

Challenges to Broadband Expansion

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Comcast has a demonstrated record of investing in its broadband network in Tennessee.



- Broadband is available to 99% of Comcast cable homes
- Largest WiFi provider in the state
- Average \$120M in capital investment in Tennessee annually
- Approx. 15K low-income families connected to the Internet since 2011
- More than 2,886 full-time employees work from 131 facilities, offices, and call centers statewide
- \$130M paid in state and local taxes and fees in 2014

The Tennessee Department of Economic Development has established a plan for incenting private investment.

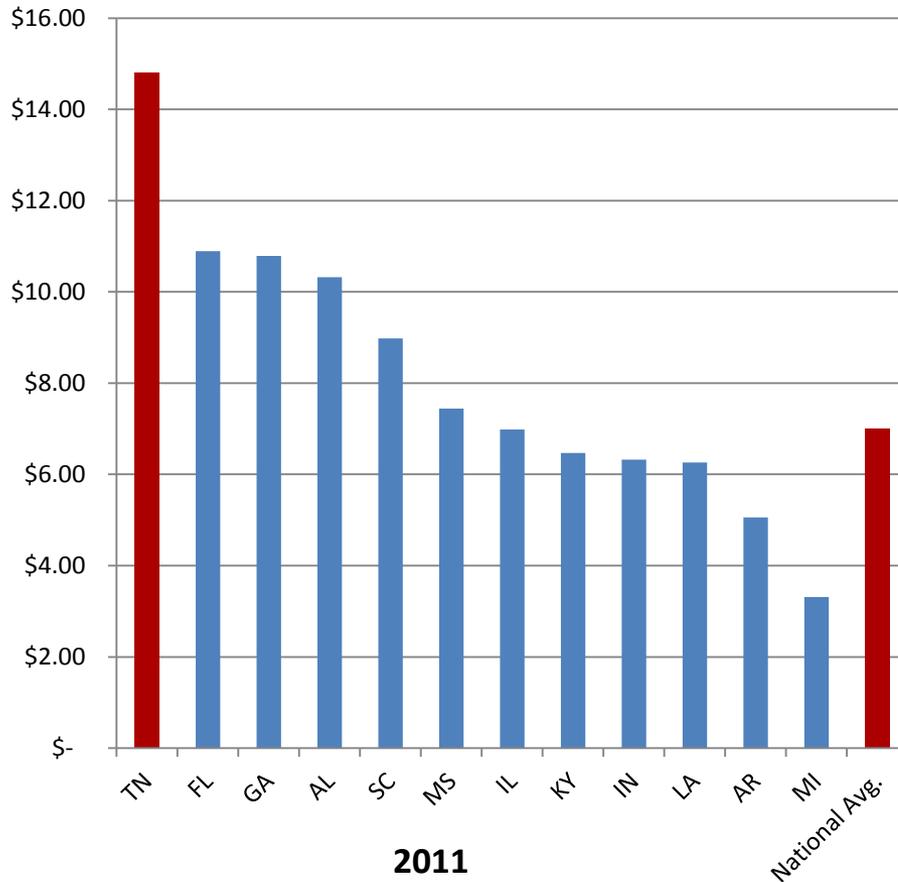


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Tennessee's pole rates are the highest in the nation, effectively imposing a "broadband tax."

Average Pole Rental Rate By State



- Since 2011, pole attachment rates in Tennessee have increased by 35.5%
- Average pole rate in Tennessee is almost 3 times the national average
- Comcast pays nearly \$10M annually in excess over the national average of \$7
- Unique pole agreements negotiated with 85 different electric utilities

Density and permit turnaround times directly impact return on capital associated with broadband deployment.



- In rural areas, low population density challenges traditional ROI models
- Comcast strives to connect new business customers within 30 days
- Many unregulated utilities in Tennessee refuse to commit to permit windows inside of 30 days
- Absent aerial permits, Comcast must build underground at 10 times the cost

“[W]e’re not going to go anywhere where we are not invited and *where it doesn’t make good business sense.*”

– Harold DePriest, CEO, Chattanooga EPB

Decades of public debate have resulted in federal and state policies encouraging investment in broadband networks.

- Pole Attachment Act of 1978
- FCC Cable Rate Formula
- Cable Communications Policy Act of 1984
- Cable Television Consumer Protection and Competition Act of 1992
- Telecommunications Act of 1996
- FCC Telecommunication Rate Formula
- Internet Tax Freedom Act of 1998
- National Broadband Plan of 2010
- FCC Revised Telecommunication Rate Formula (2016)
- Connect America Fund
- Farm Bill Broadband Program
- Tennessee Competitive Cable & Video Services Act of 2008

In contrast, TVA plans to impose a new pole rent “rule” affecting 80% of poles in Tennessee, absent any public discourse.

Competition from government-owned monopolies increases risk and discourages private investment.



Potential cross-subsidies include:

- Attaching to poles absent permit requirements or pole rent payments
- Borrowing utility reserves to fund network development
- Cross-selling competitive services to electric customers
- Leveraging storm restoration advantage to increase market share

“[W]hile EPB is required by law to charge pole fees to its business telecom division, the utility’s fiber-optics division *pays no pole fees.... We don’t pay for that fiber part.*”
– John Pless, Chattanooga EPB

Local and state governments should adopt policies that incent private investment in broadband networks.

- Align municipal and cooperative pole rates, terms, and conditions with national standards
- Limit government network development to unserved and underserved areas of the state
- Fund incentives and create RFPs for providers to expand networks in rural areas
- Expand focus on broadband adoption programs

Collectively, the expense of obtaining permits and leasing pole attachments and rights-of-way can amount to 20% of the cost of fiber optic deployment. These costs can be reduced directly by cutting fees. The costs can also be lowered indirectly by expediting processes and decreasing the risks and complexities that companies face as they deploy broadband network infrastructure.

– *FCC's National Broadband Plan (March 2010)*