
NATIONAL INSTITUTES OF HEALTH
CENTER FOR INFORMATION TECHNOLOGY

Strategic Plan 2008 - 2012

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Message from the CIT Director and Deputy Director

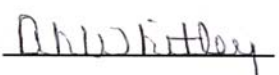
Before getting into the specifics of Strategic Plan 2008, we first want to talk about our accomplishments for 2007. It was another banner year. Our accomplishments greatly contributed to the advancement and discovery of biomedical knowledge. We increased our collaborations by more than 26% and embarked on a number of high profile research initiatives. We saved the ICs more than \$60,000 per month in telephone moves, adds, and changes. We avoided \$125,000 in costs for switch engineering and upgrades. We complied with OMB mandates to implement encryption on laptops and a standardized configuration on personnel computers. We delivered our first-ever comprehensive service catalogue and provided training on project management and ITIL. We provided nVision reporting for new releases of the NIH Business System (NBS). Last, we reduced our server provisioning times and improved the availability and responsiveness of our infrastructure and applications. It was a very busy year.

Unfortunately, 2008 is going to be even busier than 2007. Not only are we having to continue to comply with OMB directives and security initiatives, the Office of the Chief Information Officer (OCIO) is being moved from CIT and aligned within the Office of the NIH Director. The amount of work required to make this transition and to continue to add value to the NIH mission is going to be significant.

That is why we are happy to provide you with this year's strategic plan. It lays our goals and objectives and how they relate to the goals and objectives of HHS, NIH, and the CIO. It also identifies our initiatives and what we need to do from 2008 thru 2012. Key amongst these initiatives is the standing up our Enterprise Service Desk. This along with establishing a template for Service Level Agreements will be the tipping point in putting us on a path to becoming the NIH IT provider of choice. One of the things we have opted not to do in 2008 is conduct another engagement survey. Instead, we will use 2008 to work on our engagement action plans. The next survey will be conducted in 2009. Another key initiative you will see in the plan is Enterprise Network Services. We are continuing to extend these services to new and renovated buildings. One of our many OMB-directed initiatives is Trusted Internet Connectivity. We will be making a bid to be a provider of Internet services for HHS. This goes hand-in-hand with the OMB directive for us to establish an IT Infrastructure Line of Business Improvement Plan. In addition, we are looking at providing managed desktop and printer services. The scope of this activity for now is within CIT. Another important initiative for our growth is to receive customer service training. We are also looking at expanding our implementation of CMMI. For our Data Center, there is an initiative to increase power for the existing center and to start building the justification for a new center. Last but not least, we also need to work on improving property management and on consolidating our Active Directory domains into one. As you can see, we have a lot of catching up to do, but we have every confidence that we will succeed.


John F. Jones, Jr., Ph.D.
Director, CIT (Acting)

Date 7/17/08


Alfred H. Whitley
Deputy Director, CIT

Date 7/17/08

1. Purpose

For over 120 years, the National Institutes of Health (NIH) has been making significant medical discoveries to improve health and save lives. Information Technology (IT) has partnered with research to become a crucial supporting component in these discoveries. The purpose of this document is to articulate the Strategic Plan the NIH Center for Information Technology (CIT) will use for decision making purposes. In addition, this plan identifies internal and external drivers, and guiding principles that influenced the overall framework and direction of CIT's strategic goals.

2. Scope

CIT's 2008-2012 Strategic Plan focuses on identifying key initiatives that serve as a blueprint to improve and expand NIH's information technology capabilities to meet defined objectives and performance measurements. This Strategic Plan describes current initiatives and what is planned to be implemented over the next four years.

3. Background

The Center for Information Technology was established in 1998 to provide enterprise Information and Information Technology (I&IT) services to the NIH and the citizens of the United States of America who depend on NIH research and medical advances. CIT is one of 27 NIH Institutes and Centers (ICs). Its mission is to leverage I&IT to service the other 26 ICs. Beginning in 2008, the roles of the Director of CIT and the NIH Chief Information Officer (CIO) have been separated, with the office of the CIO being transferred to the NIH Office of the Director. The NIH CIO is responsible for the central management of I&IT at NIH. CIT works in close collaboration with the NIH CIO to lay the groundwork for corporate I&IT and make possible the smooth transition of technology from one generation to the next. Together they work to ensure that I&IT supports and enhances those functions that are necessary to meet the NIH mission.

As shown in the Figure 1, CIT is but one part of the overall IT structure at NIH. However, CIT is the central provider of cross-NIH IT services. CIT has been a leader in implementing enterprise technologies to enhance productivity and increase efficiencies. CIT offers robust and innovative IT services that facilitate global communication and collaboration to support intramural and extramural biomedical research.

CIT provides an extensive array of professional and technical services and maintains facilities to support more than 40,000 customers across NIH and other Department of Health and Human Services (HHS) Operational Divisions:

- Develops and provides the NIH backbone computer networking facilities, cabling and telecommunications, and supports, guides, and assists other NIH components in local area networking.

