

Technology & Resiliency Committee Minutes  
January 28, 2021 – 4:00 p.m.

Present: Chairwoman Gaston; Committee Members Phil Barrett, Eric Connolly, Joe Grasso, Bill Peck, Matt Veitch, Chairman of the Board Todd Kusnierz; Steve Bulger, Matt Rose, County Administrator; Hugh Burke, County Attorney; Jason Kemper, Planning; Eileen Bennett, Chris DuBois, Information Technology .

Chairwoman Gaston called the meeting to order and welcomed all in attendance.

Ms. Gaston announced the appointment of Mr. Barrett as committee vice Chair.

Ms. Gaston said that because this is a brand new committee, she wanted to have a discussion about the purpose of the committee with committee members and staff. The Committee description was distributed with the agenda. Ms. Gaston said that she believes the first part is pretty clear. Some of the technology aspects have been handled by Buildings and Grounds, and she believes they probably will continue to, in some respects, because if you're talking about manipulating surroundings and whatnot, that's going to be it's going to be Buildings and Grounds. But believes the committee's would definitely work together. The idea is, what is our information technology as a county? How can we move forward? How can we change it? Do we need to? What does Eileen need in that department? Do you need more people, more equipment etc.? Ms. Gaston said the idea is how can we improve our technology and keep it up to date, and what are the things that we need to do, as a part of that? The suggestion in the committee is not necessarily that there are a lot of things broken. It's just this is such an important issue. For a County, particularly, we're seeing more in COVID, that we really need to make sure that we have a clear and directed effort at monitoring that. Ms. Gaston said a lot of things that are really important, in her opinion, are things like we need to start working towards live streaming meetings, which is something that is already being discussed, public Wi-Fi in some parts of our County, we need to develop a system with the Director on how we can support remote work, a lot of that is going to take a lot of work. Ms. Gaston said that we going to have to make a lot of decisions and look at things how we've been running and not. Also any technology policies. Are there any other things that we should do throughout the county, and how we should work on that? The second part is resiliency. Resiliency Dividends is the idea that it is the benefit you get from preparing to deal with stress. As a county government, there are things that we can do that help us prepare for stressors. One of those is building our technology. Some of it is how are we designing our buildings? How are we purchasing buildings? Are we outfitting them? What supports are we providing for our personnel? Some of it is in response to things like climate change, some of it is natural, some of it is things like pandemics or natural disasters. It's whatever we can do to help build us into responding. Ms. Gaston said that County staff at the beginning of COVID, and through now, have been incredible in responding. But she believes that would have been made a lot easier if some things were already set up in the system. Ms. Gaston said that she would like to hear what other committee members are concerned about, or if there are any thoughts about the scope.

Mr. Barrett said that from the standpoint of resiliency, it can cover a lot of areas, and believes a lot of that goes to efficiency, better efficient use of our resources. There are a lot of ways you can save

money by saving energy. If you go into it with the main goal of saving money, certainly you can save a lot of energy. Ms. Gaston said that at one point there was a green committee that came up with ten recommendations, a few of which have been implemented but a lot of those were designed for the purpose of saving money. Mr. Veitch said that there's a lot of places where the technology upgrade requires Buildings and Grounds work, or even with resiliency. That committee and this committee have to work together for that. Mr. Veitch said that over the last couple of days, he has been talking with Chad about some of this, some of these ideas, saving money and saving energy and trying to figure out how to make the County more resilient.

Mr. Barrett said that outreach to different departments that can be done through the committee's is important. He has already asked Chad to come up with at least three ways money can be saved with Public Works. The lighting in the DPW Garage is the original lighting, and with all the incentives now for LED lighting, that is a fairly inexpensive way to save a lot of money and have a better product. Also, assessing the viability of solar panels that might be able to be placed on buildings or nearby.

