UNIVERSITY OF LA VERNE

Program Review of the
Office of Information Technology

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June 15, 2010

Table of Contents

Executive Summary

The Office of Information Technology provides information technology resources and services in support of the University of La Verne educational mission. In collaboration with students, faculty and staff, we deploy appropriate technological solutions to meet unique instructional, research, and administrative needs. Technology becomes an investment in the future when we empower individuals to achieve educational and institutional goals through reliable access, accurate information, and professional services. OIT's annual goals and objectives are taken straight from the University's strategic plan and projects are funded in accordance with those goals and objectives.

The Office of Information Technology ranks last amongst its twenty peer institutions in terms of technology support staff-to-student headcount ratio, a standard measurement for University technology support staff size comparison. Despite this, ongoing and point-in-time surveys indicate the campus community feels OIT is providing a high level of service (given its staffing limitations). The Office of Information Technology has been successful at meeting most of its major goals and objectives over the past few years, although ongoing staffing issues have resulted in some major failures, such as the initial portal implementation attempt in 2007 that had to be halted two weeks from go-live because of an exodus of staff.

The University of La Verne has increased its support for technology each year over the past five years, however the technology budget still remains inadequate to properly fund the size and scope of the operation. The increase in funding has not been due to additional staffing or to support current operations, but rather to pay for numerous new campus technology initiatives and the annual hardware and software maintenance costs associated with them. As a result, each year OIT is expected to do more with less. An example of this is that in the year 2000, the Enterprise Application Services department within OIT had eight staff to support eight enterprise applications. Two years later, at its peak, it had ten staff to support ten enterprise applications. Today, it has six staff and the equivalent of one contracted FTE to support almost thirty-two enterprise applications. In addition to low staffing levels, the system replacement lifecycle budget has shrunk to a point that desktops may only be replaced every eight years rather than four and servers and critical network components every twelve years rather than six.

While selective outsourcing has been used to address some aspects of technology support rather than filling a vacant staff position, it does so in a very limited and confined manner, and often creates an additional burden on the remaining staff. Following a recent WASC visit, the write-up indicated that while OIT was managing to support the existing applications, it was unlikely it would be able to support the additional technologies campus constituents were planning to implement in the coming years. Most college and departmental strategic plans involved the implementation or enhanced use of technology in some fashion and while the University generally funds the implementation costs, ongoing support and operational costs have been lacking.

At this juncture, the University of La Verne needs to invest in the ongoing support and operation of its existing technologies and technical infrastructure or risk serious failures in its mission-critical systems.

I. Department Mission , Vision, and Tenets

1. Mission
The Office of Information Technology provides information technology resources and services in support of the University of La Verne educational mission. In collaboration with students, faculty and staff, we deploy appropriate technological solutions to meet unique instructional, research, and administrative needs. Technology becomes an investment in the future when we empower individuals to achieve educational and institutional goals through reliable access, accurate information, and professional services.

2. Vision
The Office of Information Technology will provide quality, integrated information and communication systems, and the technical support and training, that will enable a highly reliable and secure information flow and facilitate superior levels of administrative and instructional service to students.

3. Tenets
- We believe user support is the foundation of all we do as a department.
- We believe technology can either impede or enable users; we are committed to the latter.
- We believe technology is an institutional investment in the future of our students.
- We believe ubiquitous, "transparent" technology leads to user Nirvana.
- We believe attitude is the core of customer service.
- We believe that building strong partnerships with our users is essential to departmental and institutional success.
- We believe that technological proficiency empowers users and decreases their reliance on support personnel.
- We believe teamwork encourages and enhances creativity and innovation.
- We value the expertise, knowledge, and ideas each individual brings to the table and believe their contribution is worthy of recognition and appreciation.
- We believe in learning from our mistakes.
- We believe open communication promotes a climate of trust and understanding.
- We believe in a professional balance of technological currency and fiscal responsibility.

II. Department Goals and Objectives

1. **University of La Verne Strategic Goal #2, Strategic Objective #1**
   To provide resources and support to help both full-time and part-time faculty achieve excellence in teaching in the classroom or online.
   i. **OIT Objective 1:** Provide ubiquitous and functioning Smart Classroom capability in all formal University-owned classrooms through a mix of permanently installed and portable instructional technologies.
   ii. **OIT Objective 2:** Provide faculty teaching in a Smart Classroom with the ability to contact a technology support person directly from the classroom and receive immediate remote technology support, or in person assistance within 15 minutes.

2. **University of La Verne Strategic Goal #3, Strategic Objective #2**
   To enhance internal communications strategies to keep members of the University community better informed and apprised of key developments, accomplishments, and activities.
   i. **OIT Objective 3:** Ensure all faculty, staff, and students have a functional University email account with appropriate space allocation to conduct business.
   ii. **OIT Objective 4:** Provide the University community with various ways to communicate key campus developments, accomplishments, and activities to the University community using a variety of modalities.
   iii. **OIT Objective 5:** Communicate key technology developments, accomplishments, and activities to the University community on a regular basis.

3. **University of La Verne Strategic Goal #7, Strategic Objective #4**
   To continue to expand the University's technology infrastructure [in a secure and managed manner] to support teaching and learning and administrative functions.
   i. **OIT Objective 6:** Provide adequate, secure, high-availability network and server infrastructures to accommodate instructional and administrative functional needs.
   ii. **OIT Objective 7:** Provide ubiquitous and high-capacity wireless capability in and outside of academic buildings.
   iii. **OIT Objective 8:** Provide adequate personal computing access to ensure all students who need to use a computer and/ or standard software are able to do so in a timely manner.

4. **University of La Verne Strategic Goal #8, Strategic Objective #2**
   To create greater efficiency and effectiveness in academic and administrative processes.
   i. **OIT Objective 9:** Enable Technicians to access clients' computers remotely for Help Desk assistance calls and complete a minimum of 25%

of technology workorders remotely and 50% on the same day they are received.

ii. **OIT Objective 10**: Partner with academic and administrative departments to identify and implement technological solutions that enhance the efficiency and effectiveness of their processes.

5. **University of La Verne Strategic Goal #8, Strategic Objective #3**
To effectively integrate our data enterprise information systems to provide a seamless, automated, user-friendly, and accurate information system for effective decision-making.
   i. **OIT Objective 11**: Simplify the process of accessing multiple data systems through the use of single or simplified sign-on capabilities.
   ii. **OIT Objective 12**: Provide data warehousing capabilities to bring operational data from disparate systems together into data repositories more conducive to supporting Business Intelligence/ Academic Analytics and end-user reporting.

6. **University of La Verne Strategic Goal #9, Strategic Objective #4**
To develop employee training programs and support services to enhance the ability of faculty and staff to address the needs of our students.
   i. **OIT Objective 13**: Provide online training opportunities to faculty, staff, and students for all major desktop software applications supported by the University.
   ii. **OIT Objective 14**: Facilitate administrative training and support for new and upgraded software applications used by the University in support of students.
   iii. **OIT Objective 15**: Provide OIT staff with ongoing technical training opportunities for each system they are charged with supporting and maintaining.

III. Description of Department Capacity

1. Staff and personnel
   The Office of Information Technology is made up of four departments with 23 full-time personnel, 4 contracted personnel, and 5.25 student assistant Full-Time Equivalents (FTE). A full organization chart and a detailed listing of current OIT personnel can be seen in **Appendix A**. A detailed listing of all OIT personnel (as of September 2009) along with their hire date and a brief job description can be seen in **Appendix B**.

   i. The Office of the CIO (Chief Information Officer) is responsible for the overall strategic direction and performance of technology-related functions at the University, the business operations of running OIT, and the Campus Telephone Operator function. This area consists of the positions:
      a. Chief Information Office
      b. OIT Office Coordinator
      c. 1.25-FTE Student Assistant (Telephone Operator)

   ii. Enterprise Applications Support (EAS) is responsible for the support and maintenance of the University's Enterprise Resource Planning software applications such as the Student system, the Financial Aid system, the Finance system, the Human Resources system, the Alumni system, and a number of smaller, departmentally-based application systems. This area consists of the following positions:
      a. Director of Enterprise Applications Support
      b. Senior Programmer Analyst
      c. Programmer Analyst
      d. Database Administrator (**contracted**)
      e. Assistant Database Administrator
      f. Web Developer
      g. Web Programmer
      h. .5-FTE Student Assistant (Web)

   iii. Technology Infrastructure Support (IS) is responsible for the support and maintenance of the University's technological infrastructure, including networks, telecommunications, and servers. This area consists of the following eight positions:
      a. Director of Technology Infrastructure Support
      b. Senior Network Engineer
      c. Network Administrator
      d. Telecommunications Engineer (**contracted**)
      e. Windows System Administrator
      f. Windows/Email System Administrator
      g. Linux/Unix System Administrator
      h. Assistant Linux/ Unix System Administrator
      i. .5-FTE Student Assistant (Network Technician)

iv. Client Services (CS) is responsible for the support and maintenance of the University's desktop, computer lab, and classroom technologies. This area consists of the following nine positions:
   a. Director of Client Services
   b. OIT Office Coordinator
   c. Assistant Director of Client Services
   d. Help Desk Manager
   e. Manager of Special Projects and Asset Management
   f. Classroom/Lab Technician
   g. Senior Desktop Technician-PCs (**contracted**)
   h. Senior Desktop Technician-Macs (**contracted**)
   i. Desktop Technician (**contracted**)
   j. 3-FTE Student Assistants (Technicians)

Although the University of La Verne ranks in the center of 20 comparison institutions with respect to student full-time equivalencies (FTE), it ranks low in the number of centralized IT staff members available to support the Institution. With just 27 FTE staff members and 5.25 FTE Student Assistants, the Office of Information Technology has one of the highest students-to-centralized-IT-support-staff ratios among its peer comparison institutions, as shown in Table 1.

Table 1: Central IT Staffing Ratios with Comparison Institutions

	Average of Comparison Institutions	University of La Verne	
2007/2008	**Count**	**Count**	**Rank**
Student FTE	4,598	5,230	9/20
Central IT Staff	43	27	14/20
Student FTE Supported per IT staff member	112	201	19/20
Student Headcount Supported per IT staff member	115	198	17/17

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2. Supervisory relationships
   The Office of Information Technology is organized in a classical hierarchical fashion. The three OIT Directors and the senior OIT Office Coordinator all report directly to the Chief Information Officer, as shown in Figure 1.

Figure 1. OIT Management Supervisory Relationships
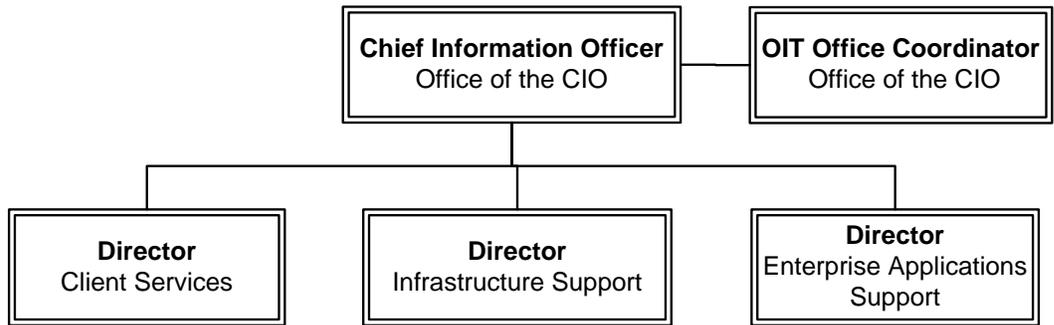
All six staff within the Enterprise Applications Support department report directly to the Director of EAS, as shown in Figure 2.

Figure 2. Enterprise Applications Support Department Supervisory Relationships
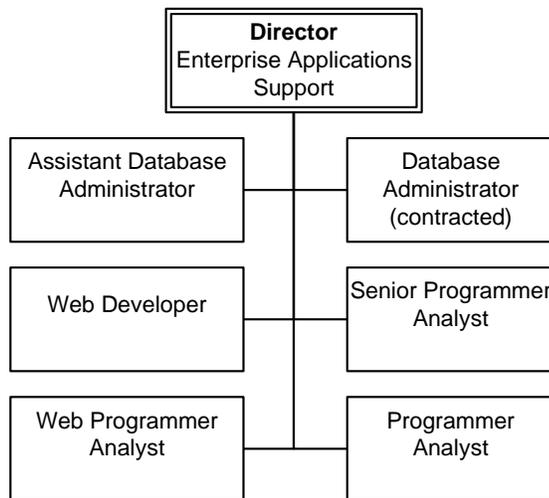
All seven staff members within the Infrastructure Support department officially report to the Director of IS, however the Senior Network Engineer manages the day-to-day duties of the Network Administrator and the Linux/Unix Administrator manages the day-to-day duties of the Assistant Linux/Unix Administrator (in transition from a Classroom/Lab Support position).

