

## “Three Steps to Empower Consumers, Promote Competition and Ensure Universal Service and Network Reliability in the Technological Transition to IP Networks”

Comments presented by Wally Bowen, executive director of the nonprofit Mountain Area Information Network (MAIN), Asheville, N.C., to members of the FCC Technological Transitions Task Force on March 14, 2013 .

1. Expand Eligibility for the Connect America Fund
2. Expand Unlicensed Spectrum
3. Preempt State Laws Restricting Municipal Networks

1. Expanded eligibility for Connect America Fund to encourage local “self-help” networks is a more efficient and cost-effective use of USF subsidies.

Eliminates need to guarantee a 15% rate of return for carriers of last resort, resulting in reduced USF expenditures over time and reduced regulatory oversight.

Historical analog: 1936 Rural Electrification Act's eligibility was broad and inclusive: for-profit, nonprofit, membership cooperatives, municipal, etc. Approximately 84% of rural networks launched with REA support chose the nonprofit and/or cooperative business model.

More prudent investment of public subsidies. Local networks invest in the local community. Their employees live and work in the community they serve. Local staff are better positioned to maintain infrastructure to ensure network reliability. By contrast, absentee-owned networks must “parachute” engineers and technicians into remote communities for troubleshooting.

Enhanced Consumer Protection: Local networks are managed locally and are more responsive and accountable to consumers. Customers of absentee-owned networks constantly complain that remote call-centers are out of touch with local conditions.

Local Innovation & Social Capital Formation: IT staff living and working in the community are available to share expertise with students, innovators, and <sup>1</sup>entrepreneurs, producing internship and mentoring opportunities, job growth, and reversing the rural “brain drain.”

Enhanced Public Safety: Local networks are more available and responsive to local <sup>2</sup>public safety and

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<sup>1</sup> In 2007, a local developer was converting an abandoned school into artists' studios. In an artists' haven like Asheville, this was a sure bet. But this school was 30 minutes north of Asheville -- in Marshall, N.C., population 846 -- on an island in the French Broad River. Artists love the beauty and seclusion of this isolated island, but they expect broadband. Getting a reliable estimate from the non-local telecom companies was virtually impossible. But MAIN, in partnership with the local electric co-op, extended a fiber-optic line to downtown Marshall. Using a wireless link to reach the island, MAIN now provides plentiful broadband to Marshall High Studios, which has become a thriving artists' colony. Meanwhile, across the river, the town is awakening from decades of economic decline. The developer also took MAIN staff's advice to run ethernet cabling during renovation to accommodate the Web of the future. This sharing of local expertise -- this social capital -- is not dispensed by absentee networks from call-centers in India.

<sup>2</sup> In 2008, a ham radio operator contacted MAIN seeking a free and secure connection to our wireless broadband link on Locust Knob in remote Mitchell County, N.C., which was hit by a devastating flood in 1998. That same afternoon, we granted his request and activated the free secure link for the local chapter of ARES, the Amateur Radio Emergency Services coalition supported by Homeland Security. When asked what he would have done if a local network like MAIN didn't exist, the ham radio volunteer said that, first, he would have tried to contact the owner of the tower to identify the

emergency communications needs.

Enhanced Competition: Rural middle-mile<sup>3</sup> networks are open to all last-mile providers. Operating as an open network is the only path to sustainability in rural areas. Proprietary middle-mile networks in rural areas are irrational. Expanded CAF eligibility to encourage local networks will enhance competition and increase consumer choices. [5 nonprofit fiber networks in western NC]

2. Unlicensed Spectrum Expansion – Low-frequency unlicensed spectrum is essential for last-mile broadband service in rural America. In many rural areas, the extension of fiber or cable lines to individual homes and businesses is cost-prohibitive. Meanwhile, affordable wireless technologies capable of delivering broadband speeds of 15 Mb per second or more are readily available. What's missing is low-frequency unlicensed spectrum capable of covering long distances and penetrating buildings and heavy foliage.

With expanded eligibility for CAF support, local networks can cost-effectively extend middle-mile fiber infrastructure deep into rural areas to provide abundant bandwidth for low-frequency, high-capacity, last-mile wireless broadband delivery from a variety of providers.

3. Preemption of restrictions on municipal broadband networks – More than 100 years ago, the vanguard of rural electrification was comprised of local municipalities which built and operated their own electric networks in areas neglected by investor-owned utilities. These rural municipal networks provided critical infrastructure and expertise to help extend electric power to unincorporated rural areas after passage of the 1936 Rural Electrification Act, which codified the principle of universal service.

Like municipal broadband networks today, municipal power systems faced legal and legislative challenges and restrictions from investor-owned utilities in the early 20<sup>th</sup> century. Ultimately, restrictions on municipal power systems were preempted by anti-trust and universal service mandates. Today, many legal experts believe that the FCC's universal service mandate and authority is sufficient to preempt state restrictions on municipal broadband networks

Summary: Core Principles of the “Three Steps” Recommendations

Universal Service – Universal service in rural electrification was achieved via federal support for local “self-help” networks. Likewise, the most efficient and cost-effective strategy for universal service in the IP transition is federal support via CAF for local networks.

Deregulation – Incumbents are correct that regulations requiring them to do business where their business models do not work are inefficient, onerous, and a misuse of USF subsidies.

Localism – Social capital benefits, consumer protection/accountability, enhanced public safety, and

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carriers using the tower. Second, he would try to contact one of the carriers to make his request. After weeks – perhaps months – of research and navigating corporate bureaucracies, the volunteer concluded that the answer to his request would probably be either “No” – or “Yes” for a \$1,000 a month lease. This indifference to the needs of rural America – and other underserved communities – is the legacy of absentee-owned networks. It's time for a change.

3 Western North Carolina is home to five local middle-mile fiber networks using a nonprofit business model and operating as open networks: ERC Broadband, Pangaea, BalsamWest, French Broad EMC, and Skyline Telephone Membership Cooperative.

network maintenance and reliability.

Competition – CAF investments in middle-mile open networks ensure a sustainable platform and level playing field for last-mile competition. END