Non-Instructional Unit: T&IR

Individual(s) Completing the Questionnaire/Report:
Elena Pokot, CIO, Assistant Vice Chancellor, Technology & Information Resources
Mary Jo deMeza, Director, Office Technology and Enterprise Communications;
former: Networking, Desktop and Training Services
John Pariso, Supervisor, NOC (Network Operating Center)
Theresa Parker, Manager, Applications Support group
Lorna Wong, Director of Instructional Technology Services

BACKGROUND INFORMATION

1. Describe in a paragraph or two what your unit does (i.e., the services it provides).
   In support of UW-Whitewater mission of teaching and learning T&IR provides the following core services:
   Maintains reliable, flexible and secure technology infrastructure
   Supports the use of technology in instructional delivery
   Provides infrastructure and support for communication services, such as email and website management
   Provides Office Technology Support
   Supports implementation and maintenance of ERP and departmental systems
   Provides strategic planning and policy development for information technology on campus

   Specifically,
   Instructional Technology Services (ITS) focus on guiding the direction and supporting the use of technology in instruction. The unit supports faculty and instructional staff in incorporation of technology in classroom instruction, web-based course management system, other on-line delivery of courses, and creation of digital components of courseware. The unit maintains hardware, software, networking and print services for campus computer labs and Level II & III classrooms. The unit supports faculty technology development to enable effective deployment of technology that positively affects student learning.
   NOC (Network Operating Center) provides strategic direction and technical support for network and technology infrastructure. This includes hardware, operating system and database support for ERP environment, deployment, maintenance, and support of information storage environment, including back up, physical environment of the university data center, and campus network engineering, management and support.
   Office Technology and Enterprise Communications (OTEC) unit supports office computers, printers and other office technology through the entire equipment life-cycle: purchase, setup, redeployment and surplus. The unit provides tools to deliver reliable, cost-effective, up-to-date and secure desktop technology and supports effective use of desktop technology through training, consulting and problem resolution. The unit also provides the infrastructure, management and support for enterprise communications: email and calendaring, the UW-W web site, file storage, and workgroup printing. This includes planning, acquisition, deployment and management of the server farm, maintenance and support of the operating systems, application and middleware software, administration of campus directories and user accounts. This unit also manages the campus Help Desk and provides training services for both staff and students.
   Application Support Group is responsible for supporting the administrative information systems of the university. Technical support is provided for implementing, maintaining, and enhancing an integrated, web accessible, enterprise student and human resources system. This system is used campus-wide to manage all aspects of student records and enrollment, as well as records for faculty and staff. In addition, T&IR provides technical assistance for
departmental vendor developed systems implementation and upgrade and interfacing/integrating these systems with the enterprise system.
Office of the CIO engages various university constituencies in constructive dialog about the current state of technology, short and long-term technology planning, development of technology policies and procedures, and disseminating information about technology-related issues.

2. Who is/are the constituency/ies you serve, and approximately how many of each constituency do you serve annually? (e.g., students, academic departments, classified staff, etc.)

- Students: constituency - All students (10,000+) using university services such as Self Service access to their own records (registration, grades, etc.), email and access to information hosted on UW-W website; 9000 using Course Management System; web publishing and storage services is currently used by 3,850 students. Specific contacts: 6000 used campus computer labs and 4,100 students used helpdesk for questions and problem resolution in 2004. Technology orientation conducted for all freshmen (1,285 in fall 2004). Technology training conducted for IT student employees throughout campus (66 students in 159 enrollments in 2004).
- Faculty and instructional staff: all (600+) using university services such as Self Service access to student records (grade postings, etc.), email, access to information hosted on UW-W website, use of campus network, etc., file storage and printing services; Specific contacts: 300+ are served by ITS, in 2004, Help Desk was used by 918 faculty/staff, training workshops used by 262 faculty/staff in 529 enrollments.
- Academic departments: all (30) using university services such as email, posting of information to UW-W website, use of campus network for file storage and retrieval. Computer purchasing and surplusing services are provided to all campus departments.
- Classified staff: all (380+) using university services such as email, access to information hosted on UW-W website, use of campus network, etc., computer purchasing and surplasing services provided to all campus departments.
- Non-instructional units: all (23) using university services such as email, posting of information to UW-W website, use of campus network for file storage and retrieval. Administrative system support: direct support for 12-15 units; indirect support for all units.

3. Overview and evaluate the adequacy of the human, physical, and fiscal resources your department deploys to serve students and meet other programmatic needs by answering the questions below:

**Human Resources**

Evaluate the general adequacy of the human resources (i.e., the # of employees (including student help) and their skills) relative to the unit’s ability to serve the constituencies identified above and achieve other programmatic goals. Do this by assigning a number between “1” (completely inadequate) to “9” (completely satisfies needs).
In a paragraph or two, discuss why you've assigned the score you have. Include, in particular, a discussion of unique strengths as well as important needs not being met or opportunities not being explored because of limitations.

T&IR is being hindered in providing services to the university community by both the comparatively low number of employees in our unit, and the organizational limitations we have. UW-Whitewater Central IT Staff to Student FTE Ratio is the third lowest in UWS (only UW-LaCrosse and UW-Oshkosh have a lower ratio than UW-Whitewater). Several universities have ratios that are twice as high as UW-Whitewater, including UW-Superior, which is a quarter of the UW-W size.

In addition, any IT organization of the 21st century must be nimble and flexible in order to respond to rapidly changing needs and expectations of our constituencies and to evolving trends in technology development. Rigid labor relations and personnel management practices are hampering this need for flexibility. Different work rules across several staff classifications make it difficult to have a consistent set of expectations for our entire team. T&IR management staff struggles to find an appropriate balance between providing the desired level of service to its constituencies and meeting the professional development needs of its diverse staff.

