<u>Present:</u> Commissioners Peter Graves, Joseph Cartwright and Charles Weed <u>Staff:</u> County Administrator Coates, Finance Director Trombly, DOC Superintendent Van Wickler, IT Director Hummel, Maplewood Administrator Kindopp, and Assistant County Administrator Bouchard. **Guest(s):**

At 9:34AM Commissioner Graves opened the meeting and recognized Superintendent Van Wickler who presented the five (5) Correctional Officer (C. O.'s) training packets for the CO's that will graduate on October 17th.

Included in the training packet is a certification request for one of the Licensed Alcohol and Drug Abuse Counselors (LADC) support personnel and one of the facilities staff.

Following review of the training packets the Commissioners signed the graduation certificates.

It Director Hummel was then recognized to address Master Agenda Item #616: Information Technologies Semi Annual Report - R. Hummel

Hummel presented the following report:

IT Department Status Report - October 10, 2018

Staffing & Workload

David Pena has accepted our employment offer and will join us on October 15, bringing the department to full staff. David is currently pursuing a degree in IT and brings his extensive hands-on lab experience to the department.

Events

In August, Harris (the Finance department's payroll/accounts program) experienced a problem due to a "bug" in the application's code. This bug caused incorrect dollar figures to be printed on checks. IT was able to assist Finance by restoring the Harris software to its condition before the error occurred. The ability to do this and the speed of the remediation were due directly to the virtualization of our server infrastructure and our continuity planning.

The Maplewood construction project has resulted in some temporary disruptions to phone and computer service as offices were relocated and wires were moved. These disruptions were created by the contractors responsible for moving the phone and data lines from a portion of the building scheduled for demolition. IT staff identified and reported these issues to the contractors to expedite their resolution.

Availability and Continuity of Business

A primary responsibility of the IT Department is to ensure the availability of computing resources to all County departments and to ensure the County's continuity of business. Over the first nine months of

2018, there have been less than 30 minutes of unplanned downtime due to factors within our control. Most of the interruptions were associated with the relocation of the primary server room and primary data closet at Maplewood.

Infrastructure

Cheshire County operates a completely virtualized server environment. The advantages of this include more efficient use of resources, reduced maintenance, centralized management, and standardization. In addition, virtualized servers can be backed up, restored, and moved with an ease that is not possible with physical servers.

The fibre-based, high-speed, encrypted connections that link each campus have been performing without issue. Later this year, in anticipation of migration of our telephone services, we will be upgrading the speed of these connections. We continue to advance the design of our independent "management network," our channel of access to our internal network structure in the event that the primary connections fail.

Security

External threats continue at a significant rate. Our "public" interfaces (firewalls, web services, email, and public-facing equipment) are subject to constant probing and directed attacks. In 2018, we have increased our "attack surface" by putting several new outward-facing services (mail server and file drop box) into production. To date in 2018, no successful penetrations were detected or observed.

Our most significant vulnerability continues to be end users – the final line of defense against compromise. In some cases, simply opening an email or browsing a website can be enough to download malware or viruses that could impact security. Our actions to prevent unauthorized exfiltration or loss of data have increased in sophistication – and complexity – this year. End users have also been increasingly vigilant, reporting many "phishing" attempts to the IT department.

All workstations now host a program that resolves all domain requests (website names) through an encrypted channel to OpenDNS, our domain and malware blocking service. This protection is in place both on campus for desktop computers as well as when the user is using a laptop off-campus.

Our "whitelisting" policy, which allows only authorized programs to execute on a workstation, has significantly reduced our exposure to malicious programs being installed or executed.

We have implemented "geo-blocking" on our firewalls to block incoming traffic from entire countries or regions of the world. The reduction in brute-force attacks from blocked areas has been significant. Attacks from bad actors that are launched from US-based servers, however, are not prevented by geo-blocking.

County-Wide Projects

1. Mail System

The county's in-house email system has been running without major issue. In April, we conducted a penetration test using security company KnowBe4's mail server security assessment tool. This test attempts to deliver emails configured with various types of incorrect information, (simulated) viruses, and other types of attack. In every case, our system detected, flagged, and blocked the attacks.

2. HOC Security System Upgrade

The replacement of the control stations for the HOC's door and camera control system is complete. Com-Tec, the contractor, delivered and installed new workstations in September. The installation was managed by IT staff and accomplished with minimal disruption to the jail's operation.

The next phase of this project requires the IT department to increase the availability of this system by integrating a backup/restore system into the secure network to create and manage periodic centralized backups. Doing so enables any workstation to be restored in place, bring the security system into compliance with our standard of "30 minute or less" for restoration. This recovery option was not available prior to the upgrade.

3. Secure File Share

The County's new in-house secure file exchange service (NextCloud) was placed into production at the end of August. This service allows employees and designated external users to share files securely without the need for external providers such as Dropbox. This service was built and deployed by in-house staff without external cost. We are currently working with selected County employees to train and deploy the system. Eventually, use of the system could be extended to towns and agencies within the Cheshire County area.

