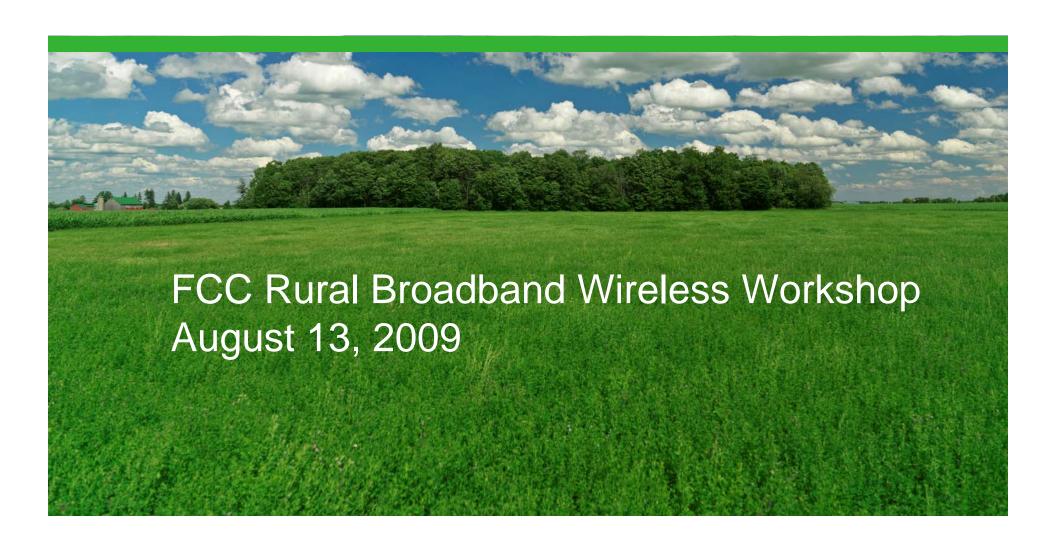
## openrange

perfectly simple... wireless broadband



## **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
  - oSome 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
  - oProduct must be simple to install and use
  - oTruck 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.