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- Provides central email, instant messaging, authentication, Internet services, video conferencing, podcasting, and web collaborations.
 - Manages a central IT Help Desk that provides technical service and extensive support to over 40,000 customers.
 - Operates and maintains the NIH Computer Center which offers secure, centralized hosting for its customers.
 - Provides an extensive training program which includes courses, seminars, and documentation for computer and network users.
 - Provides professional project management and consulting services for IT projects.
 - Serves as the central systems analysis, design, and programming resource for data processing and database projects relating to scientific, technical, management, and administrative data on multiple platforms. Designs and develops software projects for computational and data processing facilities and web applications to meet NIH program needs.
 - Coordinates, integrates, and standardizes the vast array of computer services available throughout all of the organizations comprising NIH.
 - Serves as a scientific and technological resource for other parts of HHS and for other Federal organizations with biomedical, statistical, and administrative computing needs.
 - Promotes the application of High-Performance Computing and Communication to biomedical research, including image processing, structural biology, protein folding, database searching, gene linkage analysis, and computational chemistry, using some of the most advanced, massively parallel scalable computing. Computing technology is applied to research problems involving macromolecular structure representation and modeling, and protein and DNA sequence analysis.
 - Develops computer-based systems for laboratory and clinical applications, conducts computer science and engineering research and development, and consults and collaborates in computational, statistical, and mathematical aspects of data analysis. CIT supports software systems to perform these analyses and conduct research in statistics and mathematics with applications to biomedicine.

This Strategic Plan outlines CIT's near-term and future directions in support of this wide range of information and IT services to further the NIH mission. As best practices dictate, CIT's Strategic Plan utilizes and aligns with the missions, visions, goals, and desired outcomes defined by the HHS and NIH. In addition, CIT recognizes the need to integrate external policies and directives as defined by Congress and the Administration into its Strategic Plan.

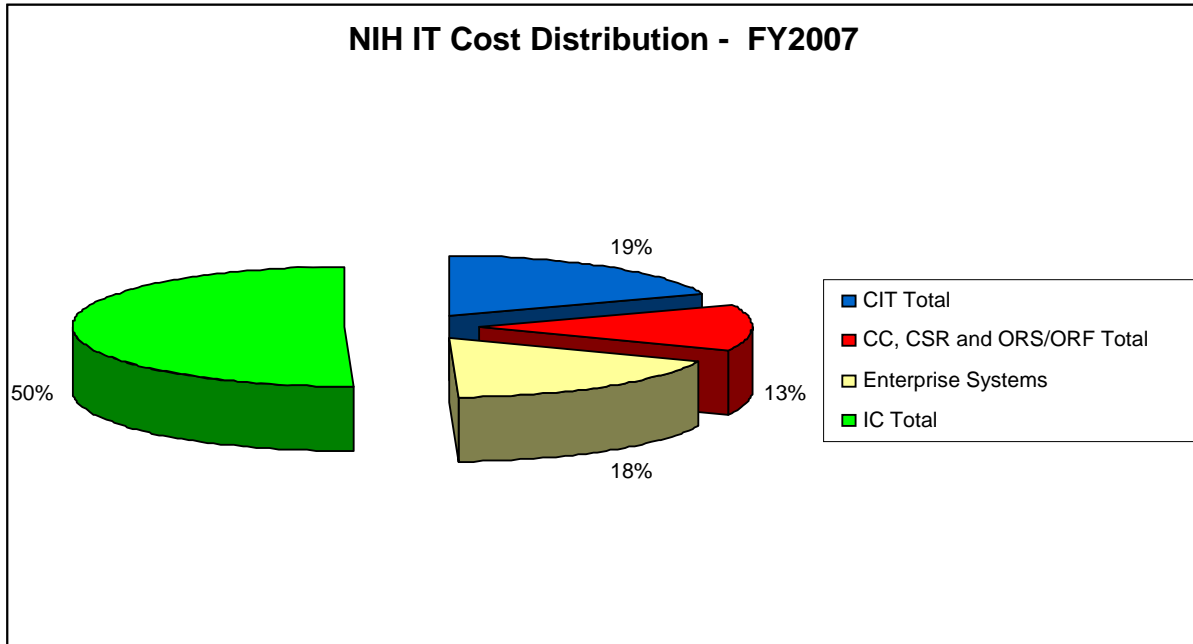


FIGURE 1.

3.1. HHS Mission

The HHS mission is to enhance the health and well-being of Americans by providing for effective health and human services and by fostering strong, sustained advances in the sciences underlying medicine, public health and social sciences.

3.2. NIH Mission

The mission of NIH is science in pursuit of fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life and reduce the burdens of illness and disability.

3.3. CIT Mission and Vision

CIT’s mission is to provide, coordinate, and manage information technology, to implement the vision of the NIH CIO, and to advance computational science to improve NIH’s ability to discover new biomedical knowledge.

CIT’s vision is to be a vital partner in the discovery of biomedical knowledge.

4. Strategic Framework

4.1. Drivers

There are many contributing factors that influence organizational direction. This section introduces key internal and external drivers that played a major role in formulating CIT's strategy.

