Information Technology at Purdue (ITaP)

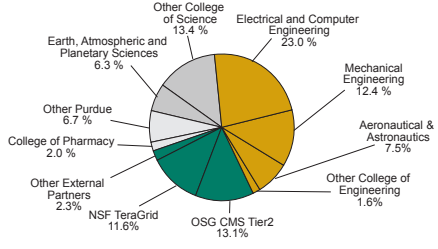
Infrastructure	FY2009	FY2010	FY2011	FY2012
E-mail transactions delivered per day	1,339,654	1,223,139	1,247,046	1,276,097
Telephone calls delivered per day	121,000	109,000	98,000	81,000
Active network connections	39,850	40,500	40,200	40,447
Telephone lines	20,450	19,900	20,050	20,600
Commodity bandwidth available (in megabits/second)	1,500	1,700	1,700	3,000
Size of network traffic per day (in terabytes)	57	64	80	111
Buildings with wireless network access	98%	98%	98%	99%
Wireless access points	1,700	2,000	2,200	3,900
Wireless network users daily	8,000	12,000	16,000	26,000
Physical servers – ITaP supported[1]	3,224	4,634	4,949	5,195
University-owned workstations[2]	25,967	27854	27234	28,200

Learning	Spring 2009	Spring 2010	Spring 2011	Spring 2012
Academic classrooms on network	100%	100%	100%	100%
Media-enhanced classrooms	92%	94%	96%	96%
Computing labs available to students	300	278	274	271
Computing lab machines available to students	5,320	5,502	5,330	5,217
ITaP instructional lab unique users/semester	37,845	38,079	38,018	37,938
ITaP instructional lab use/semester (in hours)	1.12MM	1.03MM	1.03MM	1.09MM
Pages printed in ITaP instructional labs daily	61,736	62,016	56,684	58,315
Course Management: Blackboard Vista and Learn[6]				
Course sections using per semester	5,988	6,446	7,129	5,663
Instructors using per semester	54%	62%	64%	62%
Student population using per semester	88%	88%	86%	77%
Remote connections to server-based educational applications/ semester[7]	173,089	192,442	150,727	220,013

Research	FY2008-09	FY2009-10	FY2010-11	FY2011-12
High Performance Computing (HPC)[3]				
Jobs run	16,902,057	20,625,510	23,802,704	23,740,392
CPU hours used	82,329,586	126,980,653	161,329,662	239,420,277

2011-12 HPC Utilization	Jobs run	CPU hours used
Community Cluster	11,206,186	199,015,116
Non-Community Cluster	226,355	12,210,551
Condor/Opportunistic	12,307,851	28,194,610
TOTAL	**23,740,392**	**239,420,277**

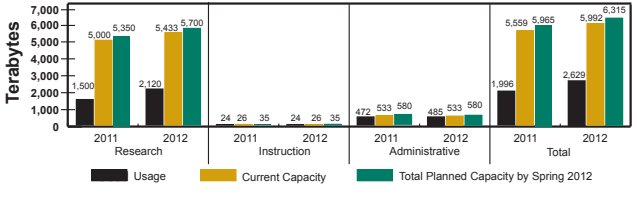
High Performance Computing Usage FY2012



Bandwidth available to researchers (in megabits or gigabits per second)

- WL campus: 10-1,000 Mbps
- Intrastate[4]: 10 Gbps
- WL to regional campuses: 1 Gbps
- Interstate[5]: 40 Gbps

Data Storage Capacity and Utilization



[1]Workstation clusters replaced with server clusters in Hith Performance Computing in 2010.
[2]Includes all university-owned desktop/notebook computers and workstations in labs, offices, classrooms, research facilities, etc.
[3]Use of parallel supercomputers, clusters, and distributed computing cycles for computationally intensive research needs, including simulations and modeling.
[4]Using I-Light (Indiana's Optical Fiber Network), Purdue and IU high performance computing resources form the Indiana Distributed Terascale Facility, which has ten Gbps in available bandwidth.
[5]The National Science Foundation funded TeraGrid infrastructure which is a multi-year effort to build and deploy the world's largest, fastest, distributed infrastructure for open scientific research. TeraGrid has 40 Gbps in available bandwidth distributed at several national sites, of which the Indiana University-Purdue University Grid
[6]Usage data for Blackboard lower in 2012 due to IPFW withdrawal from WL system. Data reflects usage for both Vista and Learn. North Central and Calumet did not participate in the Learn pilot. Users continue to migrate from Vista to Learn.
[7]Increase in usage data for remote connections to applications is directly proportional to PR campaign to increase awareness and availability for student community.

Source: Office of the Vice President for Information Technology