Information Services and Technology (IS&T)
FY07 Q1 Report
For the months of July 2006 – September 2006

Distributed November 9, 2006

Office of the Vice President for Information Services and Technology:

Jerrold Grochow, Vice President for Information Services and Technology

Vijay Kumar, Director of Academic Computing
Christine Meholic, Director of Student and Administrative Information Systems
Don Montabana, Director of Client Support Services
Wilson D’Souza, Director of Infrastructure Software Development and Architecture
Theresa Regan, Director of Operations and Infrastructure Services
Allison Dolan, Director of Telephony and IS&T Shared Services

Christine Fitzgerald, Special Assistant to the VP and Strategic Communications Lead
Angie Milonas, Senior Manager of Finance
Steve Winig, Manager of Relationship Management and Project Management Programs

IS&T FY07 Q1 Report (July—Sep 2006)

Table of Contents

I. OFFICE OF THE VICE PRESIDENT .................................................................................................................. 3
II. ACADEMIC COMPUTING ........................................................................................................5
III. STUDENT AND ADMINISTRATIVE INFORMATION SYSTEMS ...........................................20
IV. CLIENT SUPPORT SERVICES .................................................................................................30
V. OPERATIONS AND INFRASTRUCTURE SERVICES ..............................................................34
VI. INFRASTRUCTURE SOFTWARE DEVELOPMENT AND ARCHITECTURE .........................47
VII. TELEPHONY AND SHARED SERVICES .............................................................................47
VII. IS&T FINANCIALS ..................................................................................................................50
I. Office of the Vice President

The major focus of IS&T leadership during Q1 FY07 was towards developing the IS&T FY07 Operational Plan and beginning preparatory activities for the development of the FY08 IS&T Strategic Plan. In parallel with these activities, IS&T leadership planned and participated in a series of offsite meetings to address key strategic and organizational objectives as part of an on-going effort to understand and respond to the issues confronting IS&T and IT at MIT. Also, at the end of September IS&T announced that Don Montabana would join the organization as the new director of Client Support Services on October 1, 2006.

Other Q1 accomplishments worth noting are:

IT-SPARCC
♦ The Computer Space Task Force (CSTF) negotiated a contact with Bruns-Pak—a consulting firm specializing in data centers and support—to help MIT confirm the generic data center specifications and develop the set of calculations, analysis, and documentation so the Institute can move forward if it is decided to pursue a new MIT data center option. A project plan was developed.  
♦ The draft language that is to be added to the MIT Proposal summary form regarding space changes, additional electrical power, or cooling to support computer hardware and related equipment was modified by the Vice President for Research in order to incorporate it into a larger Office of Sponsored Programs context.
♦ The Executive Vice President met with IT-SPARCC to review the progress of the Council and suggested key areas for focus in the upcoming year, including Voice over Internet Protocol (VoIP) technology, new construction projects, IT process studies, and resources.

Project Management
♦ Presented the ‘State of Project Management’ within IS&T to VP staff and identified follow-up action items that have been incorporated into the Project Management FY07 Operational Plan.
♦ Initiated project management assistance to the Software Release Team for the Vista Release Project, the Departmental Information Technology Resource group for the Email Response Team Project, the Hyperion Pilot Working Group, and the Student Systems Vision Project.
♦ Solicited participants from each functional area for a Project Management 101 to be held in FY07 Q2.

Relationship Management
♦ Performed a SWOT analysis of the Relationship Management program.
♦ Oriented a new Relationship manager—Darlene Fladager.
♦ Began outreach to the Department of Undergraduate Education, the School of Architecture and Planning, and the MIT Press.
♦ Continued liaison work for the Sloan School, PDSI, and NW35 construction work; began liaison work for the construction of the Cancer Research Center and the new Media Lab.
♦ Established client-IS&T connections (i.e., DSL for identity management, PDSI for VoIP pilot, MIT Press for advice on server backup strategies and on hiring an IT manager, etc.)

Strategic Communications
♦ Developed and communicated key messages for IS&T; provided guidelines and examples for using key messages.
♦ Presented the role of communications in the Product and Services Lifecycle to the IS&T Leadership Team.
♦ Implemented ‘IS&T in the News’ and ‘THIS & THAT’ bulletin boards in all of the IS&T buildings.
♦ Created a communication and marketing plan for the AdminIT Program, including the production of a brochure.
♦ Participated in MIT’s Vendor and Travel Vendor fairs; produced the Keep in Touch: IS&T Offers Connection Options for MIT Travels brochure.
♦ Drafted press releases on retiring Eudora support and the VoIP pilot.

Some of the commitments for Q2, FY07 include:

**IT-SPARCC**
♦ Review the progress of VoIP at the October meeting.
♦ Deliver progress reports on the CSTF.
♦ Hear an initial report for MITCET on their strategic plan.

**Project Management**
♦ Conduct a Project Management 101 Workshop.

**Relationship Management**
♦ Finalize a model to assess and measure the stages of the IS&T relationships with existing clients.
♦ Promote awareness of IS&T services around the Eudora retirement.
♦ Expand the Relationship Management web site to provide critical client information.
♦ Conduct a focus group to evaluate the maintenance and dissemination of client profile in rank.
♦ Establish one-on-one meetings with IS&T directors beginning October 2006 to share Relationship Management successes and client information and to solicit feedback.
♦ Establish a Relationship/Account Management Community of Practice by October 2006 to enable continued collaboration among universities and industry programs. Engage at least three higher education and one industry members by December 2006.

**Strategic Communications**
♦ Submit RPF to the Publishing Services Bureau for IS&T web site redesign and identity for printed communication materials.
♦ Distribute the IS&T Strategic Communication Plan.
♦ Create a communication plan for Vista release.
♦ Draft press releases on Vista release and VoIP implementation.
♦ Plan an IS&T-focused community forum.
♦ Meet with IS&T managers to review communications progress and gather feedback.
II. Academic Computing

EXECUTIVE SUMMARY

The highlights of activities in the various program areas for the first quarter of FY 07 are presented below; detailed progress against smart goals and supporting metrics follow:

♦ Fall semester outreach activities were kicked off this quarter with a presentation to 35 new faculties at a Teaching and Learning Lab meeting. Staff spent time updating the Educational Technology Resource brochure, and preparing presentations of the products and services available for Ed Tech Day which was held on September 12th. Forty faculty, staff and researchers took advantage of Ed Tech Day.

♦ Support for educational technology and learning spaces needs are being discussed for Project-Based Learning and Educational Commons subject planning and delivery for Spring 07 classes. Weekly outreach meetings are being held with Project Based Learning faculty.

♦ Mathematics training and support for course development was provided for several GIR courses including Unified Engineering (16.01), Thermodynamics and Kinetics (5.06) and Differential Equations (18.03). An online 3D Visualization Technology survey was conducted to support the GIR course in Biology (7.014) with 120 students. Three faculty interviews were conducted and contacts were established with the visualization center at Purdue to help inform efforts at MIT.

♦ The math portal, a tool for faculty to locate and learn about applications and support for technology used in subjects with a mathematics component has received 1000 hits since it’s launch last quarter.

♦ Academic use of Wikis use has grown with over 800 students in seven courses, including 525 students in Prof. Sadowy’s course 3.091 - Introduction to Solid State Chemistry. There are 120 non-academic wikis. Academic computing is working with ISDA on enterprise blog/wiki planning and support.

♦ Six one-on-one sessions and 3 general classes were held and a complete documentation review was provided to support Stellar as growth in adoption continues with 517 courses in the Course Management System for Fall 06. The cumulative count of websites created since 2001 has reached 3742. A pilot of the image tool for Stellar that was developed in collaboration with AMPS and the Libraries has been launched with the Rotch Library’s Architecture image repository.

♦ Public cluster machine renewal of one hundred and forty two workstations, based on a four-year cycle was completed this quarter. A concerted effort was made to reduce the number of Sun workstations and thus reduce cost. Seventy seven Sun machines were replaced with Dell workstations.

♦ Loans of 91 laptops were made to support four courses. Staff negotiated a reduced level of requests from Course 2.671 leveraging the use of student owned laptops.

♦ GIS support and training was provided for two projects based learning courses. In addition to providing ongoing support for 50 students in the Terrascope class, 30 students were supported in the new project based learning course called CityScope, which encourages students to learn to solve problems through projects. The course is designed to get students excited about cities and the complex challenges they pose. This year CityScope will study the city of New Orleans and aims to expose freshmen to a wide range of computation, calculation and analytic techniques such as spatial data analysis, census analysis, econometric modeling, and cost-benefit analysis and survey research for identifying key urban problems. 41 GIS Lab consultations were provided to aid student learning. MIT Geodata repository usage continues to be strong with 682 unique logins to the Geodata repository by 123 unique users. Sixty-eight new accounts were created.

♦ MIT Cable TV carried live coverage of several events, including Sloan Orientation, Sloan Preterm Event, MITES Submarine Competition from Alumni Pool, Sloan Dean’s Innovative Leader Series, Architecture Series, Enterprise Forum this quarter. An IS&T Big Initiative proposal for IPTV Evolutionary Pilot in collaboration with OIS, was submitted and approved. The pilot will investigate...
delivery of MIT Cable TV programming via MITNet and evaluate the interface between programming providers and MIT customers by allowing students and other users to watch video content on their personal computers. The results of the pilot will be used to determine if IPTV is a feasible replacement for the current cable system and if it should be offered as an enterprise service.

◆ Ten new third party educational software applications were acquired this quarter, bringing the total supported count up to 106. Upgrades were made to 11 existing applications. Athena software launches totaled 92,506. Athena launches in September 2006 showed a 10% increase over September 2005 largely due to increase in Open/Office launches. Overall Matlab usage was up in September 2006 with increases in Student Matlab, more than making up for decreases in Matlab Athena launches.

◆ A Sun Microsystems sponsored seminar, “Open for Education- How sharing improves education in the participation age”- was held on September 18th. The discussion explored how adopting a shared approach to education can help to narrow the “Education Divide” by providing better educational tools for students, teachers and parents around the world.

◆ Significant progress was made in the area of bringing research tools into the classroom. A beta test of StarPirouette (formerly STAR PDB Viewer) was completed successfully in support of TEALsim-based teaching materials for the Fall GIR course 7.012 Introduction to Biology with 280 students. There have been 450 downloads of the software which runs on student as well as Athena cluster machines. Requirements for new features to the user interface have been collected. A presentation of a prototype of StarHydro was made to Hydrology. The STAR portal is up and running

◆ In support of Applications for Digital Content repositories, repository plug-ins for Rotch Library (access to DSpace via SRW) and Visualizing Cultures were successfully delivered. Support was also provided for the Stellar Images tool, which is currently in pilot phase.

◆ Discussions have continued on the Educational Technology models to support the ongoing work of the Ad Hoc AC Organizational Review Committee.