In spite of these limitations, T&IR is able to deliver its core services by relying on a growing number of hardworking, talented and dedicated professionals, and on a team of high-energy student workers. If left unchecked, the long-term effect of this situation may lead to staff burnout, and, as a result, a high rate of staff turnover. Additionally, we have a low HR ratio within UWS and the IT industry because FTE are assigned based on UWS/State contraints, not organizational needs.

Specifically,

From the ITS perspective: Currently ITS has a staff of three and a small team of student assistants to support the hardware, software and networking infrastructure of over 120 technology classrooms and computer labs with over 1,500 workstations. The general access labs are entirely dependent on over 80 student assistants for day-to-day operations. This model works very well from the perspective of student availability and the opportunities we offer to students in acquiring technology support skills. The limitation of this model lays in the quick turnover of students employees.

On the faculty support side, ITS currently has less than two FTE staff to manage the LTC center. LTC offers both consultation and production support to faculty on courseware production. A continuing exploration and testing of emerging instructional technology products needs to be in place for the center to provide effective service to faculty. With the exponential increase in the course management system usage, an increase of support staff becomes necessary to continue the high level of service expected by our faculty. To be in-line with the number of FTE with campuses of comparative size and the workload, the LTC will need a staff of four.

From the NOC perspective: Eight FTE for the most part provide adequate staffing, but we do encounter staff shortages during vacations, leaves and project work that requires that some staff focus 100% of their energy on the projects. This limits their ability to focus on improving operational efficiencies and providing customer support. We are trying to improve this by cross training staff to fill in during vacations and leaves.

The level of technical competency, as well as the project management and planning skills vary among the staff members. This can slow down the rate with which new initiatives are deployed, and new technologies are adopted.

From the OTEC perspective, the numbers of permanent staff are adequate, considering the first level Helpdesk is staffed entirely with student employees. There is one position to manage Helpdesk/Training, five positions for desktop support and hardware repair, one position to coordinate projects and the desktop support area, one position for computer purchasing and
surplus, and three positions for support of communication services infrastructure. The one area where additional staff is needed is the training area, to meet growing demands in training for new technologies and for training students.

The biggest staffing challenge is in matching skills of the current staff to changing technology and to organizational priorities. Certain staff are able to grow and expand their abilities to keep up with the changing technology environment, while others are less flexible. To overcome this situation in the short term, we have used LTEs, student employees, and project positions to take on some new initiatives.

From the Application Support Group perspective, demand for application enhancement / support projects exceeds available staff, and therefore there is a backlog of projects. Only about 50% of the requests are completed by requested dates. Additional staff would enable more projects to be completed by requested due dates. When major implementation or upgrade projects are undertaken by the staff, there is little or no support available for other campus projects. A strength of the current staff lies in their ability to multi-task. They typically handle a couple of long-term projects along with a few short projects and ad hoc problem research and resolution simultaneously.

**Physical Resources**

Evaluate the general adequacy of the physical resources (e.g., office and storage space, supporting technology, other equipment) allocated to the unit relative to the unit's ability to serve the constituencies identified above and achieve other programmatic goals. Do this by assigning a number between “1” (completely inadequate) to ‘9’ (completely satisfies needs).

    1-9

In a paragraph or two, discuss why you've assigned the score you have. Include, in particular, a discussion of unique strengths as well as important needs not being met or opportunities not being explored because of limitations.

While T&IR has adequate amount of office and storage space, the challenge is to keep it configured to meet the contemporary needs of information technology organization. With less than 50 members, T&IR is spread out across six distinct areas in two buildings. Such configuration hinders collaboration and fast problem resolution among the staff members. As T&IR functions change over the years, space configurations needs to be updated to support them. For example, as T&IR goals focus on providing a greater level of customer support, the physical space where this support is provides (such faculty and staff training facilities) must be updated and located more conveniently for public access.

T&IR enjoys university's support when it comes to maintaining physical and structural integrity of technology infrastructure. Data center and the network cabling plant are well maintained by FP&M.

As the university community has come to expect 24X7 resource availability, a new need for a secondary data center that could be used as a "hot site" for business continuity in a case of a natural or a man-made disaster has emerged.

Specifically,

From the ITS perspective:

Level III (high tech) classrooms are in very high demand as the use of technology in the classroom increases. We currently have 113 level III high tech classrooms. We should work towards 100% of classrooms with level III technology. The cost can be substantially reduced with wireless technology prevalent in academic space.

We currently have two video studios with less than 200 sq ft total space. The need for a permanent video studio for taping lectures, interviews, and other course activities is a growing need as more and more on-line courses are creating video components that require professional production for quality output.

Student Collaborative technology space will be an increasing need in the future. While computer labs offer individual workspace for students, current technologies enable activities
of a collaborative nature that will require additional physical space or reconfiguration of current space to satisfy such needs.

Computer workstation storage space is another pressing issue that computer lab management faces. To maintain 1500 active computer workstations during the semester, adequate and secure storage space for spare parts and transition of new and old computers becomes a challenge. Efficiency suffers when space is not adequate.

From the NOC perspective, the data center was built in 1988 and while space is adequate, the uninterruptible power system (UPS) and air conditioning are in desperate need of upgrades. Budget has been allocated and a project has been started to replace the UPS. A project has been identified but budget has not been allocated to upgrade the data center HVAC system. The NOC has been able to obtain adequate hardware and software to support enterprise applications but additional resources need to be invested in the development of tools and systems to manage and monitor the NOC.

From the OTEC perspective, the most immediate space needs involve more appropriate space for storage and customer service. The remodeling of the Helpdesk area in 2004 helped create a workspace that is more inviting to the public and more appropriate for the staff work needs. The challenge now is to solve similar problems for other unit work areas. One goal is to better organize our now scattered public support facilities, so customers do not have to go to different, hard-to-find locations to obtain different services (Helpdesk, training, computer purchase, web services, etc.). Another goal is to locate the computer purchase/surplus work unit in a location to facilitate equipment delivery; closer to loading doors and elevators.

