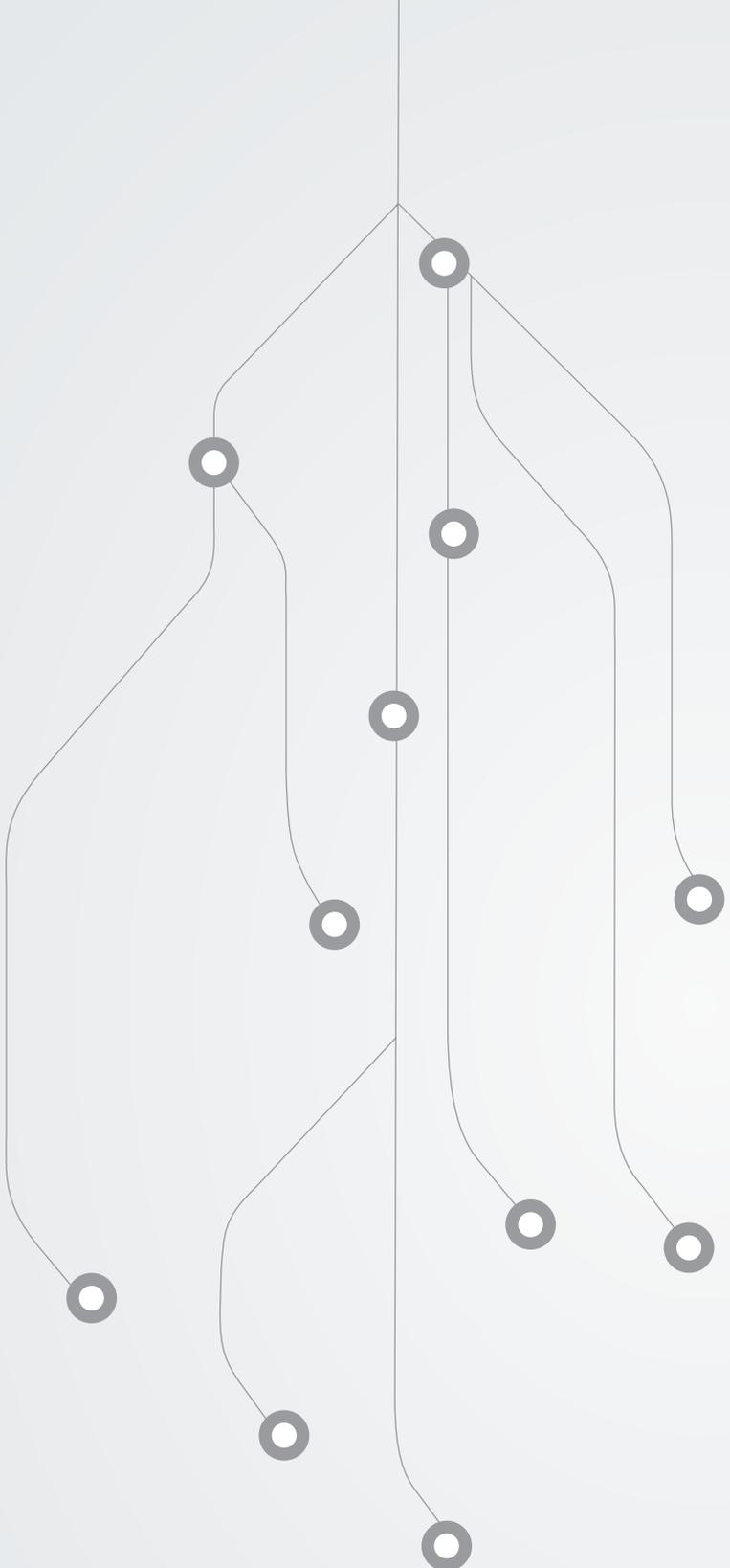UNIVERSITY OF ILLINOIS

AITS ANNUAL PROGRESS REPORT FY16

Administrative Information Technology Services

ABOUT
AITS

Administrative Information Technology Services (AITS) provides enterprise business services and resources to help students, faculty and staff of the University of Illinois system achieve excellence in teaching, research, learning and administrative pursuits.

CONTENTS

> **"Many of our goals rely on collaboration with units throughout the University.**

AITS provides infrastructure and services to support the enterprise business processes of the University of Illinois that are utilized by approximately 80,000 students and 34,000 faculty and staff. Through strategic planning and university-wide collaboration, we focus efforts to empower our community of students, faculty and staff in their daily work with systems and services that function seamlessly and responsively when they're needed the most, and by doing so, support the university mission set forth by its leadership.

In FY16, we completed many projects outlined in our strategic plan and continued to build multi-campus partnerships, while maintaining and improving our core systems and services. These IT projects and initiatives support both immediate and longer-term needs for our university system while enabling the University of Illinois' strategies and objectives.

Many of our goals rely on collaboration with units throughout the University. As such, we proactively seek opportunities to work with both university administration offices and campus departments to identify process improvement initiatives, bring their already-efficient systems to the enterprise level for the benefit of all university constituents, and improve IT Governance across the University.

This annual report highlights accomplishments from FY16 in support of the AITS Strategic Plan and the projects and initiatives we are engaged in going forward. It represents a continuing effort to support transparency and reflects the continuous hard work by our employees to provide high-quality administrative services and technology infrastructure, complete projects that are prioritized by the campuses with our governance process, and assist University units with data analytics and Business Intelligence tools.

I encourage you to share your comments or questions with me and the members of our team as we continue to build an outstanding IT environment for the University of Illinois system.

