

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.