BAS

University of California, Santa Cruz
Business and Administrative Services

Divisional Long-Range Plan: 2001 through 2011

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Laying the Foundation for the Future: Providing Support Services to a Growing Campus

Introduction

BAS is pleased to present its long range plan in response to Campus Provost/Executive Vice Chancellor John Simpson's request that campus divisions develop ten-year strategic plans addressing various campus goals. BAS is looking forward to playing a key role in supporting the campus in pursuit of its eventual long-range plan. We believe the key to our success will be to take advantage of BAS' ability to anticipate and adapt to changes originating from within and from outside of the campus. Over the past decade, BAS has succeeded in fulfilling its mission despite substantial reductions in central funding, having to comply with new and increased regulatory requirements, and meeting increased demands for services from a dynamic, growing campus. The campus community has exhibited foresight and flexibility during these times, and the accomplishments achieved during this period are excellent indicators of how well prepared the campus is to meet the challenges of the next decade.

We will be participating in the expansion of one of the finest institutions of higher learning and scholarly research, proudly combining a tradition of maintaining the highest academic standards and research excellence within the confines of a magnificent natural setting. The ambitious goals of the campus to dramatically increase enrollment and research activities will present challenges unprecedented in the history of UC Santa Cruz and, in many respects, will require a reinvention of our campus. To accomplish its goals, the campus will need to double the total existing amount of building space in less than ten years. The qualitative aspects of this endeavor are even more daunting than the quantitative. This long-range planning process is forcing BAS and other campus divisions to re-examine long-held assumptions and expectations that have their roots in the first thirty-six years of the campus' existence. From an academic perspective, new models of instruction and institutional organization are being conceived and implemented, and new, exciting research activities are evolving. BAS intends to be a key collaborator in the infrastructure support needed for these efforts.

The information contained in this document represents the culmination of our cyclical, ongoing program development and budget process expanded to project a vision for the next ten years. The individual BAS unit long-range plans form the basis for this BAS divisional plan, and all reflect the importance BAS places on supporting the strategic objectives of the university. The objectives and planning principles that are employed in developing the BAS long-range plan are intended to accommodate the level of campus growth envisioned in the academic long-range plan.

The BAS division consists of thirteen units that are organized into five thematic clusters: Business Services, Financial Services, Information Technology, Physical Environment, and Safety Services. Each unit head reports directly to the Vice Chancellor—Business and Administrative Services, whom the Office of Planning and Analysis (OPA) supports. The OPA provides divisional resource management, planning, coordination and analytical support to the vice chancellor, and operates as a resource to unit heads.
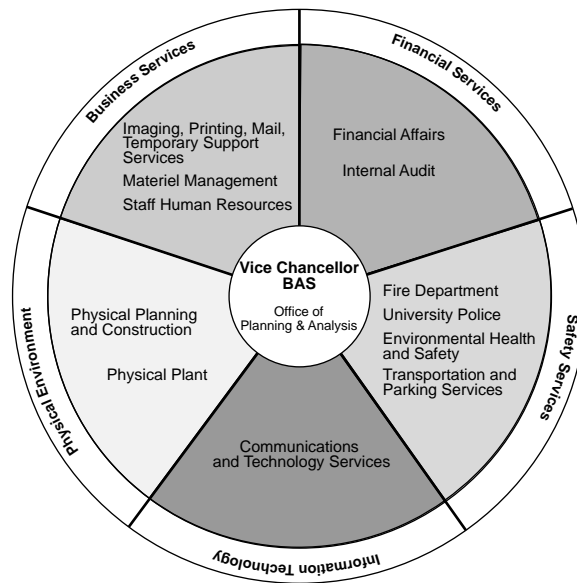
Growth of the magnitude experienced by the campus so far has had a significant impact on the campus infrastructure and on the delivery of academic support services. This will continue as the campus continues to grow. In the coming years the campus anticipates the most ambitious construction schedule since opening its doors in the 1960s. Over the past decade, due to campus budgetary constraints, BAS units have not been able to add staffing concomitant to growth. In addition, there have been limited resources available to invest in initiatives which would realize efficiencies and control costs. So far, BAS has been able to accommodate increased workload resulting from growth through economies of scale, and by adding staff when necessary. However, most BAS units are now operating at their maximum capacity. Throughout the division, units will need additional staffing to accommodate increased workload associated with campus growth, more regulatory requirements, and the desire to improve the delivery of academic support services.

UC Enrollment Growth on Existing Campuses
General Campus Budgeted FTE Enrollment Growth through FY 2011
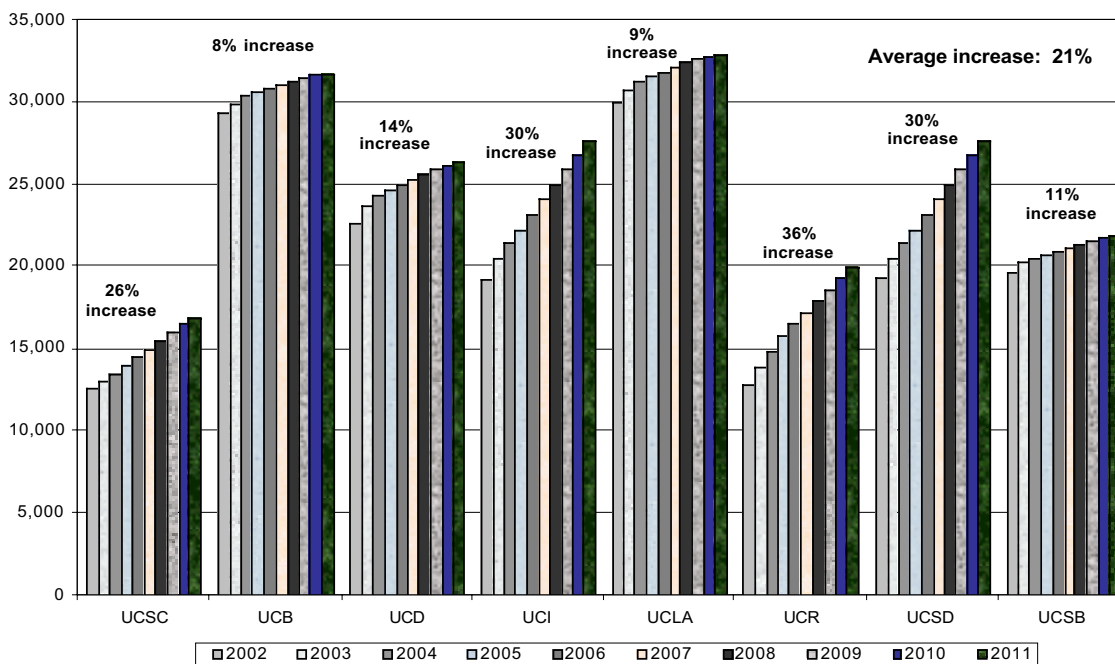
The development of off-campus academic venues, such as the Silicon Valley Center, the Monterey Bay Education, Science and Technology (MBEST) Center, and the Long Marine Laboratory will have a substantial workload impact on BAS units as well. Anticipated costs of supporting such off-campus activities, particularly those that have special needs, will be dependent on such factors as payroll, research support, cashiering, and student-related services that are expected to be provided, as well as unique transportation, security and telecommunication requirements.

Developing a long-range plan for creating a campus infrastructure that supports the academic plan will ultimately be dependent on academic planning information and priorities. We know that many things will change in the next ten years. Thus, in crafting this first long-range plan, we used the most current information available. We consider this plan to be a dynamic ongoing planning tool which will be updated periodically and revised as additional academic support planning information becomes available in the coming years. BAS managers will use this document and subsequent revisions to provide the infrastructure analysis necessary to respond to academic priorities and align services accordingly in the coming decade.

Long-Range Planning Challenges

Developing a comprehensive, thoughtful long-range strategic plan is in itself a formidable undertaking. It is made more difficult by current events that may have a lasting impact on the implementation of the campus long-range plan. We would specifically like to discuss two dramatic recent events and their impact on BAS strategic planning.

Economy

The current downturn in the state and national economy will have a direct effect on the resources available to public institutions, including the University of California. Although we do not yet know the degree of the specific impact on UC Santa Cruz, we recognize that the situation is serious. As was announced in November, the Governor has directed all state agencies, including the University of California, to consider how they would reduce their budgets in 2001-02 and 2002-03; the UC Regents are discussing a range of options for dealing with possible budget cuts.

In spite of this news, we continue our planning efforts in earnest, with a greater sense of purpose in knowing that while the next two years may bring an economic downturn, our strategic long-term planning is more important than ever as we position ourselves to be poised for the opportunities that will come once the economy rebounds. At this time, BAS management is encouraging all units to exercise prudent judgment in committing funds, an action that will undoubtedly curtail spending on a variety of fronts.

Disaster Preparedness

BAS units have been significantly impacted by the tragic events of September 11, and are closely evaluating disaster preparedness. Each BAS security and safety unit has conducted an extensive review of existing response procedures and are taking steps to enhance and adapt protocols to address the changing times. Other critical support units such as Communications and Technology Services (CATS), Physical Plant, and Campus Mail Services also participated in campus security planning measures. The results of this review can be found in the appendix on page A-19.

Preparedness planning cross campus boundaries in that BAS units are working closely with outside local, state and federal agencies to ensure coordinated efforts, continuity in response actions, and the currency of information. The Santa Cruz County Health Department, Santa Cruz City Police, City and County Fire Departments, State Department of Health Services, United States Postal Service and the FBI are a few of the external agencies we are in communication with to ensure consistency

during this time of heightened awareness and rapidly changing priorities.

The recent nature and scope of threats to the public requires that we as a community enhance our awareness and look at preparedness in new ways. If our systems and resources for ensuring a healthful and safe campus environment are to be effective, each of us must take on the responsibility to educate ourselves and be alert to risks. To that end, BAS units played an important role in creating the campus information and resource web page regarding biological hazards (http://currents.ucsc.edu/terrorist_crisis/biohazards.html) that includes recommended sources for timely information. Using this web site will enable the campus community to stay abreast of current information through the links provided on this web page.

Strategic Planning Principles

BAS continues to be guided by planning principles and values used to serve the campus for many years. These principles and values include the following:

- Working collaboratively with others and providing services and support to enable the campus to achieve its long-range objectives;

- Supporting the recruitment, development, and retention of a competent, capable, and diverse workforce by striving to be the employer of choice in the Santa Cruz area;

- Providing a safe physical environment for students, faculty, staff, and the public;

- Ensuring compliance with all university, local, state, and federal laws and regulations;

- Maintaining a strong financial control and accountability environment in support of the campus's stewardship responsibilities to the public;

- Continually developing accountability measures and seeking ways of improving the efficiency and effectiveness of processes and procedures;

- Strategically using technology to improve the quality and efficiency of services provided to the campus in support of its academic, research, and public service mission.

Over the next decade, all of the basic services currently provided by BAS to the campus community, such as police and fire protection, facilities and grounds maintenance, accounting and business services, building design and construction services, and information technology and telecommunications services, will continue to be needed by the campus. Student enrollment growth, faculty and staff growth, and increases in the amount of campus building space are the primary factors influencing workload increases in most BAS units. As might be expected, projected operating costs over this time period reflect these trends. In addition, operating and initiative cost projections reflect BAS' efforts to improve processes and efficiencies and incorporate technology while minimizing the cost of BAS services to customers.

Changing the way in which BAS delivers support services will enable it to control costs. Whenever possible, BAS will deliver support services through mechanisms that allow users to be more self-sufficient, and not require direct person-to-person staff involvement. BAS plans to use the Internet extensively to provide increased access (self-services) to commonly sought after information and services to the campus community. We foresee an environment where in most instances, person-to-person interaction will be limited to unusual, complex, or high-risk transactions or business dealings.

We also envision a larger number of common campus transactions to be handled via the Internet. Critical student, financial and other operational information that is needed to make well-informed strategic campus decisions will be produced and provided through the Internet. More "intelligence" and improved financial controls will be integrated into business processing software applications so that there is less reliance on a person having to review transactions. Finally, there will be greater focus directed

toward automating the transaction monitoring process, which is currently a mostly manual, and labor-intensive system.

The campus will face a large number of challenges as it pursues its long-range goals. BAS looks forward to playing a significant role in

supporting the campus in meeting these challenges. In this regard, the following are some of the key issues BAS has identified and how BAS intends to support the effort to successfully address them.

BAS Role in Addressing Long-Range Campus Growth Issues

Campus Physical Plan

Our dynamic environment demands that UCSC develop new ways to address growth and construction needs. The result must be a functional and integrated community that fulfills the university's responsibilities of teaching, research, and public service while preserving the essential qualities of this unique campus. Simply adding assignable square feet will not create a physical setting adequate to serve UCSC's students, faculty, and staff. Good university campuses are more than buildings based solely on the numerical demands of space tables and spreadsheets. Rather, they are rich tapestries of places and spaces whose fabric embodies the highest aspirations and achievements of the educational enterprise. In BAS, this effort is lead by Physical Planning and Construction (PP&C). PP&C intends to address both the abstract and the concrete sides of this duality. This role in such a growth environment is unique: work must precede campus expansion rather than respond to it. PP&C will direct these efforts and set the stage for campus development and direct design and construction to assist the campus community in articulating a long-term vision, planning a functional and integrated campus, and designing and constructing the facilities necessary to reach larger campus goals. Campus planners, working with the campus community, study environmental settings, understand programmatic demands, analyze development alternatives, and create development guidelines and entitlements. Building on the planning effort,

project management staff collaborate with campus clients, executive design professionals, UC Office of the President (UCOP), outside agencies, and construction contractors for a minimum of three years–four to six years is more typical–before any project is completed and available for campus use.

Not only will UCSC's upcoming growth occur in an increasingly complex and demanding planning, design, and construction environment, it must also occur at a rate unprecedented in campus history. While it is this rate of growth that is the determining factor in assessing anticipated workload, it is the characteristics of the campus that will be the outcome by which these efforts will ultimately be judged.