◆ Jim Cain, who has previously worked at MIT in the department of Architecture and CAVS, has joined in the role of Educational Technology Consultant. He will support projects within the School of Engineering and also provide backup for math software projects using MATLAB and Mathematica. Paul Baumgardner and Chad Dupuis, both staff in the Installations and Spaces area left MIT.
ACCOMPLISHMENTS

**Mathematical Analysis and Presentation**

**Goal:** Provide training and course support for mathematical software.

**Impact:** Enable greater utilization of mathematics tools in support of undergraduate teaching and learning.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 sessions, 20 attendees</td>
<td><strong>MATLAB QuickStart</strong></td>
<td>Students, researchers (30 attendees)</td>
<td>Monthly</td>
</tr>
<tr>
<td>Training on MATLAB and Simulink (70 students) in Q1</td>
<td>Simulink tutorials for 16.06 <em>Principles of Automatic Control</em></td>
<td>Prof. Willcox (70 students)</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>Likely Q2</td>
<td>MATLAB tutorials for Course 17</td>
<td>Graduate students (20 students)</td>
<td>Fall 2006</td>
</tr>
</tbody>
</table>

**Goal:** Develop innovative instructional materials for math-intensive subjects.

**Impact:** Assist faculty in presenting complex mathematics and linking GIR math knowledge with higher-level subjects.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting needs analysis; attending class meetings to work with faculty and students</td>
<td>Assist with pilot of 6.081, a new proposed EECS entry level subject</td>
<td>Prof Abelson, Kaelbling</td>
<td>Fall 2006</td>
</tr>
</tbody>
</table>

**Goal:** Manage the IS&T Math Portal.

**Impact:** Provide definitive source for campus users to learn about math software. The impact is to be measured using web counters.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>310 front page hits; 669 software page hits in Q1</td>
<td>Development of tutorial topic pages: (a) <em>Introduction to Mathematica</em> and (b) <em>MathML at MIT</em></td>
<td>Faculty, instructors, students, researchers</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>Completed as needed</td>
<td>Topic page updates in collaboration with CSS</td>
<td></td>
<td>Monthly</td>
</tr>
</tbody>
</table>
Science And Engineering Visualization

**Goal:** Provide training and course support for Science and Engineering visualization.  
**Impact:** Enable greater utilization of visualization tools in support of undergraduate teaching and learning.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.010 Matlab materials developed (30 students, Prof Veneziano)</td>
<td>MATLAB visualizations for 1.010 <em>Uncertainty in Engineering</em></td>
<td>Prof. Veneziano (30 students)</td>
<td>Fall 2007</td>
</tr>
<tr>
<td></td>
<td>Engineering software support and training for 1.38 <em>Engineering Geology</em> and 1.381 <em>Rock Mechanics.</em></td>
<td>Prof. Einstein (50 students)</td>
<td>Fall 2007 (1.38) Spring 2007 (1.381)</td>
</tr>
</tbody>
</table>

**Goal:** Develop innovative instructional materials for science and engineering visualization  
**Impact:** Use of innovative teaching methods through support for the integration of visualization tools in existing science and engineering classes. A clearer understanding of the software, hardware, and facilities needed to support new services for 3D visualization.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
</table>
| Beta test of StarPirouette a huge success in 7.012 Fall, 2006 with somewhere between 280 and 400 students participating. Over 450 download of the software. No significant technical difficulties running on student machines or Athena cluster machines. Well received by students, teaching assistants, and faculty. New User Interface design was presented to the clients. The clients are very enthusiastic about the new design and have added features that take advantage of the new approach. Significant work is currently underway to implement the new User Interface design, implement added features, and improve performance in areas identified by the clients. | 1. TEALsim-based teaching materials for GIR course 7.014 *Introduction to Biology* | Prof. Belcher  
Prof. Walker  
(GIR: 120 students; could be extended to Chemistry or Materials Science and Engineering) | Spring 2007 |
Conducted online survey and 3 faculty interviews in Q1; Established contacts with visualization center at Purdue

2. Survey Report on educational needs for 3D visualization services, software, hardware, and facilities Faculty, instructors Spring 2007

3. Ed Tech Times article on 3D visualization technology Faculty, instructors (100 Ed Tech Times subscribers) Spring 2007

Research underway

4. Requirements Report for Visualization Portal Faculty, instructors Science and engineering students Spring 2007

**Geographic Information Systems**

**Goal:** Develop learning materials, training and support for GIS for freshman seminars and departmental required subjects

**Impact:** Enable greater utilization of GIS tools in support of undergraduate and graduate teaching and learning. Assist in the delivery of subjects integral to majors and in new DUE/CUP initiatives including Project Based Learning (PBL seminars).

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 GIS Lab consultations; 68 new accounts (users); 123 unique users accessed repository in Q1</td>
<td>1. Provide GIS lab resources (training, consulting, support) to aid student learning</td>
<td>Terrascope class (50 students), PBL CityScope seminar (30 students), Required subjects for majors in Civil and Environmental Engineering (26 undergraduates, 177 graduate students), Architecture (14 undergraduates, 213 graduate students) and Urban Studies and Planning (7 undergraduates, 208 graduate)</td>
<td>Fall and Spring 2007</td>
</tr>
</tbody>
</table>

Meeting regularly with McCants, Cityscope, Bowring, Field camp

2. Develop teaching materials for faculty incorporation into Urban Studies, EAPS, History Hoyt (DUSP), McCants (History), Bowring (EAPS), Entekhabi (LEE) Spring 2007

**Outreach and Communications**

**Goal:** Provide coherent framework of available educational technology tools and resources for teaching and learning.
Impact: Make faculty more aware of the wealth of edtech resources at their disposal at MIT; publicize efforts of our faculty in edtech work. Provide forum for users of edtech to exchange info and ideas.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snapshot (KEEP Toolkit) templates completed</td>
<td>1. Create inventory and viewbook on available edtech Athena, Mac and PC applications and faculty-developed projects</td>
<td>Faculty &amp; teaching staff</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>Complementary project began to inventory GIR subjects use of technology, to be completed in Q2</td>
<td>2. Conduct monthly outreach activities on new tools available via AC, iCampus, Libraries, OCW, etc. (Crosstalk, Ed Tech Partners)</td>
<td>Faculty &amp; teaching staff</td>
<td>Spring 2007 (ongoing)</td>
</tr>
<tr>
<td>Weekly PBL faculty outreach meetings in prep for Spring 07 classes</td>
<td>3. Promote AC activities via publications, events, and communications (Ed Tech Times, New Faculty Orientation)</td>
<td>Faculty &amp; teaching staff</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>Ed Tech Day Presented at New Faculty TLL meeting (35 faculty) Brochure reprinted with update insert</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Web Education Tools

Goal: Provide technical assistance and support for faculty using Web Education Tools

Impact: Faculty is able to better develop and use blogs and wiki technologies in support of web-based teaching and learning. Partnership with faculty in web portfolios pilot for freshman Communications requirement and departmental majors requirements.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot underway; 7 academic subjects and 120 non-academic; working with ISDA on enterprise blog/wiki planning and support</td>
<td>Provide Wiki service for educational users</td>
<td>5 academic subjects plus additional project wikis in Spring 06; 103 students plus ~900 project-based wiki users</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>2 subjects in Fall06; working with ISDA on enterprise blog/wiki planning and support</td>
<td>Provide Blog service for educational users</td>
<td>4 academic subjects in Spring 06 (227 students)</td>
<td>Spring 2007 (ongoing)</td>
</tr>
<tr>
<td>Reviewed Stellar documentation; provided 1:1 training sessions</td>
<td>Provide Stellar support and input into new tool development</td>
<td>505 academic subjects used Stellar in Sp06.</td>
<td>Fall 2006</td>
</tr>
</tbody>
</table>
Writing program testing wiki portfolios; providing server support for PGT and Valencia projects

Provide server admin, programming, and documentation support for faculty edtech projects and experiments

Einstein (Civil), Morgenstern (FL&L), Faery (Writing Program), Terman (EECS)

Fall 2006 and Spring 2007

---

**Learning Environments (Physical & Virtual)**

**Goal:** Design teaching and learning environments that incorporate new technologies, including 3D Visualization spaces with software and hardware to support immersive 3D visual experience and integrated communications.

**Impact:** Meet emerging educational needs of the Educational Commons provide effective teaching and learning environments to students and faculty.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing meetings</td>
<td>Work with Dean of Undergraduate Education, AMPS &amp; MITCET to develop a roadmap and sustainable plan for teaching and learning environments to meet emerging educational needs</td>
<td>ODU (Dean Hastings), and designated faculty; GIR Task Force Implementation Group; Classroom Task Force (Prof. Bob Redwine, chair.)</td>
<td>Preliminary working draft Fall 2006; Roadmap Spring 2007</td>
</tr>
<tr>
<td>NMC hardware and software has been upgraded (iMac G5, Dual PowerMac G5, MiniDV, DVD, VHS, analog-digital converter), Final Cut Pro, Shake, Adobe CS2</td>
<td>Pilot two spaces, including the New Media Center to support Project Based Learning</td>
<td>Freshman PBL pilots; NMC users; SHASS</td>
<td>Spring 2007</td>
</tr>
<tr>
<td>MacAthena implementation. AFS home dir linked from the desktop, secure single sign-on (thanks to Duncan Kincaid DUSP). Web.mit.edu/acis/labs/26-139</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New room scheduler being piloted to make reserving the room easier and more available. M26-139-schedules.mit.edu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ongoing operational support of the previously</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
installed collaborative spaces

**Goal:** Continue to provide the student computing environment to meet educational needs through public cluster management, DLC cluster renewals, laptop loaner program, and win Athena implementations for academic uses in DLC’s.

**Impact:** Sustained availability of appropriate technologies aligned with undergraduate educational programs; encouragement and exploration of mobile computing approaches to teaching; maintain baseline access for students who otherwise do not have their own technology.

Public cluster machines renewal of one hundred and forty two workstations, based on a four-year cycle was completed this quarter. A concerted effort was made to reduce the number of Sun workstations and thus reduce cost. Seventy-seven Sun machines were replaced with Dell workstations.

Loans of 91 laptops were made to support four courses. Staff negotiated a reduced level of requests from Course 2.671 leveraging the use of student owned laptops.

**Goal:** Develop innovative instructional materials for science and engineering visualization

**Impact:** Use of innovative teaching methods through support for the integration of visualization tools in existing science and engineering classes. A clearer understanding of the software, hardware, and facilities needed to support new services for 3D visualization.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta test of StarPirouette a huge success in 7.012 Fall, 2006 with somewhere between 280 and 400 students participating. We had over 450 downloads of the software. No significant technical difficulties running on student machines or Athena cluster machines. Well received by students, teaching assistants, and faculty. New User Interface design was presented to the clients. The clients are very enthusiastic about the new design and have added features that take advantage of the new approach. Significant work is currently underway to implement the new User Interface design, implement added features, and improve performance in areas identified by the clients.</td>
<td>1. TEALsim-based teaching materials for GIR course 7.014 Introduction to Biology</td>
<td>Prof. Belcher Prof. Walker (GIR: 120 students; could be extended to Chemistry or Materials Science and Engineering)</td>
<td>Spring 2007</td>
</tr>
</tbody>
</table>
2. Survey Report on educational needs for 3D visualization services, software, hardware, and facilities
   Faculty, instructors
   Spring 2007

3. Ed Tech Times article on 3D visualization technology
   Faculty, instructors
   (100 Ed Tech Times subscribers)
   Spring 2007

4. Requirements Report for Visualization Portal
   Faculty, instructors
   Science and engineering students
   Spring 2007

Goal: Develop a business & service model for implementing IPTV as an evolution for MIT Cable TV (CATV) by January 31, 2007
Impact: Minimize upgrades to aging CATV infrastructure and free up channels to fulfill pending requests. Leverage the MIT network and Internet2 infrastructure to deliver content at MIT to students, Housing, Sloan School of Management, Foreign Languages & Literature and to 22 schools on New England Cross roads and over 100 schools on Internet2.

