

Crossing the Digital Divide by Joe Feigon

Most residents of Mendocino County can easily boast the wonders of our home: amazing wilderness, little traffic (compared to our neighbors a few hours south), clean air, and dynamic communities. Outside the few populated areas, most of us get our water from a well or spring, we all have septic tanks, leech fields, and some kind of power (grid or otherwise). We visit the Post Office for our mail, and most of us take our household waste to a Transfer Station. We have access to the fundamentals: food, hardware, clothing, K-12 schools, fuel.

While most of us embrace the slower pace of country living, complete isolation is a choice few make voluntarily. Gaining Internet access removes the isolation often associated with life in a rural region. Lifestyle choices need not limit access to information, or the educational content, or commercial opportunity. There's a plethora of content available to anyone with access to the Internet, and many ways a local vendor can promote products and services to the outside world, but wait, how do I get there from here?

This column is about the current Internet Access options in Mendocino County, how the technologies work, and their relative costs.

We can gain Internet access one of three ways today: Satellite, Wireless (Cellular or Fixed Wireless), or Wireline (Terrestrial). Each technology has multiple vendors, each has strengths, each has limitations.

- 1) Terrestrial (or wireline)
- 2) Wireless can be of two types: Mobile and Fixed Wireless
 Mobile as offered by cellular carriers,
 Fixed Wireless
- 3) Satellite

Where can we get service:

- 1) DSL is the current best value **if** you live fairly close to town; it may be necessary to have a active landline depending on your location.
- 2) Cellular **if** your Internet usage is infrequent and limited to email and general web browsing.
- 3) Satellite **if** you don't have cell coverage, don't live "in the flats", and want to access the Internet for more than a few minutes a day.

The nuances of each technology:

- 1) DSL, if available, provides you with multiple speed options (faster always better when feasible/affordable), and does not limit you on the amount of information (data) you can access (e.g., you could watch streaming videos all day long if you wanted).

DSL costs - assuming you already have a landline - cost is roughly \$45-\$65/month, depending on your provider and choice of speed . If you were to order a stripped down landline, DSL + Phone = ~\$100/

month.

2) Cellular data communications – mobile Internet access. Most smartphones (Android or Apple) are capable, if your cellphone plan includes data, of being tethered to a laptop or desktop computer. Cellular data is a quick way to gain Internet access without investing in a landline or installing a satellite dish on your property.

However, if your cell phone signal strength is marginal, data communications won't be any better. While low data rate plans are fairly cheap, and the flexibility of having portable Internet access is compelling, this solution **can** be the most expensive. If you find yourself on a movie marathon you can exceed your monthly quota by multiples and end up with outrageous cellphone bills.

The Fixed Wireless access option may or may not cap your data, and your monthly fee will also be based on access speeds. Fixed wireless requires line-of-site to the provider's relay point, which will vary with each provider. Costs are about the same as DSL, and may or may not require a landline.

3) Satellite – space age technology for the truly off-grid. There are more than 1,000 private or government-owned satellites circling the globe today.

If you have spot on your property with unrestricted southern sky views, you are likely qualified for satellite service. The downside of satellite is that Internet access can be slow.

There you have it, three options for approximately \$100/month.

Next up: keeping yourself and your data safe – smart surfing in the 21st Century

Joseph Feigon