MISSION
An enabler of NDSU’s success, the Information Technology Division is a talented team of professionals striving to provide reliable systems and services and to encourage the adoption of innovative technologies.

VALUES
As a team, our actions show respect for:

- The individual – We ensure the dignity of each person is preserved in all our interactions.
- Multiple perspectives – We respect one another’s contribution by ensuring that we deliberately seek and hear each other’s views and concerns through open communication.
- Personal growth and accountability – It is incumbent upon us to stay current in our professions to ensure our continued success.

GUIDING PRINCIPLES
To become a model information technology service provider, whose success is measured by the quality of support provided to those we serve by:

- Recognizing that it’s about people – The Information Technology Division remains committed to the idea that technology is never an end in itself, but is only a tool to support the success of individuals in the NDSU community.
- Focusing on what makes a difference – The Information Technology Division directs resources to those efforts and activities that have the greatest potential to support innovation and effectively achieve NDSU’s goals.
- Being adaptable – The Information Technology Division seeks to support, encourage and facilitate creative uses and applications of technology to meet a variety of needs.
- Providing useful information, courteous service and appropriate follow-up – The division seeks to ensure that all our interactions achieve these goals with the individuals we serve, whether in person, remotely or with automated systems.

VISION
To realize the success of the Information Technology Division, we respectfully acknowledge the diverse and changing needs of the individuals we serve in the dynamic fields of teaching, research and outreach.

THE THREE DEPARTMENTS WITHIN THE INFORMATION TECHNOLOGY DIVISION ARE:

<table>
<thead>
<tr>
<th>ENTERPRISE COMPUTING &amp; INFRASTRUCTURE</th>
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<tbody>
<tr>
<td>led by Marc Wallman, assistant vice president</td>
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<table>
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<tr>
<th>INFORMATION TECHNOLOGY SERVICES</th>
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<tr>
<td>led by Jeffrey Gerst, Ph.D., associate vice president and CIO</td>
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<tr>
<th>TELECOMMUNICATIONS &amp; EMERGENCY SUPPORT TECHNOLOGIES</th>
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<tbody>
<tr>
<td>led by Joan Chapek, assistant vice president</td>
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</table>
The IT Division’s mission is to serve as enablers of technologies. When technology functions seamlessly, the University System, the campus, the IT organization and specific departments or individuals are able to optimize use of teaching, learning, research and business applications and processes to achieve desired outcomes — and we’ve achieved our mission.

As an organization, we strive to provide reliable, secure systems and services for our customers. We recognize that it’s about people, as we remain committed to the idea that technology is never an end in itself, but is only a tool to support the success of individuals in the NDSU community. IT staff, with a broad range of competencies, understand the intricacies of technologies and service delivery. Users are able to navigate through networks and applications with little thought as to the existence of ubiquitous technologies supported by highly-skilled individuals. New technologies, upgrades and maintenance continue to enhance IT capabilities critical for meeting current and future consumer demands.

Information technology without question is knowledge-intense, and people’s talent, expertise and ingenuity are essential ingredients for successful IT services and support. Talented IT staff continue to provide solutions to complex challenges involving infrastructure, security, enhanced unified communications, and IT instructional and service support to students, faculty and staff.

While the IT Division’s organizational structure consists of three departments — Enterprise Computing & Infrastructure, Information Technology Services, and Telecommunications & Emergency Support Technology — these departments work collectively in a team-focused relationship. The phrase “the whole is greater than the sum of its parts” summarizes how we interact collaboratively to facilitate problem-solving initiatives.

As a team, IT staff rely on strong communication and interface with each other to enable NDSU’s technology capabilities to be at the forefront. The information ecosystem is a powerful mechanism for gathering and disseminating data. Individually and collectively, IT staff work cross-functionally across division lines to ensure that a broad range of IT services support the success of individuals in the NDSU community.

The IT Division continues the practice of monthly all-staff IT Time gatherings, which offer professional development programs and opportunities for organizational updates to be shared. Additionally, the importance of gathering informally with the Vice President for an occasional coffee time imparts camaraderie. Published monthly, the InTouch newsletter continues to be a way staff can stay connected to what is happening in the organization and with other staff members. To extend the sharing network, we added a student section to InTouch. Each year, staff members look forward to organizing and contributing to the United Way Silent Auction. In its 14th year, this event raised nearly $1,500.

I.C.E. AWARD RECOGNITION EVENT

Vice President for Information Technology Bonnie Neas presented the second annual IT Division award for Innovation, Collaboration and Excellence to Britt McAlister, of the Enterprise Computing & Infrastructure department, on March 18, 2010.