Mr. Veitch said that one of the things that was done way back in the beginning of this committee, when it was first formed, was inventory management. The barcoding project. Everybody's computer now has a barcode on the back, and then that monitor has a barcode on it. We know where everything is, and if we need to find it, or if we need a new one, or we find that something is old, we can track all that and keep it up to date.

Mr. Connolly mentioned that some departments could have employees who are on the verge of retirement, and they're the only ones who know how to perform particular tasks on a daily basis. We are prone to problems if several employees decide to retire at the same time. The difficult thing is to figure out priorities, and what are things that we need to address right away just to maintain resiliency? On the other side of things, what are things that we can do right away, to drastically reduce county expenditures. If you approach it, with those two things in mind, he believes it is more digestible and easier to manage. Mr. Connolly said that the Town of Ballston are about a year into becoming a clean energies community. They have been working with the County, and that's one of the processes that we could start here.

Ms. Gaston said that she definitely wants to be able to make recommendations or take actions that help save money, make the county more resilient and prepare us for what might come next.

Mr. Peck said that looking forward, you've got to be careful financially and look for ways efficiencies save money, and if you're going to spend money, look for ways to save money. Resiliency in general and having backup is always very important in all businesses. Ms. Gaston agreed, finances are definitely a part of resiliency. If you end up spending your entire bank account, you're not going to be very resilient. So that has to be a part of the consideration when whatever steps we're taking.

Mr. Grasso asked where the items being discussed at this committee will be coming from. Ms. Gaston said that some of it is going to be like a regular committee, where a Department head will talk about a plan. She would like to see some of the discussions happen, just from the committee that we're bringing up and discussing questions. This is kind of a new topic, particularly the

resiliency part. As a past standing committee, the Green committee came up with recommendations. What she would like to see, and if no one has an objection, there are some resiliency plans that are out there from other municipalities, counties in the nation. She sits on a resilient County's national board. Ms. Gaston said that she would like to share those resiliency plans and next time talk about are there any things in these plans that we think would be beneficial or not? Because some of are going to be different. Should we build one of those, should we just focus on enacting the recommendations from the Green committee from 2009? Are there are certain steps that we should come up with. She is happy to sort out if each committee member wants to talk to a subset of departments, if that's how we want to do part of it. If a committee member has a particular interest in moving forward, it all ends up with the same goal. She wants to make sure that we're in the place to talk about that and move those ideas forward.

Mr. Connolly agreed and said that if committee members are assigned to departments, he will visit the departments, ask them about their technology, ask them what they are struggling with. Actually get to know the departments and the people who are running it and listen to what they're challenged with, and to see if there's some logical things that can be done.

Mr. Peck said that knowing what the departments do and who operates what is always a good idea. Mr. Veitch said that the other new committee, the Government Review Committee, working with this committee potentially doing kind of the similar thing, because he believes there's no shortage of ideas. Some of those ideas may require a technology solution, or some of those ideas may be a resiliency solution, or they may be Public Works or Buildings and Grounds, there's so many different things that that committee could run into that it's not enough for just one committee to handle it. He has heard multiple ideas since January 1<sup>st</sup>, and they could go in a whole different host of directions. So that may be something that can be done also, working with other committees. Mr. Barrett said that he would expect there to be referrals and we should encourage referrals from other committees.

Ms. Gaston suggested having a joint committee of this committee and the Government Review & Efficiency Committee next month. This can help split the load about both the structural aspects and the legal and rules aspects, but also resiliency as a whole.

Ms. Gaston introduced Mrs. Bennett Director of IT and Mr. DuBois Deputy Director of IT to discuss the Data center refresh project. Ms. Gaston said that our IT department has done some admirable work over COVID and responding to things that they did not know we're going to need to be responded to on the drop of the hat.