4.1.1. Internal Drivers

Internal drivers are those factors that affect NIH's operating environment from within the organization. These drivers are often the result of department and agency level goals and objectives. In addition, drivers include discussions among ICs within NIH working towards common goals. These internal drivers are:

- NIH Strategic Plan
- NIH Roadmap
- NIH CIO Goals
- HHS Secretary's Priorities
- HHS Strategic Plan
- Customers/Stakeholders
 - Increasing dependence of NIH on core IT services
 - Increasing appearance of mass collaboration
 - The need for collaborative scientific support for the Intramural Research Program (IRP)
- Limited resources and increasing demands.

4.1.2. External Drivers

NIH recognizes the need to adapt to mandates by the Administration and Congress. These external drivers include:

- Presidential initiatives and directives¹
- Legislation²
- Office of Management and Budget (OMB) guidance³
- Government Accounting Office (GAO) reports
- Citizens
- Customers/Stakeholders
- Increasing sophistication of security threats
- Evolving technologies
- Increase of the Internet as context for problem solving
- Inspector General (IG) Audits.

¹ Including the President's Management Agenda (PMA) and Executive Order 13101 (Greening the Government)

² Including the E-Government Act of 2002; Federal Information Security Management Act of 2002 (FISMA); Clinger Cohen Act of 1996 (CCA); Paperwork Reduction Act of 1995 (PRA) and the Government Performance and Results Act of 1993 (GPRA).

³ Including Circulars A-11, A-16, A-130, and A-76, Memo 97-02, and ITILOB Optimization.

4.2. Guiding Principles

CIT is careful to ensure that technology is used as a tool to support NIH's scientific and business goals. In order to do this, CIT adheres to the following principles:

- Principle 1: Deliver robust IT services that foster creative discoveries and innovative research strategies to promote the protection of health.
- Rationale: The NIH interfaces with many collaborators around the world and supports a premiere Clinical Center. Therefore, it is imperative that CIT's services are robust and available to meet demands. The NIH's core mission is to develop new knowledge. Therefore, providing I&IT support in a way that fosters creativity is essential.
- Principle 2: Collaborate with customers to develop solutions that transform biomedical research.
- Rationale: CIT's primary mission is to support NIH's ICs and their varying missions. Consequently, CIT must develop solutions that seamlessly meet customer expectations. Additionally, when innovative approaches have been developed in the ICs, it is part of CIT's mission to aid the rapid spread of those approaches to other communities that would benefit from them.
- Principle 3: Deliver flexible and cost effective products and services that add value to our customers.
- Rationale: With limited resources, it is imperative that CIT develops and supports cost effective, flexible and reusable products and services.
- Principle 4: Provide a secure information infrastructure that encourages collaboration and information sharing.
- Rationale: Security and privacy are ongoing concerns for organizations. Therefore, CIT will implement appropriate security controls to protect data assets and privacy.
- Principle 5: Develop solutions that adhere to the NIH and HHS Enterprise Architectures.
- Rationale: Effectively leveraging enterprise IT resources is key to containing IT costs and promoting data sharing. Therefore, CIT will help implement and use the Enterprise Architecture.

4.3. NIH CIO Goals

CIT is aligned to the HHS and NIH missions in coordination with the NIH CIO. Prior to 2008, CIT and the NIH CIO were combined in one organization, with the CIT Director also serving as the NIH CIO. In an effort to provide NIH with greater I&IT efficiencies, integration, and oversight, the Office of the CIO was separated from CIT and moved to the NIH Office of the Director. CIT remains committed to the vision and goals set by the CIO.

1. Enable Knowledge Creation and Sharing

Objectives:

- Useable electronic health record
 - Controlled Vocabulary
 - Standards Awareness
 - Program Coordination
 - External Representation
- Human Semantic Interoperability
- Meta-data Repository
- Advance computational capabilities related to biomedical research

2. Enhance Business Adaptability by ensuring that NIH I&IT projects are well managed to respond rapidly to business and research needs

Objectives:

- Improve Project Management
- Increase the ability to leverage our investment
 - Improve Architectural Adherence of I&IT Projects
 - Integrate information across Enterprise and IC Extension Systems
- Develop a comprehensive strategy for improving IT project management across the NIH, especially for large, high-risk projects

3. Ensure a robust, secure NIH infrastructure at or above industry standards at least cost

Objectives:

- NIH Rationalization
 - Process Improvement through IT Infrastructure Library
- Engagement with the HHS
 - Security program
 - Infrastructure Optimization
 - Trusted Internet Connection
- Sustain, Upgrade and Retire Existing Services
- Implement an NIH Service Desk that will fully support the NIH Enterprise
- Implement Enterprise Network Services (ENS) in additional NIH buildings

4. Lead NIH I&IT across the span of NIH, including the Office of the Director (OD) and the NIH ICs

Objectives:

- Establish robust data governance
- Develop a five year plan for optimizing NIH IT Infrastructure Lines of Business (ITILOB) to reduce long term costs and increase efficiencies and reliability
- Enhance high performance scientific super computing in order to support collaboration within intramural NIH science and research
- Build competencies and apply best practices for Project Management excellence within the NIH enterprise

5. Manage Integration of external imperatives with NIH needs

Objectives:

- Integrate the business needs of the NIH with mandates that must be managed to clarify and achieve compliance with value.
- Support a robust infrastructure while managing mandated initiatives from both HHS, OMB, and other federal entities as appropriate
- Implement OMB required IT security changes
- Reduce trusted Internet connections (TIC) as directed by OMB
- Consolidate NIH Active Directory (AD) Child Domains in order to comply with federal IT security mandates, reduce costs, and improve services
- Establish IT support for NIH Continuity of Operations

5. CIT's Strategic Goals

Since its establishment in 1998, CIT has maintained a high level of reliability and availability for its services including at least 99.9% availability for NIHnet, hosting services, central email service, Active Directory, Windows infrastructure, and the Data Center for production enterprise applications. While balancing limited resources, increasing demands, attrition, and changing technology, CIT's 2008-2012 plan communicates commitment to its customers and continuous improvement. This structured, results-oriented strategic plan is based on HHS Enterprise IT goals⁴ and is closely aligned with the NIH CIO's goals. It is focused on CIT's long-term strategic goals and specific initiatives to meet short-term and long-term NIH and HHS objectives.

Goal 1: Provide a secure and trusted IT environment.

Objectives:

- Enhance the confidentiality and integrity of IT resources.
- Protect IT assets and resources from unauthorized access or misuse.
- Ensure that IT security is incorporated into the life cycle of IT assets.
- Enhance security awareness.

2008 Initiatives:

- Ensure 98% participation in information security and privacy awareness training.
- Establish a formal POAM process that includes tracking, reporting, and validation.
- Ensure that FISMA (Federal Information Security Management Act) system reports are completed on-time, reviewed, and approved.
- Complete the CIT Information System Security Officer (ISSO) web site and ensure that it is updated to keep the CIT community informed about security issues.
- Integrate security into System Development Life Cycle (SDLC) and CPIC processes for CIT projects.
- Develop and implement processes to ensure continued compliance with Pointsec disk encryption.
- Conduct scans, penetration tests, and periodic laptop audits.
- Increase the number of secure messaging users.
- Implement OMB required IT security changes: Federal Desktop Core Configuration (FDCC) for PCs.
- Reduce Internet connections as directed by OMB Trusted Internet Connection (TIC) initiative.
- Consolidate NIH Active Directory (AD) Child Domains to comply with IT security mandates.
- Implement new procedures to ensure security configuration of all desktop and laptop computers prior to use.

2009 – 2012 Directions:

- Improve existing processes through use of IT Infrastructure Library (ITIL).
- Implement future OMB IT security requirements.
- Establish a fee for service for security testing, monitoring, documentation and training.
- Continue conducting scans, penetration tests, and periodic laptop audits.
- Increase capabilities of off site back-up and mirror facilities.
- Investigate more energy efficient solutions for secure computing.
- Continue implementing and providing TIC services.
- Continue consolidating NIH AD Child Domains to comply with IT security mandates.

⁴ HHS Enterprise Information Technology Strategic Plan (Draft) FY2006 – FY2010
(<http://www.hhs.gov/ocio/plans/itstrategicplan.html>)

Goal 2: Enhance the quality, availability and delivery of HHS/NIH information and services to citizens, employees, businesses, and government.**Objectives:**

- Maintain high availability for all IT systems.
- Implement industry best practices for IT infrastructure management.
- Ensure the availability of IT resources and dissemination of information in preparation for or in response to local and national emergencies or other significant business disruptions.
- Become a Center of Excellence.
- Improve usability of IT systems and applications
 - Promote self-help capabilities in all appropriate CIT systems and programs.
 - Promote systems availability on multi-platforms.
 - Investigate opportunities to apply new technologies to existing services and implement in production as appropriate.
- Enhance communication between CIT, the CIO, the IC CIOs, and IT Governance groups.
- Provide Quality Customer Support
 - Improve the effectiveness of the Incident Management process.

2008 Initiatives:

- Maintain at least a 99.9% availability for all IT systems.
- Improve support for Macintosh users across NIH.
- Establish IT support for NIH Continuity of Operations.
 - Implement contingency and Disaster Recovery plans and conduct tests.
- Develop a phased plan to provide adequate UPS-protected power for the future needs of the CIT Data Center facility.
- Install new Computer Room Air Conditioning (CRAC) units in the Data Center.
- Implement a new SL8500 tape library system and transition EMIB and Windows hosting archiving to this new capability.
- Continue to improve integration of the Help Desk, Continuity Assurance Program (CAP), Network Operations Center (NOC) and Data Center operations for increased system availability.
- Implement an NIH Service Desk that will fully support the NIH enterprise.
 - Streamline the service request process to increase percent of requests resolved on 1st contact.
 - Enhance the Service Desk web site for easier customer access.
 - Document and implement CIT-wide Service Operation Processes.
 - Implement technology to support Service Desk Processes.
- Implement the Telephone Improvement Program to reduce telephone outages due to power and equipment failures.
- Modify Call Center operations to automate changes to on-call pager schedule and provide patient recruitment services.
- Increase registrations for and use of improved self-service password tool to reduce downtime and Service Desk costs.
- Complete the NIHnet Core upgrade.
- Provide customer service training to all CIT employees.
- Implement and conduct customer surveys.