Michael Hites
Senior Associate Vice President

FY16
HIGHLIGHTS

COLLABORATION

ENHANCED IT SOLUTIONS FOR STUDENTS WITH DISABILITIES

This project brings together representatives from Disability Resources and Educational Services (DRES) on the Urbana campus, the Disability Resource Center (DRC) on the Chicago campus, the Office of Disability Services (ODS) on the Springfield campus, and representatives from Registrar and IT to develop IT solutions that help to improve the academic performance and success of registered students with disabilities. This solution will simplify and improve the overall quality of services provided to the students who request these federally mandated services, provide access to data which is needed to objectively assess the efficiency and impact of services, better inform ongoing strategic and budget planning processes, and respond to a growing number of requests for disability data at the campus, college and university levels.

ELECTRONIC CONFLICT OF INTEREST IMPLEMENTATION

For years, the University of Illinois processed staff and faculty Conflict of Interest reports with paper forms and manual routing. The implementation of the Electronic RNUA form brought together faculty and staff from research, ethics and IT offices to implement an online form and develop efficient electronic processing. The next phase of this project will enhance and improve the complicated Faculty conflict processing.

ENHANCEMENTS TO THE MYRESEARCH PORTAL AND KUALI COEUS IMPLEMENTATION

START myResearch is a collaborative IT project designed to identify the most effective and efficient way to track research administration so that overhead is reduced and researchers can focus on research activities. In FY16, the grant administration software was replaced with the Kuali Coeus system and the myResearch PI Portal was enhanced to further enhance grant administration for researchers.

PREFERRED FIRST NAME IMPLEMENTATION FOR STUDENTS

Many individuals on campus have a desire to be known by a preferred first name instead of their legal first name in the classroom or workplace. The Preferred First Name implementation has been a collaborative project between AITS, the Dean of Students and Registrar offices, and iCard programs, just to name a few. This implementation will allow students, faculty and staff from all three campuses to indicate a preferred first name and have that name used in many University systems.

WHO
WE SERVE

STUDENTS

Over 80,000 students are enrolled at the three University of Illinois campuses and two regional campuses. Thousands more take classes off campus and online.

**Students use AITS services as they:**

- Register for classes
- Access transcripts
- Receive financial aid
- Check grades and class schedules
- View and manage accounts
- Pay tuition
- Apply for graduation
- Receive work study and student employment earnings
- Find food with Mobile Dining App

FACULTY

Approximately 6,000 faculty are employed by the University of Illinois. Faculty members are in fields including engineering, agriculture, law, veterinary medicine, the arts, business, liberal arts and sciences, and medicine and the health sciences.

Faculty rely on AITS services to:

- Manage grants
- Access class rosters
- Hire staff
- Submit and receive reimbursements
- Manage benefits
- Record and change grades
- Receive employment earnings
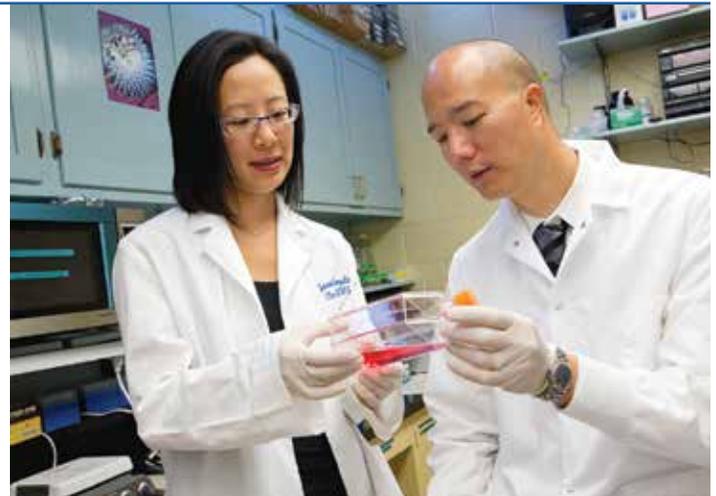
STAFF

Approximately 34,000 professional, graduate, and support staff members work together to achieve the research and learning missions of the University. AITS services support academic business offices at the University, which in turn, enables those offices to better serve their constituents.

AITS enables efficient:

- Accounting and financial reporting
- Online purchasing
- Grant management
- Student admissions, records and registration
- Human resource services and payroll services

WHAT
WE DO

ENTERPRISE SERVICES

Business Processes

Provide analysis, training, tools, and methodology in business process improvement and project management in support of initiatives to improve customer service, free-up staff time, deliver services faster and/or reduce cost.

Customer Requests

Build and support new systems and functionality as requested by university constituents that are evaluated, selected and prioritized by multi-campus customer-driven IT governance (Information Technology Priorities Committee (ITPC)).

Systems and Applications

Support of vital business processes of the University by building and maintaining administrative software applications for constituents on all three campuses.

