



Nebraska Broadband Bridge Program

Company: Skywave Wireless, Inc.

Project: Dodge Village

Document: Attachment G

# Business Plan

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### **Mission statement**

Skywave is a local service provider. It provides internet and telephone service to its customers via wireless and fiber optic networks. It focuses on all customers in its service areas, residential and business. Skywave's mission is to provide residents of rural Nebraska with telecom services that are competitively priced, the fastest available, and local. The need for communications, specifically increased data bandwidth, is ever increasing and Skywave is deploying cutting edge technologies to make that possible.

### **Proposed Network**

Skywave is proposing an all-underground fiber optic network for the village of Dodge, NE. The project consists of approximately 320 serviceable locations. ITU G.984 GPON standard will be utilized to provide last mile broadband services. This GPON standard has a capacity of 2.488 Gbps downstream by 1.244 Gbps upstream. Updated versions support up to a 1:128 split ratio. Physical distance between the user and the provider can be up to 40Km with class C+ optics. GPON technology can easily achieve sub 1ms latency. A few factors like distance and equipment used can affect this number slightly, however it still remains one of the fastest distribution technologies. With Quality of Service (QoS) standards and extremely low latency, GPON is capable of delivering the highest (5 - excellent) mean opinion score (MOS).

### **Legal Challenges**

Skywave is a licensed CLEC (Competitive Local Exchange Carrier) in the state of Nebraska. This allows Skywave access to public ROW's (Right of Way) and utility easements of record. Skywave works with all local, state, and federal authorities in any additional permitting processes. We do not foresee any legal challenges with this project.

### **Products and Services**

Skywave offers a variety of services. These include various data services: residential internet, business internet, and private business links.

Telephony services include: residential and business POTS (plain old telephone service), hosted PBX solutions, e-fax, and traditional fax service.

Construction services include: trenching, horizontal directional drilling, excavation, utility locating, fiber splicing, and structured wiring.



## **Operational Plan**

Skywave's plan for ongoing operation of this project is to add it to already existing systems and support staff that operate its current FTTP networks.

Skywave will continue to maintain internal staff that monitors and rectifies any issues with performance or capacity on the network. The on-going maintenance of the physical fiber optic plant is handled by outside plant technicians. Skywave has several crews of experienced fiber optic installers. Everything that is needed to maintain and service the network Skywave has in-house. This allows Skywave to keep its costs down and response times up without having to rely on outside contractors.

Skywave's technical staff handles the provisioning and maintenance of fiber optic electronics and CPE equipment used to provide services to its customers. IT staff also handles interconnection equipment and devices. Internal ticketing systems and procedures are used to provision all services from start to finish. All departments communicate using this system. This allows Skywave to provide quick response and excellent customer service.

## **Financial Analysis**

Skywave has been building and operating its fiber network since 2012. It currently has completed networks in West Point and Beemer. It is currently finishing up its Oakland project. These projects are all profitable and help provide capital for future growth and maintenance of fiber optic plants.

The Dodge project will consist of approximately 320 serviceable addresses. Skywave's current fiber network ARPU (Average Revenue Per User) is approximately \$74. Skywave has seen in the past a 30%-50% take rate after the first year of service. This would bring in over \$85,000 in revenue a year. Skywave has estimated that the project will cost around \$590,000. With the life of the network easily being over 30 years, this implies a ROI (Return on Investment) of 10 years or less.

The funds provided by Nebraska Broadband Bridge Program are going to encourage faster deployment of high-speed broadband networks by Skywave and other providers while targeting areas that need it most.

## **Summary**

The Dodge Village project is not a large undertaking but is going to make a big impact on the community. Skywave has been in contact with residents of the area discussing the possibility of completing a project such as this. It is clearly evident that residents of Dodge have been disadvantaged for some time because of the lack of multiple wireline broadband providers. Communities with one provider often are faced with high prices and poor services. The lone provider has no incentive to provide any better service. This project aims to change that by providing a new fiber optic network that also will bring competition, lower prices, and better services to this community that has long been waiting.