

openrange

perfectly simple...
wireless broadband



FCC Rural Broadband Wireless Workshop
August 13, 2009

Open Range Communications

- \$367 million funding (One Equity Partners, Dept of Agriculture RDUP)
- Over 500 markets in 17 states to be deployed over 5 years
- Licensed spectrum
- WiMax technology
- Self-installation fixed indoor CPE (data + voice)
- Currently building out first markets for launch in 2009



Rural Broadband Deployment Challenges

- Site acquisition is not easier or faster than in urban areas
 - Rural zoning approval cycle often very slow
 - Some municipalities have restrictive tower height covenants
- Access to backhaul network often practical only with microwave radio
 - Not all markets can be connected with a single hop, even at 6 GHz.
- Indoor CPE with self installation is a requirement for mass market consumer
 - Allows phone and internet portal ordering process
 - Product must be simple to install and use
 - Truck roll is not an option due to cost
- CPE performance, cost, functionality, reliability must be superior



Commentary on FCC questions

- Licensed spectrum required to provide contracted QoS to customer, and to ensure operating environment is under our control.
- CPE cost factor limits the practicality of integrating additional bands or air interfaces into one device, but over time technology continues to make this easier.
- Unlicensed spectrum helpful for in-home distribution of the broadband pipe provided by the licensed service, but 3650 MHz-style spectrum not suitable for primary service delivery in rural areas.
- WiMax is suitable for rural deployments. WiMax cost curve and technology roadmap benefit from widespread deployments worldwide and large ecosystem.
- Additional sub-10 GHz microwave spectrum useful for connecting broadband wireless cell sites to backhaul.