Figure 3. Infrastructure Support Department Supervisory Relationships
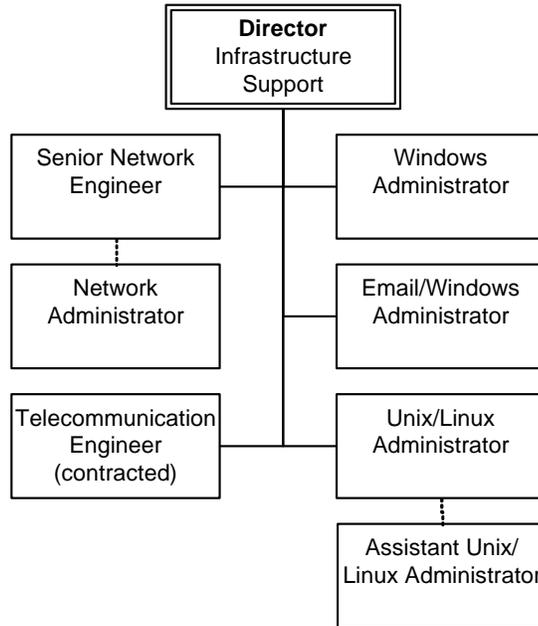
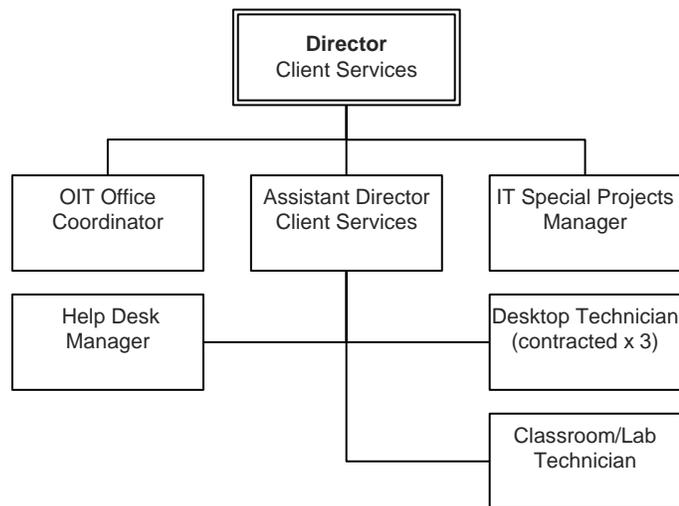In Client Services, the Help Desk Manager and the Desktop Technicians report to the Assistant Director, who in turn reports to the Director of Client Services, along with the remaining Client Services staff.

Figure 4. Client Services Department Supervisory Relationships

3. Turnover of personnel
   During the past five years, the Office of Information Technology has experienced turnover ranging from a low of one position (4%) in 2005/2006, to a high of six positions (26%) in 2007/2008. During the five-year period between 2004/2005 and

2008/2009, nineteen staff members have left the Office of Information Technology, as shown in the Table 2 below.

Table 2: OIT Staff Turnover, 2004-2005 through 2008/2009 (by Reason)

Reason	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	Totals
Accept other work	1	0	1	6	0	8
Change in residence	1	0	0	0	0	1
Retirement, by choice	1	0	0	0	0	1
Personal reasons	0	1	0	0	2	3
Laid off, permanent	0	0	3	0	0	3
End of contract	0	0	1	0	0	1
Breach of company rules	1	0	0	0	0	1
Other	1	0	0	0	0	1
Totals:	**5**	**1**	**5**	**6**	**2**	**19**

Source: University of La Verne Human Resources

The most common reason recorded for staff turnover in the past five years was "accept other work", which accounted for over 40% of the turnover. It was the main reason given by all six OIT staff members that left the University in 2007/2008. Three personnel were laid off permanently in 2006/2007 when their area (Desktop Support) was outsourced in order to improve services and coverage without filling vacated positions. Since then, two additional positions, the Telecommunications Engineer and the Database Administrator have been sourced for the same reason, but only after the positions became vacant through attrition.

With nine staff members leaving over the past five years, the Enterprise Applications Support department has experienced the most turnover in OIT, as shown in Table 3 below.

Table 3: OIT Staff Turnover, 2004-2005 through 2008/2009 (by Department)

Department	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	Totals
Office of the CIO	0	0	0	0	0	0
Enterprise Applications Support	2	0	0	5	2	9
Infrastructure Support	2	1	0	1	0	4
Client Services	1	0	5	0	0	6
Totals:	**5**	**1**	**5**	**6**	**2**	**19**

Source: University of La Verne Human Resources

Of the nine staff members that left EAS, seven of them did so during the past two years. Five of the seven left within a 6-month period to accept positions with other local Universities for career and salary advancement reasons. Half of the turnover in the Client Services department was as a result of the Desktop Support function being outsourced in 2005/2006 to improve services and coverage without filling vacated positions. All staff turnover in the Infrastructure Support department over the past five years has been within the Telecommunications Team. When the Telecommunications Team joined the Office of Information Technology in

2004/2005, it had three positions: a Telecommunications Manager, a Telecommunications Technician, and a Chief Telephone Operator. As these positions became vacant over the following three years, the duties were either consolidated in the one remaining Telecommunications position - a Senior Telecommunications Specialist - or absorbed by other OIT personnel. When Senior Telecommunications Specialist accepted employment at a competitor university, OIT outsourced the University's Telecommunications Support function.

4. Inventory of basic equipment
The Office of Information Technology has a large inventory of basic equipment for internal staff use, not counting the thousands of hardware items it is responsible for in support of the campus community and enterprise technology functions (such as network routers, switches, and servers). Each OIT staff member has at a minimum at least one computer (some have more than one to allow testing, multi-tasking, etc.) a telephone, filing cabinet space, and shelving for books/parts. Other basic equipment such as printers, scanners, shredders, and copiers, are available in communal areas and shared by staff members of a particular department or team. Other equipment, such as two-way radio cell phones are assigned to OIT individuals who must be accessible on short-notice regardless of location, time-of-day or day-of-week. All OIT management, Infrastructure Support department (networks, Telecommunications, and servers), and Client Services department (Help Desk, Desktop Technicians, and Classroom/Lab Support Technicians) personnel are assigned Nextels. Only the Director and the Database Administrators in Enterprise Applications Support are assigned Nextel phones. OIT personnel have a fleet of electric golf carts available to them for the transportation of parts, as well as timely mobility purposes. An inventory of all basic equipment assigned to the Office of Information Technology can be seen in **Appendix C**.

5. Computer hardware
The Office of Information Technology is responsible for the configuration, setup, maintenance and upkeep of the University's enterprise and desktop computer hardware, including servers, network and telecommunications equipment, personal computers and peripherals, smart classroom technologies, printers, and other miscellaneous hardware. Table 4 shows a summary count of major computer hardware types supported by OIT.

Table 4: Major Computer Hardware Supported by OIT

Type	Count
Servers	106
Network nodes (routers/switches/hubs/other.)	285
Telephone stations (analog/digital)	1,423
Laptops and tablets (PC/Mac)	295
Desktops (PC/Mac)	1,372
Printers (Laser/DeskJet)	224
Data projectors	72
Miscellaneous technologies (faxes, PDAs, etc.)	

Details on the University's servers, laptop/desktop models, and printers can be found in **Appendices D**, **E**, and **F** respectively.

6. Computer software
   The Office of Information Technology is responsible for the implementation, support, and upgrading of enterprise, departmental, and desktop software applications. Enterprise software applications are those that are used across the enterprise (Banner student system, BiTech financial system), while departmental application systems are those that are primarily used by one or two departments (Facilities Management System, Viking Alumni Development system). Enterprise and departmental systems in use at the University and supported by OIT, along with their relationships and integration, can be seen in **Appendix G**. There are two categories of desktop software applications: those used institution-wide and supported centrally by the Office of Information Technology (known as "*Standard*" desktop software) and those used by a department and supported be personnel in that department (known as "*Specialized*" desktop software). A detailed list of *Standard* and *Specialized* desktop software applications can be seen in **Appendix H**.

7. Workspace
   The Office of Information Technology staff operates out of two buildings on the main campus: OIT North above the University Bookstore) and OIT East (the south-eastern most building under University use), as shown in **Appendix I**. The Office of the Chief Information Officer and the Enterprise Applications Support departments occupy the second floor of the University Bookstore. The Director and the Chief Information Officer have private offices, while staff members work in two large rooms with divider furniture (cubicles) for privacy. There is a small meeting room that serves as a Web conferencing room when necessary. A floor layout of this area can be seen in **Appendix J**. The Infrastructure Support Department and Client Services occupy OIT East, which consists of a ground floor and a mezzanine second floor. The ground floor consists of Client Services functions, while the upper floor houses the Infrastructure Support functions. The Directors have private offices, but all other staff share office space or work in open technician work areas. Like OIT North, there is somewhat adequate space to house current staff, but there is no room for future growth. A floor layout of this area can be seen in **Appendix K**. Total space available to OIT personnel is shown in Table 5.

Table 5: Office of Information Workspace

Type	Number	Adequate? (yes/no)
Rooms (private)	5	No
Rooms (2 or more people in open floor plan)	5	Yes
Cubicles	10	Yes
Square footage total (office space)	3,347	No
Square footage per employee (including student assistants)	108	No

The University houses its computing and core networking components in two rooms, one in Woody Hall (approximately 120 square feet) and one in Founders Hall

(approximately 600 square feet). Neither of these spaces are properly designed data centers, but rather are make-shift areas in which technologies reside, in a precarious state; they both lack basic data center environmental control systems such as automatic fire detection and suppression systems and Uninterruptible Power Systems.

8. Material and equipment
   The Office of Information Technology maintains an inventory of supplies and tools in order to affect repairs in a timely manner. These materials range from toolkits to network sniffers to software applications.

9. Operating budget
   The operating budget for the Office of Information Technology has grown each year for the past five budget years in terms of both dollar amounts and as a percentage of the institutional budget, as shown in Table 6.

Table 6: OIT Annual Operating Budget

	OIT Budget	Annual Increase	Institutional Budget	Annual Increase	OIT Budget as percentage of Institution's Actual
2004/2005	$3,559,136		$95,781,445		3.72%
2005/2006	$4,067,886	14.29%	$103,606,221	8.17%	3.93%
2006/2007	$4,208,568	3.46%	$107,837,389	4.08%	3.90%
2007/2008	$4,623,336	9.86%	$112,807,491	4.61%	4.10%
2008/2009	$5,274,451	14.08%	$116,764,128	3.51%	4.52%

Source: University of La Verne Budget Office

The budget increases reflected increased contractual costs due to major new technology initiatives (annual increases and new enterprise software/hardware implementations), as well as a concerted effort to move towards fully funding the annual technology depreciation lifecycle necessary to replace and upgrade desktop and infrastructure hardware in a consistent manner.

When measured against peer comparison institutions, the Office of Information Technology annual operating budget ranks among the lowest in terms of centralized IT funding per FTE student, as shown in Table 7.

Table 7: Centralized IT Funding Ranking Against Comparison Institutions

2007/2008	Average of Comparison Institutions	University of La Verne	Ranking
Student FTE	4,598	5,230	9/20
Centralized IT Funding per FTE Student	$1,445	$912	17/19

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IV. Effectiveness Indicators

    a. Indirect indicators

In early 2010, a survey was emailed to both **full-time faculty and faculty adjuncts** to determine their satisfaction level with technology services provided to them. The survey sought to gauge their satisfaction with the Smart Classrooms (technology-enhanced) they teach in, the technologies used to enhance campus communications, their ability to get information from the University's enterprise application systems, their use of technology training made available to them, and the level support they receive from the Office of Information Technology. Results of the faculty survey can be seen in **Appendix L.**

In early 2010, a survey was mailed to all **staff (classified and Administrative Professional employees)** to determine their satisfaction level with technology services provided to them. The survey sought to gauge their satisfaction with their technologies, the technologies used to enhance campus communications, their ability to get information from the University's enterprise application systems, their use of technology training made available to them, and the level support they receive from the Office of Information Technology. Results of the staff survey can be seen in **Appendix M.**

In early 2010, a survey was mailed to all **students** to determine their satisfaction level with technology services provided to them. The survey sought to gauge their satisfaction with the email services the University provides, the usefulness of the University's website, and the adequacy of the wireless coverage provided for their use. Results of the student survey can be seen in **Appendix N.**

As of July 2009, a short **user-satisfaction survey** has been sent to campus constituents following the closure of each workorder they call into the Technology Help Desk. This survey gives the faculty and staff members the opportunity to rate their satisfaction with the work performed with regards to the workorder. Results of the student survey can be seen in **Appendix O.**

    b. Direct Indicators

The Office of Information Technology maintains and analyzes the ongoing financial, staffing, and system statistics and logs related to the support and performance of the University's technologies. These data are reviewed on a regular basis to determine operational efficiency, identify problems or bottlenecks, and measure success.

The **Budget Impact Ratio** is defined as the total institutional budget for information technology divided by the total institutional budget net of financial aid. The 2004/2005 Budget Impact Ratio Carnegie Classification Comparison for Masters institutions at the 50th percentile was 5.1%. Over the last four years the University of

La Verne has increased its ratio and is now above the 50th percentile figure, as shown in Table 8.

Table 8: Budget Impact Ratio

	2005/2006	2006/2007	2007/2008	2008/2009
Total Institutional Budget	$103,606,221	$107,837,389	$112,807,491	$116,764,128
Student Financial Aid	$ 18,588,984	$ 17,432,990	$ 17,632,667	$ 18,469,272
Total Institutional Budget Net of Financial Aid	$ 85,017,237	$ 90,404,399	$ 95,174,824	$ 98,294,856
Total Institutional Budget for IT	$ 4,067,886	$ 4,208,568	$ 4,623,336	$ 5,274,451
Budget Impact Ratio	4.8%	4.7%	4.9%	5.4%

The **Budget Support Level** is defined as the total institutional budget for information technology divided by the total headcount of employees and students. The 2004/2005 Budget Support Level Carnegie Classification Comparison for Masters institutions at the 50th percentile was $740. The University of La Verne remains well below the 50th percentile figure, as shown in Table 9.

Table 9: Budget Support Level

	2005/2006	2006/2007	2007/2008	2008/2009
Employee Headcount	868	717	829	734
Student Headcount	8,324	8,328	8,401	8,853
Total Headcount Employees + Students	9,192	9,045	9,230	9,587
Total Institutional Budget for IT	$4,067,886	$4,208,568	$4,623,336	$5,274,451
Budget Support Level	$ 443	$ 465	$ 501	$ 550

The **Staff Support Level** is defined as the total headcount of employees plus students divided by the total Information Technology professional and student support staff. The 2004/2005 Staff Support Level Carnegie Classification Comparison for Masters institutions at the 50th percentile was 107. Over the last four years the University of La Verne's IT staff support level has been more than double that number and the ratio is increasing by 5-10% each year, as can be seen in Table 10.