Data and Analytics

Scope, design, and deliver solutions to university business problems using a combination of enterprise data warehouse, business intelligence, and data visualization frameworks.
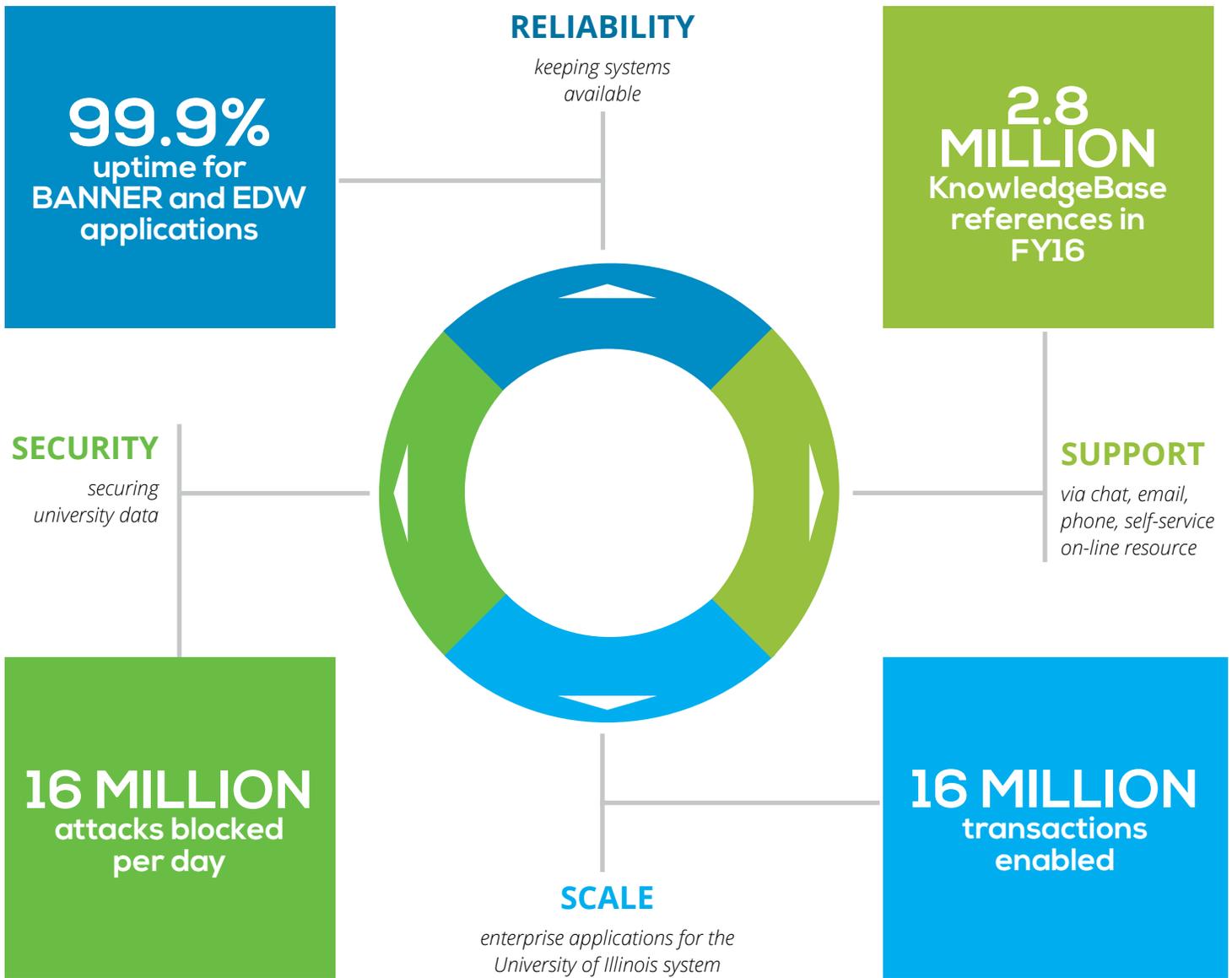
Support 7x24x365

The AITS Service Desk provides support for clients/constituents and serves as a single point of contact for personalized help with administrative systems. Assistance is also provided through a self-service collaborative tool containing thousands of documents at **answers.uillinois.edu.**
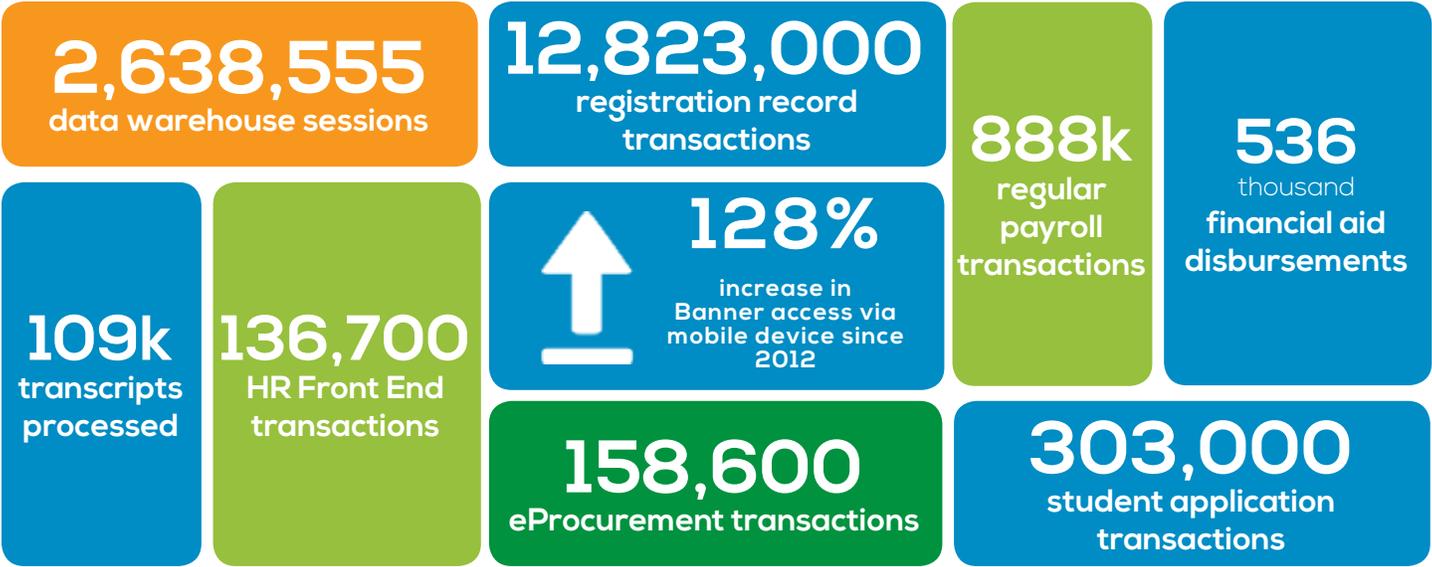
The work of AITS is rooted in industry best practices and standards-based approaches to ensure the quality and consistency of services. Areas of best practice utilization include software development, service management, financial management, organizational effectiveness, IT governance, data warehousing, project management, and security compliance. AITS supports a large number of systems and enables high volume of transactions for the entire University system. The majority of AITS IT services are enterprise in nature, and most serve constituents at all University locations.