Britt received the award for working with a variety of customers to develop an efficient financial reporting Web site and report distribution process for NDSU and the University System. This reporting solution has saved NDSU hundreds of staff hours. By tapping into “official” source information, discrepancies in data have been eliminated and reports are more accessible and user-friendly.

Other nominees for the I.C.E. Award included:
- Steve Beckermann, Media Technologies Consultant
- Tammy Cummings, Instructional Services Consultant
- Blair Johnson, Desktop Support Specialist (Ag. Ext.)
- Jim Ross, Sr. Software Engineer & Interim Lead
- Greg Wettstein, Chief Computation Scientist & Principal Engineer

I.C.E. AWARD RECOGNITION EVENT
PLANS FOR FUTURE IT TEAM AWARD
With the prominence of a team environment in the organization, the IT Recognition Committee initiated plans to develop criteria for an IT Team Award. This award would recognize and reward a group of individuals who have established a well-defined goal or activity and have worked together to achieve results that significantly impact the campus community. In addition to recognizing individual achievement through the I.C.E. Award, the IT Team Award intends to emphasize the efforts of teamwork in achieving a project or noteworthy goal. More information on the IT Division awards program is available at www.ndsu.edu/vpit/award

IT DIVISION ORGANIZATIONAL CHANGES
In its third year of existence, the IT Division continues to refine its organizational structure. Several staff were realigned to different roles, allowing the organization to make the most of staff skill sets.

Five new staff were added to the organization during FY 09-10, two of whom filled vacancies from separations and one retirement. With the addition of the downtown campus, IT support was required for Barry Hall and we reassigned one of the main IT campus Help Desk staff to that location. A new position was created to backfill NDSU’s campus needs. A Technology Systems Coordinator was hired in Telecommunications & Emergency Support Technologies to expand research activities and develop existing, new and emerging technologies related to implementing systems and services that will advance unified communications.

Recruitment proved to be very strong as the stagnant economy continued to draw applicants from across the country. As part of our recruitment strategy, we continued to emphasize NDSU’s extensive healthcare plan, and the division’s flexible work culture and strong professional development program to applicants.

During the latter part of the year, we engaged in a major search for an executive director for Enterprise Systems & Application Development, which resulted in a hire in August 2010. Our recruitment efforts were restrained for a short period of time when interim President Richard Hanson announced a temporary hiring freeze as part of his overall plan to examine NDSU budget issues.

The organization continued to refine position descriptions and titles of staff to reflect the changing trends in information technology. Such endeavors are always ongoing. As with any IT organization, change is inevitably a way of life and is reflected through a continuum of calibrating talent and skills to align with future organizational needs.

EDUTECH STAFF TRANSFER TO THE INFORMATION TECHNOLOGY DEPARTMENT STATE AGENCY
On July 1, 2009, EduTech formally transferred from the IT Division to the North Dakota Information Technology Department. EduTech previously held a partnership with ITS as a K-20 technology support organization offering a variety of services to help North Dakota schools and educators improve student achievement. The organization was established 1990 as a bulletin board system for K-12 schools under the name of SendIT. In 2002, SendIT merged with the Center for Innovation in Instruction to become EduTech. Although EduTech is no longer part of the IT Division, they continue to be housed at NDSU, and a strong relationship between EduTech and the IT Division continues to exist. Many shared IT services and resources remained the same through a memorandum of understanding. We have had an outstanding relationship with Jody French, director of Edutech, and all of her staff over the years.
Enterprise Computing & Infrastructure (ECI) is responsible for all centralized engineering activity for the Information Technology Division. ECI is composed of four units: Enterprise Application Development, Enterprise Systems, Network Engineering and Operations, and Research Computing Services. The 2009-2010 accomplishments of ECI are highlighted below.

**ENTERPRISE APPLICATION DEVELOPMENT**
Enterprise Application Development is responsible for delivering software engineering and development services to NDSU departments and to the North Dakota University System. EAD maintains and supports many applications, including the NDUS Help Center (Remedy Help Desk incident tracking system), NDSU’s Content Management System (TYPO3), Blackboard learning management system, and the NDSU event calendar.

During the 2009-2010 fiscal year, EAD saw a significant milestone. In November 2009, the old webserver, sometimes called webdev, was retired and replaced with a new, more secure Web development environment called Pubweb. The webdev service was designed in approximately 1997 and operated for 12 years with few substantive architectural changes. NDSU now has three options for delivering web content: Pubweb, TYPO3 and Blackboard.