2009 – 2012 Directions:

- Continue to maintain a high availability of IT systems by making additional systems management and infrastructure improvements.
- Implement Remote Assistance/Desktop Management Tools to facilitate End User support's efforts to troubleshoot, repair and manage desktop computing environments (e.g., Altiris, SMS, ePO, remote assistance products).
- Continue to transition from a Help Desk to fully implemented Service Desk.
- Integrate Support Tool technologies to improve customer experience and increase support organization NIH Service Desk efficiency.

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- Re-engineer and consolidate process used to request IT services through a centralized service request portal.
 - Implement common processes and supporting tools across NIH End User Support for Incident/Problem Management and Request Fulfillment.
 - Provide additional “Tier 0” self assistance.
 - Re-engineer the NIH Service Desk’s phone menu cue and answer process to reduce wait times.

Goal 3: Implement an enterprise approach to IT infrastructure and common administrative systems that will foster innovation and collaboration.**Objectives:**

- Explore emerging services, moving from prototype to pilot and production services that provide value to the NIH community.
- Implement enterprise services whenever possible to achieve cost savings, operational efficiencies or enhanced IT security.
- Improve efficiency and security of NIH Enterprise I&IT through strengthened NIH Enterprise Architecture, promoting interoperability and transparent, secure data flow.
 - Ensure alignment of emerging technologies with the NIH Enterprise Architecture
 - Ensure alignment with the NIH business strategy by referencing the NIH Business Architecture to-be models and information architecture standards.
 - Support federal, departmental, and NIH federated authentication and identity management initiatives.
- Support and implement data sharing across NIH in accordance with policies and guidelines
- Maximize the value of technology investments through enterprise-wide procurement and licensing.
- Add value to NIH and Departmental programs via coordination of IT as a service across NIH and HHS.
- Strengthen infrastructure management.

2008 Initiatives:

- Implement enterprise services whenever possible to achieve cost savings, operational efficiencies or enhanced security.
- Increase the number of users served by enterprise software licenses.
- Implement HHS-520 (Request for Approval of Outside Activity) in NEES (NIH Enterprise Ethics System).
- Increase usage of new virtualized service that allows projects to reuse data center hardware to lower hosting costs.
- Implement unified messaging and collaborative services.
- Support new users of the Integrated Services Center.
- Implement Enterprise Network Services (ENS) in additional buildings.
- Establish a Voice Over Internet Protocol (VoIP) solution for NIH.
- Optimize the number of NIH server rooms and data centers to reduce costs and improve efficiencies.
- Plan and begin to implement move of eRA ownership and system administration to CIT hosting.
- Implement architecture migrations for Tru64/Alpha environments, including completion of high availability configurations for “EOS” shared server Oracle offering and the HHS/PSC Payment Management System (PMS) servers.
- Begin planning implementation of sub-capacity pricing.
- Transition NIH Portal service and users consistent with reduced funding.
- Implement Building 10 shared cabling infrastructure.
- Convert web sites to Microsoft Office SharePoint Server.

2009 – 2012 Directions:

- Continue to adhere and contribute to the development of the NIH Technology Architecture, as a framework for the standardization and acquisition of hardware and software required to increase the effectiveness and efficiency of IT services.
- Complete implementation of the move of eRA ownership and system administration to CIT hosting.
- Implement recommendations from the future Mainframe and Servers Service and Support plan.
- Implement one new release of NEES each year; all reports and requests filed as part of the NIH ethics program to be included in NEES by 2012.
- Increase bandwidth for off-campus locations to bring the buildings up to par with the campus sites.
- Continue testing VoIP technologies and define an NIH implementation strategy in FY09.
- Continue marketing NIH Enterprise Network Service to transition IC's network management to CIT.
- Expand the Call Center services offered to the ICs.
- Continue optimizing servers using virtualization.

Goal 4: Enable and improve biomedical research.**Objectives:**

- Support, enhance, and advance collaborative computational science.
- Advance scientific and technical progress through innovative solutions for IC partners in the areas of biomedical informatics, genomics, structural biology, image analysis, computational methods and algorithms, parallel computing, biomedical instrumentation, molecular modeling, knowledge management, and mathematical and statistical analysis.
- Enhance communication of research results.
- Maintain IT infrastructure in support of biomedical research; provide new capacity and infrastructure technology as required by biomedical research.

2008 Initiatives:

- Provide Project Management and Software Development expertise to support biomedical endeavors at the NIH.
- Provide IT services in support of the NIH-wide communication plan to translate research results to the public.
- Release new version of National Database for Autism Research that includes an ability to query across phenotypic, neuroimaging, and genomics domains.
- Begin development of new clinical imaging system.
- Specify, design, and begin to implement bioinformatics to support next generation genome sequencing applications.
- Develop tissue expression microdissection methods, instrumentation, software, and core laboratory capabilities to facilitate the molecular characterization of disease pathology.
- Develop prototype best-fit model for automatic disease fingerprint generation.
- Improve high performance computing capacity through the High Performance Network Cluster Replacement Initiative.
- Expand the High Performance Parallel File System.
- Reconcile Office Technology Transfer (OTT) patent data for NIH Intramural Research personnel (NIDB).
- Provide and host collaboration tools that facilitate trans-NIH, federal and other private and academic sharing of biomedical research.

