UNIVERSITY OF ILLINOIS SYSTEM
Urbana-Champaign • Chicago • Springfield

AITS

Administrative Information Technology Services

FY17 ANNUAL METRICS REPORT

RELIABILITY

AITS supports systems that University of Illinois students, faculty and staff expect to be available 24 X 7 for critical business processes. AITS strives to have systems dependable and reliable for their clients.

Banner and EDW uptime percentage is calculated using unplanned or unexpected outage information. Password Manager does not include planned outages in uptime.

BANNER

99.99 2017 % Uptime

Banner is used by students, faculty and staff to register for classes, pay employees and make departmental purchases

ENTERPRISE DATA WAREHOUSE

The Enterprise Data Warehouse (EDW) is the authoritative source for critical reporting for the University of Illinois System

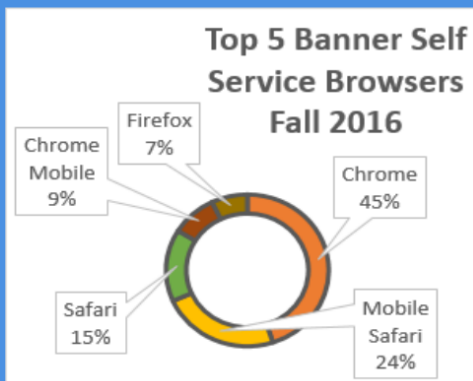**99.94** % 2017 % Uptime

PASSWORD MANAGER

Password Manager is used by all students, faculty and staff to claim their NetID and utilize self-service Password maintenance and resets

99.99 2017 % Uptime

WHAT HAPPENS DURING START OF TERM — Fall 2016

WHAT BROWSER IS MOST POPULAR?

Top 5 Banner Self Service Browsers Fall 2016

- Chrome 45%
- Mobile Safari 24%
- Safari 15%
- Chrome Mobile 9%
- Firefox 7%

WHEN DO STUDENTS USE THE SYSTEM?

11:00 a.m. on the first day of class showed the highest usage

BANNER REGISTRATION Transactions

The highest number of registration transactions are seen on the first day of class for each campus during the start of every term. Fall 2016 #s:

Urbana--Over 100,000
Chicago--Over 55,000
Springfield--Over 3,000

CUSTOMER SERVICE

AITS' Strategic Plan gives guidance to the System to provide ease of use for our applications. We evaluate our services and provide self-service capabilities so that customers can assist themselves.

SCALE

12 million Registration Records Processed

157,600 eProcurement Transactions (iBuy)

874 thousand Payroll Transactions

142,000 HR Transactions Processed

2.6 Million EDDIE Sessions

over 1/2 Million Financial Aid Disbursements

In FY17, AITS started initiatives to gather customer feedback. The AITS Service Desk began gathering customer feedback in December, 2016 and the first application survey was the Protected Email Attachment Repository (PEAR) application.

CUSTOMER FEEDBACK

AITS Service Desk Customer Service Evaluation

April 17	May 17	June 17
77	**79**	**78**

Net Promotor Score--above 70 for customer service is considered "world class"

PEAR Feedback
3 month avg.(out of 10) **8.59**

From our Customers
'Outstanding Work'

'Project Management Class was great!!!'

'Vet Med appreciates high-level service'

'Rock Star'

CUSTOMER SELF-SERVICE

3.5 Million Knowledge Base (KB) Hits
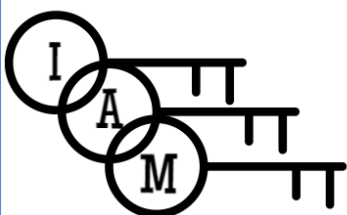
225,000 Password Resets

1,020 Active KB Docs

6,800 Research Proposals Submitted **&** **4,100** Research Awards Processed
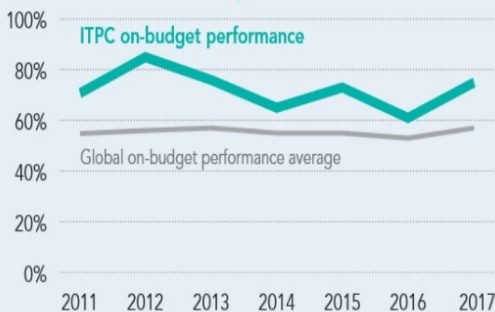
PROJECTS

The projects that AITS works on support cost reduction and labor efficiencies that are distributed through the University of Illinois System. AITS project work is governed by the Information Technology Priorities Committee (ITPC).

