Dear Colleagues,

I have now been in the Chief Information Officer role at the University of New Hampshire for over a year, and what a wonderful first year this has been. I trust you will see from the progress and efforts highlighted in this report that this past year has been one of incredible accomplishment. We have continued to move the University forward both in terms of strategic initiatives and operational excellence.

The work you and your colleagues here within IT and across UNH, USNH, and the State of New Hampshire is indeed admirable. This past year, we made significant contributions to the President’s Strategic Focus Areas of Enrollment, Brand and Marketing, STEM Education, Research and Research Commercialization, and Fundraising. We also had a positive impact on Support, Improvements, and rolled out New Services. So, it is with great excitement and joy that I welcome you to this annual report which represents a look back at the great work in information technology at UNH.

Thank you for all the hard work and effort you each put into realizing these achievements.

Best regards,

Dr. Stan Waddell
Associate Vice President and Chief Information Officer
Information Technology
University of New Hampshire
ENABLING ENROLLMENT GOALS

OPEN FOR BUSINESS: UNH IT’S MOVE-IN WEEKEND HOURS

Each fall, UNH IT welcomes students by providing services and support during Move-In Weekend. This past year, UNH IT provided support throughout the first weekend and for extended hours during the first week.

UNH LAW BAR PASSAGE ANALYSIS

UNH IT completed analysis of BAR passage results for recent UNH Law graduates to determine what relationships exist between BAR passage and other student data points such as GPA and LSAT scores. The data will be used by UNH Law to help the school increase BAR passage rates for their graduates.

UNH LEARN FOR LIFE

UNH Learn for Life is a new web portal that brings together a broad spectrum of non-credit offerings for adults and youth, with a contemporary one-stop shopping experience for our customers.

APPXTENDER V7.0 UPGRADE

UNH IT completed the upgrade of AppXtender to version 7.0. AppXtender is used for document management purposes throughout the University System. This upgrade fixed bugs, enabled clients to use the IE11 browser, and was required as the previous version was unsupported earlier in the fiscal year.
IMPROVING WEBCAT

UNH IT implemented a new cascade interface in the UNH Banner Self-service environment (Webcat). This new user interface provides an updated look-and-feel to the UNH Banner self-service environment, as well as easier navigation for the end user.

FREE MICROSOFT OFFICE FOR UNH STUDENTS, FACULTY, AND STAFF

UNH IT negotiated an agreement with Microsoft to provide all active UNH faculty & staff with an Office 365 subscription at no charge.

Through this program, active UNH faculty and staff are able to put programs such as Word, Excel, PowerPoint, and more on their PC or Mac. Microsoft Office apps can also be downloaded and used on iOS or Android devices, which includes additional features available only to Office 365 subscribers. Faculty and staff can also download and install the latest version of Office 365 as they are released.

BANNER DOCUMENT RETENTION

Many USNH departments have imaged documents for several years. Many of these images still exist. The first phase of the Banner Document Retention project will implement software to automate the deletion of current and future digital documents based on the retention policy for the document type.

By applying document retention and disposition rules, the University can reduce operating expenses and possible legal risks associated with retaining personal documents longer than department policy allows. Staff and faculty will also be able to access documents faster using accelerated searches.

UNH has many terabytes of stored documents in Banner, which requires extra back-up overhead. After installing the new product, UNH IT will begin working with various departments to create their retention rules based on department policies in place. One challenge is that certain document types can span several departments, which will require consensus amongst the various departments.

NAVITAS GRADUATE SCHOOL APPLICATIONS PROCESSED MORE EFFICIENTLY

Navitas Graduate School applications are now processed more efficiently with the introduction of Axiom. Navitas data will be imported into Axiom for processing and verification, and will include the creation of Admissions records in the Banner Student system.

Axiom is a faster, efficient, and accurate way to process data. The system automatically captures the data, verifies it for accuracy, and uploads the data into Banner based upon business logic. Axiom automatically searches for potential duplicate records and validates data to assure database compliance. Erroneous data is highlighted and can be easily corrected. Axiom also provides a user interface for correcting or updating existing data that is then uploaded real-time into Banner.

IMPROVED EMAIL FORMATTING

UNH IT provided Granite State College the ability to send HTML-formatted emails for a more professional presentation, while still retaining standard text-based emails. This functionality can now be extended to UNH offices.
IMPROVED PRINTED SCHEDULES

UNH IT created a new process for the UNH Registrar’s Office to provide a printed schedule to students at orientation. The new process minimizes the time needed for setup, improves usability and readability, as well as improve maintainability for UNH IT.

BANNER FINANCIAL AID SPRING REGULATORY BUNDLED UPGRADE – FOR UNH AND GSC

UNH IT created a bundled Banner Financial Aid upgrade, including the Financial Aid spring regulatory release, a Student release and patch (required for the FA release), several General releases, a Web Tailor release, and an Accounts Receivables release. The releases included many defect corrections and new functionality for our user community to explore.

IMPROVED FINANCIAL AID REPORTING

UNH IT partnered with the Financial Aid Office and Enrollment Management to develop reporting to provide additional insight into financial aid awarded to incoming applicants. This information will assist UNH with financial aid budgeting and projections.

UNH IT AND UNH ADVANCEMENT COMPLETE FINAL PHASE OF AUTOMATED DATA SYNC WITH IMODULES

The third and final phase for the iModules to Banner data sync project has been completed. This phase was a one-way data sync from iModules to Banner for Events. iModules is currently used as the alumni website for the University of New Hampshire and is the main data repository for all active and in-flight events. Previously, the data was manually entered into Banner after the fact. The goal for Phase 3 of the data sync project was to automate the transmission of much of the event data along with registration and attendance information. The automation significantly reduces time spent on data entry and improves data accuracy.