2009 – 2012 Directions:

- Provide new capacity and infrastructure technology as required in biomedical research.
- Enhance high performance scientific super computing in order to support NIH science and research.
- Support the “Greening” of the Data Center with the new Energy Efficient Cluster Initiative.
- Continue development and implementation of new clinical imaging system.
- Continue implementation and enhancement of bioinformatics to support next generation genome sequencing applications.
- Expand capabilities of tissue expression microdissection methods, instrumentation, software, and core laboratory capabilities to facilitate the molecular characterization of disease pathology.
- Initiate a controlled vocabulary project.

Goal 5: Achieve excellence in IT management practices.**Objectives:**

- Promote cost-effective IT solutions by sharing and implementing best practices.
- Promote software and system sharing and interoperability.
- Develop and maintain a high quality competitive workforce; encourage professional growth for staff.
- Ensure IT systems adhere to enterprise architecture.
- Apply strong project management and performance measurement processes to critical IT projects to achieve project success.

2008 Initiatives:

- Improve operations by implementing IT Infrastructure Library (ITIL) best practices.
 - Begin planned transition of the NIH Help Desk to a Service Desk.
 - Complete the ITIL training program for CIT and IC IT staff.
 - Move from a Level 0 Service Catalog to a Level One Service Catalog.
 - Establish a central process for CIT Service Level Agreements.
- Develop and implement a five-year plan for optimizing NIH IT Infrastructure Lines of Business (ITILOB) to reduce long term costs and increase efficiencies and reliability.
 - Develop suitable performance measures for the infrastructure optimization areas.
 - Capture baseline performance and develop plans for achieving improvements.
- Apply Capability Maturity Model Integration (CMMI) best practices across entire applications development division.
- Improve the work environment by developing and executing action plans based on the results of the 2007 CIT Workforce Engagement Survey.
- Restructure iSDP to adhere to recommended better business practices and improve operations.
- Develop and begin to implement an internal, new, rigorous Property Management Business Process.
- Investigate expanding telework.
- Conduct Partner Focus meetings.

2009 – 2012 Directions:

- Re-survey the CIT work force to track progress on organizational engagement and identify further actions required to improve organizational effectiveness.
- Continue implementing recommendations from the ITILOB improvement plan.
- Support the use of Control Objectives for Information and Related Technology (COBIT) to improve IT governance.
- Implement managed desktops and printers for CIT.
- Continue implementing ITIL best practices.
 - Maintain an up-to-date Service Catalogue and Service Level Repository.
 - Implement Change Management and Release Management.
 - Complete transition from Help Desk to fully implemented Service Desk.
- Improve project management.
- Complete implementation of internal new Property Management Business Process
 - Develop an accurate property baseline via 100% survey of all locations.
 - Validate location of all property versus the official record in Sunflower.
 - File Report of Survey for all missing and damaged property with the OD/Property Administration Branch to create accurate official record in Sunflower.
 - Ensure continued compliance through annual and periodic inventories.
- Conduct and implement customer surveys.

6. Governance and Oversight

CIT manages its programs and operations in compliance with NIH-wide management and budget requirements. CIT programs are subject to rigorous review under NIH-wide oversight of central services organizations. The management review process involves the following governance bodies:

- NIH Steering Committee – Established by the NIH Director to provide trans-NIH governance and streamlined decision-making, it has ultimate funding/budget approval authority.
- Management and Budget Work Group (MBWG) – Responsible for central services budget review, it makes funding recommendations to the NIH Steering Committee.
- IT Working Group (ITWG) – With primary responsibility to monitor and ensure the overall performance of NIH's enterprise-level IT programs and investments, it makes funding recommendations to the MBWG. The ITWG has three sub-working groups focused on the IT requirements of specific NIH business domains:
 - Clinical Research Information System (CRIS) Steering Committee (Intramural),
 - Extramural IT Steering Committee (also referred to as the Extramural ITWG), and
 - Administrative Management Systems Steering Committee (AMSSC).