BY THE NUMBERS

RELIABILITY
keeping systems available

99.9%
uptime for BANNER and EDW applications

2.8 MILLION
KnowledgeBase references in FY16

SECURITY
securing university data

SUPPORT
via chat, email, phone, self-service on-line resource

16 MILLION
attacks blocked per day

16 MILLION
transactions enabled

SCALE
enterprise applications for the University of Illinois system

AITS is an engaged partner within the University community with the mission of providing IT systems that are accessible, reliable, accurate, efficient and responsive to customer needs. Banner and related systems that AITS supports provide the backbone for University business processes, and it is imperative that these services are highly available and protected to reduce vulnerability to security threats and data breaches.

The value that technology brings to the University of Illinois system is multi-faceted. With IT systems and services that are enterprise in nature and support constituents at all University locations, AITS is promoting the mission of the University by providing quick access to data, enhancing communication and collaboration between students, faculty and staff, and enabling the business side of the University to meet the demands and expectations of its educational mission.

2,638,555 data warehouse sessions

12,823,000 registration record transactions

888k regular payroll transactions

536 thousand financial aid disbursements

109k transcripts processed

136,700 HR Front End transactions

128% increase in Banner access via mobile device since 2012

158,600 eProcurement transactions

303,000 student application transactions

(annual transaction volumes)

STUDENT SERVICES:
Financial Aid Processing | Registration & Records | Recruiting and Admissions

FINANCIAL SERVICES:
Accounts Payable/Receivable | Contract Management | eProcurement | General Ledger Management | Inventory Accounting | Travel Expense Reimbursement

HR SERVICES:
Benefits | Payroll | Recruiting & Training

PROFESSIONAL SERVICES:
Business Process Improvement | Data Visualization | Enterprise Data Warehouse | Identity and Access Management | Mobile Application Consulting | Project Management | Records and Information Management | Security and Compliance Consulting | Workflow Development Consulting | Security Provisioning | Server and Storage Hosting | Quality Assurance | Web Services Consulting | Workstation Management
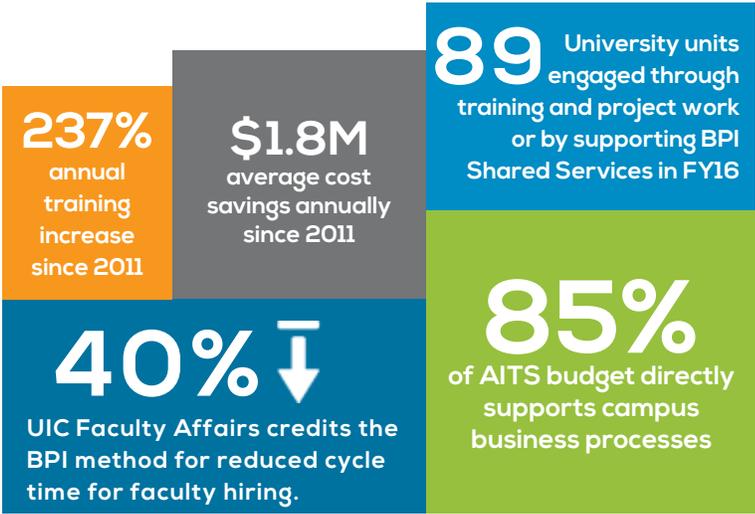
RESEARCH SERVICES:
Research Administration Management

VALUE
AND EFFICIENCY

Through IT delivered at the highest scale, AITS moves the University's business process from paper, to electronic systems, to web-based services, and to mobile technology as demand for productivity increases and as IT continues to innovate.

Since 2011, the Business Process Improvement Shared Service (BPISS) has seen a 237% increase in annual training participation and has averaged $1.8 million cost savings annually. In addition, the projects that AITS works on support cost reductions that are distributed throughout the campuses, colleges and departments of the University of Illinois system.

237% annual training increase since 2011

$1.8M average cost savings annually since 2011

89 University units engaged through training and project work or by supporting BPI Shared Services in FY16

40% UIC Faculty Affairs credits the BPI method for reduced cycle time for faculty hiring.

85% of AITS budget directly supports campus business processes

PROJECTS
FY 16

SEE HOW WE MAKE AN IMPACT:

ACADEMIC EXCELLENCE | RESEARCH & DISCOVERY | ECONOMIC DEVELOPMENT | PUBLIC ENGAGEMENT | HEALTH CARE
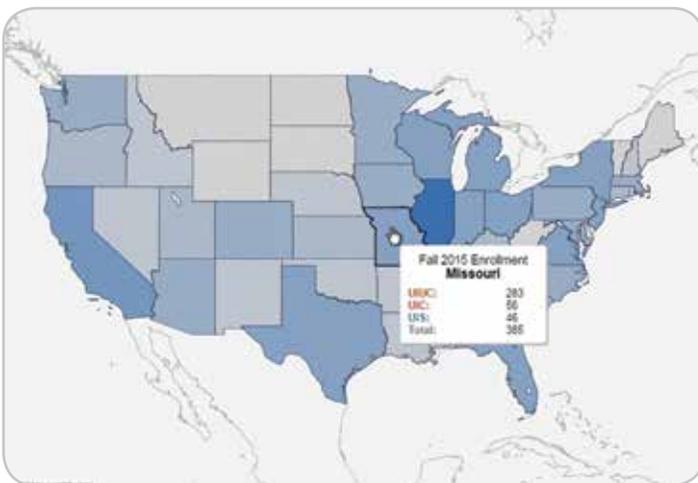
UNIVERSITY SYSTEM WEBSITE & DASHBOARDS

In 2016, AITS and University Relations partnered on a project involving groups from across the university to create a new dynamic website for the University of Illinois system that includes interactive dashboards and report cards that share the University's story.