4. Infrastructure Expansion

The design of the County infrastructure allows us to quickly engineer changes to support our expanding needs. In the past six months, two new communications systems were installed to support County projects. A dedicated wireless Internet connection was deployed for use by Dartmouth-Hitchcock staff to communicate securely and reliably from Maplewood. At the HOC, a new secure Internet connection was created to allow geothermal monitoring equipment to function without compromising network security.

5. HOC Inmate PC Training Center

The Inmate Programs officer at the HOC asked for assistance in provisioning a training center for inmates to enable them to use computers to produce resumes and develop other skills. By refurbishing

retired workstations and using available or free software, IT staff provided the training center with five workstations at zero additional cost. In addition, the workstations are equipped with enhanced security software that prevents any attempts at sabotage or modification.

6. Telephone System Replacement

The new telephone system design project is progressing into the breadboard phase. Several trial systems have been deployed to demonstrate voice mail, inter-campus direct dialing, and other advanced features.

7. Sheriff/Dispatch Emergency Trailer

IT is beginning the engineering design phase of our project to fully integrate the Dispatch emergency operations trailer with the County network by casting the trailer as a "fifth campus." This will provide access to county file and computer resources as well as leverage the upcoming phone system redesign. IT is working to provide these capabilities both in a tethered configuration (at the HOC) and untethered (emergency deployment). This effort is to support the Sheriff Department's objective of enabling the trailer to either supplement or replace the dispatch center in both emergent and other circumstances.

8. Network Intrusion Detection System

IT is developing and implementing an interactive log analysis system to monitor and store events from all firewalls, network switches, and servers. The configuration and programming is being accomplished in-house at no direct cost to the County. The system will enable security analysis to provide improved situational awareness and incident detection.

Respectfully Submitted, Robert L. Hummel, Director of Information Technology

The Commissioners thanked Hummel for his report and then Administrator Kindopp was recognized and discussed her recent trip to Washington DC for a leadership training opportunity and her meeting with Congresswomen Kusters staff while attending the conference.

She then discussed a licensing issue that is being examined for Medical Technicians in Nursing Homes.

At 10:25AM Commissioner Cartwright moved to enter a non-meeting to discuss union matters. Commissioner Weed seconded the motion and upon vote the motion passed unanimously.

At 11:44AM the Commissioners voted unanimously to return to public session.

Administrator Coates was then recognized for the Weekly Operations Report

Coates said that Attorney Bonsignore will be here on the 19th to meet with selected department heads as the next step in our participation in the multi-county, multi-state Opiate lawsuit.

Coates then said that a meeting with the person who was the fund raiser for the library project has been arranged for Friday at 9:00AM to discuss Copula project.

He the informed the Commissioners that the Blood Farm sales price has been accepted by both buyer and seller and \$105,975.00 is the final price.

Coates reported that the questions regarding employee life insurance is still under investigation by the County's benefit insurance company and we should have information concerning the options in the next few weeks.

Coates said that Steve Horton is still working on getting the information for the biomass discussion that occurred last week and he hopes to have the data by next week to report out.

He then reminded the Commissioners that on October 16th the Chamber of Commerce regional issue seminar series will be held at Keene State in Alumni Hall. The featured speaker will be the County Corrections Superintendent Rick Van Wickler.

He then said that the Keene Library book sale will run next week and he commended the library staff for their great work in setting-up and then cleaning-up after the sale. He said that they have been very easy to work with and that the sale last year went off with a hitch and the Keene staff greatly enjoyed attending the sale.

On October 29th the Community Volunteer Transportation Company will host an event to celebrate their 10th anniversary.

Coates said that on November 6th he and Trombly will attend a meeting in Concord to listen to Senscio present their plan for in-home care to the NH Department of Health and Human Services.

Coates said that the Old Courthouse windows project was written-up in the Keene Sentinel last week and was a well written article that accurately portrays the work being done.

He then discussed that the sewer overflow incident that occurred at Maplewood last week has been fully remediated and that the required Department of Environmental Services (DES) 5-day report has been submitted. He said that a new DES staff member will visit the site on Thursday to meet with the County water treatment personnel and other staff.

Old Business: None

New Business: Commissioner Cartwright asked about the Eversource work that is being completed for the Maplewood project and asked if Eversource has been contacted regarding energy saving best practices and potential rebates to assisting in funding the project. Administrator Coates said that was in process and will conversations will continue as the design is finalized.

The Weekly Census was then reviewed.

The Weekly Manifest was then reviewed with questions from the Commissioners. At the conclusion of the questions, Commissioner Cartwright moved to accept the Manifest as presented and was seconded by Commissioner Weed. Upon vote the motion passed unanimously.

The minutes of Oct 3, 2018 were then reviewed and Commissioner Cartwright moved to accept the minutes as amended and was seconded by Commissioner Weed. Upon vote the motion passed unanimously.

The calendar was then reviewed.

General Discussion: None

At 12:06PM there being no further business to discuss, Commissioner Cartwright moved to adjourn the meeting. The motion to adjourn was seconded by Commissioner Graves and upon vote the motion passed unanimously.

Respectfully Submitted,

Charles Weed Clerk, Board of Commissioners