PARENT PORTAL ENHANCEMENTS

The Parent Portal enhancement project improved the parent and student user experience and added new functionality to provide parental access to Financial Aid Awards and Grades (students grant these permissions). The project included replacing the current parent portal environment with vendor baseline functionality.

These changes will save UNH time and cost in maintenance and support.

NH DEPARTMENT OF EDUCATION/ SASID – PHASE 2 (SCHEDULED FOR IMPLEMENTATION BY THE END OF JUNE, 2016)

This project automated the process of issuing state-assigned student IDs for the NH Department of Education (NHDOE) for enrolled students attending the Community College System of New Hampshire (CCSNH) and the University System of New Hampshire (USNH). Additionally, it established the framework for transmitting required CCSNH and USNH non-identifiable student performance data to NHDOE. This project was undertaken to improve student outcomes for the purposes of research and analysis, to help facilitate an electronic transcript project between CCSNH and the USNH, and to meet legislative requirements.
AUTOMATED CFAR FINANCIAL ELIGIBILITY DETERMINATION

UNH IT collaborated with the UNH Center of Academic Resources (CFAR) to automate the financial eligibility determination process. The automation of creating a file of financially eligible students will save resource time, increase data accuracy, and reduce institutional risk of exposure to sensitive UNH student and parent financial data.

Benefits:

- Save resource time. CFAR and UNH Financial Aid resources will no longer need to spend time on the current manual and labor-intensive process to determine financial eligibility

- Increase data accuracy. Automating the creation of financially eligible students will ensure consistent, more accurate results

- Introduce the ability to efficiently determine financial eligibility at multiple points throughout the year, as students are admitted, transferred and financial circumstances change

- Reduce institutional risk of exposure of sensitive financial data
UNH IT FAIR

The First Annual UNH Information Technology Fair was held on Tuesday, October 6, from 12:30 PM - 3:30 PM under the big top on the Great Lawn in front of DeMerritt Hall.

The fair, open to all UNH Students, featured demonstrations and information on UNH IT products, services, and support, including:

- Box @UNH
- Qualtrics
- MS Office for Students
- Parker Media Lab
- myCourses
- UNH Wifi
- UNH Mobile
- IT Support Services
- ... And more!
UNH IT Coffee Talk Presentations Throughout the Year

July
This UNH IT Coffee Talk introduced new UNH CIO, Stan Waddell to the University community and provided a lively presentation about the Account Management System.

November
UNH IT’s fourth installment of its 2015 IT Coffee Talk series featured presentations on Skype for Business and the UNH IT Knowledge Base.

March
This session featured How to Engage Students Using Social Media with Tyler Wentworth, Senior Producer at UNH Communications & Public Affairs.

June
UNH Websites with Drupal with John Pietlicki, UNH Academic Technology Web & Mobile Development and Rori Boyce from UNH IT discussing Change Management.

Seeing Data with Tableau @ UNH
In May 2016, the Tableau implementation brought the power of data visualization to administrative units at UNH. More than two dozen UNH departments have expressed interest in using Tableau to help them share and analyze data more effectively. The goal is to showcase UNH’s story and impact in a manner that resonates with UNH constituents and external stakeholders.

Student Technology Liaisons
For the second year, UNH IT sponsored monthly meetings with UNH students interested in learning more about technology at UNH.

Student Technology Liaisons took part in Intro to Lean training and the Marshmallow Challenge.
UNH IT continued to collaborate with Academic Technology on events, projects, and marketing opportunities throughout FY16. The collaborative efforts yielded many opportunities to promote services provided to faculty, staff, students, visitors, and residents of the State of New Hampshire.

UNH IT has been taking advantage of this opportunity for several years to engage with our customers, answer questions about our services, and provide information on our products. Teaming with Academic Technology, UNH IT chose the theme, “Infusing Knowledge with Technology” and handed out water infusers filled with fresh fruit while answering any questions of participants. This valuable opportunity allows for optimal face time with customers to strengthen the UNH brand and market our services.

UNIVERSITY DAY

Annually, UNH students, staff, faculty, and members of the community converge Thompson Hall lawn to meet representatives from organizations, departments, student organizations, and community members. UNH IT has been taking advantage of this opportunity for several years to engage with our customers, answer questions about our services, and provide information on our products. Teaming with Academic Technology, UNH IT chose the theme, “Infusing Knowledge with Technology” and handed out water infusers filled with fresh fruit while answering any questions of participants. This valuable opportunity allows for optimal face time with customers to strengthen the UNH brand and market our services.
CONTENT CREATORS MEETING

Starting in FY16, UNH IT Communications hosted a series of meetings for those involved with creating content for UNH Information Technology and Academic Technology. The meetings focused on products and software applications used for communicating to our constituents. Topics included UNH IT Knowledge Base best practices and Video Creation, Editing, and Best Practices.

VANTAGEPOINT - PODCAST INTERVIEWS WITH UNH IT PERSONNEL/PARTNERS

New this year, UNH IT produced a series of audio recordings with key IT personnel and our partners. These interviews are available in both audio and text, allowing University community members and beyond the opportunity to get to know who we are, what we do, and why we do it.

OUTREACH AND COMMUNITY INVOLVEMENT

Scott Valcourt served on an expert panel for the National Institutes of Justice (NIJ) in September 2015. The panel, convened by the RAND Corporation for the NIJ, brought together public safety and technology leaders from across the country to consider the top areas of research that NIJ should study to deliver law enforcement technology environment necessary for 2025.

Doug Green (Broadband Services) and Scott Valcourt attended the NSF CC*DNI Principal Investigators meeting in collaboration with the quarterly meeting of The Quilt in Austin, TX in September. Scott served as a moderator of the panel on Leveraging Campus Resources and Engaging Researchers.