Background

The *1988 Long-Range Development Plan* (LRDP) was originally prepared to guide campus growth from an enrollment of approximately 8,800 students to an enrollment of 15,000 by 2004-05. Since its adoption, the campus population has grown by nearly 4,000 students, to this year's projected three-quarter average of 12,463. Although student enrollment this year will only reach 83% of the level provided for in the LRDP, at thirteen years old the document is reaching the end of its life expectancy. Some fundamental planning assumptions (e.g., residential colleges of 1,000 students each) have changed. Other assumptions (e.g., an eastern access road) are not likely to be met within the timeframe anticipated in 1988. External forces and conditions have

changed; planning and environmental laws, for example, are more strict. The environmental information and data which informed the 1988 LRDP have significant "blanks" which require filling; the science used to interpret them has evolved, requiring new understandings and new approaches.
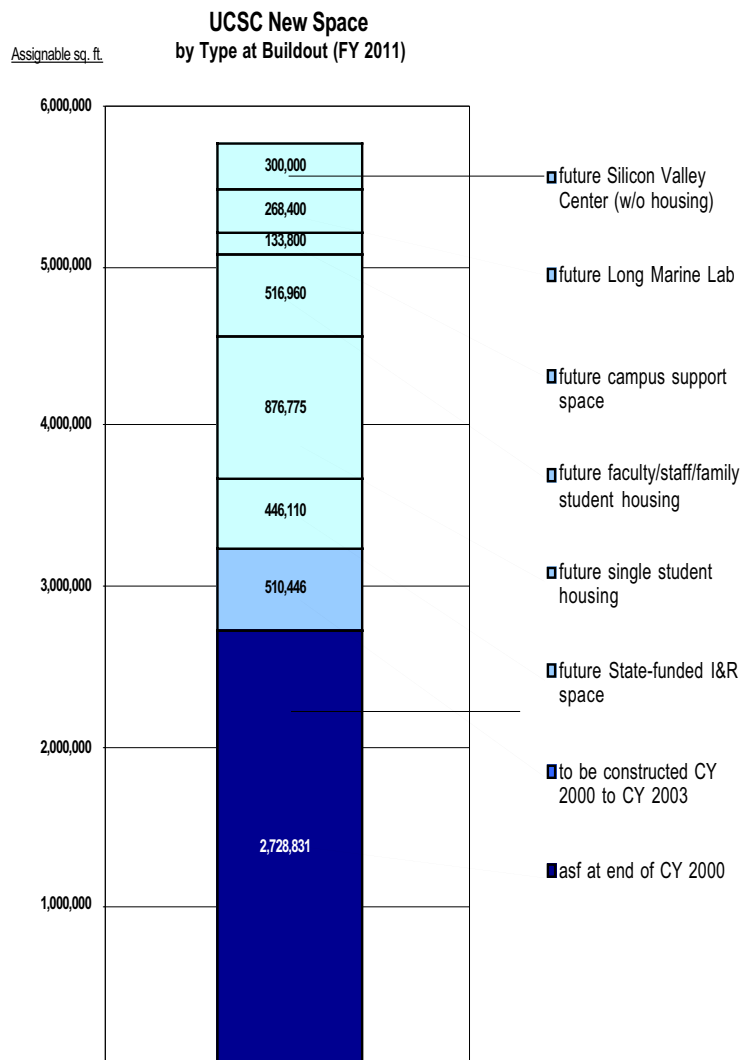
PP&C's response to these circumstances is well underway. Initiating and directing the work of the Growth and Stewardship Task Force, which is charged with reviewing and updating the assumptions underlying the LRDP, PP&C is considering major land use questions, and evaluating the opportunities and risks they present. These efforts will allow the campus to complete the growth called for in the 1988 LRDP in a wise and responsible way. It is anticipated these discussions will ultimately lead to an update of the LRDP, guiding campus development beyond 2006. Planning staff have also played a major role in two significant off-campus planning initiatives at the Silicon Valley Center and Long Marine Laboratory; master planning efforts are underway for both.

The pace of design and construction activity has also increased over the last five years. This year we anticipate completing more gross building area than in any year in campus history save 1966, just after the campus opened; work on those projects has been underway for more than five years. There has been successful use of alternative contracting methods on a number of occasions, and we continue to explore project delivery improvements. Projects are no longer confined to the main campus; project management at off-campus sites–including Long Marine Lab, Silicon Valley Center, the MBEST Center, the University Town Center, and various rental spaces–has grown in volume and importance over the last three years. For a growing and ever more complex campus, the technical support that PP&C's architects and engineers provide to Campus and Community Planning and Physical Plant will be increasingly in demand.

Planning Assumptions

Comparing the activity of the last ten years with that projected for the next ten years provides an indication of the intensity of the effort to come. Between 1991 and 2000, UCSC grew by 600,000 assignable square feet (asf), adding an average of 60,000 asf per year. Over the next ten years, UCSC plans to grow by over 3,000,000 asf, or more than 300,000 asf per year. The charts below and on the next page illustrate the details and the impact of these ambitious plans, and place them in historical context of UCSC's growth since opening in 1965.

As any campus matures and develops, campus planning complexity increases and decisions become more difficult. More parties are involved. "Easy" sites are already developed;

UCSC New Space by Type at Buildout (FY 2011)

Assignable sq. ft.

Value	Category
300,000	future Silicon Valley Center (w/o housing)
268,400	future Long Marine Lab
133,800	
516,960	future campus support space
876,775	future faculty/staff/family student housing
446,110	future single student housing
510,446	future State-funded I&R space
2,728,831	to be constructed CY 2000 to CY 2003
	asf at end of CY 2000

UCSC Growth, 1966 - 2010

Assignable
Building Area

Total Enrollment

001-02   005-06

16,900 students
2010-11

14,600 students
2005-06

12,463 students
2001-02

Figures include faculty/staff/family student housing,
Long Marine Lab, and the Silicon Valley Center

━━━ **Assignable Square Feet (asf)**   ━━━ **Total Enrollment**

UCSC Building Growth (asf)
1965-2010

annual asf

cumulative asf

36 years
2,728,000 asf

10 years
3,052,000 asf

1990   2000

2,128,000 asf
82,000 asf/yr

600,000 asf
60,000 asf/yr

3,052,000 asf
305,000 asf/yr

Figures include all projected main campus space, Long Marine Lab,
and Silicon Valley Center. No UC MBEST projects are included.

■ asf added   ── cumulative asf
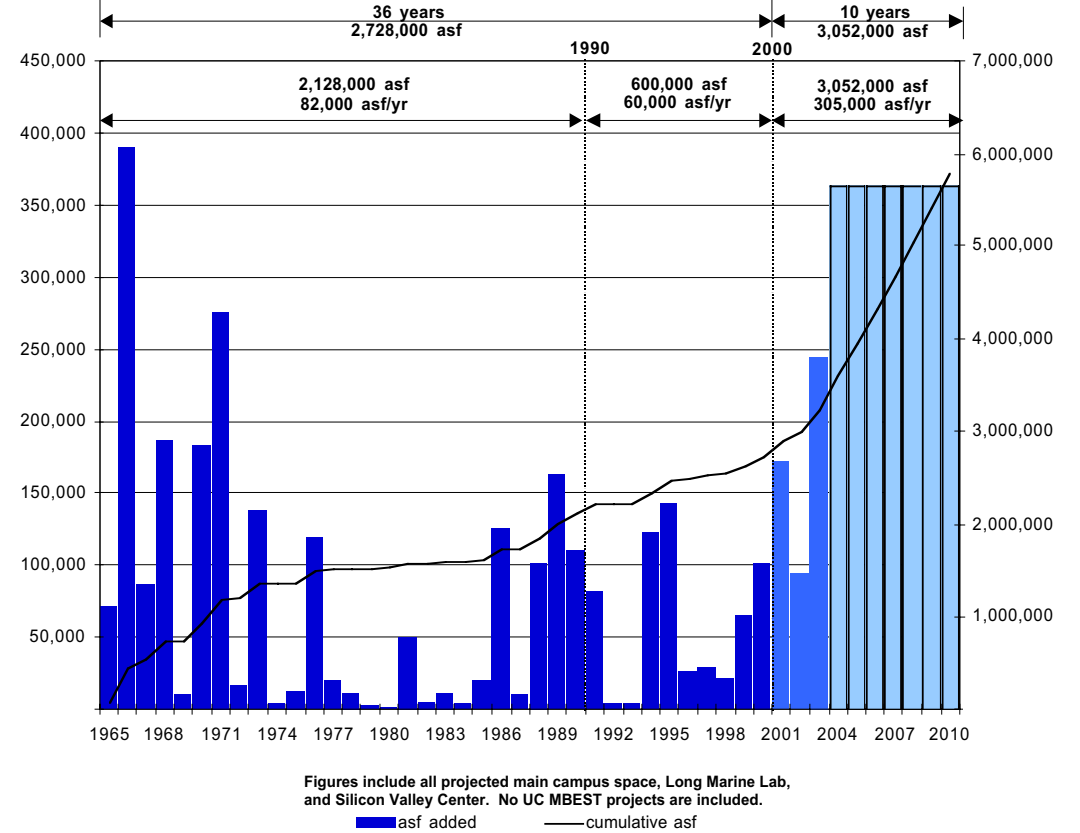
new ones are more difficult to identify and entitle. Impacts of growth on the surrounding community mean that planning must also address off-campus infrastructure problems and mitigation measures. A continuously evolving regulatory structure and increased authority of outside agencies over campus development will significantly shape what we are able to do. Campus Planning principles include the following:

- Develop consensus on fundamental campus planning directions, continuing UCSC's tradition of environmental sensitivity and thoughtful place making.

- Clarify the programmatic implications of off-campus initiatives, especially the Silicon Valley Center, for on- and off-campus growth.

- Integrate new development in ways that reinforces and strengthens the existing campus "fabric."

- Mesh campus and community needs and solutions whenever possible. Coordinate updates to UCSC's LRDP with the revision of the General Plan of the City of Santa Cruz.

- Address issues of community infrastructure such as water supply, traffic circulation, and housing.

- Establish the foundation for a major update or amendment to UCSC's LRDP to guide campus growth beyond 2006.

Project planning, design, and construction must always manage the delicate balance between campus expectations, programmatic and schedule demands, and available funds. Capital resources are shrinking, increasing pressure to reduce project budgets, at a time when more attention must be paid to issues of sustainability and life-cycle costs. And, as is the case with campus planning, design and construction on a maturing campus is more difficult than on a younger one. Tightly constrained sites require more attention to construction staging and phasing. Disruptions to campus activities must be considered. Infrastructure systems that have been stretched beyond capacity must be renewed and expanded. The age of some campus buildings is approaching forty years; facilities renewal must be considered along with new construction. Project planning, design and construction objectives include the following:

- Overhaul project budgeting and capital planning procedures to reflect the realities and complexities of contemporary project development. Provide sufficient budget and schedule contingencies and evaluate life-cycle cost implications.

- Evaluate realistically the implications and impacts of the proposed unprecedented rate of growth.

- Explore alternative construction procurement models, including appropriate third party financing and development mechanisms.

- Develop a mindset that creates opportunities to solve a variety of problems at once.

- Plan for the renewal and upgrading of UCSC's aging facilities.

Capital development is an expensive activity. Time spent resolving financial issues is time that cannot be spent solving planning problems. Capital development objectives include the following:

- Develop a funding model–a working "internal economy"–that appropriately allocates planning costs among affected campus units.

- Develop funding mechanisms necessary to support the unprecedented scale of project development currently proposed in a time of shrinking state capital resources.

- Develop and coordinate funding sources that can pay for "the spaces in between" discussed below.

Capital planning within the University of California is typically driven by the need for programmed (i.e., assignable) enclosed space. Our planning models do not easily generate what might be called "the spaces in between" – facilities and systems that support and benefit the entire campus but are not the responsibility of any single sponsor. As stewards of the campus, PP&C is in a position to advocate for (but not fund) these "orphan" projects and

wishes to introduce them into the current planning dialogue. A good example is UCSC's main entrance along Coolidge Drive, which establishes the first impression of the campus. Although the 1988 LRDP designated this part of the campus as a "Historic Area," little has been done recently in the way of restoration, improvement, or adaptive re-use. A coordinated plan to upgrade this area would both preserve important historical resources and enhance a unique and special image for UC Santa Cruz. Other examples include:

- Improvements to signing and wayfinding will be essential to the efficient use of a more densely developed campus, and make the campus more welcoming and comprehensible to visitors.

- Development of a Geographical Information Systems (GIS) campus mapping database would provide a web-based organizational and management tool allowing retrieval and use of campus physical information (e.g., biotic studies, floor plans, topographic information, etc.) by all campus units.

- A permanent solution to the continuing administrative space deficit must be found.

- UCSC lacks a major assembly space where the campus community can come together. Improvements to the Upper Quarry Amphitheater and for construction of a "campus events center" have been suggested.

Attention to infrastructure issues will be essential. The last ten years of campus construction have added over a million gross square feet of building area with very little in the way of infrastructure expansion or improvement. Existing storm water drainage systems and pedestrian and vehicular circulation routes are overextended. Electrical and water distribution systems are nearing capacity. See page A-2 in the appendix for additional charts on campus planning.

Summer Quarter

Implementing a summer quarter will have a significant impact on BAS workload costs and its ability to perform tasks traditionally performed during the summer. Many academic support programs and services typically provided during what has been considered the traditional academic year are suspended or curtailed over the summer months. In addition, a large number of major building maintenance projects are undertaken during the summer while buildings are not fully occupied.

Our analysis indicates that a full complement of student services will need to be provided during summer quarter, including the following services that are typically offered only during the fall, winter and spring quarters:

- CATS computer account management services, and campus computer lab operations;

- Student billings, student loan counseling and administration, and tuition and fee payments processing services provided by Student Business Services;

- Police services will likely have to be increased if additional students are housed on campus during the summer quarter;

- TAPS shuttle services will need to be expanded to respond to increased demand.

Some the following additional academic support services may need to be provided in support of a summer quarter:

- Maintaining campus facilities under an expanded academic schedule will require many Physical Plant subunits to extend their hours of operation in order to perform tasks that are done during the summer.

- The current Student Information System (SIS) will need to be modified to enable both the registration and financial aid modules to handle summer quarter.

- Teleslug will need to be modified by CATS to handle two quarters simultaneously.

- Special compensation arrangements made with faculty teaching summer quarter will need to be handled by the Accounting Office.

- Additional business transaction processing taking place during the summer will need

to be handled by various offices such as the Accounting Office and Materiel Management.

Several summer activities traditionally performed by BAS subunits will have to be reconsidered, including:

- CATS' current practice of upgrading software and performing maintenance on workstations in computer labs during the summer.

- Setting up and dismantling CATS telecommunications equipment for summer conference-related activities will need to be performed under a much shorter time-frame.

- Coordinating Physical Plant major maintenance and alterations projects, especially projects such as re-roofing, that have traditionally been undertaken during the summer months when facilities can be vacated.

Sponsored Research

The Sponsored Projects Office has projected sponsored award activity on the campus will grow from $65 million in 2000-01 to $125 million in 2004-05, representing an increase of 70%. By 2010-11, this activity is expected to increase to $230 million, an increase of 254% over 2000-01. From a financial management perspective, sponsored research has been identified by UC financial managers at the campuses and at UCOP as being the highest risk activity being undertaken at the University. This is probably also true from other perspectives such as campus health and safety.

Our analysis indicates that growth in sponsored project activity will result in a roughly proportional increase in the workload costs of several BAS units that support the campus' sponsored research effort. We anticipate that this growth will effect BAS in some of the following ways:

- CATS will need to provide an even greater volume of the leading-edge computing infrastructure and services in support of new and expanded areas of research.

