DIVISION OF INFORMATION TECHNOLOGY

ASSESSMENT REPORT

2007 – 2008

ANNUAL ASSESSMENT AND PROGRAM EVALUATION REPORT
DIVISION OF INFORMATION TECHNOLOGY

I. Brief Overview of Unit

During the 2007 – 2008 academic year, the Division of Information Technology made significant gains in all areas of operation. Although we experienced changes in management, reporting structures and other organizational adjustments, we remained focused on our primary mission; the support of the University's instructional, research and administrative programs.

The IT division is organized to provide more decision making and responsibility at levels below the Office of the Vice Chancellor for IT/CIO. The organization remains focused on rebuilding the trust and confidence of our community in the IT division at NC A&T SU.

The Office of the Vice Chancellor for Information Technology and Chief Information Officer is responsible for strengthening and supporting the university's learning, discovery, and engagement activities by providing the leadership to position the university on a path that represents operational excellence and integrates advanced technologies that enhance teaching, learning, and research. Seven units report to the Office of the Vice Chancellor. These are: Administration, Application Support, Networking and Communication, Security Compliance & Policies, Support Services, Systems & Data Center Operations, and Digital Media Services.

The Administration unit is led by the Assistant Vice Chancellor for Teaching and Learning Technology and is responsible for managing the IT departments that plan, install, monitor, and support the university's information technology infrastructure. It is also responsible for communicating IT initiatives that impact or may be of interest to the university community. Additionally, the Change Control Board [CCB] is a function of this office. The 12 member board is drawn from a cross section of staff within the IT division and is led by a project director. The CCB's primary role is to instill a culture of change management within the division to ensure that proposed infrastructure changes comply with the guidelines and standards set forth to maintain optimal availability of all production systems. The departments that report to the Administration unit are: 1) Budget & Finance 2) Human Resources 3) Procurement and Asset Management 4) Project Management 5) Training & Development, and 6) Communications.

The Application Support unit is led by an IT director and is responsible for university-wide applications. This office is responsible for the operations of DoIT and provides guidance and oversight of the implementation of technology supported by the division. The following departments report to this office: 1) Database Management 2) Enterprise Resource Planning [ERP], and 3) Web Services.

The Digital Media Services unit is led by an IT director and is responsible for developing, deploying and managing the infrastructure and curriculum to deliver the technology

proficiencies and professional development competencies of the university community. The Teaching and Learning Environments department supports the Digital Media Services unit and engages in community-based initiatives to address the 'digital divide'. This unit also manages the Instructional Design Development and Support department which offer Blackboard® services and e-Learning services. The four departments that support the Digital Media Services unit are: 1) Media Services 2) Instructional Design Development & Support 3) Teaching and Learning Environments, and 4) Crosby TV Studio.

The Networking and Communications unit is led by the Assistant Vice Chancellor for Networking and Communications and is responsible for providing state-of-the art network and communication technologies for NC A&T State University. Services include a high-speed fiber based infrastructure to ensure reliable voice, data, and video as well as multimedia network connections. The three departments that support this unit are: 1) Communications 2) Networking, and 3) 90.1 WNAA radio station.

The Security Compliance & Policies unit is led by an IT director and reports to the Office of the Vice Chancellor for Information Technology/CIO. This unit consists of a security and audit director and one security analyst.

The Support Services unit is led by an IT director and is responsible for Aggie Technical Support [ATS], *formerly Aggie Help Desk*, Student Technology Services [STS], and all computer labs. This office provides the day-to-day management and support of the academic, administrative, and auxiliary campus computing systems.

The Systems and Data Center Operations unit is led by an IT director and is responsible for the overall architectural design and coordination of IT infrastructure. This office is responsible for the oversight of technology design and development plans for all departments in the IT division, university divisions, and external groups. Additionally, this unit ensures that the campus infrastructure is developed and implemented using a consistent, comprehensive set of guiding principles and standards. The three departments that support this unit are: 1) Data Center Operations 2) Windows Server Development, and 3) Unix Server Development.

