Computing & Information Services Strategic Plan

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INTRODUCTION

Background
This is the first known strategic plan for Computing and Information Services (CIS). In 1995 an annual report was published and it included goals for the next year. Many significant changes have occurred since that last statement of goals: technological changes, management changes, and changes in the operations of the clients and partners that we support. CIS undertakes this strategic planning effort to deal with these dramatic changes in our environment and to prepare for what is to come.

Historically, technology planning for the University of New Hampshire has been closely linked to the University System of New Hampshire’s long range technology plans (LRTP). Two LRTPs have been published and they are driven by System-wide cooperative efforts. The LRTPs have initiated many technology improvements; however, they did not focus on campus-specific issues.

LRTP 2 expires June 30, 2004. Plans for the development of LRTP 3 were initiated in fall 2002. (See Appendix B for a summary of the proposed development process.) In December 2002, the USNH chancellor and the presidents of the System institutions formally decided to put on hold for one year the development of LRTP 3. When the work is reactivated, CIS will take the lead role. It is anticipated that LRTP 3 will address campus-oriented issues, and academic technology in particular, more extensively than previous versions.

Purpose
“Strategic planning is a disciplined effort to shape and guide what an organization is, what it does and why it does it” (Bryson, 1988, p.5). The University of New Hampshire requires that each responsibility center unit develop its own strategic and financial plan that is consistent with the University’s plan. In addition to the requirement to produce a plan, CIS welcomes this opportunity to thoughtfully present to our clients and partners our vision and strategies for the future.

This is a strategic plan for CIS as an organization. It is not a technology plan for the University of New Hampshire (UNH) or the University System of New Hampshire (USNH). However, some of the efforts described in this plan will set the stage for technology plans that will emerge through the LRTP process, as well as the work of the UNH Technology Policy and Planning Group. (See section on Governance Structure.)

The context for this plan is the overall UNH thrust in strategic planning, centering on the Academic Plan for the Future of the University of New Hampshire. Themes in this plan align with the Academic Plan strategic themes of discovery, engagement and outreach, resourcefulness, institutional effectiveness, and community. Many CIS Plan strategies and actions support and reinforce Academic Plan strategic goals and actions: many cross-references to the Academic Plan are provided to illustrate the binding. While the emphasis in this plan is primarily on the UNH role for CIS, it is acknowledged that
significant portions of CIS have important USNH-wide responsibilities and customers. Indeed, successful implementation of this plan will benefit all of USNH.

The planning horizon is five years including the current year. CIS will review the plan each year and prepare an update.

**Process**

CIS began the strategic planning exercise in the fall of 2000. A committee consisting of the Assistant Vice President/Chief Information Officer, CIS directors, and key managers met every two weeks for nearly three months. This committee, often in consultation with the CIS staff as a whole, identified the CIS stakeholders and key performance indicators, drafted a statement of mission, vision, and values, and analyzed our strengths, weaknesses, opportunities and threats. In the spring of 2001 work on the strategic plan was put on hold in deference to Project FRESH (replacement of the USNH finance and human resource application and reporting systems). A streamlined planning committee reconvened in 2002 to develop the strategies and actions as well as write the remaining sections of the plan. Drafts have been previewed by UNH and USNH senior management: the vice president for finance and administration and her staff, the vice president for academic affairs/provost, the Deans’ Council, the Technology Policy & Planning Group (TPPG), the IT Policy & Advisory Council (ITPAC), and the IT Coordinating Committee (ITCC).

**Definition**

When used in this plan, the term “partners” includes the UNH and USNH entities for which CIS manages information systems. For example, the UNH Office of Sponsored Research (OSR) is a partner since CIS manages the InfoEd research administration system in partnership with OSR for the benefit of all USNH campuses. Partners are different from customers in that the level of involvement of a partner with CIS is higher.

**References**

The strategic planning committee used the following books extensively in the planning process:


**Plan of Presentation**

In the following sections, we discuss the state of CIS today; present our mission, vision, and values; introduce our strategic themes; describe our strategies and actions (with measures of achievement and target completion dates); and project the resources required for implementation.
STATE OF CIS TODAY

CIS’s Services

Demand for CIS services has grown steadily and will continue to grow. CIS services are evolving to serve an increasing number of clients and partners with ever more diverse needs across always changing technologies. CIS is flexible is adapting its organization to anticipate the affects of these trends.

CIS is a service organization headed by the Assistant Vice President/Chief Information Officer who reports to the UNH Vice President for Finance and Administration and the USNH Vice Chancellor and Treasurer. CIS is comprised of four operations units: Academic Technology, Telecommunications and Client Services, Printing and Mail Services, and Enterprise Computing; plus one internal support unit: Finance and Planning. An organization chart is included in Appendix A.