- Environmental Health and Safety will need to ensure that a greater number of laboratories and work area environments continue to comply with federal and state safety regulations.

- Financial Affairs will need to provide a higher volume of services in order to maintain overall financial accountability to sponsoring agencies, ensure compliance with federal costing guidelines, and provide relevant and useful project accounting information to principal investigators.

- Internal Audit will need to coordinate a larger number of audits of the type that are periodically conducted by federal, state, and other sponsoring agencies to review the accounting for specific sponsored awards and campus overhead costs.

- Materiel Management will experience an increase in workload related to handling and accounting for a greater number of purchases involving lab supplies and inventorial equipment.

- Campus Police will need to increase security for laboratories and other areas of the campus used in the research effort, particularly if there is an increase in research involving animal subjects.

- SHR will experience an increase in workload for recruiting and hiring staff.

Internal Influences

BAS workload costs related to providing academic and research support services are influenced by a number of campus-specific factors, such as student enrollment levels. BAS uses growth projection information related to these factors to project its operating costs. In our executive summary we identified some of these factors, which are repeated in the following table. In addition possible measures that BAS might take to manage cost growth related to these factors are identified.

As one might expect, the accuracy of the quantitative projections presented in the BAS long-range plan is directly related to the quality and availability of growth projection data. In the coming years, we hope to receive additional and more detailed growth projection data, which we will use to refine and update our long-range plan.

In addition to the factors described above, campus-wide strategic decisions can have a substantial impact on BAS operating costs, including recharge rates. The management of these costs could be improved with the assistance of senior campus management. For example, increases in sponsored research activity could result in reduced campus recharge rates. If extramurally funded activities increase at a proportionally higher rate to that of other campus programs, these activities will absorb a proportionally higher level of recharge activity costs, which affect recharge rates and services to other campus activities. As another example, faculty and researcher compliance with federal, state, and university regulations governing sponsored research impacts the workload costs of several BAS units, including Environmental Health and Safety and Financial Affairs. In short, the greater the levels of compliance with health and safety regulations and with financial account-ability requirements, the lower the workload costs of these units.

Internal Influences on BAS		
Factor	**Effect on BAS Operations**	**Possible BAS Management Measures**
Student enrollment	Workload increases of many BAS subunits increase in approximate proportion to student enrollment growth	Service delivery efficiencies and integration of technology may control cost growth associated with handling common student business transactions with the campus and providing related customer services
Faculty and staff employment	Increased activity will drive the need for related administrative services, e.g. SHR, Financial Affairs, TAPS, IPMTS, and Materiel Management	Service delivery efficiencies and integration of technology may control cost growth associated with handling common business and logistical needs of campus faculty and staff members and providing related customer services
Sponsored projects volume	Operating costs of BAS units, e.g. Extramural Funds Accounting, Materiel Management, and EH&S, increase in approximate proportion to growth in sponsored projects	Prudent integration of technology may control cost growth associated with accounting. Greater collaboration among BAS, academic divisions, and the VC-Research could also result in the identification and implementation of efficiencies
Financial aid awards	Operating costs of BAS subunits, e.g. Student Business Services, increase in approximate proportion to growth in the number of financial aid awards	Prudent integration of technology may control cost growth associated with handling student accounts and providing related customer services
On-campus and off-campus facilities usage	Workload of BAS subunits, e.g. CATS, PP&C, Physical Plant, Real Estate Services, Fire, Police, TAPS, and Plant Accounting, increases in approximate proportion to growth in the number of campus facilities and amount of assignable space	Greater coordination of efforts among BAS and non-BAS units involved in planning and building new buildings may control cost growth
On-campus student, faculty, and staff housing	Operating costs of BAS subunits, e.g. CATS, PP&C, Physical Plant, Real Estate Services, Fire, Police, Plant Accounting, increase in approximate proportion to growth in on-campus housing	Stronger coordination of efforts among BAS and non-BAS units involved in planning and building new housing may control cost growth. The development and implementation of crime and fire prevention programs might also help to control cost growth.
Auxiliary enterprise operations	Operating costs in BAS subunits, e.g. CATS, Fire, Police, Financial Affairs, and EH&S, increase in approximate proportion to growth in auxiliary enterprises	Stronger coordination of efforts among BAS and auxiliary enterprise units may control cost growth
Public events volume	Operating costs in BAS subunits, e.g. Police, TAPS, and Fire, increase in approximate proportion to growth in the number of public events	Development and implementation of crime, fire prevention, and transportation programs may control cost growth

External Influences

The national economy, new governmental regulations, and relations with the surrounding community are just a few external factors largely outside the control of the campus that can significantly influence BAS operating costs. The campus is subject to an ever-expanding number of new regulations, many of which are highly complex, require immediate implementation, and in most cases do not include accompanying funding. This trend is not likely to abate over the next decade. It often results in BAS units having to assume additional responsibilities and to cope with increased workload demands. This substantially increases BAS operating costs. In our executive summary, we identified a number of significant external factors, which are cited in the table below. Also listed are possible ways that BAS might manage these risks.

External Influences on BAS		
Factor	Key Risk	Possible BAS Mitigation Measures
Cost of living	Difficulty in recruiting and retaining faculty and staff within the existing campus salary structure	Develop and deploy a comprehensive strategy aimed at creating a highly favorable image of UCSC as an employer of choice and of the Santa Cruz area as an ideal place to live. This strategy will influence actions such as advertising job openings, promoting the campus in the media, and presenting the campus at events such as job fairs and professional conferences.
New regulations	Increased costs resulting from complying with new regulations that are inconsistent with university business practices	Work with UCOP to be proactive in contributing input influencing legislation at the state and federal levels that is consistent with university administrative practices and environmental regulatory oversight.
New, mandated UC programs, and changing accounting and business policies	Increased costs resulting from implementing mandated UC programs and from complying with new or revised accounting and business policies that are inconsistent with the campus business model	Active participation by BAS staffmembers in the implementation of new UC programs and in updating UC policies with the goal of better ensuring that UCSC interests are well-served. Often times, such as in the current effort to revise university cash handling policies, opportunities arise during these processes to ensure that policies are consistent with the way in which UCSC conducts its business. In this particular case, a BAS staffmember is a key participant in this effort.
Community relations	Lack of community support for allowing UCSC to pursue its strategic plans	Increase campus outreach and participation in community and public forums.
Workspace quality and availability	Reduced productivity and employee morale resulting from inadequate or sub-standard workspace and from poorly designed or poorly utilized space	Widespread BAS participation in planning by PP&C, as well as CATS, Physical Plant, Police, Fire, EH&S and other BAS units who are well positioned to contribute towards maximizing the quality and availability of space. Often issues as subtle as the placement of janitorial closets, storage space for such things as copier paper, or telecommunications panels, can greatly influence maintenance and support costs over the long run.
Collective bargaining agreements	Increased administrative and strategic costs resulting from implementing certain terms of new collective bargaining agreements	Encourage greater collaboration among campus "parties of interest" in developing collective bargaining strategies that identify costs, including implementation costs, of agreeing to various terms. In addition, the campus might strive to achieve a level of consistency among the various agreements that could result in reduced administrative costs.
Evolution of technology	Increased risk of failure to optimally utilize information technology to achieve campus strategic educational, research, and academic support goals	Various BAS units can provide valuable input into developing principles and a framework that can guide the integration of technology into campus programs and activities over the long-term. Principles governing campus information technology deployment and maintenance can help the campus manage some of the major risks involved in creating and maintaining a "leading edge" information technology infrastructure on the campus.

BAS Division-wide Preparations for Campus Long-Range Growth

From a division-wide perspective, BAS is proud of all that it has accomplished in a number of areas. In many respects, these accomplishments represent advance preparation for the task of supporting the rapid growth of the campus over the next decade.

Division-wide Accomplishments

The following are some of the more notable achievements of the past few years:

- The BAS budget and resource allocation process that has been in place for the past four years allows for the thoughtful planning and funding of expanded and new services. Prospective BAS services are evaluated through a collaborative process in an effort to inform BAS management of the overall needs of the division and prioritize them for funding based on campus priorities.

- Over the past few years, a number of management development initiatives have been implemented. These include the implementation of the "Balanced Scorecard" approach to measure BAS unit performance and regular, periodic campus-wide customer satisfaction surveys of all BAS units.

- The creation of the BAS Office of Planning and Analysis (BAS-OPA) has resulted in improved coordination and management of strategic planning, divisional program delivery, accountability and improving the process of effectively allocating resources. The OPA provides administrative oversight and support to the vice chancellor and the division while incorporating an increased information technology solutions for business and administration.

- BAS has been closely involved in implementing the strategy outlined in the UC System-wide *UC 2010: A New Business Architecture for the University of California*. Implementation of this initiative on the campus will improve administrative efficiency and improve the quality of service delivery.

- The BAS Events Manager is an online tool for creating and managing event registrations. Since the fall of 2000, 1,462 people have been registered for 73 campus events and trainings.

- The CruzTime online calendaring program was initiated and has become the campus standard for enterprise-wide meeting scheduling. In addition, the program helps departments in managing and sharing resources such as conference rooms and equipment that may be loaned. To date, 1160 staff employees on campus are using CruzTime, which represents 97% of the target audiences.

Organizational Realignments

The campus and BAS have attempted to organize academic support services to optimally meet the needs of the campus. In many cases, this has meant reorganizing BAS units and realigning the services provided. The following are some examples of proposed and ongoing organizational realignments.

Americans with Disabilities Act (ADA)

The campus's current structure for handling Americans with Disabilities Act (ADA) compliance has been inadequate for some time. When the ADA was passed, compliance duties were divided among three staff members in three

separate divisions (Student Affairs, Business and Administrative Services, and the Assistant Chancellor for Human Resources). Since then, a number of changes have occurred that warrant revisiting the way UCSC handles ADA compliance:

- As the use of technology in education grows, the risk of shutting out those who use adaptive technology increases. When the campus purchases software for campuswide administrative projects, there is no consistent method to ensure that software purchased is ADA-compliant. In addition, UCSC currently has no consistent, campuswide method of enforcing compliance with campus web policies, which require certain modifications to make web sites accessible.

- While the Instructional Computing Labs now have several software and hardware programs to make computing accessible to those with certain disabilities, there is insufficient space on campus for non-computing-related adaptations (e.g. equipment for scanning, optical character recognition, or voice-recognition systems).

- When the Disability Resource Center was reorganized in 1998, all ADA compliance duties were taken out of the director's position. This means that there has been no one responsible for providing outreach and training for program access aspects of the law (i.e. everything that isn't employment-related or a facilities issue). Since this area includes staff and faculty interactions with students, it is an area critical to the success of students with disabilities at UCSC.

- Faculty with disabilities have repeatedly requested that they have a single contact person for handling their accommodation issues. Currently, they may or must talk with the Vocational Rehabilitation Counselor, their board chair, their dean, Risk Management, and/or the ADA Compliance Officer for Employment.

- There has been an increase in the number of employees with significant mobility impairments on campus. While this represents an ADA success, requests for physical improvements in their buildings have increased as well.

- Due to the increased amount of construction on campus, the amount of time required for ADA plan check review has increased. In addition, planning mitigation measures to maintain accessibility during construction is also requiring more time.

At UCSC, the cost for ADA related facility improvements has been born solely by BAS. Because there is no central funding for ADA requests, BAS has been using building maintenance funds for these expenses; however, this defers building maintenance projects until other funding is found. Because providing access to the workplace is a campus responsibility, a more equitable and permanent source of funding needs to be identified.

It is our recommendation that the entire ADA effort be realigned into one full-time position, which would cover all aspects of the ADA, including employment. The person hired for this position would have sufficient time to address the concerns outlined above, in addition to handling all disability-related complaints and grievances; such a structure would improve and enhance ADA compliance efforts. Since the proposed duties would be of a campuswide nature (working with students, staff, faculty, and the community), covering a variety of issues (academic and employment accommodations, access to electronic information, facility and code issues, and access to university programs in general), we propose that the position be located in the Chancellor's Office, and funded centrally. Because of the similarities this position would share with the campus Ombudsman (e.g. an independent intermediary who receives and resolves complaints; conducts research and fact-finding; and makes recommendations for change), we recommend that ADA compliance be realigned and managed with a similar reporting structure.

Capital Planning

The transition of the Capital Planning Unit back to Planning and Budget in March 2001, was

essentially seamless. Capital Planning, Physical Planning and Construction and Physical Plant units continue to maintain strong, productive working relationships.

Communications and Technology Services (CATS)

In the fall of 2000, a consultant was hired to act as the Chief Information Officer, reporting to EVC/Campus Provost Simpson, while the campus decides whether this is a position it wants to fill permanently. This individual works closely with CATS management and divisional Information Technology (IT) leaders. Appropriate administrative interactions between the Chief Information Officer (CIO) and CATS includes consultation, needs identification, project prioritization, advocacy and developing accountability measures. While the traditional model is for the central IT organization (CATS) to report to the CIO, the model currently in place at UCSC, where the CIO does not have operational responsibility for CATS, is working well.

The current model enables the CIO to take a campuswide view of IT and is seen as an independent advocate for IT policies, issues and initiatives across the campus. If the CIO has budgetary and operational responsibility for the central IT organization there can be an inherent conflict of interest when the CIO is promoting increases in IT-related expenditures. By not having budgetary and operational responsibility for central IT, the CIO can focus on policy issues and the strategic application of IT across the campus. In addition, instead of being focused on the budget, the CIO is able to have a campuswide perspective.

Staff Human Resources

The March 2001 integration of Staff Human Resources into BAS has been successful. BAS management, through OPA, has been working with the SHR unit, providing among other things, business support. In reviewing the operations of SHR, OPA has identified a number of issues that will need to be addressed in the immediate future.

- The campus would greatly benefit from the implementation of a web-based faculty and staff recruitment management system and this is a key initiative for SHR and BAS for the coming decade. Such a system could substantially streamline the employment process. It is envisioned that the system would manage both the job posting and application data collection components of the process, freeing staff in hiring units to focus on more critical tasks. From a strategic campus perspective, implementation of such a system would make the campus more competitive with other leading edge employers.

- Given its many responsibilities, SHR is understaffed. Although the BAS-OPA has been able to provide some assistance, certain areas such as information technology support remain essentially unstaffed. In order to implement new and improved processes, like the recruitment management system described above, IT staffing will be critical to the unit. To address this issue, BAS has requested the transfer of the FTE associated with the IT-related position which previously reported to the overall Human Resources division. Failure to obtain this funding will seriously hamper SHR's ability to update and improve services to the campus.

Training and Certification Costs

Employees requiring professional certification or licensing, such as architects, fire fighters, police officers, health and safety staff members, auditors, and accountants, hold many critical positions within BAS. In order for these employees to continue providing high quality services to the campus, they must maintain their competency by meeting the continuing education requirements applicable to their professions. Professional development is essential not only to enabling BAS to continue providing quality services, but is also important in recruiting and retaining quality employees. Much of the training required is costly and must be obtained off-campus.

