BROOKLINE SCHOOL BOARD
AUGUST 23, 2016
MEETING MINUTES

A meeting of the Brookline School Board was conducted on Tuesday, August 23, 2016 at 6:05 p.m. at the Captain Samuel Douglass Academy.

Chairman Matthew Maguire presided.

Members of the School Board Present: Patricia Lynch, Vice Chairman
Erin Sarris, Secretary
Lauren DiGennaro (arrived at 6:40 p.m.)
Kenneth Haag

Members of the School Board Absent:

Also in Attendance: Andrew Corey, Superintendent
Gina Bergskaug, Assistant Superintendent
Dennis Dobe, Principal, Captain Samuel Douglass Academy
Daniel Molinari, Principal, Richard Maghakian Memorial School
Denise Norton, Assistant Business Administrator

AGENDA ADJUSTMENTS - None

NOMINATIONS / RESIGNATIONS / RETIREMENTS / CORRESPONDENCE

Superintendent Corey spoke of the Board's approval to hire an additional elementary school teacher, and informed the Board the final steps in the hiring process are underway, and the new hire should be on board before the start of the school year.

PUBLIC INPUT - None

PRESENTATION

Superintendent Corey stated COPsync is a program designed to reduce response time. Research indicates response time is the number one factor in an emergency situation. The Brookline Police Chief, William Quigley, and the Hollis Police Chief, James Sartell, are both supportive of the program. The Police Departments don't have the program at this time; however, will move to it if the school districts move to it. Multiple communities participating in the program is the true benefit the program offers, e.g., if a police officer from a participating neighboring community were traveling through Town and was the closest to the scene in the event of an alert, that officer would be notified, and able to respond.

Mr. Brandon Flanagan, Chief Executive Officer, BRANDON COPsync, stated in 2014 his organization contracted with the State of New Hampshire supported by the Governor, in particular New Hampshire Homeland Security and Emergency Management. They wished to provide a threat alert notification system for public school and law enforcement entities throughout the State. COPsync 911 was the chosen vendor. As such, Homeland Security has provided three years' worth of funding (currently in 3rd year) to allocate towards every public K-12 institution and every law enforcement agency in the State.

COPsync 911 is designed to be a real-time threat alert and notification system. The intent is to first and foremost reduce law enforcement response time. It has been identified, very conclusively, through studies that have been conducted by the Department of Justice, post Sandy Hook in 2014, that although it is unlikely we will ever prevent these types of incidents from occurring throughout the nation, the only way to mitigate loss of life or these types of circumstances is to reduce law enforcement response time.

COPsync would provide to any number of faculty staff, administrators, etc., an application that would reside on any type of device, e.g., laptop, desktop, Smartphone, tablet, which would allow the user, by double clicking the icon, to notify law enforcement (local, County and State within a specific radius) of a situation in 15 seconds or less.

While working with the State, COPsync has found that by getting this alert into the hands of the officers in their patrol units and to dispatch within 15 seconds or less they are able to reduce response time. Through the 911 infrastructure of the State there is an inherent delay that is built into it, and roughly, on average, that has been found to be 2-4 minutes. That is just to have the first call placed, routed, and then dispatch the first officer outward. That is not response time.

Law enforcement will have this application residing on their in-car computers as well as within the dispatch/communication center. As a third means, law enforcement will deploy a portion of COPsync 911 onto their phones that would allow them to receive a text message. They can receive a message notification regardless of duty status or location within the Town, County, or State. The program is Criminal Justice Information System ("CJIS") and Federal Information Processing Standards (FIPS) compliant. Ultimately that means the software application is encrypted to the highest levels that the FBI has set forth, and is only accessible by law enforcement.

In the event of a crisis or any type of life-threatening situation, the individual having access to the program would simply double click on an icon without doing anything more including typing any information or having to use a password, etc. The clock will count down to zero automatically and send an alert outward. There is an option of clicking send alert now, which bypasses that, or the user could cancel the alert within that 15 second window in the instance that it was hit unintentionally.

Instantaneously law enforcement is receiving the crisis communication portal to their computers in the field, dispatch, and their cell phones. The information displayed tells them automatically that assistance has been requested, for example, from the Danvers School District, specifically the Fenway Middle School, its physical address, and the location from where the threat derived, e.g., Mr. Flanagan's classroom #62 in the English hallway. In the instance that there is a teacher that teaches in multiple classrooms, they are provided a quick pick list so they can pre-program different locations from where they would send an alert from, and on their mobile devices they have the option to include additional locations with a 6th option being the ability to broadcast their GPS position; particularly helpful for members of the Administration and in a regional school district where individuals may be moving around between different towns.

The two hyperlinks are the threat location, which is self-explanatory; would show an officer on his mobile data terminal the exact location on the map from where the threat derived and a hyperlink, which is the target floor plan. The floor plans that have been developed for the SAU are loaded into the software as a small integration on the back end. This type of information will be placed at the fingertips of the responding units.

Mr. Flanagan reiterated the desire is to get the police on scene and in the building quicker. In the law enforcement community today training is such that it is first on/first in. In other words, we're not waiting for the SWAT team, other specialty units, or backup for that matter to help penetrate the building. The first responders on site would likely be going through the building by themselves, and the desire is to help with officer safety through increased situational awareness.

Vice Chairman Lynch questioned how the officer would gain access noting the school would be locked. Mr. Flanagan responded that would be a concern outside of COPsync because regardless of COPsync initiating an alert or not, they still have to gain access to the building. During conversations with officers from other communities he has found the response to be they are coming through that doorway one way or another.

Mr. Haag questioned if the map would be static or dynamic, meaning if the alert comes in does the area it originated from become highlighted on the map. Mr. Flanagan responded it is most likely a PDF, but it depends on who has developed the floorplan; if it is a software vendor that is common in the area, COPsync could integrate with them. That is something they could explore further.

Mr. Flanagan commented COPsync encourages taking full advantage of this portion of the program, e.g., could include additional information such as multiple floors, aerial photographs, etc. What they have done a good deal of in the State is pre-populating what they call the "run card', which is an abbreviated version of the Emergency Response Plan. Understanding this is a regional district and there would be two police departments that would respond, in addition to nearby agencies and communities utilizing COPsync, State Police and the County, they wish to streamline it as much as possible and streamline the information only to the organization at that point in time that may be experiencing the threat.

Mr. Flanagan provided an example of how the software works/looks. He noted the notification window that appears on the device of the individual making the alert confirms the alert has been sent and received by law enforcement. That is important so that the individual making the alert knows help has received the alert and is coming. One of the shortfalls that have been seen with 911 throughout the country is that it only takes a certain number of phone calls to bog down the system. In the State of New Hampshire it is only 18 calls at the E911 center in Concord. In these types of situations, students equipped with cell phones, teachers, faculty, parents, members of the community, etc. will be calling. The intent is to notify the individual making the alert that help is coming and allows for a two-way chat notifying responders exactly what they may be experiencing, e.g., intruder, red shirt. Law enforcement can communicate back; ETA 1 minute. When this really comes full circle for that entire organization under threat is the area under locations. As the alert was launched from classroom 62, all of the law enforcement community is receiving it, but everyone in the building is receiving it as well including central office staff. This is hugely important because they want to provide an options-based response

to the teachers, faculty, staff, and especially for the students. If a teacher in classroom 63 sees there is an intruder wearing a red shirt next to classroom 62 their best bet is probably to barricade the doorway and shelter in place. Conversely, if the teacher in classroom 90 at the opposite end of the building, knowing where that threat is and that it is isolated, may make the decision to get out of the building.