Academic Technology

The Audio/Visual Services staff assist faculty, students, and staff with the use of A/V and computer equipment in classrooms and other campus venues. The Instructional Development Center staff assist faculty in integrating a broad spectrum of instructional tools and technologies into their classes. The Photographic Services staff provide creative photographic support to the University community. The ResNet Program assists residence hall students to connect to the campus network by creating and distributing the ResNet Guide and supervising student consultants who give one-on-one assistance. The Academic Computing Systems staff manage the public PC and Mac computing facilities on campus. The Video Services staff offers a full range of services for video production: pre-production consultation, scripting, and budgeting; video and multimedia graphic production; and duplication and packaging. The Teach/Learn Centers staff provides a variety of services that support teaching with technology, including managing hands-on classrooms, distance learning, and videoconferencing facilities.

Telecommunications and Client Services

The Telecommunications and Client Services Group (TCS) was formed over several years from seemingly diverse service groups, as technology changed and convergence required that support staff from various groups work closely together, share expertise, and seek efficiencies in managing and supporting the technology. Telecommunications’ voice and networking groups provide communication, connectivity, and billing of these services to a wide range of clients. The primary communication services include high speed wired local and wide area network connections, wireless data, video conferencing, wireless phones, local and long distance calling. The UNH Computer Store sells computer products to the university community, with an emphasis on UNH supported computer products. Help Desk Professional Services is the primary point of contact and dispatch center for queries and incidents related to computing equipment, applications, and connectivity to the campus network. Additionally this group provides first level
support, technical training programs, and documentation services. Technical Services & Second Level Consulting specialists administer the servers that host electronic mail, groupware, and system-wide virus protection; consult on hardware and software problems as referred by HDPS; and repair desktops, printers, and servers. The Extended Services Group coordinates after-hours support for TCS services and offers: system administration and support for the UNH Web server, Web-related consulting services, and Web page development and maintenance through Web Solutions.

**Printing and Mail Services**

UNH Printing Services is a graphic arts resource serving the printing needs of the University community. They offer graphic design, Web page design, high quality full color offset printing, two retail copy centers, copyright clearance service, self-service library copier network, and office copier placement. Mailing Services is a mailing resource serving the intra-campus, national and international mailing needs of the University community, including first-class mail, bulk mail, FedEx, and mail list management.

**Enterprise Computing**

System administration and data center management includes hardware and software installation and support for UNH/USNH information systems, middleware administration and support. Also included are monitoring and backing up central computing systems for academic and administrative use, as well as centralized printing for Unix- and VMS-based functions. The Management Information System (MIS) staff provides applications development, management reporting, administration, and related support for the various components of the UNH and USNH enterprise application systems -- finance, student, human resources, research administration, and alumni -- in collaboration with the respective partners and clients.

**Finance and Planning**

Finance and Planning is responsible for CIS-wide financial management (including budgeting and reporting), human resource management, and planning efforts. The staff in Finance and Planning help CIS employees and managers do business with UNH and USNH today and to plan for tomorrow's business.

**Staffing**

CIS staff members are our greatest strength. Our staff members are talented, motivated, knowledgeable, professional, loyal, experienced, and adaptable to our diverse customer base. We have good people skills, work well in teams, and respond effectively to mandates. Although turnover is a fact of life, we value the energy that new employees bring to us. Many CIS directors, managers, and supervisors have long-term CIS and UNH/USNH experience. This provides considerable institutional knowledge.
CIS employs over 350 people in a variety of positions. Operating Staff (OS) positions in CIS include: IT Technicians, Information Support Assistants, Offset Press Operators, Digital Composition Operators, and others. Professional, Administrative, and Technical (PAT) positions in CIS include Information Technologists (many levels), Instructional Technology Specialists, and others. As shown in the following table, CIS employs 184 permanent staff and over 72 percent are PAT.

Table 1: CIS Employees (Headcounts)

<table>
<thead>
<tr>
<th>Unit</th>
<th>PAT</th>
<th>OS</th>
<th>Temp/Term/ Hourly</th>
<th>Student</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecom &amp; Client Services</td>
<td>45</td>
<td>20</td>
<td>31</td>
<td>43</td>
<td>139</td>
</tr>
<tr>
<td>Academic Technology</td>
<td>26</td>
<td>3</td>
<td>10</td>
<td>59</td>
<td>98</td>
</tr>
<tr>
<td>Printing &amp; Mail Services</td>
<td>7</td>
<td>30</td>
<td>3</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>Enterprise Computing</td>
<td>36</td>
<td>6</td>
<td>9</td>
<td>0</td>
<td>51</td>
</tr>
<tr>
<td>AVP Office/Finance &amp; Planning</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>119</strong></td>
<td><strong>65</strong></td>
<td><strong>53</strong></td>
<td><strong>122</strong></td>
<td><strong>359</strong></td>
</tr>
</tbody>
</table>

Of the 184 permanent staff, only about 5 percent are less than full time.