**Table I. Enterprise Application Development Data**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average daily active courses</td>
<td>2,474</td>
</tr>
<tr>
<td>Average daily active organizations</td>
<td>582</td>
</tr>
<tr>
<td>Average daily active users</td>
<td>13,375</td>
</tr>
<tr>
<td>Average daily page views</td>
<td>4,399</td>
</tr>
<tr>
<td>Total logins</td>
<td>1,923,184</td>
</tr>
<tr>
<td>Average logins per day</td>
<td>5,269</td>
</tr>
<tr>
<td>Distinct hosts</td>
<td>89,106</td>
</tr>
</tbody>
</table>
As the public-facing department of the IT Division, Information Technology Services continues to focus on providing the campus community with support, training and assistance to promote the success of NDSU. To accomplish this, ITS operates a variety of primary services in support of customer needs. The 2009-2010 accomplishments of these service areas are described in the following sections.

CLASSROOM TECHNOLOGIES
A joint effort was made between the Classroom Technologies team and the Instructional Services team to install the first lecture capture enabled classrooms. Funding was approved for five classrooms. The first classroom is on track for completion by November 1, 2010. The remaining four classrooms will be completed after back-ordered equipment arrives.

After the successful implementation of a more robust system for controlling audiovisual equipment in Barry Hall, the Classroom Technologies team is in the process of replacing outdated controllers across the main campus with the new controllers. The new controllers allow improved remote control access of equipment installed in classrooms and automatic power-off for projectors after an extended period of nonuse, saving resources on lamp replacement.

Faculty and staff requests for videoconference meetings have increased, particularly in spaces that do not have videoconference equipment available. To meet this growing need, funding was approved for the purchase of a mobile videoconferencing system. This additional equipment has been requested and used frequently. Desktop conferencing support for students connecting via video, as well as students in traditional classes, has increased substantially over the past year.

The Classroom Technologies group provided equipment and support for the statewide North Dakota Cyberinfrastructure Conference, which will be hosted at NDSU in March 2011. High demand for additional cluster computers lead to the installation of four computers on the main level of the Memorial Union.

Two Classroom Technologies staff were invited to participate in an extensive campus wide “Americans with Disabilities Act” planning committee; the purpose of ITS involvement is to aid in providing assistive technology information.

Looking forward, desktop virtualization is a high priority project being explored by ECI as well as the Classroom Technologies staff.
DESKTOP SUPPORT
Desktop Support continues to offer support to departments across campus, assisting staff and faculty with technical issues. Desktop Support services are offered both on campus and throughout the state’s extension offices and research centers. While not all departments require assistance from Desktop Support, an estimated 60% of all NDSU staff and faculty are supported by Desktop Support. Basic services include new computer setup, software installation, printer setup and assistance, and other peripheral services. Security patching, virus prevention and general maintenance are also provided on a daily basis.

The Desktop Support team assisted with the migration of staff and faculty to the NDSU Outlook e-mail and calendaring system. This process required vast communication with all departments and individuals, even those not generally supported by Desktop Support. The team also provided Web documentation for initial setup and migration from old e-mail clients and configuration of systems for new features.

Desktop Support continues to facilitate communication among other technical support groups on campus and assists with core IT resources, including Windows Update Center, McAfee Antivirus, assistance with operating system setup and implementation of computer hardware standards.

IT HELP DESK
Total calls to the IT Help Desk increased by 10%, to 36,612 calls. Of the total calls, 34,050 were answered (an increase of 16%), giving an abandoned call rate of 7% (2,562 abandoned calls). An abandoned call rate below 10% is considered efficient according to call center standards. These figures include both NDUS calls answered at NDSU and NDSU IT support calls.

For NDSU, there was a 45% increase in walk-up support, with just under 30,000 NDSU IT support contacts. The increase in walk-up support is continuing, with more hand-held devices and smartphones being used by students, staff and faculty on campus.

Incidents closed on first contact increased by 25%, to over 25,000 incidents closed on first contact. Last year, the IT Help Desk started providing ‘chat’ support. The chat client through which the IT Help Desk provides support also allows remote view or control of customer computers as needed. Over the year, the IT Help Desk has seen a significant increase in the number of ‘chat’ support sessions. At this time, reliable data on this trend is not available.