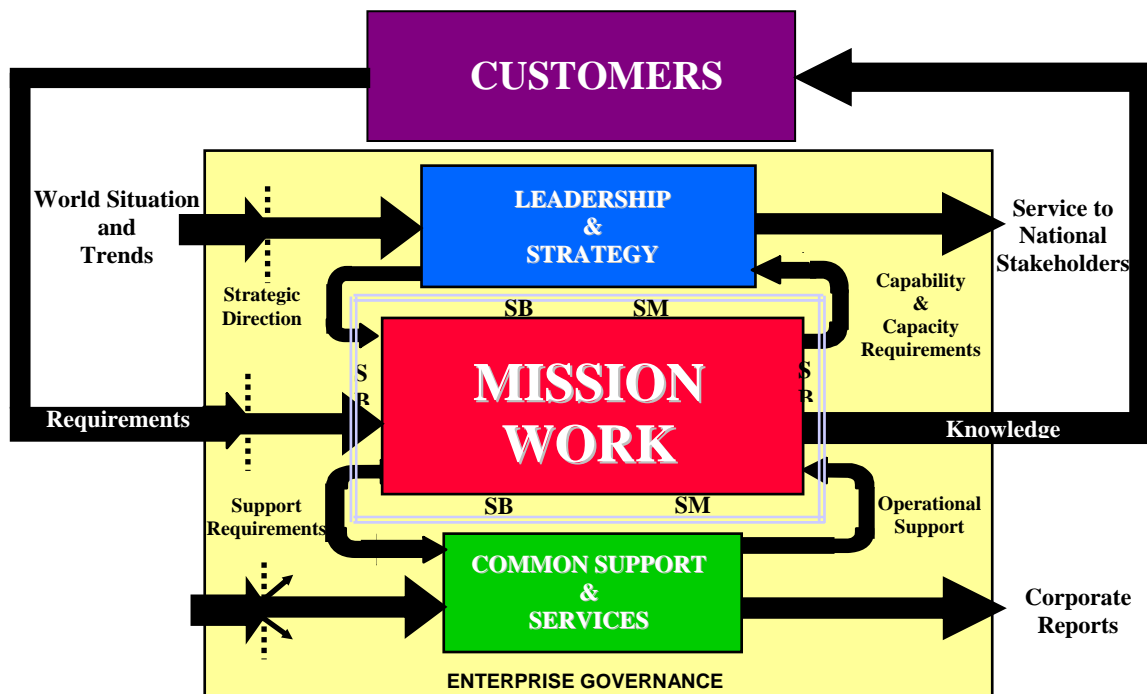


FIGURE 2

CIT follows the I&IT management principles and policies and enterprise architecture established by the NIH CIO. In addition, the CIT leadership actively participates in the NIH IT Management Committee (ITMC), chaired by the NIH CIO, and composed of senior IT officials at the ICs. The ITMC advises the NIH CIO on I&IT management and planning and serves as a conduit between the IC and the CIO on I&IT issues.

In addition to identifying I&IT investments that require NIH and HHS level reviews, CIT is responsible for participating in NIH's capital planning and investment control (CPIC) process. Capital planning and investment control are key requirements of the Clinger-Cohen Act (CCA) of 1996 and the implementing regulations and guidance issued by OMB and HHS. OMB's increased scrutiny of I&IT investments and other legislative mandates (e.g., the E-Government Act, Government Performance and Results Act, and Federal Information Security Management Act) contribute to increasing management attention to I&IT oversight and compliance. Further, I&IT investments should be aligned with the President's Management Agenda, HHS Goals as expressed in the HHS Strategic Plan 2007-2012 (<http://aspe.hhs.gov/hhsplan/>), and goals of the NIH CIO. The alignment of CIT's goals is demonstrated in Appendix A.

At CIT, enterprise-wide performance measures are in place, both as part of the annual I&IT Investment planning process and in the Performance Contracts of senior management. Measures are tracked against performance results to provide critical information about whether overall I&IT activities are achieving expected goals.

Appendix A: CIT Alignment with HHS/NIH Strategic Goals

Each CIT strategic goal is aligned and contributes to the goals of the Department and NIH.

CIT Goals Aligned with HHS Goals					
HHS Goals ⁵ HHS Strategic Plan Goals and Objectives – FY2007-2012	CIT Goals				
	1	2	3	4	5
1: Improve the safety, quality, affordability and accessibility of health care, including behavioral health care and long-term care					
2: Prevent and control disease, injury, illness, and disability across the lifespan, and protect the public from infectious, occupational, environmental, and terrorist threats					
3: Promote the economic and social well-being of individuals, families and communities					
4: Advance scientific and biomedical research and development related to health and human services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table 1

CIT Goals Aligned with HHS IT Goals					
HHS IT Goals ⁶ HHS Enterprise Information Technology Strategic Plan (Draft) FY2006-2010	CIT Goals				
	1	2	3	4	5
1: Provide a secure and trusted IT environment	<input type="checkbox"/>				
2: Enhance the quality, availability, and delivery of HHS information and services to citizens, employees, businesses, and governments		<input type="checkbox"/>			
3: Implement an enterprise approach to information technology infrastructure and common administrative systems that will foster innovation and collaboration			<input type="checkbox"/>		
4: Enable and improve the integration of health and human services information				<input type="checkbox"/>	
5: Achieve excellence in IT management practices					<input type="checkbox"/>

Table 2

⁵ <http://aspe.hhs.gov/hhsplan>

⁶ <http://www.hhs.gov/ocio/plans/itstrategicplan.html>

CIT Goals Aligned with NIH Goals					
NIH Goals ⁷	CIT Goals				
	1	2	3	4	5
1: Foster fundamental creative discoveries, innovative research strategies, and their applications as a basis to advance significantly the Nation's capacity to protect and improve health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2: Develop, maintain, and renew scientific human and physical resources that will assure the Nation's capability to prevent disease	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
3: Expand the knowledge base in medical and associated sciences in order to enhance the Nation's economic well-being and ensure a continued high return on the public investment in research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4: Exemplify and promote the highest level of scientific integrity, public accountability, and social responsibility in the conduct of science	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	