Financial Summary

CIS has responsibility for 26 discrete funds. The number of funds reflects the variety of activities in CIS and the need to account for them separately. Our FY2003 operating budget is nearly $30 million. Our major categories of revenues are as follows:

- $5,482,449 UNH Allocation
- 1,212,645 UNH Student Technology Fee
- 6,219,000 USNH Allocation
- 11,862,979 Auxiliary Sales to UNH/USNH Departments
- 5,070,040 Auxiliary Sales to Students, Faculty, & Staff
- $29,847,113 Total FY03 Revenue Budget

In addition to the operating budgets, we have $1.9 million in operating reserves as of July 1, 2002, and we have set aside plant funds of $3.0 million for equipment replacement. In recent years CIS has had balanced budgets and no fund has been in a deficit position. However, plant funds and reserves are not adequate to meet the level of equipment replacement that is expected in the near future. When plant funds and reserves are exhausted, possibly by FY05, we may be unable to replace essential equipment.

Governance Structure

Governance and decision making in this context are inherently complex. New governance structures for CIS are emerging. CIS strives for a rich interplay among governance groups, partners, clients, and its management leading to optimum mix of services and direction. Two primary governance groups advise CIS: the UNH Technology Policy and Planning Group (TPPG), and the USNH Information Technology Policy Advisory Committee (ITPAC). ITPAC is chaired by the UNSH vice chancellor/treasurer and is comprised of the academic/research vice presidents and financial vice presidents of each USNH institution plus the USNH director of human resources. TPPG is chaired by the
CIS AVP/CIO and is comprised of representatives from the following UNH constituencies:

- Vice President for Academic Affairs/Provost
- Vice President for Research & Public Service
- Faculty Senate
- UNH-Manchester
- Auxiliary Operations
- SIS Steering Committee
- Institutional Research
- Instructional Technology Group

- Vice President for Finance & Admin.
- Vice President for Student Affairs
- Students
- Alumni Association
- UNH Foundation
- Library
- Web Advisory Group
- Supported Products Advisory Committee (tentative)
CIS MISSION, VISION, AND VALUES

Mission Statement (what we do)

Our mission is to select, implement, sustain and retire information technology (IT), tools and infrastructure: we support teaching, learning, research, public service and administration. We provide the means to communicate, present, manage and secure information. We encourage the appropriate use of IT to improve the educational experience. Our role as CIS staff is to be the experts in IT, leaders in its deployment, and coaches in its best use.

Vision (where we are going)

We will lead in optimizing the use of IT resources through high quality, affordable, and responsive services. Collaboration with our clients and partners will foster IT outcomes that advance their programmatic objectives.

Values (our code of behavior)

We provide excellent customer service through:

- **Professionalism**: We maintain high standards of competence, performance, and behavior in our work.
- **Integrity/Ethics**: We commit to mutual respect, fairness, and honesty.
- **Trust**: We will deliver on our commitments and expect that others will also.
- **Communication**: We engage in open, two-way information sharing.
- **Collaboration**: We seek ways to work together with our colleagues and customers to focus on opportunities and find solutions.
- **Quality**: We take pride in delivering excellent, reliable, and sustainable services.
**STRATEGIC THEMES**

Computing and Information Services is an evolving organization. As there are steady advances in our underlying information technologies, the IT service delivery organization must dynamically retire old technologies and introduce appropriate new technologies, maintain staff expertise, and continually re-form our provision of related services.

In a broader context, CIS in past years has been marked by rapid turnover in management and a deserved reputation for lack of close accord with its clients. As this Plan is published, CIS is completing its third year with essentially the same team of senior leadership. The primary emphases of the management team currently are:

1. Financial discipline. Review and rationalization of expenses, rates, and controls. Funding requests tempered by the economic realities of USNH/UNH.
2. ‘Hardening’ of infrastructure. Assuring that our communications systems and our computer networks so vital to the mission of the academy are made robust and secure, consistent with risk assessment and mitigation investments.
3. Articulation of what we do (and don’t do), how we do it, and the terms and conditions of our service delivery. Definition of what quality service means and striving to achieve that level of service.
4. Focus, consolidation, cohesiveness, and adoption of standards and higher education/industry best practices. Alignment of management approaches, performance evaluation, and compensation across the several CIS units.
5. An increasing appreciation that the several ways in which CIS communicates broadly with its clients and partners (and with each other) must be complemented by the personal efforts of every CIS staffer to develop mutually respectful, professional relationships with our clients.

