The Bedford Citizen

LETTER TO THE EDITOR

APRIL 1, 2016

I took to the mic twice at the Tuesday town meeting to voice my support for the 17-32 capital expenditure project to fund a replacement communication network for the town. I am a computer scientist and have been in the technology field for over twenty years. I would like to share my rationale for supporting this project in the hopes that it can help others frame their understanding of the project and its importance to our town operations.

Does the town need a dedicated high-speed, high-capacity network for their facilities?

Absolutely! The end-users spoke to their need for a modernized communication system. Our town exchanges large volumes of data within and amongst their facilities: video feeds, real-time feeds from water and sewer stations, phone lines, email, etc. The schools support roughly 5,000 kids and employees during the day, many of whom have one or two devices trying to connect to wi-fi. Our kids use the network throughout the day to access digital textbooks and Google Docs or class websites put up by the teachers. Several servers physically reside at BHS, so some of the day-to-day work done at JGMS, Lane, and Davis is using servers at BHS. No business supporting 5,000+ people, or colleges, or hospitals could operate without a dedicated high-speed, high-capacity network. This need for bandwidth will only increase as technology advances and our population grows.

Can this wait?

Not really. The existing copper network will no longer be maintained starting in 2017. That means our leased copper network is not infrastructure that Verizon has a business case to support and so it will atrophy. The town's current communication network will start failing. It needs to be replaced and that is not something that can happen overnight.

Can we use the same fiber that residents use?

No. Sometimes it is possible for businesses and individuals to purchase dedicated capacity on a fiber network, if the capacity is available and if there is fiber in the ground where you need it. Fiber is not run everywhere, it is only run where commercial providers lay it down and they only make that investment if it is profitable. It is doubtful that there is fiber running between JGMS to BHS, for instance. That is the crux of the problem. In order to have a viable replacement for our soon-to-be obsolete communication system, fiber needs to be laid down to connect our facilities and there is no business case for commercial providers to make that investment. It has to be paid for by the town if we want it.

Is there a less-expensive option?

Not likely. The only options for building a new fiber optic network are to have the town lay down the fiber or pay Verizon to lay it down for them. Both options are roughly the same price. I felt that the town employees involved in this project have done due diligence in making the determination as to which option is best. It makes economic and technical sense to do the work in-house because the town has equipment and staff to support the project and maintain the network. There is the added bonus of the town owning the network when the work is done. The town is embarking on major construction projects for the Safe Routes to School Project and the Mudge Way hardscaping projects, so ideally, the town can run the fiber when everything is torn up so the work can be done efficiently.

Please support this project on April 4th. An adequate communication system for our town is every bit as important as having reliable fire trucks, police cars, snow plows and adequate classroom space for our children.

Sincerely,

Soraya Stevens