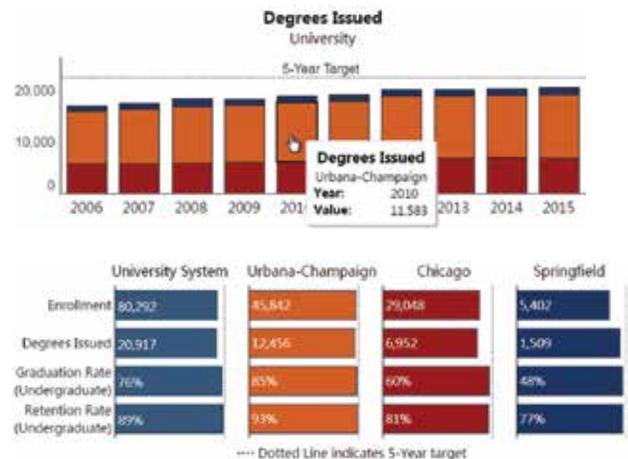To view more, visit www.uillinois.edu/reportcard.

Illinois Startups

Student Demographics
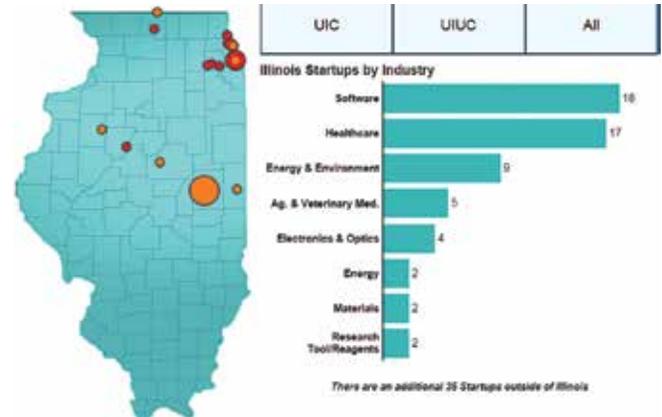
Campus Data

IDENTITY AND ACCESS MANAGEMENT

Update Recovery Options

The contact information you provide will allow self management of your password if it becomes unusable (expired, forgotten, or locked) and will only be used for password changes, computer account security events, or as authorized by law. For more information, please refer to the University Web Privacy policy.

Please provide at least **ONE** type of contact information.

Non-University Email Address
me@domain.com

Text-Enabled Phone Number
(999) 555-1234
Standard text fees may apply, consult your service provider.

Voice Callback Phone Number
(999) 555-1234
What number should I use?

SAVE   I want to opt out

Cancel

IAM established one University credential and reduced the number of times that a user is prompted to authenticate when accessing various University systems. The One ID and Password (OIDPW) phase of the IAM project was implemented at the Springfield and Urbana-Champaign campuses in 2015, giving the students, faculty and staff three self-service options to recover their passwords. Go-live on the Chicago campus is slated for Fall of 2016.

97% of users in UIS system

_____

unique users recovery options set within 1 year

50% of users in UIUC system

_____

unique users recovery options set within 9 months

MYRESEARCH PORTAL

The myResearch Portal provides Faculty with Award and Agreement data at their fingertips. The newest release of the myResearch Portal features a completely new design and layout, an enhanced search function, and improved reporting/data export tools.
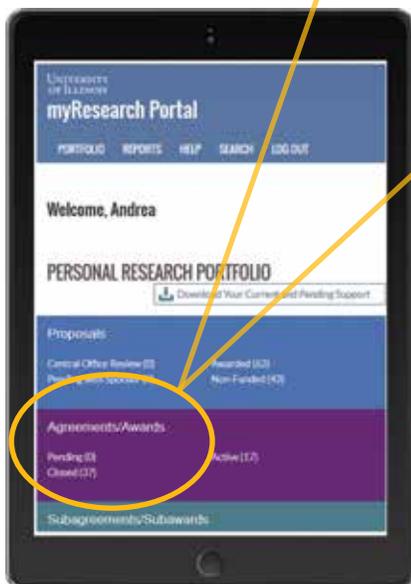

With myResearch Portal, PIs and Business Managers can conveniently manage grants with the ability to download current and pending support, view negotiation detail, generate payroll histories and see expenditures and financial summaries in one location.

myresearch.uillinois.edu/piPortal

PROJECTS
CONTINUED

AITS MOBILE DEVELOPMENT

In collaboration with many University departments and state organizations, AITS Mobile Development Services (MDS) is positioning AITS as a mobile leader across the University.

Through the development of several iOS and Android apps to improve the University experience for students, faculty and staff, like the **UI Dining, Knowledge Base, Illinois DVM** apps, and the **Chicago Water Walk** app that promotes tourism in downtown Chicago, MDS is working hard to promote the AITS Strategic Directions and create valuable tools for the University and surrounding communities.

In the fall of 2016, MDS will release the **UI Student** enterprise app, which includes class schedules and final grades, campus safety and health contacts, and much more.

Future mobile opportunities include collaboration with a number of startup companies to deliver apps to the consumer market, Illinois government representatives to create a constituent-focused app, and exploration of emerging technologies and their practical application such as blue tooth beacons, wearables, augmented and virtual reality, drone-based image collection, data monetization and predictive analytics.

www.aits.uillinois.edu/mobile

MY-UI-FINANCIALS

Prior to the release of My-UI-Financials in FY16, there was no universally adopted process through which all departments requested, maintained, and distributed existing official financial reports, and most units accessed information using a variety of software tools and procedures.