Scott Valcourt was appointed a member of the Northern Crossroads (NoX) Advisory Committee for a 1 year term starting April 2016. The NoX is the networking connector in the Boston area that nearly every higher education institution with Internet access connects to in New England. The Advisory Committee is focused on reviewing ideas on how to benefit all of the connector institutions with new services as well as propose the implementation of next-generation networking.

Scott Valcourt, Brian Shepperd (Broadband Services) and Chief Paul Dean (UNH Police) were appointed to the New Hampshire Statewide Interoperability Executive Committee (SIEC) in May 2016. Formed through a legislative act, the SIEC is responsible for the implementation of NH's aspect of the nationwide public safety broadband communications network, FirstNet. Brian and Scott also serve on the Broadband Sub-Committee of the SIEC and were instrumental in the development, review and recommendation of vendors to serve in a public-private partnership role with NH as the FirstNet network is developed to cover the entire state.
SUPPORTING STEM EDUCATION GOALS

UNH BROADBAND SERVICES - SUPPORTING STEM STATEWIDE

UNH Broadband Services is actively involved in numerous initiatives throughout the state to enhance broadband connectivity for schools, telehealth, public safety, and other community anchor institutions.

NH STATEWIDE INTEROPERABILITY EXECUTIVE COMMITTEE (SIEC)

During FY16, SIEC worked in partnership with the federal FirstNet project to develop the next generation of a state and nationwide private LTE communications network for all first responders.

Brian Shepperd, Scott Valcourt, and UNH Police Chief Paul Dean were appointed members of the SIEC. Scott and Brian are active participants in the broadband working group of the committee which has led the nation with the first RFP for an optional public/private partnership for its statewide first responder LTE network.

GOVERNOR’S TELECOMMUNICATIONS PLANNING AND ADVISORY COMMITTEE (TAB)

The goal of TAB is to enhance broadband deployment and telehealth throughout New Hampshire. Brian Shepperd is an active member in the TAB, was a member of the telehealth subcommittee in 2016, and now chairs the Education Subcommittee. The education work on TAB expanded into the NH School Connectivity Initiative below.

Brian participated in the Telehealth Subcommittee and was one of the presenters in a Telehealth 101 workshop for approximately 30 DHHS employees. This committee work advised legislation that led to passage of language incorporating some components of telehealth into NH Medicaid reimbursements.
COOS COUNTY BROADBAND MAPPING PROJECT

UNH GRANIT hosted 3 workshops in Coos County as part of the Coos County Broadband Mapping project funded by a Northern Border Regional Commission grant. UNH Broadband Services presented an overview of current broadband technologies and ongoing initiatives to expand access and utilization in northern NH at each of the 3 events:

- Broadband and Teaching at a Distance, Colebrook, NH
- Broadband and Economic Development in Gorham, NH
- Broadband for Municipalities and Public Safety in Whitefield, NH

Brian Shepperd, Director of Broadband Services at UNH, presented an overview of current broadband technologies and ongoing initiatives to expand access and utilization in northern NH at the Broadband and Economic Development Workshop in Gorham, NH on March 31, 2016.

PACKED HOUSE FOR TELEHEALTH 101 SEMINAR

Brian Shepperd, UNH Director of Broadband Services, presented at the TeleHealth 101 event to the NH Department of Health and Human Services staff on August 6, 2015. The NH Telecommunications Planning and Advisory Board hosted this session to help Department of Health and Human Services staff understand the infrastructure requirements and uses for telehealth.

NH SCHOOL CONNECTIVITY INITIATIVE

The New Hampshire School Connectivity Initiative (NHSCI) is a collaborative effort tasked with enhancing high-speed broadband access for K-12 public schools in New Hampshire. NHSCI is spearheaded by the New Hampshire Department of Education, through the Office of Educational Technology. Collaborating members include the Office of the Governor, the New Hampshire Departments of Education, Information Technology, and Resources and Economic Development, and the University of New Hampshire. The UNH CIO, Director of Broadband Services, and Director of Strategic Technology are all members of NHSCI.

NHSCI is also working in collaboration with EducationSuperHighway (ESH), a nonprofit (501c3) organization that recently signed an agreement with NHSCI to jointly facilitate high-speed broadband access for K-12 public schools in NH. ESH is also
working with many other states on similar efforts, nationwide. Funded in part by the Bill and Melinda Gates Foundation and other donors, ESH supports increased broadband connectivity in public schools. ESH provides its services free of charge to NHSCI to help New Hampshire’s K-12 schools and districts obtain direct fiber connectivity.

NHSCI’s first goal was to compile a comprehensive K-12 broadband connectivity report. The Telecom Advisory Board Education Subcommittee, coordinated by the University of New Hampshire and in partnership with the EducationSuperHighway team, facilitated the K-12 data collection effort to assess the current state of broadband connectivity in our schools. The data was then used to create a connectivity report which identified the school districts who are strong candidates for utilizing FCC E-Rate funds to obtain fiber connections. The team is currently meeting with those districts to prepare them for the 2017 E-Rate request.

The NHSCI/ESH team has also identified additional fiber construction funds available to schools if the State of NH provides matching funds. NHSCI has begun the capital appropriating process to appropriate those funds.

Another goal is to develop a plan to meet K-12 connectivity goals through the facilitation of statewide K-12 fiber network discussions with school districts, service providers, and partner organizations with the long-term goal of ensuring that all public school students across New Hampshire can take advantage of digital learning.

Finally, the initiative is creating a statewide strategy to enhance the utilization of E-Rate funds that are used to provide discounted communication services to schools and libraries across the state. NH currently receives less than 45% of the funds collected by the Federal Communications Commission through the Universal Service Fee paid by NH businesses and residents.

NHSCI and EducationSuperHighway host an information session for NH fiber providers to highlight the ongoing efforts to enhance fiber connectivity to K-12 Schools.

