# Core Data Service Almanac

## CORE METRICS

**$ 1,620** Total central IT spending per institutional FTE (students, faculty, and staff)

**$ 6,601** Total central IT spending per institutional employee FTE (faculty and staff)

**$ 2,092** Total central IT spending per student FTE

3.6% Total central IT spending as a percentage of institutional expenses

42% Percentage of institutions with a 5% or greater increase in central IT spending

20% Percentage of institutions with a 5% or greater decrease in central IT spending

30% Central IT noncompensation operating spending as a percentage of total central IT spending

59% Central IT compensation spending as a percentage of total central IT spending

11% Central IT capital spending as a percentage of total central IT spending

**$ 1,382** Central IT training spending per central IT staff FTE

4% Central IT outsourcing spending as a percentage of total central IT spending

3.7% Central IT staff FTEs as a percentage of institutional employee FTEs

16% Central IT student worker FTEs as a percentage of total central IT FTEs

9.7 Central IT FTEs per 1,000 institutional FTEs

## INSTITUTIONAL IT STRATEGY

61% Institutions whose highest-ranking IT officer is on presidential cabinet

36% Institutions with a designated student technology fee

$ 275 Median student technology fee (annualized)

77% Percentage of total central IT spending on running the institution

13% Percentage of total central IT spending on growing the institution

5% Percentage of total central IT spending on transforming the institution

## SUPPORT SERVICES

13% Central IT support services spending as a percentage of total central IT spending

2.3 Central IT support services FTEs per 1,000 institutional FTEs

0.9 Desktop computing FTEs per 1,000 institutional FTEs

1.0 IT help desk FTEs per 1,000 institutional FTEs

100% Institutions offering self-service options for central IT help desk services

85% Institutions offering tier 2/level 2 service or higher for central IT help desk

59% Institutions with full deployment of private-cloud storage

50% Institutions with full deployment of virtual desktop infrastructure

57% Institutions with full deployment of application virtualization

## Annual number of tickets per institutional FTE among institutions with a central IT help desk that offers each mode:

- Walk-in tickets (0.2)
- Phone tickets (1.1)
- E-mail tickets (0.8)

## EDUCATIONAL TECHNOLOGY SERVICES

8% Central IT educational technology services spending as a percentage of total central IT spending

1.0 Central IT educational technology services FTEs per 1,000 institutional FTEs

31 Student FTEs per lab/cluster workstation provided by central IT

705 Student FTEs per kiosk workstation provided by central IT

$ 209 Student FTEs per virtual lab/cluster workstation provided by central IT

96% Institutions with collaborative spaces

76% Institutions with team-based classrooms

48% Institutions with makerspaces

## Most common teaching and learning support services:

- Classroom technology and support for faculty (100%)
- Faculty group and individual training in use of educational technology (100%)
- Learning management training and support for faculty (100%)
- Online learning technology and support for faculty (100%)
- Technology-enhanced spaces (100%)

## Most commonly deployed e-learning technologies:

- Full-function online learning delivery system (96%)
- Real-time web- or videoconferencing online learning environment (96%)
- Student evaluation of teaching effectiveness (92%)

## Most commonly deployed student success technologies:

- Degree audit (84%)
- Credit transfer/articulation system (56%)
- Academic early-alert system (52%)

## Classroom technologies most likely to be deployed soon:

- Wireless projection (26%)
- Remote monitoring for technical support (18%)
- Accessibility technologies (e.g., JAWS reader, signing support) (14%)
## RESEARCH TECHNOLOGY SERVICES

<table>
<thead>
<tr>
<th>Category</th>
<th>Data</th>
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<tbody>
<tr>
<td>2% Central IT research technology services spending as a percentage of total central IT spending</td>
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<tr>
<td>0.0 Central IT research technology services FTEs per 1,000 institutional FTEs</td>
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<tr>
<td>39% Institutions providing integrated IT support for research computing</td>
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<tr>
<td>33% Institutions planning to provide integrated IT support for research computing</td>
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<tr>
<td>100.0 TFLOPS capacity among institutions with high-performance computing</td>
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</table>