Ms. Sarris questioned if the program would have an impact on the current emergency response plan within the schools; would having a program like this mean a change in the protocols for staff. Superintendent Corey responded it does start to provide options. For example a class that is located at the furthest point away from the incident, the decision could now be made to exit the building. It will change it. It is something that is already being discussed by all police departments rather than simply shelter in place. If the decision is reached to move forward, there would be further discussions with COPsync, Chief Quigley, and Chief Sartell, and the process would begin to document what the protocols are.

Chairman Maguire spoke of the ability for all other staff members to be provided with the information being shared, and questioned if other staff members would have the ability to join the conversation, which could make it more confusing for the person who initiated the call. Mr. Flanagan responded members of that organization specifically would have the ability to add additional information. That has been found, through tabletop exercises, to be one of the most dynamic portions of the program. The reason being that threat isn't going to be stationary. We want to be able to track that individual's movement, but foremost want to be able to provide real time information to law enforcement, and the only way we can do that is by including everybody within the building. It streamlines itself similar to an old AOL chat notification window. It does not come across with multiple pop-up windows; it is all streamlined and scrolls through as more information comes through.

Chairman Maguire spoke of the need for training to ensure only those having valid information would be adding to the conversation. Mr. Flanagan stated COPsync acknowledges that from an organizational standpoint. Through the grant COPsync will provide a standardized training curriculum to each school in the district.

Mr. Haag commented the only thing he struggles with is the practicality of if there is an intruder would an individual have the time to contribute information. Mr. Flanagan remarked as long as the alert is initiated it has gone out to law enforcement. The way they are trained to react is the worst case scenario is occurring; they are all coming. The initiator of the alert may be too close to the threat to do anything other than silently double clicking that icon. However, two doors down there may be another who could add good information to it, which is why it is powerful to include everyone.

Mr. Flanagan stated during the event information is critical, but they have also found post event it is even more so. These events can take anywhere from 6-7 hours until we regain accountability and control of the situation. What they have seen law enforcement do in tabletop exercises run in New Hampshire, is type a message back into the school, which says all clear, rooms 1-10 now check in. Now as an individual I am seeing this all clear message come from one of the officers in charge of that situation, and now we can start to check the boxes and understand where everybody is, where everybody went, is there anybody that is wounded or needs medical attention now so that we can provide it as opposed to waiting the 6 hours until we get to them. This allows us to shorten that timeframe, shorten that window, and allow for parents to reunify with their children much quicker and for law enforcement to regain accountability of the situation in a much quicker and expedited fashion that is certainly very effective.

Mr. Flanagan stated the last portion is what they refer to as the reverse notification. This is a very important feature of the program. This portion of the program derives from law enforcement. We've all seen issues of bomb threats that have been called in throughout the country and what has been found is that it becomes overwhelming for law enforcement to notify 5 schools or 20 schools all simultaneously of a potential threat. Reverse notification allows the Police Department to draw a geo fence around one building in the district or perhaps three buildings in the District and in doing so they can provide a subject line that says for example, there is an evacuation and a known threat within building. Once they push send, the message will be pushed out very quickly. The Administration would receive the notification and would join the chat room and respond. COPsync encourages the District to establish a user group/reverse notification recipients. The teacher that may be teaching in 3rd grade on the Smart board perhaps doesn't need this to flash across their screen. We don't want to create more chaos, but your central Administration your Principals and other members of the safety security committee we would want them to be set up to always receive these alerts for every school in the District. Therefore, it is a big enough number that allows them to take action, but not too small to miss it. COPsync can work with the District to identify that.

When asked, Mr. Flanagan explained New Hampshire Homeland Security and Emergency Management put forth an Emergency Management Performance Grant (EMPG). It is a streamlined grant application of 6 questions, which is simple and effective to get through, and is posted on their website. You submit the grant on behave of the District and in turn the grant will cover the entire cost of the program for the first year. Generally speaking it is a 50/50 match program. The soft

match, time COPsync spends educating communities, training staff on the school and police side, etc. will more than cover the 50% match requirement.

The cost after the first year is $1,200 per school. That includes continued IT and tech support, training refreshers including documentation, videos, and other presentations accessible by the District and the SAU, and every new software release of the program as it is made publicly available. New revisions and upgrades are being pushed out roughly every 90 days.

When asked if there is a cost for the police side, Mr. Flanagan stated there is, and that information has been relayed to both Chiefs. That is also covered by the grant. For law enforcement, it is $120 per terminal. If Hollis has 10 line cars it would be $1,200.

Ms. Sarris questioned if COPsync is the only vendor in the State, and was informed, at this point, they are. Mr. Flanagan commented that is important because it develops interoperability among law enforcement. It allows multiple jurisdictions to communicate and share this information as the situation is unfolding. Candidly, that was a big benefit to Homeland Security and the Governor because we never had that before.

When asked which communities are utilizing the program, Superintendent Corey provided the examples of Amherst, Townsend, MA (looking at it); Mason has submitted their grant, Greenville, and New Ipswich.

Chairman Maguire questioned if a situation could occur that a teacher was at home and their child activated the program. Mr. Flanagan responded that is something we need to be very much aware of as we deploy this and how we choose to deploy it because the alert would still go out from their home. They designed that on purpose because they didn't want to limit the ability to send it as the teacher may be at a Friday night football game or on a class field trip that is school related. That is something we would have to be cognizant of as they move forward with the training.

Ms. Sarris questioned how the teachers would respond to this believing there to be a struggle between empowerment and providing additional assistance. She questioned if this could be perceived as putting an additional burden on their job. Principal Dobe responded they will be undertaking a pretty major initiative in staff training related to emergency response plans. As Mr. Flanagan has said there really has been a change in the way that schools and police departments look at these sorts of incidents and what appropriate response actions are for schools. That will be undertaken this fall, and he would see this program as a nice compliment to that. He believes the teachers will see the potential and power of the program. He commented it is so easy in a school system without a technology like this for the office to be flooded, the PA system to be flooded and for people to be quite confused. He stated appreciation for the way the program streamlines and brings all communication in one place that is shared automatically. He sees it as a powerful and positive addition to the District's preparedness.

Brian Rater, Finance Committee

Questioned if there is a mechanism for alerting neighboring schools of a situation occurring. Mr. Flanagan stated there is. He stated that type of configuration is recommended so that the central Administration staff has the ability to receive those alerts and understand what is happening within the District. They don't recommend that every school and every faculty member receive an alert, but perhaps the Principal or Assistant Principal could be brought into the loop to be made aware of what is taking place in their vicinity.

Mr. Rater questioned if they COPsync has experienced incidences of false alerts, and was told they have. Mr. Flanagan stated the program has been deployed for over three years now in the public and throughout the country. However, based on the statistics they have seen those numbers have been very small, which they attribute to good training, good practicing, and the ability to test the program as often as users wish. COPsync recommends that be done at least quarterly.

Mr. Rater questioned if there have been any real incidents reported and handled through the program. Mr. Flanagan responded there have been and COPsync 911 has really showed its worth. There are some well documented stories. Although he did not wish to share them publicly he offered to share them privately. They are very strong stories where potentially very bad situations have been avoided.