CONNECTNH FY16

ConnectNH, UNH’s video collaboration network for distance learning, telehealth and outreach, is busy providing services and capacity expansion throughout the state. Highlights of these services are:

- Littleton Regional Healthcare is utilizing ConnectNH videoconferencing services for training nurses in Northern NH.
- White Mountain Community College is expanding the use of ConnectNH videoconferencing services for distance learning of Med-Tech and other programs between Berlin and Littleton Campuses. They are also investigating using this technology for the new collaborative program with UNH Manchester that was recently announced.
- Videoconferencing of AP Math Classes from Colebrook HS to other North Country schools in 2014 has now expanded to French and Spanish classes in 2015.
- ConnectNH, through a USDA RUS grant with the NH Fire Academy, brought training via videoconferencing to the new NH Fire Academy facility in Bethlehem, NH and to the 45th Parallel EMS in Colebrook, NH. These sites can connect with other local departments through the ConnectNH software clients.
- ConnectNH helped pilot EMT Training from Lakes Region Community College to White Mountain Community College.
- ConnectNH helped pilot utilizing remote a professor for GSC Conway to expand offerings for a nutrition course.
- ConnectNH provided streaming and content capture services for a UNH Law event at the UNH Law’s Warren B. Rudman Center for Justice, Leadership and Public Policy. Debt Matters: Why the Budget Must be a Top Priority for the 2016 Candidates.
Left to right: Bob Bixby, the Executive Director of The Concord Coalition and former Senators, Judd Gregg (NH) and Evan Bayh (IN) discuss the importance of the nation's debt becoming a key talking point during the upcoming Presidential election.

YEARS 1 OF SCIENCE DMZ DESIGN FOR SAINT ANSELM COLLEGE

UNH is a partner with Saint Anselm College in Manchester in the design and deployment of a ScienceDMZ for a small institution through a grant from the National Science Foundation. Year 1 defined the network solution taking into account the existing network and the requirements of the science drivers that need to partner with Dartmouth College and UNH. Training with UNH and Saint Anselm technical staff took place in June and equipment is being ordered to be installed and testing in FY17 with a launch date expected to be by the end of 2016.

SHOALS MARINE LAB MICROWAVE WIRELESS NETWORK UPGRADE

Through a grant from the National Science Foundation, UNH Broadband Services designed and worked with SML to replace their existing Internet connection operating between 1.5Mbps and 3Mbps with a connection directly on the UNH LAN providing service at over 200Mbps. In addition, every building on Appledore Island is now connected with fiber optic cabling and is also served with WiFi network access, allowing research tools and communication devices to be anywhere on or around the island and able to be in communication with the mainland researcher. Two Polycom video conferencing units were installed on the island, allowing SML to broadcast programs from the field as well as bring research speakers into the island without having to navigate the boat schedule and maritime weather. A set of IP-based cameras and solar-powered towers will allow researchers to monitor wildlife activity remotely and without detection by various species as they seek to understand habitats and behaviors of some of the most elusive creatures around the island.
RESEARCH AND RESEARCH COMMERCIALIZATION GOALS

SCIENCENET

The UNH Wide Area Network (WAN) team was integral in launching the 10 Gigabit/sec “ScienceNet” science DMZ, the NSF funded experimental UNH research network that interconnects five key research buildings on campus to each other and to Internet 2 with dedicated 10 Gbps speeds. WAN is now working closely with Saint Anselm College in the design and preparation for the launch of their science DMZ scheduled for FY17.

SYMPLECTIC ELEMENTS APPLICATIONS ALLOWS FOR HARVESTING RESEARCH AND CITATIONS

USNH Enterprise Applications Team worked with the PMO and Research Information Technology to implement the new Symplectic Elements application, which captures the activities of all UNH research-active staff to allow the Elements server to search online and harvest research and citations for each researcher.

UNH SCIENCENET

UNH Broadband Services, and UNH Research Computing (through a National Science Foundation grant) completed the turn-up and testing of the 100Gbps ScienceDMZ that provides up to 20Gbps connectivity to science devices and data storage devices for the purpose of sharing research data within and beyond the walls of UNH. Through the use of Internet2’s NET+ service, researchers interested in sharing data with up to 20Gbps of dedicated network capacity can do so through a simple reservation through RCC or via a web-based data transmission interface called Globus.

USDA RUS 2013 GRANT

Through a grant from the US Department of Agriculture, ConnectNH led a deployment of Polycom video conferencing hardware and software to increase the use of distance learning for first responders in NH, as well as expand the use of telehealth services for the Mid-State Healthcare System or physician offices and Mid-State Hospital.
UNH IT completed the 2014 NHIRC grant with Lamprey Networks, Inc. of Durham to develop a voice authentication system for the Health@Home product used to support home-based patient monitoring. Dr. Radim Bartos of Computer Science was the PI; Scott Valcourt served as Co-PI.

The Northeast BDHub grant award is led by Columbia University and brings together researchers from PA, NY, NJ and New England to partner and design the next generation tools and techniques to address issues in Big Data research. UNH submitted as a participant in the new National Science Foundation (NSF) program to develop four regional Big Data hubs to encourage collaboration and data sharing amongst the research community. A kickoff workshop was held in New York in December 2015. Scott Valcourt (UNH IT), Patrick Messer (RCC), Mark Lyon (Math & Statistics) and Ellen Christo (UNH Innovation) all serve as senior personnel in the program.
603 CHALLENGE

UNH IT provided much of the behind-the-scenes code with enterprise information management that supported the second year of UNH’s very successful 603 fundraising campaign.

CONTINUOUS PROCESS IMPROVEMENT – LEAN UNH

UNH employees are adept at improving how we deliver services to students and community members. The UNH Project Management Office (PMO) offers Lean training at UNH to teams and individuals looking for additional tools and skills to further this type of improvement work.