Table 10: Staff Support Level

	2005/2006	2006/2007	2007/2008	2008/2009
Employee Headcount	868	717	829	734
Student Headcount	8,324	8,328	8,401	8,853
Total Headcount Employees + Students	9,192	9,045	9,230	9,587
IT Professional Staff FTE	27	26	24	27
IT Student Staff FTE	11	11	11	6
Total IT Professional & Student Staff	38	37	35	33
Staff Support Level	240	246	265	291

Computer Availability is defined as the total headcount of employees plus students divided by the total number of institutional computers. The 2004/2005 Staff Support Level Carnegie Classification Comparison for Masters institutions at the 50th percentile was 3.7. The University of La Verne's computer availability figure has been more than double that number the ratio is increasing by 5-10% each year, as can be seen in Table 11.

Table 11: Staff Support Level

	2005/2006	**2006/2007**	**2007/2008**	**2008/2009**
Employee Headcount	868	717	829	734
Student Headcount	8,324	8,328	8,401	8,853
Total Headcount Employees + Students	9,192	9,045	9,230	9,587
Total Number of Institutional Computers	1,125	1,217	1,302	1,512
Computer Availability	8	7	7	6

Work Orders Closed within One Hour identifies the number and percentage of workorders reporting technology problems or requests for assistance that are closed within one hour of being reported. This percentage indicates how quickly the Office of Information Technology Help Desk is able to resolve users' technology problems and issues.

Table 12: Work Orders Closed within One Hour

	2004/2005	**2005/2006**	**2006/2007**	**2007/2008**	**2008/2009**
Completed work orders	7,054	8,379	11,250	11,600	10,408
Work orders completed within one hour	1,457	1,697	3,207	2,922	3,105
Percentage completed within one hour	20.7%	20.5%	28.5%	25.2%	29.8%

In the first ten months of 2009/2010, following the deployment of remote-control software allowing Technicians to access users' desktops remotely, the percentage of workorders resolved within one hour has risen to 36.7% (3,139 of 8,547).

Malicious Emails Blocked Before Delivery identifies the number and percentage of incoming emails that are properly identified as spam or malicious and removed from the system rather than being delivered to users mailboxes. This reduces clutter, saves on electronic storage, and prevents malware from being introduced into the University's intranet.

Table 13: Malicious Emails Blocked Before Delivery

	Emails Rec'd	**Emails Blocked**	**Emails Accepted**	**% Blocked**
2008/2009	362,816,487	355,560,158	7,256,329	98%

Enterprise System Availability identifies the amount of time in a given year that the University's major enterprise systems by the Office of Information Technology are available. Unplanned downtime accounts for .

Table 14: Enterprise System Availability

	2004/2005*	2005/2006*	2006/2007*	2007/2008*	2008/2009
Internet Connection	97.71%	97.96%	98.68%	99.92%	99.97%
LeoPac Library System	99.98%	99.98%	99.94%	99.98%	99.97%
Student System	99.73%	99.84%	99.92%	99.98%	99.89%
Student Self-Service	99.98%	99.98%	99.94%	99.91%	99.85%

*Estimates

V.   Findings

In July of 2009, the Office of Information Technology started conducting ongoing surveying of campus constituents each time a technology workorder was completed and closed. Surveys were returned for a little over 4% of the more than 8,400 completed workorders, however many workorders are entered by OIT personnel to track work such as the imaging of computers and the installation of technology infrastructure rather than being called in by campus constituents. OIT personnel do not complete the surveys in order to avoid skewing the results. Of the 383 surveys returned, an overwhelming majority (93%) report the campus constituent was either *satisfied* or *very satisfied* with the work performed. Looking at the extremes, 2.1% reported being *very dissatisfied*, while 87.2% reported being *very satisfied* with the work performed.

During the first quarter of 2010, the Office of Information Technology conducted three point-in-time surveys (to faculty, staff, and students) and one on-going survey (to faculty and staff who submit workorder tickets to the OIT Help Desk) designed to gauge user satisfaction with services and technologies provided by the Office of Information Technology.

During the first quarter of 2010, the Office of Information Technology sent out a point-in-time survey to full-time and adjunct faculty. One hundred and twenty six faculty members responded, representing approximately 30% (57) of the full-time and 10% (66) of the adjunct faculty. Seventy three (59.3%) of the faculty participants were male. Over 70% of the faculty participants taught predominantly at the main campus. Almost two-thirds used a desktop, rather than a laptop (although some also had a laptop) and four-fifths used a PC.

During the first quarter of 2010, the Office of Information Technology sent out a point-in-time survey to all full-time staff members (Classified and Administrative Professional). One hundred and forty one staff responded, representing a little more than one-third of the University's 418 staff. Almost three-quarters (of those who participated were female. Fifty-eight classified and eighty-one Administrative Professional staff, representing 32.2% and 34% of their respective classifications, participated in the survey. The vast majority reported using a desktop rather than a laptop (92.8%) and a PC rather than a Mac (94.2%).

During the first quarter of 2010, the Office of Information Technology sent out a point-in-time survey to all main campus students. The Office of Information Technology provides the back-end technologies that students use (such as email), but has very little direct contact with them. Two hundred and five students responded, representing almost 6% of the registered main campus student headcount. Closely reflecting the University's gender breakdown, almost 70% of the respondents were female. Eighty-five (41.9%) were graduates, seventy-nine (38.9%) were traditional undergraduates, and forty (19.7%) were CAPA Campus Accelerated Program for Adults). Almost four-fifths were commuters, with only 20.1% reporting they lived on campus in student housing. The

majority of the students participating in the survey (83.5%) reported they use a PC and over two-thirds use a laptop, rather than a desktop.

A Comparison of the University of La Verne's support for technology with that of about twenty of its peer institutions reveals the following:

- Although the University of La Verne has been increasing both the dollar amount and the percentage of the Institution's annual budget it allocates towards the support of technology, it still lags behind the average for like-institutions. EDUCAUSE reports the average IT funding as a percentage of the institution's budget for Doctoral Intensive institutions for 2008 was 6%. At $912 per student FTE, the University of La Verne's funding for technology is one of the lowest in its comparison group, which averages $1,445 per student FTE. This shortfall has resulted in unmanageable timelines for the Institution's hardware replacement lifecycle;
    - A standard four-year replacement lifecycle for desktop and laptop computers extends to an eight-year timeline;
    - A standard six-year replacement lifecycle for servers and network equipment extends to a twelve-year lifecycle.
- The Office of Information Technology support-staff-to-student ratio is one of the highest in its comparison group. Although the University is right in the middle of its comparison group in terms of student FTE (5,230 compared with an average of 4,598), it ranks dead last in the number of IT support staff per student headcount. The average for the comparison institutions was 115 student FTEs per central IT support staff compared to the University of La Verne's 198. The Office of Information Technology struggles to provide technology support in those areas that are under-staffed, such as Desktop Support and Enterprise Applications Services. Limited hours of support and large backlogs of projects result in an inability to provide the level of support appropriate. WASC's recent post-visit report noted that technology staffing levels are insufficient to meet the University's stated strategic plans. The staffing issue also means OIT must run a "lights out" operation in the data centers, with no staff available in the evening and on weekends while the academic programs are in full operation.
- The University's "Data Center" has very poor environmental controls, rendering the University at risk of recurring or catastrophic system failures. As a result, a number of its critical systems (such as Finance/Human Resources, the Website, and the Learning Management System) have been moved off-campus into fully-hosted outsourcing partnerships. While this provides stronger physical environments, it puts the strategic systems of the University into the hands of non-University personnel. The Data Center lacks basic environmental controls, such as Fire suppression and Uninterruptable Power Systems. Air conditioning was only recently installed at a tonnage that can accommodate the equipment. The University has suffered a number of near catastrophic failures such as water leaking through the Data Center ceiling and air-conditioning failures that resulted in prolonged temperatures about 110 degrees in the room.

Significant progress has been made towards fulfilling the technology-related five-year strategic goals and objectives related to the University's Five-Year Plan of 2007-2011:

1. *University of La Verne Strategic Goal #2, Strategic Objective #1*
   To provide resources and support to help both full-time and part-time faculty achieve excellence in teaching in the classroom or online.

   i. *OIT Objective 1: Provide ubiquitous and functioning Smart Classroom capability in all formal University-owned classrooms through a mix of permanently installed and portable instructional technologies.*

      Overall, faculty reported strong satisfaction with the smart classroom technologies and services provided by the Office of Information Technology. More than 84% of faculty either *agreed* (38.1%) or *strongly agreed* (46%) that OIT provides overall technology support services that meet their instructional needs. A similar number felt there were adequate numbers of smart classrooms available, validating the fact that nearly 96% of classroom spaces on the main campus are Smart Classrooms. A majority felt that that the types of hardware and software provided *always* or *often* met their instructional needs (76.4% and 71.2% respectively). Roughly 72% of faculty reported that OIT *always* or *often* maintains fully functioning equipment in the smart classrooms, with only 1 faculty member reporting the equipment was *rarely* maintained.

   ii. *OIT Objective 2: Provide faculty teaching in a Smart Classroom with the ability to contact a technology support person directly from the classroom and receive immediate remote technology support, or in person assistance within 15 minutes.*

      Telephones have been installed in all classrooms with signs providing the OIT Technology Help Desk phone number to ensure faculty teaching a class can contact OIT personnel directly for assistance. The OIT Service Level Agreement calls for technicians to stop all but emergency work and go to the classroom to attend to a technology issue affecting the teaching environment. Most faculty felt OIT support staff *always* (51.2%) or *often* (19%) promptly and attentively remedied any technological related problems they experienced in the smart classrooms, however 14% felt they only did so *sometimes* and 5% *rarely*.

2. **University of La Verne Strategic Goal #3, Strategic Objective #2**
   To enhance internal communications strategies to keep members of the University community better informed and apprised of key developments, accomplishments, and activities.

   i. *OIT Objective 3: Ensure all faculty, staff, and students have a functional University email account with appropriate space allocation to conduct business.*

      All new full-time faculty are issued a University email account when upon hire, while adjunct faculty receive them when they are first authorized to teach a course for the University. Adjunct faculty may keep their account for up to two years

without teaching a course for the University. Staff members receive a University email account as soon as they are hired and are eligible to keep it so long as they are employed by the University. Students are issued a University-based Gmail account when they enroll in their first course and are eligible to keep it for life. All official University electronic communication is sent to student, faculty, and staff University-issued email accounts.

Over 80% of faculty and 78% of staff indicate their email account *always* or *often* has sufficient space for them to conduct University-related business, however about 10% of the faculty and staff respondents report their account *rarely* or *never* has enough space. When OIT migrated to the Microsoft Exchange platform for faculty and staff, email quotas were increased from 250MB to 512MB for faculty and from 30MB to 256MB for staff. The majority of students reported being *always* (53.7%) or *often* (32.2%) satisfied with their University Gmail services, with less than 4% being *rarely* or *never* satisfied. Students were migrated to the Google educational Gmail system in 2008, increasing their allotted storage quota from 30MB to 7GB, validated by the significant satisfaction with this change: 89.8% of them *strongly agree* (63.9%) or *agree* (25.9%) that their account has sufficient space to conduct University-related business and only 1% *disagreeing* or *strongly disagreeing*.

The vast majority of faculty and staff (80-86%) report their email account is *always* or *often* easy to access from both on- and off-campus.

ii. **OIT Objective 4**:   *Provide the University community with various ways to communicate key campus developments, accomplishments, and activities to the University community using a variety of modalities.*

The University community is able to communicate developments, accomplishments, and activities via email, telephone messages, and the University Website.

While almost 76% of staff *agreed* or *strongly agreed* that the new faculty/staff email Global Access List makes it easier for them to communicate with the campus community, only 53.6% of faculty felt the same way. About 15% of each group was *neutral* on the matter.

A little over half the staff (54.3%) and only one quarter of the faculty (27.7%) *agreed* or *strongly agreed* that voicemail announcements were useful in keeping them updated on <u>urgent</u> University events and programs. These numbers changed to 47.5% for staff and 30.1% for faculty when looking at the usefulness of the voicemail announcements for updating them on <u>current</u> events and programs. Only half the staff and a quarter of the faculty report listening to their voicemail messages on a regular basis (*often* or *always*).

A majority of students (77.6%), faculty (71.5%), and staff (79.3%) feel the new University website keeps them updated on current University events and programs. Almost half the faculty and staff read the website front page articles *often* or *always*, while only about 37% of students do so. An additional one-third of each population reads them at least *sometimes*. Many also felt the new website contained the resources and information they needed to conduct business (78.7% of students and 71.7% of staff) or instructional and professional needs (65.9% of faculty). While almost 67% of students and 60% of staff feel the re-designed website makes it easier for them to find the information they need, only 48.4% of faculty share this attitude. Only 15% of students and staff feel the new website has <u>not</u> made it easier to find the information they need, however close to one in three faculty feel that way (27.8%). Four out of five faculty and staff find the new website visually inviting (aesthetics), but less than three out of five (54.7% and 60.6% respectively) find it easy to navigate (functionality). The preponderance of students, on the other hand, find it both visually inviting (82.3%) and easy to navigate (71.5%).

iii. ***OIT Objective 5***:   *Communicate key technology developments, accomplishments, and activities to the University community on a regular basis.*

The Chief Information Officer sends out a general semi-regular email (once or twice a month) to all faculty and staff providing regular technology updates to all faculty and staff. Other informational emails regarding specific technology issues are sent out by both the CIO and technology Directors as needed.

Many faculty (62%) and most staff (80.9%) *often* or *always* read the CIO's technology news briefs. Almost 20% of faculty and 5% of staff hardly ever read them. The majority of staff (87.3%) and faculty (69%) agreed or strongly agreed that the CIOs technology news briefs were useful to keep them updated with information related to technology services. While about 10% were ambivalent about the matter, only about 5% felt the missives were of little use to them.