When asked about the extent of annual training, Mr. Flanagan stated with the first year of the grant they want to come in and train every school. They will provide training for each school and every staff member assigned to it. From there they like to identify a resident expert so to speak for a train-the-trainer type model. That trainer would constantly ingest all of

the information, and would have the local presence and daily interaction with staff, which is powerful. The District would have access to the portal which houses updated videos, curricular, and the like.

Vice Chairman Lynch reiterated she has a concern with law enforcement's ability to gain access into the building. Superintendent Corey remarked that is a very valid point, and goes back to Principal Dobe's conversation regarding the drastic shift occurring in how we respond to incidents from shelter in place to trying to locate the intruder and make informed decisions. He noted the other districts have not received the presentation. He would like to continue the dialogue with Chief Quigley and Chief Sartell as complete cooperation between the towns would result in the best response time for the Districts, and bring the matter back before the Board at its September meeting with a recommendation for continued discussion and possible formal action.

Vice Chairman Lynch suggested a member of each School Board serve as a Liaison of sorts. Ms. Sarris questioned if there might be other grants that could be sought to further assist with the cost. Superintendent Corey stated there are a number of grants that come around periodically. For example this year the Middle School received a $23,000 grant to do extensive upgrades to security. Ms. Sarris commented with all of the communication technology that exists there are a lot of assumptions by individuals that what is in place already does some of this stuff, and then when something happens it is appalling to learn it doesn't.

Assistant Superintendent Bergskaug commented she was involved in an emergency situation, and radio chatter becomes so overwhelming that important information cannot be communicated.

PRINCIPALS' REPORT

● Summer Facilities Work - Update

Principal Molinari stated the work on the floors at the Richard Maghakian Memorial School (RMMS) has completed. Work was done on floors that span from the Milford Street door through the main lobby, down the gymnasium hallway by the music room, and then all the way down the 1st grade wing into the Kindergarten wing. It is a nice improvement to the school. It is a gray base floor with some blue accents throughout. Aesthetically it is a great improvement, but more importantly it is a safer situation as the prior floors were cracking and tiles were lifting.

The safety locks will be installed next Monday. The entranceway project has taken on a life of its own. The bookcases are all painted on the walls, one side of the stairwell has been painted with books, and work continues on the other side. When you enter the main entrance, there is a large Blue Jay painted with the song of the school. Three more work sessions are scheduled.

Principal Molinari invited the Board to an Opening Ceremony for the entranceway on Friday, September 2nd. An email will be sent out with additional information.

Principal Molinari spoke of the search conducted to fill the open teacher position, which resulted in a strong candidate pool from which to choose. It was determined the 3rd grade was the best placement at this time due to class size, student need, teacher qualifications, etc. Currently the 3rd grade class sizes are spanning from 18-19 students/class.

Chairman Maguire questioned if student reassignments would be finalized in the next few days, and was informed that has already been completed. All teachers that work with students and all parents were notified the prior Friday. A Meet and Greet will be offered on August 31st for any families that wish to meet the new teacher.

Principal Dobe stated a number of summer projects were planned for the Captain Samuel Douglass Academy (CSDA). The flooring in the main office entry has been replaced (carpet tile). The desire is to extend that in the future by putting new flooring in the other vestibule areas, which are also experiencing tiles lifting. Custodians are now working on outdoor projects having completed the indoor preparations. He spoke of classroom movement/reallocation of space over the summer and expressed his gratitude towards the custodians for the work they did in making the necessary changes.

● Opening Day Plans - Faculty Luncheon

Principal Dobe stated teachers will be onsite for in-service professional development days August 29th through the 31st. He, Principal Molinari, and Karen Kulick, Special Education Administrator, with the assistance of the Superintendent's office, have put together a program they believe will be beneficial to staff in helping them make the transition from summer to school year. They will begin with an entire day of Envision Math 2.0 training. This will be the 2nd full-day installment for all staff, and will take place at RMMS. On Tuesday, all Brookline teachers will be present for a District staff meeting

followed by other activities. On Wednesday, there will be Science training with Elizabeth Penney, Science Teacher, Envisions unit planning, e.g., scoping sequence, and plotting out timeline for implementation, what units will be taught when, etc., as well as other meetings at the building level.

Vice Chairman Lynch commented the 6th grade supply list included Chromebook, which is something she has heard a good deal of talk about, and something she does not believe to be appropriate. Principal Dobe stated that to have been recommended not required. Vice Chairman Lynch remarked it is a product from a certain company, which she also disagrees with. Principal Dobe commented it was a recommended unit, and certainly almost any device could be utilized. That has all been laid out in the Bring Your Own Device (BYOD) project outline, and students have utilized a number of different items. There are a lot of advantages to the Chromebooks for the work being done, which is why he believes that appeared on the list. He noted that he was consulted about that and supported it. He stated he would be happy to speak with any parent that has questions or concerns about that.

Ms. Sarris remarked part of the discussion she has heard is some school districts have received grants for Chromebooks at a lower cost. She questioned if at some point it would become clear that the students that have Chromebooks have a certain advantage so that maybe Chromebook will be the required tool down the road. She questioned if there are grants available, if there is a way they could be purchased in a large quantity at a lesser cost for the student and no cost for the school. Principal Dobe stated he is not aware of any grants of that nature. There are some grants that allow schools the flexibility to utilize funds for that purpose. The District has provided additional computers; primarily laptops and the expectation is that some Chromebooks will be purchased this year. He does not foresee the District becoming a one-to-one school district where all we would have would be school district owned devices and every student has one. He believes what the District has been able to bring on board will be a really nice compliment. Any number of platforms can be supported. The District does not support phones or game device consoles. Grade 6, in particular, does a lot with Google Classroom, more so than any other grade level, and that is why, for their purposes, that is all they need. In a way they were trying to send the message to parents as they often times do, there is no need to buy your child a $500 iPad; a $150 Chromebook is more than adequate for anything they would be needing to do at school.

When asked if Google has a discounted program with schools, that could be offered to the individual student. Principal Dobe stated that could be done, but part of what the District has tried not to do is get into the business of selling computers. Some school districts will work out an arrangement with some vendor and the vendor will send a representative during a parent information night, and will essentially sell computers on the spot. That seems encouraging and a nice way to go, but the District has simply not felt it appropriate or necessary to take that step at this time. The BYOD program was fantastically successful last year, and they look to continue to cultivate that in the way they have; in a more organic fashion. All that was intended to convey was that that might be helpful to the student.

Ms. DiGennaro asked if the Chromebooks are utilized in the Middle or High School. Superintendent Corey stated they would be as the students would be heading into the same Google environment. Most of the devices are being seen to be very durable.

The faculty luncheon will be held on Tuesday, August 30th from 12:00 p.m. to 1:00 p.m.

DISCUSSION

● Strategic Plan – Presentation

Superintendent Corey spoke of the SAU41 Strategic Plan, which was completed a number of years ago. The Administration has been working on the Technology Plan, which will also be presented and a Capital Improvement Plan (CIP), which will be presented next month. The intent is to put as much detail and planning into the next 5-6 years as they can. One of the things he asked Assistant Superintendent Bergskaug to work on was to look at the Strategic Plan more through the lens of teaching, learning, and where we want a 12th grader to end up. He commented we are doing things now in the elementary school that we weren't even considering 2-3 years ago, and are preparing the COOP 7th grade students and our High School students and those teachers for what is on the way because it is going to be drastically different.