Since Feb 2015, 20 process improvement projects have been undertaken as part of Lean Yellow Belt Training. Teams from a variety of UNH departments have come to the 3-day training class to work through a problem or opportunity they have identified within their organization. They learn new Lean skills while analyzing their current state and designing a path to an improved future state. The scope and type of the projects vary and outcomes focus on improving customer service, reducing time and cost to deliver services, and improving employee satisfaction.

The PMO offers Lean training, free of charge, at a variety of levels. The schedule of courses can be found on the IT training calendar. Lean training has rapidly expanded across UNH as the approach is tailored to our UNH culture, and our sister institutions have taken an interest as well. Search “Continuous Process Improvement” from unh.edu to find out more on the PMO’s website.
EMAIL CONSOLIDATION PROJECT

UNH IT worked to contain costs, improve security, and provide an improved user experience when it consolidated two email systems into one this fiscal year: MS Exchange. This project resulted in a decrease to hardware and power consumption by nearly a dozen servers and improved opportunities to collaborate with colleagues using a globally shared calendar for meetings and planning purposes.

The following are excerpts from just a few of the many comments received expressing thanks for assisting faculty/staff in this effort.

“Things worked out perfectly!!! I have all my mail”

“Everything seems to be working fine. Thank you very much for your help with setting things up.”

“Brilliant! Many, many thanks, Spencer. So appreciated.”

ASSISTING UNH/USNH HUMAN RESOURCES

Banner XE - USNH Enterprise Applications Team worked on implementing the first Banner XE module in the development environment – the Employee Profile. Banner XE is a new user interface that Ellucian has worked on for several years. It requires Single Sign-on for Banner Employee Self-Service (WISE). In preparation for Single Sign-on, all Banner usernames that do not match AD/LDAP will need to be changed to ensure usernames are in sync. This major effort is underway and the first test cases are being validated in the Banner test environment. Not only will the Employee Profile offer an improved user interface for employees to interact with their data, but WISE will no longer require using the 9 digit USNH ID for login; WISE will instead use UNH AD/LDAP username/password.

Syntrio - USNH Enterprise Applications Team worked with HR to develop an interface for the newly implemented Syntrio LMS application to help manage employee training. The interface automates the sending of employee information from Banner.

LEAN PROJECT IMPROVES ADVANCEMENT’S GIFT AGREEMENT PROCESS

A cross-functional Advancement team undertook a project to streamline their internal handling of Gift Agreements. Thirteen team members attended Introduction to Lean training and then, with support from the PMO, completed a process analysis and redesign. The ultimate outcome of the project was to create a process that can respond more quickly and predictably to UNH donors and reduce the risk of missing out on these generous gifts. The results of the project included creation of standard templates, automated workflow using SharePoint, estimated time savings of 500 hours per year (~$37,500 value), and increased capacity to handle more gift agreements in the future. This project team was recognized and celebrated during the 2016 Lean Summit.
to Syntrio. Future enhancements will bring data back from Syntrio into Banner to track training accomplishments.

**Tandem** – Developed and implemented new automated processing for Payroll to issue Tandem health benefit payments and taxation in the same payroll, alleviating a problem with taxation not always occurring in a timely manner.

**BROADBAND SERVICES SERVICE ENHANCEMENTS AND COST REDUCTION INITIATIVES**

In keeping with its mission, UNH Broadband Services constantly reviews expenses, renegotiates contracts, and realigns its services to ensure we are providing the best value to those we serve. This year, we again enhanced service for USNH institutions with no net increase in the FY16 shared services budget while also providing cost avoidance for other services. We now provide a total Internet/Internet2 bandwidth capacity of 35 Gigabits/sec with a 24/7 average usage of over 10 Gigabits/sec. Last year, we transported over 40 PetaBytes of internet and intercampus data. This capacity successfully supports faculty, staff, students, and research for all of the USNH campuses.

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“Last year, we transported over 40 PetaBytes of internet and intercampus data.”

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**ADDING ANCHORS TO REDUCE COSTS**

The Broadband Services team continues to add other community anchor institutions to our network, reducing the costs to all USNH institutions and our partners. The FY16 Additions include:

- Shoals Marine Lab
- PSU Center of Graduate Studies in Concord
- River Valley Community College - Lebanon
- Portsmouth Historical Society
- Interconnect Hanover Police Department and Grafton County Sheriff’s Office

**NEGOTIATIONS NET SAVINGS, BETTER SERVICE**

UNH IT completed two negotiations that resulted in service enhancements and cost reductions for the USNH campuses. The UNH Broadband team renegotiated its primary and secondary commercial internet contracts for the USNH Wide Area Network. This resulted in both increased bandwidth capacity and a savings of over $33K in the shared services budget.

Broadband Services negotiated a new USNH membership with Internet2. The total USNH membership cost was slightly less than the savings realized from the renegotiated internet contracts discussed above and the agreement also negated significant costs to the campuses for planned contracted services. The benefits of the USNH membership include:

- Participation in InCommon: InCommon ‘s mission is to create and support a common trust framework for U.S. education and research. This includes trustworthy shared management of access to on-line resources in support of education and research in the United States.

- All of the campuses have access to the entire portfolio of Internet2 NET+ services at member pricing. These services include two that UNH is already utilizing, Box and Canvas, as well as others like Docusign.

- All of the campuses will continue to have access to Internet2 without paying the traditional per-campus fee associated with each campus. This membership avoids the $23,400 annual network participation fee PSU would have to pay associated with its Carnegie classification.

