



Wireless Broadband for Rural Oregon

Oregon Connections Telecommunications Conference
October 29, 2009

Maturity and Performance

- First with High Speed Internet in Central Oregon (1997)
- Largest fiber optic network in region with dedicated fiber construction and maintenance departments
- Fiber rings inside and outside of region
- Nationally recognized for technology leadership
- Fastest HSI product in Oregon (60Mbps DS) with DOCSIS 3.0
- Advanced Business services with Optical Ethernet, SIP trunks
- WiFi clouds in partnership with municipal entities

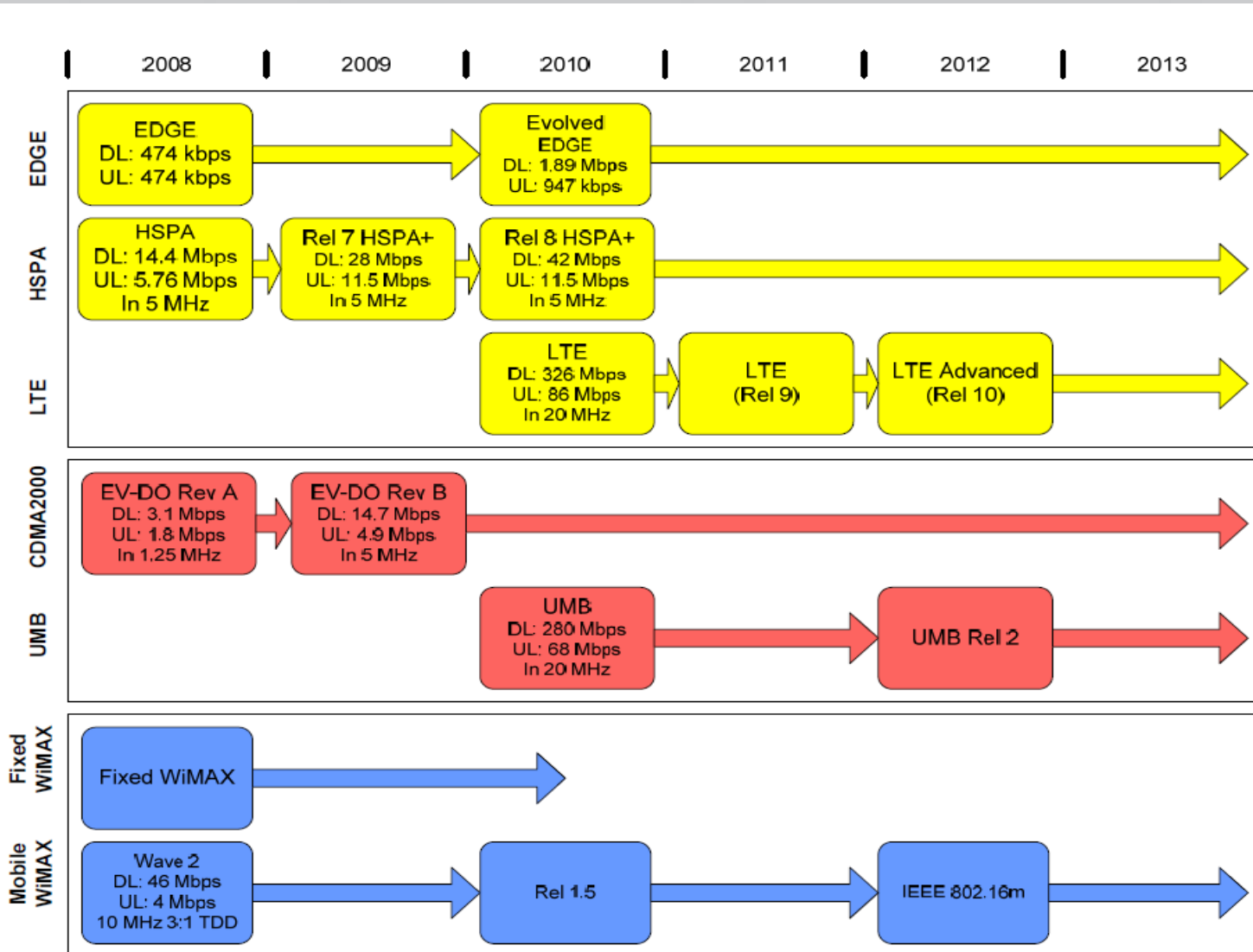
Moving into wireless broadband ...

