

Presentation to New Hampshire House

Science, Technology and Energy Committee

Supporting HB 153, Committee to Study Universal Internet Access

Jim Isaak, Chair IEEE NH Section

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Good afternoon

I'm Jim Isaak of Bedford, retired from the computer industry and an active volunteer in the world's largest professional society for technologists: IEEE. I have been an advocate for broadband communications since the earliest days of the Internet¹, and most recently chairing the IEEE USA Committee on Communications Policy where I lead the development of a position statement on strengthening broadband initiatives².

The essential value of broadband Internet has changed significantly in just the last year or two, spanning virtual home based education, work, civic meetings, social connection, health care and entertainment. While the specific needs and options vary from town to town, it is critical that the state recognize the opportunities and remove obstacles as well as enabling local control.

Towns control decisions about local property tax rates, diversity in zoning, housing, education and even streets. Internet access, affordability and capacity, have become distinguishing characteristics of towns, attracting, discouraging or perhaps even seriously constraining residents. While I encourage every town to critically evaluate their current network situation, I also hope they will ask where they want to be over the next decades. Attracting new businesses, facilitating the growth of existing businesses and enabling entrepreneurs as the Internet continues to expand are opportunities towns need to consider. Towns with "shovel ready" strategies may find federal funding available this year.

The state can eliminate obstacles that prevent competition, particularly from municipalities. Examples like PULSE service Loveland Colorado, and the leadership of the NH Electric Co-Op members demonstrate that municipal broadband is viable, and fiber to the residence with

¹ "Standards for the Personal Computing Network"; [IEEE Computer Magazine](#); Oct. 1978

² Strengthening Broadband Initiatives: <https://ieeusa.org/volunteers/committees/ccp/>

1Gbit capacity for less than the average cable bill is possible, even in rural and mountainous areas. Ensuring interested municipalities are empowered to take action is one step, also ensuring multi unit housing entities do not get locked into exclusive contracts that block alternative suppliers is another.

Competition by a for-profit monopoly controlling the 'wire" to the residence is not in the consumer or public interest, any more than having a toll road controlling access to the home that bundles in delivery services while blocking or limiting competitors. At least one truly high bandwidth service, open to all content suppliers and services on a neutral, affordable basis is essential, and hopefully with 5G wireless, and other innovations, towns and residents may have multiple options. Curiously our remote towns, taking their own initiative such as Lempster and Bristol may better meet the needs of 21st century industry and entrepreneurs than cities that have been locked into contracts with suppliers that have limited or negative incentives to assure affordable access with adequate capacity.

A state committee to study these issues is an important step. In addition to the proposed sources of input and expert advice, I hope the study committee will also seek input from related professionals including health care, our highly successful SNHU online University, homeless/transition organizations, North Country development associations and forward looking entities such as the IEEE - reflecting a diverse range of engineers, technologists and innovators.

I am also providing a copy of the IEEE USA broadband position that expands on some of these concepts.

Thank you I welcome your questions now, or individually though my contact information below.

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