

## The Digital Divide

People become disenfranchised whenever they lack adequate broadband access. Rural and poor communities have particularly poor broadband access, including *no* access at all. Safety, educational, business, and social services are all denied those lacking adequate broadband.

This “digital divide” is a complex, multifaceted problem:

1. **Coverage** – Contrary to federal and State of California maps, much of Mendocino County remains unserved or underserved.
2. **Bandwidth** – The California Public Utilities Commission classifies areas with less than 6 Mbps down as underserved. Only a few urban areas in Mendocino County are fully served using this metric.
3. **Capacity** – Regardless of bandwidth, download limits in many areas of Mendocino County make it difficult to do business, or receive services.
4. **Latency** – Regardless of bandwidth, connections with significant latency often cannot be used for many typical applications, including VPN, voice, and video.
5. **Cost** – Costs for many services, including satellite, can be unaffordable.
6. **Equipment** – Connections without equipment, e.g. desktops, laptops, tablets, phones, etc., are useless.
7. **Redundancy** – Many connections are not redundant, so a single point failure in a middle-mile backbone causes broadband disconnection across a broad area. A tree falls across a line, and a non-redundant middle-mile link disconnects all connections down line.
8. **Diversity** – Connections in many areas of the County are available from only a single vendor. Failure, or retreat, of a local vendor disconnects broadband across broad areas, e.g. Esplanade’s failure on the Mendonoma coast in 2011. Single-vendor coverage areas are prone to inflated prices and reduced service standards.
9. **Adoption**– Many people within Mendocino County continue to reject the need for broadband without realizing that broadband is key to living happily ever after.
10. **Expertise** – Many people within Mendocino County lack the expertise to make effective use broadband, even when available.
11. **Money** – Substantial political and financial resources are invested in maintaining the status quo, often disenfranchising the rural and poor.

**Each of these problems must be solved before the digital divide will be eliminated.**