Internet for Everyone

- Ubiquitous broadband is a priority for BendBroadband
- Wireless broadband is the most cost effective solution for rural markets
- Deploying leading edge wireless solution
- Product has similar performance to cable and DSL in rural markets and reaches the underserved

Fully Licensed Spectrum

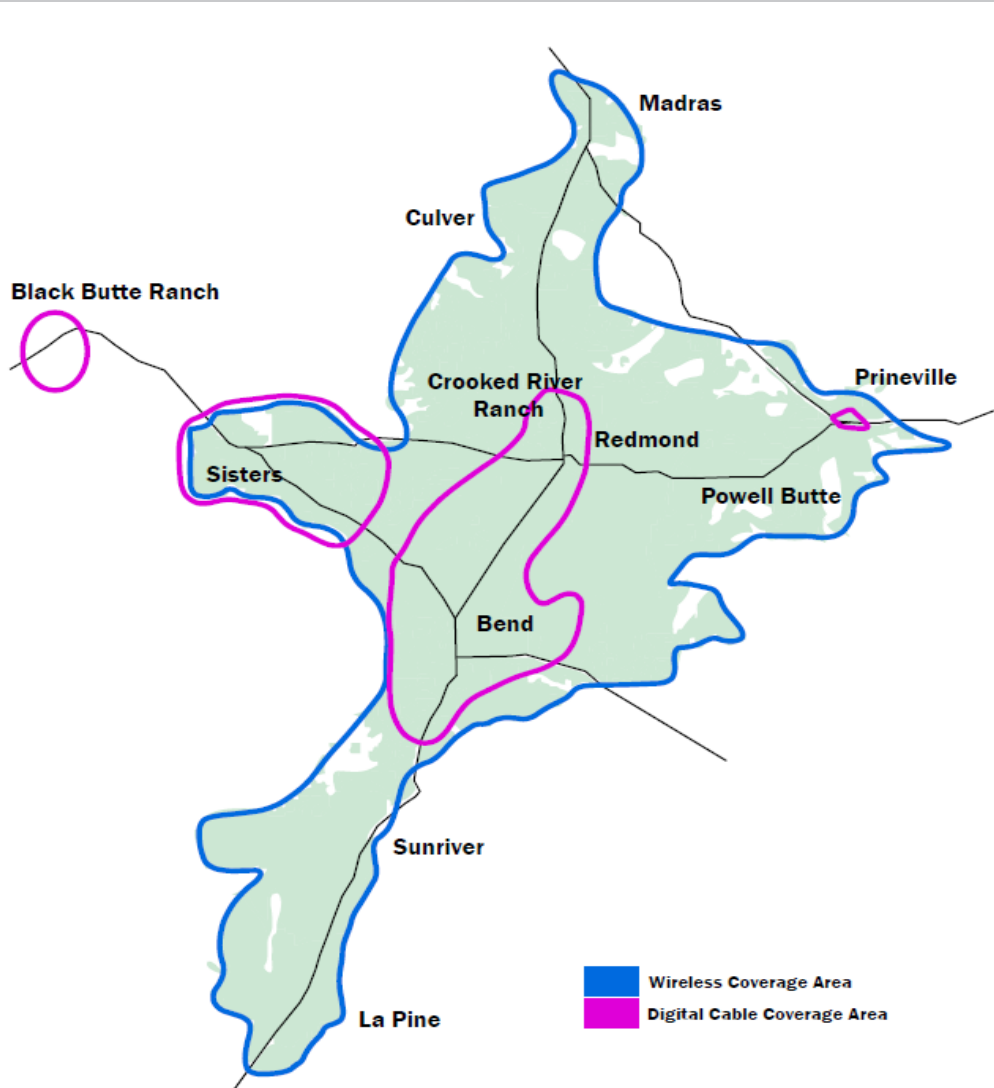
- BendBroadband has purchased spectrum from the federal government
- Other carriers cannot use that spectrum to transmit data
- Allows for higher powered data transmission for improved coverage and quality
- Unlicensed or 'lightly' licensed spectrum is low power and shared among multiple users and carriers—which may result in interference, poor quality and contention



The Future of Wireless

- Nearly 4 billion worldwide GSM users drives innovation, performance and lower equipment prices on the road to LTE
- BendBroadband launching with HSPA+ (High Speed Packet Access Plus)—upgradeable to LTE
- Central Oregon will have the first production HSPA+ network in the United States

Central Oregon, at launch, will be among the 10 fastest wireless network in the world



What towns will have coverage?