3. ***University of La Verne Strategic Goal #7, Strategic Objective #4***
To continue to expand the University's technology infrastructure [in a secure and managed manner] to support teaching and learning and administrative functions.
   i. ***OIT Objective 6***:   *Provide adequate, secure, high-availability network and server infrastructures to accommodate instructional and administrative functional needs.*

The Technology Infrastructure Services department within the Office of Information Technology has migrated all the University's primary servers and networks equipment to highly redundant, robust platforms to minimize downtime. As a result, the majority of critical systems maintained by OIT were available over 99.9% of the time last year and the majority of the unplanned downtime was caused by electrical or air-conditioning failures.

ii. **OIT Objective 7**: *Provide ubiquitous and high-capacity wireless capability in and around academic buildings.*

In June of 2010, the campus will complete one-year project to expand and install a ubiquitous, high speed (802.11n) wireless network infrastructure on the main campus. At the time of the student survey, the wireless implementation was about 70% completed and more than 80% of the students reported using it at some time, with more than 56.1% using it *often* or *always*. More than 65% of the students reported the wireless system met their needs, while 26.2% of them were *neutral* on the subject. The 8% that felt the wireless did not meet their needs were likely in the Oaks residence hall, which had not yet had wireless installed. About one-third of the staff and half the faculty use the wireless system on a fairly regular basis. The vast majority of those that do use it report the speed of the wireless system as being at least adequate.

iii. **OIT Objective 8**: *Provide adequate personal computing access to ensure all students who need to use a computer and/or standard software are able to do so in a timely manner.*

Over one-third of students always use their personal laptop computer on campus and a further 32.7% use them *sometimes* or *often*. Only 19% of students report they never use their personal laptop on campus. A number of computer labs are maintained on campus to accommodate those students who don't have or don't bring their personal computer to campus. These labs contain 222 computers available for student use.

4. ***University of La Verne Strategic Goal #8, Strategic Objective #2***
   To create greater efficiency and effectiveness in academic and administrative processes.
   i. **OIT Objective 9**: *Enable Technicians to access clients' computers remotely for Help Desk assistance calls and complete a minimum of 25% of technology workorders remotely and 50% on the same day they are received.*

   The Client Services department within the Office of Information Technology implemented remote control software allowing Technicians to access users' desktops remotely in early 2008 and then refined it in early 2009. During 2008/2009, almost 30% of all calls were resolved within one hour of being received. In the first ten months of 2009/2010, following the deployment of the enhanced remote-control capabilities, the percentage of workorders resolved within one hour has risen to 36.7% (3,139 of 8,547).

   ii. **OIT Objective 10**: *Partner with academic and administrative departments to identify and implement technological solutions that enhance the efficiency and effectiveness of their processes.*

During 2008/2009 the Office of Information Technology moved forward with a number of major projects to enhance the efficiency and effectiveness of administrative and academic processes, including (but not limited to):

- Expansion of the SAN disk farm to accommodate academic archiving of Communication and Photography files;
- Installation of high-speed, ubiquitous wireless on the main campus;
- University Website redesign;
- Implemented the BookNow process to allow students to see what books they would need for classes they register for and then take them to the Bookstore site to purchase them;
- Moved all credit card processing off-campus to ensure compliance with PCI-DSS legislation;
- Migrated to the Exchange email system to provide faculty and staff more email storage and access to the University's list of employee addresses via the Global Address List;
- Set up a process to enable students to sign up for emergency notification messages;
- Assisted with migration of Human Resources from FoxPro to BiTech enterprise system;
- Implementation of the Banner Operational Data Store (ODS) system and Cognos reporting system to improve reporting opportunities from Banner.

5. **University of La Verne Strategic Goal #8, Strategic Objective #3**
To effectively integrate our data enterprise information systems to provide a seamless, automated, user-friendly, and accurate information system for effective decision-making.
   i. ***OIT Objective 11:*** *Simplify the process of accessing multiple data systems through the use of single or simplified sign-on capabilities.*

   At this time, the campus has no single or simplified sign-on capabilities in place. A campus portal providing simplified sign-on capabilities to most of the enterprise application systems has been identified and obtained. It is scheduled for implementation in the latter half of 2010. The department's ability to provide ongoing support for this portal is questionable due to very limited staff in the enterprise Application Services department. The University has entered into a contractual agreement with a consortium for back-end technical support of the product.

   ii. ***OIT Objective 12:*** *Provide data warehousing capabilities to bring operational data from disparate systems together into data repositories more conducive to supporting Business Intelligence/Academic Analytics and end-user reporting.*

   The Office of Information Technology implemented the Banner Operational Data Store and the Cognos data analytics application as the first step towards providing full-blown data warehousing capability. Training sessions were held for OIT staff,

Institutional Research staff, and key functional users, however the system has not been used since the training. The shortage of technical support staff in the Enterprise Application Services department has meant OIT has been unable to support and market this initiative. In the year 2000, EAS had eight staff members to support eight enterprise applications. Today, they have six staff members (and .5 FTE contracted staff) to support almost thirty-two enterprise applications.

6. *University of La Verne Strategic Goal #9, Strategic Objective #4*
   To develop employee training programs and support services to enhance the ability of faculty and staff to address the needs of our students.
   i. **OIT Objective 13***:   Provide online training opportunities to faculty, staff, and students for all major desktop software applications supported by the University.*

   The Office of Information Technology provides Computer-Based Training courses to the University community for all standard desktop software applications supported by OIT. Over 62% of the faculty and 79% of the staff are *aware* of this online training, however only 28% of faculty and 23% of staff have made use of it.

   ii. **OIT Objective 14***:   Facilitate administrative training and support for new and upgraded software applications used by the University in support of students.*

   The Office of Information Technology works closely with the functional areas that use the major enterprise application systems at the University. They provide the facilities and access to test versions of the software applications so that training can be conducted.

   iii. **OIT Objective 15***:   Provide OIT staff with ongoing technical training opportunities for each system they are charged with supporting and maintaining.*

   The Office of Information Technology has received increased training budget over the past two years, however the training budget per technical staff FTE is seriously underfunded when compared with peer institutions. All technical staff members in OIT are responsible for the ongoing support of a number of different applications and/or systems, yet are only able to attend either training or conferences on each of them about once every six years with current funding.

VI.   Action Recommendations

Determine what additional hardware and software is needed in smart classrooms for instructional usage.
- Request the Faculty Technology Committee members poll their respective constituents to determine what additional hardware and software they feel is needed to enhance the instructional experience.
- Determine whether the hardware and software would be needed in all computer labs or just particular ones.
- Prepare funding requests for the next annual budget cycle process.

Identify financial resources to ensure appropriate system replacement lifecycles for instructional equipment in smart classrooms and computer labs.
- Advocate for additional instructional technology fee allocations at a level that ensures appropriate system replacement lifecycles of equipment.
- Advocate for current instructional technology funds being used for the operational support of the Center for Teaching and Learning to be funded out of the General Fund in order to free up funding to purchase and support additional instructional software site licenses.

Increase funding for centralized technology support to at least the average of our twenty-school peer comparison group to ensure competitiveness.
- Study EDUCAUSE data to determine breakdown of budgets at peer Doctoral-Intensive institutions to focus on areas of under-funding.
- Determine funding levels necessary to appropriately maintain current operations and provide the technology to achieve the strategic goals and objectives of the University.
- Propose a funding model that provides a set percentage of the University budget allocated towards technology support.
- Prepare funding requests for maintaining current operations/system replacements lifecycles and new initiatives involving technology.

Increase staffing for centralized technology support to at least the average of our twenty-school peer comparison group to ensure competitiveness.
- Study EDUCAUSE data to determine breakdown of staffing levels at peer Doctoral-Intensive institutions to focus on technology-support areas of under-staffing.
- Determine staffing levels necessary to appropriately maintain current operations and provide the technology support to achieve the strategic goals and objectives of the University.
- Ensure all new technology initiatives include appropriate increases in technology staffing to support them.
- Contract with an outside expert (consultant/peer institution CIO) to conduct a staffing study and make recommendations regarding staff support level needs.
- Prepare staffing requests for maintaining current operations and new initiatives involving technology.

Identify technical training budget necessary for OIT personnel to effectively support the applications and systems they are responsible for supporting.

- Develop full list of applications and systems supported by OIT staff.
- Identify training opportunities and timelines for each of the applications and systems.
- Develop training schedule and rotation to ensure each staff member receives the at least the minimum training necessary to support their areas of responsibility.

Investigate potential improvements in the campus communication capabilities.

- Consider implementing unified messaging to allow voicemails to be received and managed via email accounts..
- Implement a campus-wide general and targeted announcement system via a University Web portal.
- Implement and maintain a central events calendar for University-sponsored events.

Improve the structure of the new University website to make it easier for students, faculty, and staff to find the information they need.

- Work with the Web Committee to determine areas of weakness in the Web structure that makes it difficult for constituents to find information.
- Poll constituent groups to determine what information is difficult to find and what aspects of the website are difficult to navigate.
- Work with the Web Team to make improvements to the layout, navigation, and tools (i.e. search engine and information indexing) to make the site more intuitive.

Complete the implementation of ubiquitous, high speed wireless access on the main campus, the College of Law, and the Regional Campuses.

- Install wireless capability in the Oaks residence halls on the main campus.
- Install wireless capability in periphery buildings such as OIT north, Human Resources, and the Center for Teaching and Learning.
- Install wireless capability in Regional Campus buildings.

Address the business continuity concerns with serious environmental and space deficiencies in the Institution's data center.

- Determine feasibility and costs associated with moving all remaining critical systems into the "cloud".
- Determine the feasibility and cost of constructing a data center in existing space.
- Determine the feasibility and cost of constructing a new data center (on or off the main campus).

Appendices

Appendix A

Organizational Chart for the

OFFICE OF INFORMATION TECHNOLOGY

OFFICE OF THE CIO
Clive Houston-Brown, Chief Information Officer

Maggie Mantecon, OIT Office Coordinator

CLIENT SERVICES
Joanne Ashcroft, Director

Justin Czerniak, Special Projects/Asset Mgr
Suzi Miller, OIT Officer Coordinator

Help Desk

Brian Tresner, Assistant Director
James Henderson, Help Desk Manager

Desktop Support
(Intratek Contract)

Aurtis Wilson, Desktop Technician
Juan Benavidez, Desktop Technician
Mike Fredette, Desktop Technician

Classroom and Lab Support

Hoyland Chin, Classroom Lab Tech
Veronica Natogma, Classroom Lab Tech

ENTERPRISE APPLICATIONS SUPPORT
Todd Britton, Director

Website Administration

Tung Hoang, Web Programmer
Xiaomin "Melissa" Zhuo, Web Developer

Applications Support

Nga Vo, Sr. Programmer Analyst
Xiaofeng "Eric" Wu, Programmer Analyst

Database Administration
(Strata Information Group Contract)

Colby Shamblin, DBA
Rosine Saghain, Asst. DBA

INFRASTRUCTURE SUPPORT
Mancin Taylor, Director

Network Administration

Hany Mohamed, Sr. Network Engineer
Wayne Lai, Network Administrator

Server Administration

Jeff Chauveau, Windows Administrator
Mark Smith, Linux/Unix Administrator
Cary Crosby, Email Administrator

Telecommunications Support
(Scottel Contract)

Pat Fernandez, Telecomm Specialist

Green text denotes Contracted Services

Appendix B

Current Office of Information Technology Employees
September 2009

Last Name	First Name	Title	Hire Date	Brief Job Description
Ashcroft	Joanne	OIT Director - Client Services	21-Oct-87	Manages all aspects of Client Services functions, including the Technology Help Desk, Desktop Support, and Classroom and Lab Support.
Benavidez	Juan	Desktop Technician	Contracted	Provide primary PC and secondary Macintosh personnel computer hardware and software installation and troubleshooting support.
Britton	Todd	OIT Director of Enterprise Applications Support	19-Aug-08	Manages all aspects of Enterprise Applications support, including Programming and Analysis, Database Administration, and Web Development.
Chauveau	Jeffrey	Windows Systems Administrator	01-Jun-00	Serves as primary systems administrator for Windows-based server systems, the enterprise anti-virus system, and the Storage Area Network systems.
Chin	Hoyland	Classroom-Computer Lab Equipment Technician	02-Jan-01	Provides technical expertise and support for computer labs and Smart Classroom technologies such as data projectors, DVD players, and controller systems.
Crosby	Cary	Systems and Email Administrator	05-May-08	Serves as primary systems administrator for email, anti-spam systems and secondary systems administrator for Windows-based servers.
Czerniak	Justin	IT Special Projects and Asset Manager	12-Nov-07	Handles special projects and asset management for the Client Services area.
Fernandez	Pat	Telecommunications Specialist	Contracted	Provides primary support for all telephone related systems and equipment.
Fredette	Michael	Desktop Technician	Contracted	Provide primary Macintosh and secondary PC personnel computer hardware and software installation and troubleshooting support.
Henderson	James	Help Desk Manager	01-Mar-01	Provides Tier 2 level technical support on the Technology Help Desk, including Remote Control troubleshooting and repair.
Hoang	Tung	Programmer Analyst	15-May-08	Provides primary programming and analysis support for web-based systems.
Houston-Brown	Clive	Chief Information Officer	01-Apr-97	Provides overall guidance and strategic direction for the University technologies.

Lai	Wayne	Network Administrator	25-Mar-02	Provides day-to-day operational support and administration for the network infrastructure.
Mantecon	Marjorie	OIT Office Coordinator	16-Jul-01	Provides administrative support to the CIO and the Enterprise Applications Support departments and oversees the Campus Telephone Operator function using Student Assistants.
Miller	Sandra	OIT Office Coordinator	25-Sep-95	Provides administrative support to the Client Services and the Technology Infrastructure departments and serves as Tier 1 level Technology Help Desk support.
Mohamed	Hany	Senior Network Engineer	03-Dec-07	Provides strategic and day-to-day operational support for the network infrastructure access and security.
Natogma	Veronica	Classroom-Computer Lab Equipment Technician	18-Jan-05	Provides secondary systems administrator for Linux-based server systems (position in transition from Classroom-Computer Lab Equipment Technician to Assistant Linux/Unix Systems Administrator).
Saghian	Rosine	Assistant Database Administrator	01-Sep-97	Provides primary Data Warehouse/Business Intelligence and secondary Oracle Database Administration support.
Shamblin	Colby	Database Administrator	Contracted	Provides primary Oracle Database Administration support.
Smith	Mark	Unix/Linux and Windows Systems Administrator	20-Aug-01	Serves as primary systems administrator for Linux- and Unix-based server systems, the enterprise LDAP authentication system, and the enterprise backup system.
Taylor	Mancin	OIT Director - Infrastructure Support	27-Nov-00	Manages all aspects of Technology Infrastructure support, including networks, telecommunications, and server system administration.
Tresner	Brian	Assistant Director of Client Services	01-Aug-92	Manages the Technology Help Desk function and supervises the Desktop Technicians.
Vo	Nga	Senior Programmer Analyst	04-Sep-01	Provides primary programming and analysis support for the enterprise-level Banner Student and Financial Aid system and secondary support for a number of departmental application systems.
Wilson	Aurtis	Desktop Technician	Contracted	Provide primary PC and secondary Macintosh personnel computer hardware and software installation and troubleshooting support.