II. Strategic Plan

A. Vision

The primary vision for the Division of Information Technology is to establish North Carolina A&T State University as a truly technology-enabled institution. The role of technology is to provide the leadership team with relevant and accurate information on demand. IT strives to implement the latest advances in new technologies to support our faculty in the teaching and learning environment and to provide current technology to serve the needs of our students, faculty, and staff.

B. Mission

The mission of the Division of Information Technology is to implement a robust, highly available, and redundant technology infrastructure to support the university's instructional, research, and administrative programs. We welcome the challenge to provide first-rate on demand service to our clients while remaining mindful of the needs of our faculty, staff, and students.

C. Goals

Goal 1: Software Applications – Acquire Microsoft software for campus.

    a. <u>Outcomes Achieved</u>

        1a. NC A&T SU was selected to participate in the Thurgood Marshall College Fund which contributed $15M in software donated by Microsoft to various HBCU's. NC A&T SU was selected to receive $383,000.00.

        2a. DoIT Procurement office provided a justification proposal for the donated software and was granted all items requested.

    b. <u>Assessment Measurements</u> – Measurements are determined by feedback of products and services. The CIO gets feedback from personnel with TMCF and receives software granted.

    c. <u>Assessment Procedures</u> – The DoIT Procurement office ensures all software has been delivered and installed on the software server.

    d. <u>Administration of Assessment Procedures</u> – Director of DoIT Policies, Procedures and Procurement.

    e. <u>Use of Findings to Improve the Unit</u> – Communication with TMCF for the shipment of products is a valuable asset. Implementation of communication procedures will be completed to ensure delivery of software.

Goal 2: Infrastructure – Implement University Call Center

    a. <u>Outcomes Achieved</u>

        1. Installed 125 IP phones.

        2. Created virtual call center for Enrollment Management and Center for Academic Excellence.

        3. Increased incoming call capacity for Enrollment Management by over 200%.

        4. Created single number for University Information Desks.

5. Enhanced user's ability in the call center by creating screen pop-up and automated data base access.

b. <u>Assessment Measurements</u> – Volume of calls can now be tracked and metrics determined.

c. <u>Assessment Procedures</u> – Networking staff review call logs, feedback from clients after service calls and evidence of on-demand delivery of products and service. The CIO gets feedback from cabinet meetings and discussions with various groups (faculty, staff, administration and students) throughout the campus. All senior managers in DoIT are expected to do likewise. Assessment results are discussed in senior management meetings and corrective actions taken.

d. <u>Administration of Assessment Procedures</u> – CIO and senior managers

e. <u>Use of Findings to Improve the Unit</u> – Input received from the types of requests called in by users is used to help determine technology needs and services throughout campus. Town hall meetings and other discussions with faculty, students and staff has indicated that progress is being made and further identifies additional technology upgrades as necessary. The strategy for improving communication is to enhance the networking infrastructure with the best technology and hiring highly skilled technicians to manage.

Goal 2a: Infrastructure – Improve Video Conferencing for Distance learning

a. <u>Outcomes Achieved</u>
1. Implemented H.329 technology which allows for high resolution graphics.
2. Hosted Astronomy Class from A&T to Virginia Tech. The improvements in graphic gave the abilities to distinguish varies patterns, shades and colors that only high resolution graphic can deliver.
3. Hosted Braille class which enhanced distance learning experienced
4. Conducted lecture series with University of Rhode Island for world renowned African scholar.
5. Broadcasted major events over Aggie Information Channel.

b. <u>Assessment Measurements</u> – Measurements are determined by informal feedback from faculty, staff, and students who respond to various IT announcements. The CIO gets feedback from the cabinet and discussions with various groups (faculty, staff, administration and students) throughout the campus. All senior managers in DoIT are expected to do

likewise. Assessment results are discussed in senior management meetings and corrective actions taken.

    c.   <u>Assessment Procedures</u> – DoIT staff review announcements and incorporate feedback from clients and department heads. The CIO gets feedback from town hall meetings and discussions with various groups (faculty, staff, administration and students) throughout the campus. All senior managers in DoIT are expected to do likewise. Assessment results are discussed in senior management meetings and corrective actions are taken.

    d.   <u>Administration of Assessment Procedures</u> – CIO and senior managers.

    e.   <u>Use of Findings to Improve the Unit</u> – Input received from the types of requests called in by users is used to help determine technology needs and services throughout campus. Provide informative communication throughout campus utilizing e-mail and AggieNet (plasma screens). Town hall meetings and other discussions with faculty, students and staff has indicated that progress is being made and further identifies additional technology upgrades as necessary. The strategy for improving communication is to enhance the networking infrastructure with the best technology and hiring highly skilled technicians to manage.

