Feasibility Study: Deployment of a Wireless Network in Folsom



13 October 2006

Prepared by Tellus Venture Associates, for The City of Folsom, California

Feasibility study objectives

- ☐ Can a citywide, wireless network...
 - ☐ Be technically viable?
 - ■Succeed financially?
 - ☐ Promote economic development?
- Research and analysis included...
 - Market assessment
 - ☐ Spectrum survey & analysis
 - Conceptual design
 - ☐ Business model & scenarios

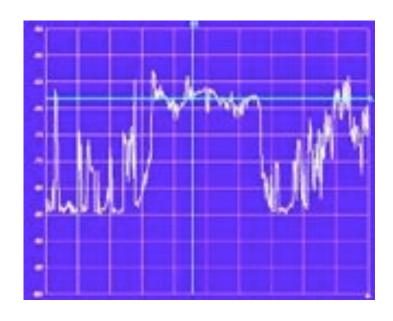
Internet service in Folsom is good

- Infrastructure up to date
 - Comcast
 - □ SBC
- Wireless service in-town
 - ☐ Earthlink wireless service
 - □ Verizon planning 3G broadband
 - □ 30 to 40 WiFi hotspots

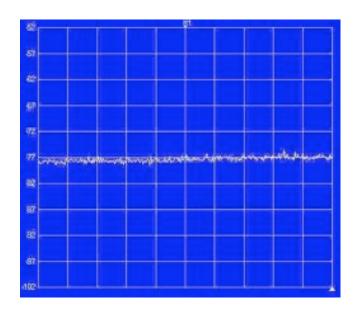


No indication of general or widespread unmet needs, for either the consumer or commercial markets.

Room is available for new service



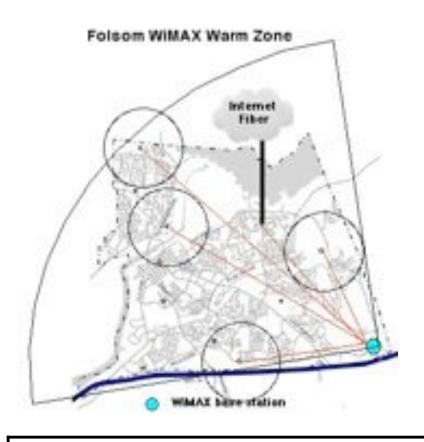
WiFi frequencies



WiMAX frequencies

Folsom already has a lot of WiFi users and hotspots, but frequencies earmarked for WiMAX are very quiet.

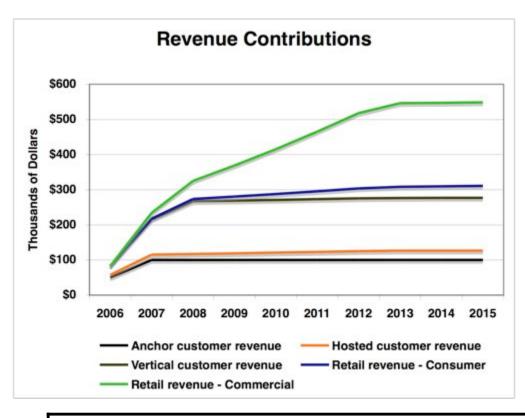
WiMAX is an opportunity to grow



- Inexpensively provides new networking capability
 - Create new opportunities for small and large businesses
 - ☐ Reduce costs, increase service for large organizations
 - ☐ Aid research & development
- Partnership opportunities
 - WiFi hotspots
 - New consumer services
- Can expand to directly serve consumers

Key to success is to focus on serving existing needs with greater flexibility and lower cost.

Business model puts revenue first



- Four scenarios
 - Standalone business
 - Local consortium
 - ISP partner
 - Membership
- Self supporting with user buy-in
- Partners create growth
 - ISPs need options
 - Specific sectors, such as health care
 - Open to new ventures

Allows existing businesses to expand & develop, creates opportunities for new businesses, improves service for all.

Next step: pilot project

- Proof of concept
 - Demonstrate technology works
 - ☐ Show that it's truly useful
- Claim unused spectrum
- ☐ Use existing public & private assets
 - Access to City infrastructure
 - On-going R&D programs
 - ☐ Minimize out of pocket expense

Interested organizations are eager to participate and willing to commit resources.

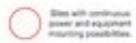
City Hall Campus - WiFi/Wi-Max Sites





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Kemp Park - WiFi/Wi-Max Sites





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Timeline

October 2006
Preliminary budget
Funding identified
October/November 2006
Installation of initial pilot project design
November/December 2006
SkyTel radio optimization
December 2006/January 2007
Pilot project operational
August 2007
Pilot project assessment
Citywide expansion evaluation

City staff currently finalizing work plan for installation.

Questions?

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