

**ASSESSMENT OF THE 2002-2003
ITT STRATEGIC PLAN**
(Revised March 4, 2005)

Mission: The Information Technology and Telecommunication (ITT) mission is to support and strengthen the University's instructional, research and administrative programs by providing central services and infrastructure for University-wide access to information technology and telecommunications resources.

Vision: The ITT vision is to become an accelerator and catalyst for change in the transformation and continuing evolution of the Interdisciplinary University stated in the University vision statement: *North Carolina Agricultural and Technical State University is a learner-centered community that develops and preserves intellectual capital through interdisciplinary learning, discovery, engagement and operational excellence.*

Goals: The seven 2002-2003 goals, expected outcomes, assessment measurements, assessment procedures, administration of assessment procedures are as follows:

Goal 1: Governance – Establish a collaborative governance structure that promotes and supports the Interdisciplinary University vision

- a. **Outcomes Achieved** – The ITT Division continued to achieve significant progress towards establishing a collaborative governance structure but this goal will take five years to achieve. Progress based on expected outcomes for 2003-2004 includes:
 1. Policies were reviewed and submitted to the Board of Governors in March, 2003 as part of a comprehensive document requesting permission to exercise management flexibility in the planning, acquisition, implementation and delivery of information technology under G.S. 116.30.1. Approval was granted on March, 2003.
 2. The following university-wide ITT committees were established and activated:
 - a. Enterprise Data Advisory Committee
 - b. eLearning Task Force and ITT Advisory Committee
 3. The Student Technology Services (STS) organization was established to enhance help desk support for the campus and to engage students in real-world management practices including hiring, scheduling work assignments, training and evaluation.
 4. The Database Administrator (DBA) position was established and filled by Forrester Butler.
 5. All major ITT projects are tracked using the Blackboard software.
 6. The ITT Division organization was restructured to better align with the strategic plan. The data networking, telephony, and video departments were combined under one unit to establish the converged network department. Convergence is the key to developing a collaborative-based systems architecture that will meet the needs of the Interdisciplinary University.

- b. Assessment Measurements – The primary metric for the governance goal is organizational execution. Organizational execution is measured by the gap between when a request is made for service or resources and when ITT fulfills the request.
- c. Assessment Procedures – Organizational execution is assessed by logs of request, informal feedback and anecdotal evidence of on-demand delivery of products and service. The process is that project logs for new products and service request logs are kept by each department and consolidated at the unit and division levels.
- d. Administration of Assessment Procedures – At the end of the fiscal year the Office of CIO consolidates information from the following sources: (1) CIO Town Hall Meetings (2) CIO discussions groups (faculty, staff, administration and students) (3) CSR (Customer Service Reports) from all ITT departments, (4) Project summary logs and, (5) Help Desk logs. Throughout the year, preliminary feedback is discussed in senior management meetings and corrective actions taken.
- e. Use of Findings to Improve the Unit – It is clear that on-demand execution has not been achieved yet. There is too much dissatisfaction with the instability of the network and applications primarily caused by the enormous increase in virus, worm and hacker attacks. Therefore, the strategy for addressing this concern is to install additional security protection hardware (the Barracuda and Tipping Point) as well as Computer Associates security suite of software products.

Goal 2: Infrastructure – Develop and maintain a state-of-the-art information technology and telecommunications infrastructure that is best of breed.

- a. Outcomes Achieved – The strategies and architectures for three of the five components of the new infrastructure have been established.
 - 1. An IBM/SGI grid computing strategy and architecture have been established with the Division of Research.
 - 2. The rollout plan for implementation of the converged network has been established.
 - 3. A strategy for autonomic computing has been established. A security architecture based on the Computer Associates software suite was selected as foundation for the autonomic computing.
- b. Assessment Measurements – ITT is using four key metrics to assess the quality of the effectiveness of the infrastructure: (1) Network measured by availability and down time, (2) Real-time application availability measured by availability and down time, (3) On-demand service measured by requested time verses delivery time, and (4) Rapid application implementation measured by requested time verse delivery time.
- c. Assessment Procedures – Each ITT department prepares a weekly ITT performance report to document the behavior of the part of the infrastructure under his or her responsibility.

- d. Administration of Assessment Procedures – Each department manager is responsible for providing weekly reports to the Office of the Vice Chancellor for ITT/CIO. The reports are consolidated, analyzed and discussed for feedback in senior management meetings.
- e. Use of Findings to Improve the Unit – The technology build up over the past fifty years is starting to fail which affects stability, reliability, availability and serviceability. The ITT Health Check reports show an increasing need to speed up the implementation of the new infrastructure. The virus, worm and hacker attacks are having a significant, negative impact on the performance of the infrastructure. The strategy for improving stability, reliability, availability, and serviceability is the same as the strategy to achieve Goal 2.

Goal 3: Enterprise Data Content – Develop and maintain a comprehensive, easily accessible enterprise data repository that meets and exceeds the needs of the university community of learners.