Grounded upon these CIS management emphases, and in full appreciation of the preeminent role of the *Academic Plan for the Future of the University of New Hampshire* in charting the future for UNH, CIS has created this Strategic Plan. The CIS Strategic Plan includes specific links to the *Academic Plan*. Action items in this CIS Plan will make CIS a helpful contributor to meaningful implementation of the *Academic Plan*.

We strive to be bold and to generate high-value outcomes for our clients and partners while being cognizant of realistic constraints—especially respecting current economic conditions and New Hampshire’s fiscal austerity. CIS strives to be planful, leveraging resources to accomplish the most important outcomes consistent with priorities strongly influenced by the recently created UNH Technology Policy and Planning Group.
Given this background, CIS chooses three strategic themes for this Plan:

1. Managing our Partner and Client Relationships
2. Leading UNH, and USNH as Appropriate, in the Optimal Use of IT Resources
3. Fostering Individual and Organizational Development in CIS.

CIS’s relationships with our stakeholders are crucially important. Clients and partners must enjoy mutual respect and trust and confidence with their providers of IT expertise and support. Successful collaborations will lead to optimal fulfillment of clients’ programmatic objectives. To that end, CIS is committed to establishing the best possible working relationships with clients and partners. This is the most important strategic theme of this Plan.

The second strategic theme addresses the responsibility of CIS to provide leadership in the deployment and cost-effective utilization of IT resources across UNH and also for USNH as appropriate. CIS will establish clear linkages between CIS’s efforts and plans with plans of other UNH units, most especially the plans of the colleges. CIS will seek opportunities to contribute to the making of colleges’ technology plans, as well as offering overall guidance so that all UNH unit technology plans meld into a coherent overall technology plan. Deployment of new systems and services will meet clients’ requirements while conforming to IT architectures that are designed to promote standards, provide stability and ensure economic life cycle costs. Lifecycles of deployed IT hardware, software and networking solutions must be actively managed. Retirement of obsolete technologies will enable reallocation of precious resources to contemporary solutions. CIS will formulate contingency plans addressing disaster recovery, and in partnership with clients will assist in their making of business continuity plans.

Strategic theme number three is to actively promote individual professional development and the development of CIS as an organization. To best support the IT needs of UNH and USNH, CIS pledges to develop its staff as a cadre of high performing individual contributors, motivated and incented to function in collaborative teams, and recognized for their success.

Execution of strategies and corresponding action items aligned with these three themes constitutes the essence of this CIS Strategic Plan.
STRATEGIES AND ACTIONS

Theme 1: Managing our partner and client relationships.

Strategy 1A: In support of the UNH goal of being a collegial and supportive community, CIS commits to communicate effectively with clients and partners.

Action 1A-1: Document and publish a directory of existing CIS products and services including a searchable database describing the products, services, rates (if applicable), and rationale for rates (if applicable). Update regularly.

Measures of achievement: Directory of services is published; CIS clients, partners, and staff find it useful.


Action 1A-2: Develop an integrated communications plan for CIS to publicize services, current projects and initiatives under development, ways for customers to give us feedback, and opportunities for constituencies to participate in planning and implementation efforts. Update regularly.

Measures of achievement: Communications plan is completed and feedback mechanism is in place.

Target completion date: June 30, 2005.

Action 1A-3: Seek regular, periodic meetings with the UNH Deans’ Council to share information, trends, and recommendations.

Measures of achievement: Meet with Deans at least once per semester.

Target completion date: December 31, 2003.

Strategy 1B: In response to the UNH goal to employ state-of-the-art technology to support the processes of teaching, learning, and scholarship, CIS will anticipate, understand, and strive to satisfy the information technology (IT) needs of our clients and partners.

Action 1B-1: Working with governance groups (TPPG and ITPAC), engage UNH-USNH client management and partners in identifying and prioritizing institutional and System IT needs. Once established, CIS will work with senior management and partners to reallocate resources and secure new resources to fund the prioritized needs.
Measures of achievement: Governance groups identify, prioritize, and advocate for UNH/USNH IT needs.

Target completion date: June 30, 2004.

Action 1B-2: Collect information from our clients and partners regarding their departmental IT needs, using surveys and other methods.

Measures of achievement: Each CIS unit receives input from clients and partners about their IT needs.

Target completion date: June 30, 2004.

**Strategy 1C: Evaluate our effectiveness in meeting our clients' and partners' IT needs in conjunction with the UNH goal to make efficient use of resources.**

Action 1C-1: Collect information from our clients and partners regarding their satisfaction with CIS services, using surveys and other methods.

Measures of achievement: Each CIS unit employs a service evaluation mechanism.

Target completion date: June 30, 2004.

**Strategy 1D: Improve our relationships with clients and partners.**

Action 1D-1: Recognize successful CIS partnerships with clients by publishing success stories that demonstrate collegiality and collaboration.

