



### > BUSINESS MADE **SIMPLE**

## WiMAX Case Study: **NETAGO** WIRELESS

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### **Objective**

- > Provide an overview of a Nortel WiMAX trial in rural Canada



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### Outline

- > Background on service area
  - where it is
  - the Special Services Area Board
  - a few photos ...
- > Background on Netago Wireless
- > Why Netago chose WiMAX
- > Trial is a success!
  - video



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### A Few Facts on Special Areas

- > Population: 12,000: growing across Alberta except for Special Areas Board (SAB)
- > Area: 8,000 square miles (20500 sq. km), arid terrain
- > Industries: farming, ranching, oil and gas
- > Objective: attract new businesses and families to SAB, retain future generations
- > Netago Vision: Provide high-speed data services to residents of rural Alberta at comparable prices to urban areas

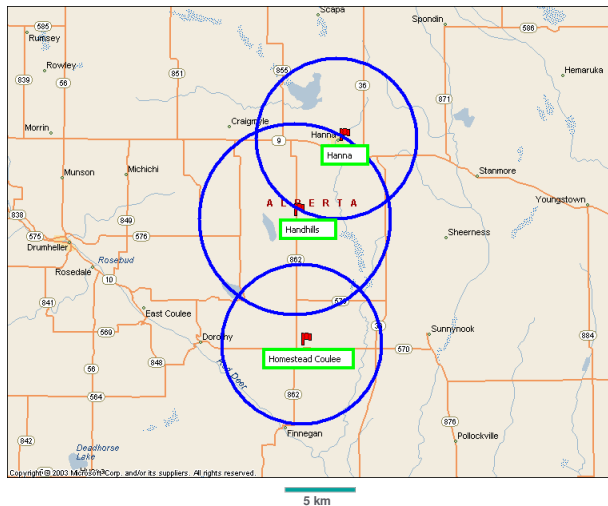


**Broadband services is a missing critical economic driver**



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### Initial Trial Service Area



The NETAGO WiMAX network operates in the 3.5GHz band and will be made available to ~80% of SAB residents by the end of summer 2006, extending the service area of the Alberta SuperNet Project [www.albertasupernet.ca](http://www.albertasupernet.ca) which is a provincial government initiative designed to bring affordable broadband services to ~4,200 government, health, library and educational facilities in 429 communities across Alberta.



### Special Services Area Board - Synopsis

- > Special Services Area Board (SAB) is a unique rural municipal area covering ~2.1 million hectares in south-eastern Alberta.
- > Responsible for administration for all municipal services plus leasing of public lands in the area. 60% is public land leased for grazing, cultivation or irrigation. SAB also operates 5 community pastures: grazing for 9,000 cattle.
- > Responsible for all local roads, comprising some 5,000 miles (8,000 km) within the area.
- > Set up for land use control in the 1930s, continues to operate the area for the betterment of the land and the people from within.



















### Creating NETAGO Wireless

- > 2003: Netago Wireless opens doors
- > 2004: Options for broadband connectivity remain cost prohibitive
- > 2005:
  - Alberta SuperNet launches - fiber connections for all of Alberta
  - Netago establishes partnerships
    - Upstream provider: Alberta SuperNet
    - Municipal government: Special Areas Board
    - Equipment manufacturer: Nortel
- > 2006: WiMAX trial and network launch



Partnerships are essential  
to make the impossible  
probable



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## Why NETAGO Chose WiMAX

- > Non-proprietary solution
- > Economies of scale
- > Quality of service



- > Extend existing coverage by 50%
- > Lower cost to consumers
- > Enable VoIP, prioritize business over end-users

WiMAX is THE technology to make broadband happen for this area



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## Video 1



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### What we did

Trial exceeded customer expectations

#### Timing:

- > Summer 2005: RFP requested
- > Dec 2005: Equipment arrives
- > Jan 2006: Trial launched

#### Implementation:

- > Cover Hanna and 2 rural areas
- > Trial with 3 towers / 3 BTSSs
- > Omni directional antennas
- > 35 outdoor and 8 indoor subscriber units

#### Results:

- > Ranges up to 20 km and 15 km to outdoor and indoor units
- > Speeds of 1.5 / 2 and 3 Mbps, depending on the needs
- > Tested streaming video at 8 Mbps

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### Success Stories

- > Residents: office from home, online banking, distance learning
- > Ranchers: agricultural research, buy/sell cattle
- > Oil company: company LAN speeds of 2 Mbps increased work productivity
- > Calgary Stampede: 2 Mbps enables transfer of high-bandwidth data

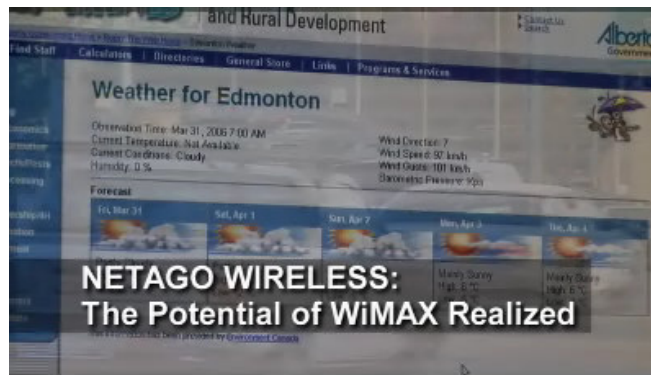


Customers are delighted

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### Video 2



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### Learnings and Advice

- > Spectrum
  - How do you get it?
  - Partners can help
  - Work closely with Regulator
- > Services, such as site engineering and selection
  - Wireless experience is a major plus
- > Partnerships
  - Relationships can make it or break it



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### What's Next?

- > Commercial launch summer 2006
- > Expansion beyond SAB area
- > Trial new technologies with Nortel



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# Thank you! Merci!

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