Mrs. Bennett gave an overview of her Department. Other than computers and networks they are also responsible for telecommunications, security cameras in all County buildings and facilities. She currently has a staff of 11 people, including herself and Deputy DuBois. She is currently looking for three positions, a confidential secretary, and two techs. The Sheriff's Department and the DA's department has gotten a lot of extra work with bail reform and all the regulations that they have. One person from her department is dedicated already to the District Attorney's office, and the newest person coming on staff will be dedicated as priority for the Sheriff.

Mr. DuBois oversees the network, which is a windows Cisco network. We also have an IBM Power System. We have some homegrown applications on that, that were written in house and there's one staff member who has knowledge of that system, that is Mrs. Bennett herself. Trying to train someone else to understand a very large and complicated system that has grown and started being

written in 1995, we deployed it about 96/97, and it's still here. The solid box was refreshed in 2017. That's good for approximately eight years. We have some smaller home grown items written for real property. We currently print all of our tax bills off of the IBM System because the State has never written an application to print tax bills. We print all the tax bills for all of the municipalities, fold and stuff them in the envelopes and deploy to the tax collectors out of our department. Real Property prints them and processes and comes out of our department, Mr. Connolly asked what software Mr. Jarosh was speaking with him about. Ms. Bennett said that the tax foreclosure and option program was pretty much written by her. We've looked at a lot of applications they are mostly for tax collection, we aren't tax collectors, we are delinquent tax collectors. Treasury makes the communities whole, and we take that delinquency and process it. Then there's all the rules and regulations, bankruptcy, all those different kinds of things and modules that we've written in. If someone doesn't pay taxes in three years, it goes to foreclosure We have a process for the County Attorney's office to process foreclosure, according to Article 11. We have had auctions here, but last year they were very successful in doing an online auction. Mr. Veitch said that they also do all of the PC maintenance and refreshes. Mrs. Bennett said that even in this data refresh, all the equipment comes in. Chris and another staff member configures everything we there's no outside expense for engineering services. There is \$14K in her budget if additional guidance and assistance is necessary. Mr. Peck commended the IT department with all of the work done in setting up the new Public Safety Facility. It was a monumental task that they tackled with great efficiency. Ms. Gaston said that just since January, working with Public Health, the IT staff has been incredible.

Mrs. Bennett said that the data refresh, some of that is about resiliency. If we want to stand up another server, maybe we want to test something, maybe we need to do testers, we're getting very limited. Some of that is because of COVID, we find that what we live in right now is just not adequate. Ms. Bennett said she was hoping to be able to push the project to 2022, but we do not know what the pandemic is going to ask of us. Dr. Kuhles is looking for solutions, because solutions that were given to us from all sorts of entities don't work 100%. It may increase some of our requirements for network resources for Internet services, phone services, ability of our phone systems, to be able to do the things that need to be done.

Mr. Connolly asked about the network room and where it is housed. Mrs. Bennett said that for our purpose it is adequate. They have a smart row in there, fire suppression, climate controlled, and has room for expansion. Ms. Gaston recommended committee members to ask Director Bennett for a tour.

Mrs. Bennett said that over in the last seven years they have worked on having wiring closets in each department, we know where our equipment is, we know where our switches are. There's nothing hidden up in the drop ceilings, it was just put together as needed. Mrs. Bennett said that it is partly why she is here with this proposal. We do not want to be piece mealing anything, we've learned from our mistakes. piecemealing a network is just the worst idea there ever was. But that's what we had, and we made it work. Departments are asking for more technology, they need the server space.

Ms. Gaston said that the idea was to push this project out later but because a lot of domains are coming down, it makes more sense to do it now.

Attached to these minutes is a breakdown of the full proposal.

Mr. DuBois said that this will replace all the servers that we currently run, we are adding one, doubling the memory of those servers. The storage device we have now is not supported anymore, so we have to replace that anyway. One of the big things we found when we did our first data consolidation is our storage was at one terabyte, and we are now over 12, or 14 terabytes, in just the five or six years that we've grown. So following that trend, it is expected to be within 20 terabytes within three years. Some of that is backups, a lot of that is part of the document management system attached to the financial system. The storage device will be much faster than what we currently have. Replacing the data center switches in the building core switch.

