

CASE STUDY: SERVICE TO A “LOCKED OUT” MARKET

National WiFi was contacted by the owner of a community in a micro-market where one provider controlled all telecommunications services. Further, that company was not focused on the multifamily market space, had little to offer in terms of flexibility, and had no reason to be competitive — or so they thought.

PROPERTY INFRASTRUCTURE

The community is a 192 unit, 16 building garden-style community that is two stories high with peaked roofs. It had no significant serviceable infrastructure other than traditional coaxial cables in each unit controlled by the monopolistic carrier.

INITIAL ANALYSIS

It was clear that delivering bandwidth to the property would be the biggest challenge. National WiFi’s nearest point of presence was 35 miles north of this community. Delivering service via a wireless backhaul seemed to be the only option.

FIRST STEPS

In addition to the distance challenges facing this community, it is geographically located in a valley with no direct views of local radio towers and no possibility of a direct radio link to an existing National WiFi tower. Local zoning also prohibited any construction over 40 feet, eliminating our ability to locate an antenna structure on this site.

Through an outstanding relationship with our equipment vendors, within a period of 21 days, National WiFi was able to obtain two experimental Non-Line of Site or NLOS radios specially designed for this type of application. In addition, we were able to partner with a local tower operator willing to allow us to conduct an experiment from the top of his 400 foot tower to see if a link could be established.



CONCLUSION

Our experiment was successful. By establishing two wireless links, one from our point of presence 35 miles north to our partner’s relay tower, and another Non-Line of Site 2-mile link from that tower into the community. National Wi-Fi was able to deliver competitive bandwidth to this community when no one else could.

SOLUTION

With backhaul in place, a local point-to-point network was constructed connecting the buildings and delivering service to each building. Wireless access points were then deployed on the terraces of each structure, delivering wi-fi service into the unit. Residents also have the option of connecting with ethernet cable via a wireless subscriber unit that can be purchased separately.

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