With My-UI-Financials, administrators, faculty and PIs are able to quickly access their financial reports any time, any place, day or night, without the need to rely on business offices to go through the tedious and time-consuming process of retrieving relevant information.

> *Because the parameters are already preset, I was able to retrieve years of information in just a few minutes.*
>
> *Rodney Chambers, Director of Financial Operations, University Library, UIC*

	ALL FUNDS	HELP	GO TO RVM

All Funds

Filter by: Fiscal Year: 2016 ▾ Fiscal Period: 09 - March ▾

Chart	College	School	Dept.	Type of Fund	Fund PI Name		
All ▾	All ▾	All ▾	All ▾	All ▾	All ▾	Get Records	Clear Row

Show 100 ▾ entries   Search:

CoA ▲	Fund Cd ⇕	Orgn Cd ⇕	Prog Cd ⇕	Title ⇕	Ind ⇕	Budget ⇕	Cur Month Exp ⇕	Expenses ⇕	Encumbrances ⇕	Bud Bal Avail ⇕	Actions
9	100016	582000	582001	Departmental Operations	YTD	0.00	5,021.10	45,943.12	34,018.96	-79,962.08	🔍 📋
9	200201	582000	582001	Departmental Operations	YTD	389,300.00	15,246.03	149,789.74	110,478.43	129,031.83	🔍 📋

"Using AITS' usability expertise and development resources, HR was able to translate the functional requirements for the UI New Hire system into a much more efficient and usable system."

Tony Kerber,
SR Director, HRIS Strategy,
University Administration

HOW
WE DO IT

IT GOVERNANCE

AITS participates on over 100 partner and customer committees to collaborate on academic, business and information technology issues and solutions, and to help insure IT investments are prioritized and aligned against the university goals and strategies as broadly as possible.

SHARING

ENTERPRISE TOOLS

Support and provide resources and provisioning of tools for enterprise level IT services being developed or provided by other IT units. Provide IT project, program, and portfolio management training and consulting services.

STRATEGY

STRATEGIC PLANNING

Everything AITS does is driven by a focus on successful results and the following values: Leadership, Stewardship, Customer Satisfaction, People, Integrity and Learning.

We plan and we measure to the plan.

FOCUS ON EXCELLENCE

AITS employees have a clear sense of organizational purpose, and together provide a culture of growth and development where excellent performance is the goal and expectation for everyone. In early FY16, AITS implemented a formal recognition program to recognize its employees who demonstrate an attitude of excellence through behaviours supporting AITS' mission, vision, values, and/or strategic directions—the foundation of the organization's ability to deliver on our promises to customers. The 65 nominations submitted by customers and colleagues, and representing 24 groups within AITS, demonstrated how the employees exceeded expectations, led by example, identified opportunities, provided exceptional service, or helped implement an innovative solution. Eight employees received multiple nominations!

We are very proud of our two Excellence Awards winners:

John Tanner, Enterprise Application Administration Specialist: "...very forward looking in his support of enterprise systems and is always looking for ways to make things more efficient."

Peter Bossert, Enterprise System Specialist: "...he always takes the time to understand the evolving business aspects and requirements of financial aid processing."

ENTERPRISE ADMINISTRATIVE COMPUTING INFRASTRUCTURE

The University requires a foundational infrastructure of reliable information technology resources on which other systems and services depend. These infrastructure services must maintain a superior level of performance and reliability in order to support the mission of the University while being cost-effective, scalable, and accommodating to changing needs and technologies.

INFRASTRUCTURE

275 vended applications supported

1,226 databases supported

Storage/Backups
439 TB configured storage
1.5 PB total backups

Security
Data and Physical Protection
Vulnerability Scanning
Attack Monitoring/Remediation

688 major software applications and business processes supported

Monitoring
System health monitoring
Application, Server, ORCA, Systems, Network

Backup/Disaster Recovery

6,000 SQUARE FEET
Data Centers
Chicago & Urbana

1,113 Servers

Change, Project, Configuration, and Release Management

Co-location Services
Hosting hardware for other organizations
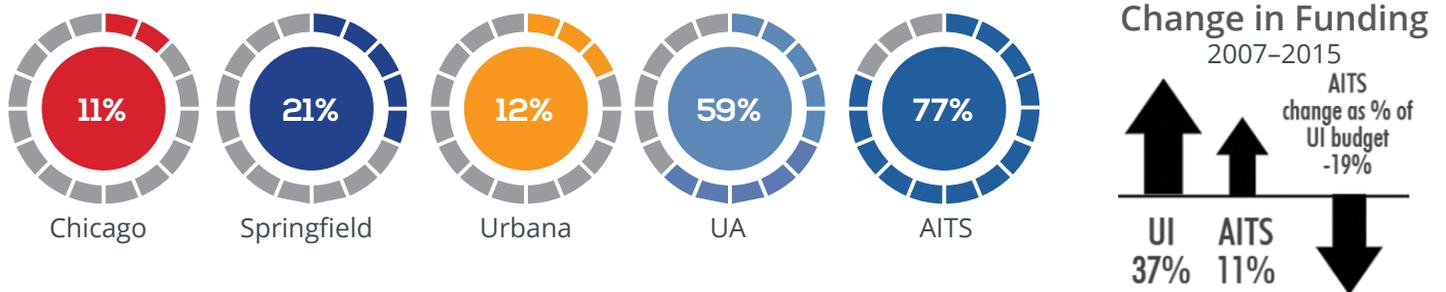
24x7x365 System Support