The good news is that the majority of the software, we are just adding licenses, what we currently have, is not a major expenditure because we already own it. We have to add one windows data center license to be a VMware as the virtual software. Already part of a working project, we are pushing our Disaster Recovery site from a physical location, Microsoft Azure services. Being in the cloud will allow for more mobility if there was ever an issue. \$16,625 of the proposal will provide for additional remote work solutions. Mrs. Bennett said that another part of this is we did increase our internet services, that did not have a budget impact, Firstlight is our provider and they were able to double our internet service at no cost increase.

Mr. Burke suggested contacting our insurance provider to see if discounts could be obtained having increased cyber security.

Mr. Grasso asked if this item was budgeted for 2021, Ms. Gaston said that it was not, the proposal is for the funds to come from Fund Balance. Mr. Kemper said that he checked with Mr. Rose and Mr. Jarosh this afternoon, and the Fund Balance is currently approximately \$28.5.

Mr. Grasso asked what the life cycle is for this project. Mr. DuBois said approximately 6 years. Mr. Grasso said that for lifecycle cost analysis and budgeting, we should really be carrying \$100K a year in a budget, so that we've got a reserve and we're not just constantly just hitting the budget unexpectedly.

**A motion was made by Mr. Grasso, seconded by Mr. Connolly, to authorize a refresh of the County's IT Data Center that was implemented in 2015, an additional remote work solution, and amend the 2021 budget accordingly. Unanimous.**

Mr. Veitch said that the \$16K for the work from home solution is good to have taken care of now but questioned if without having an HR policy in place, can it be spent. Mrs. Bennett said that there are departments that have VPNs because they work outside, they're in homes to assist people, they're in court. Mr. Dubois said that these costs are not fixed costs, they are estimated for the year and if not used will reduce the total cost.

## Other Business

Mr. Veitch suggested that the County website is something that should be looked at some time this year. Additionally, County Policy for IT should be reviewed at some point. Mr. DuBois said that he can email a copy of the current IT policies to the Committee.

Ms. Gaston asked how the website is currently handled. Mrs. Bennett said that the proposal was that each department would have their own web designee. Most departments have that, some departments ask IT for support. IT is always available, some staff available 24/7 for updating the website during emergency situations. The website is currently an annual agreement with a local company from Middle Grove. It's a WordPress content managed website and is fairly easy to use. Ms. Bennett said that we have been satisfied with them. The person that owns that is very responsive to us, for example during an election, she will let him know the election is coming up, increase our bandwidth or increase our resources, anticipating that it will get hit hard, and he's always accommodated that.

Mr. Veitch said that it's been probably 10 years since we bid out our website and would say that it does not need to be a huge priority this year, but sometime during the year, we can look at the website. Ms. Gaston agreed and said that people expect a lot from websites. Mrs. Bennett said that the cost per month of the current website is only \$1K per year. Mr. Veitch said that it may not necessarily mean a new vendor, it may just be that it needs a redesign. It's been the same design for 10 years. Mr. Connolly said that online payments are currently not accepted on our website. Mrs. Bennett said that this would entail an outside vendor to process the payments. Mr. Veitch said that policies and such would also need to be written for online payments.