From the Application Support Group perspective, office space is adequate, although the T&IR organization is scattered between two buildings. Office technology is adequate as well. In general, server and data base equipment for supporting the administrative systems is up-to-date, fast and reliable. It enables phased migration of changes, thorough testing, and minimal disruption to the campus when technology changes are migrated to production. The development staff need one more database available for special isolated testing when needed. This requires additional disk space and resources to maintain another testing environment.

Fiscal Resources

While recognizing that every unit would benefit from a larger budget, evaluate the general adequacy of fiscal resources allocated to the unit to serve its constituencies and achieve other programmatic goals by assigning a number between "1" (completely inadequate) to "9" (completely satisfies needs).

7 1-9

In a paragraph or two, discuss why you've assigned the score you have. Include, in particular, a discussion of unique strengths as well as important needs not being met or opportunities not being explored because of limitations.

In the last two years, T&IR has established a technology infrastructure replacement strategy. Based on this strategy, each component of technology infrastructure has a predefined expected life cycle. Sustainability of technology infrastructure is supported by pre-planned stable funding allocation, which enables the institution to leverage investment in technology and take advantage of new developments and industry trends. This funding allocation must continue into the foreseeable future in order to continue sustaining technology infrastructure.

However, several outside factors may affect our state of technology: State-level budget deficit and continuous threat of budget cuts directed toward the university system introduce a high level of uncertainty into a long-term sustainability of funding for technology. There is also a diminishing level of control over purchasing decisions: more and more technology acquisition decisions at the state level are made in the general interest of the state as a whole to the detriment of the UWS. Exemptions from the state-level acquisition decisions are gradually being revoked.
There is also a greater uncertainty at the macro level: ramifications of Oracle acquisition of PeopleSoft may lead to a whole scope of consequences, ranging from drastic increase of maintenance fees to a necessity for complete system re-implementation, which may require millions of dollars.

On the side of human resources, T&IR has to compete with the private industry for a highly trained and knowledgeable work force. Limited fiscal resources and stringent hiring practices often preclude us from hiring the best-qualified staff.

Specifically, From ITS perspective:
The computer infrastructure, hardware, software, printing and support for student computing activities in the general access labs are adequate with the current allocation through the General Access Computing Funding and the Student Technology Fees. A continuing allocation with proportional increase is needed to sustain current level of support.

On the faculty support side, our success for the past five years has been greatly enhanced through a generous Title III grant from the DOE. Such funding allows for the state-of-the-art LTC lab for technology production, and regular faculty technology development support activities conducted by the LTC. The momentum gained during these past five years has to be maintained through appropriate funding allocation. This is especially critical during the next five years as technology becomes mainstreamed in instruction.

NOC: Additional funding is desirable to reward/retain high achievers, attract best qualified staff, provide new training opportunities, obtain new tools and hire contract labor to assist us in implementing new technology and meeting project deadlines.

From OTEC perspective:
In order to ensure that staff skills keep pace with technology changes, it is important to provide training and professional development opportunities. However, the costs for technology training and events can be quite high, even with educational discounts, and the concern is that funding will be available for these opportunities.

Another fiscal concern is software licensing. The pattern of the last few years demonstrates that software costs, especially for enterprise licenses, are rising quickly, making it difficult to accurately budget for future costs. This is complicated by the institution's reliance on particular software and the considerable cost of changing vendors.

From the Application Support Group perspective, fiscal resources are adequate in general. However, better service and system/data integrity could be provided if additional financial resources were available to fund additional disk space, test environment equipment, and staff to maintain the hardware and software.

4. In a paragraph or two, overview significant changes made in your unit since 1996 (i.e., the last North Central Association Accreditation Visit). (e.g., re-organized, key staff changes, change in purposes, etc.)


In 1998 the following changes occurred:
Mainframe Technical support and non-mainframe technical support were separated.
Mainframe Technical support was moved from Networking & Telecommunications Services to Information Systems and Operations Services.
Help Desk and Desktop support services were merged, and the unit was renamed to Networking, Desktop, and Telecommunications Services. User Training &Support Services unit was renamed to Instructional Technology Services.
New service, Web Support was developed under Instructional Technology Services.
The major goal of the Information Systems and Operations Services was changed from developing and supporting the homegrown Mainframe environment to vendor-developed (PeopleSoft) ERP system based on client-server and Oracle architecture.
Two project developers were hired for 3 years to assist with deployment of PeopleSoft.
An Oracle DBA was hired to maintain ERP database. The major goal of the Networking & Telecommunications Services area was to plan and support the network infrastructure and campus Local Area Network, manage the telecommunications service for campus, and provide support and problem resolution for office computers, printers and software. The major goal of the User Training & Support Services area became to provide the central contact for campus regarding technology problems, provide training for office applications, support technology and audio-visual equipment for instruction, manage student computing labs, support and develop Internet services, and provide graphics design for instructional and administrative needs.

