

Rural Communities and the Phone Network Transition

The Phone Network is Transitioning

- Our phone network is moving from traditional (TDM-based) technology to Internet Protocols (IP). This is inevitable because there is already a compelling business case for companies to update their networks.
- The transition presents opportunities for better services, but it must be handled responsibly.

The Five Fundamentals

Public Knowledge has advocated for a transition that is a true step forward for everyone, and urges policy makers to ensure the network continues to serve five fundamental values:

- Service to All Americans,
- Interconnection and Competition,
- Consumer Protection,
- Network Reliability, and
- Public Safety

How Does the Transition Impact Rural Areas?

- **Rural network build-out:** The transition creates the opportunity for networks to upgrade to provide broadband access (or faster broadband access) to rural areas. However, as the networks become all-IP, universal service rules that have helped rural Americans obtain phone service may no longer apply, and rural America risks getting left behind.
- **Wireless versus wireline:** Carriers like AT&T and Verizon have shown interest in replacing their wireline networks with fixed wireless service. Fixed wireless service can have significant restrictions and limitations compared to the landline service Americans rely on. The incentive to substitute wireless for wireline is especially strong in rural areas with higher build-out costs and lower population densities.
- **Internet access:** Next-generation networks may not necessarily provide internet access. For example, in Fire Island, NY, Verizon attempted to replace its copper network with a voice-only service called Voice Link. Outcry from residents and local businesses—and inquiries by the NYS Public Service Commission and the Federal Communications Commission—about lower voice quality, less reliability, and the lack of internet access persuaded Verizon to build out fiber instead.
- **Rural call completion:** As the phone network transitions to IP, carriers' use of least-cost router systems has led to an increase in incomplete calls to and from rural areas. Particularly after the DC Circuit's recent net neutrality decision, the FCC's ability to make these IP-based systems connect reliably—as we have always expected phone companies to do—is in jeopardy.

What Is Happening Now?

- On **January 31, 2014**, the FCC proposed several trials to more fully understand the impact of the transition on consumers. These trials include:
 - *Voluntary service-based experiments*, where providers would introduce new services with an eye to eventually replacing existing services entirely. Some of these experiments will likely be set in rural areas.
 - *Next generation network experiments in rural areas*, where the FCC would use support from the Connect America Fund to build to rural communities. The information gathered in these experiments could potentially influence the standards for the networks that will be built out to rural areas in the future.