FY17 PROJECT HIGHLIGHTS
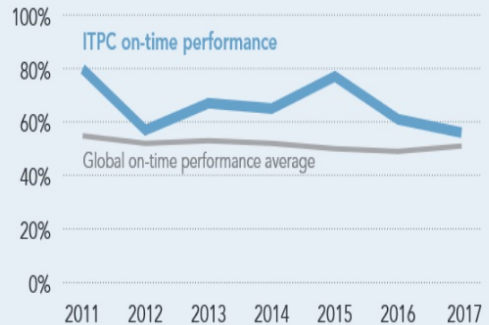
22 projects completed in FY17

On-Budget Performance 🏷️$

ITPC on-budget performance

Global on-budget performance average

100% 80% 60% 40% 20% 0%
2011 2012 2013 2014 2015 2016 2017

ITPC projects consistently perform better than the global performance average as published in PMI's Pulse of the Profession.

On-Time Performance ⏱️

ITPC on-time performance

Global on-time performance average

100% 80% 60% 40% 20% 0%
2011 2012 2013 2014 2015 2016 2017

MANDATORY VS. DISCRETIONARY

This is an analysis of Mandatory vs. Customer Requested Projects and Project Hours (ITPC and AITS Internal) from FY09-FY17 This information is current as of July 13, 2017

FY09 - FY17 SUMMARY

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

	Projects	Hours (Project and non-project work)
Customer Requested	142	290,409
Mandatory	163	323,598

This analysis of total projects and project hours from FY09 through FY15 shows both projects and project hours are evenly split between customer requested and mandatory project work. This is a growth of mandatory hours in FY16 which has continued into FY17
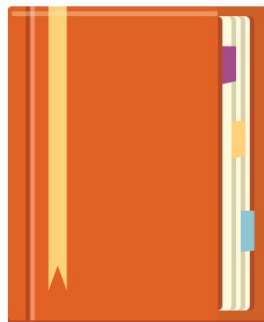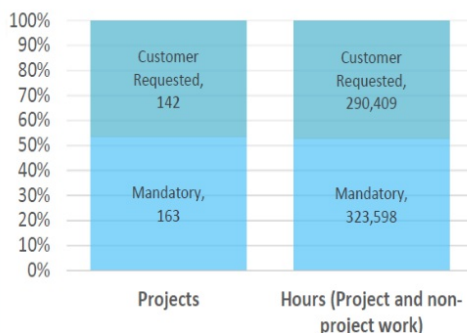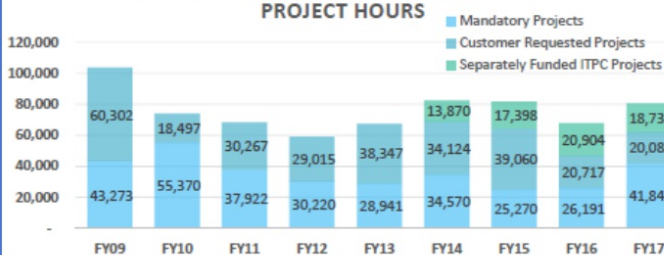
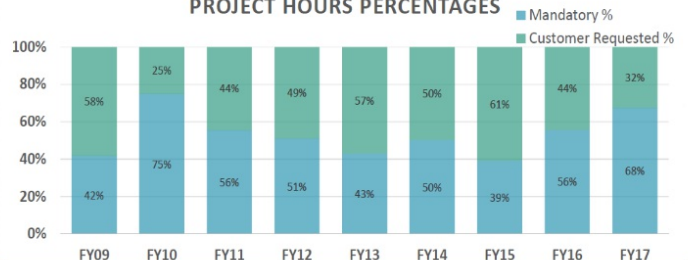### Mandatory and Customer requested projects completed by FY

35 30 25 20 15 10 5 0
FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17

■ Customer Requested ■ Mandatory

MANDATORY AND CUSTOMER REQUESTED PROJECT HOURS

■ Mandatory Projects
■ Customer Requested Projects
■ Separately Funded ITPC Projects