Equipment check-out at the IT Help Desk increased by 6%, to just under 4,000 individual bookings.
Table 2. IT Help Desk Data

<table>
<thead>
<tr>
<th></th>
<th>FY10</th>
<th>Change from FY09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received</td>
<td>36,612</td>
<td>10%</td>
</tr>
<tr>
<td>Answered</td>
<td>34,050</td>
<td>16%</td>
</tr>
<tr>
<td>Abandoned</td>
<td>2,562</td>
<td>-35%</td>
</tr>
<tr>
<td>NDSU IT Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received</td>
<td>21,195</td>
<td>-3%</td>
</tr>
<tr>
<td>Answered</td>
<td>19,098</td>
<td>4%</td>
</tr>
<tr>
<td>Abandoned</td>
<td>2,097</td>
<td>-39%</td>
</tr>
<tr>
<td>Average Talk Time</td>
<td>4:11</td>
<td>-5%</td>
</tr>
<tr>
<td>Voice Mail</td>
<td>62</td>
<td>29%</td>
</tr>
<tr>
<td>Outgoing calls</td>
<td>10,822</td>
<td>1%</td>
</tr>
<tr>
<td>Total telephone contacts</td>
<td>29,920</td>
<td>3%</td>
</tr>
<tr>
<td>NDSU Other Contacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mail received</td>
<td>5,313</td>
<td>-7%</td>
</tr>
<tr>
<td>Walk-up</td>
<td>9,143</td>
<td>45%</td>
</tr>
<tr>
<td>NDUS Help Desk Calls (Answered at NDSU)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received</td>
<td>15,417</td>
<td>35%</td>
</tr>
<tr>
<td>Answered</td>
<td>14,952</td>
<td>37%</td>
</tr>
<tr>
<td>Abandoned</td>
<td>465</td>
<td>-9%</td>
</tr>
<tr>
<td>Incidents closed on first contact</td>
<td>24,952</td>
<td>25%</td>
</tr>
<tr>
<td>OMRs Processed</td>
<td>2,346</td>
<td>19%</td>
</tr>
<tr>
<td>Distribution Lists (Listserv)</td>
<td>3,521</td>
<td>7%</td>
</tr>
<tr>
<td>Equipment Reservations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual bookings</td>
<td>3,853</td>
<td>6%</td>
</tr>
<tr>
<td>Plots</td>
<td>1,373</td>
<td>-20%</td>
</tr>
</tbody>
</table>

INSTRUCTIONAL SERVICES

Instructional Services partnered with Distance and Continuing Education on two important projects. The first project involved implementation of the Respondus LockDown Browser on Blackboard for use by NDSU faculty and students. The LockDown Browser creates a locked testing environment within Blackboard to discourage cheating on online tests. With the LockDown Browser, students are unable to do the following:

- print or copy
- visit other URLs or applications
- search for answers online
- send instant messages
- access other parts of the Blackboard course
- exit prior to finishing the test

The second project that Instructional Services pursued in partnership with Distance and Continuing Education was investigating lecture capture technology. Faculty from the Sociology Department expressed interest in installing this technology on campus, so
Instructional Services conducted research for this project. The Distance and Continuing Education team had also been approached about implementing lecture capture, so the two teams worked together in conducting the research. After multiple vendors visited campus to demonstrate their products and a detailed study was conducted to compare the products, the two departments decided to pilot the Tegrity product. By installing a camera, microphone(s) and Tegrity software in the classroom, an instructor can easily record everything that happens in the classroom. These recordings are available through the corresponding Blackboard course. As a result, students can review what happened in the classroom through easy access of the recording on Blackboard. Tegrity has a remarkable search function that enables students to focus in on specific class material. Instructors of online classes will also be able to use these recordings for their distance students in lieu of traditional class time. Five classrooms will have been equipped with the necessary hardware and software as of January 2011.

Another new tool that was made available to NDSU faculty, staff and students through the North Dakota University System is Pronto, Wimba’s answer to instant messaging. Pronto offers extra functionality by tying into the Blackboard system and automatically adding users of a Blackboard course into a Pronto group. Pronto also has an interactive whiteboard, application sharing capability and an online office hours function that can queue the students as an instructor works with them individually.

Three members of the Instructional Services team presented a poster session at the BbWorld Conference in July 2010. The session was on “Bb Buzz” – short audio/video Blackboard tutorials created in a talk show format. The Instructional Services team members were well received, especially since we handed out hand buzzers.

The Instructional Services team brainstormed some ideas on how to present information about our services to new faculty during August Faculty Orientation. Orientation is a very busy time with much information packed into just a couple of days. The team decided to create poster sessions to display in the hallway outside of the orientation meeting rooms. During breaks, faculty could visit the Instructional Services booths, talk with members of the team and take copies of helpful handouts for later reference. We also set up the poster sessions for the returning Faculty Orientation.