Status & Progress
MIT Cable TV carried live coverage of several events, including Sloan Orientation, Sloan Preterm Event, MITES Submarine Competition from Alumni Pool, Sloan Dean’s Innovative Leader Series, Architecture Series, Enterprise Forum this quarter. An IS&T Big Initiative proposal for IPTV Evolutionary Pilot in collaboration with OIS, was submitted and approved. The pilot will investigate delivery of MIT Cable TV programming via MITNet and evaluate the interface between programming providers and MIT customers by allowing students and other users to watch video content on their personal computers. The results of the pilot will be used to determine if IPTV is a feasible replacement for the current cable system and if it should be offered as an enterprise service.

Bringing Research Tools To The Classroom
Goal: Implement STAR tools (STARGP, STAR PDBViewer) into two new domains for teaching. Tools to be used for teaching in 2 courses in Spring 2007 with possible extensions beyond.
Impact: In the area of higher performance computing applications, bringing research tools to the classroom entails significant loss of time setting up students to use the tools, a steep learning curve to use command line tools and significant amount of scripting knowledge to connect various research or Unix® utilities. The STAR tools are aimed at increasing productivity in the classroom by increasing domain teaching and learning time as well as preparing students for research.

<table>
<thead>
<tr>
<th>Status &amp; Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta test of StarPirouette. Presentation of StarHydro prototype to clients. Dealing with hardware issues for StarGP and serving up StarPirouette to the community.</td>
<td>Implement STAR tools in two new domains from a list of potential customers</td>
<td>Quantum Chemistry, Chemical Engineering, Hydrology Ocean Science, EAPS</td>
<td>Spring 2007</td>
</tr>
<tr>
<td>STAR portal is now up and running.</td>
<td>Setup STAR portal website</td>
<td>Faculty and Students</td>
<td>Winter 2006</td>
</tr>
</tbody>
</table>
This item has been put on hold due to lack of resources and the success of the current work.

Provide training for wider diffusion of STAR tools

IS&T, faculty

Winter 2006

Applications For Digital Content Repositories

**Goal:** Pilot Implementation of two applications for digital content repositories (Stellar Images, Thalia, VUE, Pachyderm, MetaMedia) for potential courses in Visualizing Cultures, Project Based Learning, HST, Architecture and Planning

**Impact:** The Stellar Images tool will allow instructors to search for images to use in the classroom and to create slideshows. Initially the Stellar community will have access to images from the Rotch Visual Collection and the Visualizing Cultures Image Database. Initially the Stellar community will have access to images from the Rotch Visual Collection and the Visualizing Cultures Image Database.

The OKI federated search tool has been successfully adapted, tested and integrated into VCID to allow for both individual and cross-collection searches, giving users the greatest flexibility with their search results. The Visual Understanding Environment (VUE) application will provide flexible tools for integrating digital resources into teaching and learning. Using VUE’s concept mapping interface, faculty and students can design semantic networks of digital resources drawn from digital libraries, local and remote file systems and the Web.

<table>
<thead>
<tr>
<th>Status and Progress</th>
<th>Deliverable</th>
<th>Customer</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful delivery of repository plug-ins for Rotch Library (access to DSpace via SRW) and Visualizing Cultures</td>
<td>Stellar Images pilot</td>
<td>Rotch Library</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>HST – Progress waiting on departmental infrastructure Architecture – Current discussions</td>
<td>Evaluation of additional tools and customers for Thalia</td>
<td>Stellar Image (as service provider), HST, School of Architecture</td>
<td>Winter 2006</td>
</tr>
<tr>
<td>Arranging meetings with faculty/staff who have indicated interest</td>
<td>Evaluation of additional tools and customers for VUE</td>
<td>Brain &amp; Cognitive Science, HASS, Architecture, DUSP</td>
<td>Winter 2006</td>
</tr>
<tr>
<td>Adding support for multiple repositories and federated searching</td>
<td>MetaMedia</td>
<td>Humanities and Foreign Languages</td>
<td>Spring 2007</td>
</tr>
<tr>
<td>Adding support for multiple repositories and federated searching</td>
<td>Pachyderm</td>
<td>Humanities and Foreign Languages, DUSP, Architecture, (MIT Museum)</td>
<td>Spring 2007</td>
</tr>
</tbody>
</table>

**Student Software Acquisition & Distribution**

**Goal:** Continue acquisition, licensing, maintenance, installation and distribution of software of over 90 applications used for student computing. ONGOING GOAL

**Status and Progress**

See Metrics in Appendix

**Impact:** Provide a reliable software environment for student computing.

**Goal:** Investigate the applicability of the streamlined student Matlab licensing model to other applications (e.g. Mathematica) by spring 2007.

**Impact:** Reduce distribution transaction time.
## Academic Computing Metrics 2007 Q1

### Math, Science and Engineering Course Support

<table>
<thead>
<tr>
<th>Course</th>
<th>Faculty</th>
<th>Students</th>
<th>Type of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.06 Principles of Automatic Control &amp; 16.07 Dynamics</td>
<td>Prof. Willcox Prof. Deyst</td>
<td>70</td>
<td>Teaching: Taught four hours of MATLAB &amp; Simulink tutorials.</td>
</tr>
<tr>
<td>7.012 Introductory Biology</td>
<td>Prof. Walker Dr. Rokop Prof. Belcher</td>
<td>300</td>
<td>Assessing New Technology: Conducted online survey on use of 3D visualization in class.</td>
</tr>
<tr>
<td>1.010 Uncertainty in Engineering</td>
<td>Prof. Veneziano</td>
<td>30</td>
<td>Creating Course Materials: Created MATLAB visualizations.</td>
</tr>
</tbody>
</table>

### Use of Mathematical Tools at MIT Portal

<table>
<thead>
<tr>
<th>Number of Hits</th>
<th>July 2006</th>
<th>August 2006</th>
<th>September 2006</th>
<th>QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front topic page</td>
<td>63</td>
<td>77</td>
<td>170</td>
<td>310</td>
</tr>
<tr>
<td>Software overview, online tutorials &amp; other specialized pages</td>
<td>134</td>
<td>127</td>
<td>408</td>
<td>669</td>
</tr>
</tbody>
</table>
## Mathematics, Science and Engineering Consultations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Software: number of consultations (email, phone, in-person, co-teaching)</td>
<td>1</td>
<td>12</td>
<td>22</td>
<td>35</td>
</tr>
<tr>
<td>Science &amp; Engineering Software: number of consultations (email, phone, in-person, co-teaching)</td>
<td>2</td>
<td>10</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Outreach &amp; Training (number of sessions)</td>
<td></td>
<td></td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Outreach &amp; Training (number of people)</td>
<td></td>
<td></td>
<td>is&amp;t subscribers</td>
<td>20</td>
</tr>
</tbody>
</table>

## Course-related blogs in use - Fall 2006

<table>
<thead>
<tr>
<th>Course</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.601</td>
<td>Susskind</td>
<td>24</td>
</tr>
</tbody>
</table>

## Course-related wikis in use – Fall 2006

<table>
<thead>
<tr>
<th>Course</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>Lerman</td>
<td>162</td>
</tr>
<tr>
<td>16.82</td>
<td>J.Craig</td>
<td>18</td>
</tr>
<tr>
<td>21w.731-01</td>
<td>Faery</td>
<td>18</td>
</tr>
<tr>
<td>21w.735-01</td>
<td>Unger</td>
<td>12</td>
</tr>
<tr>
<td>21w.765</td>
<td>Barrett</td>
<td>16</td>
</tr>
<tr>
<td>22.033</td>
<td>Kadak</td>
<td>7</td>
</tr>
<tr>
<td>3.091/3.093</td>
<td>Sadoway</td>
<td>525</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course 3 Lab</td>
<td>Kimmerling</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Eng</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP.782</td>
<td>Ianova</td>
<td></td>
</tr>
<tr>
<td>Faculty Search</td>
<td>3 spaces</td>
<td></td>
</tr>
</tbody>
</table>
GIS Support

<table>
<thead>
<tr>
<th></th>
<th>July 2006</th>
<th>August 2006</th>
<th>September 2006</th>
<th>QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS Lab: No. of consultations (e-mail, phone, in-person, co-teaching)</td>
<td>8</td>
<td>16</td>
<td>17</td>
<td>41</td>
</tr>
<tr>
<td>MIT Geodata repository- new accounts</td>
<td>3</td>
<td>4</td>
<td>61</td>
<td>68</td>
</tr>
<tr>
<td>MIT Geodata repository- unique users</td>
<td>20</td>
<td>27</td>
<td>76</td>
<td>123</td>
</tr>
<tr>
<td>MIT Geodata repository- unique logins</td>
<td>187</td>
<td>219</td>
<td>276</td>
<td>682</td>
</tr>
<tr>
<td>Software development support</td>
<td>Census tool</td>
<td>Census tool</td>
<td>Census tool</td>
<td>Most current users of Geodata repository</td>
</tr>
<tr>
<td>Outreach &amp; Training</td>
<td>0</td>
<td>3 faculty</td>
<td>50 (12,000) + 9 faculty + 12 students in 1,966</td>
<td>50 (12,000) + 12 faculty + 12 students in 1,966</td>
</tr>
</tbody>
</table>

Athena Equipment Renewal

<table>
<thead>
<tr>
<th>Renewal</th>
<th>Public Cluster</th>
<th>Public Quickstation</th>
<th>Dorm Cluster</th>
<th>Dorm Quickstation</th>
<th>E-Classroom</th>
<th>Lecture Hall</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM replaced w/ Dell (Linux)</td>
<td>20</td>
<td>4</td>
<td>11</td>
<td>1</td>
<td>22</td>
<td>4</td>
<td>62</td>
</tr>
<tr>
<td>Sun replaced w/ Dell (Linux)</td>
<td>19</td>
<td>3</td>
<td>22</td>
<td>14</td>
<td>18</td>
<td>1</td>
<td>77</td>
</tr>
<tr>
<td>Sun replaced w/ Sun (Solaris)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>39</td>
<td>7</td>
<td>33</td>
<td>15</td>
<td>40</td>
<td>8</td>
<td>142</td>
</tr>
</tbody>
</table>

Laptop Loans

<table>
<thead>
<tr>
<th>Fall 2006</th>
<th>DELL</th>
<th>IBM</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course 1.00</td>
<td>17</td>
<td>34</td>
<td>51</td>
</tr>
<tr>
<td>Course 2.671</td>
<td>31</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Course 2.003</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Course 12.010</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>48</td>
<td>43</td>
<td>91</td>
</tr>
</tbody>
</table>
MIT Cable TV Metrics

<table>
<thead>
<tr>
<th>Programming</th>
<th>July 2006</th>
<th>August 2006</th>
<th>September 2006</th>
<th>QUARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Hours - live broadcasts</td>
<td>3</td>
<td>45</td>
<td>7</td>
<td>55</td>
</tr>
<tr>
<td>Programming Hours - pre-recorded broadcasts</td>
<td>744</td>
<td>744</td>
<td>720</td>
<td>2208</td>
</tr>
<tr>
<td>No. of paid programming hours</td>
<td>3</td>
<td>45</td>
<td>7</td>
<td>55</td>
</tr>
</tbody>
</table>

3rd Party Athena educational software - monitored launches

<table>
<thead>
<tr>
<th>Athena Software Monitored launches</th>
<th>Jul-06</th>
<th>Aug-06</th>
<th>Sep-06</th>
<th>Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matlab - Athena</td>
<td>13,002</td>
<td>13,331</td>
<td>12,071</td>
<td>38,404</td>
</tr>
<tr>
<td>Athena OpenOffice/StarOffice</td>
<td>10,216</td>
<td>7,222</td>
<td>28,918</td>
<td>46,356</td>
</tr>
<tr>
<td>Athena Mathematica</td>
<td>989</td>
<td>572</td>
<td>1,098</td>
<td>84,760</td>
</tr>
<tr>
<td>OTHER Non top 3 Athena software</td>
<td>1,021</td>
<td>1,414</td>
<td>2,652</td>
<td>5,087</td>
</tr>
<tr>
<td>Total Monitored Launches of Athena Apps</td>
<td>25,228</td>
<td>22,539</td>
<td>44,739</td>
<td>92,506</td>
</tr>
</tbody>
</table>