- All of the campuses will be allowed access to Eduroam which lets you utilize your participating school’s WiFi authentication at any eduroam hotspot in the world to join instantly and securely. Eduroam is secure, world-wide roaming access service developed for the international research and education community.
• System Membership waives the following fees which would normally be charged to individual campuses:
  • InCommon one-time setup fee ($700 each campus)
  • InCommon Annual fee per campus ($1,600 PSU; $1,180 KSC; $1,180 GSC)
  • UNH Manchester and UNH Law were bundled as part of the existing UNH membership
• NET+ Example – InCommon Certificate Service available at a 25% discount:
  • UNH has been participating in the Certificate Service since 2014 which resulted in a conservative estimated savings of over 40K annually.
  • KSC anticipates it will save over $10K annually through the InCommon certificate service

“UNH estimated savings of over 40K, annually.”

“KSC will save over $10k, annually.”

UNH COMPUTER STORE

The UNH Computer Store leveraged campus events to showcase the wide variety of products available to students, faculty, and staff including Orientation, Resource Fairs, Move-In Weekend, University Day, Evergreen Fair, and others.

Code Servers

UNH IT has been supporting approximately 15 Subversion server (code servers). We consolidated these into 2 servers, ensuring environments are standard, consistent, and regularly patched.

Database Patches

UNH IT significantly reduced the planned downtime for Oracle databases by implementing rolling operating system patches, and standby databases for critical Oracle patch updates. For 70 databases we have decreased the downtime by 70%.

Rob McGary meets with parents and students at the Resource Fair at Orientation to explain the advantages of purchasing from the UNH Computer Store
SUPPORT, IMPROVEMENTS, AND NEW SERVICES

ITIL CHANGE MANAGEMENT

On May 20, UNH IT and Academic Technology launched a collaborative Change Management Model based on industry best practices. Change Management standardizes the reporting and approval of changes to services and products offered by UNH IT/AT. Change Management's goals are to minimize the adverse impacts of changes on service quality, improve communications, and ensure changes are considered and implemented in a consistent way.

UNH IT SERVICE CATALOG REPORT

The UNH IT Service Catalog lists more than 100 services offered by departments within UNH Information Technology and Academic Technology. A report is now available to allow Information Technology/Academic Technology staff to sort and filter Services by Department, ITSM Service Category, Service Owner, and Parent Service.

FAMIS SPACE UTILIZATION

UNH IT worked with Facilities to implement functionality that will allow the location data (buildings/floor/ room) to be maintained by other users besides Facilities IT team. This should result in more current data and be helpful for departments to see and maintain their space, which impacts budgets.

VOICEMAIL MIGRATION TO EXCHANGE UNIFIED MESSAGING

The voicemail migration to Exchange Unified Messaging completed in December 2015. More than 2700 mailboxes were successful migrated from the old Avaya Modular Messaging to the new Exchange Unified Messaging. The project is estimated to save over $70,000 annually in vendor licensing and maintenance fees. Exchange Unified Messaging also provides users with new features such as UNH employees receiving voicemail in their inboxes, text preview, and hands free access when dialing in to retrieve messages.
SOURCE CODE MANAGEMENT

A source code management system was implemented, helping UNH IT gain efficiencies, and provide a more structured method of handling and sharing source code, gaining speed and efficiency.

CAMPUS SAFETY

Campus safety is paramount to the University. UNH IT Information Security Services has completed the UNH PSVC (Public Safety Video Camera) UNH Manchester Expansion project. The expansion of additional Public Safety Video Cameras undertaken at the UNH Manchester campus will be accessible to the UNH Police Department in Durham. Video will be stored in Durham for retrieval purposes.

The project was considered very successful and the following feedback was received:

“I just want to take a moment to express our gratitude to Brian, Tony and Jon for their hard work and expertise in getting the camera system up and running. Through their efforts to move this project along, the system was up and running rather quickly and done correctly.

The UNHM Security team is extremely happy and we have already had reason to use the camera system for a specific incident.”

IMPROVING CONVENIENCE AND SECURITY WITH JAVA MANAGEMENT

A Java Management rollout was completed the end of April. This allows IT to push Java updates without client intervention, resulting in both convenience and protection for the client desktop.

GSC SCRIP SAFE IMPLEMENTATION

Implementation of Transcripts on Demand (TOD) service has enabled GSC to outsource the collection of transcript requests from current and former students. Using the basic installation, transcript staff have experienced immediate operational benefits:

• Elimination of the need for transcript request forms.
• No processing and retention of signed Consent Forms.
• Collection of complete and edited transcript order information.

EMAIL GATEWAYS

6.9 Million Message Received Monthly (368GB)
12.4 Million Message Sent Monthly

GSC DIRECT DEPOSIT REFUND

This new functionality allows students to authorize refunds through ACH direct deposit processing instead of physical checks, view and update banking information and to agree to allow any Title IV payments to pay for non-Title IV charges via new self-service functionality.

IMPROVED PRINTED SCHEDULES

UNH IT created a new process for the UNH Registrar’s Office to provide a printed schedule to students at orientation. This new process minimizes the time needed for setup, improves usability and the readability, as well as improve maintainability for UNH Information Technology.
PREFERRED NAME

IT worked with multiple user offices and the Transgender Policy and Climate Control committee to provide functionality for Students to indicate a preferred name.

Places Where Preferred First Name May Be Used:

- Class Rosters
- Degree Audit Reporting System
- Grade Reports
- Advisee Lists
- Unofficial Transcripts
- Library sign-out process
- Directory Listing (unless you have chosen FERPA Exclusion)

IT is currently working on phase 2 which includes the use of preferred name in customer facing IT tools and services.

USNH NETWORK MONITORING

USNH Wide Area Network Submissions engaged Monitis for external monitoring of key devices and services at KSC, PSU, and UNH. This provides a USNH networks status as seen from four locations in the United States and Europe.

DATA CENTER CORE UPGRADE

UNH increased the reliability of statewide network routing by upgrading the data center core routing and duplicating this capability at the Telecom Building. This enhancement will allow us to better serve Cooperative Extension, Granite State College, and our numerous external IBEAM clients.