BAS training costs 1999-2000
Percentage of payroll spent on training

Division	Amount	Percentage
Internal Audit	$7,915	2.79%
Materiel Management	$13,255	2.00%
EH&S	$10,868	2.00%
Financial Affairs	$37,898	1.90%
IPMTS	$23,584	1.78%
CATS	$61,970	1.71%
Police	$27,865	1.50%
TAPS	$9,956	1.10%
Physical Plant	$108,120	1.00%
PP&C	$14,349	0.64%
Fire Department	$1,500	0.23%

Average: 1.51%

Scale: 0.00% — 0.50% — 1.00% — 1.50% — 2.00% — 2.50% — 3.00%
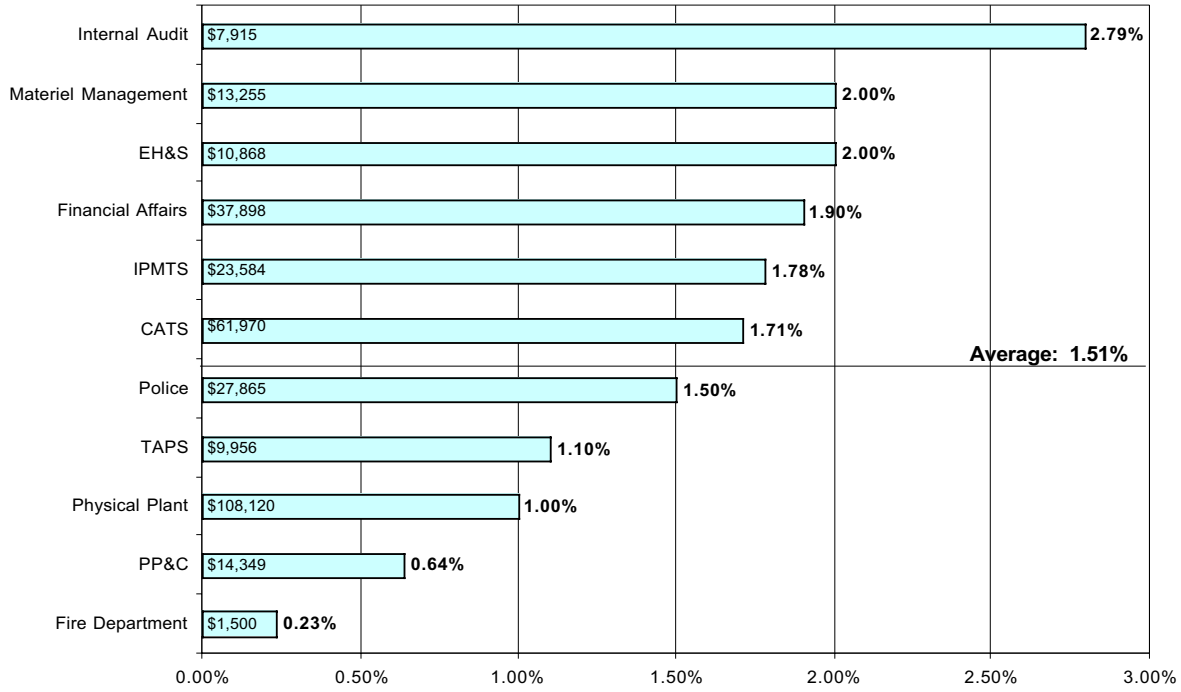
BAS training 1999-2000
Hours spent per FTE

Division	Hours
Fire Department	71.00
Police	70.00
Internal Audit	55.00
EH&S	44.00
Financial Affairs	22.00
PP&C	15.00
TAPS	13.00
IPMTS	2.00

Average: 36.5 hours per FTE

Scale: 0.00 — 10.00 — 20.00 — 30.00 — 40.00 — 50.00 — 60.00 — 70.00 — 80.00
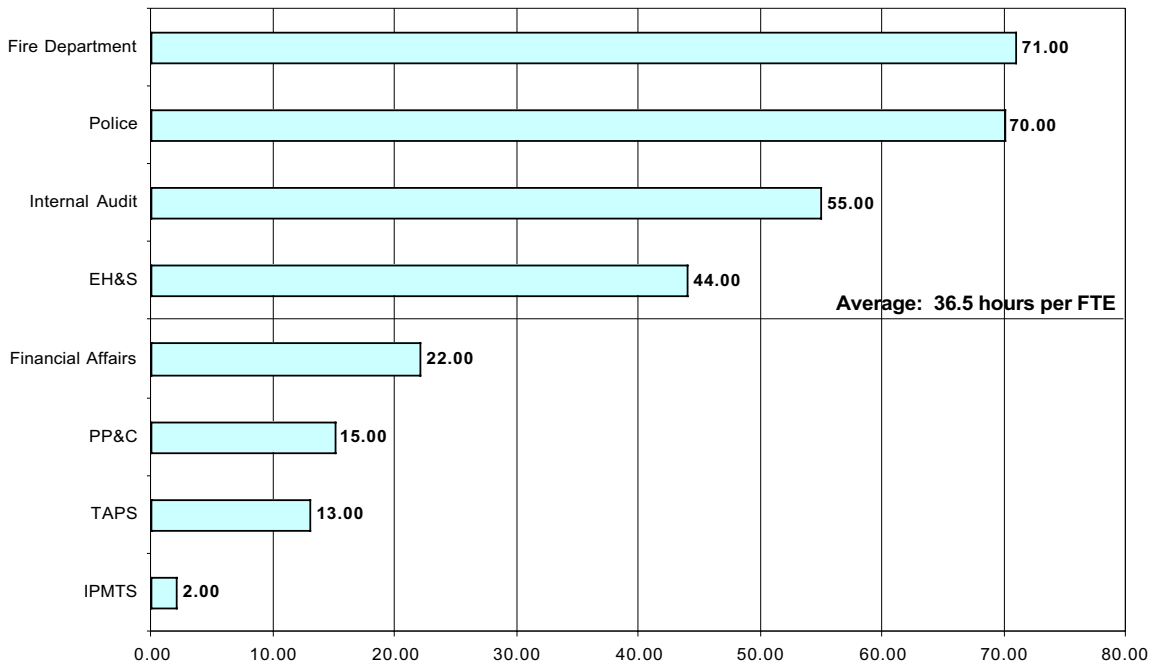
The charts on the previous page illustrate the percentage of payroll BAS units spent on training and the number of training hours per FTE provided by BAS units during the 1999-2000 fiscal year.

Diversity

BAS is committed to making good faith efforts to increase the diversity of its workforce and to fully comply with related federal regulations. To help ensure outreach efforts are expanded and supported, BAS allocates $10,000 annually for targeted recruitment advertising expenses. BAS units are able to request these funds to cover the costs of advertising positions that belong to job groups for which there exists underutilization of women or minorities. OPA reviews all requests to ensure funds are used where they are needed most, taking into consideration the outreach activities of the unit requesting funds. BAS units are required to advertise open positions in at least two of the outreach resources identified if the position belongs to a job group for which there exists underutilization.

In 2000, BAS developed and implemented a web-based exit interview program that, among other things, asks departing employees why they are leaving. This information is used to devise strategies to improve diversity and

performance, and to promote retention. In addition, the data is analyzed each year, allowing BAS to identify strengths and weaknesses in its organizational climate. Results from the analysis are also used to evaluate BAS sub-unit performance and identify problem areas.

In order to make a concerted effort to address the chronic underrepresentation of women and minorities in the technical and skilled job groups, and to attract more applicants for clerical and administrative assistant job series positions, OPA has formed an ad-hoc group with management representatives from Equal Employment Opportunity/Affirmative Action (EEO/AA), PP&C, and SHR. This group is exploring innovative initiatives and outreach to the community seeking new ways to make university employment more accessible through increased applicant pools and additional training opportunities. The information and ideas gathered at these meetings will help guide the design of future outreach efforts and affirmative action goals.

Another way BAS is working on increasing diversity is by using Effective Interviewing!® during the hiring process. By asking applicants questions designed to reveal behavioral competencies, interview teams are able to assess a candidate's capabilities. This allows us to more accurately match candidates to jobs, resulting in more successful hires.

The Role of BAS Units in Supporting the Campus Long-Range Plan

Over the past decade, largely due to increasing demands for additional support services and limited financial resources available to the campus, BAS units have exhibited the ability to adapt to change. BAS is proud of all it has achieved despite having to operate within a constrained budgetary environment. We believe that these accomplishments are indicative of the extent to which BAS has managed well and is prepared to meet future campus needs.

Unit Accomplishments

What follows are notable examples of BAS unit accomplishments over the past few years. We believe they exemplify the ability of BAS to adapt to meet campus responsibilities. This attribute will increasingly be put to the test as the campus and university journey through uncertain budgetary times. But, given its past

track record, BAS is confident that it possesses the proven "nimbleness" to continue succeeding in the future with the support of the campus.

Business Services

IPMTS

- Over the past decade, IPMTS has strategically implemented additional services to the campus, including off-campus sites.

Materiel Management

- In 1995-1996, the Purchasing Department implemented the Purchasing Card (ProCard), a credit card that authorized staff members in campus departments to quickly and easily purchase many commonly needed goods and services. The costs associated with making a purchase with the ProCard are about one-sixth that of traditional means. Use of the ProCard

ProCard Transactions as a Percentage of Total Transactions
(Goal: 50% usage)

Legend: 1999, 2000, 2001, 2002
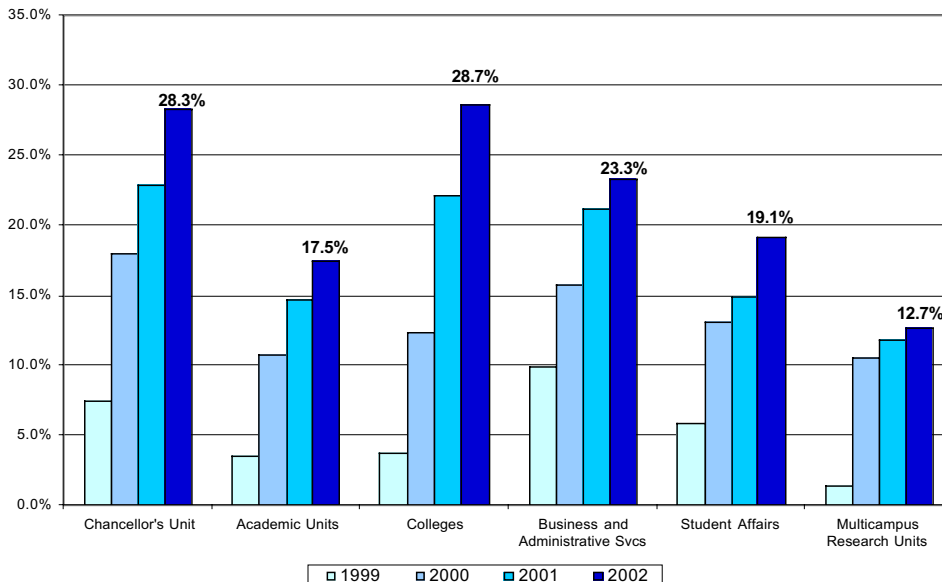
has reduced the number of purchase orders processed by campus service centers by 20%. This occured while the total amount of campus purchases made increased from $75 million in 1995-96 to $115 million in 2000-01.

- The Risk Management Office is implementing a return to work program for injured employees in an effort to reduce the costs associated with work-related injuries and worker's compensation claims.

Staff Human Resources (SHR)

- UCOP continues to decentralize functions to campuses with minimal or no support. Despite existing staffing levels, SHR has been able to address issues that continue to emerge locally (via UCOP or through new laws or regulations) in an environment of increasing collective bargaining activity. The Labor Relations unit has been able to mitigate employee liability costs through effective negotiation of employee disputes.

Financial Services

Financial Affairs

- The Controller's Office continues to implement the comprehensive campus financial management program, including workshops for campus business officers and staff, process risk assessments, and financial management tools for campus business officers. The objective of the program is to maintain a strong financial accountability and control environment for the campus.

- With the implementation of the latest upgrade to the Financial Information System in November 2001, the grant accounting module has been implemented, resulting in improved access to sponsored award financial information by campus service centers and departments, and in the elimination of a large amount of duplicative, manual work associated with billing sponsoring agencies, which is performed in the Extramural Funds Accounting Office.

- The Campus Controller's Office is in the user-testing phase of implementing an online web-based workplace culture assessment survey. This survey is another key component of the comprehensive campus financial management program and will provide the management of campus departments and divisions with a tool to assess the relative strengths in key areas that contribute to a productive and effective work environment.

Internal Audit

- Internal Audit is using technology for data mining and to conduct examinations in a more efficient and complete manner.

Information Technology

CATS

- CATS provides web access phone billing information to students and administrative offices.

- Online registration is now available for student CATS accounts.

Physical Environment

Physical Planning and Construction

- Utilized alternative contracting methods (such as multiple prime contracting) to improve project schedule and budgetary performance.

- Initiated and directed the work of the Growth and Stewardship Task Force to achieve consensus on principles for campus development.

Physical Plant

- As major pieces of campus infrastructure equipment have been replaced, Physical Plant has installed computerized monitoring devices to the equipment, improving the reliability of services and, ultimately, reducing costs.

- The Physical Plant implemented an online web-based work order program that has streamlined the process and improved the ability of campus departments to obtain information.

Safety Services

Environmental Health and Safety

- Environmental Health and Safety is in the process of implementing an integrated safety and environmental management system to improve campus safety and to continue providing quality services at one of the lowest per-person costs of any UC campus.

Police

- Campus Police is engaged in building expertise in dealing with computer-related crimes, which represents a rapidly emerging, substantial campus risk.

Transportation and Parking Services

- Over the past year, Transportation and Parking Services implemented a web-based parking permit application process resulting in substantial cost savings and improved customer satisfaction.

BAS Unit Long-Range Plan Summaries

Ensuring the safety and security of the campus community, being prepared for natural disasters, ensuring the integrity in the public trust, and managing expansion of the administrative and physical infrastructure are among the highest priorities within BAS' strategic responsibilities. Fulfilling these responsibilities over the next decade will require that it receives adequate resources from the central campus. BAS anticipates that the prudent integration of information technology will help contain workload cost growth, by streamlining the delivery of services and improving the quality of services provided. In addition, BAS expects to improve efficiency and effectiveness by taking advantage of economies of scale and eliminating processes and practices that no longer provide appreciable value to the campus. The following is a summary of individual BAS units' long-range plans, all of which embrace these strategic objectives.

Business Services

Materiel Management

Materiel Management consists of a number of sub-units that provide procurement, business contract development, real estate, equipment administration, receiving, moving, workers' compensation and risk management services. Over the past several years, Materiel Management has redesigned processes and implemented new services that have reduced workload in campus service centers without adding additional staff.