120,000 100,000 80,000 60,000 40,000 20,000 -

	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Separately Funded ITPC						13,870	17,398	20,904	18,731
Customer Requested	60,302	18,497	30,267	29,015	38,347	34,124	39,060	20,717	20,080
Mandatory	43,273	55,370	37,922	30,220	28,941	34,570	25,270	26,191	41,841

MANDATORY AND CUSTOMER REQUESTED PROJECT HOURS PERCENTAGES

■ Mandatory %
■ Customer Requested %

100% 80% 60% 40% 20% 0%

|	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Customer Requested %	58%	25%	44%	49%	57%	50%	61%	44%	32%
Mandatory %	42%	75%	56%	51%	43%	50%	39%	56%	68%

SERVICES

AITS offers technical services across the University of Illinois System. Services include support of shared applications and technical objects.

CONTACT US FOR THESE SERVICES

Growth of Formbuilder Applications in 5 years

29 FY13

Forms in Use

379 FY17
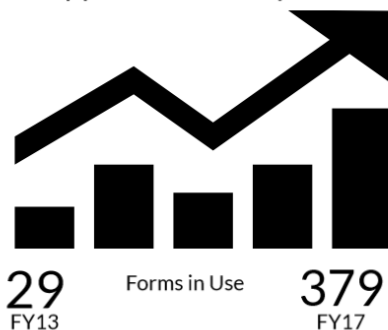
710 Configuration Items Supported (Applications, Modifications, etc)

12 mobile apps developed by AITS

1,073 Servers Supported

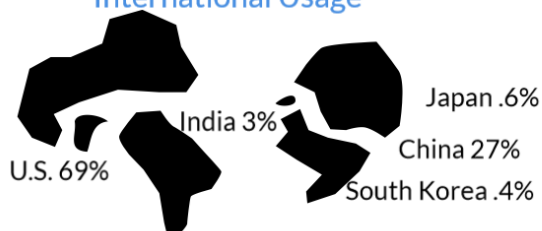**18** Million Hits on the AITS Web Content Management System (WCMS)

Mobile Application Use--UI Dining International Usage

India 3%

Japan .6%

China 27%

U.S. 69%

South Korea .4%

500,000 Enterprise Messages Received and Delivered

Storage
1.5 Petabyte Backup
459 Terabyte

10,000 + Hours Supporting non-AITS Systems

Over 2,500 Desktops Supported

IT Service Management

Change Management, Configuration Management, Project Management, Release Management

[Practices are based upon ITIL, CMMI, PMI methodologies]

Application Development

Utilizes SDLC based upon Agile and CMMI. Develop web, batch, mobile, reports, integrations and database apps.

Quality Assurance Testing

Automated, functional, regression, negative, and accessibility testing using HP UFT and HP ALM\Quality Center

Performance Testing

HP LoadRunner and IBM Rational Performance Tester to simulate loads of over 2500 concurrent users.

Vulnerability Scanning

IBM Rational Appscan
Number of Vulnerability Scans Run in FY17: 413

Security

Access Provisioning and Control
Security Engineering and Architecture
Audit and Compliance

Service Desk

- Only 24X7 SD at UI
- Tier 1 / 2 Support
- Production Monitoring

- Bomgar, Chat, email, and phone support
- UI Supported Knowledge Base and SDM Tool
- 27,170 Tickets in FY17

Data Warehousing

Business Intelligence
Dashboard Visualizations
EDW / Data Marts

Server Admin

AITS:	838
Co-Lo Linux:	47 (14 depts)
Co-Lo Solaris:	2
Co-Lo Windows:	186 (29 depts.)
TOTAL:	1,073

Database Admin

Number of Databases
Oracle: 371
SQL Server: 873

Application Administration

Number of Apps
Vended: 206
In-house: 434

Number of Integrations
Web Services: 111
SSO Integrations: 49
JMS objects: :137
Gateways: 29

Desktop / Video

Devices Supported:
2260 Machines
43 Buildings
30 Departments

Video Conferencing:
58 Conf. Rooms
31 Campus Depts.
2 External Orgs

Co-location Services

- ACCC
- Technology Services
- CPRD
- IPATHE
- UIC HPC (Campus Cluster)