BOX @ UNH

- 8,797 UNH Affiliated Users
- 2,118 External Users (Sponsored AD accounts that did not need creating)
- 10,915 Total Users

CEB ROADMAP

In early 2015, UNH Information Technology arranged for membership in CEB, a best practice insight technology company. CEB provides a unique view into what matters and works when driving performance, and has over 30 years of experience sharing, analyzing, and applying proven practices.

The various domains within the Enterprise Technology Services group began using the interactive CEB roadmap builder to better depict decision support solutions, strategic planning, and service capability. The roadmap allows ETS to:

- Mitigate risk
- Improve collaboration, budgeting, and IT planning
- Identify technology redundancies
- Ensure execution progress on strategic initiatives
- Benchmark technology plans against peers’
- Connect IT projects to business goals
- Engage business partners
UNH IT AND UNH ADVANCEMENT COMPLETE FINAL PHASE OF AUTOMATED DATA SYNC WITH IMODULES

The third and final phase for the iModules to Banner data sync project has been completed. This phase was a one-way data sync from iModules to Banner for Events. iModules is currently used as the alumni website for the University of New Hampshire and is the main data repository for all active and in-flight events. Previously the data was being manually entered into Banner after the fact. The goal for Phase 3 of the data sync project was to automate the transmission of much of the event data along with registration and attendance information. This automation significantly reduces time spent on data entry and improves data accuracy.

UNH IT INTERNAL KNOWLEDGE BASE HELPS CUSTOMERS

The IT Knowledge Base now contains a centralized depository of internal knowledge for customer support staff. This integration of this information into the existing UNH IT Knowledge Base helps the IT Service Desk and IT Consultants provide better service by enabling them to provide concise, consistent, easy to follow documentation to support to faculty, staff, students and guests who use the IT technical ecosystem.

24/7 SELF-HELP UNH IT KNOWLEDGE BASE CREATED

UNH IT created and launched the UNH IT Knowledge Base, a web-based, self-help center for UNH IT clients and customers to find answers to commonly asked questions on IT products and services 24/7/365.

The UNH IT Knowledge Base contains contributions from Information Technology and Academic Technology and is a one-stop source of information.

During FY17, a total of 686 documents were added to the KB by 76 active contributors.

UNH IT KB FIRST YEAR STATS

From 7/1/15 to 6/30/16, the UNH IT KB had 950,884 Visits and averaged 2,598 Visits/Day.

950,884 number of visits to the UNH IT KB during FY16

Not surprisingly, this correlated with the number of Service Desk Incidents, which dropped by 1.09% from FY15. The UNH IT Service Desk Incident report shows a steady increase in the number of incidents from FY12 until this year. One contributing factor may be the access to self-help via the UNH IT KB.

Source: UNH IT KB 7/1/15 TO 6/30/16
AUDITING ACCOUNTS

UNH IT implemented new processes for auditing AD Password Enforcement and handling Unclaimed AD Accounts which improved security and reduced risk.

8000+
UNH IT handled over 8,000 requests for accounts and provided second level support for 1,525 incidents in FY16.

CAMPUS RECREATIONAL MANAGEMENT SYSTEM

Campus Recreation Management System Selection Project Campus Recreation has selected a new Recreational Management System that goes hand-in-hand with the addition to the new Hamel Rec Center. The new cloud-based system, named Fusion, replaces Blackboard transact, formerly used to manage swipe-ins to the facility. In addition, the new system has management functions to display the availability of rental facilities, visiting teams, sale and rental of equipment and memberships for students, faculty, staff and community members. Memberships and access for use of the pools is also included. The Project Management Office provided PM Services for the Exception to Bid process and the system implementation.

77%
First Level Call Resolution

IT SERVICE DESK FIRST LEVEL CALL RESOLUTION

The IT Service Desk First Level Call Resolution (FLCR) for FY16 is 77%. FLCR is a Service Desk industry metric that measures the percentage of inquiries that are solved during a customer’s initial inquiry. The Service Desk industry standard is 65% - 70%.

OCCUPATIONAL THERAPY’S STUDENT INTERNSHIP APPLICATION

The College of Health and Human Services’ Occupational Therapy program selected a product to replace their aging, home-grown application that manages student internships. The cloud-based product significantly reduces the administrative effort to manage the fieldwork program.

The new database allows 120 fieldwork educators to identify availability of placement opportunities and later report on a student’s performance. Students will upload their immunization records and other needed documents for their fieldwork educator to access directly. These online features will greatly reduce the amount of paperwork currently handled and stored in the Occupational Therapy Department. Furthermore, students’ experience reports for others students to view will be facilitated online, allowing the next cohort of students to access these documents from their phone or tablet when searching for a fieldwork placement that fits their educational need. The system will be available in the summer and will be used exclusively in the fall for incoming students. The Project Management Office provided PM Services for the Bid process and will assist with the system implementation.

GRANITE SQUARE STATION LEAN REDESIGN

Granite Square Station (GSS), located in the MUB, underwent a major transformation this summer. The process began early this year with a Lean Yellow Belt event hosted by the UNH PMO where the team built a current state map of the package and mail processing systems. The team defined a new business process which included the demolition of about 12,000 mailboxes. It was necessary to put out an RFP to select and acquire a new cloud-based software system which will make package processing much more efficient. GSS handles about 125,000 student packages each year, but only a very small amount of first class mail. Now, when a letter or a package arrives for a student,
they receive an email or a text, alerting them to pickup their parcel at GSS. In the past, students had to check their mailboxes regularly. One major improvement is that there is no longer a need to keep track of 12,000 mailbox keys – many of which were never used. Woodside and Gables will be using the same system. Babcock mailboxes are also being eliminated so that students living there will retrieve their mail from GSS. The new mail room is expected to be operational on, or about, August 1.