Assistant Superintendent Bergskaug has put together a presentation that focuses more on our vision. This presentation was utilized with the Administrators at the recent retreat. The teachers were asked to build the beginning of the year plans working all the way down off the Strategic Plan with this Vision in mind. We also believe this information will be very helpful in the community from the standpoint of budgets by limiting surprises.

Assistant Superintendent Bergskaug reiterated the presentation was shared with the Administrators at the Faculty Retreat. Their work now is to look at the building and see how we can all work as one cohesive unit with the same Vision and Mission in mind. She commented she was asked to talk about her vision for the District. The Strategic Plan is in place, but how do we make that more of a living document with a vision or end product in mind.

The Mission is "To ensure a strong, supportive learning environment focused on academic excellence." The Vision would be what would we like our final product, the Hollis Brookline High School graduate, to look like, and then how do we start with a potential three-year-old entering our schools.

We have a Strategic Plan in place as well as a 21st Century plan. Those serve as the inner core of what is done day-to-day. Our instruction is based off of our well-written curriculum, which is rooted in and driven by our long-term plans. What sort of experiences and skills should our end product have? Our students should be able to think critically, to put the learned content into context, to collaborate and work with others in the community, peer groups, and faculty, to be creative with problem solving and project-based learning, to be open to ideas that are different from their own, and to be able to communicate information whether through art, music, verbally, written, etc.

She would envision that graduate, that final product, to be a critical and original thinker across all content areas and from all angles, and be able to be confident in their decisions and stand by their decisions based on evidence. She also envisions community partnerships whether that is creating internship opportunities with some of our older students, possibly creating an innovation center where rather than necessarily having all of our instruction take place within the walls of the building have some instruction take place somewhere else within the community with experts in the field. She spoke of the STEM Fair that was conducted last year, as a great first beginning of this type of arrangement.

With today's technology, there is a vast amount of information available to our students, and the question isn't so much what you are learning, but how you are taking all of that readily available information and making the best use of it.

Perseverance came out as a theme; how do you teach perseverance, that it is okay to fail because that is how you learn more. She provided a short video demonstrating how students were able to play with the Lego We Do kit, experience failure, be okay with that, and problem solve through communication, collaboration, and true learning.

Assistant Superintendent Bergskaug stated she hopes the end product has opportunities for leadership, and not just a small select group of students, but leadership from all groups of students and leadership beyond the walls of the classroom. There could be opportunities for students and faculty to work together to achieve a common goal such as building school-wide rubrics; participating in a conversation of matters that directly impact teachers and students. With participation from both sides there is more buy-in for students.

Our end product should be ready for college or career, and have strong roots in the community allowing for independence and leadership, which will ultimately create a well-rounded learner.

How do we achieve the desired end product; we need to showcase our own experts and provide professional development. We need to allow our teachers to do what they do best, and lead others, their own colleagues, to that same success. We need to allow teachers to put themselves out there for offering professional development, and teachers need to be able to select their own professional development based on what our students and school needs.

Curriculum, Instruction, and Assessment (CIA) is addressed by the Strategic Plan. We want to make sure that it is designed and delivered to enable diverse learners to achieve and exceed our standards. We will continue to base our curriculum development on best practices and continuously raise the level of student achievement for all of our learners.

Core curriculum steering committees will be established to review and revise the work that has already been done, and to talk about a Pre-K to 12 approach; are we hitting all of the key components to ensure there are no gaps in learning, to make sure that when a student has gone through Envisions in Brookline that when they hit 7th grade those 7th grade teachers are ready and prepared to work with those students with the language and the understanding of the concept they have learned in this program. When our students enter the Middle School they have two very different backgrounds, so how do we make sure that is a smooth transition for all. A more SAU conversation will assist in that. Recommendations would come from those committees to tell us what sort of professional development is needed and what sort of changes need to be made.

The 21st Century Plan goals address curriculum and instruction. We are going to ensure the infrastructure supports 21st Century teaching and learning. The more we learn the more support we need to provide our professionals to make sure we can build professional capacity. We will continue to integrate and imbed our 21st Century teaching and learning into

our core subjects, and support innovative ideas for improvement because without being able to take a risk we cannot see the maximum possible gain. We need to be able to support calculated risks with innovations.

The District will continue with the well-written curriculum, but the next step is to make it available to all teachers, to Board members, and the community. The Administration has to ensure there is horizontal alignment, and that our assessments represent the standards we are trying to assess. The core curriculum steering committees will discuss vertical alignment to ensure we have logical progressions throughout the years. Our PLCS will move from just meeting and maybe developing common assessments to really using the assessment data to inform curricular decisions.

Hopefully the result is improved student learning with graduates who are equipped with 21st Century skills ready, and willing to be successful in the community.

Ms. Sarris commented she likes the idea of experiences outside of the classroom and the teacher empowered learning. She questioned, with the technology that is being brought into the classrooms, does the Administration see that having an impact on materials teachers use, e.g., fewer textbooks for specific topics, and more use of texts available online. Assistant Superintendent Bergskaug responded those types of things would be impacted by this Vision. The more we move forward the more those conversations are had; to make sure we are not just using technology for the sake of it, but ensuring it enhances instruction. She commented the Social Studies department at the High School level has moved to some online resources rather than some of the textbooks for some of the courses because there are so many additional resources that become available once you move to that. That is part of the consideration for curriculum work; how do we best provide access to this curriculum for all students.

● Technology Plan – Update

Richard Raymond, Network Administrator, provided a PowerPoint presentation stating the goal to be to provide an overview of the network infrastructure and thoughts on the direction to take for the future.

Currently, the technology staff consists of a Network Administrator, two (2) full-time Technical Specialists in the Hollis Brookline Cooperative School District, one (1) full-time Technical Specialist in the Hollis School District, and one (1) in the Brookline School District.

Charter is the Internet service provider. The 250MB circuit does all of the heavy lifting; where internet traffic routes out. There is a 100MB coax business class connection router, which could be used if the fiber were to go down or if there was the need to dedicate that circuit for testing or some other specific need. The SAU has a Barracuda firewall and internet filter (deployed last year) and an HP Procurve 3500 core switch, which was put in place in 2012 (located at the High School). The Internet is shared by all sites in SAU41. The fiber bandwidth was increased from 150MB to 250MB in June. Pricing was so competitive, by doing a longer term agreement with Charter, the cost actually decreased by approx. $4/month.

For the Wide Area Network (WAN); all sites are connected with 100MB fiber, which is leased from Charter. The Procurve 3500 switch does all of the internal routing, manages all of the VLANS. Located under CSDA is a Fairpoint T1 circuit, which handles the hosted VOIP phones located at Hollis Primary School, Hollis Brookline Middle School, and the SAU Central Office. That phone traffic is routed over to Brookline because the T1 circuits are more competitive in Fairpoint territory than they are in Hollis.

When asked, Mr. Raymond stated when the phone system in Brookline is upgraded it will run off the T1 circuit. It is believed the T1 circuit will handle at least one additional building.