Measures of achievement: Four submissions per CIS director per year and at least six stories published in CIS Signals.

Target completion date: June 30, 2003.

Action 1D-2: Increase personal contact with clients when seeking their input and value differences of opinion and disagreement along with civility and consensus.

Measures of achievement: CIS decisions are made in part based on input from clients obtained through personal contact.

Target completion date: December 31, 2003.

Action 1D-3: Review and make recommendations regarding appropriate and effective IT governance structures.
Measures of achievement: Published list of key components of an effective structure.

Target completion date: December 31, 2003.

**Theme 2: Leading UNH, and USNH as appropriate, in the optimal use of IT resources.**

**Strategy 2A: Take a leadership position in shaping dynamic information technology architectures that complement and support UNH/USNH program objectives. Serve as educators and champions with respect to emerging technology tools and trends in support of teaching, research, public service, student services, and administration.**

Action 2A-1: Establish clear linkages between CIS’s efforts and plans with plans of other UNH units, most especially those of the colleges. Assist with the development of technology plans for each UNH college.

Measures of achievement: CIS documents agreements reached with Deans and other UNH unit leaders describing joint technology initiatives.

Target completion date: June 30, 2004.

Action 2A-2: Using comprehensive input from all clients and partners including full participation by the academic representatives at each System institution formulate the USNH Long Range Technology Plan version 3.0.

Measures of achievement: Approval of LRTP 3.0 by the USNH Board of Trustees.

Target completion date: June 30, 2005.

Action 2A-3: Seek opportunities to realize efficiencies and economies in the use of IT resources to ensure that UNH is making efficient use of resources.

Measures of achievement: Appropriate opportunities are identified and investigated with affected clients and partners.

Target completion date: June 30, 2006.

Action 2A-4: Promote innovation in the application of contemporary information technology to program areas by proactively sharing ideas, identifying university exemplars and best practices with clients and partners.
Measures of achievement: CIS routinely engages clients and partners from program areas in idea sharing and a review of university exemplars and best practices.

Target completion date: June 30, 2005.

Action 2A-5: In support of the UNH goals (1) to integrate academic and non-academic aspects of student life, (2) to strengthen connections among our teaching research, creative and public service activities, and (3) to develop a communication strategy that provides a clear picture of the University’s values, promote the concept of a UNH portal, gain UNH consensus on approach, and begin implementation.

Measures of achievement: Substantive use of a community portal.

Target completion date: June 30, 2004.

Action 2A-6: Establish campus consensus on goals and objectives for deployment of wireless networking solutions. Enable students, faculty, and staff mobile access to network resources in selected core-campus teaching and learning spaces using UNH standard wireless networking technology. This is an initial investment towards deployment of a ubiquitous UNH wireless network.

Measures of achievement: Deployment of wireless networking in core campus teaching/learning spaces pursuant to established campus goals and objectives.

Target completion date: September 30, 2005.

Action 2A-7: In support of the UNH goal to enhance linkages with state government and non-governmental organization and the UNH outreach mission, model and promote Granite State Distance Learning Network expanded to include all K-20 schools and libraries in New Hampshire.

Measures of achievement: Expanded network model accepted by USNH, the NH Department of Education, the NH CIO, and the Office of the Governor of NH.

Target completion date: June 30, 2005.

Action 2A-8: Charge the Instructional Technology Subcommittee of the TPPG to assess the impact of information technology on learning outcomes.

Measures of achievement: Subcommittee accepts assignment to produce a report advisory to TPPG.

Target completion date: December 31, 2003.
Strategy 2B: Improve management of product/service lifecycles.

Action 2B-1: Research, promote, and deploy best industry practices in partnership with clients to ensure efficient use of IT resources.

Measures of achievement: Each CIS unit has deployed best industry practices wherever practical.

Target completion date: June 30, 2005.

Action 2B-2: Review Inventory of Services and survey results to compare our service offerings with the CIS, UNH, and USNH missions, with the UNH Academic Plan, and with our understanding of clients' and partners' needs. Create a report that identifies the gaps in our service offerings and the resources necessary to close the gaps.

Measures of achievement: All service gaps are identified and shared with applicable governance groups for resource resolution.

Target completion date: June 30, 2007.

Action 2B-3: Create and implement a process for identifying and tracking emerging technologies and services. Evaluate promising products in partnership with prospective clients and the Supported Products Advisory Committee.

Measures of achievement: Emerging technologies and services are routinely identified, tracked, and evaluated.

Target completion date: June 30, 2005.

Action 2B-4: Review data collected on CIS effectiveness and execute a plan to make appropriate adjustments to how services are offered or delivered.

Measures of achievement: Plan for improving effectiveness is completed.

Target completion date: June 30, 2005.