Wu	Xiaofeng	Programmer Analyst	04-Jan-07	Provides primary programming and analysis support for a number of departmental-based application systems such as the Viking Alumni Development system.
Zhuo	Xiaomin	Web Developer	07-Jul-08	Provides primary Web development support for all administrative and academic department Web presences.

Appendix C

Inventory of Basic Equipment
(Office of Information Technology)

Type	#	Adequate? (if have)	Need (if don't have)
Desktop Computers	37	Yes	
Laptop Computers	22	Yes	
Telephones	28	Yes	
Two-way Cell Phones	30	Yes	
Printer (black/white)	5	Yes	Aging Fleet
Printer (color)	1	Yes	Aging Fleet
Faxes	3	Yes	
Fax/printer/scanner/copier (4-in-one)	2	Yes	
Scanners	0	No	
Shredders	2	Yes	
Computer Projectors	2	Yes	
Television monitors	1	Yes	
CD Players	0	Yes	
Laminating machine	0	N/A	
Speakers	0	N/A	
Microphones	0	N/A	
Desktop camera	5	No	
Electric Carts	12	Yes	Aging Fleet
Gasoline vehicles	0	N/A	
Cisco 2821 (Law School Router)	1	Yes	
HP4000PC	12	Yes	
3com hub	4	Yes	
Cisco Switches	110	Yes	
Cisco NAC CAM (Network Admission Control)	5	Yes	
Cisco MARS 100 (Monitoring, Analysis, and Response System)	1	Yes	
Cisco Wireless LAN Controllers	4	Yes	
Cisco ACS 4.1 (Access Control Server)	1	Yes	
Cisco 1841 (BiTech Router)	1	Yes	
Cisco 3745 (Internet Main Router)	1	Yes	
Cisco 3845 (Host MPLS Router)	1	Yes	
Cisco ASA 5520 (Adaptive Security Appliance)	2	Yes	
Pix 525 (Secondary Firewall)	1	Yes	
Cisco 3662 (Dial In Router)	1	Yes	
Cisco 4506 (core switch w/routing capability)	2	Yes	

Cisco wireless bridges	12	Yes	
Cisco IPS 4255 (Intrusion Prevention System)	2	Yes	
Cisco 3020 blade switch (Server Blade Switch)	4	Yes	
Cisco wireless APs for all campuses	120	Yes	

Appendix D

University of La Verne Servers
September 2009

Count	Server Name	Purpose	O/S Platform	Location	Comments
1	ACB 110 PM	Print Manager ACB 110	Windows 2003	ACB 110	
2	ACS1	Access Control Server	Cisco NOS	FH207A	
3	ACS2	Access Control Server	Cisco NOS	FH207A	
4	ANTIVIRUS	Anti-Virus	Windows 2003	FH 207A	
5	BANDEVL	Test Server for Banner/Data Protector/CommandView	HP-UX 11i	FH207A	
6	BANODS	Banner - Operational Data Store (Viking DB)	HP-UX 11i	FH207A	
7	BANPROD	Production Student Information System	HP-UX 11i	FH207A	
8	BANWEB	Web Server for MyULV	HP-UX 11i	FH207A	
9	BANWEB.LaVerne.edu	Replacement Banner Web Server	HP-UX 11i	FH207A	
10	BiTech7i-1	BITECH PRODUCTION - WINDOWS	Windows 2000	Hosted at BiTech	
11	BiTech7i-2	BITECH PRODUCTION - WINDOWS	Windows 2000	Hosted at BiTech	
12	BiTech7i-Devl	BITECH DEVELOPMENT - WINDOWS	Windows 2000	Hosted at BiTech	
13	BLACKBOARD	Blackboard - Hosted at Blackboard Corp.	RHEL3	Hosted at Blackboard	
14	BLACKBOARDD-SNAPSHOT	Blackboard Snap Shot Server	RHEL3	FH207A	
15	Breeze	Presentation / Conference Software	Windows 2003	FH 207A	
16	CAS1	Client Access	Windows 2003	FH207A	
17	CAS2	Client Access	Windows 2003	FH207A	
18	CCTV	Continuum Application	Windows 2003	FH207A	
19	CITRIX.ulv.edu	Metaframe / FME Web /TrackITWeb/Mathe/Quark	Windows 2003	FH 207A	
20	Citrixdev	Citrix Web devl	Windows 2003	FH207A	
21	COMBO	Database Instances (R25,FME)	HP-UX 11i	FH207A	
22	CSMARS	Monitoring Analysis Response System	Linux	FH207B	
23	DC1	Domain Controller	Windows 2003	FH207A	
24	DC2	Secondary Domain Controller	Windows 2003	OIT East	
25	DC3	Domain Control/Global Catalog/DNS	Windows 2003	FH207A	
26	dcdev	DC Development	Windows 2003	FH207A	

27	ELMS	ELMS - MSNDAA / DebtMaster	Windows 2003	WH Data Room	
28	Ex1Cluster1	Active Cluster Node	Windows 2003	FH207A	
29	Ex1dev	Exchange Development	Windows 2003	FH207A	
30	Ex2Cluster2	Active Cluster Node	Windows 2003	FH207A	
31	Ex2dev	Exchange Development	Windows 2003	FH207A	
32	Faculty.Laverne.edu	New Faculty Server	RHEL 5	FH207A	
33	FH207 PM	Print Manager FH 207	Windows 2003	FH 207	
34	File1Cluster2	Windows File Servers	Windows 2003	FH207A	
35	File2Cluster2	Windows File Servers	Windows 2003	FH207A	
36	File3Cluster2	Windows File Servers	Windows 2003	FH207A	
37	File4Cluster2	Windows File Servers	Windows 2003	FH207A	
38	File5Cluster2	Windows File Servers	Windows 2003	FH207A	
39	FINDEVL	BiTech - Development Server for Finance & HR	HP-UX 11i	Hosted at BiTech	
40	FINPROD	BiTech - Production Server for Finance & HR	HP-UX 11i	Hosted at BiTech	
41	Hub1	Hub Server Network Load Balanced	Windows 2003	FH207A	
42	Hub2	Hub Server Network Load Balanced	Windows 2003	FH207A	
43	HVACdb	HVAC Monitoring	Windows 2003	FH207A	
44	Insight Management / Altris	c7000 Blade & SAN Mgmt Server	Windows 2003	FH207A	
45	INTBAN	Internet Native Banner Forms Server	HP-UX 11i	FH207A	
46	iSpeech	Automated Voice Response	Windows 2003	FH Phone Rm.	
47	KULV	Audio Streaming Radio Station Server	Windows XP Pro	ACB Building	
48	LAC 240 PM	Print Manager LAC 240	Windows 2003	LAC 240	
49	LEC 111 PM	Print Manager LEC 111	Windows 2003	LEC 111	
50	LEOPAC	ULV Library System	HP-UX 11i	FH207A	
51	LH112 PM	Print Manager LH 112	Windows 2003	LH112	
52	LH130 PM	Print Manager LH 130	Windows 2003	LH 130	
53	LISTS	lists.ulv.edu mailman	RH6.2	FH207A	
54	LMS-1	Cisco LAN Management Server	Windows 2003	WH Data Room	
55	LOKI	Backups - Raq 4&5	RHEL2.1	FH207A	To Be Discontinued
56	Luminis	Luminas Development Portal	Linux 3.0	FH207A	
57	Lumprod.Laverne.edu	Production Luminis	RHEL4	FH207A	
58	M4000	Mail server	Unix	FH207B	
59	MD400	Mail Proxy / Router	Unix	FH207B	
60	Monitor	Network Monitoring with MRTG	RHEL3	WH Data Room	

61	NAC Appliance1	Wireless-Network Admission Control	Linux	FH207B	
62	NAC Appliance2	Wireless-Network Admission Control	Linux	FH207B	
63	NAC Appliance3	Wireless-Network Admission Control	Berfigo	COL	
64	NAC Mgr1	Network Admission Control Mgr1	Linux	FH207B	
65	NAC Mgr2	Network Admission Control Mgr2	Linux	FH207B	
66	NTP1	Network Time Protocol	RHEL4	WH Data Room	
67	Open LDAP	Enterprise LDAP	RHEL4	FH207A	
68	OTM	Telephony Manager	Windows 2003	FH207A	
69	PFAIDS_NT	PowerFaids Application Server / Debtmaster	Windows NT 4.0 SP6A	WH Data Room	Offline
70	Proofp-1	ProofPoint - Anti Virus / Spam	Linux 3.0	FH207B	
71	Proofp-2	ProofPoint - Anti Virus / Spam	Linux 3.0	FH207B	
72	R25ASV	Resource25 Web Viewer	Windows 2003	WH Data Room	
73	R25Devl	Resource25 Development	Windows 2000 Pro	WH Data Room	Offline
74	R25WEB	Resource25 Web	Windows 2003	WH Data Room	
75	RAQ4	Faculty & Staff Server	Linux 2.2	FH207A	
76	RAQ5	Student Server (Clubs)	Linux 2.2	FH207A	
77	Sassafrass	Key Server for Desktop Applications	RHEL3	FH207A	
78	sdxmeal	Sodexomeal Plan	Windows 2003	FH207A	
79	Server10	Global DHCP Server (Data, Voice, Printer)	Windows 2003	FH207A	
80	Server11	Cognos	Windows 2003	FH207A	
81	Server12	Cisco Network Analyzer	Windows 2003	OIT East	
82	Server13	TrackIt/Sophos	Windows 2003	FH207A	
83	Server14	Makau Training Server	Windows 2003 App	WH Data Room	
84	Server15	Scholastic Achievement / Debtmaster	Windows 2003	FH207A	
85	Server16	Snap Survey Server	Windows 2003	WH Data Room	
86	Server18	NatSci Image Renderer	Windows 2003	FH207A	
87	Server19	Remote Desktop Control / Asset Mgmt	Windows 2003	FH207A	
88	Server20	Network Licenses	Windows 2003	FH207A	
89	SQL_DB	SQL/TrackIT Database	Windows 2003	FH207A	
90	Symposium	Telephony ACD	Windows 2003	FH207A	
91	TOUCHNET	Hosted - Touchnet Application Server	Windows 2003	FH 207A	

92	TOUCHNET PG	Hosted - Touchnet Payment Gateway	Windows 2003	FH207A	
93	ULV-WLC1	Wireless LAN Management Controller	Aeronet	FH207A	
94	ULV-WLC2	Wireless LAN Management Controller	Aeronet	FH207A	
95	ULV-WLC3	Wireless LAN Management Controller	Aeronet	COL	
96	Viking	University Relations Server	Windows 2003	WH Data Room	
97	VoIP	Telephony VoIP1 DHCP	Windows 2003	WH Data Room	
98	WCS	Wireless LAN Solution Engine	Linux	WH Data Room	
99	WebCT 6	Application Server for WebCT 6	RHEL3	FH207A	Out of Production
100	WebCT 6	Database Server for WebCT 6	RHEL3	FH207A	Out of Production
101	WebCT 8	Application Server for WebCT 6	RHEL 4	FH207A	
102	WebCT 8	Database Server for WebCT 6	RHEL 4	FH207A	
103	WH Lobby PM	Print Manager WH Lobby	Windows 2003	WH Lobby	
104	WWW.ULV.EDU	ULV's Main Web Server	RHEL3	FH207A	Out of Production
105	Xenapp	Citrix XenApp	Windows 2003	FH207A	
106	Xenappdev	Citrix XenApp devl	Windows 2003	FH207A	

Appendix E

Inventory of Campus Personal Computers (Desktops and Laptops)

Make	Model	Type	Approx. Age	Lifecycle Upgrade	No Lifecycle Upgrade
Compaq	Evo D510	Desktop	?	1	
Compaq	Evo D510 SSF	Desktop	?		1
Dell	2400	Desktop		1	
Dell	4100	Desktop	6 years		12
Dell	4300	Desktop	5 years	4	8
Dell	4400	Desktop	5 years	1	17
Dell	4500	Desktop	5 years		4
Dell	4550	Desktop	5 years	87	13
Dell	4600	Desktop	4 years	93	
Dell	8200	Desktop	5 years	6	1
Dell	8300	Desktop	5 years	1	
Dell	GX240	Desktop	5 years	2	1
Dell	GX260	Desktop	5 years	1	
Dell	GX270	Desktop	5 years	4	1
Dell	GX280	Desktop	?	1	
Dell	Precision 350	Desktop	?	1	
Dell	Precision 450	Desktop	5 years	1	
Gateway	5200	Desktop	?		1
HP	7800	Desktop	3 years	40	
HP	d530	Desktop	4 years	75	
HP	dc2300	Desktop	2-3 years	4	
HP	dc5000	Desktop	4 years	25	
HP	dc5000 SFF	Desktop	4 years		1
HP	dc5100	Desktop	3-5 years	157	30
HP	dc5150	Desktop	3 years	9	
HP	dc5750	Desktop	1-3 years	241	
HP	dc5750 SFF	Desktop	3 years	3	
HP	dc5800	Desktop	6 mos-2 yrs	197	
HP	dc5850	Desktop	1 year	1	
HP	dc7600	Desktop	2 years	1	
HP	dc7700	Desktop	3 years	1	
HP	dc7800	Desktop	1 year	5	2
HP	dc7900	Desktop	1 year	2	
HP	dx5150	Desktop	3 years	175	
HP	dx5750	Desktop	3 years	1	

