not have the responsibility and liability of a service provider. Fiber infrastructure would be another infrastructure the local unit of government builds for the good of the community. Since most economic development is dependent on providing businesses an incentive to locate or relocate to a community local units of government can build a strong argument that leveraging existing or building new “open access” fiber to support economic development. Open access will create a defensible position for local units of government while also building economic development opportunities while still keeping themselves and MFE out of the retail space.

Question 3: Why wholesale services? As part of the open access network it logically makes sense for MFE to provide these types of layer 1 and 2 services and leave finished services to the retail providers or to the business leasing the fiber. Wavelength services will only be used in the case of limited availability of fiber strands (mostly in the backbone transport portion of the network) while dark fiber will be the preferable solution and required in the access network (from the backbone network to the customer location). In typical open access networks the service is managed down to a VLAN level by the wholesale provider creating a

requirement for a sophisticated operational support system to manage retail services for the retail providers. MFE, by providing wavelength and dark fiber services will reduce its requirement for a sophisticated operational support system platform. A strong mapping program with a database of fiber strands will handle the requirements from a systems inventory perspective. Also by utilizing dark fiber and wavelength solutions the retail provider can make its own decisions regarding the electronics it decides to place at the customer location. To this end, MFE does not care if the retail provider is providing OC-n or Gig-E solutions since we are only providing the layer 1 or 2 pipe.

Question 4: Network Connections-how will others connect? The core connectivity location will be the 511 building in downtown Minneapolis at the FWR Communications Minnesota Gateway location; this affords MFE the opportunity to interconnect with the largest amount of existing providers in the Minneapolis/St. Paul area. From there MFE will create core network connectivity utilizing dark fiber or wavelength services to get out of the partner's fiber networks.

Example of Network



At the interconnection to the partner network a local access point is created to breakdown the wavelength or dark fiber strands to interconnect with the access local fiber. Strategic community access points (handholes) will be created to provide connectivity to the retail providers' customer. When a retail provider obtains a customer along the local network an order is placed to MFE to design and build the lateral to the customer. The cost of the lateral build is financed by the end user and added into the cost of the service. At the point that construction is completed and the fiber is tested end to end, the fiber is turned over to the

retail provider to provision the retail service. If the building owner/lessee is the purchaser of the wholesale service then the fiber is turned over to them to provision their own services to either 511 to interconnect to a backbone provider or to the owner/lessee's second location whether that is across town or the metro area.

Question 5: How will you get retail providers on board and who? MFE will make it attractive for retail providers or wholesale purchasers to utilize its network by:

- a) Creating a meet point at the 511 building where most providers already have connectivity
- b) Having a uniform pricing strategy by fiber strand mile to make pricing consistent and easy to determine
- c) Allowing retail providers to greatly expand their footprint with little capital expenditure

Initial providers MFE will target for its first four trial sites will include:

- a) Onvoy
- b) Integra
- c) Nextera
- d) Wireless Carriers

MFE principals currently have strong relationships with the first three providers and will work to create relationships with wireless providers which MFE believes is one of the greatest wholesale opportunities given the bandwidth requirements of cellular providers. MFE will attempt to include one wireless carrier in its trial deployment.

Once the trial period is complete MFE will ramp efforts to add other CLECs, ISPs and VARs to provide services to the retail commercial market and wireless carriers to utilize the network for their backbone transport networks.

Question 6: Will these "B" members participate? MFE believes the answer is yes. With MFE's principals experience in building and operating networks in the Minneapolis/St. Paul metropolitan area there is knowledge of 100's of miles of fiber infrastructure available for use. From a county, city and school district perspective there have been significant fiber builds within the last decade that goes underutilized. With these local units of government they are always looking for ways to generate revenue for their operations without having to raise the tax base of its constituents. MFE believes that if these local units of government can capture the operational costs of their networks it will be a significant advantage to their operational costs. In meetings and interviews with representatives of the local units of government we find this assumption true.

The largest lever for "B" members to participate is the economic development advantage for cities that have a fiber infrastructure to retain or lure new businesses to their community. MFE will target the economic development departments of cities and counties to become part of the MFE business plan. The relative autonomy of economic development entities to make decisions and

raise funds to build these networks will be a crucial piece of the business plan. As “Big Bandwidth” connectivity becomes more of a business requirement those communities will have a definite advantage over those cities that do not. In addition, since economic development groups have the first contacts with new businesses in their area plus a vested (financial) interest in the fiber network they become the first-line salesperson for MFE. With the ability for an economic development coordinator to tell a potential business that not only fiber connectivity is available but also that they can choose from 5-6 different providers will become a compelling tool for new business acquisition.

Question 7: What are the future opportunities for growth? MFE believes that the following opportunities exist to grow the business:

- To become the de facto standard for economic development groups across the 11 county metro area
- To become the wholesale go-to solution for wireless carriers to solve their bandwidth issues to cell sites
- To work with the Blandin Foundation to replicate this “Open Access” model to rural Minnesota
- To be positioned to make strategic acquisitions to strengthen its position as a wholesale carrier
- To be positioned to build backbone connectivity networks where required to connect to new and existing municipal networks
- To work with outstate carriers to provide fiber connectivity between companies in the Minneapolis/St. Paul metro and outstate branches
- To become the model for Minnesota CLECs to enter new markets, bypass the incumbent companies infrastructure and provide real “Big Bandwidth” solutions