Action 2B-5: Work with governance groups and clients to create and implement a process for decommissioning products/services that have been identified by CIS as obsolete or non-cost-effective.

Measures of achievement: Process is implemented and results in successful decommissioning obsolete or non-cost-effective products/services.

Target completion date: June 30, 2005.
Action 2B-6: For new products and services, synchronize expectations with achievable services. Create and implement a process or tool for analysis of proposed new products and services, including financial and human resource impacts as well as marketing analysis of audience to be served, their ability and willingness to pay for services (if fee for service), their interest in service, and relevance to UNH and/or USNH missions. Consider scalability and long-term (ongoing) expenses, not just startup cost.

Measures of achievement: Process or tool is implemented and results in successful analysis of new products/services.

Target completion date: June 30, 2006.

Action 2B-7: Implement a peer review process to assess if UNH IT services and support are competitive with peer institutions to further ensure efficient use of resources.

Measures of achievement: Accurate and useful data is gathered from peer institutions.

Target completion date: June 30, 2006.

Strategy 2C: Establish disaster recovery and business continuity plans in partnership with our clients.

Action 2C-1: Engage clients and partners in identifying mission critical services. Publish hours of service and expectations for trouble shooting for mission critical services.

Measures of achievement: Mission critical services are identified; hours of service and expectations are published.

Target completion date: December 31, 2003.

Action 2C-2: Educate clients and partners and frame expectations about respective roles and responsibilities for disaster recovery and business continuity planning.

Measures of achievement: Clients and partners are knowledgeable about their roles and responsibilities.

Target completion date: June 30, 2004.

Action 2C-3: Develop a CIS disaster recovery plan for CIS-hosted, mission-critical systems to ensure UNH/USNH information assets are appropriately safeguarded.

Measures of achievement: CIS disaster recover plan is approved by relevant governance groups.

Target completion date: June 30, 2004.
Action 2C-4: Assist clients of information systems and partners in the development of business continuity plans.

Measures of achievement: Clients and partners are knowledgeable about business continuity plans and CIS’s commitment to assist them.

Target completion date: December 31, 2004.

**Strategy 2D: Establish consensus on and adherence to IT security principles.**

Action 2D-1: Publish USNH security policy; communicate with UNH/USNH governance committees; commit to approved policy.

Measures of achievement: The USNH security policy is approved and published.

Target completion date: December 31, 2003.

Action 2D-2: Identify and prioritize risks to UNH/USNH technology assets and recommend risk mitigation strategies.

Measures of achievement: Risks are identified and prioritized; mitigation strategies are recommended.

Target completion date: December 31, 2003.

Action 2D-3: Inform clients and partners about security risks to their IT systems and actively encourage and support remediation by those clients and partners.

Measures of achievement: Clients and partners are knowledgeable about risks and engaged in remediation efforts.

Target completion date: June 30, 2004.

**Theme 3: Fostering individual and organizational development within CIS.**

**Strategy 3A: Attract, develop, and retain high-quality staff having competencies matched to the technology directions of CIS.**

Action 3A-1: Identify and train backup staff for all key positions.

Measures of achievement: All key backup staff are trained.

Target completion date: June 30, 2005.
Action 3A-2: Make professional development an integral part of CIS culture. Identify a career path for individuals within CIS. Include promotional and lateral movement and/or job enrichment opportunities. Encourage and reward staff who attain professional recognition in their field and bring distinction to CIS and UNH.

Measures of achievement: Professional and career development is discussed at the annual evaluation process for all staff. Staff who attain professional recognition in their field are recognized and rewarded.

Target completion date: June 30, 2005.

Action 3A-3: Publicize CIS successes and highlight CIS staff contributions to those successes.

Measures of achievement: Routine publication of CIS successes highlighting CIS staff contributions.

Target completion date: December 31, 2003.

Action 3A-4: Update CIS job descriptions to ensure they reflect actual work tasks and include core, relevant competencies and CIS values, especially team work and customer service.

Measures of achievement: All job descriptions are updated.

Target completion date: June 30, 2005.

Action 3A-5: To strengthen middle management within CIS, provide training and encouragement to high potential employees to become better qualified for advancement.

Measures of achievement: More CIS employees are qualified for advancement within CIS.

Target completion date: June 30, 2005.

Strategy 3B: Create an effective, cohesive organization based on clarity of direction and shared priorities and goals.

Action 3B-1: Increase awareness of what groups within CIS are doing to encourage collaboration and support by using “CIS Announce” and other internal communication vehicles.

Measures of achievement: Increase in the number of collaborative efforts.

Target completion date: June 30, 2004.
Action 3B-2: Promote and reward cooperation and teamwork through annual merit distribution.

   Measures of achievement: Improved teamwork and cooperation as measured by annual employee evaluations.