Materiel Management has experienced rapid growth in demand for its services. The following chart illustrates just one of these services related to business contracts.

Business Contracts	FY 2000	FY 2001	% increase
# of SAM* software licenses	2	7	250%
Value of business contracts	$567,000	$4,750,000	738%
# of Business contracts POs	37	121	227%
Value of new program contracts	$298,000	$2,663,000	792%
# of new program contracts	22	71	223%

*software being used in the Human Genome Project

The addition of four major programs, the New Teacher Center (NTC), the Educational Partnership Center (EPC), the University of California College Preparatory Initiative (UCCP), and MBEST have had a major impact on purchasing and business contracts. This has resulted in a need to increase staffing and to obtain additional workspace. Both of these needs remain critical challenges to the department.

A key feature of Materiel Management's future plans is the establishment of satellite buyers with several units including Housing, Physical Plant, CATS and the Division of Natural Sciences. The plan calls for the Purchasing Department to provide a portion of the funding for a satellite buyer thereby enabling the host unit to reorganize work assignments and create a buyer position. The satellite buyer is proposed to have purchasing authority up to $50,000 and a reporting relationship to the Purchasing Department, which will undertake responsibility for training and certification. The advantages to the host unit include greater efficiency, improved customer service and responsiveness, local commodity expertise, and a professional on-site buyer.

In addition, if the UCOP e-procurement initiative comes to fruition, Materiel Management will be the system steward and in the forefront of its implementation at UCSC.

Imaging, Printing, Mail and Temporary Support Services (IPMTS)

IPMTS units provide business services to the campus community and the Santa Clara Regional Center ranging from temporary staffing support to the design, production and delivery of printed information. Three sub-units receive limited state support, including Graphic Services, Mail Services, and the IPMTS Service Center. Campus units fully support other IPMTS units by paying for their services. Rates for services provided by these units continue to be equal to or lower than comparable services provided by off-campus vendors. In addition, the rates are highly competitive with charges on other UC campuses.

Over the next decade, IPMTS anticipates that its greatest challenge will be in adapting and integrating emerging technologies into the services it provides to the campus. As it looks to the future, IPMTS is exploring introducing new services, including digital record storage services, and partnering with CATS to provide printing services.

Staff Human Resources (SHR)

SHR is comprised of employment, labor relations, benefits, training and development, consulting and compensation services. SHR endeavors to help the campus recruit, hire and retain the best-qualified and most diverse workforce possible.

The SHR unit objective is to support campus leaders in making UCSC the employer of choice. However, the campus is faced with a number of legacy obstacles such as compensation classification methodology, outdated policies and processes, and increased collective bargaining activity that have hampered our ability to realize this status.

In the future, we envision SHR delivering its core services in a new mode. Technology enhancements will provide campus managers, staff and faculty with access to information, policies and procedures at their desktop. Prospective employees will be able to explore job opportunities at UCSC in new ways. SHR improvements to services will be in line with the New Business Architecture framework and will become the first unit in BAS to receive the NBA re-engineering effort in the form of a Recruitment Management System.

Financial Services

Financial Affairs

Financial Affairs consists of sub-units responsible for providing accounting, financial management, and student business services. The individual units that make up Financial Affairs include the Accounting Office, Campus Controller's Office, Financial Information System, and Office of Student Business Services. The main strategic objective of Financial Affairs is to ensure that the campus fulfills its financial stewardship responsibilities to all parties of interest that support it. Due to the nature of its work, nearly all of the financial support received by Financial Affairs is from state funding. It receives a small portion of funding in the form of contract and grant overhead funds, various fees, and administrative cost allowances.

Ensuring that the campus upholds its financial stewardship responsibilities, by maintaining a strong financial control and accountability environment, will remain the primary objective of Financial Affairs. Financial Affairs antici-pates marked growth in the following areas over the next ten years: sponsored award administration, plant accounting, student account and loan administration, campus financial risk management resulting from policy and process simplification, cash and credit card payment handling, and accounting resulting from the eventual implementation of electronic commerce.

The prudent incorporation of technology into campus financial transaction processing will be a major focus of Financial Affairs over the next ten years. This includes implementing direct deposit of vendor payments, including em-ployee travel reimbursements; automating the travel process; incorporating built-in controls in financial transaction processing systems; and providing web-based access to student account information. Beyond this, efforts will focus on simplifying campus financial processes and developing competent, knowledgeable campus business officers, service center managers, and staff that can work well within these processes. Much of this will be accomplished through providing training and other support resources.

Internal Audit

Internal Audit is an important function at each UC campus, and the Regents require this effort on each campus. Critical responsibilities include ensuring the appropriate and effective use of University assets and ensuring the integrity of the campus financial information. To do this, Internal Audit conducts examina-tions of various campus activities and pro-grams, identifying risk, control, and account-ability issues, and making recommendations that ensure continued compliance with univer-sity policies and governmental laws and regulations. Internal Audit provides consulta-tive advice to a variety of campus units. This advice ranges from identifying opportunities to improve efficiency and computer security, to ensuring compliance with tax and contract and grant regulations.

Currently, only the Internal Audit Office at the Santa Barbara campus has a higher ratio of staff to auditable entities for any of the campuses systemwide. UCSC has the lowest number of staff systemwide, although we have the same audit requirements as larger campuses. As new programs evolve and major sponsored projects and information systems upgrades are imple-mented, Internal Audit is needed for routine operational and compliance reviews, advisory services and investigations. Special projects during the next ten years will include review of major capital projects, and responding to new federal mandates such as the renewal of the campuses indirect cost rate in 2003-2004.

Information Technology

Communications and Technology Services (CATS)

CATS is responsible for delivering information technology services (voice and data) to a growing campus in support of academic and administrative activities. CATS manages fourteen instructional computing labs, and provides support to faculty involved in elec-tronically enhanced or mediated instruction.

In recent years, CATS has shown a deficit in state-funded operations, which has been the subject of extensive internal scrutiny and two external reviews. The deficit was due, in large part, to one-time and ongoing costs associated with the migration from batch-processed to online, real-time information systems (e.g., FIS and the Payroll Personnel System), as well as support for users as new systems came online. In conjunction with the campus CIO, CATS management, BAS, and the Planning and Budget Office have developed strategies to eliminate the unit's operating deficit through a combination of position elimination, expense reduction and the allocation of new funding coupled with internal restructuring. With resolution of the deficit situation, and further

restructuring, CATS will be poised to build a stronger centralized IT infrastructure to meet the technology demands anticipated in the next ten years.

In light of the CATS deficit, it was necessary to postpone critical disaster preparedness and security measures related to information technology. However, CATS is now in the process of developing and implementing an information technology disaster recovery plan for mission critical applications and services. Mission critical services include e-mail, campus web services, and name resolution services. Mission critical applications include the Student Information System/Academic Information System (which will replace SIS and be operational in 2004-2005), the Financial Information System and the Narrative Evaluation System. The IT disaster plan is also envisioned to provide for off-site storage, and stand-by power. If central facilities and/or resources are damaged or are unavailable during natural or man-made disasters, the campus must have defined and tested plans in place to ensure that mission critical IT services and applications continue within a reasonable timeframe.

In the next decade the campus can expect to see revolutionary changes in the use of information technology in support of instruction, research, student services and business processes. Information technology changes rapidly and what we know now is that students will expect to have ubiquitous access to courses and instructional materials through a combination of high-speed network connections and wireless devices. Similarly, faculty, students and staff will expect to have access to information, services and business processes through personalized portals that will be tailored to meet their individual needs. We expect that voice, data, and video communications will be consolidated into a single network that will demand ever-increasing bandwidth.

Physical Environment

Physical Planning and Construction (PP&C)

PP&C, which includes the Campus and Community Planning Office and the Environmental Assessment Group, is responsible for the planning, design, project administration, and construction of new and renovated campus facilities. All of these services are provided in a manner consistent with campus academic plans. The unit is funded through a mix of state and recharge funding generated through its project-related activities.

Planning and project development are resource-intensive activities. University policy requires that capital projects be self-supporting. Only limited central campus funding is provided to support certain essential "core" functions. Campus core funds support only 1.4 of 7.5 existing planning positions; these are intended to cover general planning coordination, including planning committee support, LRDP administration, and mitigation monitoring. This requirement applies even in the absence of any significant capital program. Capital projects, through the imposition of a recharge, will continue to provide the bulk of funding supporting PP&C's project management activities. Project accounts will continue to be established and staff members will charge time to them, just as they do for design and construction projects. This allocates the costs to appropriate fund sources, allows close tracking of planning time and expenses, and assures compliance with federal guidelines requiring consistency in recharge methodology.

Projections of staffing needs are rough approximations at best, since the ratio of staff to project volume is not a linear one; the number, size, and type of the projects will determine planning staff levels and project management requirements. Looking again to recent history as a guide, PP&C's project management staff has grown from a low of 22 in 1994-95 to its

current level of 38, nearly doubling in size. It is estimated that by 2005 PP&C should grow to about 55 staff members, an increase of nearly 50%. Planning staff numbers are more difficult to assess, since Campus and Community Planning was established only two and a half years ago. When first established it consisted of 2.5 FTE positions. It currently has 7 positions filled and plans to grow to 9 FTE during 2001-02. With the ambitious planning agenda described above, it is anticipated that it should grow during 2002-03 to about 13.5 FTE at its peak. Preparation of an update to the LRDP and the accompanying environmental impact report will be a major effort lasting three to four years. Its timing is particularly important since we intend to coordinate its development with the city's work on a new General Plan. Once those documents are in place, we expect that planning staffing could be reduced to about 11 positions.

Possible new initiatives to be directed by PP&C include the following:

• *Current and Near Term Planning Studies* Previous PP&C budget proposals have presented in some detail the need for a wide range of planning studies. Some have been funded, others have been deferred. All are necessary. In the short term they are important to support building siting decisions. In the long term, combined with the work of the Growth and Stewardship Task Force now underway, they will establish the basis for a major update to UCSC's LRDP.

• *Long-Range Development Plan Update* As we outgrow the current LRDP, it will need to be updated, either with a wholesale revision or via coordinated revisions to its constituent elements. This process is likely to take three to four years, probably between 2002 and 2006. Based on the limited knowledge now available, we estimate that the cost of consultant and legal fees could be in the range of $2 to $3 million.

• *Sustainability Audit* In addition to PP&C's planning initiatives was a proposal focused on campus sustainability. The vision for the campus set forth in the *Millennium Committee*

Report pledges that "UCSC will plan its growth and development with attention to sustainability…" "Sustainability" can mean many things in the context of campus planning and development, from effective transportation systems and alternatives to waste reduction and recycling programs during building construction, and will be of increasing concern, particularly given the current state energy situation. As a first step, we propose a "sustainability audit" (roughly estimated at $150,000) to review current campus practices, publicize successes and achievements, and suggest improvements. This effort could begin immediately and would be sponsored jointly with Physical Plant.

• *Continuing Planning Studies* Once the LRDP is updated, it will require continuing review and "maintenance" in response to evolving circumstances. The particulars of this effort will only be clear as work on the LRDP revision moves forward. While much of this work will be able to be accomplished with in-house planning staff, assistance of consultants, technical experts, and legal counsel will be required. We suggest that a budget of $250,000 to $350,000 per year (in current dollars) be reserved for such studies.

Physical Plant

Physical Plant is a complex and diverse organization whose mission is to provide services for the safe and efficient operation, maintenance and repair of the physical assets of the campus including buildings and building systems, grounds, sanitation and utility infrastructure to both state and nonstate supported areas. The unit consists of work management, building and utility services, grounds, and custodial services. The unit is responsible for deferred maintenance, operation and maintenances of plant (preventative and routine maintenance), recharge operation for auxiliary support services, and purchased utilities. Physical Plant processes more than 21,000 work orders per year, provides 160,000 hours of recharge services, and delivers $5 million dollars worth of electricity, gas, sewer, and fresh water to the

campus.

In 2001-2002 the Physical Plant will receive an estimated $1.5 million in bond and $280,000 in state deferred maintenance funding. This funding has enabled the campus to address the highest-priority projects.

It is projected that workload will increase for the operation both as a result of aging facilities and the addition of new buildings. The Physical Plant will move to different shifts and after-hour and weekend operations prior to 2005 in order to provide services with less interruption and quicker response time for after-hour emergencies.

Pages A-4 through A-7 in the appendix contain prioritized listings of Physical Plant deferred maintenance projects (funded and un-funded).

Safety Services

Environmental Health and Safety (EH&S)

EH&S provides health, safety and environmental protection programs designed to reduce or eliminate workplace accidents and injuries, workplace illnesses, property loss, and unintended environmental degradation. The unit depends upon senior management support, faculty participation, and ongoing staff awareness to be effective. The current regulatory climate and workload associated with campus growth further increase the need to integrate efficient EH&S programs into the ways the campus conducts its programs and business.

EH&S functions, to be effective, will need to be integrated as a campuswide network of interconnected people, policies, departments, behaviors and processes. Only then will the campus be able to maximize keeping workers and the environment free from harm, while minimizing compliance risks from external agencies. This is particularly true of laboratory safety program obligations for which EH&S provides indirect oversight as well as the injury prevention efforts conducted at the managerial level. EH&S by necessity must rely on coop-

eration and partnerships with the divisions responsible for implementing and administering these programs directly.

The campus is currently undergoing our first Environmental Protection Agency (EPA) self-audit compliance initiative that may have significant consequences for the campus. While we are optimistic about our performance, monetary penalties associated with resultant findings may be significant and associated supplemental environmental projects costly. The audit will result in both short- and long-term implications for EH&S and the campus. Short-term issues will involve a large shift in EH&S resources to prepare for and conduct the audit. Long-term, EPA has an expectation that a safety and environmental management system will be put in place at each campus to ensure ongoing compliance.

The campus's core obligations and accountability for EH&S functions have historically been on the rise and it is predicted this trend will continue through the 10-year planning period. In addition, it is likely regulatory standards and compliance obligations will become even more stringent over time. EH&S staffing levels are currently inadequate to meet this demand. Finding experienced staff is difficult due to the unique skills necessary to fulfill both the technical and hands-on implementation requirements of the job duties. EH&S has evolved into a technology intensive function for data and information management, requiring new tools to evaluate and control workplace hazards. Technology enhancements will continue to be an important element for maximizing personnel resources and improving effectiveness. Over the past ten years EH&S has implemented technology solutions using internal resources, however it will be necessary to have access to external resources such is the campus directory to keep data current and track compliance obligations.

The charts on the next page show comparisons of EH&S unit costs and staffing throughout the UC system.