- UIC Hospital
- UIF
- UIC College of Engineering
- UIC Computer Science
- UIC Bio-engineering

- Urbana DCSS
- UIC LAS
- UI Planning and Budgeting
- UIC Electrical Engineering
- UIC Computing Research

- UIC Psychology
- UIC LAS
- Illinois State University
- IDOT

UA	DCSS
Campuses	State

Inventory Control

- CA Configuration Management DB
- Full Asset tracking in Banner
- Annual Asset review

Monitoring

- Application – SiteScope (436 monitors)
- Server – WhatsUp (2306 monitors) / Unimon
- ORCA – 86 Solaris servers
- Systems - Sitescan(109 monitors)
- Network – WhatsUp

Backup / Disaster Recovery

- Backup over 1 Petabyte
- Netbackup Application
- Quantum LT05 Tapes
- Secondary production copy vaulted at HAB
- Annual BCP/DR testing

Physical Security

- Multi-Factor + Key Card
- Quarterly Access Review
- Video Surveillance (68 cameras 5 DVRs)
- Alarm systems
- Independent Security Administration

Connectivity

- Redundant ICCN and BGP ISP feeds
- 10 gigabit campus backbone
- 10 gigabit data center network
- 10 gigabit DWDM Peering b/ RRB and HAB
- Redundant server load balancing

Storage / SAN

- EMC VNX Series
- 459 TB configured storage
- CISCO fibre channel
- Automated Tier Management

Tier 1 (Flash)
High Performance

Tier 2 (SAS)
Performance

Tier 3 (NL-SAS)
Capacity

RRB
Chicago
Tier 3 Data Center
Space: 11,203 ft^2

AITS Enterprise Infrastructure Services

HAB
Urbana
Tier 2 Data Center
Space: 4,080 ft^2

AITS Enterprise Infrastructure Services Stack	Version 5 Published: November 9, 2016

FINANCIAL

AITS strives to serve the University of Illinois System by being outstanding stewards of its financial resources. AITS uses Activity Based Costing to evaluate costs for each service.

SUPPORT OF OUR CORE PROCESSES

The projects that AITS works on support cost reduction and labor efficiencies that are distributed throughout the universities, colleges, and departments of the University of Illinois System.

	FTE Cost	Non-Labor Costs	Total Cost
Business Process Improvement	$310,787	$56	$310,843
Collaboration tools	$56,048	$0	$56,048
Compliance	$295,004	$20,951	$315,956
Database Customer Services (Consulting)	$339,963	$0	$339,963
Customer Training	$64,959	$1,230	$66,188
Data Visualization	$309,618	$0	$309,618
Centralized Desktop Support	$1,409,788	$91,115	$1,500,902
Enterprise System Support	$2,741,668	$543,703	$3,285,370
Enterprise System Research Administration	$1,023,878	$1,187,060	$2,210,938
Enterprise System Finance Applications	$1,617,382	$1,164,059	$2,781,441
Enterprise System HR Applications	$2,557,654	$1,108,360	$3,666,014
Enterprise System Student Applications	$2,287,510	$1,189,549	$3,477,059
Enterprise System Capital Programs	$408,056	$119,909	$527,965
Enterprise System Mobile Applications	$220,928	$45,205	$266,133
Identity and Access Management	$1,572,513	$1,691,907	$3,264,420
Mobile Applications (Consulting)	$182,369	$0	$182,369
Enterprise Data and Reports	$2,122,934	$718,470	$2,841,405
Records and Information Management System	$46,822	$0	$46,822
Security	$130,737	$0	$130,737
Enterprise Class Storage/Backup Services	$222,984	$76,650	$299,633
Server Support Services (Maint & Consulting)	$24,050	$76,650	$100,700
Workflow Development (Consulting)	$225,543	$0	$225,543
Application System Support	$251,130	$0	$251,130
Security Provisioning	$247,448	$0	$247,448
Data Center Management / Co Location Services	$222,353	$144,760	$367,112
UI Ready (Kuali)	$125,071	$104,756	$229,827
Video Bridge Conferencing (Consulting)	$136,881	$127,111	$263,992
Web Services (Consulting)	$12,494	$0	$12,494
Projects and Portfolio Management (Consulting)	$205,999	$0	$205,999
Web Services Infrastructure	$17,270	$0	$17,270
Enterprise Integrations	$181,066	$0	$181,066
TOTAL AITS FY2016 Activity Based Costing	**$19,570,907**	**$8,411,498**	**$27,982,405**

