

## **CSU Annual Campus Technology Survey Clarifications - Fiscal Year 2004/2005**

### **Integrated Technology Strategy - Technology Infrastructure Initiative (About this Survey)**

The Integrated Technology Strategy or ITS is a comprehensive technology planning framework and process of the California State University. Approved by the Executive Council and endorsed by the Board of Trustees in 1996, the ITS is systemwide in scope, encompassing all 23 campuses. It is centered around a series of programmatic initiatives designed to improve student learning and the quality of the student experience generally, and to increase levels of personal and administrative productivity. A detailed overview of the Integrated Technology Strategy is available as a downloadable file on the ITS Web site. Point your browser to <http://its.calstate.edu> and click on "ITS Planning and Implementation Process."

The Technology Infrastructure Initiative addresses the baseline utilities, hardware, software and user training and support systems, which are prerequisites for full implementation of the Integrated Technology Strategy. Accordingly, the ITS-TII has the highest priority among the ITS initiatives. It is the technical foundation on which all programmatic initiatives depend. A detailed description of the target environment is available on the ITS Web site <http://its.calstate.edu> by downloading the document entitled *TII Status and Directions*.

### **Support faculty involvement (#1)**

Information about faculty *use* of technology-mediated resources in connection with their teaching is collected in the biennial faculty survey. This survey seeks information about redirection of campus resources (or acquisition of new resources) for the purpose of enabling faculty to engage in the *creation* (including field testing) of such materials. Creation or production of materials in the intended sense will normally require faculty access to some combination of technical assistance, specialized facilities, equipment and application development tools, specialized training, and/or redirection of a portion of the instructional assignment for a specified period. Requiring students to use email or to access Web pages to complete course assignments, for example, does not qualify as "faculty involvement" for purposes of this survey. Personnel years are the principal indicator of campus support. In calculating dollar mounts for this survey do not include imputed costs for administrative or infrastructure services that are necessary, but indirectly related to carrying out relevant activities.

### **Technology-mediated instructional or learning materials (#1)**

For purposes of this survey, "technology-mediated instructional or learning materials" means any instance of the use of computer- or network-based technology to communicate, or to facilitate the acquisition or demonstration of, knowledge or skills associated with an academic program. Examples range from the use of computer-based presentations in classrooms to individual student involvement in research employing sophisticated computer-based simulations; from the required use of e-mail or electronic retrieval of course-related information resources (from a library, online data repository, the World Wide Web, etc.) to participation in courses via the Internet, or televised instruction via satellite or other medium.

### **incorporation in their classes of an asynchronous (online) learning component (B2d1)**

The practice of substituting some form of asynchronous, or online, learning for a face-to-face meeting in a classroom is increasingly common. Where such activities are regularly scheduled for an entire term, the instructional space thus vacated can be reassigned for use by other classes. The purpose of the survey question is to find out what CSU campuses are doing to encourage faculty who employ such "hybrid" instructional modalities to do so in a way that permits the campus to plan alternative use of unoccupied rooms.

### Automated means (#3)

This refers to the ability for regular patrons (e.g., enrolled students, university faculty or staff) to request library resources from other libraries without the assistance of a desk clerk or other personnel.

### PHAROS (#3)

PHAROS is the name of the web-based, unified information access system developed by epixtech, inc. (formerly Ameritech Library Services) and the CSU. Among other features, PHAROS enables automated processing of end-user submitted requests for materials available from sources outside the local library using the Resource Sharing System (RSS). Detailed information about PHAROS is available at <http://uias.calstate.edu/UIAS.shtml>.

### computers did the university provide (#6.1a)

Only computer workstations (desktop and laptop computers) purchased and supported by the institution should be counted in responding to questions in Section 6. The decision of whether to include in the current report computers purchased during the 2004/2005 fiscal year, but not yet placed in service, is up to the campus. Differences in campus asset management practices preclude a single inventory standard across all campuses. For this survey, it is important that campuses be consistent from year to year in how this information is reported.

### Full-time Faculty (#6.1a1)

Following are head counts and full-time equivalency positions for full-time faculty as reported in the CIM data warehouse data of 10/31/2004 (Office of the Chancellor, Human Resources).