Nancy Lilleberg and Tammy Cummings worked with three faculty members – Ann Clapper, Anita Welch and Donna Grandbois – to present at NDSU’s Women’s Week. The session, named “Digital Divas” focused on how the three professors use instructional technology to improve their teaching and students’ learning.

The winter brought with it the “H1N1 Scare” so the Instructional Services team offered to present at departmental meetings information on how technology could help if the H1N1 pandemic severely affected class attendance. Some technologies mentioned were:

- Using Wimba Classroom to record class presentations so that students unable to attend could still receive instruction.
- Using hand-held video or audio recorders to prepare supplementary lessons available via Blackboard.
- Using Blackboard to present course content in a planned manner, along with online testing.

During the last half of the year, Instructional Services played an important role in planning for the Blackboard upgrade from version 8 to version 9. This major upgrade affected all training, documentation, and handling of faculty and student concerns about the change. The upgrade was completed in August 2010, but most of the planning and work was done in the previous fiscal year.

TECHNOLOGY LEARNING & MEDIA CENTER

The Technology Learning & Media Center continues to provide a variety of technology learning and media services for the campus community, including walk-in and by-appointment multimedia services, media studio and special media services, classroom project support, plotting services, coursework assistance and short technology classes. During FY 2009-2010, TLMC served more than 9,000 customers, a 16% increase from the previous year. In addition to these recorded contacts, many students used the TLMC lab to work on group and individual multimedia projects.

Technology training continues to be a popular service. During 2009-2010, 87 training sessions were
provided by TLMC staff members for the general student population, and 78 sessions were delivered to specific classes, in response to instructor requests. With the addition of a full-time media technologies consultant in 2008, the TLMC has been able to provide limited video production services. During spring 2010, the TLMC media consultant spent approximately 122 hours working on media projects for NDSU departments. Spring reservations for the media studio totaled 82 hours. With its focus on multimedia services and student project support and training, the TLMC is a valuable component of the ITS Instructional Services team.

OUTREACH & ADVANCED APPLICATIONS
Through the advanced application coordinator position, ITS provides the resources to identify, support and promote applications of advanced networks and similar advanced technologies for NDSU, the K-20 community and other partners. Ongoing activities in 2009-2010 included development and facilitation of regional events that serve to increase awareness of research and education networks and their uses in research, teaching and learning; continued work with colleagues in similar positions in other states to develop and promote collaboration, leverage resources and coordinate efforts across campus and the North Dakota University System, and across the Northern Tier Network; and supporting North Dakota’s K12 community in identifying, promoting and coordinating Internet2/videoconferencing educational activities.

NDSU Provides Leadership – Across the State, Regionally and Nationally
NDSU continues its membership and leadership roles in national and regional research and education networks such as Internet2 and the Northern Tier Network. During this last year, awards of three new grant initiatives specifically involving the IT Division will concentrate activities on expanding the reach of the national research & education networks and broadband capacity in our region and nationally. In each case, these initiatives include NDSU in a leadership role, serving as either the lead institution or one of the lead institutions facilitating these initiatives.

NDSU is represented nationally through staff participation in multi-state collaborations, presenting at local and national conferences, and serving on working groups and committees. Staff currently represent NDSU by serving on the Internet2 national conference program committee and the executive committee of the Internet2 K20 Initiative, including subcommittee work on teams addressing needs and trends related to Federated Identity Management and support for the Internet2 Sponsored Education Program Participants. NDSU continues to provide staff and limited technical support for the annual Megaconference Jr. global multipoint videoconference event. NDSU is also represented at the Educause Midwest Regional Conference, with ITS staff serving on the program committee.

Connecting to Research & Education Resources: For Research, Teaching and Service
ITS Outreach Initiatives serve to provide support for faculty and students at NDSU, for campuses in the ND University System and for the K12 community. In addition to strengthening communication among these communities to increase awareness and share information on new resources, these outreach activities also are notable for the role they play in developing new ways for research and education to utilize resources available through critical cyberinfrastructure components provided exclusively through access to our national and global R&E networks.

These valuable resources originate both at sites within ND and located anywhere in the world. Through the high bandwidth capacity of today’s R&E networks, examples of resources covering a wide range of disciplines are included here.

Education Outreach from Knife River Indian Villages National Historic Site (National Park Service)
By connecting via a local ISP to classrooms and campuses on STAGEnet, curriculum-based education outreach activities based at the Knife River site at Stanton, N.D., can be shared with students and scholars located anywhere. Participating in ongoing state and national K12 content provider programs, the education staff at Knife River now find themselves scheduling virtual programs with classes across the country via h.323 videoconferencing.