In 1999 web support was moved from Instructional Technology Services to Networking, Desktop and Training Services (NDTS). Telecommunications Services was transferred from T&IR to Administrative Affairs. The University applied for and received a Title III grant for “Strengthening Institution’s Program.” This grant enabled UWW to enhance institutional management with the deployment of PeopleSoft and to establish a technology infrastructure for learning. In 2000 the Learning Technology Center was formed in the ITS unit. In 2001 the following changes occurred:

- CIO Hsi-Ping Shao retired.
- Library Services area was segmented from T&IR into a stand-alone unit.
- Photo & Graphic Services area was transferred from T&IR to News & Publications.
- In 2002 the following changes occurred:
  - Mary Jo deMeza was promoted to Director, Networking, Desktop and Training Services
  - A new CIO, Elena Pokot joined the university.
- In 2003 the following changes occurred:
  - Information Systems and Operations Services were subdivided into two organizations: NOC (Network Operating Center) and Applications Support. John Pariso assumed the management of NOC, Theresa Parker was promoted to manage the Applications Support Group.
  - Director of Instructional Technology Support Services returned to full-time teaching in Political Science, his position was eliminated due to budget reduction. Lorna Wong assumed leadership of the unit.
- In 2004, the following changes occurred and several major new goals were added:
  - Support for Enterprise services and applications was expanded to include departmental systems. Resources were reallocated to support this goal.
  - Support for web-based applications was expanded, and resources were reallocated to support this goal.
  - Randy Williams, former Director of Information Systems and Operations Services left the organization. His position was reallocated to support a new goal of developing information security infrastructure and policies.

In another paragraph or two, describe why these changes occurred.

In 1998, the separation of technical support into the Mainframe and non-mainframe areas and merging of Help Desk and Desktop support services under the Networking & Telecommunications Services was undertaken to focus the support for growing campus-wide non-mainframe network infrastructure. This separation also enabled the former User Training & Support Services unit to focus on providing Instructional Technology Support. New service, Web Support, was developed to address the growing need for web presence and development of web-based applications, which was a national trend by that time. Information Systems and Operations Services geared to up address Y2K issue as well as to deploy PeopleSoft ERP system which included Financials, HR and Student Administration.
Deployment of PeopleSoft ERP and migration from the legacy mainframe environment was identified as a leading institutional priority at that time.

Title III provided resources to enhance institutional management and establish a technology infrastructure for learning. This grant assisted the University in making a major and critical transition from an outdated mainframe-based information system that consisted of more than one thousand disparate programs to an integrated system that better serves students, faculty and staff and can also utilize web-based technologies for quick access to mission-critical institutional data. Related to establishing a technology infrastructure for learning, two aspects were addressed. One aspect addressed the need for sustained and institutionalized faculty training in the use of modern technology for the enhancement of instruction, while the second aspect dealt with the upgrade of campus network infrastructure to support the technology-based instruction.

The transfer of Telecommunications Services from T&IR to Administrative Affairs in 1999 was driven by the fact that support in the Centrex environment has much more to do with departmental chargeback and billing issues than with technology. Therefore, it aligned better with Financial Services unit in Administrative Affairs.

Historically, Library and Information Technology were separate organizations. In the early 1990s, Library was perceived as a driving force behind adaptation of new technologies on campus. Merging of the two organizations was a strategic as well as an administrative decision at the time. In 2001, when then CIO Hsi-Ping Shao retired, Information Technology portion of T&IR was in a good position to provide strategic leadership as well as the technology support on campus. At the same time, it was felt that the Library, as a separate organizational unit, will be in a better position to play a more prominent role on campus. Therefore, the decision was made to separate these units.

Transfer of Photo/Graphic Services area from T&IR to News & Publications was precipitated by two factors: Technology has enabled Faculty to become more self-sufficient in producing presentation materials for instructional delivery. The focus for the area shifted from production of classroom materials to development of institutional image. Close alignment of the area with News and Publications was intended to support this trend.

In 2003 Information Systems and Operations Services were subdivided into two organizations: NOC (Network Operating Center) and Applications Support Group. Formation of NOC was intended to help T&IR's transition from the traditional mainframe-oriented Data Center to the Distributed Computing IP-oriented environment, where data networks become the central nervous systems, which link together servers, desktops, and printers, and deliver services to the end-users. Formation of the NOC enabled us to:

• Take a proactive approach to problem identification and resolution
• Leverage the resources of our team of computer operators
• Engage the computer operators in monitoring and relaying information regarding the availability, performance, and functionality of the various components and services that utilize the enterprise network.

Total Desktop Care was created to reduce campus-wide cost of computer acquisition and to improve customer experience through the full lifecycle of computer equipment (acquisition, deployment, redeployment, surplus).

The Helpdesk area was reorganized and merged with the Training area to provide a coordinated service to customers and to improve productivity of staff by eliminating duplication of effort.

A position was reallocated from Desktop to Web Support in order to provide more resources to meet rapidly growing demands of web environment on campus.

Network support position in NOC, shared by T&IR and Residence Life was intended to centralize network management on campus to avoid duplication of effort and to enable new initiatives, such as wireless access to campus network.

In the past, departmental systems were mainly supported by individual departments. It resulted in inconsistent system implementation, high reliance on system vendors, poor customer service and duplication of resources. Therefore support for departmental systems and applications was identified as one of the primary needs by several key T&IR customers. Resources were reallocated to support this goal.

Currently web application development is highly decentralized and, for the most part, performed by student workers with little or no supervision. It results in inconsistent system development techniques, inadequate documentation and production turnover practices, and overall
inability to maintain the applications after students graduate. T&IR identified centralization of web
development on campus as a high priority. Resources were reallocated to support this goal.

In order to deal proactively with continuing attacks on technology infrastructure in the higher
education environment, and with exponential growth of federal mandates, T&IR needed to take a
strategic approach to security management. One FTE position was reallocated to become Information
Security Officer. Blake Penn was hired in this position to help establish a security strategy for the
institution.