#### Full-Time Faculty - Fall 2004

Campus	Head Count	FTE Positions
Bakersfield	301	304.06
Channel Islands	74	74.00
Chico	498	498.00
Dominguez Hills	288	288.02
East Bay	312	312.22
Fresno	601	603.14
Fullerton	721	721.00
Humboldt	288	288.10
Long Beach	919	920.59
Los Angeles	558	558.50
Maritime Academy	56	56.00
Monterey Bay	125	125.00
Northridge	808	808.02
Pomona	549	549.25
Sacramento	800	800.10
San Bernardino	448	448.19
San Diego	887	887.00
San Francisco	768	769.57
San Jose	701	701.20
San Luis Obispo	653	654.27

San Marcos	210	210.62
Sonoma	240	242.26
Stanislaus	264	264.92

**Part-time Faculty (#6.1a2)**

Following are head counts and full-time equivalency positions for part-time faculty as reported in the CIM data warehouse data of 10/31/2004 (Office of the Chancellor, Human Resources).

**Part-Time Faculty - Fall 2004**

<b>Campus</b>	<b>Head Count</b>	<b>FTE Positions</b>
Bakersfield	138	49.13
Channel Islands	114	40.35
Chico	359	163.82
Dominguez Hills	381	129.81
East Bay	361	158.06
Fresno	489	177.03
Fullerton	982	379.71
Humboldt	191	81.49
Long Beach	841	333.58
Los Angeles	475	196.85
Maritime Academy	16	6.86
Monterey Bay	138	63.95
Northridge	986	380.66
Pomona	442	210.82
Sacramento	647	269.65
San Bernardino	387	151.26
San Diego	685	256.12
San Francisco	692	270.32
San Jose	848	348.43
San Luis Obispo	330	165.72
San Marcos	153	53.87
Sonoma	183	76.30
Stanislaus	187	75.83

**ITS-TII baseline hardware and software standards (#6.1b,e)**

A workstation and its software will be considered current, and therefore meeting standards, if the purchase date is later than 3 years prior to the end of the reporting period for this survey. That is, for the period under review, FY 2004/2005 which ends on June 30, 2005, hardware and software are current and meet standards if they were purchased in FY 2001/2002 or later.

**Staff/Administrators (#6.1c,d)**

Following are head counts and full-time equivalency positions for full- and part-time staff-administrators as reported in the CIM data warehouse data of 10/31/2004 (Office of the Chancellor, Human Resources).

### Staff/Administrators - Fall 2004

Campus	Full-Time Head Count	Full-Time FTE	Part-Time Head Count	Part-Time FTE
Bakersfield	394	395.58	30	15.32
Channel Islands	241	241.00	11	6.40
Chico	818	822.38	115	66.07
Dominguez Hills	594	595.29	36	19.08
East Bay	649	649.43	68	36.42
Fresno	943	943.25	47	27.25
Fullerton	1116	1121.31	98	61.38
Humboldt	544	544.77	94	59.05
Long Beach	1367	1370.66	148	88.64
Los Angeles	872	873.54	56	33.95
Maritime Acad.	125	125.00	12	5.61
Monterey Bay	352	353.29	35	15.59
Northridge	1421	1427.43	116	68.45
Pomona	956	957.05	64	33.57
Sacramento	1184	1185.84	78	45.44
San Bernardino	793	798.51	59	27.22
San Diego	1503	1504.00	121	75.26
San Francisco	1278	1281.41	239	135.01
San Jose	1161	1164.89	93	51.76
San Luis Obispo	1030	1031.00	94	59.79
San Marcos	431	431.67	53	30.69
Sonoma	748	748.00	53	44.70
Stanislaus	396	398.33	46	27.03

#### Generally accessible to students (#6.2g)

Include all computer workstations to which students have general access, regardless of organizational ownership; e.g., workstations in university or college/school general purpose computer labs, dual-use classrooms or labs, dormitories or other public spaces. Exclude for purposes of this survey dedicated computer labs intended to support specific instructional, search or research activities; e.g., foreign language or mathematics labs, library information system, etc.

#### classrooms are permanently equipped (#6.2j)

The intent of this item is to track the number of available "smart classrooms;" i.e., those that are equipped with screen/monitor(s), projector, network connections for voice, video and data and a computer workstation or provision for attaching a laptop.

Listed below are the instructional space counts used in computing the ratio of "smart" to conventional classrooms for each campus. For purposes of this report, only permanent facilities on main campuses are included; off-campus centers and instructional spaces classified as "temporary" are excluded.