Goal 3: IT Collaborative – Share Hosting Project for the Blackboard™ Course Management System

    a.   <u>Outcomes Achieved</u> –The Shared hosting environment has increased bandwidth enabling greater consecutive sessions, less dropped sessions and greater usage overall since its implementation in Spring, 2008. As a result, NC A&T SU Blackboard™ services are hosted by UNC Greensboro.

    b.   <u>Assessment Measurements</u> – Measurements are captured by informal feedback from faculty, staff, and students who participated in focus groups and other group settings. The CIO receives feedback from discussions with various groups (faculty, staff, administration and students) throughout the campus.

    c.   <u>Assessment Procedures</u> – Managers at the work unit levels are responsible for monitoring, capturing and assessing the impact of changes and report findings as appropriate to the Office of the Vice Chancellor for IT/ CIO through established reporting methods. Assessment results are discussed in senior management meetings and corrective actions are taken.

    d.   <u>Administration of Assessment Procedures</u> – CIO and senior managers.

e. Use of Findings To Improve the Unit – The IT division continues to provide support in areas that are consistent with the vision and goals of an interdisciplinary university. The strategy to increase IT collaborative efforts across university departments involves actively discussing technology requirements that will aid the teaching and learning process along with indebt discussions regarding funding and support.

Goal 4: Upgrade Banner databases from Oracle 9i to Oracle 10g.
   a. Outcomes Achieved – The Banner databases were successfully upgraded to Oracle 10g, which resulted in a more up-to-date and stable Banner infrastructure.

   b. Assessment Measurements – Measurements were captured during upgrade testing.

   c. Assessment Procedures – Members of DoIT and the Banner project team conducted extensive testing to ensure a smooth upgrade.

   d. Administration of Assessment Procedures – Members of DoIT and Banner project team administered the assessment procedures.

   e. Use of Findings to Improve the Unit – Test procedures and documentation were improved. These improvements are available for subsequent upgrades.

Goal 5: Maintain state-of-the-art academic labs and develop secure network access to maximize availability of production systems.
   a. Outcomes Achieved
      1. Academic labs in the College of Engineering, School of Technology, Corbett Gym and portions of the School of Business were upgraded with state-of-the-art desktop computer equipment and 14 HP 9040n printers to support the academic matriculation of students and faculty. Morrow Hall was upgraded with a state-of-the-art ergonomic lab that included 6 new iMAC computers, plasma displays, and port access. Other residence halls were also upgraded with new computers including Cooper Hall and Aggie Village.

      2. The successful implementation of the Network Admission Control (NAC) product called Cisco Clean Access provides enhanced network protection for student's computers, servers and the network infrastructure. The Clean Access process will help guard the campus network against hackers, viruses, and worms and better secure our data. The computers of over 4,000 students were checked and upgraded to ensure standards were met. This project was a joint DoIT

effort with the Networking and Communications unit spearheading the project implementation.

b. Assessment Measurements – Measurements are captured from tools (database monitors, CPU monitors) used to track network services. Input is also gathered from informal and formal feedback from faculty, staff, and students or campus users as they utilize network services during the work day or as part of the education process. The CIO also receives feedback from discussions with various groups (faculty, staff, administration and students) throughout the campus.

c. Assessment Procedures – Managers at the work unit levels are responsible for monitoring, capturing and assessing the network infrastructure and report findings as appropriate to the Office of the Vice Chancellor for IT/ CIO through established reporting methods.

d. Administration of Assessment Procedures – CIO and senior managers

e. Use of Findings To Improve the Unit – The IT division's primary role is to build a best-of-breed, state-of-the-art network infrastructure for North Carolina A&T State University. This includes a strategy for developing and maintaining a high-speed fiber based infrastructure that provides highly reliable voice, data, video and multimedia connections.