MISSION & PLANNING

5. In a paragraph or two, describing any significant projects/initiatives that your unit is planning or currently
   has underway, but has not yet completed.
   • Deployment of Wireless: Wireless access to Internet and UWW browser-based services such as
e-mail and student self-service is currently deployed campus wide. The next phase is to
incorporate wireless access into instruction.
   • Student Laptop program: Students will be able to easily purchase personal laptop
computers through UW-Whitewater, for reasonable prices.
   • Identity management, common authentication: Ability to use a central directory for
identification, authentication, and where possible, authorization of access to systems and
services. Use of a single logon would not only simplify student and faculty access, but would
also streamline administration and enable a more secure environment.
   • Web-based access to network storage: Provide personal and shared document storage space
for UW-W faculty and students that is universally accessible through the web.
   • Web Content Management System: Will enable web publishers to keep content accurate,
timely and audience-centered while creating a uniform look and feel throughout the web site.
The goals are to make the site more engaging, to provide enhanced news and information, to
simplify updating and publishing, and to ensure ease of navigation.
   • Evaluation of Office suite: Evaluate the viability of alternatives to the Microsoft Office suite
of applications.
   • Desktop Integrity: Provide a complete suite of tools to protect and maintain the integrity of
office computers, such as tools for anti-virus, spyware, deployment of OS patches and
security updates.
   • Security infrastructure. This initiative includes working with the campus community to
develop and implement policies, interpretation of state and federal law and regulations
regarding privacy and protection of data, and deployment of hardware and software required
to build, support and monitor a secure environment.
   • ITS plans to implement a centralized program for software purchase for all computer labs by
the end of spring semester 2005. The goals of this initiative are to leverage the best prices of
software through volume purchasing, to better manage the software license records centrally,
and to be able to install and maintain software imaging more efficiently for all computer labs.
   • Flash Clearinghouse – A UW System collaboration project: The LTC creates Flash animation
and simulation objects for on-line course materials in different disciplines that are shareable
among other UW campuses. Projects are accepted from all UW campuses to build a collection
of reusable prototypes.
   • T&IR began evaluating the benefits of single platform expandable disk storage system for
various enterprise and departmental services. The benefits of such a system are improved
administration of storage, improved planning for storage growth and greater leveraging of
technology investment.
   • Lab Print Management: To manage the volume of printing in the computer labs on campus.
The goal of the project is to contain the exponential increase in printing to avoid charging of
printing cost to students.
   • Deploy “Shared Query Library” for ERP data - collaboration with UW: Academic
departments on campus will soon be able to query enrollment, course, major/minor, and
other data for their analysis and reporting needs in their own offices. The first phase of this
project will be rolled out in March 2005.
   • Touchnet: The campus has recently implemented a system to allow students to pay bills via
the web using either credit cards or ACH transactions, and an eBilling component for viewing
billing information on the web. A new cashering system is planned to be implemented in summer 2005. At the same time, the TouchNet systems will be transitioned from TouchNet hosting to campus hosting.

- Imaging: The Registrars Office recently implement an Imaging system for storage of old paper transcripts. The Financial Aid Office and Graduate School are also planning to use this system to capture incoming documents to their office. T&IR is providing technical assistance on this project.
- IT Strategic Plan for FY 05 – 08: The ITSP is being developed to incorporate new trends in technology, to address the needs of our constituents, and to reflect the mission and values of UWW.

6. Below are five “core values” the University identifies as central to its purposes and operation. Please evaluate the importance of each core value in terms of how each aligns with the purposes of your unit (i.e., take a hypothetical 100 points and distribute them among the five values, with those values that align more closely to the purposes of your unit receiving more points).

<table>
<thead>
<tr>
<th>Core Value</th>
<th>Importance (100 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment to the pursuit of knowledge and understanding</td>
<td>5</td>
</tr>
<tr>
<td>Development of the individual</td>
<td>30</td>
</tr>
<tr>
<td>Personal and professional integrity</td>
<td>5</td>
</tr>
<tr>
<td>Commitment to serve</td>
<td>50</td>
</tr>
<tr>
<td>Commitment to develop a sense of community, respect for diversity, and global perspectives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total=</strong></td>
<td><strong>100 points</strong></td>
</tr>
</tbody>
</table>

7. Each and every academic and non-academic unit engages in planning for the future. Review the list of variables below and evaluate the extent to which each of the following influences decision-making behind the planning process for your unit (i.e., take a hypothetical 100 points and distribute them among the planning variables listed below, with those variables playing the larger role in your unit’s planning efforts receiving more points).

<table>
<thead>
<tr>
<th>Planning Variables</th>
<th>Importance (100 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mission of the university or the unit</td>
<td>19</td>
</tr>
<tr>
<td>Academic assessment data/information relevant to student performance against learning outcomes</td>
<td>0</td>
</tr>
<tr>
<td>Other data/information gathered relevant to performance (e.g., Audit &amp; Review feedback)</td>
<td>15</td>
</tr>
<tr>
<td>Societal/Cultural trends (e.g., changes in demographics, lifestyles, professions)</td>
<td>4</td>
</tr>
<tr>
<td>Campus trends (e.g., changes in university-initiated needs and demands)</td>
<td>15</td>
</tr>
<tr>
<td>Technology trends (e.g., technology developments that affect delivery of service)</td>
<td>19</td>
</tr>
<tr>
<td>Professional trends (e.g., changes evident at other universities/colleges)</td>
<td>11</td>
</tr>
<tr>
<td>Available human resources (e.g., # of employees, talents, etc.) within the unit</td>
<td>8</td>
</tr>
<tr>
<td>Available financial resources (e.g., budget, available and accessible $)</td>
<td>8</td>
</tr>
<tr>
<td>Available physical resources (e.g., space, existing technology, etc.)</td>
<td>2</td>
</tr>
<tr>
<td>Other:</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total=</strong></td>
<td><strong>100 points</strong></td>
</tr>
</tbody>
</table>

8. Does your unit have a mission statement?
   - Yes x
   - No

If you answered “yes,” please list the mission statement here. Or, if your mission statement can be accessed on the web, please list the URL here.

http://www.uww.edu/TIR/
If you answered “yes,” please describe how, if at all, this mission statement plays a role in your unit’s planning and/or decision-making.

The T&IR mission guides our annual and strategic planning processes, priority setting, development of new campus initiatives, and requests of funding to support these initiatives.