WHAT IT COSTS

The projects that AITS works on support cost reductions and labor efficiencies that are distributed throughout the campuses, colleges, and departments of the University of Illinois system.
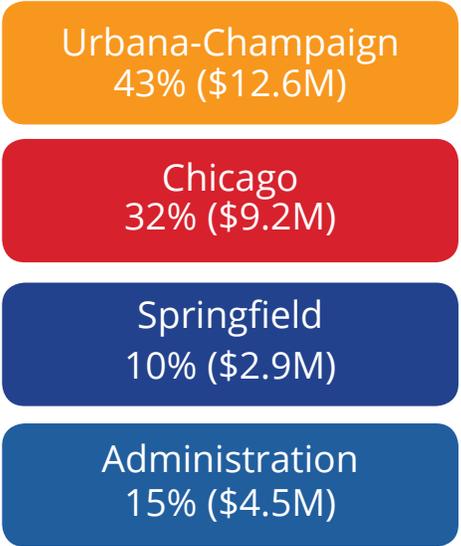
STATE SUPPORT AS A PERCENT OF FY15 BUDGET

11% Chicago
21% Springfield
12% Urbana
59% UA
77% AITS

Change in Funding
2007–2015
AITS change as % of UI budget -19%

UI **37%** AITS **11%**

SUPPORT OF CORE PROCESSES

Line of Business	FTE Cost	Non Labor Costs	Total Cost
BPI (Delivered to Customer)	$220,833	$4,794	$225,627
Collaboration tools	$78,405	-$11,266	$67,139
Compliance	$84,213	$25,146	$109,358
Database Customer Services (Consulting)	$195,143	$0	$195,143
Customer Training	$96,734	$17,964	$114,698
Data Visualization	$287,615	$0	$287,615
Centralized Desktop Support	$1,401,449	$112,947	$1,514,396
Enterprise System Support	$1,696,486	$700,994	$2,397,480
Enterprise System Research Administration	$1,037,469	$1,135,746	$2,173,215
Enterprise System Finance Applications	$1,606,780	$1,467,141	$3,073,920
Enterprise System HR Applications	$2,493,577	$1,369,129	$3,862,705
Enterprise System Student Applications	$2,295,645	$1,504,356	$3,800,002
Enterprise System Capital Programs	$331,213	$106,546	$437,759
Enterprise System Mobile Applications	$574,305	$53,614	$627,919
Identity and Access Management	$1,475,488	$1,861,346	$3,336,834
Mobile Applications (Consulting)	$12,166	$0	$12,166
Reports and Data	$2,179,618	$977,634	$3,157,251
Records and Information Management System	$322,601	$13,242	$335,843
Security (Consulting)	$99,295	$0	$99,295
Enterprise Class Storage/Backup Services	$285,727	$107,217	$392,944
Server Support Services	$38,589	$146,579	$185,169
Workflow Development	$343,247	$0	$343,247
Application System Support	$1,183,091	$0	$1,183,091
Security Provisioning	$312,884	$0	$312,884
Data Center Management / Co Location Services	$160,583	$56,777	$217,360
UI Ready (Kuali)	$3,490	$125,725	$129,215
Video Bridge Conferencing (Consulting)	$117,522	$141,835	$259,361
Web Services (Consulting)	$20,314	$0	$20,314
Projects and Portfolio Management (Consulting)	$196,563	$203	$196,766
Web Services Infrastructure	$72,941	$7,753	$80,693
Enterprise Integrations	$101,390	$0	$101,390
TOTAL	**$19,225,375**	**$9,925,429**	**$29,150,804**

0.65% of University Budget

Customer Resource Utilization

Urbana-Champaign
43% ($12.6M)

Chicago
32% ($9.2M)

Springfield
10% ($2.9M)

Administration
15% ($4.5M)

Over the past few years, AITS, which has a budget of $25 million, has cut expenses by $2 million, revised our strategic plan, developed a sustainable activity based costing (ABC) model, and integrated all of these aspects into our portfolio and project management office (PPMO).

ABC is being utilized as a well-defined, repeatable, and transparent tool to provide improved information about the true cost of our services, and in turn, we are using this to determine the most efficient sourcing for strategic planning.

With ABC, we have been able to identify that 85% of the cost AITS incurs are in support of all three campuses in the University of Illinois system.

AITS STRATEGIC PLAN
FY16–FY18

STRATEGIC DIRECTIONS

SAVE TIME: Improve and add services that increase productivity for faculty, students and staff.

IMPROVE EASE OF USE: Improve the usability of AITS services.

IMPROVE SPEED TO SERVICE: Improve the time to delivery of AITS Services.

DELIVER TARGETED AND PERVASIVE INFORMATION: Provide for strategic, widespread use of our data.

COLLABORATE: Build and strengthen relationships throughout the University based on mutual trust.

The AITS Strategic Plan outlines the information technology strategies and initiatives of Administrative Information Technology Services. It is designed to be a three-year IT plan that evolves with collaborative input alongside other strategic plans throughout the University of Illinois system.

The planning process that produced the current FY16-FY18 strategic plan document utilized the University of Illinois IT Strategic Planning Process Framework developed in FY12 as a primary input to planning.

On an ongoing basis, progress towards achieving the goals and initiatives in the strategic plan is measured using an online dashboard tool, which promotes shared ownership and tracking responsibilities, as well as easy access to produce reports for easy distribution.

In pursuing these strategic directions, AITS developed and managed to a set of specific initiatives. For a complete accounting of these initiatives and our progress against them, please see The AITS Strategic Plan page on the AITS website at www.aits.uillinois.edu.