Comparison of Matlab- Athena vs Matlab -Student

<table>
<thead>
<tr>
<th>Athena Software Monitored launches</th>
<th>Jul-06</th>
<th>Aug-06</th>
<th>Sep-06</th>
<th>Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matlab - Athena</td>
<td>13,002</td>
<td>13,331</td>
<td>12,071</td>
<td>38,404</td>
</tr>
<tr>
<td>Matlab - Student</td>
<td>11,948</td>
<td>10,862</td>
<td>23,708</td>
<td>19,324</td>
</tr>
<tr>
<td>Matlab (Athena &amp; Student)</td>
<td>24,950</td>
<td>24,193</td>
<td>35,779</td>
<td>57,728</td>
</tr>
</tbody>
</table>

3rd Party Athena educational software - monitored launches graphic
Monitored launches: Matlab - Athena vs Student Matlab

<table>
<thead>
<tr>
<th>FY06Q1</th>
<th>FY06Q2</th>
<th>FY06Q3</th>
<th>FY06Q4</th>
<th>FY07Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matlab - Student</td>
<td>Matlab - Athena</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of launches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. Student and Administrative Information Systems

EXECUTIVE SUMMARY

Q1FY07 marked the completion of several major initiatives including the HR-Payroll Project, the Broad Project, and the FM Discovery Project. The HR-Payroll Project had a high-visibility, successful go-live in the weeks prior to and following July 1st. Post go-live support and enhancements continued throughout the quarter and a celebration to mark the launch and acknowledge cross-team contributions to its success was held on September 7, 2006. The MITSIS Migration Project saw good progress during the period, especially in the areas of code review and testing, and the Undergraduate Admissions Phase II Project continues to move forward. Finally, the SAP Upgrade Project was launched with an expected completion date in early 2007.

Planning around the 2010 Student System Vision Project to identify and create a road map to address MIT’s student system needs continued, with a focus on incorporating strategic guidance from Academic Council regarding scope, timeline and guiding principles. Efforts to engage an outside consulting company to partner with MIT and internal staff hiring efforts were being further refined through regular project management meetings, discussions, and interviews.

New Services included the annual release of the Admissions online application, the redesign of the Admissions portal for new content management system and an enhanced portal for new international mailing requirements. Following Q4FY06 completion of the insideMIT Pilot, that project was given the go-ahead for increased activity during the upcoming quarter, including preparation of a communications plan, expansion of its governance board, and recruitment of cross-departmental resources. In a related matter, SAIS/MIT was in the final stages of becoming a member of the Campus-EAI Consortium and Christine Meholic is scheduled to deliver an insideMIT Portal presentation at the Executive Summit during Educause in Dallas in mid-October. Finally, the first regularly-scheduled all-SAIS Quarterly Meeting/luncheon was held in August, with the Q1 meeting slated for November 16th.

MAINTENANCE AND IMPROVEMENTS

Academic Services
Accomplishments:
• Participated in WHO’S TEACHING WHAT task force, which reviewed current MIT course evaluation systems and best practices in data collection
• Completed modifications and testing to Student Term Address load program in compliance with new SISTIM application for Housing Assignments

Goals:
• Complete UROP Phase III programming by November for rollout to students in January 07
• Deploy dynamic application menu page in WEBSIS
• Continue support of Academic Services applications with specific focus on Academic Calendar and Fall Term Registration

Graduate Admissions & Dean for Student Life
Accomplishments:
• Updated Graduate Admissions online applications on CollegeNet website, as well as data feeds between MITSIS Graduate Admissions database and CollegeNet, EECS and Sloan Admissions IT systems (via ApplyYourself.com)
• Encrypted CollegeNet FTP link to secure graduate admissions application file transfers to MIT
• Attended Community Source SIS Development Group’s Boston workshop and contributed to CS SIS processes and entity modeling
• Moved Graduate Admissions application to updated version of operating system on new Citrix servers (with security list updates)
• Completed Housing Billing updates in MITSIS

November 9, 2006
Goals:
- Support Graduate Admissions peak applications period (October-December)
- Support Spring term Housing preparations
- Support data transfer development for loading freshmen Bio records and assigning them MIT ID.

Student Financial Services
Accomplishments:
- Implemented Gross Pay Timesheet Load process from SAP Payroll to SFS Student Employment, for disbursing and reporting on College Work Study and Federal Work Study payments
- Supported post-implementation of MITSIS-to-Payroll student biographic feed
- Set timeline for implementing PowerFAIDS upgrade and began preparatory work for testing during October.

Goals:
- Provide support for MITSIS biographic feed to SAP Payroll and users of web-based applications for hiring students: Web Grad Aid (monthly payroll), Electronic Student Personnel Action Form (hourly payroll) and all MITSIS jobs and interfaces for SFS, including PowerFAIDS, statement processing, and disbursements

Infrastructure
Accomplishments:
- Completed transition of SSIT’s F5 big-ip’s to OIS
- Delivered QA Tier for UA Phase II
- Facilitated deployment of updated SAPgui software installers for MIT Macintosh and Windows machines

Goals:
- Upgrade Undergraduate Admissions database version from 9i to 10g release 2
- Upgrade Migration database from 10g release 1 to 10g release 2
- Deliver test and production tiers for Undergraduate Admissions Phase II project

Issues:
- Upgrade of Undergraduate Admissions database version from 9i to 10g release 2: project initiation delayed by resource limitations; will begin during FY07Q2 and complete during FY07Q4

Support the Improvement of Enterprise Business Processes
Accomplishments:
- Completed work on MIT Events Calendar web service initiative (July)

Goals:
- Integrate EHS management system with Oracle portal
- Integrate COEUS “in-box” with portal
- Convert EHS web applications to NetWeaver
Administrative Computing

Accomplishments:
- Delivered financial enhancements for Facilities cost distribution report and CSAIL use of Summary Statement
- Evaluated, scoped, and sized request to reduce/eliminate Travel Office agency/credit card reconciliation process now requiring 2 weeks/month
- Completed migration of SAPWeb Procurement application, including creation and display of purchase order and display invoice to Web Application Server (WAS) environment
- Implemented Item Unique Identifier (IUID) system

Goals:
- Per customer forum prioritization, implement new IPA costing sheet, enhancement to end date validations, and imaging of travel expense vouchers by 11/9/06 development freeze

QA Internal

Accomplishments:
- Developed requirements specifications for upgrade to current “Test Alley”
- Built temporary testing lab for use by MITSIS Migration team for functional and integration testing
- Finalized Change Control process for Student Systems
- Created requirements specification for new upgraded SAP transport process
- Delivered business case proposing new role for QA (with expanded testing support) to support SAIS program
- Finalized Quality Assurance Plan template to support new QA role

Goals:
- Move testing lab to permanent location by 01-DEC
- Submit detailed proposal for new QA role
- Develop Student Systems Change Control process into permanent business model
- Develop and deliver new upgraded/expanded SAP transport process

NEW SERVICES

Accomplishments:
- Released new Admissions online application
- Completed redesign of Admissions portal for new content management system
- Enhanced Admissions portal for new international mailing requirements

PROJECTS

I. FM Discovery

Accomplishments:
- Final report delivered 7/31/06; results presented to IS&T VP 8/10/06

II. 1042S

Accomplishments:
- Implemented IRS tax files and 1042S forms in August

III. MITSIS

Accomplishments:
- Signed off on code delivered by CTI
- Transitioned CTI resources to contractor support
- Completed review of all delivered code
- Reassessed and reassigned team resources to new roles
• Implemented production change control process
• Kicked off function testing process and end-to-end business process modeling workshops

Goals:
• Complete Functional Testing, End-to-End Business Process model/documentation, Integration Test Planning and integration test scripts
• Upgrade infrastructure to Oracle 10G rev2
• Acquire space for end-user testing

Issues:
• A dedicated space where we can bring end users to assist in test execution is key to continuing effort

IV. HR-Payroll Project
Accomplishments:
• Completed payroll go-live activities, including running weekly/monthly payrolls
• Transitioned to post go-live support activities
• Confirmed prioritization and began development of post go-live enhancements
• Refreshed SAP testing environments with post-HR Go-live production data in order to facilitate production support and integration/functional testing

Goals:
• Create restricted access to SAP prototype system to facilitate HR Payroll application upgrade to ERP 2005
• Upgrade SAP 4.6C and ERP 2005 system landscapes with updates required for HR 2006 Year-end processing

Note: Please see related metrics at end of report

V. Broad Project
Accomplishments:
• Conducted post-project review
• Published final report with recommendations and action items

VI. SAP Upgrade
Accomplishments:
• Developed transaction list, evaluated test scripts and authorization roles, reviewed release notes and identified deltas between 4.6C and ECC 6.0
• Initiated test script writing and update with business customers
• Repurposed (refreshed and reconfigured) SAP systems support concurrent with SAP upgrade and 4.6C production support activities
• Upgraded SAP pre-staging (sandbox) environment to ERP 2005 and began analysis of its technical infrastructure

Goals:
• Complete test script updates by 11/29/06
• Implement new FM derivation rules in SF3 by 10/13/06 to facilitate all sub-team testing/posting activities
• Upgrade SAP staging, development and testing systems to support ERP 2005 analysis, unit testing, functional/integration testing, and user acceptance testing efforts
• Acquire consultant resources to augment technical (SAP Administration and Authorizations) support of ERP 2005 upgrade

VII. Benefits Upgrade
Accomplishments:
• Completed vacation tracking requirements
Goals:
• Complete vacation tracking functional specifications by 11/19/06

Issues:
• Roth 401K kick-off canceled; Open Enrollment changes deferred to FY08

VIII. UA Phase II
Accomplishments:
• Signed off on 24% of all functional specifications
• Completed 75% of technical architecture related prototypes, frameworks and components, and 5% of non-Architecture related coding
• Completed infrastructure setup of QA instance for testing of completed solutions
• Implemented data scrambling (scrambled data created for use in development instance)
• Completed installation, configuration and release of Phase 2 servers in support of development/QA
• Set-up queue for tracking and managing issues.

Goals:
• Support Early Admission application deadline
• Release Early Admission Action decisions online
• Enhance Admissions portal for new data changes requirements
• Complete user sign off on 70% of all functional specifications
• Complete 60% of all Release 1 related coding
• Complete coding of all architecture related components
• Complete setup of Test instance to support environment for User Acceptance Testing

IX. Student VISION
Accomplishments:
• Received strategic guidance from Academic Council regarding scope, timeline and guiding principles of project
• Continued vendor selection process

Goals:
• Hire core team [including Senior Project manager and business analyst]
• Create project plan for VISION study

X. GASP Project
Accomplishments:
• Held GASP Project Kickoff meeting in August
• Continued project analysis with more Use Cases
• Engaged ISDA in software development stack support, Single Sign On/Security Module, Calendaring interface and use of OKI in development of new GASP scheduling

Goals:
• Complete analysis and development
• Conduct weekly meetings with ISDA to develop infrastructure

Issues:
• Two consultants recruited for project released prior to start of development due to resource demands of MITSIS Migration; further analysis and development may be deferred until beginning of FY08

XI. SAPweb Classic Migration
Accomplishments:
• Worked with Server and Network Operations to integrate production SAP NetWeaver (Web Application) stand-alone system with an F5 load-balancer

PROGRAM MANAGEMENT

I. Program Management
Accomplishments:
• Wrote eight FY08 business cases and delivered to ASPCC 9/29/06
• Updated business case template and instructional template to incorporate direct and indirect benefits
• Held first Student Steering Committee [SSSC] meeting in August
• Completed in-house draft of 3 year operational plan [final revision to be submitted to VP week of 10/09/06]
• Held first SAIS Quarterly Meeting/luncheon on 8/01/06; Q1 meeting scheduled for 11/16/06

Goals:
• Monitor ASPCC voting on priority of eight FY08 business cases, 10/16/06
• Compile results of 10/16/06 vote and present to ASPCC on 10/18/06 for approval
• Present FY08 project schedule and costs to ASPCC for approval 11/15/06

II. Performance Management and Career Development
Accomplishments:
• Sent an SAIS R3-Admin resource to technical training to facilitate SAP Java infrastructure support
• Sent SAIS resources to SAP Technical Education conference in September to acquire SAP project (Upgrade, NetWeaver, etc.) related learning.