The CSDA is equipped with CAT5E cabling. CSDA has a Procurve wireless access system with 25 access points, which has a guest VLAN for BYOD. Three to five additional access points will be added this summer, which are being redeployed from RMMS. RMMS also had a Procurve system and has purchased an Aruba system.

With regard to the Procurve system, since acquiring Aruba, HP has discontinued the sales of the access points and controllers. Mr. Raymond stated his belief the District can get 3 and perhaps up to 5 years out of the current system. His recommendation is to budget for an Aruba Instant system at some point in the future. The cost is believed to be approximately $20,000. He is looking into the possibility of acquiring additional access points from another school up north that is replacing their system with something else. The access points would remain under Hewlett Packard's lifetime warrantee. Purchasing additional access point may buy the District additional time with the current system. The Aruba system has the new AC standard for wireless. Chairman Maguire questioned, and was informed, at the point at which the current system reaches end of life the move would be made to replace everything currently in the building.

Drivers of the timeline will be performance of the current system and the possibility of HP declaring the "end of life" status for the Procurve access points, at which point replacements would no longer be provided. Chairman Maguire stated the desire, when reaching that point, for a Request for Proposal (RFP) process to be undertaken to obtain quotes from numerous vendors. Mr. Raymond commented on having installed 4 Aruba systems and stated he is pleased with the product and their tech support. Other systems would be considered as well to determine the most logical direction for the District.

The switches are 1-7 years in age. Two are GB and 5 are 100MB. POE switches are in each end of the wiring closet, which are working fine, but the HP access points use a lot less power than Aruba access points. It is GB fiber between the two sections of the building, and the core switch has the BYOD VLAN, the phone VLANs from Hollis, connects the DSCI T1 circuit and Charter fiber WAN. All of the other switches are data VLAN.

The phones at CSDA are the older style plain old telephone service (POTS) lines. Services are limited, and the system is getting close to the number of extensions that can be connected.

There are 14 printers at CSDA; 10 are networked and they are all on the Conway contract. The District pays a flat per page cost. The servers are virtualized. There is a 2008 Domain R2 Controller/Print Server running on VMWare (deployed in 2015).

A map was displayed of the CSDA wireless network. With the addition of 3-5 access points the building will come close to saturation.

At RMMS, cabling is CAT5E. An Aruba Instant wireless system with 14 access points is being installed this summer. The RMMS has HP Procurve switches, which are 100MB. A few GB will be added as part of the upgrade. There is GB fiber between the various parts of the building. The phones are POTS. They have 7 printers (all networked). Their server is a 2008 R2 Domain Controller/Print Server running on VMWare, which was deployed in 2013.

Mr. Raymond displayed a map highlighting the areas where access points are located, those which will be added over the summer, and those which are proposed long-term.

With regard to district-wide data services, a File Server is shared by all sites. It was deployed in 2012 and was virtualized this summer. The goal is to start moving more non-confidential data to the Cloud mainly because they provide unlimited storage, and can do a much better job with uptime, accessibility, and backing up than we ever could afford to do as a school district. Confidential information will remain in-house. Food Services is shared by all sites, and was deployed in 2013. The student information system is PowerSchool, which is also hosted in the Cloud. The Parental Portal is enabled for all schools. The Student Portal is enabled for grades 7-12. Alert Solutions is the parent notification system and is embedded in PowerSchool. InfoSnap for online registration was implemented in 2015 and went live on July 22nd (earlier than last year) for the 16/17 school year. Online report card is being developed this summer primarily for the COOP School District, but will be positioned should the decision be made to go to an online report card for the elementary schools in the future.

PowerSchool auto updates Cafeteria, Health, and Destiny (library) databases. The Infinite Visions (BudgetSense) server is shared by all sites, was updated in March, is located at the HBHS, and is on generator back-up (runs 24/7). It has Microsoft Server 2012, is now virtualized, backs up to itself every couple of hours, backs up to the HBMS every business day, and to the Cloud once a week. WebSense is the employee portal. The hardware is in place and will be built over the next few weeks. That deployment to the upgrade will be virtualized on September 30th.

Email is hosted by Google. Staff has email and students in grades 4-12 have email with sau41.org access only, and Google Classroom is activated for all schools.

Naviance is guidance software for college applications, which is also in the Cloud. HealthSnap is the database system the nurses utilize, which has gone to a Cloud system this year. Next to Student Services, they are the most hypersensitive about HIPAA and FERPA laws. The company, ProMed, has a very aggressive HIPAA and FERPA policy, and was able to satisfy their requirements. That is moving to the Cloud as well.

The SAU has a Dell Kace Network Management Device, which services all sites and was deployed in 2013. The device pushes all of the patches and the operating system upgrades to all devices across the entire district.

The Web Presence SAU41.ORG is hosted with HostGator and is running on the Joomia platform. School sites are on Google. Most of the staff sites are on Google. The SAU41.k12.nh.us domain is still active with pages linked from

SAU41.org and is running on an internal 2003 virtualized web server (houses old School Board meeting minutes, etc.). Domains are registered with GoDaddy through 10/2022. The Anti-Virus is SOPHOS. There are servers that service each district.

A new service that was recently purchased is Intronis Cloud Backup. Infinite Visions, Cafeteria, and Key FOB images are backed up nightly. SQL data for Cafeteria and Infinite Visions is backed up to the Cloud once a week. The bandwidth is monitored. It was increased to 250MB on June 1, 2016.

Mr. Raymond stated ongoing and future considerations include continuing to evaluate desktops and laptops for replacement cycle, update switches to GB, monitor and increase wireless at RMMS by adding more access points and additional power over Ethernet switches if needed.

With regard to long-term plans, the desire is to work towards an Implementation Plan that is built off the work of the 21st Century Committee. The desire is to develop a unified K-12 vision for technology's role in delivering curriculum. When standardizing devices across the districts consideration would be given to whether there is a place for Chromebooks in the curriculum delivery, do we want to bring BYOD to the lower grades, etc. The process to approve a suite of software applications would be similar to what is already being done for hardware. The desire is to standardize peripherals such as projectors, document cameras, and develop a replacement plan.

For network infrastructure upgrades, the recommendation would be for a wireless IEEE 802.11ac over time, CAT6 long-term, and GB Switches over time. Efforts will continue to monitor and evaluate any needs to increase WAN (Charter) to GB (current cost for 100MB is $357/month per site). Internet bandwidth will continue to be monitored. An evaluation and replacement cycle will be retained for all technology. Training and professional development for staff is something to be conscious of.

Mr. Raymond stated the one thing that is needed is a data retention policy. He would expect the policy to be K-12.

Chairman Maguire questioned if there is a priority based policy in place with regard to the internet bandwidth, e.g., testing traffic takes priority over other activities. Mr. Raymond stated there currently is not such a policy/practice in place, but that could be done. Chairman Maguire suggested, prior to increasing bandwidth, a review should be done to determine what percentage of the bandwidth is taken up with school functions and what percentage is used for students surfing the web, etc.

Mr. Raymond commented students are not allowed access to high bandwidth sites such as YouTube. He spoke of the monitoring that occurs relative to bandwidth usage, and stated that will continue to be monitored, and, if necessary, a policy could be put in place that would limit the amount a specific group (such as students) is allowed to utilize.