▼ **$1 million**
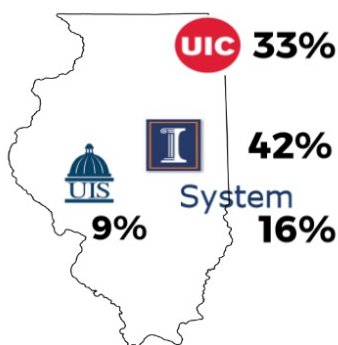TOTAL COSTS — Compared to FY15 Total Cost of approximately $29 million

Cost AITS incurs in support of enterprise systems at University of Illinois Systems
91% ▲ compared to 85% in FY16

CUSTOMER RESOURCE UTILIZATION

UIC **33%**

42% System

UIS **9%**

16%

SUMMARY

This chart represents the AITS metrics in a 5 year snapshot. It also shows information about trends when information is available.

Category	Metric	Prior FY (2016)	This FY (2017)	% Change	5 Year Trend
Reliability	Banner and Related Systems Availability	100%	100% ➡	0%	
Customer Service	Banner Self-Service Usage	9,042,769	- ⬇	-100%	
Customer Service	Banner-Courses Completed	703,000	716,600 ⬆	2%	
Customer Service	Banner-Financial Aid Disbursements	535,600	547,800 ⬆	2%	
Customer Service	Banner-Registration Record Transactions	12,823,000	12,127,000 ⬇	-5%	
Customer Service	Banner-Regular Payroll Transactions	887,800	874,300 ⬇	-2%	
Customer Service	Banner-Student Application Transactions	303,000	301,500 ⬇	0%	
Customer Service	BI/DW Training (Attendees)	389	282 ⬇	-28%	
Customer Service	EDDIE Sessions	3,138,555	2,638,555 ⬇	-16%	
Customer Service	eProcurement Transactions (iBuy)	158,600	157,600 ⬇	-1%	
Customer Service	HR Front End Transactions (HRFE)	136,700	142,600 ⬆	4%	
Customer Service	IAM People who have set recovery options	-	187,314		
Customer Service	IAM Self Service Passwords Set	-	251,600		
Customer Service	KnowledgeBase Use-All KBs	2,772,750	3,479,320 ⬆	25%	
Customer Service	Security Requests-SECAPP Requests	29,668	32,107 ⬆	8%	
Customer Service	Security Requests-Service Desk Tickets	562	401 ⬇	-29%	
Customer Service	SitePublish PageViews	-	18,364,698		
Customer Service	Start myResearch Awards	-	4,171		
Customer Service	Start myResearch Proposals Submitted	-	6,809		
Customer Service	Training (BPI and PMO)	-	1,920		
Customer Service	Travel & Expense Reimbursements (TEM)	244,400	254,800 ⬆	4%	
Customer Service	Websites Supported	49	55 ⬆	12%	
Services	FormBuilder Forms in Use	427	576 ⬆	35%	
Infrastructure	Active Databases	1,226	1,164 ⬇	-5%	
Infrastructure	Change Requests-Banner Infrastructure Impacted	672	512 ⬇	-24%	
Infrastructure	Change Requests-Non-Banner Infrastructure Impa	9,814	9,416 ⬇	-4%	
Infrastructure	Configuration Items (CI) Supported	688	710 ⬆	3%	
Infrastructure	Data Center Allocated Configured Capacity in TI	474	526 ⬆	11%	
Infrastructure	Data Center Back Up Storage	1,782	1,546 ⬇	-13%	
Infrastructure	Labeled "Not Successful" Change Requests	48	38 ⬇	-21%	
Infrastructure	Security Blocks	-	16,000,000		
Infrastructure	Total Change Requests	2,065	1,757 ⬇	-15%	

MORE INFORMATION

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

www.uillinois.edu/cio
System Office CIO website for shared services, business process improvement, IT governance information, records and information management, and portfolio and project management.

WANT TO GET INVOLVED?

AITS believes it is important for the system'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!