

Matt Larsen – Vista Beam



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Vistabeam – Rural WISP

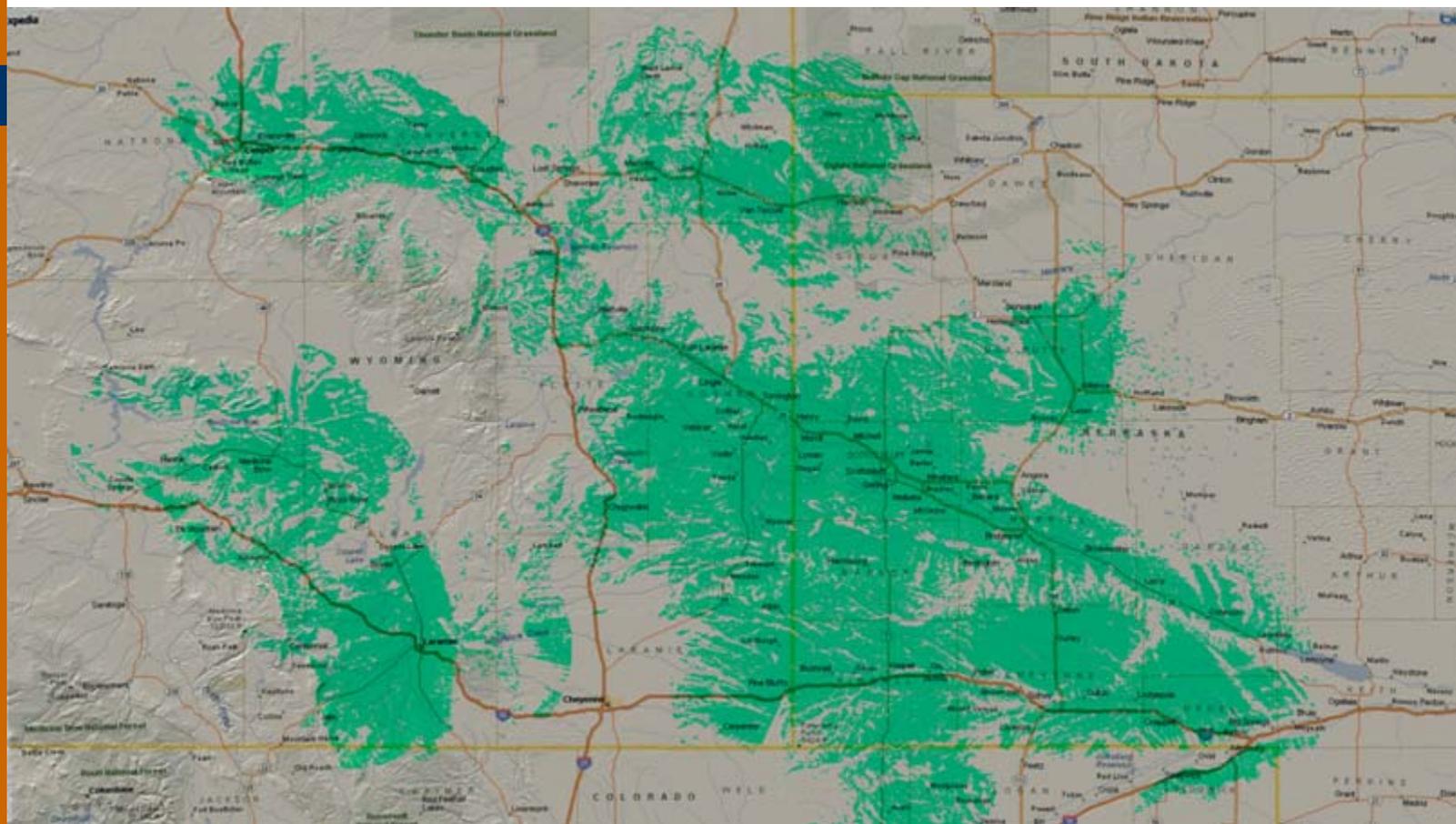
- Vistabeam services a 35,000 square mile footprint in Western Nebraska and Eastern Wyoming, some of the most rural areas in the lower 48 states
- 15 Other WISPs compete within Vistabeam service area
- 4 Cellcos compete in same area – most of area does not have 3G coverage





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Vistabeam Coverage Area





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Vistabeam Statistics

- Broadband coverage across 35,000 square miles
- 1800 miles of facilities based microwave backhaul
- 22meg to end users via 802.11x technologies in 900mhz, 2.4ghz and 5ghz
- Adding gigabit backbone from the Rural Nebraska Healthcare Network (FCC Project)