Theodore Roosevelt Center in Dickinson, N.D.
Dickinson State University is home to the Theodore Roosevelt Center, a digital presidential library working to gather all of Roosevelt’s papers virtually from locations across the country. The Library of Congress, Harvard University, the National Park Service and many other sites hold countless original documents that will be part of this collection. Building this digital collection of primary sources involves addressing the...
needs of permanent and secure storage space for the
documents, a database application to manage the
collection all accessible via an interface on the Web
that allows users to search and access more than one
million files, and finally, the bandwidth needed to
access the collection regardless of where the request
originates. Scholars from across the U.S. and globally
currently assist the TR Center in locating, digitizing
and analyzing the files in preparation for their addi-
tion to the collection.

The Deep Underground Science and Engineering
Laboratory in Lead, S.D.
The effort to turn this once abandoned gold mine
shaft into a world class research facility is led by the
University of California at Berkeley, the South Dakota
School of Mines and Technology and the National
Science Foundation. The Homestake Mine shaft is
8,000 feet deep, and DUSEL will be the world’s
largest, deepest underground laboratory. DUSEL will
provide opportunities for transformational discoveries
in particle physics, nuclear physics and astrophysics,
but DUSEL also will be multidisciplinary.

Led by efforts of NDSU’s Division of IT Outreach
Initiatives, remote education outreach activities
from DUSEL were featured at the fall 2010 Internet2
Member Meeting in Atlanta, Georgia, and at the
North Dakota Cyberinfrastructure Conference in
March 2011. An on-site workshop for faculty, teacher
education students and high school science teachers
from both North and South Dakota is planned for
early April 2011.

Many of these initiatives are included in presentations
and reports to committees of the ND Legislature and
the ND State Board of Higher Education.

STATISTICAL CONSULTING
The Statistical Consulting unit within ITS/Statistics
provided consulting services to the NDUS over the
past year through the efforts of one full-time staff
member from ITS and several graduate students
(contributing a total of 10-20 hours per week) from
the Department of Statistics. Consulting records for
the full-time staff person indicate more than 250
unique clients accounting for approximately 1,200
recorded contacts (in person, via phone and e-mail)
were helped from a wide variety of academic depart-
ments. Roughly half of these contacts were directly
related to statistical questions. The remainder consists
primarily of calls for appointments and questions
related to software usage (SAS, SPSS) and use of the
Optical Mark Reader (OMR) for both test scoring and
Student Ratings of Instruction processing.

The bar chart below places the 09-10 fiscal year into
historical context. Additional bar charts on the next
page show breakdowns of these data by question type
as either statistical or other and expressed as either a
total count within the year or as a percentage of the
total count within the year.

![Bar chart showing Consulting Statistician Client Contacts]

One additional measure of statistical consulting
efforts is the number of refereed publications includ-
ing members of statistical consulting among the
authors. We averaged 1-3 publications per year from
2000-2010. Publication counts for 2006, 2007, and
2008 were 5, 5, and 4, respectively, but have dropped
to 1 per year in 2009 and 2010.

In addition to the above consulting efforts, the full
time consultant taught a one-credit seminar (Statistics
794 in Fall 2009) on Monte Carlo Simulations using
SAS software and coordinated the spring semester
graduate presentation seminars (Statistics 790 in
spring 2010).
He also migrated the test scoring programs used in conjunction with the OMR scanner (which are written in SAS) from the shared UNIX host (abacus) to a desktop PC running Windows in spring 2010.
Statistical Consulting Client Contacts

Number of Contacts/Client

Data from 2009–2010 Fiscal Year
Statistical Consulting Client Contacts

Data from 2009–2010 Fiscal Year
DEPARTMENT REPORT
TELECOMMUNICATIONS & EMERGENCY SUPPORT TECHNOLOGIES

As a result of several campuswide directives and initiatives, the Telecommunications & Emergency Support Technologies department has experienced tremendous expansion and growth. The department has implemented new advanced technologies designed to enhance the security and safety of the campus, engaged in enterprisewide partnerships, reflected on the fusion of voice and data on one platform, and have continued to leverage the institution’s investment in providing the technology and infrastructure to support the growth and expansion of NDSU on the campus and its remote sites. Rapid change in operation, the ability to think and respond quickly, and the endurance of an aggressive workload has consumed the Telecomm staff during the past year, focusing on the growth and the sustaining of collaborative partnerships.