Number of faculty/staff/students per EH&S FTE
A systemwide comparison

EH&S cost per faculty/staff/student
A systemwide comparison
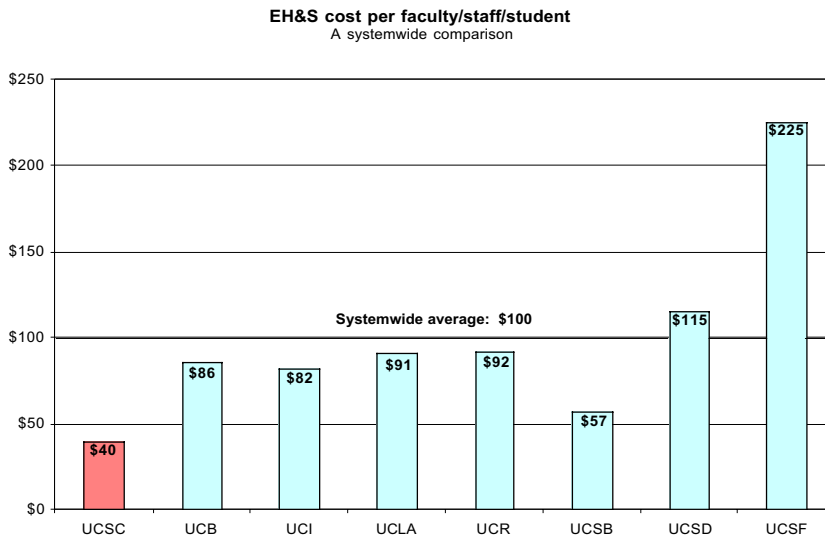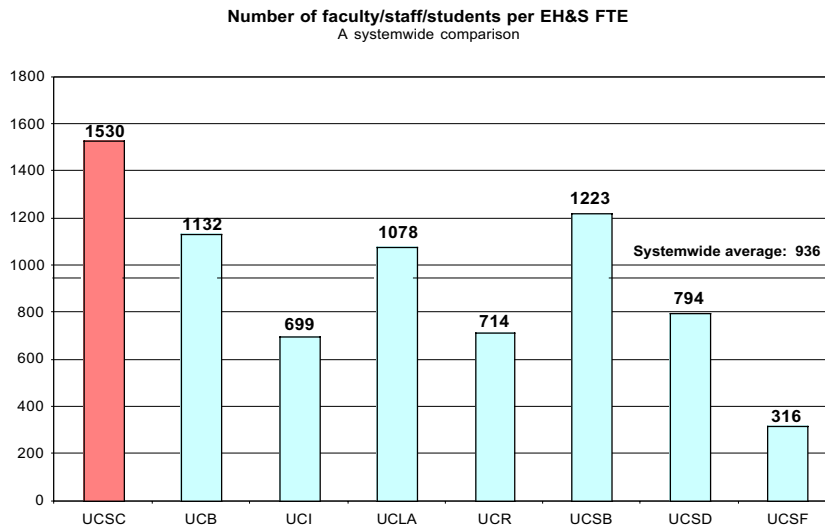
Fire Department

The Fire Department is an emergency service unit that is heavily regulated by outside agencies. CAL Occupational, Safety and Health Administration (OSHA) requires that a minimum of four firefighters must be at the scene of a structure fire before an entry is attempted (e.g. the "two in, two out" rule). In addition, the campus's own Environmental Impact Report that accompanied the 1988 Long-Range Development Plan identified a series of mitigation measures, one of which mandates the campus's Fire Department to provide sufficient firefighting staff and equipment to fulfill its role as a first response unit and to respond to more than one life safety emergency at a time.

In 2001, the long-awaited Assistant Fire Chief position was filled. One of the primary responsibilities of this position is to promote a state of readiness at UCSC for responding to emergencies. The objective of the Emergency Response Program is to prepare and educate the general campus population regarding emergency response procedures, and to develop and maintain relationships with off-campus agencies for possible future mutual aid. Disaster preparedness has always remained among the highest priorities in BAS and funding has been provided to the best degree possible. Since 1995, ongoing training has continued in the form of building coordinator trainings, EOC

drills, and an executive EOC training session. As new disasters and catastrophic events occur, the fire service is consistently looked upon to provide emergency services to protect and serve the campus.

The campus Fire Marshall, designated by the State Fire Marshall, is responsible for the timely review and approval of campus construction plans and inspections of new construction projects. At Santa Cruz, the Fire Chief is this designated individual. Beyond all management responsibility for the Fire Department, the chief is expected to conduct all plan checks and inspections according to stringent, state-mandated guidelines. Although the Fire Department has been a high priority for internal BAS funding (including new workload allocations, new OMP funding and internal reallocation of existing resources), these sources alone are insufficient to address the significant needs of this program.

In addition to natural disasters and other emergencies, the aftermath of September 11th has created a heightened sense of concern about crimes against humanity, including biological and chemical releases. Our need to be proactive in preparedness has never been greater.

Fire suppression capabilities and the resources needed to operate effectively and safely are vigorously regulated by federal and state agencies. New "emergency operations standards" that were merely accepted as industry practices are now being forced into law with severe penalties if violations occur. These regulations and the corresponding staffing needs are the most challenging issues the Fire Department faces over the next ten years in providing an aggressive fire prevention and incident management program.

University Police

This unit provides basic safety patrol services and is responsive to the unique needs of the UCSC environment. Its greatest challenge remains the adequacy of its physical space, which inhibits the department's ability to recruit new officers and other support staff to keep pace with a growing campus. Like EH&S and the Fire Department, the Police Department is funded almost entirely with state funds, with the exception of parking-related enforcement activities, which are supported by parking fines.

Currently, the campus has a ratio of one police officer per 809 students. The national average for police population to students on campuses is one officer per 666 students. It is the long-term goal of the unit to have one officer per 700 students, which more closely reflects the national average. UCSC has one officer per 374 residents, the lowest number of officers per resident in the UC system. By 2005-2006 it is expected the campus will have 6,300 students that reside on campus. Although many colleges have a more urban setting than UCSC, most have a smaller proportion of on-campus residents. Thus, UCSC's 24-hour student population is large by comparison to other campuses and this necessitates staffing levels appropriate to respond to the needs of evening residential population and evening and weekend events.

Police Department staffing levels are minimal given the size of the campus and the number of overall campus residents (currently 5,617). In light of campus growth, the Police Department will need to increase staff in order to safely respond to the wide variety of situations that a small city would encounter. In addition, it is critical to engage in proactive services such as traffic enforcement, crime prevention and community outreach. The police response time must be in direct relation to the urgency of the situation, there must be enough officers to control the situation, and the officer must possess the necessary skills to respond effectively. A major event that requires extra attention such as a complicated investigation, serious crime, or threats of terrorism, and the public concerns for safety demand a commitment of adequate resources.

The City of Santa Cruz has requested that UCSC police provide traffic enforcement in the upper westside neighborhoods of Santa Cruz, and provide foot patrols and liaison with the downtown student population.

The campus anticipates the construction of a new Emergency Response Building in 2005. This new facility will solve many problems experienced by the Police Department due to lack of specific space uniquely required by a Police Department such as showers, locker rooms, interview rooms, evidence handling and storage facilities, and custody holding areas. The facility will bring together all police functions including the Emergency Dispatch Center, which is currently located in the basement of the Communications Building. In addition, the facility will house an Emergency Operations Center, which is needed in the event of a disaster or critical incident. This new EOC will be equipped and ready to activate in any emergency, will provide adequate space for not only emergency response, but also for senior administration who need specialized work space in the event of a disaster. Funding and completion of this project is critical to the campus's emergency preparedness capability.

Public safety responders use an 800 MHz radio system and unfortunately coverage in the northern, undeveloped portion of the campus is very poor. Estimates for providing complete coverage of the area are over $600,000. Even without further development in that area of the campus, improved radio coverage is needed for public safety units. Constructing more facilities in the northern campus will make these improvements critically important.

Officer salaries have been increased in the last few years through collective bargaining and the BAS allocation process. The cost of living in Santa Cruz County is an obstacle for all local police agencies, exacerbated by the higher wages paid to police officers in the Santa Clara County ($1,000-$3,000/month more than UCSC officers). The police department has not been able to recruit officers from other local agencies in several years as the salaries at UCSC are estimated to lag the market by 14.2%. Campus police officer retention has been stable, but police officer recruitments are very problematic taking up to 18 months or longer to hire qualified officers. It is important to note that once a police officer is hired, the officer must complete a three-month intensive field-training program before being able to work independently as a police officer on campus. Realistically, it takes another year beyond the training program before the new officer is familiar with the campus culture, regulations, and population.

The "Reverse 911" (brand name) system enables a public safety unit to dial multiple phone numbers at one time and deliver recorded messages. The Dispatch Center would pre-program phone numbers in batches (e.g. the Chancellor's Cabinet, CAO's, Building Coordinators, off duty police officers or firefighters), and with the touch of a button, would dial all the programmed phone numbers. Designated individuals can pre-record a message that is played when the phone is answered. This system can be used to quickly notify selected groups about evacuations, hazardous conditions, road blockades and emergency meetings. We hope to install such a system at UCSC in the near future.

With the ever present possibility of a major event requiring extra attention such as a complicated investigation, a rash of crime, or the current threat of terrorism and public concern for safety, an investment in the UCSC Police Department must be made in the coming decade.

Transportation and Parking Services (TAPS)

TAPS reports, on an administrative basis, to the Police Chief. The unit is responsible for meeting the growing circulation, transportation and parking needs of the campus. An equally important objective is the attempt to minimize transportation-related impacts on the local community as the campus grows. TAPS has implemented many helpful and cost-effective alternative transportation programs such as the campus carpool and vanpool programs; subsidized Santa Cruz Metropolitan Transit District (SCMTD) transit passes for faculty and staff, and bicycle programs.

TAPS is funded through student transportation fees, parking permit fees and, to a lesser extent, grants for specific programs and transportation improvements. TAPS must take into account state and federally mandated air pollution thresholds, which place greater reliance on the introduction of transportation management alternatives.

Continued expansion and improvement of TAPS services and programs will take place in response to campus growth. The increase of student housing will generate a greater demand for on-campus transit services and will require an expansion of between 70% and 100% in the next ten years over current operating levels.

Future campus transit service expansions are intended to include more frequent service to Long Marine Lab, expanded day and night shuttle service during Summer Session and an expansion of the Disability Van Program.

TAPS is facing many challenges brought on by projected growth. The demand for parking is greater than ever while new construction will place buildings on some of the existing parking lots, further depleting the number of available spaces. This expected loss of parking inventory coupled with an increased demand for parking will require creative and costly solutions for accommodating cars and providing transportation alternatives for the campus community.

The BAS Internal Economy

Analysis of Resources

In 2001-02, BAS received 16% of overall campus funding, 15% of total campus state funding, and generated 66% of total campus recharge and fee funding. In addition, BAS employs 27% of all non-academic campus staff, based on full-time equivalent figures (FTE). With these resources, BAS maintains the physical and administrative infrastructure that enables the campus to pursue its teaching, research, and public service mission. From maintaining the extraordinarily beautiful grounds and facilities of the campus to ensuring that the funding provided by taxpayers and donors is accounted for accurately, BAS units are continually seeking ways to optimally align the services it provides to the needs of students, faculty, staff, and other supporters of the university.

The following chart depicts campus and BAS sources of funds for fiscal year 2001-2002:

Source of funds	Campus budget	BAS budget	BAS as % of campus
State	$166,000,000	$24,786,486	15%
Recharge and fees	$52,700,000	$34,835,297	66%
Registration Fees	$81,400,000	$282,000	0%
Other	$79,900,000	$813,294	0%
TOTAL	$380,000,000	$60,717,077	16%

The next chart shows campus and BAS non-academic staffing levels for fiscal year 2001-2002:

	Campus	BAS	BAS as % of campus
Staff FTE	2,285	627	27.40%

41% of the BAS budget is state-funded, 57% is derived through recharge and fees, and 2% comes from other sources. The following chart depicts each unit budget profile for 2001-2002:

Unit	Staff FTE	State funding	Recharge and fees	Other	Total	Percent of total BAS funding
CATS	85	$4,092,783	$8,280,662	$173,000	$12,546,445	21%
EH&S	10	$554,255	$15,646	$332,892	$902,793	2%
Financial Affairs	49.5	$2,498,169	$359,341	$66,144	$2,923,654	5%
Fire Department	16	$900,424	$75,509		$975,933	2%
IPMTS	40	$169,245	$5,144,842		$5,314,087	9%
Internal Audit	5	$256,991		$136,302	$393,293	1%
Materiel Management	24	$796,874	$308,110	$78,140	$1,183,124	2%
Physical Planning & Const	32	$319,820	$3,365,017		$3,684,837	6%
Physical Plant	251	$11,299,325	$8,924,781	$282,000	$20,506,106	34%
Staff Human Resources	31	$1,483,568	$320,330	$21,816	$1,825,714	3%
TAPS	34		$7,491,900		$7,491,900	12%
University Police	42	$1,649,009	$549,159		$2,198,168	3%
Vice Chancellor/OPA	7.5	$735,862		$5,000	$740,862	1%
Collection Center		$30,161			$30,161	
TOTAL	627	$24,786,486	$34,835,297	$1,095,294	$60,717,077	100%

The following chart details how the overall BAS budget is currently allocated to the five thematic groupings of units:

Thematic area	Units	Funding (in millions)	As a % of BAS funding
Business Services	IPMTS, Materiel Management, SHR	$8.3	14%
Financial Services	Financial Affairs, Internal Audit	$3.3	6%
Information Technology	CATS	$12.5	21%
Physical Environment	PP&C, Physical Plant	$24.2	40%
Safety Services	EH&S, Fire, Police, TAPS	$11.6	19%
TOTAL		*$59.9	100%

*VC BAS operating and collection center not listed in thematic groupings of units.

Recharge and Fee Activities

Over the past decade, campus departments have demanded many services from BAS for which core funding has not been provided. To pay for such services, BAS has proposed a variety of funding models, including recharging services, fees for services, and outsourcing of services. Among the BAS units that derive funding through recharge and fee funded services are CATS-Network and Telecommunications Services, TAPS, Printing and Mail Services, Physical Planning and Construction, Physical Plant, Moving Services, and Surplus Operations.

Over fifty percent of total BAS funding has been derived from non-core funded recharge and fee services. UCSC has had to be among the most aggressive of the UC campuses in funding some of its services through recharge and fees, due to the lack of available core funding sources. The table on the following page reveals that, among the administrative divisions on four comparable UC campuses, Santa Cruz derives the highest proportion of its funding from non-core funding sources.