Goals:
• Send additional SAIS R3-Admin resource to technical training to facilitate SAP Java infrastructure support

METRICS

Web Stats

<table>
<thead>
<tr>
<th>Web-tech / Culebra Web Metrics</th>
<th>Q1 FY07</th>
<th>Q4 FY06</th>
<th>Q3 FY06</th>
<th>Q2 FY06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Requests</td>
<td>5.8 million</td>
<td>4.9 million</td>
<td>5.3 million</td>
<td>5.2 million</td>
</tr>
<tr>
<td>Distinct Hosts Served*</td>
<td>47K</td>
<td>42K</td>
<td>43K</td>
<td>44K</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internet Transaction Server (ITS) Web Metrics</th>
<th>Q1 FY07</th>
<th>Q4 FY06</th>
<th>Q3 FY06</th>
<th>Q2 FY06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Requests</td>
<td>4.8 million</td>
<td>2.0 million</td>
<td>2.0 million</td>
<td>2.1 million</td>
</tr>
<tr>
<td>Distinct Hosts Served*</td>
<td>6.9K</td>
<td>5.4K</td>
<td>4.5K</td>
<td>4.9K</td>
</tr>
</tbody>
</table>

*Distinct Hosts Served = number of unique IP addresses making at least one server request within given time frame

J2EE Applications Metrics

<table>
<thead>
<tr>
<th>Application</th>
<th>Total Number of Hits</th>
<th>Daily Average Number of Hits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Admissions</td>
<td>7.7 million</td>
<td>252K</td>
</tr>
<tr>
<td>Degree Tracking / Test Scores</td>
<td>163K</td>
<td>5.3</td>
</tr>
<tr>
<td>UROP</td>
<td>24K</td>
<td>1K</td>
</tr>
<tr>
<td></td>
<td>Q1 FY07</td>
<td>Q4 FY06</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>ASA</td>
<td>49K</td>
<td></td>
</tr>
<tr>
<td>Webgradaid/Sistim</td>
<td>290K</td>
<td></td>
</tr>
<tr>
<td>Academic, camemail, expdown, reg, regcntrllst</td>
<td>20K</td>
<td></td>
</tr>
<tr>
<td>ESPAF [note: new action]</td>
<td>39K</td>
<td></td>
</tr>
</tbody>
</table>

**Resource Metrics-Admin Computing**

<table>
<thead>
<tr>
<th></th>
<th>Q1 FY07</th>
<th>Q4 FY06</th>
<th>Q3 FY06</th>
<th>Q2 FY06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects</td>
<td>60%</td>
<td>62%</td>
<td>58%</td>
<td>51%</td>
</tr>
<tr>
<td>Minor Enhancements</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Production Support</td>
<td>33%</td>
<td>31%</td>
<td>36%</td>
<td>41%</td>
</tr>
</tbody>
</table>

**Resource Metrics-Student Futures**

<table>
<thead>
<tr>
<th></th>
<th>Q1 FY07</th>
<th>Q4 FY06</th>
<th>Q3 FY06</th>
<th>Q2 FY06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects</td>
<td>75%</td>
<td>71%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Minor Enhancements</td>
<td>0%</td>
<td>0%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Production Support</td>
<td>25%</td>
<td>29%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Websis Metrics

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Number of Hits</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2006</td>
<td>501K</td>
</tr>
<tr>
<td>August 2006</td>
<td>512K</td>
</tr>
<tr>
<td>September 2006</td>
<td>591K</td>
</tr>
</tbody>
</table>

### Team Reports

<table>
<thead>
<tr>
<th>Admin Computing</th>
<th>Goals</th>
<th>FY2007 Q1</th>
<th>FY2006 Q4</th>
<th>FY2006 Q3</th>
<th>FY2006 Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of SAP Production System Interactive Dialog Steps</td>
<td>24.1 million</td>
<td>19.7 million</td>
<td>18.9 million</td>
<td>17.3 million</td>
<td></td>
</tr>
<tr>
<td>SAP Production System Average Interactive Response Time (seconds)</td>
<td>.2691</td>
<td>.2936</td>
<td>.2337</td>
<td>.2122</td>
<td></td>
</tr>
<tr>
<td>SAP Production System Prime-Time Availability (M-F 8am – 6pm)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>SAP Production System Planned Service Outages (# of occurrences and total hrs.)</td>
<td>14 x totaling ~79 hrs</td>
<td>14 x totaling ~60 hours</td>
<td>13 x totaling ~87 hours</td>
<td>14 x totaling ~76 hours</td>
<td>15 x totaling ~66 hours</td>
</tr>
<tr>
<td>SAP Production System Unplanned Outages (hrs)</td>
<td>0 hrs</td>
<td>1 x totaling ~2 hrs</td>
<td>1 x totaling ~2 hrs</td>
<td>1 x totaling ~3.5 hrs</td>
<td>0 x totaling 0 hrs</td>
</tr>
<tr>
<td>Total number of SAP transports</td>
<td>5.7K</td>
<td>15K</td>
<td>9K</td>
<td>3.6K</td>
<td></td>
</tr>
<tr>
<td>Number of Unique SAP (Gui + Web) Users</td>
<td>11.5K</td>
<td>4.7K</td>
<td>4.7K</td>
<td>6.3K</td>
<td></td>
</tr>
<tr>
<td>Number of Unique SAPgui Users</td>
<td>1.6K</td>
<td>1.6K</td>
<td>1.5K</td>
<td>1.5K</td>
<td></td>
</tr>
<tr>
<td>Number of Unique SAPgui Logon Sessions</td>
<td>65.5K</td>
<td>64K</td>
<td>61K</td>
<td>56K</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SSIT</th>
<th>Goals</th>
<th>FY2007 Q1</th>
<th>FY2006 Q4</th>
<th>FY2006 Q3</th>
<th>FY2006 Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production System Unplanned Service Outages (# of occurrences and total hrs.)</td>
<td>2 x totaling ~2.25 hours</td>
<td>2 x totaling ~6.5 hours</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

### Project Metrics

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>PLANNED</th>
<th>ACTUALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds Management Discovery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources</td>
<td>6-8 PM</td>
<td>8-9 PM</td>
</tr>
<tr>
<td>Cost</td>
<td>50K</td>
<td>40K</td>
</tr>
<tr>
<td>End Date</td>
<td>April 06</td>
<td>August 06</td>
</tr>
</tbody>
</table>

| SAPweb Classic Migration     |         |         |
| Resources                    | 15-21 PM| 20 PM   |
| Cost                         | 133-182K| 170K    |
| End Date                     | June 06 | Oct 06  |

| SAP Upgrade                  |         |         |
| Resources                    | 89-127 PM| 89-127 PM|
| Cost                         | 826K-1.1M| 826K-1.2M|
| End Date                     | February 07| February 07|
SAP Payroll Count

![SAP Payroll Count chart]

SAP Off-Cycle Payroll Count

![SAP Off-Cycle Payroll Count chart]
Q1 Total Payroll Support Reported Tickets: 162
Q1 Total Payroll Support Resolved Tickets: 129
Q1 Total Payroll Support Unresolved Tickets: 33
IV. Client Support Services

EXECUTIVE SUMMARY

The first quarter of the fiscal year has two main focuses for CSS: continued delivery of IT services and preparations for the start of a new academic year. CSS completed several hires this quarter – for new and open positions – most notably a new Director for CSS, Donald Montabana. Fall Readiness initiatives featured a larger role for online materials, including podcasts, and many CSS staff played a part in orienting new students and faculty to computing and connection options at MIT. The summer was also highlighted by post-go-live support for Payroll and continued effort on the email migration project.

Become a Trusted Partner with the Community:

• Wrap-up of Fall Readiness initiatives
  http://web.mit.edu/swrt/releases/snapshot/
  For the first time, IS&T offered the Student Bundle (for connecting computers to MITnet) as a web-based download and produced “Getting Connected” podcasts. Other Fall Readiness initiatives included a table at the Activities Midway, minicourses and Linux/Athena documentation, web pages for incoming freshmen, and a brochure for graduate students.

• Planning and testing related to the Windows Vista release and Intel-based Macs
  http://web.mit.edu/swrt/releases/vista
  http://web.mit.edu/ist/topics/macos/intel.html
  Testing of the final major pre-release of Windows Vista—Release Candidate 1 (RC1)—began in Q1. Testers include CSS staff and MIT participants in the Customer Preview Program. CSS also continued to monitor the release of Universal applications for Intel-based Macs. While SWRT identified a solution for backing up Intel-based Macs, this solution does not support automated backups, so follow-on work continues.

• Expanded email migration efforts
  http://web.mit.edu/swrt/releases/emailmigration/
  In Q1, CSS established an Email Customer Service Team to expand on the efforts of the existing Email Migration Team. The new team is performing onsite consultations with clients who have performance or user acceptance issues after migration. Specifically, the team is reaching out to DLCs that have concerns around the migration process; evaluating the clients’ environment and making recommendations that promote better functionality of the recommended email clients; and identifying clients’ training needs and directing them to appropriate classes.

Improve the IT User Experience:

• Continued post-go-live support for the HR-Payroll Project
  Beginning with the Payroll cutover on July 1, the support focus shifted from preparatory activities to real-time help, as customers navigated the new time cards and approval processes. The Help Desk worked in collaboration with the Payroll Service Center, DITR and other on-site and remote resources to ensure a positive customer experience and successful first runs of first the weekly then the monthly payroll. By all accounts, support for go-live was a tremendous success due to years of thorough preparation in partnership with our customers and colleagues.

• Expansion of the AdminIT program
  http://web.mit.edu/ist/services/hardware/adminit/
  With the goal of increasing the customer base from 550 to 1000, CSS expanded its AdminIT program for desktop computing maintenance. The program’s mission is to increase the reliability of administrative...
computing through timely hardware and software upgrades and effective end-user support. Semiannual preventive maintenance visits are a cornerstone of the program. Through a related initiative, the Administrative Desktop Renewal Program, CSS assists departments with equipment standardization, desktop life cycles, and discounts on large purchases of computer equipment. In this quarter, DITR deployed 200 administrative desktop computers. In addition, DITR established a Service Level Agreement (SLA) Team, headed by Hans Dietrich, in response to increased demand for their services.

**Full staffing of IT Security Support Team**  
With the hiring of Tom Jagatic as a Senior IT Security Consultant, the ITSS team has reached its full complement of four staff and is poised to re-establish its services fully in the realm of community outreach and support. The team is excited to be taking a proactive rather than reactive stance toward IT security, and looks forward to establishing programs and practices that encourage safe computing across the Institute.

