

Monday January 30, 2023

To: Beth Rudolph, Winchester Town Manager  
From: Nicole Langley, Director, Winchester Public Library  
Cc: Jane Murray, Chair of Board of Library Trustees  
Re: Library Technology Upgrades and ARPA Funds

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As the new Library Director, my biggest concern moving forward for the Library and the Town is the state of technology in the Library. Foremost of the tech concerns is the condition of the wireless network. The wireless is running at 100 Mbps, and in a time when 5 GB download speeds are available from major national carriers at a reasonable cost, we are not providing an acceptable minimum level of service!

More specifically, there are carriers that offer 5 Gbps peak download speed, and that is *50 times faster* than what we currently have in the Library! Also common is a 1 Gbps that is 10 times faster. The 100 Mbps we have is commonly promoted as sufficient for 4-6 users and up to 10 devices. In a time when residents are still dependent upon virtual meetings, 100 Mbps is not nearly sufficient. Furthermore, most afternoons, we have at least 100 users each with at least 1 device, many with two or three devices!

Even worse, service in the Library is often only one third to half of the 100 Mbps, because of Verizon's network usage and the state of the physical network in the building. Staff restart the wireless multiple times a day because of inevitable crashes. Wireless service at all times is intermittent even in areas of the building like the Large Meeting Room, where there are no metal shelves or concrete walls obstructing signals.

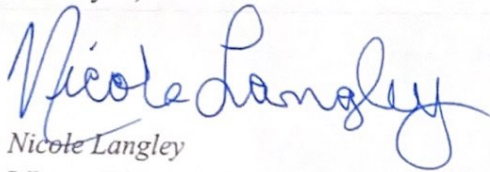
Additionally, new and additional access points will not be compatible with current cat4 cabling (dates back to the 1990s). There is an upper limit as to how much data can be pushed through the wiring. To upgrade the system and install more strategically placed access points, the entire building needs to be rewired to at least cat6.

I have acquired quotes from two vendors on the State bid list. Additionally, I have had a third vendor draw up a Capacity Plan. The final cost to improve the wireless (and upgrade the wiring for the ancient, analog phone system) is \$45,542.58.

This upgrade is essential to the short term and long term functioning of the Library.

I would like to propose that ARPA funds be appropriated for this portion of the planned upgrades. Knowing that broadband infrastructure was one of the original purposes for ARPA funds and knowing the potential benefits of such an upgrade for Winchester residents, business owners, and Library visitors of all ages, I hope that you will consider this request. Please let me know if you have any questions.

Thank you,



*Nicole Langley*

Library Director

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