Goal 6: Improve Customer Service – Aggie Tech Support [ATS] (Formerly *Aggie Help Desk*)

a. Outcomes Achieved
1. A total of 4,210 tickets were created in ServiceDesk and 4,010 were closed documenting a 96% successful closure rate.
2. Zones of responsibility were implemented to provide focused and specific attention to particular campus communities with better integration of IT technicians and lab consultants. The Tier I, Tier II, Tier III escalation procedures were clearly defined and depicted.
3. The unit was renamed 'Aggie Tech Support' to more accurately reflect the mission and function of the technical team. Filtering out non-technical callers allowed the IT technicians to spend valuable time on resolving IT issues and accomplish faster response times.
4. **New Integrated Phone System** allows calls to be routed faster and provides technicians with speedy access to existing requests.
5. **New On-line Self-Service System** permits users to check the status of existing requests. We also added a knowledge base which contains solutions to frequently reported issues.

6. **New Priority System -** Ensures that requests receive the appropriate level of attention and are prioritized per existing service-level agreements.

7. Two additional staff members were added. Other openings were filled with technicians with more advanced skill levels.

8. More involvement from Student Technology Services (STS) allows students to gain hands on experience while providing technology services to other students, faculty and staff.

b. <u>Assessment Measurements</u> – Service Desk Helpdesk Software was deployed to track and determine metrics.

c. <u>Assessment Procedures</u> – The Aggie Tech Support staff review call request logs, feedback from clients after service calls and anecdotal evidence of on-demand delivery of products and service. The CIO gets feedback from administrative meetings and discussions with various groups (faculty, staff, administration and students) throughout the campus. All senior managers in the IT Division are expected to do likewise. Assessment results are discussed in senior management meetings and corrective actions taken.

d. <u>Administration of Assessment Procedures</u> – CIO and senior managers.

e. <u>Use of Findings to Improve the Unit</u> – Input received from requests called in by users is used to help determine technology needs and services throughout campus. Group discussions with faculty, students and staff have indicated that progress is being made and further identifies additional technology upgrades as necessary. The strategy for improving the on-demand response time is the implementation of zones of responsibility, increased staff, hiring more highly skilled technicians in vacancies, and deployment of Service Desk Helpdesk software.

Goal 6a: Improved Customer Service – Campus Communication

a. <u>Outcomes Achieved</u>

1. Using communications as a tool to close any gaps that may exist between IT and other departments in the university community continues to be a primary goal. We made significant strides informing users of new developments in a timely manner. The campus community received key information vital to the availability of information technology services or of general interest to the community at large.

2. *Aggie Tech Talk Spring 2008*, the DoIT departmental publication, was well received by the campus community. The *Aggie Tech Talk* magazine informs the campus community about IT initiatives and

technology news pertinent to campus users. It is published once per semester.

3. Received unsolicited, favorable comments relating improved communications from DoIT.

b. <u>Assessment Measurements</u> – Measurements are determined by informal feedback from faculty, staff, and students who respond to various IT announcements. The CIO gets feedback from CCB and discussions with various groups (faculty, staff, administration and students) throughout the campus. All senior managers in the IT Division are expected to do likewise. Assessment results are discussed in senior management meetings and corrective actions taken.

c. <u>Assessment Procedures</u> – IT staff review IT announcements and incorporate feedback from clients and department heads. The CIO gets feedback from administrative meetings and discussions with various groups (faculty, staff, administration and students) throughout the campus. All senior managers in the IT Division are expected to do likewise. Assessment results are discussed in senior management meetings and corrective actions are taken.

d. <u>Administration of Assessment Procedures</u> – CIO and senior managers.

e. <u>Use of Findings to Improve the Unit</u> – Feedback received from faculty, staff, and students helps DoIT communicate effectively with campus users. IT announcement are distributed utilizing e-mail and Aggie Vision (plasma screens) to reach users quickly. Administrative meetings and other discussions with faculty, students and staff have indicated that progress is being made and helps IT identify areas to improve internal and external communications. The strategy for improving IT communications includes interdepartmental discussions, improved follow up/response times, timely notifications, and working closely with the Change Control Board (CCB).