**OPERATION AND PERFORMANCE**

9. What are the major or measurable objectives of the unit?

For ITS:
1. Provide an accessible, state-of-the-art computer and audio-visual equipment in classrooms and computer labs to enable student learning
   - maintain at least 100 Level II & III technology classrooms
   - provide at least 80 hours of student access in general access labs
   - maintain at least 1 computer per 10 students ratio.
2. Provide accessible, state-of-the-art software that enhances teaching and learning by ensuring consistent desktop in technology in classrooms and computer labs with current versions of software required by courses.
3. Support a robust course management system that provides flexible and easy to access student learning infrastructure with the goal of being one of the top 3 web enabled courses per student FTE ratio.
4. Provide faculty technology support and development services that promotes the effective infusion of technology into courses by conducting 20+ technology and pedagogy workshops per year and at least 40 hours of office hours for individual consultation.

For NOC:
1. Maintain a high availability (90%+) for enterprise systems (such as a student administration system).
3. Maintain availability of Internet access at 99.6%.
   - Operating System upgrades within 6 months of release.
   - Database upgrades within 6 months of being identified by vendor as being required.
   - Development tools upgrades within 9 months of release.
   - Vendor application patches within 4 months of release for general availability.
5. Staff response time to service outages.
   - 1 hour response time to problems occurring after work hours, holidays and weekends.

For OTEC:
1. Replace the text-based email system with a system using a Windows/MacOS interface.
2. Provide an email-system that is web-enabled.
3. Increase the mailbox size for faculty and staff from 2MG to 100MG.
4. Increase the mailbox size for students from .5MG to 10MG.
5. Deploy an institutional group calendaring system for administrative staff.
6. Provide an institutional group calendar that is web-enabled.
7. Provide resources for faculty, departments, students and student organizations to publish web content.
8. Provide tools to measure ADA compliance for web accessibility.
9. Assure 100% accessibility compliance of the T&IR web site.
10. Establish web-enabled access to document storage.
11. Transition 90% of faculty and staff to use network storage.
12. Save the institution $100,000 in annual computer purchasing costs.
13. Reduce the amount of time for deployment of updates for desktop security.
14. Create an 80% level of customer satisfaction with the Helpdesk.
15. Resolve 75% of Helpdesk calls on the same day.
16. Create an 80% level of customer satisfaction with training workshops.

For Application Support Group:
1. Implement and maintain a highly available, reliable, expandable integrated enterprise student and human resources system that provides easy to use, efficient means of maintaining and accessing information.
   - increase availability of enterprise systems by 50%
   - enable 30+ academic departments to access student data directly
   - enable all faculty (500+) to input student grades directly into the student records
   - provide student data query capabilities for academic departments
   - enhance software to assist students with disabilities
2. Provide professional, quality technical support to departments in implementing and upgrading departmental vendor systems.
3. Reduce campus staff data entry time and enhance data accuracy by integrating or interfacing systems.
4. Provide highly available self-service access to enterprise data for students and faculty.
   - enable faculty to view/print class rosters via the web
   - provide ability to generate an advising report via the web when needed
   - enable all students to be able to add and drop courses via the web
   - provide always up-to-date course catalog and schedule information to students
   - enable students to view/print their class schedule
   - provide up-to-date student financial account information and easy means for students to pay fees by enabling ACH and credit card payments via the web

For CIO office
1. Every 3 years develop a new IT Strategic Plan.
2. Assure that technology initiatives are aligned with strategic goals of the university.
3. Provide fiscally-sound management of technology on campus.
4. Develop and maintain up-to-date technology use policies on campus.

10. What outcome measures (i.e., data, information) provide evidence that your unit’s objectives are being met?
    For ITS:
    1. Data is collected for the number of technology classrooms supported, number of computers in labs maintained, number of students using computer labs, number of D2L courses by semester, number of faculty workshop conducted each semester, number of attendees, number of faculty visited the LTC
    2. Surveys will be conducted to assess the needs and satisfaction of students and faculty with the services provided.

    For NOC:
    1. Track duration of planned & unplanned outages that impact availability of student administration systems (server, database, application interface).
    2. Track duration of outages of network infrastructure.
    3. Track timeframe for implementation of releases for ERP environment.
    4. Track after hours response time to outages of services.

    For OTEC:
    1. The current email system, Exchange, has a Windows/MacOS interface.
    2. The current Exchange email system is accessed through the web using Outlook Web Access (OWA); this is the interface used by all students and many faculty and staff.
    3. The mailbox size for faculty and staff is currently 250MG.
    4. The mailbox size for students is currently 20MG.
    5. A group calendaring system called CorporateTime is used by more than 500 UW-W staff.
    6. The web-based component was added to CorporateTime group calendar in 2002.
    7. The number of accounts being used to publish web content: 449 faculty accounts, 4,280 student accounts, 129 student organization accounts.
    8. The HiSoftware suite of tools to measure web accessibility is installed and is in use; reports for measuring compliance for different areas of the UW-W web site are published regularly.
    9. Accessibility of T&IR web site is measured.
10. The Netstorage service provides web-based access to personal and shared documents for 900 faculty and staff, as well as 420 departmental and student employee accounts.
11. Annual reports describe costs savings for university computer purchases.
12. Track time it takes to deploy desktop security updates.
13. Help Desk Magic system measures customer satisfaction with the Help Desk.
14. Help Desk Magic system indicates which calls are resolved on the same day.
15. Archives from the Training Registration system show the number of technology training workshops that have been offered.
16. Archives from the Training Registration system show the categories of training workshops that have been offered.
17. Evaluations from Training workshops measure customer satisfaction levels.

