

Tech Adv Board

10/5/09 minutes

Attending: Carl Rubin, Tom Keating, Wade Davis, Michael Mathias (members)
Dave Davison, Linda Conneely, Roger MacDonald (*ex officio*)

Carl called the meeting order

- Carl said the purpose of the meeting was to set the agenda for the year. Carl said that he had requested agenda items, and did not receive anything back from anyone. Wade said that, two meetings ago, a number of different future agenda items had been discussed. Carl said that, while true, nothing had been put in concrete.
- Carl said that the Board has the capital items to discuss, and asked if there were any capital items in the pending town meeting.
- Linda said there is \$400K for infrastructure that is included, and \$210K for equipment that is not included for Newman, and would show up in the School's capital plan for 2012.

Carl asked if these would be in the budget for Newman. Linda said she thought these would probably not be in the budget, but would be in capital items.

Carl said that the parents at Mitchell and Hillside would likely be perturbed by this. Linda said that there was a capital item approved for Hillside and Mitchell for this year for electrical and tech, but now the thinking was there might be a need for a system assessment for those buildings, and not just electrical and technology.

Wade asked who has asked the Board for input on these capital items. Carl said it is for town meeting. Wade said he understood that, but wanted to know, based on the Board's charter, who was asking for the Board's input. Carl said that, on an ongoing basis, it is implied that the Selectmen want the Board to review capital requests.

Linda said that the previous item of the Mitchell and Hillside assessment has been on list of capital items for a couple of years, and that it had been discussed by the committee, over time, and was funded last spring.

- Tom asked about the timing of the financial system review. Dave said they need to get by the move, which would be in Feb.
- Linda said the School would be looking at its replacement cycle at the next School Committee meeting. The capital item request for the May Town Meeting

will be about \$260K, which was based on the Schools only getting about half the funding request last year. Linda is also redesigning the proposal to show how many computers are needed on the teacher side for instruction, how many computers are for labs, and how many are student computers in classrooms. Linda said the teachers' computers need to be kept current so that they can run applications and access management data.

- Carl said that, hopefully, Mike would be able to meet with the PPBC before the next meeting.
- Carl said that there were no more agenda items, but that he would ask for agenda items in an email a week before the next meeting. Wade said that he was thinking of the agenda items that were brought up by himself and Mike a couple months ago, but wasn't comfortable bringing them up again because no one has asked the Board for advice on those items.

Carl asked which items Wade was referring to. Wade said that Mike had mentioned virtualization and that he had mentioned a few things. Wade had wanted to discuss the presentation by the School Dept that was given before the meeting at which agenda items had been discussed. Carl asked Wade what he wanted to know. Wade said that, first of all, he wanted to know what the purpose of the presentation was, but that he didn't want to discuss it now because Carl had asked for agenda items. Carl said that he had nothing listed as concrete to go forward. Carl said he usually puts items in his notes for the next meeting. Carl said the Board has discussed virtualization, but that nothing is happening and the town is hunkering down for the move.

- Roger said that right now, with virtualization, the town is communicating with vendors for advice on how to move forward. Roger said they're trying to get an idea of different scenarios, such as using VM and Citrix. Roger said the town is also working with the tech consultant on help moving forward.

Carl asked what the town is looking to do.

Roger said he sees a two-phase project. The first phase is server virtualization, which would move forward after the move. The next phase would be looking at virtualizing desktops. Probably first a test run with a small dept, such as the Council On Aging, which doesn't require a lot of demand, and seeing how that works. Roger said that one thing the town was looking at was how to initially get into this while making sure there is enough infrastructure in place so that the town wouldn't have to redo hardware, applications, and software.

Linda asked if the town has any money in the construction budget that would help with this project. Roger said there was. Roger said he was also looking at his operating budget, for maintenance, in particular, and if he can use dollars after doing some analysis to see if he is spending too much dollars on maintenance for those applications.

Roger said the town would probably not virtualize the entire town. On the desktop, the town would probably try to virtualize the town hall and PSAB, and maybe the Water Treatment Plant. The town would initially stay away from Public Safety because they have a lot of quirky applications.

- Carl said that he has clients who no longer have tape backups. Roger said the town doesn't, either. Carl said his clients have virtualized it. Roger said the town hasn't virtualized it, but has gone to a disk-to-disk system. Carl asked if the backups were moved off-site. Roger said they weren't. Roger said they were looking at ways to go, and might move the backup to tape. Roger said the only machine backed up to tape now is the AS400.

Carl said that database backups that are difficult, such as SQL and Oracle, can be backed-up by making a copy of the VM environment, and that by utilizing the town's fiber the backups could be done to a server in a different building. Roger said that's something the town is looking at, as there will be three buildings (the town hall, a small data center at the Police Dept., and PSAB), so something should be able to be worked out for backing up with off-site storage.

Carl said that he's backing up to USB drives, which are then taken home. Roger said the town has tried that, but had issues with the Exchange box.

- Wade said that the town is asking for advice and input from vendors and from the tech consultant, but that there was one group the town hasn't asked advice from. He was asked who that would be. Wade said it got back to what was the Board for.

Roger said the town was trying to get its ducks in a row, and that much of the advice was discussion. Roger said the town always takes input. Wade said that the way he read the Board's charter, until the Board is asked for input, it's not the Board's place to give it.

Carl said the town has asked for input, and had said a year ago they wanted to move to virtualization.