**Provide High-Quality, Ubiquitous IT Services:**

**DCAD server transitions**  
In cooperation with OIS, DCAD began using virtual servers for its development and production environments. This enables multiple DCAD clients to share a single server, at a greatly reduced cost, while still retaining their own virtual space. DCAD has passed on the cost savings of shared servers to its clients, while transitioning system administration for the virtual servers to OIS. In addition, in Q1 DCAD completed development of a new rate model for its services.

**Improve Performance, Processes and Technologies for Client Support:**

**Transition to a permanent staffing model for ongoing support of HR-Payroll business applications**  
This wrap-up included layoff of short-term staff and transition of Payroll support work to permanent staff.

**IS&T web site redesign on temporary hold**  
Joshua Scott, project coordinator for the IS&T web site redesign, finalized a publishing process map and a project plan for the conversion of the IS&T web site. However, based on input from ISDA, Alfresco has replaced Lenya as the preferred content management system for the web site, and the larger plan is for IS&T to develop and promote Alfresco as the enterprise web content management solution for MIT. As a result, IS&T web site redesign plans are temporarily on hold during this transition period, but the project is expected to continue shortly in conjunction with the launch of the Alfresco implementation.
Also in Q1:

• **Director transition**
  Jane White continued in her role as Interim Director as the search team for the CSS Director actively interviewed candidates. At the end of September, Jerry Grochow announced that Don Montabana would join IS&T as Director of Client Support Services on October 1, 2006.

• **Hiring of Mobile Devices Platform Coordinator, Usability Coordinator, Senior IT Security Consultant, and Training Registrar**
  Andrew Yu joined the Software Release Team in the new Mobile Devices Coordinator position in early September and, for starters, launched a mailing list and a user group. Michael Dutton came on board in September as DCAD’s Usability Coordinator; he takes over for Susan Jones, who is retiring from CSS after 20+ years of customer-focused service. Tom Jagatic joined the IT Security Support Team at the end of September as a Senior IT Security Consultant. Anna Pope started in August as Training Registrar, replacing Marilyn Mercer, who also retired after 10 years of service.

**Q2 FY2007 – Plans and Commitments**

- Help to orient new Director of Client Support Services
- Rollout disk encryption pilot (continued from Q1)
  - 8 test reports from pilot testers
- In partnership with ISDA, re-establish web site redesign project in light of Alfresco development (continued from Q1)
- Investigate interest on part of new senior leadership to continue with efforts toward nominal fees for software for students (continued from Q1)
  - Roll into discussions of per capita-based fees for services
- Launch Mobile Devices services, including User Group, and establish user mailing list
- DCAD to complete hiring of 3 staff
- Payroll follow-up
  - Measure support loads
  - Reset agreement with the Payroll Service Center
  - Reset staffing and ongoing responsibilities in Training & Pub
- Clarify Provost and VIP Help agreements
- FileMaker release effort
  - Develop draft FileMaker support strategy
  - Plan for release of latest version of FileMaker
  - Coordinate with sensitive data efforts
- Support annual Benefits Open Enrollment process, including changes caused by new HR/Payroll implementation
- Support for Salary Certification phase of Payroll rollout
  - Includes training, authorizations, Help Desk
  - Complete web demos for this process
- Complete ACD configuration/design for Help Desk
- Ready support for VISTA operating system
  - Include preparation for “early appearance” on campus
- Identify and complete rate models for two additional areas within CSS
- Email migration
  - Identify and contact all remaining Eudora users
- Complete planned migrations
  - Plan for Thunderbird release, including initial announcement to the community
- Decide on operational hierarchy and practices for shared CSS documents to be housed on accessible server
- Continue to develop support model for VoIP rollout
V. Operations and Infrastructure Services

Program: Ongoing Operations (Supports service orientation strategic theme. Priority: become a trusted partner with the community by providing ongoing support for IT products and services that have transitioned from design, development or pilot status into operations.)

I. Maintain and operate the MIT Campus Network (NIST)

II. Maintain and operate the campus infrastructure services: email, web, Kerberos, DNS (NIST)

III. Manage Moves, Adds and Changes and outside contract for jack installations, repairs and trouble calls on an ongoing basis. The goal is for a turnaround time of 3 days or less for jacks, one business day for drop activation and one business day or less for trouble resolution. (TNIS – Errol Morrison)

IV. Monitor and maintain EDI software and resolve problems. (SO)

V. Administer and maintain IXOS E-Context for SAP. Problem resolution. Implement and support other IXOS products at MIT

VI. Ongoing maintenance and support of VM Systems on IBM Mainframe (MITVMA/C) and ListServ mailing list services for Alumni Association (VM-SST).

VII. Maintain and operate TSM Backup Services (Server Ops).

VIII. Maintain and operate the W91, E40 and W20 Data Centers (including production jobs for administrative clients) supporting enterprise and collocation servers.

IX. Maintain and support Administrative and Academic computing environments. (SO)
   - Administrative and Academic server hardware upgrades
   - Configure server replacements for technology improvements and control of maintenance costs.
   - Maintain Athena release

X. Maintain and operate the W92 and Building 24 Data Center. (NIST)

XI. Maintain and operate the MIT VoIP infrastructure

XII. Maintain operation of the Windows Automated Upgrade Service. (NIST – R. Edelson)

XIII. Maintain operations during the W91 and W92 construction work. (OIS)

XIV. Monitor network equipment daily and repair failures as appropriate – ongoing. (TNIS)

XV. Maintain and operate central print services. (DOST,VM-SST)

XVI. Created, conducted and supported 48 Web surveys, including a pilot Freshman survey for 16 COHFE schools (see addendum). (J. Patel)

XVII. Conducted two undergraduate housing lotteries. (J. Patel)

Program: Support for Major Building Projects (Supports service orientation and collaboration strategic themes)

I. PDSI: Work is ongoing to provide telecommunications and network services for new Physics building. (Bob Lanigan)

II. Completed OCW move to E70 July 31, 2006. (TNIS - Shaun Palma)

III. Completed AMPS move to NE48 August 25, 2006. (TNIS - Shaun Palma)

IV. Work is ongoing to provide telecommunications and network services for new Cancer Research Center - completion date July 30, 2010 (TNIS - Andrew Bonvie)

V. Work is ongoing to provide telecommunications and network services for new New Dorm – NW35 by Aug. 1, 2008 (TNIS - John Morgante)
   - Plans and requirements were submitted for a ductbank extension to provide service to NW35. (Brian Shannon)
   - Participated in discussions on wiring and consulted on IT needs. (John Morgante)

VI. Work is ongoing to provide telecommunications and network services for new Ashdown (W1) renovation by Sept. 1, 2009 (TNIS - Andrew Bonvie)

VII. Work is ongoing to provide telecommunications and network services for new New Sloan Building: Participated in initial design discussions. Expect design to be completed in November 2007. (TNIS - John Morgante)

VIII. Work is ongoing to provide telecommunications and network services for new Media Lab Expansion: Participated in initial discussions for the revived project. Expect construction to begin in February 2007 and complete in Spring 2009. (TNIS - John Morgante)

IX. Work has begun on the following additional unscheduled large projects. (TNIS)
   - W51 Dorm by June 29,2007
W61 Dorm by June 29, 2007
- Building 14 Upgrade w/3 new TDCRs by January 19, 2007
- Completed W92 upgrade by August 2006 (TNIS – Jamal Freeman)

Program: Campus Network: A robust wired network still required: streaming media, multi-cast, high-speed requirements, and backbone for wireless network. (Supports technological innovation and leadership strategic theme)

I. Outdoor wireless: Draft plans for pilot proposal with 3-4 locations by June 2006. Requires Facilities resources. (NIST, TNIS)

II. Complete upgrade to 20 additional TDCRs by July 1, 2007. Work is underway for the following locations (TNIS):
- W20 by June 29, 2007 (TNIS – John Morgante)
- E40 to conditional Cat 5 cable or greater by June 29, 2007. (TNIS – tbd)
- 24 by June 29, 2007 (TNIS – tbd)
- 10 by June 29, 2007 (TNIS – John Morgante)
- E28 by June 29, 2007 (TNIS – tbd)
- W5 (dorm) by June 29, 2007 (TNIS – tbd)
- N51 new TDCR by Aug. 31, 2007 (TNIS - tbd; DITR - Kyle Pope)
- E25 renovation of 4, 5, 6, new TDCR by Aug. 31, 2007 (TNIS - Kyle Medberry)
- E70 3rd floor, 2-227, 4-265
- 2-222T
- 4-269T

III. W91 Data Center (TNIS – Jamal Freeman)
- Ongoing work cabling to end point (June 1, 2007 end date – TNIS: Jamal Freeman)


V. Rollout VoIP infrastructure between site and offsite locations by September 30, 2006.

VI. Single Mode Fiber- Frame Relocation: The project to relocate existing single mode fiber frames from E19-639 to E19-681 is completed and ready for use. 8/31/2006. (B. Shannon)

VII. Level 3 Redundant Connection: A permit was obtained to construct a conduit in Mass Ave to tie the Level 3 vault to the MIT vault. Negotiations continued for the actual construction with an anticipated construction date of mid-October. Negotiations and contract discussions continue around the fiber placement. (Brian Shannon)

Program: Network Operations (Supports service orientation and technological innovation and leadership strategic themes)

I. Provide Email redundancy in the event of a disaster – impact on push to IMAP and on quotas – complete implementation of redundancy system by December 31, 2006. (NIST)

II. Continue working on the implementation and installation of the Nortel DWDM equipment to light the MIT dark fiber connecting Boston, Albany, New York City and Baltimore. (NIST)

III. Work with MIT Cable TV team on implementing a pilot IPTV infrastructure. (NIST)

IV. Voice over IP pilots:
- Focus on implementation in 6 buildings (N42, W91, W92, NE49, E19, E51) including the following departments: IS&T, Alumni, Facilities, CAO, Audit, OSP, Resource Development, HR, Budget, Sloan, as well as the AMPS (NE48) and OCW (1 Broadway, NE70) moves by September 30, 2006.

Program: Server and System Administration Support (Supports service orientation and technological innovation and leadership strategic themes)

I. Migrate applications off of the mainframe (e.g. Summit, Sumprop, Admissions) by June 30, 2007
- Payroll is not running production on the Mainframe any longer. Based on client timeline, work to shut down and clean up resources will be 80% completed by June 30, 2007. Worked with Payroll on reduction in production jobs. Implementation to begin Q2.
- Support the Property Office plan for SumProp migration off of the Mainframe. A project has been submitted to ASPCC for FY 2008.
- Provided input to SAIS for SumProp migration proposal.
- Upgraded DB2 databases for SumProp application (used by Property) to current supported version 7.4 (VM-SST).
Completed removal of resources for obsolete Student Financial Aid System (INAS), IS&T Telecom usage, and Enterprise Services userids.

II. Collocation/System Administration Project (Project 1270)
   - Completed Collocation/System Administration evaluation project July 31, 2006. (J. Hallisey)
   - Launched project to implement new service offerings. Expected date of completion is April 5, 2007. (J. Hallisey)

Program: Data Center (Supports service orientation strategic theme)

I. Mainframe Tape Cleanup Project - Cleanup up remaining obsolete tape resources (over 10,000) pending client involvement by June 30, 2007.
   - Removed over 2,500 mainframe tapes. This completes the removal of all 9 track tape reels (over 1000 this quarter)
   - Decommissioned 3 IBM 3420 tape drives and 2 IBM 3803 tape controllers.
   - Upgrade Data Center - provide new Data facility and upgrade existing Data Center. Maintain workflow while the W91 Data Center is under construction.
   - Relocated tapes (see above) and prepared floor space in the W91 Datacenter for racks for the MIT network.
   - Relocated current tape drives to make room for additional server racks as part of “non-UPS” project.