For Application Support Group:
1. The PeopleSoft Student Administration and Human Resources system was implemented in 2000-2001. The following modules were implemented to replace components of the legacy system (Admissions, Student Records, Financial Aid, Student Financials, Test Results/Waivers/Credit by Exam, Transfer Credit). Additional modules were also implemented to meet other needs (Student Web access for registration/course catalog, Faculty access to student information and entry of grades, Event tracking/Preview registration).
   - Implementation of enhancements (currently 100+) is being tracked.
2. Post-implementation reviews and Service Level Agreements.
3. Number of interfaces developed and supported (currently 8+).
4. Number of self-service functions.
5. Self-service survey: In the fall of 2003, the Registrar’s Office surveyed the student regarding the self-service portion of the system. The response on the survey indicated that the majority of students were either satisfied or very satisfied with the system.

For CIO office:
1. Strategic IT Plans are developed every 3 years with broad involvement of the campus community.
2. Implementation of cost-saving initiatives.
4. Up-to-date technology use policies on campus.

11. Related to question #10, does the unit regularly collect data/information to evaluate how effectively it serves its constituency(ies)? (This might include surveys of constituencies.)
   Yes X  No

If "yes," please list specific data/information sets that the UW-W Self-Study Committees, and/or the Higher Learning Commission’s Visiting Accreditation Team can access to review/consult.
- Computer purchasing records from the Total Desktop Care (TDC) area
- Helpdesk customer satisfaction surveys
- Web site accessibility reports
- Survey concerning the need to control SPAM emails
- Surveys of campus leadership regarding deployment of wireless network
- Surveys of campus leadership regarding Content Management System
- Survey of students regarding the self-service portion of the PeopleSoft system
  (Registrar’s Office)
• ECARS studies on faculty and student usage of information technology. Results and findings contributed to the national trends of higher education in the ECARS reports.
• Course management system surveys conducted by UW system
• Survey of faculty awareness and knowledge of web accessibility issues
• Evaluations of faculty development workshops
• ITS will be conducting surveys of faculty and student satisfaction of our services
• "10 Best Practices for Higher Education IT Organizations" benchmarks T&IR performance
• List of PeopleSoft interfaces that have been developed and maintained
• List of Application Support Group Projects
• Reports on help desk calls
• Archives from the Training Registration system
• Evaluations from Training workshops
• List of technology classrooms supported
• Inventory of computers in labs T&IR maintains
• Usage trends of students using computer labs
• Usage trends of D2L courses by semester
• List of faculty workshop conducted by semester and number of attendees
• Number of faculty who visited the LTC
• Monthly service availability reports from NOC
• Annual Title III reports
• Web application project list
• TIR website lists technology use policies

12. In a paragraph or two, describe specific changes to the unit’s operation or planning, if any, have resulted from the collection and use of the data/information identified in the preceding questions. Please be specific.
   • Identity management initiative, common authentication to gain access to most systems and services initiative: Approximately one-third of the T&IR helpdesk calls received are for students or faculty that have forgotten their PeopleSoft password. This was one of the drivers for this initiative.
   • The LTC faculty development workshops are tailored to faculty needs derived from comments on evaluations of previous workshops.
   • Deployment of wireless network resulted from survey of campus leadership.
   • Computer purchasing data were used in the following way:
     - Annual computer acquisition reports led to creation of a program (Total Desktop Care) to centralize computer purchasing, and T&IR dedicated a staff person to administer the program.
     - Through the TDC program, a process was developed to standardize the installation of new computer software through disk imaging technology. The increased productivity for new
computer setups allowed the reallocation of a desktop support position to a support area of greater need.
• Survey results from faculty and staff on SPAM email were used to:
  - determine that a tool was needed to manage SPAM email for campus
  - select a SPAM solution based on the features identified as most important by customers.
• Long list of departmental systems inconsistently supported by department staffs lead to expanding the scope of system support to include departmental systems.
• Survey of university leadership regarding their vision for UWW website led to the web content management initiative and reallocation of staff to provide web development support.

13. Please provide a list of services, if any, that your unit provides for constituencies that are external to the university.
• Serve in leadership role in the D2L implementation Team for UWS. UW-Whitewater is the first campus to pilot widely D2L, the first campus to have all courses converted from other Course Management Systems. Director of ITS serves on the D2L Implementation Team and guides the direction of D2L implementation for UWS in training, conversion and functional enhancement efforts.
• Director of ITS leads the UWS site-administrators group and acts as consultant to UW campuses on D2L implementation
• UWS Collaterals Working Group: Representative from each UW campus convene together with UW-System staff to share ideas and concerns about campus technology projects. As a result, the campuses collaborate on projects, leverage intercampus resources, and exchange ideas.
• Provide infrastructure for posting state and community web content. (Business Outreach Services, Beyond Campus link page)
• Provide, upon approval, student directory information to state and regional entities
• Email services for emeritus faculty
• Support listserves for professional organizations
• Participation on listservs with other campuses that use the developed enhancements for PeopleSoft Student Administration system. Sharing of knowledge and system enhancements with other universities that use PeopleSoft.

14. Please list any partnerships your unit has developed with the community (external to the campus, at the local, national, or global-level).
• UW Information Technology Management Council
• CWCW (UW System campus web administrators)
• Serve as a leader in the UWS LTDC (learning technology development council) - the Director of ITS /Coordinator of LTC is an active member of the council and is serving as the chair of the LTDC and the head of the executive committee
• Actively participate in PeopleSoft Higher Education User Group with other campuses
STUDENT LEARNING (COMPLETE THIS SECTION ONLY IF YOUR UNIT HAS AS PART OF ITS MISSION OR PURPOSES THE DEVELOPMENT OF STUDENTS)

15. If your unit serves students as its primary constituency, does the unit have learning or development-related objectives relevant to its work with students? That is, does your unit expect that students will acquire certain knowledge or skill sets as a direct result of working with your unit or its programming?
   Yes X No

   If “yes,” please list these outcomes/objectives.
   • ITS participates in internship program for CEUT Program in various occasion. The LTC has taken at least three technology interns for 3 credits courses.
   •
   •
   •

16. Does the unit use data/information to evaluate the extent to which these learning or development-related objectives are, or are not being met?
   Yes No X

   If “yes,” please list specific data/information sets that the UW-W Self-Study Committees, and/or the Higher Learning Commission’s Visiting Accreditation Team can access to review/consult.
   •
   •
   •
   •

17. What specific changes to the unit’s operation or planning, if any, have resulted from the collection and use of the data/information identified in question #15? Please be specific.

