ON THE WRONG SIDE OF THE DIGITAL DIVIDE

What Happens When A Community Lacks Affordable High-Speed Broadband

Stories From California’s Regional Broadband Consortia
**EL MOLINO HIGH SCHOOL, FORESTVILLE, SONOMA COUNTY 650 STUDENTS**

El Molino High School, an important community institution in Forestville, is facing declining enrollment because of inadequate connectivity. It’s putting a strain on families who must find ways to get their students to a more connected high school in Sebastopol nearly 15 miles away, the Sebastopol school that is not prepared to deal with the transfer students, and El Molino teachers and parents who worry the limited bandwidth will hamper implementing Common Core standards and testing, impacting student achievement. Community leaders and families without the resources to get their children to the more connected school are concerned that socioeconomic and ethnic divides are emerging in the school system in this close-knit community.

**JOY ROAD, OCCIDENTAL, SONOMA COUNTY, 350 HOMES**

Joy Road Homeowners Association, 350 homes in Western Sonoma County, relies on a wireless Internet service provider that offers slow (1-2 mbps compared to CPUC standard 6 mbps) but only for line of sight service. Those without line of sight must rely on satellite (if the southwest window to sky is available), expensive cell phone tethering (reception is often spotty) or dial-up service. Nevertheless, this area, less than 10 miles inland from Bodega Bay, is designated on California Public Utilities Commission maps as being fully served by broadband.
COAST COMMUNITY LIBRARY, POINT ARENA, MENDOCINO COUNTY

“We can’t fulfill our mission to be the education center of our community.” -- County Librarian
Mindy Kittay

Because of a slow, unreliable WiFi connection, patrons of Coast Community Library, Point Arena’s community hub, often have to wait in line to get online. There is no other free public access broadband available in the town, even though a fiber-fed central office is 100 yards up the street. And, once online, it’s not uncommon for people to lose their connection while in the middle of a job application or research project, reports Mendocino County Librarian Mindy Kittay.

POINT ARENA SCHOOLS, MENDOCINO COUNTY, 400 STUDENTS

Highway 1 is also called School Street when it runs past the Point Arena’s elementary school (pictured below). Fiber runs north for a block (see the “Warning” sign on utility pole) then left along Lake Street, bisecting the complex that is home to three public schools serving about 400 students. Still, the public schools must pay for T-1 lines to serve students and staff because the provider refuses to connect them to the fiber. “Fiber bisects the street right between the middle school and the high school yet they have to lease 6 T-1 lines costing $2,400 a month,” says local businessman Greg Jirak.
Nearly 1,000 children and youth live in the Mar Vista Gardens public housing community, managed by the Housing Authority of the City of Los Angeles (HACLA). The average household income for L.A. public housing families is a little over $16,000.

The cost of Internet service is a big barrier to overcome. Mar Vista resident Reyna Peyanez (pictured above with son Raul) says she reluctantly cancelled her $80 a month Internet plan when the family computer broke and she no longer could afford the plan, even knowing Raul, 7, and his sister likely would need it to excel in school. In a unique partnership, HACLA and the California Emerging Technology Fund are launching a Smart Housing Pilot Partnership to provide free WiFi to each Mar Vista unit, in addition to bilingual digital literacy training and low-cost computers. The goal is develop a cost-effective model and secure California Advanced Services Funds to expand free Internet to all of HACLA’s nearly 7,000 public housing households spread throughout 14 communities, and eventually all unconnected public housing statewide.
JESSICA’S STORY, EUREKA, HUMBOLDT COUNTY

I live at 2916 Spears Road in Eureka and, despite many attempts, have been unable to get Internet service at my house. In 2011, I was accepted into an online graduate school program through George Washington University. This initiated an exhaustive search to identify a service provider that could supply reliable internet service at our home. In August 2011, I contacted five Internet providers to explore my high-speed Internet or broadband options. I was repeatedly told that our residence was not in their "service area" or that they couldn't guarantee adequate internet speeds (satellite providers).

Our home is located only a half-mile off of Myrtle Ave (a major thoroughfare in Eureka). I can drive to our local Safeway in 5 minutes and make it to the gym in less than 3.

My husband, who is a small business owner, cannot manage any of his financial accounts, billing, or other business related work over the internet. My son, who will be a high school freshman, is faced with school work that more and more requires suitable access to the internet. As for me, I just completed my online graduate program, by cobbling together study time at a local coffee shop (thanks to their free internet!) and long weekends in my worksite.

ORLEANS, HUMBOLDT COUNTY, 600 RESIDENTS

Orleans is a rural community in North-East Humboldt County with a population of 600, about a third of whom are members of the Karuk Tribe. There is no cell service, no high-speed Internet, and the land-line phone service still fails regularly. After years of waiting for providers to improve service, the Karuk Tribe decided to solve the problem by becoming the provider. In 2011, the tribe was awarded a USDA Community Connect Grant to build infrastructure, and Internet service is expected by next spring.

The Karuk Tribe has submitted plans to the California Advanced Services Fund to partner with the neighboring Yurok Tribe to expand service to include the communities of Weitchpec, Wautec, and Orick, bringing home Internet to another 450 households.
The Salinas Valley is one of the most productive agricultural areas in the world. It is characterized by large corporate farms that primarily employ a migrant workforce. Still, large stretches of the eastern valley, from Salinas to Gonzalez in Monterey County, lack access to broadband, along with many of the other 21st Century benefits that other parts of California take for granted. Unemployment rates top 20% in some communities and the California Department of Education recently designated several of the Valley’s public schools as “persistently low-achieving schools.”

Because the valley floor is so fertile, there is a tendency to push housing, particularly for migrant workers, into less valuable land in the hot, dry canyons of the Gabilan mountain range. The sparse population and distance from central office facilities have dissuaded telephone and cable companies from investing in wireline infrastructure, and the hilly terrain makes wireless service problematic. Data from the California Public Utilities Commission show that the area is in the state’s lowest tiers of broadband adoption (0% to 29%) and broadband penetration (0% to 29%).
Maria Franco was diagnosed with diabetes. At first disheartened at the news, she soon figured out she could be her own best health advocate. Living on the outskirts of Firebaugh in the Fresno County however, she does not have access to broadband at home. Through a grant from California Emerging Technology Fund to the city, she can go to town to get online and take digital literacy training through a partnership with Los Promotores, which promotes health and welfare initiatives. But for Maria and hundreds of nearby residents that requires getting in a car to get online.

“I had never before in my life used the Internet,” Maria said. Now, through online searches she says she has been able to find and learn about holistic medicines to treat diabetes. “Broadband and computer literacy have opened up a world of information,” she said, and a new avenue for her eagerness to give back to her community. “I am now more involved in helping others,” she said. Just imagine if she had broadband access at home.
CHROME RIDGE, PLACERVILLE, EL DORADO COUNTY

“We are in a black hole between the communities that are connected,”
-- Placerville area resident

There are more than forty homes in the Chrome Ridge Road neighborhood on the east side of Gold Oak Elementary School and the Holm Road neighborhood on the west side – about 7 miles from downtown Placerville. There are at least as many more homes also in walking distance of the school (school is cluster at center of photo above). Yet, despite the availability of broadband at the school, thanks to the T-1 line installed, high-speed Internet service is not available to the surrounding residents.

NEVADA COUNTY

Nevada County has a video business cluster that sells its products and services worldwide, requiring technical support people on call 24/7. These employees often work from home, requiring a broadband connection. When a new tech service person is hired, their housing choices are limited to those homes with broadband connections. This is a shrinking inventory in Nevada County, and that is impacting economic growth.