### Most common IT-related research consulting and support services:

- Assistance in preparing research grant applications (98%)
- Review and/or approval of information security plans for research involving sensitive data (98%)
- Review and/or approval of other technical aspects of research projects (98%)

### Services most commonly made available to external entities:

- High-performance computing (46%)
- Access to specialized scientific apparatus (44%)
- Storage resources (32%)

### Most commonly deployed research computing systems and technologies:

- High-performance computing (85%)
- High-performance local area network (73%)
- High-throughput computing (73%)

## DATA CENTERS

<table>
<thead>
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<tbody>
<tr>
<td>2% Central IT data center spending as a percentage of total central IT spending</td>
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<tr>
<td>0.2 Central IT data center FTEs per 1,000 institutional FTEs</td>
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<tr>
<td>56% Institutions using commercial data center services</td>
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<tr>
<td>54% Institutions participating in cross-institutional data center hosting</td>
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<tr>
<td>77% Institutions using SaaS to provide data center services</td>
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<tr>
<td>38% Institutions using PaaS to provide data center services</td>
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<tr>
<td>44% Institutions using IaaS to provide data center services</td>
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<tr>
<td>46% Institutions that tested data center disaster recovery plans in past year</td>
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<tr>
<td>2% Institutions with no data center disaster recovery plans in place</td>
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## COMMUNICATIONS INFRASTRUCTURE

<table>
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<tbody>
<tr>
<td>13% Central IT communications infrastructure spending as a percentage of total central IT spending</td>
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<tr>
<td>0.8 Central IT communications infrastructure FTEs per 1,000 institutional FTEs</td>
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<tr>
<td>76% Proportion of access points that are 802.11N</td>
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<tr>
<td>14% Proportion of access points that are 802.11ac</td>
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<tr>
<td>55% Ports that are PoE capable</td>
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<tr>
<td>6.0 Expected service lifetime of core/backbone network access layer (years)</td>
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<tr>
<td>0.6 Wired network hosts per wired network port</td>
<td></td>
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<tr>
<td>7.3 Wireless network hosts per wireless port</td>
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<tr>
<td>81% Institutions that provide ubiquitous cell service</td>
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## INFORMATION SECURITY

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<td>2% Central IT information security spending as a percentage of total central IT spending</td>
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<tr>
<td>0.2 Central IT information security FTEs per 1,000 institutional FTEs</td>
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<tr>
<td>88% Institutions with mandatory information security training for faculty or staff</td>
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<tr>
<td>41% Institutions with mandatory information security training for students</td>
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<tr>
<td>80% Institutions that are members of an authentication federation (e.g., InCommon)</td>
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<tr>
<td>88% Institutions that have conducted any sort of IT security risk assessment</td>
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### Most commonly deployed information security systems and technologies:

- Malware protection (96%)
- Secure wireless access (92%)
- Secure remote access (90%)

## INFORMATION SYSTEMS AND APPLICATIONS

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<tbody>
<tr>
<td>21% Central IT information systems spending as a percentage of total central IT spending</td>
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<tr>
<td>1.8 Central IT information systems FTEs per 1,000 institutional FTEs</td>
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### Systems most commonly vendor hosted (IaaS):

- E-mail: student (8%)
- IT service desk management (8%)
- Advancement/fundraising (6%)
- Learning management (6%)

### Systems most commonly vendor managed (PaaS):

- Learning management (10%)
- Library (6%)
- Web content management (6%)

### Systems most commonly vendor managed (SaaS):

- E-mail: student (76%)
- Customer relationship management (CRM) (53%)
- Learning management (48%)

### Systems most likely to be replaced in the next three years:

- Facilities management (41%)
- IT service desk management (34%)
- Admissions: undergraduate (24%)

### Systems most commonly mobile friendly:

- E-mail: student (59%)
- Learning management (52%)
- E-mail: faculty/staff (48%)

* Sample size of fewer than 15 institutions