HP	EVO d500	Desktop	5 years		1
HP	EVO d510	Desktop	5 years		2
HP	EVO xw4300	Desktop	3 years	6	
HP	Vectra	Desktop	2 years	1	
KAT	450	Desktop	?		1
KAT	650	Desktop	?		1
KAT	866	Desktop	?		1
Macintosh	eMac	Desktop	5 years	8	1
Macintosh	iMac G4	Desktop	2 years	1	1
Macintosh	iMac G5	Desktop	1 year	3	
Macintosh	iMac5	Desktop	3 years	11	
Macintosh	iMac7	Desktop	1 year	24	
Macintosh	iMac8	Desktop	1 year	20	
Macintosh	iMac9	Desktop	6 mos.	3	
Macintosh	Mac Mini	Desktop	2-3 years	11	
Macintosh	Mac Pro	Desktop	?	2	
Macintosh	MacMini 2	Desktop	1-2 years	2	
Macintosh	MacMini 3	Desktop	6 mos.	1	
Macintosh	MacPro1	Desktop	3 years	3	
Macintosh	MacPro3	Desktop	1 year	3	
Macintosh	MacPro4	Desktop	6 mos.	7	
Macintosh	PowerMac G4	Desktop	5 years	13	
Macintosh	PowerMac G5	Desktop	4 years	12	
Asus	Eee	Laptop	?	1	
Dell	Inspiron 2650	Laptop	?	1	
Dell	Inspiron 5100	Laptop	5 years	3	
Dell	Inspiron 8100	Laptop	6 years	1	1
Dell	Lateral c640	Laptop	5 years	7	
Dell	Lateral c840	Laptop	?		3
Dell	Lateral d505	Laptop	?	1	
Dell	Lateral d600	Laptop	?		1
Dell	Lateral d800	Laptop	5 years		1
Dell	Lateral d820	Laptop	5 years	1	
Gateway	M405	Laptop	?		1
Gateway	M675	Laptop	4 years	1	
HP	2710p	Laptop	1 year	1	
HP	6510b	Laptop	1-2 years	58	
HP	6515b	Laptop	2 years	2	
HP	6530b	Laptop	1 year	2	
HP	6715b	Laptop	1 year	14	
HP	6730b	Laptop	6 mos-1 yr	7	

|					
HP	6730s	Laptop	2 mos	1	
HP	6820s	Laptop	1 year	2	
HP	8510p	Laptop	1 year	1	
HP	8530w	Laptop	1 year	1	
HP	8710p	Laptop	1 year	1	
HP	Compaq 6110	Laptop	4 years	1	
HP	dx9030	Laptop	5 years	1	
HP	nc6000	Laptop	4 years	1	
HP	nc6110	Laptop	4 years	2	
HP	nc6230	Laptop	4 years	21	
HP	nc6400	Laptop	3 years	43	
HP	nc8000	Laptop	3 years	1	
HP	nc8200	Laptop	3 years	3	
HP	nc8230	Laptop	3 years	9	
HP	nc8430	Laptop	3 years	1	
HP	nx6110	Laptop	4 years	21	
HP	nx9010	Laptop	5 years	3	
HP	nx9030	Laptop	5 years	8	
HP	nx9420	Laptop	2-3 years	17	
HP	nx9600	Laptop	3 years	1	
HP	tc4400	Laptop	4 years	1	
HP	tc5200	Laptop	4 years	1	
Macintosh	MacBook 4	Laptop	1 year	1	
Macintosh	MacBook 5	Laptop	1 year	13	
Macintosh	MacBook Pro	Laptop	1 year	17	
Macintosh	MacBook Pro 4	Laptop	1 year	1	
Macintosh	MacBook Pro 5	Laptop	6 mos.	1	
Macintosh	PowerBook 5	Laptop	4 years	1	
Macintosh	PowerBook G4	Laptop	4-5 years	7	
Toshiba	Satellite 1800	Laptop	5 years	1	
Toshiba	Satellite A105	Laptop	5 years	1	
Toshiba	t5600	Laptop	2 years	1	
Toshiba	Tablet	Laptop	4 years	1	
Toshiba	Tecra M4	Laptop	3 years	1	
Toshiba	Tecra M9	Laptop	3 years	1	
TOTALS				**1,560**	**107**

Appendix F

Inventory of Campus Printers

MAKE	MODEL	TYPE	B/W or COLOR	TOTAL
HP	800	Designjet	B/W	1
HP	5500PS	Designjet	B/W	1
HP	650C	Designjet	Color	1
HP	Z2100 24in Photo	Designjet	Color	1
HP	1220C	Deskjet	Color	5
HP	990C	Deskjet	Color	1
Epson	Stylus Pro	Inkjet	Color	1
HP	1300	LaserJet	B/W	1
HP	1320	LaserJet	B/W	6
HP	2100	LaserJet	B/W	2
HP	2200	LaserJet	B/W	3
HP	2300	LaserJet	B/W	13
HP	2420	LaserJet	B/W	2
HP	2430	LaserJet	B/W	3
HP	2550	LaserJet	Color	2
HP	3000	LaserJet	Color	1
HP	3500	LaserJet	Color	1
HP	3600	LaserJet	Color	5
HP	3700	LaserJet	Color	1
HP	4000	LaserJet	B/W	11
HP	4050	LaserJet	B/W	19
HP	4100	LaserJet	B/W	34
HP	4200	LaserJet	B/W	16
HP	4250	LaserJet	B/W	10
HP	4300	LaserJet	B/W	4
HP	4500	LaserJet	Color	2
HP	4550	LaserJet	Color	6
HP	4600	LaserJet	Color	3
HP	4650	LaserJet	Color	1
HP	4700	LaserJet	Color	1
HP	5000	LaserJet	B/W	3
HP	5100	LaserJet	B/W	1
HP	5200	LaserJet	B/W	2
HP	5550	LaserJet	Color	1
HP	8000	LaserJet	B/W	1
HP	8100	LaserJet	B/W	1

HP	8150	LaserJet	B/W	10
HP	8550	LaserJet	Color	2
HP	1300n	LaserJet	B/W	1
HP	2600n	LaserJet	Color	3
HP	4 Plus	LaserJet	B/W	1
HP	CP3505	LaserJet	Color	1
HP	CP4005	LaserJet	Color	2
HP	P2015 Series	LaserJet	B/W	5
HP	P3005	LaserJet	B/W	2
HP	P4015	LaserJet	B/W	3
Lexmark	T632	LaserJet	B/W	2
HP	4100 MFP	MFP	B/W	3
HP	CM1312nfi MFP	MFP	Color	1
HP	CM2320fxi MFP	MFP	Color	2
HP	CM2320nf MFP	MFP	Color	1
HP	CM3530 MFP	MFP	Color	1
HP	CM6030 MFP	MFP	Color	1
HP	M1522n MFP	MFP	B/W	1
HP	M2727nf	MFP	B/W	5
HP	Officejet 6300	MFP	Color	1
HP	Officejet 6310	MFP	Color	1
HP	Officejet Pro 8500	MFP	Color	1
HP	Officejet Pro L7700	MFP	Color	7
TOTALS				**224**