Roger said that if Wade had any advice or discussion he wanted to have, Roger was an open book. Wade said that he would like the whole committee to talk about it. Roger said to consider that he was at the meeting, and he understands there is a charter, but understand that if the committee wants to discuss something, he's there to discuss it.

Linda asked if the Board has discussed something in a previous year, does the Board go back and revisit everything when there is a change in the Board's membership.

Wade said that less than a year ago, Roger had said the town moving to virtualization would be suicide. Roger said that was for before the move. Carl

said the town would be at the new location for eighteen months, which gives them time to work things out.

Wade said one time virtualization was brought up, he thought there was resistance to the whole concept when Dave asked how long virtualization had been around. Dave said that, as the only non-technology person present, he wanted to find out more about it at that time, and wanted to support Roger and his team.

- Wade said he had also asked about a year ago if the Schools were looking at virtualization, since the one OS Apple allows to run virtualized is OS X Server. Wade said he had just asked the question, and was not advocating anything.

Linda said Paul had come to a meeting specifically to talk about it.

Wade said that he remembered Paul saying, specifically because the Schools run OS X, that the Schools were not looking at virtualization.

Linda said she thinks Paul is waiting until it is a more stable environment.

- Mike asked what the long-term plans were, that was something he'd like to see, and perhaps that could get discussions going earlier in the pipeline. Mike says he knows and understands virtualization.
- Carl said he's doing virtualization now with clients. Carl said that with non-virtualization, a client can bring back his environment in an hour, but with disk-to-disk it could be brought back in five minutes.

Mike said that with a bunch of servers he supports, if you want another one (environment), just ask. Carl said if you need 2 CPUs, OK. You need 3 CPUs, OK.

- Mike said client (desktop) virtualization is a big change, a totally different animal. It was said it was a big deal, cutting edge, and a bit of a niche. Carl said he didn't know anyone that was doing that. Mike said they were doing a bunch of things with Citrix, and that he likes it.

Roger said the idea is to start moving to smaller boxes, and moving away from PCs. Mike said that's a pretty big paradigm shift. Roger said the cost was about \$200 per unit.

Roger said the main reason the town was looking at desktop virtualization was PC technician support. Roger said if something does go wrong, it's an easy replace. Roger said they're dealing more with peripherals than anything else. Roger said that will mean more back-end support, but he would rather put the energy there than in another person. Roger said they know the chances of getting that extra body are slim to none.

- Mike said, to circle back to the agenda, perhaps the presentation should be dusted-off, look at the risks, and how should those risks be addressed.
- Roger said they were also trying to help with the Selectmen's goals of lowering energy consumption, and this was a way to help meet those specific goals.
- Wade said that normally when he hears about virtualized desktops, it's about no environment becoming obsolete, since you can load that old environment if you have some proprietary software that you need to run in that environment. Wade asked if the town had anything like that. Roger said no. Roger said the town has tried to move away from that, since the town doesn't have in-house support.

Mike said that weren't there some GL apps where the town might not be able to access the data as the town keeps upgrading. Roger said the town runs two versions now. Roger said eventually that data will go away unless the town figures out a way to dump the data to paper somehow in a way the town can read, so the town has to keep the AS400 around.

Carl said the data could be exported.

Roger said the High School still has old data that has never been ported to the new system.

- Tom said he thought it was a good idea to revisit the presentation. Carl said he would turn it around.
- Wade said, to make sure he understood, that one of the reasons for the Town using desktop virtualization was to lower power usage. Roger said another reason was because the Town had come to the conclusion that getting another desktop support person is going to happen.

Wade asked the difference between using the current desktops for virtualization and getting smaller machines. Roger said difference would be in power consumption. Wade asked if that wouldn't depend on the chips you used. Roger agreed, but also said there would be no fans and CD drives spinning all the time. Roger said there was also a difference in setup time, even if you're ghosting it.

- Mike said virtualization was also used for security reasons, so the user couldn't access the floppy or USB. Roger said the town is looking at that now, and if every users needs a CD burner. Roger said the town will no longer be buying floppy drives.
- Roger said the Town is looking to minimize hardware. For example, when the town moves back to the town hall, there will only be network printers.
- Mike said that he would like to see a project plan for the next 8-12 months. Carl said Mike could send an email directly to Roger for it. Mike asked if the entire committee would like to see it. The answer was yes.

Wade asked if the Schools could do something like that, as well. Linda said yes.

Mike asked if the schools have a plan. Linda said yes. Linda said the Schools have a data center at Broadmeadow, the Schools have a replacement schedule, and the Schools are looking at virtualization, and that when the Paul feels it is something he can manage and work on, and it's supportable, they'll work on it.

- Tom asked if the smartboards impact the Schools network, if they're networked, or if they will be networked. Linda said that each smartboard is networked to the classroom computer. Tom asked if there was a professional development meeting at one school and there were people at another school, could the smartboard image be sent to the other school. Linda said no. Wade said it could be done. Tom said it would be done in a business. Wade said there may not be a reason for the schools to do it.
- Tom said he liked having notes from the last meeting before this meeting. Wade said he was dissatisfied with the quality of the minutes he had taken, and that was why he was recording the minutes rather than having to worry about taking notes all the time. Mike asked if there was any state law about recording. Wade said that he had checked state law, and had found that any attendee can record any public meeting. Roger made a correction from the last meeting, changing DataStar to DocStar. Wade asked what he should do with the finalized minutes. Carl said to send them to him.
- Carl said to send him any agenda items for the next meeting.

Meeting adjourned