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To:	House Innovation, Internet and Technology Committee
Subject:	Written Testimony for House bill H5148

Avram Dorfman
Bill H5148
Position: For - with modifications

I am absolutely in favor of this bill, but I recommend a couple of important changes to the wording. In its current form, the bill is self-limiting, and missing the most important ultimate impact to Rhode Island residents.

I am a Rhode Island resident. I am a former USAF communications officer, and I have a bachelor's degree in economics and a masters in computer science.

1. The definition of "Broadband" is incorrect. Broadband does not imply fiber. Broadband merely implies high speed, high capacity data service. There are many technologies that can do this, and any and all should be considered. Each has strengths and weaknesses, fiber is not always the best solution. This bill, the coordinator, and the commission should be focused on the results, not the technology used to deliver those results.

2. Data transmission quality matters much more than speed. This is a critical detail: The incumbent provider currently uses speed as a band-aid to make up for poor quality service. Comparatively low transmission speeds give very high performance when delivered with low latency and low loss. Members of the commission and the coordinator should develop real-world impacts - specific task performance such as numbers of simultaneous video calls and their quality - as a measure of success, rather than focusing on wire-speed.

3. "Gigabit everywhere" is actually a bad idea. No backbone technology can support everybody having gigabit speeds, and almost nobody needs gigabit speeds. If everybody has gigabit, then we need exabit backhauls speeds, which do not exist. The resulting network will end up regularly being slow, because users will overwhelm the backhaul lines. When we use bandwidth to compensate for poor network quality, the result is significant retransmission of data - most of that speed ultimately gets used to duplicate data that has already been sent. This causes excessive infrastructure cost. it is much cheaper to maintain a high quality network than a low quality faster network.

4. True competition is the most important objective here. All of the waste and exorbitant prices we are currently forced to pay are caused by the lack of competition, not the lack of technology or infrastructure.

Avram