**STUDY ABROAD APPLICATION**

The Center for International Education and Global Engagement (CIEGE), and the College of Liberal Arts (COLA) have engage in a selection process to identify a cloud-based platform to manage lead tracking and enrollment in study abroad and other international experiences.” CIEGE and COLA engaged in a bid process to identify a cloud-based platform to manage enrollment in Study abroad and other international experiences. The PMO worked with both teams to build a set of business and technical requirements to which vendors were required to rely. Products under review include one new to the Enrollment Management marketplace that promises to make the student experience easy through incremental information capture. The system can help track student interest in, and help with the recommendation of, programs from a field of about 500 programs that will fit with the graduation requirements for the student’s declared major. COLA’s interest is as a program manager that actually accepts the students into the programs. CIEGE is interested in overall enrollments both from a quantity and quality perspective, i.e., ensuring that the student selects the best program to meet their needs and desires. CIEGE committed to doubling enrollments for UNH Managed and approved programs.

**SERVICE DESK TIER TWO SUPPORT INTEGRATION**

UNH IT used Lean methodologies to improve operational efficiencies for its Service Desk customer support model. The integration of a tier-two support model provided the Service Desk with a clearly defined process for escalation when a higher level of technical expertise was needed to address customer incidents. This improved model provided a direct savings to customers by decreasing resolution turnaround time of escalated incidents by 50%.

**PMO OFFERS PROJECT MANAGEMENT TRAINING**

The Project Management Office (PMO) began offering an Introduction to Managing Projects course at UNH last September. Over 50 people have been through this day-long interactive class. The goal of the program is to provide people that are new to Project Management, or new to UNH, with an introduction to the People, Processes, and Technology that form the makeup of projects at UNH.

Participants come from a wide variety of departments at UNH and Granite State including Advancement, Business Affairs, Center for Academic Resources, Granite Square Station, Campus Recreation, CHHS, Career Services, the Honors Program, High Impact Programs, Cooperative Extension, Enrollment Management, Human Resources, Institute on Disabilities, Facilities and Information Technology. Full-day Classes are scheduled monthly at New Hampshire Public TV. This course is open to USNH employees at no cost.
PROJECT JUMP START

The PMO offers assistance to departments looking to acquire or upgrade their systems to improve efficiency and productivity. Jump start services range from assisting clients develop business cases through the Project Proposal process through to providing project management oversight to the degree needed. Departments the PMO has assisted in the past year include the Institute on Disabilities, Center for International Education, Center for Academic Resources, Granite Square Station, Campus Recreation, CHHS, Career Services, the Honors Program, High Impact Programs, and Career Services.

UNH LEAN SUMMIT

UNH hosted its second Lean Summit in February in collaboration with NH Lean Network. Over 150 people attended the one-day summit in the MUB, more than doubling the attendance from the prior year. The panel discussion gained high praise from attendees. Over 30 improvement projects from UNH, USNH, and state government organizations were displayed on posters around the room. This year, UNH introduced the Lean Awards to celebrate the continuous improvement efforts made by our teams.

This year’s winners were:

- Lean Project Award: UNH Advancement – Gift Agreement Process
- Operational Efficiency Award: UNH Facilities – FAMIS TO GO
- Lean Culture Award: UNH IT Client Services

TRACKING OUR IMPROVEMENT RESULTS

To facilitate the chronicling of UNH’s improvement efforts through Lean and other methods, the PMO has created a web form where teams can record the impact of improvements they have made. The form, which is open to all UNH employees, will be a mechanism
to record improvements and savings made by UNH teams. With a brief form to submit, it will trigger an outreach from the PMO to collect additional details. The goal is to be able to recognize the impact of our improvement efforts individually and in aggregate. In collaboration with CPA and IT Communications, we plan to increase our recognition and celebration of these achievements.

Check out the web form at: https://tdforms.unh.edu/lean/.

**TEAMDYNAMIX STATISTICS**

Total number of IT projects created over the past Fiscal Year
- 129 (162 with Academic Technology)

Total number of IT projects closed/completed over the past Fiscal Year
- 92 (118 with Academic Technology)

Number of new client engagements
- 22 new client engagements including SPA, Audit, IOD, Hospitality Services, Broadband, Advancement, GSC, IHPP, MUB.

New users added to TD
- 130

Number of training sessions held; number of people trained
- 115 people trained the past 6 months

**BALANCED SCORECARD**

Working with the President’s Cabinet, as a group and individually, UNH PMO has brought the Level 1 Scorecard to a draft state. The Level 1 UNH Scorecard has 5 perspectives, 20 objectives, and 52 measures. The scorecard is now being cascaded into the VPFA organization, beginning with IT. Leveraging the work done by the Cabinet and a department’s strategic plans and initiatives, a departmental scorecard will be created to increase alignment between actions and desired outcomes.

**TEAMDYNAMIX IMPLEMENTATIONS AND STATISTICS**

The Project Management Office worked with twenty-two departments to implement TeamDynamix for their organization, including Hospitality Services, Sponsored Programs Administration, Advancement, Granite State College, Institute for Health Policy and Practice, Institute on Disability, Broadband, Audit, and the Memorial Union Building. TeamDynamix Administrators engage with clients to assist in improving and supporting both business workflows and project management with the objective to increase efficiency, transparency, collaboration, consistency, and the capability to report on the great work being done in these organizations.

Over the past six months, 115 people were trained in the use of TeamDynamix software and 130 new users were added to the application. In addition, the PMO collaborated with IT Client Services in the creation of thirteen new customer-facing forms and the improvement of 28 existing forms which support business process automation.

What the Data shows for UNH IT

The UNH IT department completed 118 projects in FY16, while adding 162 new projects. These numbers represent new efforts and complex enhancements, and are in addition to the operational work involved in sustaining, supporting, and smaller improvements to existing services.