   Target completion date: June 30, 2005.

Action 3B-3: Implement a "360 degree" evaluation program for supervisors and managers.

   Measures of achievement: Evaluation program is implemented, and it provides useful feedback for supervisors and managers.

   Target completion date: June 30, 2005.


**RESOURCE REQUIREMENTS**

As shown below, most of the action items can be implemented with existing resources. Care will be taken to stage full implementation over the planning period to ensure that CIS’s operations are stable at all times.

Table 2: Resource Requirements for Implementing the Plan

<table>
<thead>
<tr>
<th>Action Item</th>
<th>Short Description</th>
<th>New Funding Required</th>
<th>Target Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A-1</td>
<td>Publish directory of services</td>
<td>None</td>
<td>08/25/03</td>
</tr>
<tr>
<td>1A-2</td>
<td>Develop integrated communications plan</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>1A-3</td>
<td>Seek regular meetings with Deans’ Council</td>
<td>None</td>
<td>12/31/03</td>
</tr>
<tr>
<td>1B-1</td>
<td>Engage management and partners to prioritize UNH/USNH IT needs</td>
<td>None</td>
<td>06/30/04</td>
</tr>
<tr>
<td>1B-2</td>
<td>Collect information regarding departmental IT needs</td>
<td>None</td>
<td>06/30/04</td>
</tr>
<tr>
<td>1C-1</td>
<td>Collect information regarding satisfaction with CIS services</td>
<td>None</td>
<td>06/30/04</td>
</tr>
<tr>
<td>1D-1</td>
<td>Publish success stories</td>
<td>None</td>
<td>06/30/03</td>
</tr>
<tr>
<td>1D-2</td>
<td>Increase personal contact with clients and partners</td>
<td>None</td>
<td>12/31/03</td>
</tr>
<tr>
<td>1D-3</td>
<td>Review governance structures</td>
<td>None</td>
<td>12/31/03</td>
</tr>
<tr>
<td>2A-1</td>
<td>Establish linkages between CIS plans with other UNH units, especially colleges</td>
<td>Depends on the other plans</td>
<td>06/30/04</td>
</tr>
<tr>
<td>2A-2</td>
<td>Formulate LRTP 3.0</td>
<td>Implementation costs unknown</td>
<td>06/30/05</td>
</tr>
<tr>
<td>2A-3</td>
<td>Seek opportunities for IT efficiencies and economies</td>
<td>None</td>
<td>06/30/06</td>
</tr>
<tr>
<td>2A-4</td>
<td>Promote innovation of IT in program areas</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>2A-5</td>
<td>Promote and begin implementation of a UNH portal ($200,000 one-time costs will be CIS funded)</td>
<td>$0 one-time; est. $200,000 annual ongoing</td>
<td>06/30/04</td>
</tr>
<tr>
<td>2A-6</td>
<td>Enable wireless networking in key core-campus teaching/learning spaces ($112,000 installation costs plus first year of ongoing costs will be CIS funded)</td>
<td>$0 one-time; est. $92,400 annual ongoing</td>
<td>09/30/05</td>
</tr>
<tr>
<td>2A-7</td>
<td>Expand GSDLN to include all K-20 schools and libraries</td>
<td>None—full cost recovery</td>
<td>06/30/05</td>
</tr>
<tr>
<td>2A-8</td>
<td>Charge TPPG subcommittee to assess impact of IT on learning outcomes</td>
<td>None</td>
<td>12/31/03</td>
</tr>
<tr>
<td>2B-1</td>
<td>Deploy best industry practices</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>2B-2</td>
<td>Align inventory of services with clients’ IT needs</td>
<td>Implementation costs unknown</td>
<td>06/30/07</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Resource</td>
<td>Date</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>2B-3</td>
<td>Create process for tracking emerging technologies</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>2B-4</td>
<td>Improve effectiveness in service delivery</td>
<td>Unknown</td>
<td>06/30/05</td>
</tr>
<tr>
<td>2B-5</td>
<td>Create process to decommission obsolete services</td>
<td>Mitigation costs unknown</td>
<td>06/30/05</td>
</tr>
<tr>
<td>2B-6</td>
<td>Create process for evaluating new products and services</td>
<td>None</td>
<td>06/30/06</td>
</tr>
<tr>
<td>2B-7</td>
<td>Implement a peer review process</td>
<td>None</td>
<td>06/30/06</td>
</tr>
<tr>
<td>2C-1</td>
<td>Engage clients in defining mission-critical services</td>
<td>None</td>
<td>12/31/03</td>
</tr>
<tr>
<td>2C-2</td>
<td>Educate clients about disaster recovery and business continuity planning</td>
<td>None</td>
<td>06/30/04</td>
</tr>
<tr>
<td>2C-3</td>
<td>Develop CIS disaster recovery plan (an outside consultant may be needed)</td>
<td>$50,000 one-time (estimated)</td>
<td>06/30/04</td>
</tr>
<tr>
<td>2C-4</td>
<td>Assist clients with business continuity plans</td>
<td>None</td>
<td>12/31/04</td>
</tr>
<tr>
<td>2D-1</td>
<td>Publish UNH security policy</td>
<td>None</td>
<td>12/31/03</td>
</tr>
<tr>
<td>2D-2</td>
<td>Identify risks to UNH/USNH technology assets (an outside consultant may be needed)</td>
<td>$200,000 one-time (estimated)</td>
<td>12/31/03</td>
</tr>
<tr>
<td>2D-3</td>
<td>Inform clients about security risks to their IT systems</td>
<td>None</td>
<td>06/30/04</td>
</tr>
<tr>
<td>3A-1</td>
<td>Identify and train backup staff for all key positions</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>3A-2</td>
<td>Elevate professional development and career path planning</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>3A-3</td>
<td>Publish CIS successes</td>
<td>None</td>
<td>12/31/03</td>
</tr>
<tr>
<td>3A-4</td>
<td>Update job descriptions</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>3A-5</td>
<td>Encourage and train staff for management positions</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>3B-1</td>
<td>Increase awareness of what groups are doing within CIS</td>
<td>None</td>
<td>06/30/04</td>
</tr>
<tr>
<td>3B-2</td>
<td>Promote cooperation and teamwork</td>
<td>None</td>
<td>06/30/05</td>
</tr>
<tr>
<td>3B-3</td>
<td>Implement a “360 degree” evaluation program</td>
<td>None</td>
<td>06/30/05</td>
</tr>
</tbody>
</table>