UC Santa Cruz Comparative Campus Recharge Funding Analysis
Fiscal Year 1999-2000
(costs given are in thousands of dollars)
Data source: UC Annual Financial Report - Campus Schedules, fiscal years 1997-98 to 1999-2000

	Fiscal operations	General Admin. Svcs.	Logistical Services	Op. & Maint. of Plant	TOTAL
Santa Cruz					
Expenditures	$4,958	$9,227	$12,621	$36,133	$62,939
Recharge recovery	$371	$4,206	$9,926	$18,605	$33,108
% recharge	7%	46%	79%	51%	53%
Santa Barbara					
Expenditures	$6,296	$9,089	$15,294	$44,133	$74,812
Recharge recovery	$630	$4,339	$11,779	$20,715	$37,463
% recharge	10%	48%	77%	47%	50%
Berkeley					
Expenditures	$13,603	$41,185	$60,604	$100,571	$215,963
Recharge recovery	$1,425	$19,880	$46,829	$37,425	$105,559
% recharge	10%	48%	77%	37%	49%
Riverside					
Expenditures	$3,494	$9,895	$14,698	$23,877	$51,964
Recharge recovery	$4	$300	$10,582	$8,106	$18,992
% recharge	0%	3%	72%	34%	37%

In analyzing these statistics, it is important to note that the volume of services provided by a recharge unit significantly influences recharge rates. Where a recharge unit has substantial fixed costs such as major equipment or major equipment maintenance contracts, generally speaking, higher volumes of service allow for broader allocation of fixed costs, resulting in lower recharge rates. This effect is most pronounced on UC campuses with a high proportion of extramurally funded activities. In these situations, extramurally funded activities absorb a relatively higher proportion of the total costs of the recharge unit. Often times on these campuses, recharge units, particularly those with high fixed costs, are able to charge comparatively lower rates.

Recharge rates are developed in accordance with applicable university and federal policies and are reviewed and approved by the Direct Costing Committee on an annual basis. The Direct Costing Committee membership is comprised of representatives from throughout the campus community who are customers of the services provided. Currently, the committee membership includes the Assistant Vice Chancellor of Planning and Budget (Chair), the Assistant Director of Planning and Budget (Vice Chair), and representatives from Housing, the colleges, Accounting, University Extension, Sponsored Projects and various academic divisions.

BAS units make continuous efforts to contain operating costs that can be controlled. Despite these efforts, costs will naturally increase as a result of continually increasing labor and supply cost systemwide and in the marketplace. Staff providing recharge services receive the same merit awards and cost of living increases that are provided to other campus employees. Since these additional costs are not funded centrally, they must be recovered through the recharge process. In the absence of providing central funding or increasing the volume of services provided, recharge rates will rise. Unfortunately, many core-funded campus units do not always receive sufficient funding augmentations to pay for increased costs associated with recharged goods and services. In addition, there is an administrative cost for administering recharge programs. We believe that this situation creates a contentious environment between BAS recharge units and their customers. Without a complete understanding of the basis for recharge rates it is not easily understood that rates are not set just by units involved, but are reviewed and approved outside of BAS. A short term goal of BAS is to review in depth, with recharge units and campus customers, the current recharge economy. We wish to promote a better understanding of the methodology used for

recharge, and are open to exploring ways in which recharge operations for the entire campus may be improved.

The following chart provides examples of how recharge rates at UCSC compare to rates charged at other UC campuses:

University of California Recharge Rate Comparisons
2001-2002

Recharge Activity	UCB	UCD	UCI	UCR	UCLA	UCSB	UCSC	UCSD	UCSF
CATS									
Network Connections	276/yr	393/yr	Core Funded	In Telcom Rate	350/yr	In Telcom Rate	256/yr	In Telcom Rate	not available
Telephone	300/yr	324/yr	204/yr	564/yr	418/yr	312/yr	306/yr	720/yr	305/yr
IPMTS									
Mail Services	80/month	n/a	115/month	56/month	n/a	Fully State Funded	45/month	40/month	45.50/ month
Physical Plant									
Bldg Maint Wkr I	59.30/hr	n/a	52/hr	39.87/hr	n/a	n/a	49.85/hr	n/a	67.80/hr
Custodial Services	27.65/hr	n/a	33/hr	21.89/hr	n/a	n/a	23.50/hr	n/a	37.75/hr
PP&C									
Proj Mgr/Arch/Eng	97/hr	82/hr	67/hr	83/hr	60-91/hr	76/hr	86.42/hr	89/hr	131.62/hr
Inspector	93/hr	82/hr	n/a	65/hr	n/a	n/a	75.06/hr	89/hr	85.26/hr
TAPS									
Vehicle Rental-Compact	n/a	43.35/day	n/a	n/a	42/day	28/day	27.50/day	40/day	n/a
Vehicle Rental-Midsize	n/a	43.35/day	n/a	n/a	58/day	28/day	36/day	46/day	n/a
Parking Rates	98/mo	41/mo	55/mo	41/mo	84/mo	40/mo	57/mo	57/mo	75/mo
Staff Human Resources									
Technical Training (web software)	Campus Funded	Campus Funded	Campus Funded	Campus Funded			300/person	Campus Funded	895/person
Professional Development Workshops	Campus Funded	Campus Funded	Campus Funded	Campus Funded			95/person	Campus Funded	105/person

OPA works closely with BAS units in the development of recharge rate proposals. It reviews all rate proposals and closely monitors recharge costs and rates. Efficient service delivery and effective cost management are key performance measures to which managers of BAS recharge operations are held accountable. In addition, for project-related work, emphasis is placed on accurately estimating costs and meeting project milestones. BAS collaborates with recharge ratepayers and is committed to maintaining a productive dialogue with them, particularly when significant rate increases are anticipated.

We are aware it is not enough to say our rates are among the lowest of the UC campuses. We must also strive for accurate estimating of jobs and improve our record for timely service delivery. BAS leadership is making every attempt to manage these cost elements in order to maintain reasonable and justified recharge rates. We will continue to pursue campuswide consultation for high dollar costs that may significantly affect rates and impact customers.

Recharge methodology is used for many reasons, including managing usage, and is the business norm for certain activities (telephone, mail etc.). Recharge methodology is also applied to services that are not used by the entire campus but by selected units or on an as-needed basis, such as moving, printing, media, temporary staffing, and fingerprinting services.

In the coming years, use of the recharge mechanism to fund an increasing number of basic services needed by virtually all campus departments, should be re-evaluated. In our opinion, the current funding methodology does not optimally support campuswide needs. We believe it is more costly for units providing basic, campuswide needed services to function as recharge operations

than to function as centrally funded operations. These additional administrative costs associated with recharge activity are ultimately borne by departments who must pay for services. In addition, in the coming decade it is our hope the campus will pursue a more equitable methodology of allocating administrative recharge and contract and grant overhead funding and BAS will continue to play a role in addressing this issue.

Outsourcing Services

Over the next ten years, one way to contain the costs of providing academic support services is to allow third-party vendors to provide these services. In certain instances, third-party vendors may be able to provide services at a lower cost and/or more efficiently. In pursuing this strategy, it is important to comply with legal and contractual requirements for outsourcing services currently performed by university employees. Under supplemental budget language for 2001-2002, exceptions may only be granted if a 30-day notice that includes a full justification is submitted to the state legislature and the governor. The exact language related to these exceptions is provided below:

"Examples of instances in which an exception may be considered appropriate include those situations in which there is a need to obtain special expertise, services, and equipment which are not available

internally; or situations in which it is financially necessary to do so. However, where financial necessity is the reason for the exception, before contracting for a service in which activities are fully or partially supported from state funds, it is the intent of the Legislature that the university first seek funding from the Legislature to address the financial necessity. Notice to the Governor and the Legislature must include a detailed justification for the exception. Furthermore, until September 30, 2002, it is the intent of the Legislature that, in such instances where an exception is made and a UC employee is displaced, the university should make available, at a comparable salary, another UC job for which a displaced employee is qualified. It is the intent of the Legislature that should an exception to the policy be granted and UC contract out for services, UC will report to the Legislature the number of contracts, the estimated savings to the UC during the contract period, the reason any savings were realized, the wages and benefits contractors paid to their employees, information on the sub-contractors' labor record, and the number of instances in which such contracts were subsequently terminated and services were once again performed by UC employees."

Despite this obstacle, BAS believes that there will be opportunities in the future to consider outsourcing new services. In particular, consideration should be given (including a cost-benefit analysis) in any decision involving the establishment of a new program or operation.

Projected Growth in Workload Costs

In the letter dated December 22 from Campus Provost/Executive Vice Chancellor Simpson, regarding the Long-Range Planning and New Budget Allocation Process, the following estimated general (state) funds available from enrollment growth were identified for BAS:

BAS Allocation Ranges	Range to 2005-2006		Range to 2010-2011	
	Minimum	Maximum	Minimum	Maximum
General Services	$1,488,000	$1,860,000	$2,742,400	$3,428,000
CATS	$660,000	$825,000	$1,214,400	$1,518,000
TOTAL	$2,148,000	$2,685,000	$3,956,800	$4,946,000

Note: Allocation ranges were adjusted from 12/22/00 letter to reflect the reorganization of SHR to BAS.

The March 15, 2001 BAS Long-Range Plan Executive Summary identified data factors to project growth in workload costs. Using data related to these factors, BAS units projected workload costs through the next ten years. The following chart summarizes actual total BAS ongoing operating costs for the fiscal years 1995-96 through 2000-01 and projected ongoing BAS operating costs for 2001-02, 2005-06, and 2010-11. In addition, this chart displays the BAS budget by Operation and Maintenance of Plant (OMP) which is pass-through funding that the campus receives for purchased utilities, utility operations, building maintenance, refuse and custodial services.

Funding Type	1995-1996	1997-1998	1998-1999	2001-2002	2005-2006 (estimated)	2010-2011 (estimated)
State (non-OMP)	$6,883,525	$7,798,415	$8,459,488	$13,487,161	$16,172,161	$21,118,161
State (OMP)	$9,207,808	$10,173,399	$10,544,567	$11,299,325	TBD	TBD
Other	$25,766,698	$28,099,791	$31,764,356	$35,930,591	TBD	TBD
Total	$41,858,031	$46,071,605	$50,768,411	$60,717,077	$78,999,736	$90,305,916
Staffing (FTE)	484	504	541	627	831	956

Projections do not include inflation and are based on today's dollars.
$3 million of the growth in budget from 1998-2001 is attributable to the realignment of SHR,
Student Business Services, and the Internal Audit Office to BAS from other divisions on campus.

The following chart summarizes projected BAS operating costs for 2001-02, 2005-06, and 2010-11, and the percentage change from the 2001-02 base year (dollar figures in millions):

Area	2001-02	2005-2006	% Change	2010-2011	*% Change
Business Services	$8.3	$11.3	36%	$12.6	52%
Financial Services	$3.3	$4.8	45%	$5.5	67%
Information Technology	$12.5	$16.5	32%	$18.7	49%
Physical Environment	$24.2	$29.6	22%	$33	36%
Safety Services	$11.6	$16	38%	$19.7	70%
TOTAL	$60	$79	32%	$90	50%

Projections do not include inflation and are based on today's dollars.

The next page shows BAS' operating projections by unit.

In reviewing the projected growth in workload costs and FTE in BAS, it is apparent that the needs resulting from campus growth will continue to substantially outpace projected budgetary allocations provided to BAS to meet these needs. BAS will be strategic in deploying limited resources to the highest priorities for funding.

For detailed operating projections by BAS sub-unit and cost category, please refer to page A-8.

BUSINESS AND ADMINISTRATIVE SERVICES

Operating Summary

Unit Name	2001-2002 Permanent Budget	2005-2006 State Funds One-time	Ongoing	2005-2006 Recharge and Fee One-time	Ongoing	2005-2006 Total Funds One-time	Ongoing	% Change	2010-2011 State Funds One-time	Ongoing	2010-2011 Recharge and Fee One-time	Ongoing	2010-2011 Total Funds One-time	Ongoing	% Change *
VC-BAS/OPA	771,023		841,833				841,833	9%		841,833				841,833	9%
CATS	12,546,445		5,875,430		10,660,052		16,535,482	32%		6,591,339		12,070,362		18,661,701	49%
EH&S	902,793	55,000	1,107,122		15,672	55,000	1,122,794	24%	51,000	1,244,441		17,532	51,000	1,261,973	40%
FINANCIAL AFFAIRS	2,923,654	69,900	3,915,571		268,367	69,900	4,183,938	43%	62,450	4,484,149		270,139	62,450	4,754,288	63%
FIRE	975,933		1,467,220		75,509		1,542,729	58%		2,439,119		75,509		2,514,628	158%
INTERNAL AUDIT	393,293		631,812				631,812	61%		770,000				770,000	96%
IPMTS	5,314,087		169,245		6,599,772		6,769,017	27%		169,245		7,152,667		7,321,912	38%
MATERIEL MNGMNT	1,183,124	76,000	1,774,883	14,000	265,174	90,000	2,040,057	72%	92,500	2,134,727	17,500	315,957	110,000	2,450,684	107%
PP&C	3,684,837		752,936		5,216,500		5,969,436	62%		752,787		5,032,407		5,785,194	57%
PHYSICAL PLANT	20,506,106		23,582,021				23,582,021	15%		27,119,325				27,119,325	32%
POLICE	2,198,168	104,771	2,526,413		1,038,326	104,771	3,564,739	62%	66,440	2,980,683		1,045,657	66,440	4,026,340	83%
SHR	1,825,714	58,700	2,182,398	2,500	293,030	61,200	2,475,428	36%	34,500	2,582,755		293,030	34,500	2,875,785	58%
TAPS	7,491,900				9,740,450		9,740,450	30%				11,922,253		11,922,253	59%
TOTAL BAS	**60,717,077**	**364,371**	**44,826,884**	**16,500**	**34,172,852**	**380,871**	**78,999,736**	**30%**	**306,890**	**52,110,403**	**17,500**	**38,195,513**	**324,390**	**90,305,916**	**49%**

* Percent of change for 2010-2011 is calculated from 2001-2002 to 2010-2011.

Identifying New and Additional Sources of Funds

Over the past decade, wherever possible, BAS has pursued outside opportunities to obtain the funding needed to provide additional services to the campus. For example, TAPS has received over $10 million is grant funding over the past ten years. In 2000, as a passthrough from the Santa Cruz County Regional Transportation Commission, TAPS received a $499,000 grant from CalTrans to implement bi-directional bus service on campus. TAPS provided $174,000 in matching funds for this grant.

Currently, BAS is engaged in three separate efforts to obtain external funding. TAPS has two grant proposals to CalTrans. The scope of one of the grants in the amount of $80,000, is to fund a segment analysis of the UCSC Shuttle and SCMTD transit systems to identify improvements to meet the travel needs of targeted demographic groups and to provide an improved comprehensive, coordinated transit operation serving campus needs. The second grant, in the amount of $38,000, is designed to provide additional training for campus transit planners and transit managers to improve the overall efficiency and safety of the extensive campus transit program. These grant funds would also allow TAPS to provide a paid-student internship program in transit planning. In addition, BAS is exploring potential FEMA grants for disaster preparedness.