II. W91 Power/Cooling Project: Substantial progress was made over the quarter as the design continues to evolve. Design discussions continue for all aspects of the project including the next phase for cooling towers and related equipment. (Brian Shannon)
   - A series of shutdowns permitted a 400-amp circuit breaker to be installed along with other upgrades to the main electrical room.
   - The UPS supporting the Blue Gene was installed, powered up, tested and is now functioning.
   - Installation of stanchions, cable tray, power distribution units, power busways, and conduit supporting both fire alarm and air conditioning units continued in the data rooms.
   - 10-ton and 20 ton air conditioning units were delivered.

III. DOST Assessment of Work: Review portfolio of work and staff roles and modify to meet changing client needs by June 30, 2007.
   - DOST reassessing work and specifically off-shift requirements. Began reduction in off-shift attended (onsite) coverage with phase out of Saturday 8am to noon onsite coverage.
GOALS FOR FY 2007 Q2

Program: Support for Major Building Projects (Supports service orientation and collaboration strategic themes)

Provide telecommunications and network services for new construction projects listed below.

- PDSI (Bob Lanigan)
- New Dorm – NW35 by Aug. 1, 2008 (TNIS - John Morgante)
- Ashdown (W1) renovation by Sept. 1, 2009 (TNIS - Andrew Bonvie)
- New Sloan Building by May 16, 2008 (TNIS - John Morgante)
- Media Lab – completion date Spring 2009 (TNIS - John Morgante)

Program: Campus Network:

- Outdoor wireless:
  - Draft plans for pilot proposal with 3-4 locations by June 2006. Requires Facilities resources.
  - Deployment by Dec. 20, 2006 (TNIS - Marco Gomes)
  - VoIP (Supports the IS&T priority to improve the IT user experience) (CSS, NIST, TNIS, Telephony)

- Building 3 and 7 cable renewal by Dec. 1, 2006 (TNIS - Jamal Freeman)

Program: Network Operations (Supports service orientation and technological innovation and leadership strategic themes)

- Provide Email redundancy in the event of a disaster – impact on push to IMAP and on quotas – complete implementation of redundancy system by December 31, 2006. (NIST)

- Voice over IP pilots:
  - Conduct a small pilot with Housing in the Warehouse residence (NE30) to understand how VoIP meets their needs and identify any gaps.

- Design and build a diverse and redundant fiber optic system in the Metro Ring by November 2006.

- Work with MIT Cable TV in implementing a pilot IPTV service

- Gain approval, bid and begin placement of the fiber supporting the Level 3 redundant connection.

- Complete installation of DWDM equipment to enable use of MIT dark fiber connecting Boston, Albany, New York City and Baltimore.

Program: Server and System Administration Support

- Continue development of off site data storage options for disaster Recovery. Estimated completion by December 31, 2006.

- Complete pilot(s) to support change in TSM backup strategy and service by October 31, 2006.

- Complete EDI upgrade by October 1, 2006.

- Migrate the IBM 3494 tape library data to the STK tape silo by November 30, 2006, in preparation for removal of 3494 from W91-189. (new)

- Implement XEN as the first iteration of a virtual server offering within the Server Operations group by October 30, 2006. (new)

- Additional subnet and firewall for enhanced security of our SAP R/3 environment by December 31, 2006.

Program: Data Center (Supports service orientation strategic theme)

- New Service Level Agreements for Collocation
Continue to enhance unattended procedures and change onsite-attended coverage by December 31, 2006.
Upgrade Data Center - provide new Data facility and upgrade existing Data Center.
Continue work on the W91 power/cooling project

METRICS

Web hits for web.mit.edu and www.mit.edu

MIT.EDU received external mail

Note: Barracuda Networks installed in Aug 2006
Q1 FY ‘07 – Collocation

**DOST Co-location racks (since FY2003Q4)**

- No. HPCI racks
- No. non-HPCI racks

**DOST Co-location - department**

- No. Departments
- Quarter

DOST Co-location - Research HPC server

DOST Co-location - Research HPC node
Q1 FY’07 – Server Operations

Percent Uptime
For servers that are monitored by Nagios and where an outage would have a client impact.

Q1 FY’07 - ListServ
LISTSERV lists - Alumni Association and non-Alumni

VM-SST LISTSERV - Lists

VM-SST LISTSERV - Subscribers

Q1 FY ‘07 – TSM Backup
TSM Account Trend data

TSM User Data Growth

- Number of registered users
- Amount of user data backed up (TB)
- Amount of user data archived (TB)
VI. Infrastructure Software Development and Architecture

♦ Restructured ISDA into 5 core groups: Architecture, Platform Services, Enterprise Software (ZEST), Data and Reporting Services, and Security Services (Kerberos)

♦ Led the launch of the ITAG Technical Review Board (TRB)

♦ Released Kerberos 1.5.1 and KFW 3.1 beta 1.

♦ New Athena release for the start of academic year

♦ Two web services available for development use, one for Roles and one for MIT ID.

♦ Delivered Thalia Phase I for HST

♦ Support the HR/Payroll go-live and stabilization.
  - Resolve business and data issues as they arose.
  - Development, testing, modifications in support of post go-live changes
  - Developed ACH data file load,
  - Created data integrity checking and problem checking scripts, etc
  - Loaded Fidelity Audit Data into DW and created Fidelity/SAP discrepancies reports.
  - Created extracts for Parking and Card offices.
  - Created automated access control generation and revocation routines.

♦ Master Department Hierarchy
  - Installed Master Department Hierarchy system on the production serve
  - Implemented Master Department Hierarchy and created reports for the community. This will rollout in Q2.

♦ Support Sap/EHS phase III
  - Transferred EHSWEB knowledge and maintenance responsibility to SAIS.
  - Began design, development, and testing of EHS Phase III project.

♦ Roles Database
  - Enhanced Roles Database to support "external" authorizations, ie., people's authorizations implied from data sources outside of the Roles Database
  - Created the process to identify, select and display qualifiers with inactive status on the web.

♦ AAUDE
  - Modified tables for NSF graduate student supports and R&D Expenditures data to include a new set of fields, loaded new data, also loaded data for non-AAUDE institutions.

♦ LTF
  - Formed Architecture Working Group for the Living The Future project
    - Current members are from the Media Lab and ISDA.

VII. Telephony and Shared Services

EXECTIVE SUMMARY
Telephony Services staff continued to provide high quality telephony services while maintaining a very low internal order error; the telephone switch maintained its >99.999 uptime.
Staff were also involved in a number of projects:

- Ongoing moves and renovations (working with OIS)
- Working with EHS and Campus Police re: emergency response preparedness
- Continuing interaction with OIS, other internal colleagues re: VoIP
- Improving cell reception in Stata and Broad
- Continued working with Facilities and Campus Police re: Nextel cell reception; identified mutually agreeable antenna location and working on contracts
- Implementation of new ACD system.

(Operational metrics available upon request)

Shared Services

Shared Services (Finance, Site, CG) continued to provide high quality transactional services (finance, administration and HR) while working on projects, such as TNSC pricing, creating Server Operations Service Center, revised PA process, etc.

(Staffing metrics shared with VP, Directors, CG Team)

TELEPHONY SERVICES

Program: Provide Telephony Infrastructure

- Maintain the MIT owned telephone switch and telephony infrastructure – Continued 99.999% uptime of switch

- Engage in large Voice over IP (VoIP) project – OIS defined, and ran pilot; Telephony Services responded to OIS requests related to rollout of VoIP pilot, including TDM to VoIP changes, implementing interim billing, redirecting client calls to help desk, additional connectivity for redundant gateway etc. Telephony Services participated in the development of a VoIP strategy document.

- Implement new Automated Call Distribution (ACD) and introduce ACD service, working with Client Support Services, and other MIT groups interested in ACD – Training and implementation underway; Computing Help Desk will be initial customer; work with Admissions also in process.

- Improve cell phone coverage on campus – Inbuilding cell: Telephony Services architected a solution for Stata, with several carriers on line by the end of the quarter, and Verizon expected before the end of the 2nd quarter. External/Nextel cell reception: implementation of agreed to solution beginning in 2nd quarter.

Program: Provide Telephony Customer Services

- Provide telephony customer services, including orders, repairs, billing and operators. Implemented NameConnector upgrade to a new/enhanced voice recognition system to better recognize foreign accents and process background noise; changes to the front end menu due in 2nd quarter.

- Working with OIS, support new buildings, major renovation projects – work on various projects continues.

- Provide audio bridge audio conferencing services - The volume of MIT audio bridge reservations continues to increase; there are typically a dozen or more conflicts/month (i.e., more than one person wanting a reservation at the same time.)
♦ **Market Telephony Services** – Participated in back-to-school events; contributed to IS&T brochure re: connectivity while traveling.

♦ **Support the campus emergency notification/response** Continued to work with EHS, Facilities and Campus Police regarding campus emergency communications options, including implementing new tools to enable notification (e.g. MIR3, NTI Group)

**Program:** Provide 3rd party telephony services (long distance, calling card, etc.)

♦ **Audit carrier invoices** Continue to work with 3rd party company (PES) to ensure invoices are accurate; and realize cost savings where possible.

♦ Continued to provide stewardship of WebEx contract.

**IS&T SHARED SERVICES**

**Program:** Provide organizational administrative services (i.e. HR, financial and administrative services) needed to keep IS&T running.

♦ **Provide accurate and timely financial services (quarterly reporting, transactional processing, etc.):**
  - Coordinated FY06 YE closing
  - Prepared for FY07, including new processes for position management
  - Prepared requested reports such as 10-K, historical trends analyses etc.
  - Prepared for FY08 budget process

♦ **Provide accurate and timely HR transactional support (hiring, terminations, promotions, compensation, new hire orientation, leaves etc.):**
  - CG continued to be the IST focal point for HR processes. CG is also used as a resource by HR and others outside IST re: IT staffing issues (recruiting, onboarding, salary, job descriptions, FLSA etc). CG Liaisons interacted with virtually every manager during the quarter, and had interaction with about 60% of the non-managerial staff; topics included performance issues, organizational changes, coaching/mentoring, etc.
  - Volume of recruiting activity has increased. Made progress on a number of difficult to fill positions. Continued to explore ways of improving the recruiting process. Based on metrics provided by HR, IS&T appears to have ‘time to fill’ metrics comparable to other MIT organizations.
  - Facilitated discussion of ‘internal-to-MIT’ hiring process and made recommendation.
  - Initiated process to consider ‘off-cycle’ promotions/equity increases

♦ **Provide helpful, effective, timely and accurate administrative services to IS&T staff; provide building ‘landlord’ services to W91, W91 and N42**
  - Requests to site staff remained at prior quarter levels (~2800 requests) including arranging meetings; addressing security issues; managing coffee/tea/water service; maintaining office supply inventory; coordinating computer disposal; addressing facilities issues and repairs; maintaining equipment (copier, printer, fax, whiteboard, projector, phones); handling deliveries; coordinating moves; lost and found, vacation reporting, etc.
  - Ongoing attention to space issues, such as W92 Data Center and expanding needs of ISDA & SAIS.