DELIBERATION

● To see what action the Board will take regarding Smarter Balanced State Assessment tests for 2016

For the past two years the District has been utilizing the paper and pencil version of the Smarter Balanced Assessment (SBA). That option was made available for a maximum of three years to allow districts to prepare their technology for the online version of the SBA. The Administration requested approval to take the paper and pencil version of the SBA for two years. At this time, the desire is to look forward and begin utilizing the computer-adaptive SBA. The infrastructure and hardware are available to accommodate the computer-adaptive SBA. There are enough devices in place to have them hard-wired to avoid any concerns with wireless access.

There is a 7-8 week window for grades 3-6 to complete the assessment. That will allow the assessment to be done over a period of time, include breaks, and allow for make-up sessions. A more timely receipt of the testing results is a benefit that would be derived from moving to the computer-adaptive SBA, which would allow the results to be used to influence curriculum for the current students.

Assistant Superintendent Bergskaug commented in thinking about the original discussion around the SBA in the different districts, there were concerns over a variety of issues, one being privacy. The other two districts have opted to postpone any formal action on the request to allow additional time for public input. The Board was asked to place the matter on the agenda for the September meeting for further discussion and a formal vote.

Ms. DiGennaro questioned what the privacy concerns are. Assistant Superintendent Bergskaug responded there are concerns that there is information traveling across State lines and there is the potential for a breach. Ms. DiGennaro

questioned if that is from the test being administered or the results of the test. It was noted the results are available, but in terms of privacy issues regarding individual students; when the assessment is taken the information goes across the State line, and although each student has a unique identifying number that is assigned and is different from the State identifying number and our local identifying number, there are concerns even though there is that double-blind system that somebody would be able to hack into that system and determine individual information about a student.

Ms. DiGennaro commented she has not heard those concerns having administered the test for the past few years, and questioned if the Assistant Superintendent is aware of individual(s) having those concerns. Assistant Superintendent Bergskaug stated there have not been any breaches in security.

Chairman Maguire commented from earlier discussions two years ago there were concerns that even with the way in which efforts are made to hide the identity, that under certain circumstances, an individual might still be able to track it down to a small subset of students and perhaps even an individual student.

Superintendent Corey stated his belief the concern regarding access to student data is a concern that is seen from parents all the time. With regard to the State testing system where you have to have a number that is related to the tester and a separate number related to the person as an individual in the school really addresses a number of those circumstances. He stated the desire is simply to provide additional time for members of the community having those concerns to do a little research, and see if they can gain a greater comfort level with it. From the standpoint of the assessment itself, the part the Administration is looking at is the turnaround of the data.

Ms. DiGennaro stated agreement if there are any privacy concerns she would put that at the forefront. However, if we are going to be giving this test the only benefit to it is to have it guide instruction. Teachers will be able to do nothing with the information if we continue going with results received long after the test is given. Superintendent Corey commented he is hopeful by providing additional time for public input, the Board and/or Administration will hear from members of the community.

Chairman Maguire questioned when the test would be administered, and was informed it would be provided in the spring (mid-March to mid-May).

Ms. Sarris questioned if the practical value of the SBA is to inform instruction, if funding for the schools is impacted, etc. Superintendent Corey stated he does not believe it would impact funding. The way the District is currently taking the test provides data that is not as timely as it could be. If we move to the computer-adaptive version the information will come back in a 4-6 week timeframe, which would give a teacher another data point. He commented the data from a single test cannot be given much value, however, multiple data points, e.g., NWEA, SBA, teacher assessment, teacher observation, reading assessments, math assessment, etc., would allow a teacher to have an informed conversation with a parent if there is a concern.

Ms. DiGennaro commented what Smarter Balanced is trying to do with the format of the test is to get children to apply their knowledge and information that is provided to them in that moment. It is giving them an avenue to write, to problem solve, and do those critical thinking and creativity pieces. It is trying to do that in a test form. The data that it provides is valuable, which is why she would like to get it back sooner. As we move forward with what our goals are, she believes it provides some of that information, e.g., can our students apply information that is readily available.

Principal Molinari remarked it is one data point, but it is timely, which is the benefit for the teachers. Mr. Haag questioned if the results for the entire school would be delayed if a single student took the paper and pencil test. Superintendent Corey stated two years ago there were only a handful of districts that did paper and pencil. The results for the entire State whether paper and pencil or online were delayed until the paper and pencil results were available. Last year, Brookline was one of three districts that continued with paper and pencil, and the decision was made to release the data from the online tests to those districts so they had the information 4-6 weeks at the latest from when the test was taken. We received ours in the neighborhood of 5-6 months after the test was taken.

Superintendent Corey commented there were a number of questions outstanding two years ago, and he supported the paper and pencil version at that point. The District also had infrastructure concerns at the time. The other piece that the assessment will be able to be used for is to identify how much of the skills will be based on a student's computer ability versus their knowledge. The District has two years of testing that shows our curriculum is well aligned with the test. We may see a dip in scores when taking the computer-adaptive assessment, but will know we need to focus more on how we teach students to scroll, etc.

Ms. Sarris commented community input is always good, and it may be that we could be missing a point that someone out there is considering. She added, based on the information provided, it makes sense to her for the District to be able to access the data sooner.

Chairman Maguire questioned if the Administration is aware of whether, over the past two years, there have been any issues with the SBA that have since been worked out. Superintendent Corey stated there have. In the first year, there were a number of districts that intended to take the computer-adaptive assessment and had to switch mid-stream to paper and pencil then we got to a very consistent place and knew exactly what devices would work, the added time gave Principals an opportunity to work on their scheduling, etc.

● To see what action the Board will take regarding Policy GAA – Job Descriptions; 1st reading

Principal Dobe Commented it is important that we are clear with our employees about their responsibilities. Having a policy that requires updated job descriptions for all positions would be appropriate practice. The policy is in regard to the need to have such policies and the expectation the Board would have that the Administration develops appropriate updated job descriptions for all job categories and roles.

Chairman Maguire requested a template for the job description(s) be provided in advance of the next reading.

MOTION BY MEMBER LYNCH TO ACCEPT THE FIRST READING OF POLICY GAA – JOB DESCRIPTIONS
MOTION SECONDED BY MEMBER HAAG
MOTION CARRIED
5-0-0

● To see what action the Board will take regarding Policy IIB - Class Size; 1st Reading

Principal Molinari stated the Policy Committee utilized the Hollis School District policy as a template. However, some changes were made with regard to the actual class size(s). The proposed policy for Brookline suggests class sizes as follows:

- K-1 no more than 17 students per class.

  The New Hampshire Department of Education (NH DOE) suggests target size of a class is 20 or fewer with a maximum of 25.

- 2-3 no more than 20 students per class

  The NH DOE target size is 20 in grade 2 with a maximum of 25 and 25 in grade 3 with a maximum of 30.

- 4-6 no more than 23 students per class

  The NH DOE target size is 25 with a maximum of 30.

Mr. Haag noted the intent of stating class size numbers in policy is not to identify a hard and fast number at which additional resources are added to a particular grade, but rather to identify a point at which the Administration would bring the information to the Board to initiate discussion of what, if any, action should be taken as a result.

Vice Chairman Lynch stated agreement, commenting were the numbers cited intended to be the point at which an additional teacher/section were to be added, the District would be looking at adding an additional 5 teachers at this point in time.

The last paragraph should be moved to come before the specifications.