Alfalfa

Prineville

Bend

Redmond

Crooked River Ranch

Sisters

Culver

Sunriver

LaPine

Tumalo

Madras

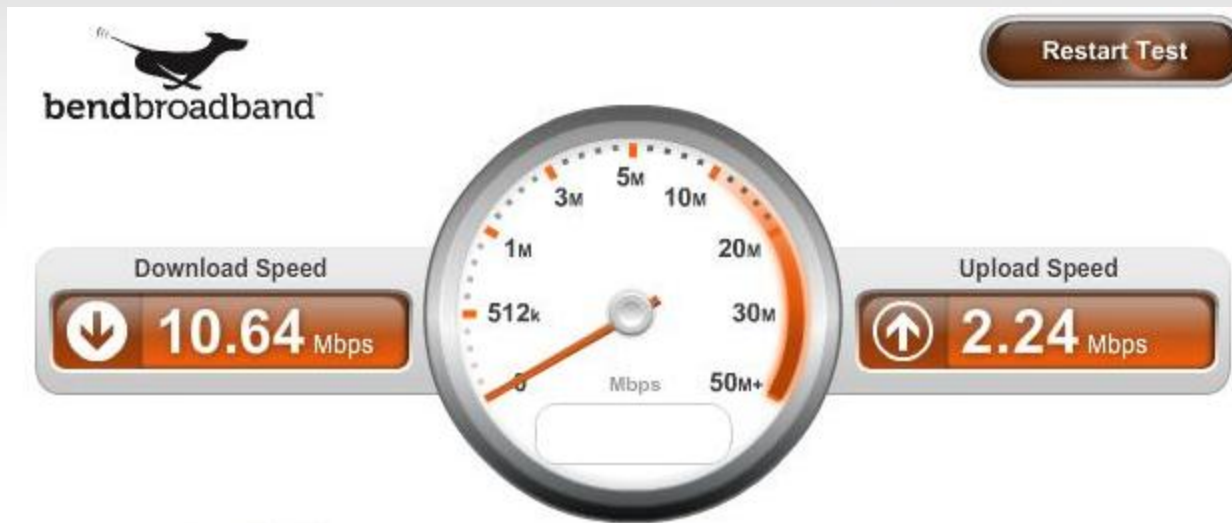
Terrebonne

Powell Butte

And places between!

Wireless High Speed Internet

- Speeds comparable to cable modem products, future-proof, upgradeable technology
- Priced comparably to cable modem service
- Designed for residences, small offices, clinics, municipal services, home telemedicine and distance education—contributes to economic development



Powell Butte Highway at freeway speeds with an HSPA+ USB Modem

Wireless Broadband for Rural Oregon

- Best cost of activation per HP for rural applications
- Balanced with best performance future
- BendBroadband is 'shovel ready' with
 - Backroom Architecture
 - OSS/BSS
 - Supply Chain
 - Support Chain

Just add cell

- 80% grant funding, 20% applicant
- Creation of service area from census blocks
- Demonstration of unserved and underserved
- PE certification
- Working business model for continuity
- Form public/private partnerships with municipalities, education and health partners

Challenges with BTOP/BIP

- Program still does not provide working business model for significant rural constituency
 - *Grant qualification for operating expense*
 - *Higher grant threshold for capital*
 - *Licensed spectrum investment should count as 'at kind'*
- Many areas do not have reasonable middle mile transport options (e.g. Lake County)
- Many areas are financially challenged for both broadband service costs and computers

- Will launch at end of 2009
- Shovel ready!
- Lowest cost per HP with solid broadband futures
- Fingers crossed!
- Program does not provide working business model for many rural last mile and middle mile futures