**On a motion made by Mr. Veitch, seconded by Mr. Connolly, the meeting was adjourned unanimously.**

Respectfully submitted,  
Therese Connolly  
Deputy Clerk of the Board



# SARATOGA COUNTY

## PRE-RESOLUTION MEMORANDUM

**TO:** Steve Bulger, County Administrator  
Hugh G. Burke, County Attorney

**FROM:** Eileen M. Bennett, Director of Information Technology

**DATE:** 1/26/2021

**Committee:** Technology & Resiliency Committee

1. Budget Amendments: \$590,913.00 for Data Center refresh plus \$16,625.00 for an additional remote work solution for a TOTAL of: \$607,538.00

2. Amendments to the Compensation Schedule: N/A

3. Details on what the resolution will authorize:

**A refresh of the County's I.T. Datacenter that was implemented in 2015 and/or an additional remote work solution. Details on attached document.**

9. Remarks: Various vendors will be used for all hardware and software from a NYS OGS Contract and/or other County approved contracts. In 2015 Resolution 27-2015 established a capital accounts fund for the Data Processing Network Infrastructure project.

Appropriation accounts to be used if the budget amendments are to the I.T. General Fund accounts:

A.23.000-7032	PC Networks	\$549,887.00
A.23.000-8520	Software	\$42,801.00
A.23.000-8190	Other Professional Srv	\$14,850.00

Revenue account to be used:

A-0599.B	Appropriated Fund Balance	\$607,538.00
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Eileen M. Bennett  
Director

## COUNTY OF SARATOGA INFORMATION TECHNOLOGY

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Chris J. DuBois  
Deputy Director

Prepared January 22, 2021

### The County of Saratoga Information Technology Department Datacenter Refresh Project including Remote Work Solution

2021 is expected to be a challenging year for The County of Saratoga Information Technology Department. With the rise of COVID-19 and recent technology initiatives, the County's IT Datacenter that was implemented in 2015 needs to be refreshed as soon as possible.

This refresh will consist of:

- replacing the five host servers with six new servers
- a new storage device doubling the counties current storage
- replacing and upgrading the datacenter switches
- replacing Building#5 core switch
- replace the firewall with a new device capable of higher levels of security

The current datacenter is running devices whose active support will be ending in 2022. IT has begun to see the degradation of perforce and bottle necking caused by heavy uses of current applications. 2021 will see the addition of no less than three new applications that are resource heavy. The goal of IT is to implement the new datacenter before these applications go online. IT also expects to see the data storage rapidly increasing over the next five to six years based on the growth of the last six years.

This datacenter refresh will resolve the resource and performance issues for the next five years or longer, while allowing the county to continue to grow its environment. The refresh will offer better performance, greatly increase our security profile, and add the ability for more flexible remote working capabilities.

Once all components are received, IT fully expects to have the new datacenter stood up within three weeks and servers migrated/upgraded (where possible) within five weeks.

### Servers

- Increase from 5 to 6 Cisco UCS servers
- Increasing the memory from 127Gb to 448Gb
- Higher performance Processors
- ISCSI throughput will go from 3 Gbps to 10 Gbps (20-30 with port groups)



## Networking

- Datacenter switches will be increased from One Gigabit Switch to 10 Gigabit Switch to match the Server and Storage throughput
- Datacenter switches are maximized for virtual environments
- Core switches will be replaced with Cisco 9500 series switches - this will compensate for the increase in traffic
- Current ASA (firewall) will be replaced with Cisco Firepower devices these devices have all the functions of a firewall but also add, filtering, Intrusion detection, virus and adware scanning, Access control, along with other functions
- Internet being increased from 200Mbs to 400Mbs with no budget impact

## Storage

- The current storage is no longer actively supported and cannot be upgraded
- The management software for the current storage device is using flash in sections
- Over the last 6 years the County storage has increased from 1TB to 21TB with the expectation that the storage will continue to grow to the 30TB to 40Tb range within the next 2-3 years
- The New storage is almost triple in speed
- The New storage is almost double the current storage space allowing for expected growth over the next 6 years

## Software

- Add one Windows datacenter license
- Add one Veeam license
- Add one VMWare ESXi license

## Miscellaneous

- Professional Services
- SFP Modules
- Cat7 cables
- Unknown items
- Contingency Budget

## Microsoft Azure Cloud Services:

- Azure will be used for DR site
- Azure will also be used as an additional solution for remote work