Two steps, 2A-5 and 2A-6, will require ongoing funding outside of existing CIS revenue streams. Two steps, 2C-3 and 2D-2, will likely require additional one-time funding outside of existing CIS revenue streams. CIS will clarify the scope of work prior to seeking additional funding from UNH and/or USNH sources. It is impossible to predict the implementation costs for two steps, 2A-2 and 2B-2, because the work to be done cannot be identified now.
APPENDIX A

COMPUTING AND INFORMATION SERVICES ORGANIZATION CHART

Bob Cape
Asst. Vice President/CIO

Kathy Gilpatrick
Sr. Admin Asst.

Petr Brym
Director
Telecom & Client Services

Terri Winters
Director
Academic Technology

David Rohde
Director
Printing & Mail Services

Dwight Fischer
Director
Enterprise Computing

Nancy Bolander
Director
Finance and Planning

Help Desk Prof Services
Network Services
Business Operations/Computer Operation
PBX/Technical Operations
Computer Store
Technical Services and Support

Photo Services
Video Services
Instructional Dev Center
AudioVisual Services
Academic Computing Systems
Teach & Learn Center
ResNet

Mailing Operations
Printing Operations

MIS
Database Administration
Management Reporting
System Administration
Data Center

Business Service Center
Strategic Planning
Excerpt from a presentation made to the Information Technology Policy Advisory Committee on October 17, 2002 regarding LRTP 3.

**Long Range Technology Plan 3.0**

**ITPAC Goals for LRTP 3.0**
- Perpetuate the successes of LRTP 2.x
- Coordinate deployment of advanced technologies, for example
  - Imaging
  - Wireless
- Manage risk
- Improve Classroom’ and Libraries’ technology infrastructure
- Apply technologies to enrich learning process (Rocco/Windsor/Cape committee)

**Process**
- ITPAC & Council of Presidents provide goals and funding parameters; charge campuses
- Institutions provide academic technology plans & proposals
- ITCC identifies commonalities in academic plans, integrates with other candidate projects
- ITCC prepares LRTP draft
- ITPAC reviews, ITCC revises
- ITPAC advances to Council of Presidents

**Timetable**
- Nov ’02 – June ’03
  - Form Expanded ITCC
  - Gather information
  - Prepare draft LRTP 3.0
- Summer ’03
  - Present plan to ITPAC; refine
- Nov ’03
  - Presidents’ Council
- Spring ’04
  - Board

**Criteria for Projects**
- USNH-wide appeal
- Shared infrastructure, centrally supported
  - Internet
  - USNH primary applications
- Innovation (Pilot, model, r&D, promising technology, campus “experiment”)
- Satisfy USNH strategic plans
- Underpins needs common to institution plans

**Table of Contents, LRTP 3.0**
- Vision
- Goals
- Environmental Scan
  - Leading higher ed institution plans
  - Technology trends and opportunities
- Perpetuating LRTP 2.x outcomes
- New Projects
- Financials (2.x carry-forward; 3.0 new)