- a. Outcomes Achieved – A UNC project involving 13 of the 16 campuses in the UNC system is in the second year of a 5-year implementation plan to upgrade campus Enterprise Resource Planning (ERP) to SCT/Banner. The plan for this campus is to complete the project in 3 years.
- b. Assessment Measurements – The most important metrics for this goal are: (1) time-to-installation measured by calendar time from start to finish and person-years, (2) staff-training measured by number of days of training received by person, and (3) costs. The longer it takes to implement the new system the more it will cost the university because of maintaining two systems. The longer it takes the staff to learn the new system the more it will cost the university in loss of productivity.
- c. Assessment Procedures – Committees have been established at the UNC system level and throughout the campus to assess progress towards implementation of this new ERP system.
- d. Administration of Assessment Procedures – The Banner Committee representing every part of the campus was appointed by the Chancellor to oversee the implementation of the SCT/Banner system. Regular meetings are held and are open to the public. This committee also interfaces with the UNC project team to access implementation progress.
- e. Use of Findings to Improve the Unit – NC A&T is positioned to be ahead of many of the campus implementations because of the aggressive campus schedule, the investment in the Oracle database software suite, hiring a DBA and hiring two database analysts. However, the assessment of the committees is that the pace is too fast and funding is a concern. The strategy for addressing these findings is to work with the Cabinet to secure appropriate funding, revisit the installation dates and reconstitute the Banner Steering Committee to re-align it with the key work that needs to be done.

Goal 4: Partnerships – Establish an optimal number of key partnerships that leverage the spending for ITT resources.

- a. Outcomes Achieved –
 1. The number of vendors and the amount of business conducted with vendors was significantly reduced this academic year in favor of establishing strategic partnerships.
 2. Strong partnerships were established with IBM and Oracle.
- b. Assessment Measurements – The key metrics are: (1) cost-saving-through-leveraged-purchases, (2) partners-to-vendors expenditure ratio, which measures the percentage of ITT expenditures, made with partners.
- c. Assessment Procedures – The ITT Budget Office compiles costs data provided by the ITT departments.
- d. Administration of Assessment Procedures – The ITT Budget Office provides the ratio data and cost savings to the ITT senior management team for analysis and action.
- e. Use of Findings to Improve the Unit – The partnerships are already providing significant savings and opportunities for collaboration. For example, Oracle database products were purchased at a discount of 97%.

Goal 5: Funding – Establish a continuous stream of diversified funding sources

- a. Outcomes Achieved – Eighty percent of the funding goal was achieved through grant-dollars and software donations.
- b. Assessment Measurements – The metric for this goal is the percent of achievement against a goal of \$1,000,000 from outside sources.
- c. Assessment Procedures – The ITT Budget Office compiles the metric bi-monthly for publication in the ITT Aggie Tech Talk newsletter.
- d. Administration of Assessment Procedures – The ITT Budget Office is responsible for collecting, analyzing and reporting the data provided by the ITT departments.
- e. Use of Findings to Improve the Unit – The attempts to diversify resources were reasonably successful for an ITT organization that had not traditionally pursued grants. However, much more funding needs to be generated from outside sources to offset declining state budget appropriations. The strategy is to continue to look for leveraged opportunities and grants.

Goal 6: Professional Growth and Development – Insure that the university community of learners continually grows and develops technology skills.

- a. Outcomes Achieved – The ITT Division staff and the university faculty, staff and administrator experienced limited ITT training.
- b. Assessment Measurements – The three metrics devised by ITT for this goal are: (1) the number of instruction days per person, (2) the number of persons receiving instruction, and (3) the number of workshops/computer-based-training classes offered.

- c. Assessment Procedures – The Teaching and Learning Technologies (TLT) is responsible for managing and coordinating ITT training, as well as compiling and reporting the results.
- d. Administration of Assessment Procedures – The Office of the TLT will compile the data from the various units of the TLT and be responsible for analysis and follow up.
- e. Use of Findings to Improve the Unit – The findings show that growth and development opportunities offered by the ITT Division during the 2002-2003 academic year were inadequate. The strategy is to provide adequate training for the Office of the TLT to establish a comprehensive plan for next year and oversee the multiyear implementation of the plan.

Goal 7: Assessment - Measure all key aspects of the ITT operation and use the results to continuously improve service to the university and improve operational efficiency.

- a. Outcomes Achieved –
 1. The Office of the CIO has contracted with the Department of Industrial Engineering in the College of Engineering to research and define a set of assessment metrics that ITT will report to the campus on a regular basis to SLAs (Service Level Agreements) are being established between each ITT department and their associated clients.
 2. Metrics for measuring progress towards the ITT strategic plan were established in the above goals and are being measured and reported regularly.
- b. Assessment Measurements – The meta-metric for assessment is usability of the metrics displayed on an ITT management portal measured by the frequency of use by the ITT managers and staff.
- c. Assessment Procedures – All ITT senior managers, reviewing key metrics on a real time basis, will use The Computer Associates (CA) Management Portal product. These metrics will be assessed and refined in ITT senior management meetings.
- d. Administration of Assessment Procedures – Each senior manager will be responsible for using metrics to management his or her respective operation.
- e. Use of Findings to Improve the Unit – The CA Management Portal is being used daily to make adjustments to systems performance. Work is continuing on refining the measurements and setting appropriate thresholds for systems and applications performance monitoring.