SELF-EVALUATION

Strengths

18. List and prioritize no more than three primary strengths that have emerged in your unit’s efforts to meet its mission, goals, or objectives. To identify these strengths, you may wish to consider: What does your unit do very well? What good things do people say about your unit? How has your unit aided the campus in meeting its mission? In what ways has your unit “gone beyond the call of duty?”

   After identifying each strength, specify supporting evidence that suggests that the statement is true. This may include data/information gathered relevant to unit performance, trend data, information gathered from audits or external agencies visit, etc.

   1. Specific Strength: Dedication of staff
• **Supporting Evidence:** Many staff members sacrifice after hours and weekend time on a regular basis to perform work, research new ideas, work on projects and deal with emergencies.

2. **Specific Strength:** Expertise, Innovation and Leadership

• **Supporting Evidence:** Our division leads many campus initiatives. Some examples include:
  - Early promotion and support of faculty and student personal website (supported since 1997 through an UW Foundation Excellence Grant when most other campus websites were still at its infancy).
  - Leadership in Course Management System deployment by having the highest adoption of CMS-based courses per student FTE ratio among UW campuses for the past five years and serving as a model campus in the conversion from Blackboard to Desire2Learn.
    Our campus played a leadership role in the D2LLO project (creation of animation learning objects) by organizing the collaboration efforts among UW campuses, creation of prototype learning objects, and hosting the collection of 150 learning objects to be accessed by all UW campuses and external institutions.
  - Designed and implemented a home-grown Print Management system for campus computing labs by leveraging the Novell network and open source utilities to manage and reduce wasteful printing in computer labs.
  - Initiate the ‘Flash Clearinghouse Project’ for UW System to create animations and reusable prototype learning objects for a variety of disciplines including chemistry, biology, psychology, and languages.
  - UWW is the first among UW campuses, and one of the first nationally to initiate a campus-wide deployment of web Content Management System.
    Among the University of Wisconsin System schools, Whitewater was one of the first to implement the system and roll out self service to the students and faculty. Several add-on modules that our staff have developed have been shared with other campuses such as Work Study earnings posting, Financial Aid initial edit, Communication/Checklist purging process, and batch communication assignment process.

3. **Specific Strength:** Customer Focus

• **Supporting Evidence:**
  - Regular dialog with campus constituencies through the following avenues:
    - Monthly meetings with non-T&IR technical support staff
    - Formation of Web Advisory Group
    - IT Student Employment committee
    - Meet with student staff of the ITA Student Helpdesk to advise and offer support resources
    - Administrative Systems Steering Committee
    - University Technology Committee
    - PeopleSoft Integration Team
    - Academic, Administrative, and Student Affairs Meetings
    - Topic-specific college and departmental meetings
  - Seek customer feedback through helpdesk, surveys, and web forms
  - Communicate technology related information campus-wide
  - Facilitate interdepartmental communication for technology based initiatives and projects
  - Solicit project needs and priorities from constituencies
Concerns

19. List and prioritize no more than three primary concerns that have emerged in your unit’s efforts to meet its mission, goals, or objectives. To identify these concerns, you may wish to consider: What could be improved? What is done poorly? What do we, as a unit, avoid doing, even though we know it’s important?

After identifying each concern, specify supporting evidence that suggests that the statement is true. This may include data/information gathered relevant to unit performance, trend data, information gathered from audits or external agencies visit, etc.

Finally, identify one or more recommended actions to address the area of concern. This may include actions that your unit has already begun, actions being planned, or preliminary thinking about how to address the area of concern.

1. Specific Concern: Staff resources are not properly aligned with organizational goals.
   - Supporting Evidence: We have one of the lowest Central IT staff to student FTE ratios within UWS. Information technology FTE are assigned based on UWS/State constraints, not based on organizational needs. Classified staff position structure does not readily allow for flexibility needed in modern IT organizations.
   - Recommended Actions: Simplify the HR process and increase FTE allocation to enable T&IR to meet the needs of its constituencies effectively. Create greater flexibility in reevaluation, reorganization and reallocation of positions. Align recruitment processes with the needs of an IT organization.

2. Specific Concern: Alignment of IT resources and Departmental unit planning.
   - Supporting Evidence: Frequently, IT is not included in the early stages of goal setting and project planning related to technology initiatives.
   - Recommended Actions: IT should be involved in strategic planning with departmental units where information technology needs or plans exist or being considered.

3. Specific Concern: Uncertainty related to State budget and IT industry.
   - Supporting Evidence: State-level budget deficit and continuous threat of budget cuts directed toward the university system introduce a high level of uncertainty into a long-term sustainability of funding for technology. There is also a diminishing level of control over purchasing decisions: more and more technology acquisition decisions at the state level are made in the general interest of the state as a whole to the detriment of the UWS. Exemptions from the state-level acquisition processes are gradually being revoked. There is also a greater uncertainty at the macro level: ramifications of Oracle acquisition of PeopleSoft may lead to a whole scope of consequences, ranging from the drastic increase of maintenance fees to a necessity for complete system re-implementation, which may result in costs of millions of dollars to the university.
   - Recommended Actions: Greater collaboration within UWS. Greater flexibility of expenditures. Leverage open source technologies.