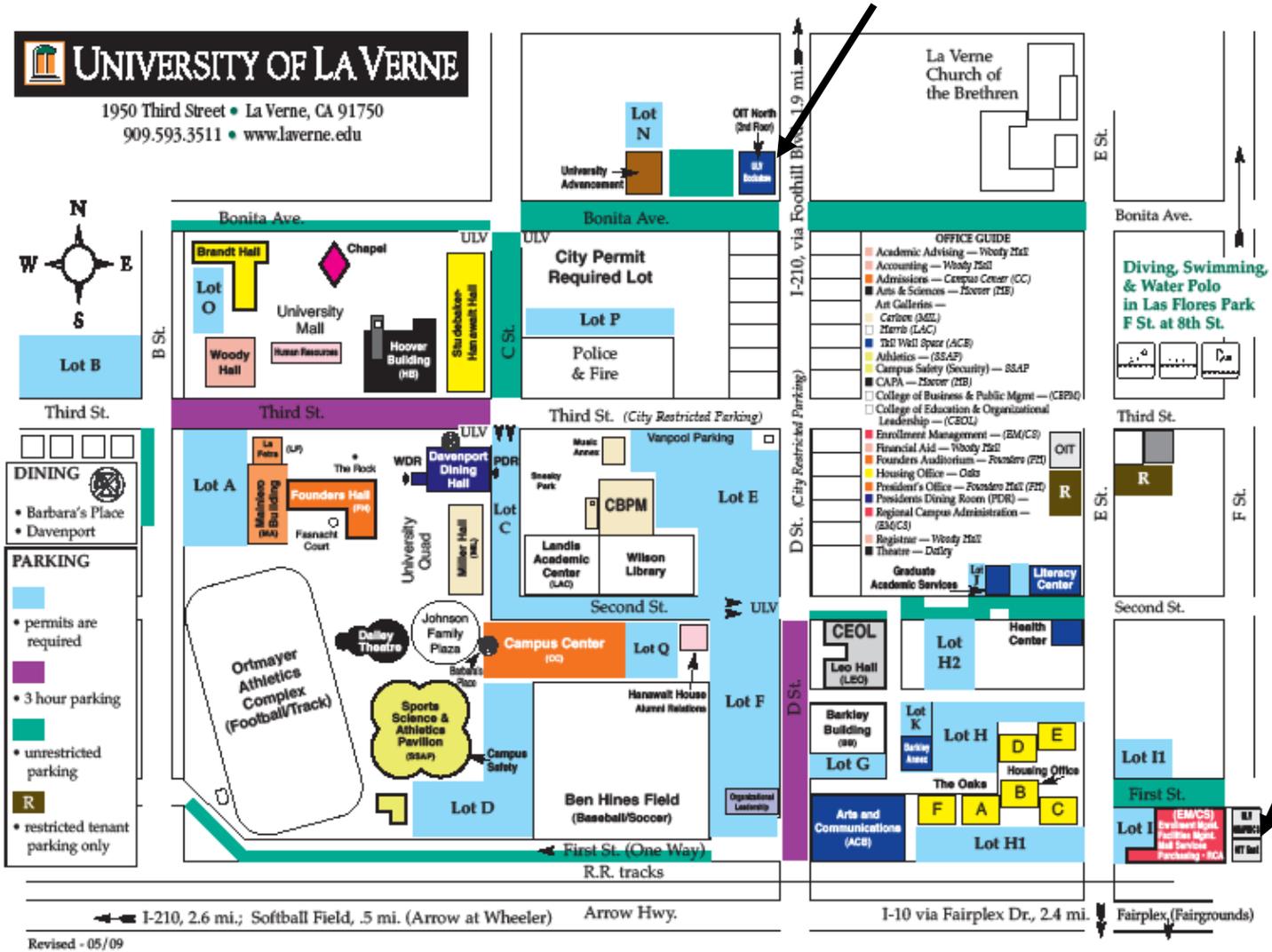# Appendix G

ULV Enterprise Applications
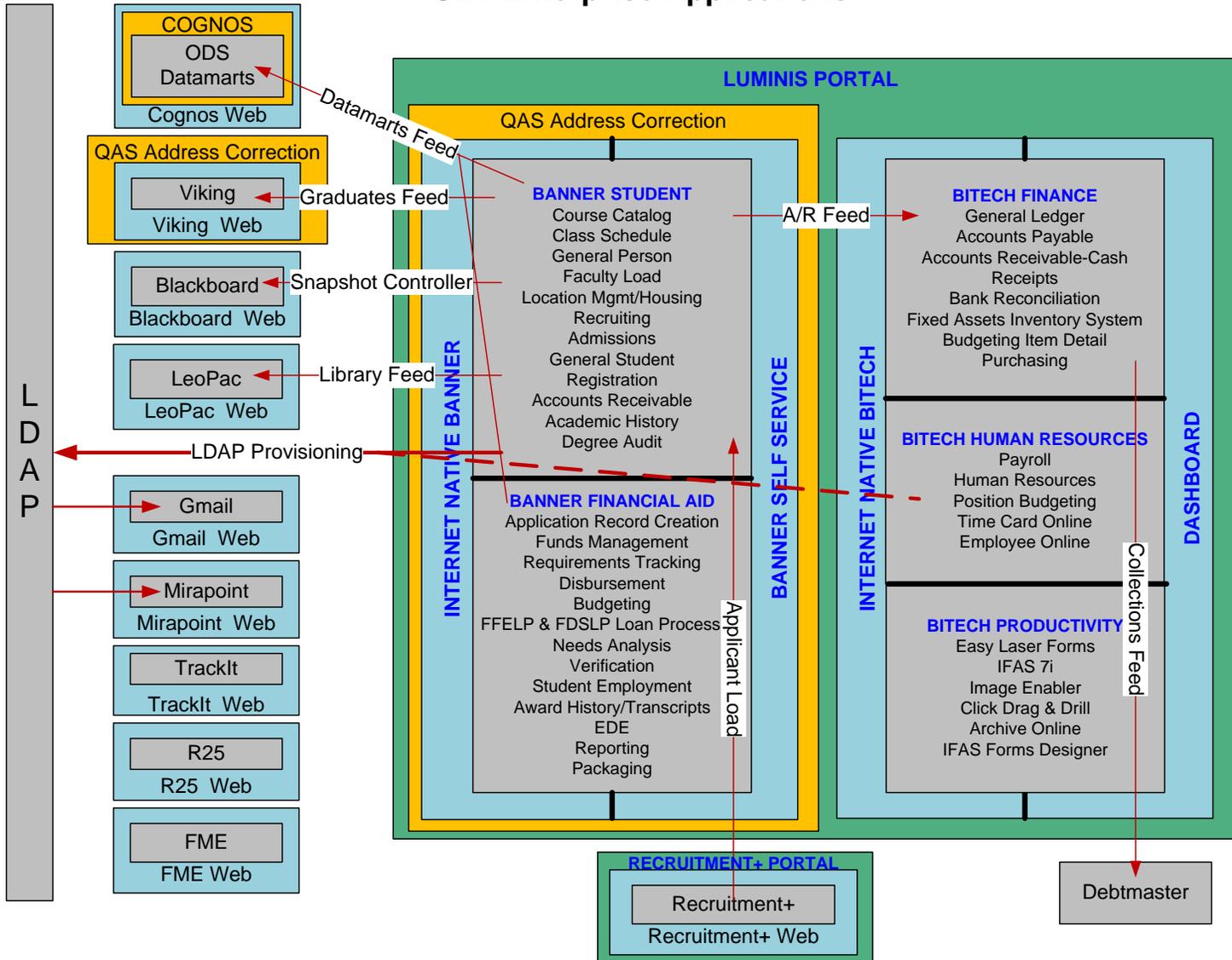
Appendix H

Inventory of Major University Personal Computer Software Applications

Software Application	Number of Licenses	Standard/Specialized
IFAS	Unlimited	Standard
Microsoft Office 2009	Unlimited	Standard
MS Project	Unlimited	Standard
MS Vista	Unlimited	Standard
Office 2008	Unlimited	Standard
Oracle	1	Standard
SPSS 11.0 for MAC OS X	10	Standard
SPSS 16.0 Family - MAC	10	Standard
SPSS 16.0 Family - PC	200	Standard
SPSS 16.0 Family -Amos	200	Standard
Statistics 17.0	38	Standard
Visual Studio.net Academic/Pro	MS Licensing	Standard
WinZip for Windows	1500	Standard
Accutrack 8	1	Specialized
Acrobat Professional- MAC	6	Specialized
Acrobat Professional- PC	34	Specialized
After Effects Professional - MAC	26	Specialized
ArcGIS - ArcView 9.3	2	Specialized
ArcGIS - Data & Maps Media Kit	2	Specialized
Audition	21 (off campus)	Specialized
AutoCAD 2000	12	Specialized
BBEdit - MAC	2	Specialized
Camtasia Studio	7	Specialized
Captivate	1	Specialized
Citrix ICA Client	1	Specialized
Clean Slate	300	Specialized
Creative Suite 4 Design Premium	16	Specialized
Creative Suite 4 Web Design	40	Specialized
Creative Suite Design Premium-MAC	30	Specialized
Creative Suite Design Standard-PC	1	Specialized
Crystal Reports (For Track-it!) Pro.	1	Specialized
Crystal Reports Professional	1	Specialized
DebtMaster	1	Specialized
Derive 5 &6	50	Specialized

DiskWarrior	2	Specialized
Dragon Naturally Speaking	2	Specialized
Dragon Naturally Speaking 7,8,9	4	Specialized
Dreamweaver - MX	2	Specialized
Dreamweaver - PC	18	Specialized
Dreamweaver 4 - Power MAC	1	Specialized
Dreamweaver 8	2	Specialized
Dreamweaver 8 - PC/MAC	44	Specialized
Dreamweaver CS3 - PC	8	Specialized
Dreamweaver CS4	1	Specialized
EasyRecovery Pro	1	Specialized
English Mastery Americana Inter. Level	1	Specialized
English Mastery Author's Tool Kit	1	Specialized
English Mastery High Inter. Level	1	Specialized
English Mastery Low Inter. Level	1	Specialized
English Mastery Beginning Level	1	Specialized
FileMaker Pro	1	Specialized
FileMaker Pro - MAC OS 9&10	1	Specialized
FileMaker Pro 8	15	Specialized
FileMaker Pro Unlimited	1	Specialized
Final Cut Pro 3 - Upgrade	23	Specialized
Final Cut Studio Pro 5.1	12	Specialized
Fireworks CS3 - MAC	57	Specialized
Fireworks CS3 - PC	1	Specialized
Fusion - MAC	1	Specialized
iLife '08	3	Specialized
Illustrator 9.0 - MAC	25	Specialized
Inspiration v. 8.0	20	Specialized
iView MediaPro 3	4	Specialized
iWork '06	1	Specialized
Maple 12	50	Specialized
Mathematics 6 Upgrades	50	Specialized
MathType 5- MAC	1	Specialized
MathWorks Product and Doc. CDs.	50	Specialized
MathLab & Simulink R2007a	50	Specialized
MindManager 8 for Windows	10	Specialized
Omni Professional 15	4	Specialized
OmniForm Filler 5.0	4	Specialized
OmniPage Pro10	4	Specialized

OmniPlan	1	Specialized
OneNote 2003	1	Specialized
Pagemaker Ed. Version -PC	1	Specialized
PaintShop Pro 7	1	Specialized
Peak DV for Final Cut Pro - MAC	24	Specialized
PGP Desktop Email	2	Specialized
PhotoDeluxe PageMill	2	Specialized
Photoshop - MAC	13	Specialized
Photoshop - PC	1	Specialized
Photoshop CS	21 (off campus)	Specialized
Photoshop CS2 - MAC	1	Specialized
Photoshop CS2 - PC	3	Specialized
Photoshop CS3	4	Specialized
Photoshop CS3	5	Specialized
Photoshop CS3 Extended - PC	3	Specialized
Photoshop Lightroom	13	Specialized
Premiere Application - MAC	25	Specialized
Print Shop 6	1	Specialized
QuarkXpress 7	62	Specialized
QuarkXpress 8	1	Specialized
Schedule it!	1	Specialized
SnagIt	6	Specialized
Snap Surveys v. 9.04	1	Specialized
Sound Forge	12	Specialized
Stuffit Deluxe	1	Specialized
Stuffit Deluxe - MAC	1	Specialized
Stuffit Deluxe 11 - MAC	1	Specialized
Stuffit Deluxe 2009	1	Specialized
TechTool Deluxe	1	Specialized
TechTool Deluxe: Protection Plan	2	Specialized
TechTool Pro	1	Specialized
Trackit! Enterprise	1	Specialized

Appendix I

UNIVERSITY OF LA VERNE

1950 Third Street • La Verne, CA 91750
909.593.3511 • www.laverne.edu

La Verne
Church of
the Brethren

Lot N

OIT North
(2nd Floor)

University Advancement

ULV Bookstore

Bonita Ave.

Brandt Hall

Chapel

Lot O

University Mall

Woody Hall

Human Resources

Hoover Building (HB)

Studebaker-Hanawalt Hall

City Permit Required Lot

Lot P

Police & Fire

OFFICE GUIDE
- Academic Advising — Woody Hall
- Accounting — Woody Hall
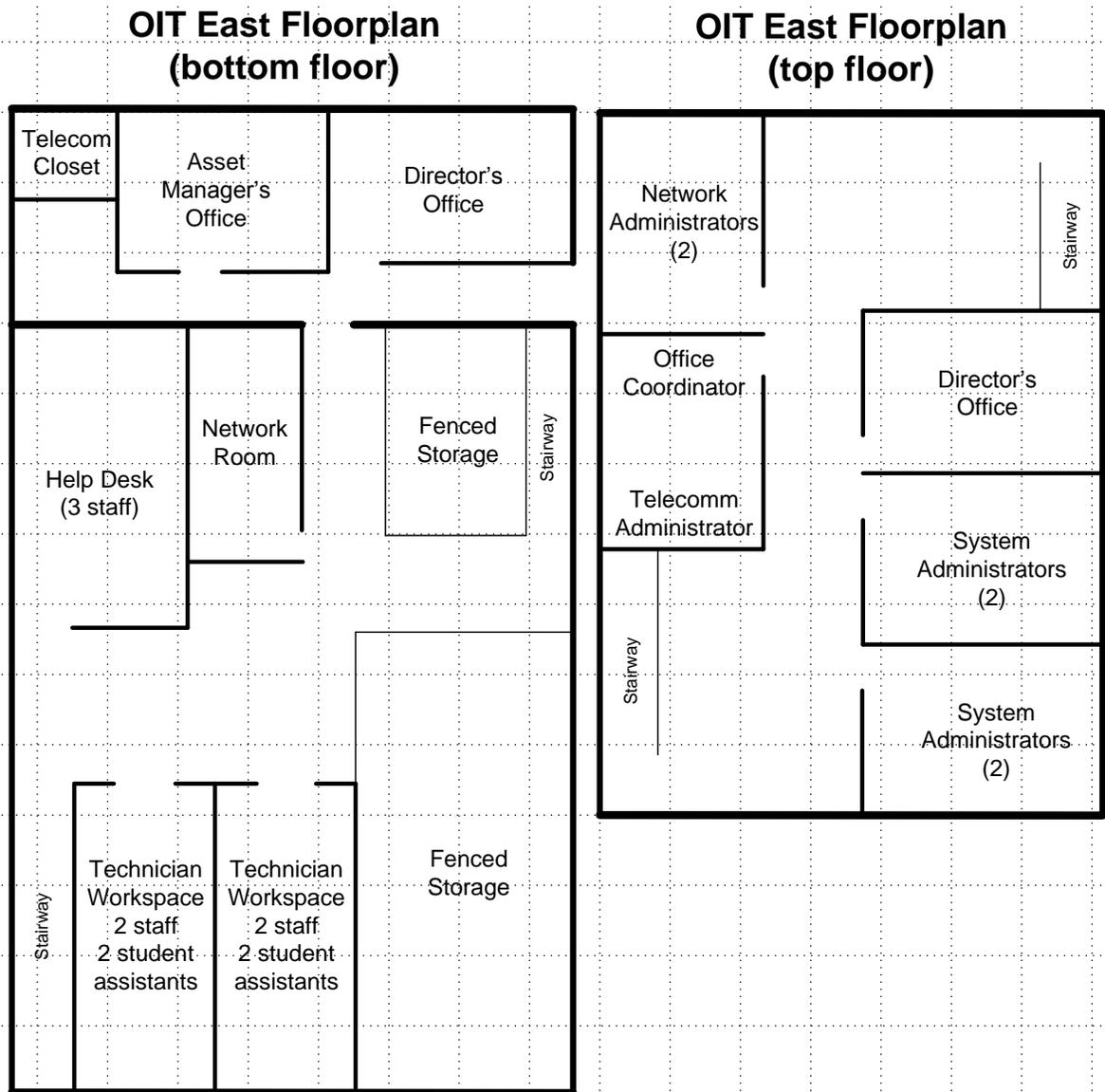- Admissions — Campus Center (CC)
- Arts & Sciences — Hoover (HB)
- Art Galleries —
  - Carlson (3ML)
  - Harris (LAC)
  - Irell Wall Space (ACB)
- Athletics — (SSAP)
- Campus Safety (Security) — SSAP
- CAPA — Hoover (HB)
- College of Business & Public Mgmt — (CBPM)
- College of Education & Organizational Leadership — (CEOL)
- Enrollment Management — (EM/CS)
- Financial Aid — Woody Hall
- Founders Auditorium — Founders (FH)
- Housing Office — Oaks
- President's Office — Founders Hall (FH)
- Presidents Dining Room (PDR) —
- Regional Campus Administration — (EM/CS)
- Registrar — Woody Hall
- Theatre — Dailey

Diving, Swimming,
& Water Polo
in Las Flores Park
F St. at 8th St.

Lot B

Third St. **Third St.** **Third St.** *(City Restricted Parking)* **Third St.**

DINING
- Barbara's Place
- Davenport

PARKING

- permits are required
- 3 hour parking
- unrestricted parking
- R restricted tenant parking only

Lot A

La Fetra (LF)

The Rock

Mainiero Building (MA)

Founders Hall (FH)

Fasnacht Court

Davenport Dining Hall

WDR

PDR

Miller Hall (MIL)

University Quad

Music Annex

Sneaky Park

CBPM

Landis Academic Center (LAC)

Wilson Library

Vanpool Parking

Lot E

Lot C

Graduate Academic Services

Literacy Center

R

OIT

R

Second St. **Second St.** **Second St.**

Ortmayer Athletics Complex (Football/Track)

Dailey Theatre

Johnson Family Plaza

Barbara's Place

Campus Center (CC)

Lot Q

CEOL

Leo Hall (LEO)

Lot H2

Health Center

Sports Science & Athletics Pavilion (SSAP)

Campus Safety

Hanawalt House Alumni Relations

Lot F

Barkley Building (BB)

Barkley Annex

Lot K

Lot H

Lot G

D E

Housing Office

Lot I1

The Oaks

Organizational Leadership

F A

B

C

Lot I

Ben Hines Field (Baseball/Soccer)

Lot D

Arts and Communications (ACB)

Lot H1

(EM/CS)
Enrollment Mgmt.
Facilities Mgmt.
Mail Services
Purchasing • RCA

OIT Graphics

OIT East

First St.

First St. (One Way)

R.R. tracks

I-210, 2.6 mi.; Softball Field, .5 mi. (Arrow at Wheeler)   **Arrow Hwy.**   I-10 via Fairplex Dr., 2.4 mi.   Fairplex (Fairgrounds)

Revised - 05/09

B St.   C St.   D St.   D St.   E St.   E St.   F St.

I-210, via Foothill Blvd., .9 mi.