**Permanent, Main-Campus Instructional Spaces By Type\***

<b>Campus</b>	<b>0001</b>	<b>0002</b>	<b>0004</b>	<b>0005</b>	<b>TOTAL</b>
Bakersfield	47	7	2	0	<b>56</b>
Channel Islands	25	3	0	0	<b>28</b>
Chico	117	0	0	0	<b>117</b>
Dominguez Hills	72	12	0	0	<b>84</b>
East Bay	90	13	7	0	<b>110</b>
Fresno	129	20	9	0	<b>158</b>
Fullerton	176	23	6	0	<b>205</b>
Humboldt	50	11	1	0	<b>62</b>
Long Beach	181	3	17	0	<b>201</b>
Los Angeles	142	18	10	0	<b>170</b>
Maritime Academy	8	2	0	0	<b>10</b>
Monterey Bay	30	3	1	0	<b>34</b>
Northridge	180	10	15	0	<b>205</b>
Pomona	137	10	2	1	<b>150</b>
Sacramento	167	18	24	0	<b>209</b>
San Bernardino	85	14	30	1	<b>130</b>
San Diego	183	16	1	0	<b>200</b>
San Francisco	157	16	17	0	<b>190</b>
San Jose	152	0	1	0	<b>153</b>
San Luis Obispo	128	13	0	0	<b>141</b>
San Marcos	68	13	0	0	<b>81</b>
Sonoma	48	5	13	0	<b>66</b>
Stanislaus	46	13	5	0	<b>64</b>

Source: *CSU Space and Facilities Database, March 2005*

\*Space type code: 0001: lecture; 0002: lecture service; 0004: seminar; 0005: seminar service

**"baseline" end-user training (#7.0)**

"Baseline" end-user training focuses on basic computer skills, personal productivity software applications and information systems in common use on the campus.

**professional development for IT professionals (#7.1)**

Maintenance and operation of the technology infrastructure is dependent on the knowledge and effectiveness of IT professionals. Professional development activities related to baseline technology support services are, therefore, an integral component the technology infrastructure.

**IT courses (#7d)**

Only completed courses specifically related to the knowledge and skills required of professional IT staff should be included in this survey, whether taken on campus or elsewhere.

**baseline technical support (#8)**

For purposes of this survey, questions about technical support apply to service for

university-provided computer equipment and software, and to network access and commonly used applications. Equipment and applications used for special purposes (e.g., engineering) are above baseline and therefore beyond the scope of this survey.

### **Level 1 Support (#8.1)**

Level 1 support is basic assistance for end users. Technical assistants who provide Level 1 support are normally skilled, but not highly trained employees. Their responsibilities typically include: general user assistance, basic trouble shooting, priority assignment, problem tracking and status reporting. When required, Level 1 assistants refer problems or requests to Level 2 support.

### **centrally or non-centrally (#8.1 - 8.3)**

This survey seeks information about the level of support services available to all or most university employees. The question does not solicit data about whether these services are provided centrally by a single IT department, non-centrally by more than one campus division, or a combination of both.

### **Level 2 technical support (#8.4)**

Level 2 support typically takes place at local campus help desks, repair depots or other appropriate on-site locations and might be provided through campus IT professional staff or contractors. This support includes workstation trouble shooting and coordination with level-three service providers. (*ITS-TII Status & Directions*, Section IV, p. 9)

### **Level 3 technical support (#8.5)**

Level 3 support requires a very high level of expertise as might be provided by professional technicians or personnel from the vendors of the relevant products or technologies. (*ITS-TII Status & Directions*, Section IV, p. 9)

### **high speed connection(#9)**

To qualify as "high speed," a workstation must have a switched (not shared), 100 Mbps (or faster) connection to the campus backbone.

### **Baseline workstation hardware (#10)**

"Baseline" workstation hardware includes computers and peripherals (printers, external drives, scanners, etc.) provided to faculty, staff and administrators to enable them to perform the work assigned to them. It also includes computers and peripherals made **generally accessible to students**.

### **Service level standards/metrics (#10, #11)**

Service level standards/metrics are performance measures defined in formal agreements (e.g., contracts) between a service provider (e.g., campus IT department) and service recipients.

### **Baseline workstation software (#11)**

"Baseline" software includes operating system and commonly used personal productivity application software installed on workstations for faculty, staff and administrators and on computers **generally accessible to students**.

### **campuswide coordinated process (#12)**

"Coordinated process" means that consultation, decision making and implementation are centrally managed for the entire campus.

**access restricted (#13.h)**

Some form of authentication (e.g., password, IP recognition or media access control) is required in order to gain wireless connectivity to the campus network.

**network outlets (#14.1 & 14.2)**

An "outlet" is a single jack or live receptacle, usually mounted on a faceplate, which provides a connection to the network for a single computer. One faceplate may contain more than one outlet.