It was suggested information relative to NH DOE target and maximum numbers be listed under references at the bottom of the policy, that a link be included, and that the date of the reference be identified.

Superintendent Corey suggested the initial draft be amended as suggested, that the Board accept the first reading of the policy, and that discussion of the target numbers themselves take place at the time of the second reading. He commented exceeding a recommended class size in April, May, and June is a much different situation than what is being experienced at this time where it is late August, students are already assigned to teachers, etc. He suggested it may be

beneficial for calendar dates to be added to the policy language, e.g., at a certain point in the year it would be more beneficial to add an instructional assistant to increase the number of adults for supervision purposes, etc.

MOTION BY MEMBER TO LYNCH ACCEPT THE FIRST READING OF POLICY IIB – CLASS SIZE
MOTION SECONDED BY MEMBER DIGENNARO
MOTION CARRIED
5-0-0

<u>APPROVAL OF SCHOOL BOARD MINUTES</u>

Brookline School Board. . . . . July 26, 2016

The following amendments were offered:

Page 3, Line 15; replace "included" with "reflected"
Page 3, Line 24; delete "that" after "Savings"

MOTION BY MEMBER LYNCH TO APPROVE AS AMENDED
MOTION SECONDED BY MEMBER DIGENNARO
MOTION CARRIED
4-0-1
Member Haag Abstained

<u>AGENDA BUILDING</u>

Smarter Balanced State Assessment tests for 2016
Standards Based Report Card - Discussion
Policy IIB - Class Size; second reading
Policy GAA - Job Descriptions; second reading
COPsync - Update (potential vote)
Capital Improvement Plan; Update (September/October)
Principal Opening Presentations; goals and objectives for school year (September/October)

<u>ADJOURNMENT</u>

MOTION BY MEMBER LYNCH TO ADJOURN
MOTION SECONDED BY MEMBER DIGENNARO
MOTION CARRIED
5-0-0

The August 23, 2016 meeting of the Brookline School Board was adjourned at 8:05 p.m.

Date _____   Signed _____

Brookline

Network and Technology Report

2016

SAU41 Technology Staff

SAU Central Office
Network Administrator - Richard Raymond (1FTE)

COOP
COOP Technical Specialist - Carol Mamczak (1FTE)
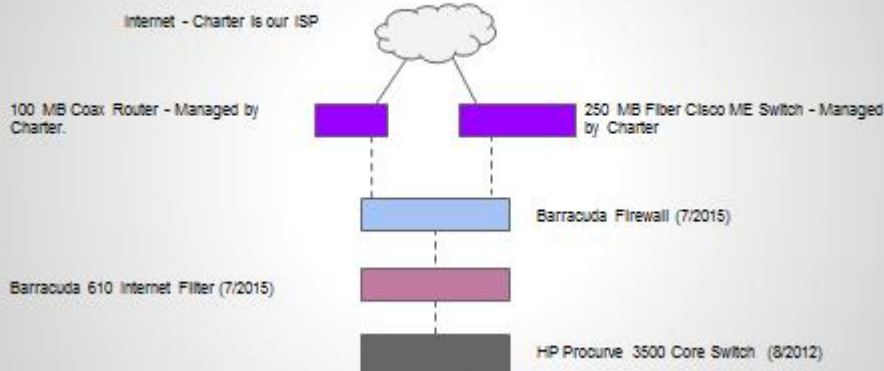COOP Technical Specialist - Jon Reath (1FTE - July 1st)

Hollis
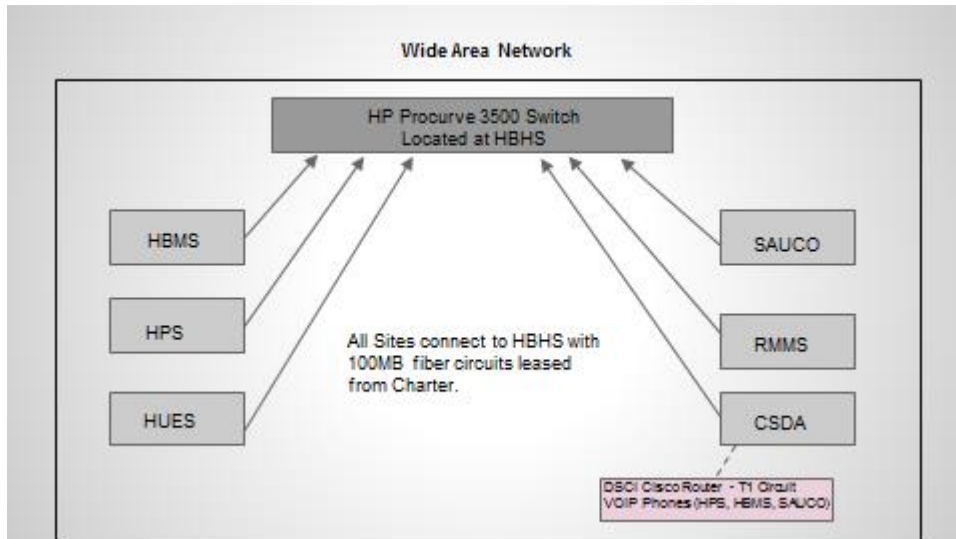Hollis Technical Specialist - William Aldrich (1FTE)

Brookline
Brookline Technical Specialist - Mary Albina (1FTE)

Internet Connects at HBHS

Internet - Charter is our ISP

100 MB Coax Router - Managed by Charter.

250 MB Fiber Cisco ME Switch - Managed by Charter

Barracuda Firewall (7/2015)

Barracuda 610 Internet Filter (7/2015)

HP Procurve 3500 Core Switch (8/2012)

The Internet is shared by all sites in SAU41 - Fiber bandwidth increased to 250 MB - 6/2016

Wide Area Network

HP Procurve 3500 Switch
Located at HBHS

HBMS

HPS

HUES

All Sites connect to HBHS with
100MB fiber circuits leased
from Charter.

SAUCO

RMMS

CSDA

DSCI Cisco Router - T1 Circuit
VOIP Phones (HPS, HBMS, SAUCO)

Captain Samuel Douglass Academy (Brookline)

Cabling is CAT5E. Installed during original construction

Procurve wireless system with 25 access points. Guest VLAN for BYOD
- Will be adding 3-5 additional access points this summer which are being redeployed from RMMS.
- HP has discontinued the Procurve wireless systems since acquiring Aruba.
- I believe we can easily get 3 to possibly 5 years out of the current system.
- Budget for an Aruba Instant system. Cost is about $20,000.00
- 30 access points ($500.00) and upgrade POE switches ($1,300.00) - wireless would be the new AC standard and GB speed.
- Drivers of the timeline will be performance of the current system and HP declaring the "end of life" status for the Procurve access points.

Switches (age 1 - 7- years)
- 2 switches are GB (72 ports - 30%)
- 5 switches are 100MB (168 ports - 70%)
- POE switch in each wiring closet. Total of 48 POE ports - 20%
- GB fiber between the 2 sections of the building.
- The core switch has data, BYOD, and phone VLANS and connects to DSCI T1 circuit and Charter fiber WAN. All other switches have 1 data VLAN.

Phones are old style POTS lines.