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Current State of the WISP

- Unlicensed fixed wireless platforms have evolved rapidly – 25meg to end user now possible, but users demand is growing even faster. Per user data usage has doubled in the last 12 months
- 3.65 “licensed lite” spectrum now in use, providing a fourth spectrum option in addition to UNII and ISM bands, and critical for higher speeds. With more spectrum, we can deliver higher speeds to more people
- WISPs can leverage statewide and regional fiber networks to deliver more bandwidth to end users, quickly WISP customers are doing VOIP, telecommuting, education, business and even videoconferencing over fixed wireless networks.
- WISPs are the Third Pipe, and can provide the same speed and reliability as cable and dsl.





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Why Fixed Wireless Instead of Mobile?

- Fixed wireless broadband is capable of much higher speeds than mobile – fixed wireless=better signals=more capacity
- Mobile broadband is “Toy Broadband” – expensive and slow compared to fixed. Good for email or light browsing, but not good enough for heavier applications.
- Typical WISP broadband prices are ½ to 1/3 the price of mobile broadband plans, and capable of higher speeds.





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WISPs Get No Respect

- Unlicensed spectrum was never intended for broadband deployment – it was considered “junk spectrum”
- WISP competitors get LOTS of government subsidies in the form of grants and low interest loans
- USF allows telcos to “tax” telephone lines and put that money back into their pockets – 60% of USF goes to “General Expenses” instead of deployment!
- WISPs are almost never included in policy discussions about improving broadband access in underserved and unserved areas, even though they are the most efficient broadband providers for these areas!



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Stimulus Is Not Helping

- In the Vistabeam area, stimulus supports untenable business models while wasting taxpayer money.
- Broadband stimulus in many cases has SLOWED DOWN broadband adoption and deployment of new networks
- Many operators postponed network builds and equipment purchases due to uncertainty around the stimulus programs
- Investors sat out of the market due to uncertainty
- Government should not be “picking winners”



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USF/CAF is Not Helping

- USF funds the companies that have neglected rural areas and is closed to smaller, innovative operators
- Medicine Bow, Wyoming is a perfect example
- CenturyTel has received millions in USF funding since 2002 for Wyoming
- Medicine Bow has broadband because one WISP invested under \$20,000 to build out capacity to Medicine Bow
- USF will continue to fund the ILEC at higher and higher per line costs in order to maintain the now obsolete and difficult to maintain copper infrastructure
- Any program to increase broadband adoption should be deployed at the user level, instead of at the corporate level. Let users reward the providers that deliver broadband instead of funneling money to large corporations that fail to deliver





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Broadband Mapping Needs Revision

- NTIA and statewide mapping efforts have been disregarding WISP data, either intentionally or unintentionally
- Data requests have been overly complex and asked for proprietary information – the primary reason many WISPs did not respond
- Form 477 is inconclusive for similar reasons – over 500 man hours for Vistabeam to complete!
- Revisions need to take place so that WISP data can be included in the National Broadband Map and operator needs can be accommodated





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WISPs Help with Net Neutrality

- Competitive WISPs are part of the solution to Net Neutrality.
- Net Neutrality is about regulating ISP behavior in a monopolistic market. It wouldn't be needed if customers had a choice of competitive providers.
- WISPs can provide an alternative for users who don't like cable or telco usage policies – we are the Third Pipe!
- There is less need for legislation to impose conditions on all ISPs.



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WISPs Are Innovative Spectrum Users

- WISPs can come up with innovative uses for many of the pieces of spectrum that are now sitting fallow.
- Firmware upgrades and new white space devices could enable WISPs to deploy in white spaces and licensed spectrum at little or no cost
- WISPs have the network, people on the ground and local connections to deploy broadband quickly to more areas
- More spectrum for WISPs means better broadband penetration and faster, more reliable service for users
- Fixed wireless = MORE JOBS for installers, field technicians and project managers.





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WISPs are Broadband Heroes

- WISPs provide a valuable service, jobs and local economic development and they do it without government assistance
- WISPs are innovative and flexible and can deliver service to places where larger companies do not want to (or can't) go
- WISPs can deliver REAL Broadband, competitive with DSL and cable. WISPs are the Third Pipe
- The WISP industry is maturing – WISPA is gaining membership at a rapid pace and there are many more (2000+) operators out there
- There are many well managed and funded WISPs
- WISPs are making a BIG difference in unserved and underserved areas

