Information Technology Study Committee
Zoom Virtual Meeting
Meeting Minutes
December 3, 2020

Present: Tom Nee, Donald White, Brian Ciccolo, Patrick O'Brien, Pam Manning, Karen Waters, Matt Suckow, Carol Rodday

Meeting was called to order at 4:08 pm by Don White.

Tom Nee presented the agenda and reported that Tom Raab suggested no votes be taken. Postponed reviewing minutes from September 29 meeting until later time.

Internet Security and Cyber Threats:
Per Tom Nee there is funding available for a security audit, more involved than the free services offered by the state. A security audit was done at town hall approximately 10 years ago and all suggestions from the audit were implemented. This audit would take place for all town buildings. More information will be provided at the next meeting.

There was a cyber threat at Hanover Middle School by three students using easily available website to initiate cyber attacks that were short so they did not get on Verizon but would interrupt Zoom meetings, Zoom classes and telephone calls. Students paid for the attack to happen through website and have been disciplined. Verizon is doing their best to prevent attacks in the future but there are no guarantees.

Karen Waters explained the students attacked an external Verizon IP address, which never penetrated through the firewall. It caused a reboot, 2-3 minute blip, enough to bring everyone off Zoom. It is a blip interruption that does disconnect. Karen is looking into vendors to get secondary fiber into HMS.

Don White asked if we would be paying a second internet provider to the school?

Karen Waters explained we have Comcast as secondary with a speed that is not enough to support Zoom meetings and Google Classrooms going on. When we lose Verizon, comcast kicks in but kicks back to Verizon because it is only a 2 minute blip. If we stayed on Comcast, only ½ or ⅓ of Zoom lessons would be supported.

Tom Nee commented that any interruption would break Zoom class, all would have to log back in.

Patrick O'Brien asked if they target our IP, Karen explained that if you have any device on our network and Google "What is my IP address"? Google will give the public IP address.

Don White asked if it was a domestic website and can we take action against them.

Tom Nee answered that law enforcement has been notified.

Matt Suckow explained that moving forward this is something we should take action on. It will only get easier in the future.

Don White asked if they can get the IP address through the guest network which is available all around the buildings and outside the building. Karen Waters replied yes

Patrick O'Brien suggested designing security in layers to make more difficult to get through.

Matt Suckow said by adding a 2nd line would greatly reduce it happening as they would have to get all IP addresses.

Patrick O'Brien said you want to make it more expensive for them to try to get through.

Karen Waters said a second fiber line into HMS can set up a round robin, different people on different providers, chances of everyone going down is slim to none. Either way we have to trust students to not be malicious and attack the school.

Don white asked if it is a problem at all schools? HHS? There have not been any incidents at HHS. What is the cost to have 2nd fiber brought in?

Tom Nee replied that 2nd fiber would be double what we are paying now, most likely $400 per building per month.

Karen Waters explained that this would only be until all schools are fully back in person.

Patrick O'Brien commented we still need more bandwidth.

Karen Waters increased in September to accommodate teachers and students being able to Zoom. There have been a few hiccups but have been straightened out. We do have enough bandwidth at HMS.

Capital Planning

Tom Nee reported that Tom Raab's strategy is to take as much out of the capital budget and work into the operating budget. The $15K HHS laser cutter was moved into "Other Equipment" in the operating budget.

Many Wifi upgrades have been completed. Will not be the original $75K put into this line item.

HHS camera upgrade will remain

Townwide switch upgrade remain

Master clock and intercom for Cedar and HMS still need to be talked about in the future.

VOIP upgrade at town hall, HPD, HFD, and COA need to be done but may be able to work into the operating budget per Tom Nee.

Tom Raab is not a fan of buying IT equipment with bond funds, no longer than 3 year leases.

No devices are purchased using bond funds that may be retired long before the bond is retired.

Don White suggested bond items need to have a use of life for at least 5 years and over a certain $ amount. How often do we need to replace cameras and switches?

Karen Waters replied that switches going forward have a 10 year life, sonic wall 5 years. HHS gym cameras which are 11 years old are being replaced now.

Tom Nee reported HPD has some cameras that are 20 years old.

FY22 Operating Budget

Tom Nee went through hardware and software of schoolside of budget.

Don White commented that some expenses are not going away, just consolidating.

Brian Ciccolo discussed Carousel line item at $70K.

Karen Waters explained the cost could go up or down in years 2-7.

Brian Ciccolo commented that the contract would be for a year with an anticipated 6 additional to follow?

Karen Waters explained it would be a 10 year life cycle, you would have 3 years, then cycle would begin again.

Brian Ciccolo stated that in past meetings it was discussed to see an expected timeline for life of equipment. Has timeline been put in place? Karen Waters is not aware of any. Switches we are purchasing now have a notification date of 2017. Tom Nee stated it is typical to try to get a few additional years our of switches.

Brian Ciccolo is trying to see if we have an ideal plan for product lifecycles and keep an eye on the bigger picture.

Karen Waters stated the package that was put together and presented at the September 29 meeting was overpriced list price for network infrastructure for all town and school buildings. Now we are breaking that down to years based on need and lifecycle.

New switches were released end of October and are sold for 5-7 years, once they are no longer sold, there is only 5 years of life from that point but could be as long as 12-14. The company dictates end of life. Tom Nee stated that if fan or power supply fails you could purchase parts but after 5 years you may need to go to eBay for parts.

On townside there was some movement renaming software, Opengov is permitting software that replaces Viewpermit. Part of $38K included migration costs that was paid by CARES Act funding.

50K for MX Consulting. Tom Raab split the cost to show where funding is being appropriated. They provide consulting services to come to HPD and HFD when needed, including weekends to provide any necessary services. Most importantly they provide a backup appliance at HPD and internet cloud services.

Tom Nee discussed email hosting/archiving from Rackspace and KnowBe4.

Don White asked how many people we are training to recognize Spam attacks through email. Tom Nee stated we have a license for 400 which would include everyone except teachers.

Don White asked about Rackspace. Tom Nee replied that HPD and HFD are now consolidated with hanover-ma.gov email addresses. Brian Ciccolo asked if that was the $3K offset from MX Consulting and increased Rackspace. Tom Nee explained that the archive is indefinite and very easy to retrieve emails. Don White asked if there is a need to have expense of archiving indefinitely? There is a $3.00/month per account archiving fee in addition to the $2.50 per month standard Rackspace account. Hosted exchange accounts are $10.00 per month. You can sinc email with computer and mobile device, can do 2 but does not sinc well with 3.

Tom Nee stated that there are still 30 dpw.org accounts, library uses ocln.org email, and schools using free Google emails. No plan for moving these.

Don White questioned dog licensing software in Viewpermit? Tom Nee replied that once it is fully implemented, dog licensing will be included. Still using old system for now.

Don White is concerned with utility costs and access to maintenance software control systems. He would like to know that someone else, other than Bob Murray, can access and run technology systems connected to HVAC, etc.

Karen Waters explained that the large tv screen in the maintenance office can bring up all the systems. She believes they use it daily.

Brian Ciccolo made a motion to adjourn the meeting at 5:09pm. Don White seconded the motion. All voted in favor.

Next meeting is Thursday, January 14, 2021 at 4:00pm.

Respectfully submitted,
Carol Rodday