Goal 6b: Improved Customer Service – IT Technology Training/Workshops

a. <u>Outcomes Achieved</u>

1. Approximately 200 faculty and staff received training in Banner Basics.

2. Approximately 200 individuals received training in Microsoft, Lotus Notes, and SharePoint.

3. DoIT introduced AggieTrain Online to approximately 500 faculty and staff. AggieTrain Online is a web-based comprehensive training package for faculty, staff, and students aimed to enhance technical skills and supplement existing training. This internet-based solution

delivers training to desktops and offers courses that are convenient, easy to access, and easy to use.

b. <u>Assessment Measurements</u> – Measurements are captured from surveys from faculty, staff, and students who participate in IT technology training workshops. The CIO receives feedback from discussions with various groups (faculty, staff, administration and students) throughout the campus.

c. <u>Assessment Procedures</u> – Managers at the work unit levels are responsible for monitoring, capturing and assessing the impact of training services and report findings as appropriate to the Office of the Vice Chancellor for IT/ CIO through established reporting methods. Assessment results are discussed in senior management meetings and corrective actions are taken.

d. <u>Administration of Assessment Procedures</u> – CIO and senior managers.

e. <u>Use of Findings To Improve the Unit</u> – The IT division continues to provide support in areas that are consistent with the vision and goals of an interdisciplinary university. The strategy to increase IT technology training involves actively discussing technology training requirements that will enhance the skills sets of faculty and staff.

Goal 7: Provide educational support for the Department of Journalism and Mass Communications (JOMC).

a. <u>Outcomes Achieved</u>
   1. Prepared and operated the TV Studio during the Hearst Argyle News Leadership symposium and the National Association of Black Journalists (NABJ) Short Course, hosted by JOMC.
   2. Provided field equipment and studio time, assisted students and served as advisors, directors and producers for the A&T All Access, A&T Sports Report and Coaches Show student productions.
   3. Provided studio time to JOMC classes.

b. <u>Assessment Measurements</u> – The NABJ short course, hosted by the JOMC department using TV Studio technology, became the first converged (newscast, radio newscast, webpage) short course, in addition to becoming a model for other colleges to follow. The results of an internal audit report were used to strengthen and enhance operations.

c. <u>Assessment Procedures</u> – The director receives feedback from students, faculty and other university clients in the form of phone calls, e-mails and letters. Facility and equipment usage logs are kept and reviewed monthly. The office of Internal Auditing performed an internal audit of general office operations.

d. <u>Administration of Assessment Procedures</u> – The director is responsible for conducting assessment procedures.

e. <u>Use of Finding to Improve the</u> Unit – Feedback received is used to adjust future operations and service offerings. Recommendations from the Internal Auditing process are reviewed and implemented.

Goal 8: Provide video support for NC A&T SU-sponsored events.
   a. <u>Outcomes Achieved</u>
      1.   Provided video services for the February One Breakfast, Chancellor Installation Concert and Ceremony, Fall and Spring Commencements, and the Bill Cosby Scholarship Concert.

      2. Provided video and audio services to select Student Affairs and Academic Affairs events, such as the Honor's Convention, Miss A&T Forum, and E. Gwynne Dancer recitals.

   b. <u>Assessment Measurements</u> – Positive feed was received from the Chancellor's Office and from University Relations about the Chancellor's concert and installation ceremonies.

   c. <u>Assessment Procedures</u> – The director receives feedback from students, faculty and other university clients via phone calls, e-mails, and letters.

   d. <u>Administration of Assessment Procedures</u> – The director is responsible for conducting assessment procedures.

   e. <u>Use of Finding to Improve the Unit</u> – Feedback received is used to adjust future operations and service offerings.