14 Printers (10 networked, 4 local)

Servers
- 2008 Domain R2 Domain Controller/Print Server running on VMWare. Deployed 10/2014

Captain Samuel Douglass Academy

2015-2016 Wireless Network
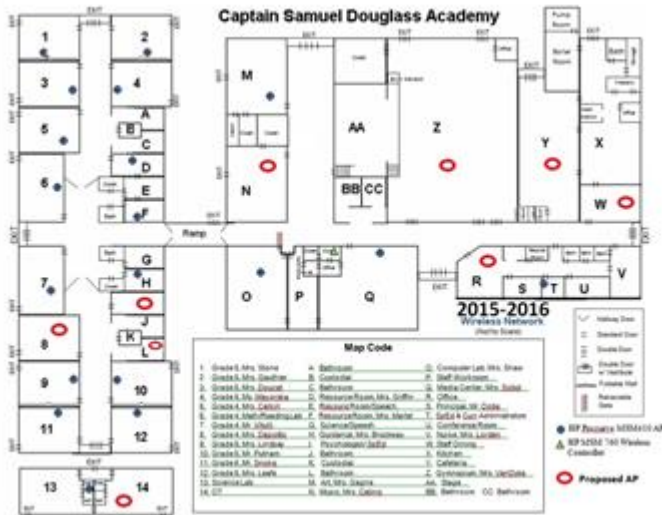
Richard Maghakian Memorial School

Cabling is CAT5E. (might be some CAT5 from a parent net day back in the 90s)

Aruba wireless system with 14 access points. Being installed this Summer.

HP Procurve Switches (Age is 2 to 7 years.)
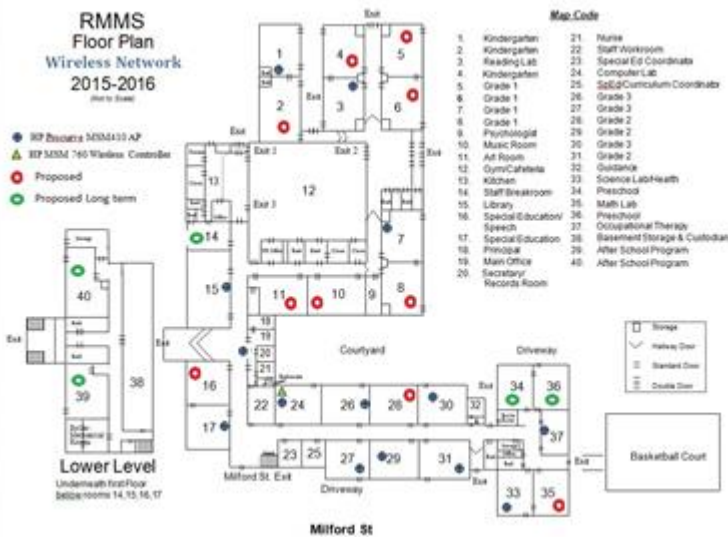   All are 100MB
    GB fiber between the sections of the building.
    Switches have 1 data VLAN.

Phones are old style POTS lines. (Plain Old Telephone Service)

7 Printers (all 7 are networked)

2008 Domain R2 Domain Controller/Print Server running on VMWare. Deployed 7/2013

RMMS Floor Plan Wireless Network 2015-2016

Data Services

File Server is shared by all sites. (HBHS) Deployed 7/2012 – Was virtualized this summer.
Goal is to start to move non confidential data to the Google cloud.

Food Services server (WebSmartt) shared by all sites (HBHS) Deployed 7/2013 – VMware Microsoft Server 2008 R2

PowerSchool is hosted by Pearson (Cloud)
Parent Portal enabled for all schools – primarily used in the COOP
Student Portal enabled for grades 7-12
Alert Solutions is the parent notification system and is embedded in PowerSchool.
InfoSnap for online registration Implemented 8/2015
Online report card being developed this summer.
PowerSchool now auto updates the cafeteria, library, and health databases.

Infinite Visions (BudgetSense) server is shared by all sites
Updated 3/2016
Located at HBHS - on generator backup
Microsoft Server 2012
VMWare
Backs up to HBMS every night and to cloud storage once a week.

WebSense server is shared by all sites. (HBMS) Deployed 2/2011 – Microsoft Server 2008 R2 – - extended
warranty purchased in February 2015. In the process of being upgraded and virtualized.

Data Services cont.

Email is hosted by Google - GAFE (Cloud)
Staff have email
Student email grades 4-12 with sau41.org access only
Google classroom is activated for all schools.

Naviance - guidance software for college applications (Cloud)

HealthSnap - Nurses database system (Cloud)

Dell Kace Network Management Device services all sites. Deployed 11/2013
Applies OS patches and other software installs.

Web Presence
SAU41.ORG is hosted with HostGator running on the Joomla platform
School sites are on Google
Staff sites are on Google
The sau41.k12.nh.us domain still has active pages linked from sau41.org and is running on an internal 2003
virtualized web server.
Domains are registered with GoDaddy through 10/2022

- Anti-Virus - SOPHOS
    - HBHS server manages HBHS, HBMS, and SAUCO
    - HUES server manages HUES and HPS
    - CSDA server manages CSDA and RMMS

Intronis Cloud Backup.
Infinite Visions (BudgetSense) and WebSmartt (Cafe) VMWare image is backed up nightly.
SQL data is backed up to HBMS M-F and to the cloud weekly.
We have 100GB of cloud storage.

Bandwidth use - increased to 250MB June 2016 - (it was 50MB three years ago!)
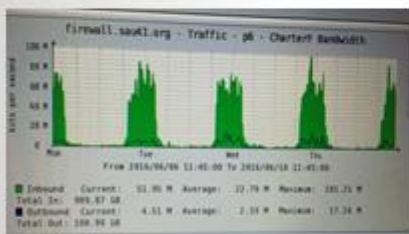
Ongoing and Future Considerations

Continue to evaluate desktops and laptops for replacement cycle.

Update switches to GB - (can be done over time as funding permits)

Increase Wireless at RMMS for total saturation of building - $8,300.00
  Adds 14 more access points
  Adds additional POE switch if needed

Implementation Plan that is built off the work of the 21st Century Committee.

Develop a unified K-12 vision for technology's role in delivering curriculum.
  Google Classroom's role
  Devices

Standardize Devices - laptops, tablets, Chromebooks and how they will deliver curriculum.
  BYOD
  Continue with a combination of BYOD, laptop/tablet carts, and desktop labs.

Develop a process for an approved suite of software applications. This is already in place for
  hardware. Tech Initiative Form

Standardize peripherals such as projectors, document cameras, and develop a replacement plan.
  (ex: buying the same projector standardizes bulb purchases)

Network Infrastructure upgrades
  Wireless IEEE 802.11ac - over time TBD
  CAT 6 (way down the road - wireless may be a better option)
  GB switches - over time TBD

Monitor and evaluate any needs to increase WAN (Charter) to GB (current cost for 100MB is
  $357.00 per month per site) We had an annual review meeting on July 12 with Charter and
  asked for pricing to explore the options. This is not an immediate need.

Monitor Internet bandwidth. 250MB as of June 1, 2016

Evaluation and replacement cycle for all technology. (ex: projectors) Includes redeployment of
  upgraded hardware whenever possible. (ex: SAUCO desktops going to Cafeteria POS stations)

Training and PD for staff - Integration Specialists, on/off site workshops, etc.

Data retention policy