**campus entitlement (#14.1)**

Calculation of the initial campus network outlet entitlements (individual jacks) is based on the preliminary engineering design for the Technology Infrastructure Initiative upgrade for each campus under the provisions of the Minimum Baseline Infrastructure Standards (MB).

Additions to the initial entitlements are made when new building construction is approved through the CSU Capital Outlay Program. The latest edition of the CSU Telecommunications Infrastructure Planning (TIP) Guidelines defines the baseline quantitative and qualitative standards for network provisioning of new construction. (See table below.)

IN RESPONSE TO QUESTION B14.1, REPORT ONLY OUTLETS ADDED AS A RESULT OF NEW BUILDING CONSTRUCTION APPROVED IN THE CSU CAPITAL OUTLAY PROGRAM BETWEEN 1 JULY 2004 AND 30 JUNE 2005.

**current CSU performance standards (#14.2)**

To meet current CSU network performance standards, both the cable infrastructure and the network electronics must be capable of dependably delivering at least 100 Mbps bandwidth. The 100Mbps standard is subject to periodic review and recommendations by the Information Technology Advisory Committee. (See table below.)

**Campus Outlet Entitlements as of 30 June 2004**

Campus	Met MB	Below MB	New TIP 2002/03	New TIP 2003/04	New TIP 2004/05	Total Current Entitlement	At Standard (MB+TIP)
Bakersfield	0	6,857	540	188	0	7,585	2,456
Channel Is.	298				1000	1,928	928
Chico	995	13,522	1,320	400	0	16,237	1,794
Dominguez	0	5,611	1,595	0	0	7,206	4,420
East Bay	0	10,185	0	0	0	10,185	0
Fresno	0	16,401	0	557	0	16,958	12
Fullerton	8,436	6,165	0	350	200	15,151	14,524
Humboldt	0	6,140	34	0	0	6,174	0
Long Beach	975	18,139	882	0	927	20,923	11,866
Los Angeles	0	13,915	0	136	0	14,051	2,000
Maritime	873	887	0	900	0	2,660	2,660
Monterey	6,594	6,343	0	1,672	0	14,609	9,466
Northridge	5,463	6,524	150	0	351	12,488	14,662
Pomona	1,500	13,333	0	0	200	15,033	6,000
Sacramento	0	12,861	1,200	0	120	14,181	5,000

San Bernard.	0	12,000	1,000	0	0	13,000	13,000
San Diego	0	17,500	2,050	1,100	2,100	22,750	3,700
San Fran.	0	23,979	400	200	80	24,659	3,420
San Jose	10,645	4,014	0	3,000	3,500	21,159	13,300
San Luis O.	16,454	2,982	1,735	0	0	21,171	16,268
San Marcos	1,530	3,227	2,119	906	3,200	10,982	5,456
Sonoma	0	7,187	1,900	3,000	0	12,087	10,700
Stanislaus	3,006	4,053	1,346	108	0	8,513	3,552

### **components of the baseline technology infrastructure (C1)**

"Baseline" technology infrastructure capabilities and resources include the following components:

#### **Hardware Access**

- General student computer lab equipment
- Student computer leasing program
- Classroom presentation equipment
- Electronic/studio classrooms
- Hardware for academic support staff
- Training labs
- Faculty workstations
- Kiosks
- Video/graphics production equipment

#### **Software Access**

- Software for direct academic support
- Campuswide software library, including maintenance and upgrades
- Interactive training software
- Networking software
- Campuswide Email system
- Basic electronic library and information resources
- Campuswide users' software tools

#### **Network Access**

- Local area networking and Internet connectivity
- Servers (email, web, news, information resources)
- Remote access (modems, dial-in, wireless, special direct lines)
- Hubs and routers and network electronics for local area networks

#### **Training**

- Basic information competency training for students, faculty, staff
- Faculty/staff training in common software and networking tools
- Student training in basic applications required by academic disciplines
- Student training in common software and networking tools
- Student training in uses of generic campuswide applications
- Advanced training for campus trainers and support personnel

#### **Support**

- Campuswide help desk support services
- Training specialists
- Instructional support consultants
- Technicians (equipment, lab, classroom, networking, maintenance)
- Computing lab monitors
- Instructional development specialists
- Curriculum applications development specialists

Source: Integrated Technology Strategy: Baseline Hardware/Software Access, Training and User Support: Final Plan and Guidelines, November 1, 1996.

**centralized, decentralized or shared (C1)**

"Centralized" means that decisions are made by a central IT department.

"Decentralized" means that decisions are made by organizational units other than the central IT department (e.g., division, college/school, department).

"Shared" means that local decisions are subject to coordination with, and/or concurrence of the central IT department.