TRANSPORT INFRASTRUCTURE, PUBLIC NETWORKS, AND VOICE TECHNOLOGIES & NETWORKS

• Successful completion of the $1.25 million upgrade of the AVAYA Telephone System to an Internet Protocol connected enterprise system. This IP-connected infrastructure allowed NDSU to provide telephone service to eight remote locations in Fargo, but more significantly allowed NDSU to begin serving the North Dakota State College of Science in August 2009 as part of a single-enterprise telecommunications system. An Enterprise Survivable Server was also installed at the Research Park, and final design of this project also extended five-digit dialing to and from several North Dakota University System campuses.

• The Phase II Single Mode Fiber project design and engineering was completed, the RFP released, the project awarded to Master Construction, and construction begun. Project dollars provided by general fund, deferred maintenance, internal service and auxiliaries will extend the university’s infrastructure to the north and east part of campus, providing greater bandwidth capacity to campus endpoints, extending fiber trunks placed in Phase I to additional campus buildings.

• Began business process development and long-term planning in partnership with NDSCS, with an analyst leadership role identified.

• A comprehensive cost analysis of the department’s “lines of business” was finalized. It was determined that the communications charge encompassing voice operations, as well as the underground infrastructure to support data, voice, video and CATV, would not result in a line increase. This rate stability is due in part to the additional 1,000 lines of business (an increase of 20%) realized from the NDSCS partnership, as well as to an increased appropriation allocation. Separate funds for the respective departmental lines of service were reduced to two funds with the utilization of program numbers for each line of business.

• A staff “Remedy” committee formed to outline trouble call reporting within the overall IT Division.

• Completed the provisioning of data, voice, video and security card access to the Cityscapes Plaza in August 2009. Leased public infrastructure provided transparent communications to apartments served by the Residence Life management agreement, as well as to the NDSU Police and Bookstore occupants.

• Voice, data, CATV, card access and video surveillance infrastructure and equipment extended to the new President’s residence.

• With the State of North Dakota’s decision to procure an AVAYA telecommunications platform solution for state government voice communications, discussions will begin to potentially share resources.

CARD ACCESS, VIDEO SURVEILLANCE & COMMUNICATIONS TECHNOLOGIES

• Completed the installation of a centralized and integrated video surveillance system (software, servers and network), integrated with the existing CBORD card access system, installed
November 2009. Card access, integrated video, infrastructure and associated equipment report back to the newly renovated 24-hour Communications Call Center to better manage crisis situations. Six existing video surveillance cameras at Renaissance Hall became the pilot project, with two additional cameras at Ceres Hall to follow. Additional phases hope to bring existing independent campus video locations onto the “system” within a scalable model to enable further new construction design and build out as dollars are made available. With the implementation of these enhanced systems, previously allocated appropriations funding allowed the hiring of a Technology Coordinator position.

- Completed the transitioning of existing building controllers and card access readers from magnetic stripe to proximity, from the original Synergystics System to CBORD. The Bison Card Center continues to complete the re-carding process to a dual purpose card (magnetic stripe and proximity) for enhanced security.

- Continued expansion of the campus CATV infrastructure during the year extending signal to the Alba Bales building, the ANPC building, as well as significant Emergency Alert System equipment enhancements. Emergency Alert System infrastructure and systems/equipment now provide an emergency TV broadcast to 1,909 residence hall and apartment units as well as to 135 administrative and/or academic locations within 43 campus buildings. Routine testing of all systems continues on the first Wednesday of each month.

- A CATV signal contract extension was negotiated with CableOne with a minimal rate increase. The rate increase encompasses the infrastructure build out to NDSU remote sites for EAS broadcasting.

- Entered into a partnership with Student Life to share the existing CBORD system, adding privilege control applications (e.g., ID Card Center, stored value funds, meal plans and activities). This partnership emphasizes NDSU’s one-card philosophy of using a single ID card for multiple business processes and technology applications.

Table 3. FY 2009-2010 budget recap for Telecommunications & Emergency Support Technologies is as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriation</td>
<td>$960,276</td>
</tr>
<tr>
<td>Local (Re-charge)</td>
<td>$2,424,857</td>
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<tr>
<td>Capital</td>
<td>$2,473,780</td>
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<tr>
<td>Total FY2010</td>
<td>$5,858,913</td>
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IT DIVISION EMPLOYEES

Following is a list of employees in each Information Technology Division business unit as of June 30, 2009.