Table 3

CIT Goals Aligned with NIH CIO Goals					
NIH CIO Goals	CIT Goals				
	1	2	3	4	5
1: Enable knowledge creation and sharing		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2: Enhance business adaptability by ensuring that NIH Information & Information Technology (I&IT) projects are well managed to respond rapidly to business and research needs					<input type="checkbox"/>
3: Ensure a robust, secure NIH infrastructure at or above industry standards at least cost	<input type="checkbox"/>	<input type="checkbox"/>			
4: Lead NIH I&IT across the span of NIH, including the Office of the Director (OD) and the NIH Institutes and Centers (ICs)			<input type="checkbox"/>		
5: Manage integration of external imperatives with NIH needs				<input type="checkbox"/>	

Table 4

CIT Goals Aligned with NIH ITILOB Goals					
NIH ITILOB Goals	CIT Goals				
	1	2	3	4	5
1: Improve IT Infrastructure Governance and Management with the use of Control Objectives for Information and related Technology practices					<input type="checkbox"/>
2: Use Information Technology Infrastructure Library (ITIL) to support NIH IT Infrastructure services	<input type="checkbox"/>		<input type="checkbox"/>		
3: Ensure End User Services and Support effectiveness and efficiency through targeted improvement in support processes and procurement		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
4: Ensure Telecommunications Services and Support effectiveness and efficiency			<input type="checkbox"/>		
5: Ensure Mainframe and Server Services and Support effectiveness and efficiency			<input type="checkbox"/>		

Table 5

⁷ <http://www.nih.gov/about/>

Appendix B: CIT Products and Services

From <http://cit.nih.gov/ProductsAndServices/>

Administrative Services

[Active Directory](#)
[Billing](#)
[Electronic Forms](#)
[IT Acquisitions](#)
[ITAS](#)
[NIH Administrative Database \(ADB\)](#)
[NIH Business Intelligence \(nVision Data Warehouse\)](#)
[NIH Central Accounting System \(CAS\)](#)
[NIH Portal](#)
[Non-NIH Financial Systems](#)
[Project Management Services](#)

Application Development

[Custom Application Development](#)
[Quality Assurance](#)

Application Hosting

[About the NIH Data Center](#)
[Application & Web Hosting Services](#)
[Data Center Rates](#)
[Data Center Security](#)
[Database Services](#)
[Disaster Recovery](#)
[Related Data Center Services](#)

Cable Management

[Cable Management Services](#)
[Cable Management Public Information](#)

CIT Service Catalog

Co-Location Services

[Co-Location Service \(On and Off Campus\)](#)
[Policies and Procedures for Co-Location Service](#)

Computational Biosciences

[Biomedical Imaging](#)
[Biomedical Informatics](#)
[Biomedical Instrumentation](#)
[CIT Bioinformatics Cooperative](#)
[Computational Methods and Parallel Computing](#)
[Mathematical and Statistical Analysis](#)
[Molecular Modeling](#)
[Telemedicine](#)

Desktop Computer Services

[Accounts](#)
[Antivirus](#)
[Email and Active Directory Services](#)
[Licensed Software, Hardware & Services \(iSDP\)](#)
[LISTSERV](#)

Email & Messaging Services

[AntiSpam](#)
[AntiVirus](#)
[E-Fax](#)
[Email](#)
[Email Archiving](#)
[Instant Messaging](#)
[NIH Paging Network](#)
[Secure Email](#)
[Secure File Transfer](#)
[Service Level Agreement](#)
[Wireless Messaging](#)

Enterprise Monitoring

[Enterprise Monitoring \(NAppMan\)](#)
[Local Application Monitoring \(Sitescope\)](#)

Mainframe Services

[Printer Registration and Reset](#)
[Publications, Documentation and Software](#)
[SILK Web Applications](#)
[z/OS System \(Titan\)](#)

Networking Services (NIHnet)

[Consolidated Network Monitoring Services \(CNMS\)](#)
[Domain Name Services \(DNS\)](#)
[Enterprise Network Services \(ENS\)](#)
[Facilities Network \(FACnet\)](#)
[Network Operations Center \(NOC\)](#)
[Network Security Services](#)
[NIHnet Core Services](#)
[NIHnet News](#)
[Remote Access Services \(Parachute and VPN\)](#)
[Wireless LAN Services](#)

Supercomputing

Telecommunications

[Telecommunications Products and Services](#)

Video and Conference Services

[Conference Room Automation and AV Services](#)

[Federal Video Relay Service \(FedVRS\)](#)

[NIH Web Collaboration](#)

[Podcasting](#)

[TeleConferencing Services](#)

[Videocasting Services](#)

[VideoTeleConferencing \(VTC\)](#)

Web Services

[Content Management Service](#)

[Enterprise Authentication \(NIH Login\)](#)

[Event Registration Systems](#)

[Search Engine Services](#)

[Survey Systems](#)

[Web Design and Development](#)

[Web Hosting Services](#)