♦ **Support IS&T VP and Directorate projects such as IT Service Center pricing project, determining cost of IT at MIT, programmatic budgeting, Resource Model, etc**
  - Completed all work for successful YE close; prepared budgets for FY07
  - Significant work on IS&T capital planning, particularly Network
- Significant work on Telephony/network pricing model for FY08; reached consensus on methodology change; developed pro forma FY08 budget
- Began implementation of Server Service Center

♦ SAP Payroll implementation preparation
  - Payroll go-live went smoothly; eDACCA training in process.

Program: Improve Organizational Effectiveness

♦ Facilitate creation of an excellent work environment, one where we retain the people we want to retain
  - Attrition increased sharply, to an annualized rate of 15% (vs 7% for last fiscal year.) This is also higher than last year Q1 (10%). No systemic reason identified.
  - Continued work on targeted, structured development plans for staff, especially leaders – presented proposal to VP staff; facilitated Directorate discussions, including CSS managers, and ISDA SWOT analysis.
  - Developed recommendation stemming from IS&T Leadership retreat re: fostering staff development and community
  - Updated follow-up to 2006 IS&T staff survey: review of communications, project management, inter-team conflict, salary & benefits ("total compensation") issues.
  - Arranged for IS&T retirement planning seminars

♦ Support more effective project management in IS&T

♦ Lead the way in promoting performance management throughout IS&T - Revise IS&T Performance Management/Performance Appraisal process - recommendation due by 12/23/06.

♦ Facilitate the process to update IS&T strategic/operational plan – modified process to reflect change in budget process

♦ Contributed to the planning of the IS&T Leadership retreats; prepared ‘Decision Framework’ proposal.
♦ Participate in IVY+ Finance and Planning (FAP) group – including benchmarking financial data and financial organization structures – MIT hosting Nov 6-8, 2006

VII. IS&T Financials
### IS&T BASE GENERAL BUDGET

**Year End Financial Forecast by Category**  
FY 2007 - First Quarter  
($ in thousands)

<table>
<thead>
<tr>
<th></th>
<th>Year to Date (July - Sept)</th>
<th>Remaining Projection (Oct - June)</th>
<th>Projected Year End Total</th>
<th>FY 2007 Annual Budget</th>
<th>% Total Budget</th>
<th>Projected Year End Variance ($)</th>
<th>Projected Year End Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUE</strong></td>
<td>($261)</td>
<td>($3,817)</td>
<td>($4,078)</td>
<td>($4,116)</td>
<td></td>
<td>($38)</td>
<td>-1%</td>
</tr>
<tr>
<td><strong>EXPENSE TRANSFERS (OUT) / IN</strong></td>
<td>($2,958)</td>
<td>($11,179)</td>
<td>($14,137)</td>
<td>($13,760)</td>
<td></td>
<td>$377</td>
<td>3%</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary &amp; Wages</td>
<td>$5,993</td>
<td>$19,522</td>
<td>$25,515</td>
<td>$25,948</td>
<td>43%</td>
<td>$433</td>
<td>2%</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>$1,606</td>
<td>$5,171</td>
<td>$6,777</td>
<td>$6,931</td>
<td>11%</td>
<td>$174</td>
<td>3%</td>
</tr>
<tr>
<td>Travel &amp; Professional Development</td>
<td>$108</td>
<td>$572</td>
<td>$684</td>
<td>$679</td>
<td>1%</td>
<td>($61)</td>
<td>-8%</td>
</tr>
<tr>
<td>Materials &amp; Services</td>
<td>$2,453</td>
<td>$9,956</td>
<td>$12,409</td>
<td>$11,844</td>
<td>19%</td>
<td>($565)</td>
<td>-5%</td>
</tr>
<tr>
<td>Equipment</td>
<td>$1,077</td>
<td>$1,530</td>
<td>$2,607</td>
<td>$2,871</td>
<td>5%</td>
<td>$264</td>
<td>9%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>$1,465</td>
<td>$10,593</td>
<td>$12,058</td>
<td>$12,378</td>
<td>20%</td>
<td>$300</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Subtotal - All Expenses</strong></td>
<td>$12,722</td>
<td>$47,504</td>
<td>$60,226</td>
<td>$60,771</td>
<td></td>
<td>$545</td>
<td>1%</td>
</tr>
<tr>
<td><strong>NET TOTAL</strong></td>
<td>$9,503</td>
<td>$32,508</td>
<td>$42,011</td>
<td>$42,895</td>
<td></td>
<td>$884</td>
<td>2%</td>
</tr>
</tbody>
</table>

### TELEPHONE & NETWORK SERVICES CENTER (TNSC)

<table>
<thead>
<tr>
<th></th>
<th>Year to Date (July - Sept)</th>
<th>Remaining Projection (Oct - June)</th>
<th>Projected Year End Total</th>
<th>FY 2007 Annual Budget</th>
<th>% Total Budget</th>
<th>Projected Year End Variance ($)</th>
<th>Projected Year End Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUE</strong></td>
<td>($3,882)</td>
<td>($11,916)</td>
<td>($15,798)</td>
<td>($15,697)</td>
<td></td>
<td>$101</td>
<td>1%</td>
</tr>
<tr>
<td><strong>EXPENSE TRANSFERS IN / (OUT)</strong></td>
<td>$2,204</td>
<td>$7,765</td>
<td>$9,969</td>
<td>$9,517</td>
<td></td>
<td>($452)</td>
<td>-5%</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Services</td>
<td>$3</td>
<td>$9</td>
<td>$12</td>
<td>$9</td>
<td>0%</td>
<td>($3)</td>
<td>-33%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$1,350</td>
<td>$4,810</td>
<td>$6,160</td>
<td>$6,160</td>
<td>87%</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>Interest</td>
<td>$243</td>
<td>$641</td>
<td>$884</td>
<td>$884</td>
<td>13%</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Subtotal - All Expenses</strong></td>
<td>$1,596</td>
<td>$5,460</td>
<td>$7,056</td>
<td>$7,053</td>
<td></td>
<td>($3)</td>
<td>0%</td>
</tr>
<tr>
<td><strong>NET TOTAL</strong></td>
<td>($82)</td>
<td>$1,309</td>
<td>$1,227</td>
<td>$873</td>
<td></td>
<td>($354)</td>
<td>-41%</td>
</tr>
</tbody>
</table>

### SERVER OPERATIONS SERVICES CENTER (SOSC)

<table>
<thead>
<tr>
<th></th>
<th>Year to Date (July - Sept)</th>
<th>Remaining Projection (Oct - June)</th>
<th>Projected Year End Total</th>
<th>FY 2007 Annual Budget</th>
<th>% Total Budget</th>
<th>Projected Year End Variance ($)</th>
<th>Projected Year End Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUE</strong></td>
<td>$0</td>
<td>($3,582)</td>
<td>($3,582)</td>
<td>($3,378)</td>
<td></td>
<td>$204</td>
<td>6%</td>
</tr>
<tr>
<td><strong>EXPENSE TRANSFERS IN / (OUT)</strong></td>
<td>$499</td>
<td>$2,264</td>
<td>$2,763</td>
<td>$2,857</td>
<td></td>
<td>$94</td>
<td>3%</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>$0</td>
<td>$188</td>
<td>$188</td>
<td>$263</td>
<td>100%</td>
<td>$75</td>
<td>29%</td>
</tr>
<tr>
<td>Interest</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0%</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Subtotal - All Expenses</strong></td>
<td>$0</td>
<td>$188</td>
<td>$188</td>
<td>$263</td>
<td></td>
<td>$75</td>
<td>29%</td>
</tr>
<tr>
<td><strong>NET TOTAL</strong></td>
<td>$499</td>
<td>($1,130)</td>
<td>($631)</td>
<td>($258)</td>
<td></td>
<td>$373</td>
<td>145%</td>
</tr>
</tbody>
</table>
### IS&T NET BASE GENERAL BUDGET

<table>
<thead>
<tr>
<th>Organizational Unit</th>
<th>Year to Date Net Actuals (July - Sept)</th>
<th>Remaining Net Projection (Oct - June)</th>
<th>Projected Year-End Net Total</th>
<th>FY 2007 Annual Net Budget</th>
<th>Projected Net Year-End Variance ($)</th>
<th>Projected Net Year-End Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Computing</td>
<td>$1,046</td>
<td>$3,025</td>
<td>$4,071</td>
<td>$4,070</td>
<td>$(1)</td>
<td>0%</td>
</tr>
<tr>
<td>Student &amp; Administrative Information Systems</td>
<td>$3,352</td>
<td>$13,455</td>
<td>$16,807</td>
<td>$17,644</td>
<td>$837</td>
<td>5%</td>
</tr>
<tr>
<td>Infrastructure Software Development &amp; Architecture</td>
<td>$600</td>
<td>$2,220</td>
<td>$2,820</td>
<td>$2,818</td>
<td>$(2)</td>
<td>0%</td>
</tr>
<tr>
<td>Operations &amp; Infrastructure Services</td>
<td>$1,315</td>
<td>$2,421</td>
<td>$3,736</td>
<td>$3,808</td>
<td>$72</td>
<td>2%</td>
</tr>
<tr>
<td>Client Support Services</td>
<td>$2,341</td>
<td>$3,936</td>
<td>$6,277</td>
<td>$6,254</td>
<td>$(23)</td>
<td>0%</td>
</tr>
<tr>
<td>IS&amp;T Shared Services</td>
<td>$421</td>
<td>$1,319</td>
<td>$1,740</td>
<td>$1,616</td>
<td>$(124)</td>
<td>-8%</td>
</tr>
<tr>
<td>VP for IS&amp;T (includes Special Projects)</td>
<td>$429</td>
<td>$6,130</td>
<td>$6,559</td>
<td>$6,685</td>
<td>$126</td>
<td>2%</td>
</tr>
<tr>
<td><strong>IS&amp;T NET BASE GENERAL TOTAL</strong></td>
<td>$9,504</td>
<td>$32,506</td>
<td>$42,010</td>
<td>$42,895</td>
<td>$885</td>
<td>2%</td>
</tr>
</tbody>
</table>

### TELEPHONE & NETWORK SERVICE CENTER (TNSC)

<table>
<thead>
<tr>
<th>Organizational Unit</th>
<th>Year to Date Net Actuals (July - Sept)</th>
<th>Remaining Net Projection (Oct - June)</th>
<th>Projected Year-End Net Total</th>
<th>FY 2007 Annual Net Budget</th>
<th>Projected Net Year-End Variance ($)</th>
<th>Projected Net Year-End Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNSC</td>
<td>$(83)</td>
<td>$1,310</td>
<td>$1,227</td>
<td>$872</td>
<td>$(355)</td>
<td>41%</td>
</tr>
<tr>
<td><strong>TNSC TOTAL</strong></td>
<td>$(83)</td>
<td>$1,310</td>
<td>$1,227</td>
<td>$872</td>
<td>$(355)</td>
<td>41%</td>
</tr>
</tbody>
</table>

### SERVER OPERATIONS SERVICE CENTER (SOSC)

<table>
<thead>
<tr>
<th>Organizational Unit</th>
<th>Year to Date Net Actuals (July - Sept)</th>
<th>Remaining Net Projection (Oct - June)</th>
<th>Projected Year-End Net Total</th>
<th>FY 2007 Annual Net Budget</th>
<th>Projected Net Year-End Variance ($)</th>
<th>Projected Net Year-End Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOSC</td>
<td>$499</td>
<td>$(1,130)</td>
<td>$(631)</td>
<td>$(259)</td>
<td>$372</td>
<td>144%</td>
</tr>
<tr>
<td><strong>TNSC TOTAL</strong></td>
<td>$499</td>
<td>$(1,130)</td>
<td>$(631)</td>
<td>$(259)</td>
<td>$372</td>
<td>144%</td>
</tr>
</tbody>
</table>