

PrairieWave Wireless Projects

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Past

- Wire line provider that entered wireless arena in 1997 to provide dial tone & data connectivity to rural customers.
- Deployed 3 unlicensed frequency hopping systems that supported phone service & data connectivity with connection speeds of 22 to 23k.
- System deactivated in 2002, too costly to maintain for the data rates that could be provided.
- Cost per subscriber - \$2000 to \$2200

Present

- Operating 2.4 GHz point to point wireless system in the Sioux Falls area since 1999.
256k to 1.5mbs symmetrical service within 8 miles of one of the two Sioux Falls towers.
- Currently testing 900Mhz systems for deployment in rural areas.
256k to 1.5mbs asymmetrical service within 10 miles of the tower location.
Cost effective transport system to provide data connectivity to the very rural customers of our ILEC service area.

Future

- Currently testing Video over Ethernet
 - Constant bit rate streams vs. Variable bit rate
 - 3.2 Mbs/sec vs. 5Mbs/sec to 6Mbs/sec (MPEG 2)
 - MPEG 4 could cut this in half
- Switched Video Architecture vs. Multicast
 - Streams called by Set top Box
- How much bandwidth is enough?
 - WiMax may be the answer
- Looking for MVNO opportunities