Office of the Vice President for Information Technology
Bonnie Neas, Vice President for Information Technology
Jeff Gerst, Associate Vice President for Information Technology Services and Chief Information Officer
Joan Chapek, Assistant Vice President for Telecommunications
Marc Wallman, Assistant Vice President for Enterprise Computing and Infrastructure
Jean Ostrom-Blonigen, Chief IT Planning Officer
Cathy Hanson, IT Staff Development Coordinator
Janet Stringer, IT Budget Coordinator
CeCe Rohwedder, Assistant to Vice President for IT

Enterprise Computing and Infrastructure
Jill Anderson, Application Developer
Jon Bronken, Assistant Manager & Systems Engineer
Eric Christeson, Application Developer
Diane Clark, Network Infrastructure Technician
Bruce Curtis, Senior Network Engineer
David Dahl, Senior Network Infrastructure Specialist
Chad Foster, Network Infrastructure Technician
Richard Frovarp, Software Engineer
Nathan Huff, System Administrator
Brian Kennedy, System Administrator
Britt McAlister, Principle Engineer for Special Projects
Bryan Mesich, Systems Administrator
Tim Mooney, UNIX Administrator
Val Nordsletten, Network Engineer
Nathan Olson, System Administrator
Matt Reimer, Network Infrastructure Technician
Jim Ross, Lead Application Dev. Specialist
Jaclyn Samuel, IT Business Analyst
Dale Summers, Database Administrator
Cheryl Swanson, Network Infrastructure Technician
Carol Tschakert, Application Developer
Bob Viou, Network Engineer
Carla Wells, Network Infrastructure Technician
Greg Wettstein, Research Comp. Group Leader
Gary Whaley, Systems Administrator
Terry Wieland, Director of Network Engineering & Operations

Information Technology Services
Michael Aho, Help Desk Consultant
Vince Anderson, Desktop Support Specialist
Lincoln Bathie, Desktop Support Manager
Steve Beckermann, Media Technologies Consultant
Sharon Brinker, Administrative Secretary
Chad Coleman, Computer Systems Specialist
Tammy Cummings, Instructional Services Consultant
Curt Doetkott, Consulting Statistician
Daniel Erichsen, Interactive Media Specialist
Jon Fry, Desktop Support Specialist (Ag. Ext.)
Enrique Garcia, Computer Systems Analyst
Jeff Gimbel, Help Desk Consultant
Nathan Gonser, Help Desk Consultant
David Hamiga, Desktop Support Specialist
Marty Hoag, Director of Policy/Strategic Services
Blair Johnson, Desktop Support Specialist (Ag. Ext.)
Cj Johnson, Instructional Services Consultant
Sherree Kornkven, Tech Learning & Media Center Mgr
Kim Lammers, ITS Business Manager
Nancy Lilleberg, Instructional Services Manager
Cynthia Lura, Account Technician
Char Maas, Account Technician
Micah McGowen, Classroom Technology Specialist
Pam Nielsen, IT Software Licensing Coordinator
Lorna Olsen, Instructional Services Consultant
Kim Owen, Advanced Applications Coordinator
Luke Prather, Instructional Services Consultant
Jerry Ranum, Desktop Support Specialist (Ag. Ext.)
Jim Sellner, Desktop Support Specialist
Theresa Semmens, NDSU IT Security Officer
Jim Senechal, Computer Systems Specialist
Steve Sobiech, Assistant Help Desk Manager
Melissa Stotz, Classroom Technology Manager
Cloy Tobola, ITS Communications Coordinator
John Underwood, Help Desk Manager
Michael Wolf, Computer Systems Specialist

Telecommunications and Emergency Support Technologies
Jason Blosser, Technology Systems Coordinator
Gail Bjornstad, Telecom Analyst
Vance Gerchak, Director for Telecommunications
Cindy Kozojed, Telecom Analyst
Linda Krogen-Brandt, Telecom Analyst
Brian Miller, Card Access Analyst Technician
Kathie Silkey, Telecom Analyst
Susan Strutz-Jenstead, Telecom Analyst
## FINANCIALS

### FY10 SOURCES OF IT SALARY AND OPERATING BUDGETS

<table>
<thead>
<tr>
<th>Funding source</th>
<th>Amount</th>
<th>% of total</th>
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<tbody>
<tr>
<td>NDUS-SLA</td>
<td>$2,280,698</td>
<td>19.0</td>
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<tr>
<td>NDSU – Appropriated</td>
<td>$4,384,618</td>
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<tr>
<td>Student Technology fee*</td>
<td>$1,600,000</td>
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<tr>
<td>Local/Recharge</td>
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<tr>
<td>Capital-Telephone Upgrade</td>
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<td>TOTAL</td>
<td>$13,746,163</td>
<td>100.0</td>
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*Total technology fee receipts for FY10 $2,120,878
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