Summary of AITS Current Progress Towards Strategic Goals as of June 30, 2016

Progress	Critical	Waiting on Someone	Off Target	Not Started	Deferred	On Target	Achieved
Goal	0	0	1	0	0	37	1
Team 1	1	0	6	0	1	17	12
Team 2	0	0	0	1	3	13	1
Team 3	0	0	0	0	0	20	1
Team 4	0	0	0	0	0	20	0
Team 5	0	0	0	0	8	23	1
Team 6	0	0	4	2	0	16	2

LOOKING FORWARD

START

- START myDisclosures—2.0 release
- myProposals—begin planning for Proposal Development using Kuali Coeus
- myResearch Portal—planning and analysis of features for high impact to users

New UIllinois Dashboards & Data

- President's Transparency Dashboards: Academic Excellence, Research & Discovery, Economic Development, Public Engagement, Healthcare
- ICS Data Acquisition Implementation
- Analysis & Implementation of iBuy data into EDW

Business Process Improvement

- University Procurement Source-to-Pay Process Analysis and Improvement
- Unit Security Contact Request Process Redesign
- Annual Sabatical Leave Proces Improvement

IAM

- One ID and Password live at UIC
- Integration to campus Rave application
- Passwords up to 127 charachters
- Centralized password expiration
- Integration with campus Slate applications

AITS Strategic Plan

- Continue feasibility study of university-wide business process analysis and implementation including a feasibility study of our next generation ERP strategy.
- Replace aging Banner hardware infrastructure to improve performance and reliability.
- Pursue new revenue opportunities where they are beneficial and cost effective to the University.
- Promote and support IT governance that is empowered, accountable, and transparent in order to better support the mission activities of the University.
- Protect user and administrative accounts from theft and exploitation by attackers.
- Identify and implement new technologies and products to enable AITS to bring state of the art services to our customers.
- Enable self-service business intelligence for the University community.

WANT TO GET INVOLVED?

We believe it is important for the university's IT community to be engaged, responsive, and aligned with faculty, student and staff needs, which is why we welcome and encourage the sharing of ideas and technology resources. If you would like to get involved and have ideas for a new project, process improvement initiative, or enterprise service, or would like to provide talent or financial resources for an existing or future project, let us know!

MORE INFORMATION

https://www.aits.uillinois.edu
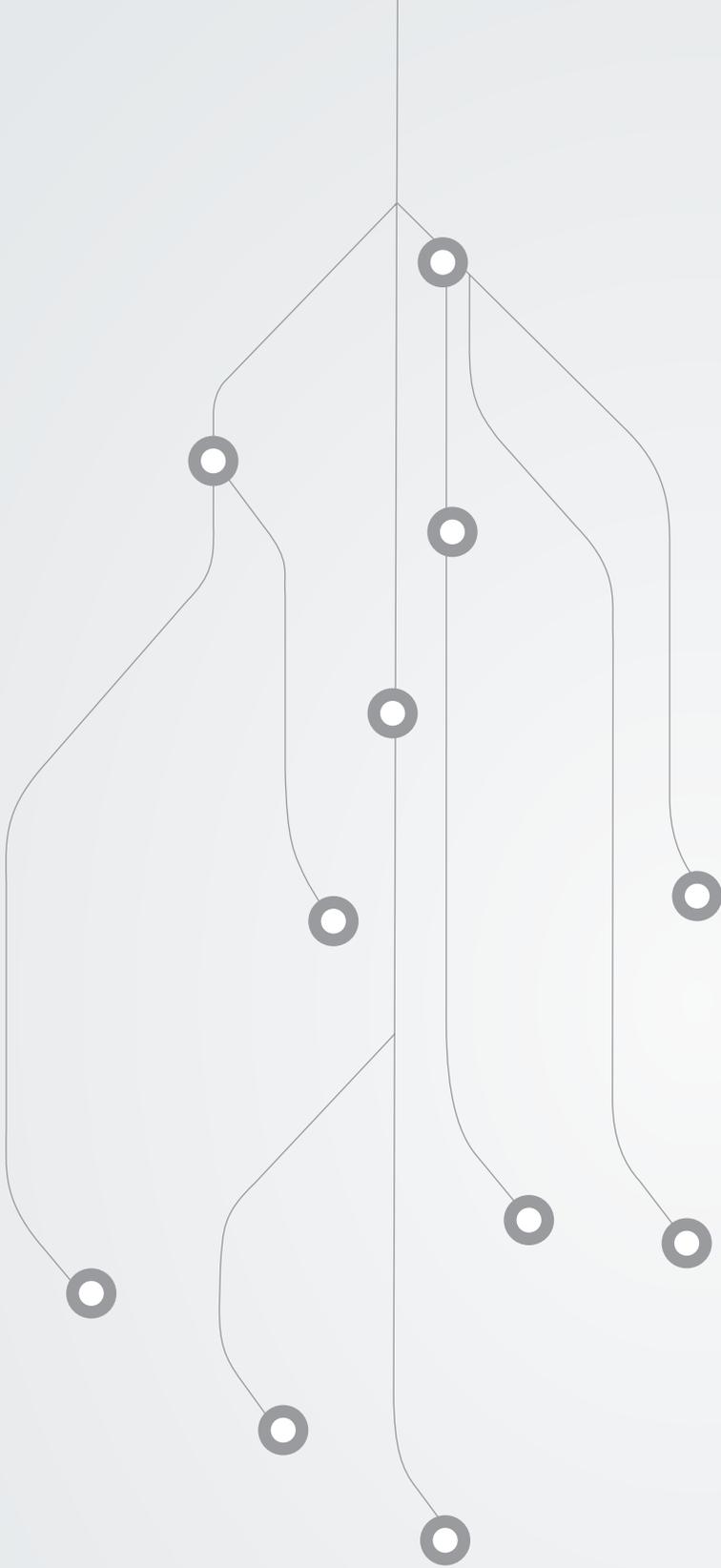
AITS website for AITS services, help resources, and organizational information.

https://www.uillinois.edu/cio

UA CIO website for shared services, business process improvement, IT governance information, records and information management, and portfolio and project management.