D St. (City Restricted Parking)

OIT North Floorplan

Sr. Programmer Analyst

Furnace Room

Assistant Database Administrator

A/C Room

Web Programmer Analyst

Programmer Analyst

Web Developer and student assistant

Director's Office

Stairway

Chief Information Officer's Office

Office Coordinator

Meeting Room

= 5 foot square

Appendix K

OIT East Floorplan (bottom floor)

Telecom Closet	Asset Manager's Office
	Director's Office

Help Desk (3 staff)

Network Room

Fenced Storage

Stairway

Technician Workspace 2 staff 2 student assistants

Technician Workspace 2 staff 2 student assistants

Fenced Storage

Stairway

OIT East Floorplan (top floor)

Network Administrators (2)

Stairway

Office Coordinator

Director's Office

Telecomm Administrator

System Administrators (2)

Stairway

System Administrators (2)

= 5 foot square

Appendix L

WASC OIT-Faculty Survey	Always	Often	Sometimes	Rarely	Never	N/A	Rating Average
1. OIT provides adequate smart classroom spaces (classrooms that are technology-enabled).	53.1 %	29.6%	9.2%	1.0%	0.0%	7.1%	4.45
2. OIT provides the types of technological hardware in smart classroom spaces that meets my instructional needs	50.5%	24.7%	14.4%	1.0%	1.0%	8.2%	4.34
3. OIT maintains fully functioning equipment in smart classroom spaces.	42.1%	30.5%	18.9%	1.1%	0.0%	7.4%	4.23
4. OIT provides the software applications in smart classroom spaces that meet my instructional needs..	46.3%	22.1%	16.8%	1.1%	1.1%	12.6%	4.28
5. OIT support staff promptly and attentively remedies any technological related problems I experience in the classroom.	51.6%	17.9%	14.7%	5.3%	0.0%	10.5%	4.29
6. My University e-mail account has sufficient space for me to conduct University-related business.	60.4%	17.7%	7.3%	9.4%	2.1%	3.1%	4.29
7. My University e-mail account is easy to access when I am on campus.	64.4%	15.8%	5.3%	1.1%	2.1%	8.4%	4.59
8. My University e-mail account is easy to access when I am off campus.	64.2%	21.1%	11.6%	11.6%	1.1%	1.1%	4.48
9. I utilize the wireless access around campus.	12.6%	15.8%	17.9%	10.5%	22.1%	21.1%	2.83
10. I read the website front: page articles.	16.8%	29.5%	33.7%	15.8%	4.2%	0.0%	3.39
11. I listen to the University of La Verne automated voice mail announcements.	16.7%	9.4%	12.5%	12.5%	31.3%	17.7%	2.61
12. I read the Chief Information Officer's (CIO) technology news briefs.	34.7%	30.5%	15.8%	11.6%	7.4%	0.0%	3.74
13. I use my own personal laptop computer on campus	12.6%	12.6%	13.7%	10.5%	29.5%	21.1%	2.60
14. The OIT technician(s) resolve my work order(s) on the first visit.	27.4%	28.4%	18.9%	5.3%	1.0%	18.9%	3.94
15. The OIT technician(s) are professional.	61.1%	17.9%	9.5%	5.3%	0.0%	6.3%	4.44
16. The OIT technician(s) are courteous.	65.6%	20.8%	7.3%	1.0%	0.0%	5.2%	4.59
17. I utilize campus computer labs to teach courses..	13.7%	10.5%	12.6%	17.9%	29.5%	15.8%	2.54
18. When I call the Help Desk, they are able to resolve my issue while I am on the phone..	22.9%	40.6%	17.7%	13.5%	1.0%	4.2%	3.74
19. I can easily obtain the information I need from the Student Information System (Banner).	20.0%	29.5%	10.5%	8.4%	3.2%	28.4%	3.76
20. I can easily obtain the information I information from the Alumni Management System (Viking)	5.2%	2.1%	4.1%	6.2%	8.2%	74.2%	2.60
21. I can easily obtain the information I need from the Finance, Payroll and HR System (BiTech)..	10.3%	11.3%	10.3%	4.1%	7.2%	56.7%	3.31

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Rating Average
22. OIT provides overall technology support services that meet my instructional needs.	47.0 %	37.0%	10.0%	3.0%	2.0%	1.0%	1.75
23. The new faculty/staff Global Address List makes it easier for me to communicate with the on-campus community.	27.3%	27.3%	17.2%	4.0%	5.1%	19.2%	2.16
24. The new University website is visually inviting	37.0%	40.0%	14.0%	7.0%	1.0%	1.0%	1.94
25. The new University website is easy to navigate.	20.0%	35.0%	17.0%	18.0%	10.0%	0.0%	2.63
26. The new University website keeps me updated on current University events and programs	28.0%	44.0%	16.0%	9.0%	3.0%	0.0%	2.15
27. The new University website contains the resources and information I need to meet my instructional and professional needs.	27.0%	39.0%	12.0%	12.0%	6.0%	4.0%	2.28
28. The new University website makes it easier for me to find the information I need..	17.0%	32.0%	22.0%	16.0%	12.0%	1.0%	2.74
29. The speed of the University's wireless system meets my instructional and professional needs	26.0%	31.0%	10.0%	2.0%	4.0%	27.0%	2.00
30. The automated voice mail announcements are useful to keep me updated on current University events and programs..	8.0%	22.0%	17.0%	4.0%	9.0%	40.0%	2.73
31. The automated voice mail announcements are useful to keep me updated on urgent campus issues.	9.0%	18.0%	16.0%	8.0%	8.0%	41.0%	2.80
32. The Chief Information Officer's (CIO)) technology news briefs are useful to keep me updated with information related to technology services..	34.0%	34.0%	13.0%	6.0%	1.0%	12.0%	1.93
33. My University-provided computer meets my instructional and professional needs.	32.0%	21.0%	7.0%	8.0%	8.0%	24.0%	2.20
34. The OIT technician(s) are knowledgeable.	51.0%	26.5%	13.3%	5.1%	2.0%	2.0%	1.78

	yes	No	N/A	Rating Average
35. I am aware of the online training available at training.laverne.edu.	66.0 %	32.0%	2.0%	133
36. I make use of the online training offered by OIT (at training.laverne.edu).	28.0%	67.0%	5.0%	1.71
37. I have my own personal laptop computer.	62.6%	31.3%	6.1%	1.33

Demographic Data:	Male	Female	Other	Rating Average
35. I am aware of the online training available at training.laverne.edu.	60.2 %	39.8%	0.0%	1.40

Appendix M

WASC OIT-Staff Survey	Always	Often	Sometimes	Rarely	Never	N/A	Rating Average
1. OIT support staff promptly and attentively remedies any technological problems I experience in my department.	36.0 %	50.0%	12.0%	1.0%	0.0%	1.0%	4.22
2. My University e-mail account has sufficient space for me to conduct University-related business.	45.0%	35.0%	9.0%	7.0%	4.0%	0.0%	4.10
3. My University e-mail account is easy to access when I am on campus.	82.0%	14.0%	1.0%	0.0%	0.0%	3.0%	4.84
4. My University e-mail account is easy to access when I am off campus.	57.0%	22.0%	5.0%	3.0%	2.0%	11.0%	4.45
5. I read the website front: page articles	14.0%	30.0%	40.0%	13.0%	3.0%	0.0%	3.39
6. I listen to the University of La Verne automated voice mail announcements.	31.0%	17.0%	14.0%	8.0%	15.0%	15.0%	3.48
7. I utilize the wireless access around campus.	8.1%	12.1%	15.2%	14.1%	29.3%	21.2%	2.44
8. The speed of the University's wireless system is adequate.	10.1%	29.3%	14.1%	4.0%	1.0%	41.4%	3.74
9. I read the regular Chief Information Officer (CIO)'s technology news briefs.	56.0%	23.0%	16.0%	4.0%	1.0%	0.0%	4.29
10. The OIT technician(s) resolve my work order(s) on the first visit.	15.2%	56.6%	16.2%	4.0%	1.0%	7.1%	3.87
11. The OIT technician(s) are professional.	55.6%	33.3%	7.1%	3.0%	0.0%	1.0%	4.43
12. The OIT technician(s) are courteous.	66.7%	24.2%	7.1%	1.0%	0.0%	1.0%	4.58
13. When I call the Help Desk, they are able to resolve my issue while I am on the phone	10.0%	40.0%	37.0%	4.0%	2.0%	7.0%	3.56
14. I can easily obtain the information I need from the Student Information System (Banner).	11.0%	33.0%	19.0%	4.0%	5.0%	28.0%	3.57
15. I can easily obtain the information I need from the Alumni Management System (Viking)	4.0%	4.0%	2.0%	3.0%	3.0%	84.0%	3.19
16. I can easily obtain the information I need from the Finance, Payroll and HR System (BiTech).	10.0%	19.0%	6.0%	6.0%	1.0%	58.0%	3.74

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Rating Average
17. OIT provides technology support services that meet my administrative needs.	28.3 %	48.5%	16.2%	3.0%	0.0%	4.0%	4.06
18. The new University website is visually inviting.	27.6%	56.1%	14.3%	1.0%	1.0%	0.0%	4.08
19. The new University website is easy to navigate.	15.6%	41.7%	28.1%	13.5%	1.0%	0.0%	3.57
20. The new faculty/staff Global Address List makes it easier for me to communicate with on campus community.	30.0%	43.0%	18.0%	2.0%	2.0%	5.0%	4.02
21. The new University website contains resources and information I need to conduct business	21.0%	47.0%	24.0%	4.0%	1.0%	3.0%	3.86

22. The new University website keeps me updated on current University events and programs.	28.0%	53.0%	16.0%	3.0%	0.0%	0.0%	4.06
23. The new University website makes it easier for me to find the information I need.	18.0%	39.0%	27.0%	12.0%	4.0%	0.0%	3.55
24. The automated voice mail announcements are useful to keep me updated on current University events and programs	17.2%	29.3%	18.2%	10.1%	1.0%	24.2%	3.68
25. The automated voice mail announcements are useful to keep me updated about urgent campus issues.	27.0%	28.0%	14.0%	6.0%	0.0%	25.0%	4.01
26. The Chief Information Officer (CIO)'s technology news briefs are useful to keep me updated with information related to technology services.	44.0%	43.0%	9.0%	3.0%	1.0%	0.0%	4.26
27. My University-provided computer meets my professional needs.	34.0%	41.0%	7.0%	13.0%	3.0%	2.0%	3.92
28. The OIT technician(s) are knowledgeable.	36.0%	47.0%	9.0%	4.0%	3.0%	1.0%	4.10

	yes	No	N/A	Rating Average
29. I am aware of the online training available at training.Laverne.edu.	79.0 %	21.0%	0.0%	1.21
30. I make use of the online training offered by OIT (at training.laverne.edu).	24.2%	66.7%	9.1%	1.73

Demographic Data:	Male	Female	Other	Rating Average
Gender	27.5 %	72.5%	0.0%	1.73

Appendix N

WASC OIT-Student Survey	Always	Often	Sometimes	Rarely	Never	N/A	Rating Average
1. I am satisfied with my University Gmail services.	51.0 %	35.0%	10.0%	3.0%	1.0%	0.0%	4.32
2. I read the website front page articles.	17.0%	19.0%	31.0%	25.0%	8.0%	0.0%	3.12
3. I use my own personal laptop computer on campus	42.0%	23.0%	12.0%	6.0%	17.0%	0.0%	3.67
4. I utilize the wireless access around campus	44.0%	16.0%	14.0%	10.0%	16.0%	0.0%	3.62

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Rating Average
5. My University e-mail account has sufficient space for me to conduct University-related business.	60.0 %	28.0%	10.0%	1.0%	1.0%	0.0%	4.45
6. My University e-mail account is easy to access when I am on campus	55.0%	32.0%	10.0%	2.0%	1.0%	0.0%	4.38
7. My University e-mail account is easy to access when I am off campus	57.0%	30.0%	8.0%	3.0%	2.0%	0.0%	4.37
8. The new University website is visually inviting.	36.4%	43.4%	17.2%	2.0%	1.0%	0.0%	4.12
9. The new University website is easy to navigate.	28.0%	41.0%	19.0%	8.0%	4.0%	0.0%	3.81
10. The new University website contains resources and information I need to conduct business	30.6%	49.0%	16.3%	3.1%	1.0%	0.0%	4.05
11. The new University website keeps me updated on current University events and programs	34.3%	40.4%	17.2%	6.1%	2.0%	0.0%	3.99
12. The new University website makes it easier for me to find the information I need.	25.3%	42.4%	18.2%	11.1%	3.0%	0.0%	3.76
13. The speed of the University's wireless system meets my needs	26.3%	35.4%	28.3%	8.1%	2.0%	0.0%	3.76

	yes	No	N/A	Rating Average
I have my own personal laptop computer.	90.0 %	10.0%	0.0%	

Demographic Data:	Male	Female	Other	Rating Average
Gender	33.3 %	66.7%	0.0%	1.67

Appendix O

	Very Dissatisfied 1		Dissatisfied 2		Neutral 3		Satisfied 4		Very Satisfied 5		Total
	Unified Service Desk Workorders: Client Ratings for 2009/2010										
Jul-09	0		0		0		0		0		0
Aug-09	2	5.7%	1	2.9%	1	2.9%	4	11.4%	27	77.1%	35
Sep-09	3	6.3%	1	2.1%	0	0.0%	1	2.1%	43	89.6%	48
Oct-09	1	2.2%	0	0.0%	0	0.0%	4	8.7%	41	89.1%	46
Nov-09	0	0.0%	1	2.6%	2	5.1%	3	7.7%	33	84.6%	39
Dec-09	0	0.0%	1	4.8%	0	0.0%	2	9.5%	18	85.7%	21
Jan-10	1	3.6%	0	0.0%	3	10.7%	2	7.1%	22	78.6%	28
Feb-10	0	0.0%	0	0.0%	2	5.6%	2	5.6%	32	88.9%	36
Mar-10	0	0.0%	0	0.0%	3	5.6%	4	7.4%	47	87.0%	54
Apr-10	1	2.4%	0	0.0%	2	4.8%	2	4.8%	37	88.1%	42
May-10	0	0.0%	0	0.0%	0	0.0%	0	0.0%	34	100.0%	34
Jun-10											
Total	8	2.1%	4	1.0%	13	3.4%	24	6.3%	334	87.2%	383

	Dissatisfied 1 and 2		Neutral 3		Satisfied 4 and 5	
July	0	0.0%	0	0.0%	0	0.0%
August	3	8.6%	1	2.9%	31	88.6%
September	4	8.3%	0	0.0%	44	91.7%
October	1	2.2%	0	0.0%	45	97.8%
November	1	2.6%	2	5.1%	36	92.3%
December	1	4.8%	0	0.0%	20	95.2%
January	1	3.6%	3	10.7%	24	85.7%
February	0	0.0%	2	5.6%	34	94.4%
March	0	0.0%	3	5.6%	51	94.4%
April	1	2.4%	2	4.8%	39	92.9%
May	0	0.0%	0	0.0%	34	100.0%
June	0	0.0%	0	0.0%	0	0.0%
	12	3.1%	13	3.4%	358	93.5%

Appendix P