

CENIC One Gigabit or Bust™ Initiative  
**Minutes of the Rural Issues Task Force Meeting on March 18, 2004**

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SETH FEARY

Task at hand today: I live in a rural community and I want broadband. How do we do this? What are our barriers? Let's develop a plan of action.

25% of the pop of US lives in rural communities. There is a big gap between urban and rural access rates. A majority of cities now have >50% broadband access. Rural is perhaps 20%.

((overview of gigabit community assessment guide)) new version to be released in the summer by CENIC et al. Seeking sponsors.

Role of Guide: initiate conversation, facilitate community dialog, document present status, evaluation of next steps to get to gigabit. How to.

Target: cities, counties, regions. Requires/promotes participation of community -- govt agencies, schools, business, community organizations, etc.

Communities are rated in stages, perhaps the following:

Stage 1 – 0-128k

Stage 2 – 200k-3m

Stage 3 – 10-100m

Stage 4 – 100m-1g

Rural is usually at Stage 1 – less access, less choice of providers, higher prices, less redundancy. Not a black/white picture – can't assume there is demand.

By 2010, rural will have almost equal access, wireless dependence, still less choice, more expensive, reliability issues.

Etc.

\*\* Seth Slide: How will the rural roadmap be different from urban? \*\*

DEWAYNE HENDRICKS

Wireless in mountainous and treed areas.

Slide: Rural Wireless issues

- fresnel zone
- regulatory
- equipment
- best practices
- mesh networking
- future??

Fresnel Zone: deals with sending data bw point a and point b. depending on where you are on a frequency and your distance, your wave is different and will take up a different amount of space. Your fresnel zone is a clear space that must be avail for effective data transmission. Goal is to not have obstacles in this zone. Zone calculated thru freq rate, distance, etc. Arrived at via a calculation.

The lower the freq, the longer the wave. The longer the wave, it doesn't interact with obstacles. As you raise freq, the waves are smaller and recognize physical obstacles. At the highest ranges, even rain can become an obstacle...

However, you don't necessarily need line of sight -- depends on your frequency... part of solving the problem is regulatory -- freeing up the spectrum for rural telecommunications needs.

Mesh networking: a way to get back to plug and play. If mesh is working like it should, the radios will work out the kinks and you can just use it. This is rarely the case, however. ((look up this technology)). Like the old scanner/CB thing -- there is an automatic scanning to ascertain what frequency/what part of the radio spectrum is the best for the moment.

PAT LANTHIER

Motherlode and the Valley

Citing examples of wireless tech throughout world -- extreme wireless conditions (jungle, etc.) . Shift is going to guerilla networks.

Pays to see what's going on in other countries. FCC may be more lenient in rural areas -- il y a less options la. They must hear from the rural areas. Grassroots element here. This is a local issue. You must move your policy makers to help you.

Motherlode Express and Great Valley Center.

Mapping critical. It helps policy makers at all levels to understand the issues.

The real issue of gig or bust in CA is reflected in the rural issues. There must be regulatory change to overcome this, creative, nontraditional, often community-based solutions -- eg wireless.

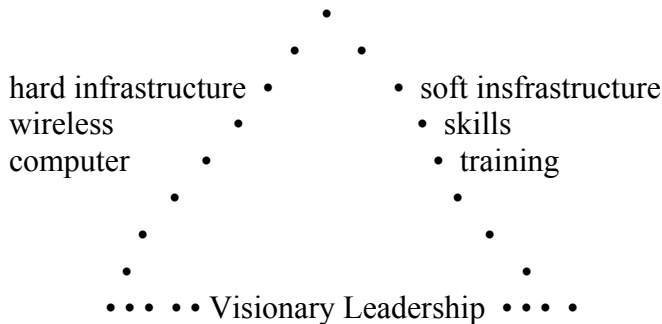
Flat panel antennas. you CAN transform the access to your area without changing the integrity of your area's history, look, etc. (don't have to have cell towers)

((WISPnet -- wireless internet service provider))

Push policymakers to enable broadband. Wireless doesn't change environmental picture. Get economic development folks to exempt broadband towers.

Key to have partnerships in rural areas. Participation of community leaders. Community forums. Sensitivity to needs and attitudes (remember comment about changing tagline emphasis from competition to progress & preservation)

Success Triad



CONCLUSION: WE NEED A DATABASE OF BEST PRACTICES.

Summary Slide:

- Community Assessments - revision of CSPP for 1gb, wireless will play a big role by 2010, rural will have almost equal access
- Wireless (Trees and Mountains) – Rural needs mix of frequencies and lower frequencies, Wireless Task Force white paper needed
- Mother Lode and Valley Broadband – Policies need changes to enable rural broadband, use wireless in rural areas, partner with right kind of groups to grade community and plan, have to get it on maps