Over the next decade, BAS will continue to aggressively seek out new and additional sources of funds from outside of the University, including private gift support and grants. While BAS programs and services are not those traditionally funded by private individual donors or nonprofit foundations, it is worth exploring potential matches to our activities and programs and the interests of the philanthropic community. In addition, while we have been successful in receiving government and other agency grant funding for transportation and safety programs, we hope to increase our efforts considerably in this area and are urging our units to aggressively seek out grant opportunities compatible with our scope of responsibilities. Lastly, regarding our more entrepreneurial programs, corporate and business partnerships will be encouraged in appropriate ways that may prove more cost effective for BAS and for UCSC. BAS hopes to pursue such alternative funding sources with the cooperation and support from other campus departments, including University Relations and the Office of Sponsored Projects.

BAS Service Centers

Of the twenty-six campus service centers, five serve BAS units. BAS service centers support the budgetary, financial, and human resource transactions within the division. In some cases the service centers also provide specialized analytical support, recharge rate preparation and administrative support to the units.

The following chart details the staffing level and the volume of transactions handled during the 2000-01 fiscal year by each BAS service center.

Service Center	Transaction Volume Processed		
	Staffing FTE	Monthly payroll (headcount) transactions	Annual purchasing activity in dollars
CATS	6.25	206	$3,089,627
Financial Safety	5	370	$4,125,564
IPMTS	3.75	58	$1,879,913
Physical Planning & Construction*	6.3	48	$57,487,050
Physical Plant	9	285	$8,200,000
TOTAL	30.3	967	$74,782,154

Includes purchasing related to building projects

As the chart reveals, there is great variance among the service centers, not only in the number of FTE, but also in the funding, workload responsibilities and expertise involved. Over the next five years (as part of a campuswide effort), BAS Assistant Vice Chancellor Valentino will lead a review of the current service center structure to determine if a more streamlined operation (i.e. fewer service centers) could produce savings and improve efficiencies.

Strategic Priorities

Initiatives

For the long-range planning process, BAS is forwarding initiatives within the five thematic areas. Most of the initiatives are necessary for unit operations, and for improved safety and security of the campus. Others reflect strategic planning that will improve processes and efficiencies, or incorporate technology.

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BAS Initiative Descriptions
(Listed in order of unit's priority)

BUSINESS SERVICES

Unit	Initiative
Mat. Mngmnt	**Satellite Buyers** covers 51% of the salary costs for three satellite buyers, who would be housed in one of several large units on campus. These satellite buyers would provide their units with improved service, local commodity expertise, and a professional on-site buyer.
Mat. Mngmnt	**E-Procurement** would provide for UCSC's cost of the systemwide initiative currently under consideration at UCOP. The initiative will have a major impact upon the acquisitions process across the campus by providing a web-based, intuitive, real-time purchasing process.
Mat. Mngmnt	**Bar Coding** allows Equipment Administration to implement bar coding technology for property inventory, thus streamlining and increasing the accuracy of the biennial physical inventory process.
Staff HR	**Recruitment Management System** provides backfill for staff to work on this project, which will ultimately allow electronic collection of employment applications, multiple position consideration for each applicant, ability to track recruitment activity, and ease of data collection for various reporting needs.
Staff HR	**Job Evaluation and Class Methodology** funds a Principal Analyst to help develop and implement an improved job design and classification system, and compensation program that will facilitate market-based pay practices.
Staff HR	**Human Resources Information System** (HRIS) covers UCSC's participation in the proposed systemwide HRIS solution, and also fund a project leader and technical support staff.

FINANCIAL SERVICES

Unit	Initiative
Fin. Affairs	**Web-based Student Account Information Access** involves providing students with online, web-based access to their campus financial account status.

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FINANCIAL SERVICES (continued)

Fin. Affairs **Vendor Payment Process Simplification and Improvement** supports the implementation of electronic vendor payment processing to pay faculty, staff, and vendors. This will also fund the purchase of two laser printers that will be used to print paper checks.

Fin. Affairs **Electronic Document Management System** involves implementing a high-capacity electronic document management system to maintain student and financial records.

Fin. Affairs **Online Payroll Time Reporting** provides backfill support so that existing Payroll staff members can complete the implementation of the adjustment portion of the automated online time reporting system, thereby streamlining service center payroll processing.

Fin. Affairs **EMF/OSP Data Interface** involves planning, programming, testing, implementation, and ongoing maintenance of a data interface between the Office of Sponsored Projects (OSP) database and the FIS Banner Proposal Module.

Fin. Affairs **Travel Expense Process Simplification** allows development of an interface and a related customized transaction approval routing process within FIS, and a training system for users.

Fin. Affairs **Web-based Financial Management Training** involves developing web-based financial management training and a related proficiency testing program – an integral component of the planned UCSC business officer certification program.

Fin. Affairs **Web-based Online Training Module** allows for the development of the training module, and a related proficiency test. Successful implementation of online training would eliminate the need for classroom instruction.

Fin. Affairs **Web-based AP & Travel Accounting Training** involves development of web-based training and proficiency testing in accounts payable, encumbrance liquidation, and travel accounting. It also provides for development of service center profiles to ease training customization efforts.

Fin. Affairs **E-Procurement System Interface with AP** provides Accounts Payable-related support for the creation and ongoing maintenance of an automated interface and associated processing between FIS and the new UC E-Procurement system.

Fin. Affairs **E-Procurement System Interface to FIS** provides FIS support for the creating and ongoing maintenance of an automated interface between FIS and the new E-Procurement system, and for making related enhancements to FIS to allow the data received to be processed and posted in FIS.

Fin. Affairs **New Business Architecture (NBA) Projects** involves FIS collaborating with CATS to implement an integrated authentication system and UCSC business portal, and to implement SCT's workflow functionality.

INFORMATION TECHNOLOGY

Unit   Initiative

CATS   **Disaster Preparedness** addresses critical components of business continuity and disaster recovery, including contracts for secure and climate-controlled off-site storage of campus data, equipment to ensure continuity of power to the Data Center, and contracts for vendor hot sites or rapid equipment placement in the event of a disaster.

INFORMATION TECHNOLOGY (continued)

CATS	**Security Enhancements** includes distributed firewalls and Virtual Private Network (VPN) services to protect central systems (and to offer similar protection and service to campus units via recharge), implementation of central security tools, and preparation for the use of more secure access methods, including the use of SmartCards or biometrics.
CATS	**Campus Cabling Upgrade** upgrades the in-building wiring infrastructure within 71 buildings to meet new bandwidth and outlet density standards, and is critical to meeting the emerging needs of faculty for high-speed access to the internet.
CATS	**New Business Architecture** includes development and implementation of key infrastructure components needed for portals, including enterprise directories, common authentication systems, and account management systems.
CATS	**Enhanced Messaging** is the functional update of email or messaging services, including web interfaces, support for mobile reading, better mailing list tools and policies, and incorporation of wireless messaging services.
CATS	**Fiber Optics** will provide additional cabling to the Campus Cabling Upgrade project to give gigabit speeds to buildings that are in excess of 400 meters from the equipment.
CATS	**Electronic Reports Distribution** will provide service centers with more choice in their receipt of information, as well as a shift in costs from paper, ink, printer maintenance, and staff time to other support areas for Information Systems.
CATS	**Wireless Network Service Implementation** will provide staff support and capital equipment funding for deployment of a campus wireless infrastructure.
CATS	**Natural Sciences Lab** is a proposal to add a modest 25-seat Instructional Computing (IC) lab in Thimann Laboratories in 2002 to support students in the Natural Sciences Division (currently the only division without an IC lab).
CATS	**Cowell Infill Apartments Lab** would cover one-time equipment and ongoing costs for a small Instructional Computing lab in the Cowell Infill Apartments.
CATS	**Streaming Video for Academic Courses** would provide faculty and server support for video streaming services, as requested by faculty.
CATS	**Research Computing Infrastructure Support** is a request for .5 FTE, hardware, and software to supplement research support in Instructional Computing labs.
CATS	**Silicon Valley Center Communications Services** is a proposal to provide telecommunications services to the Moffett Field facility.
CATS	**Silicon Valley Center Academic Tech Services** provides anytime-anywhere computing services, a student computing facility at Moffett Field, and other support services.
CATS	**Voice Over IP** involves significant improvements to the copper and fiber wiring plant on campus, in order to migrate our legacy telephone infrastructure to VoIP.
CATS	**Radio System Improvement** will expand the 800 mHz radio network coverage to include the north campus. This will be critical for public safety units, as well as Physical Plant, as Colleges 11 and 12 are completed.
CATS	**Applicant Tracking Replacement** provides for the implementation of a new Recruitment Management System.
CATS	**NBA Portal (FIS)** includes acquiring or building new systems and integrating them into an integrated campus portal.
CATS	**NBA E-Procurement** enables integration of E-Procurement into the Financial Information System.

PHYSICAL ENVIRONMENT

Unit	Initiative
PP&C	**Physical Planning and Construction Initiative** will enable the campus to accommodate 16,900 students by funding area plans, habitat conservation plans, utility capacity plans, ongoing planning studies needed at the completion of the LRPD, a Geographic Information System, a sustainablity audit, signing and wayfinding plans, and an LRDP update.
Campus/PP	**Cogeneration Feasibility Study** is a request for a study to determine size, location, and desirability of a facility needed to increase reliable energy for a growing campus.
Physical Plant	**Underground 21kV Cable Replacement** is a request for materials to replace the cable on the 21kV system, resulting in improved reliability of electrical services, and lower maintenance costs.
Physical Plant	**Underground Data & Communication Cabling Replacement** is a request for materials and contract labor to replace the underground data and communication cabling, thus mitigating system failures.
Physical Plant	**Vegetation Management** provides for a new Grounds Services FTE, the creation of a land management plan focusing on hazard mitigation, fire safety and prevention, and provides equipment for roadside mowing, maintenance for drainage, erosion mitigation and fire road maintenance.
Physical Plant	**Drainage and Erosion Control** provides for the development of a comprehensive drainage and erosion control master plan for both developed and undeveloped areas of campus lands.
Physical Plant	**Building & Utilities Services Staffing** is a request for a position which would act as a liaison between PP&C and Physical Plant. As building projects are completed, this position would identify work that needs to be done prior to occupancy.
Physical Plant	**Monitor High Voltage System Instrumentation** is a request for a monitoring system which will allow observation of building electrical loads, enabling staff to determine potential building overloads.
Physical Plant	**Pedestrian Pathway and Circulation** would provide necessary pedestrian pathway and circulation improvements, including reconstruction of damaged and failing asphalt paths and stairways, and redesign of some prioritized campus pathways.
Physical Plant	**Tree Management** provides for a comprehensive campus tree inventory for the developed areas, including tree hazard identification, and for additional tree care staff with basic support equipment to perform on-going preventative tree maintenance and hazard mitigation identified by the inventory.
Physical Plant	**Campus Recycling** covers necessary upgrades to the campus Recycling Program, with the purchase of new equipment, the development of an efficient recycling center, and two additional support staff.
Physical Plant	**Centralized Irrigation Control** seeks to continue implementation of a centralized landscape irrigation control system, with a primary goal of reducing irrigation water use for the campus.

PHYSICAL ENVIRONMENT (continued)

Physical Plant **Site Stewardship Program** seeks to establish a program that educates and provides the campus community with volunteer opportunities, encourages community support for campus ecological and environmental programs, and restores the campus environment.

SAFETY SERVICES

Unit   Initiative

EH&S **Environmental Safety Facility** provides for a building to house a hazardous materials processing and storage area, a laboratory for industrial hygiene monitoring and laboratory instrument calibration, and EH&S staff.

Fire **Fire Station Renovation** expands the current fire station to provide adequate living quarters for firefighters, additional administrative and training space for new staff, and to accommodate existing engines and a new ladder truck.

Fire **Personal Protective Equipment** is a request to purchase new "turnouts" (fire-proof suits, boots, and gloves) and breathing apparatus for firefighters.

Fire **EOC Renovation** allows moving the campus Emergency Operations Center (currently housed in the Fire Department, and vulnerable to damage by woodland fires) to Room 481 McHenry on a temporary basis until the Emergency Response Building is completed.

Fire **Maintenance and Purchase of Fire Apparatus** is a request to purchase a new ladder truck, and the additional maintenance required for the Fire Department's older fire apparatus.

Police **Two Police Officers to Assist Santa Cruz Police Department** would be utilized for traffic enforcement in the upper Westside neighborhoods and for foot patrol and liaison with the downtown student population.

Police **Dispatch Equipment Replacement/Upgrade** provides for dispatch equipment for the new Emergency Response Building, covering costs not met by the dispatch equipment replacement reserve account.

Police **Community Services Program** is a request for a crime prevention officer who will oversee a group of student Community Service Officers (CSOs). These students assist with crime prevention presentations, provide a helpful presence at special events, and perform a variety of other police-related services to the campus community.

Police **Staffing for Third Entrance Kiosk** will be required if a third entrance to campus is created.

The following chart reflects a summary of the funding necessary to implement the initiatives:

2005-2006		2010-2011		Total	
one-time	ongoing	one-time	ongoing	one-time	ongoing
$37,886,239	$6,736,877	$4,934,746	$12,792,618	$42,820,985	$19,529,495

The summary below is a listing of BAS initiatives by thematic area. Detailed financial information about each initiative can be found in the appendix on pages A-10 though A-16.

Priority	Unit	Initiative	Unit Budget Available	2005-2006 One-time	2005-2006 Ongoing	2010-2011 One-time	2010-2011 Ongoing	Total One-time	Total Ongoing
BAS INITIATIVE SUMMARY 2001-2002 — *Listing by prioritized unit submittals*									
BUSINESS SERVICES									
1	Mat Mngmnt	Satellite Buyers			71,604		129,336	0	200,940
2	Mat Mngmnt	E-Procurement		3,845,000	1,453,900			3,845,000	1,453,900
3	Mat Mngmnt	Bar Coding		45,000				45,000	0
1	SHR	Recruitment Management System		47,596				47,596	0
2	SHR	Job Evaluation & Class Meth	19,000	4,100	80,342		80,342	4,100	160,684
3	SHR	Human Resources Information System		50,000	908,566		908,566	50,000	1,817,132
		Sub-total Business Services	**19,000**	**3,991,696**	**2,514,412**	**0**	**1,118,244**	**3,991,696**	**3,632,656**
FINANCIAL SERVICES									
1	Fin Affairs	Web-based Student Acct Information Access		118,400	38,680			118,400	38,680
2	Fin Affairs	Vendor Pymnt Process Simplfctn & Imprvmnt		61,064				61,064	0
3	Fin Affairs	Electronic Document Management System		150,000	15,000			150,000	15,000
4	Fin Affairs	On-line Payroll Time Reporting		17,000				17,000	0
5	Fin Affairs	EMF/OSP Data Interface		32,900				32,900	0
6	Fin Affairs	Travel Expense Process Simplification		519,256	61,112			519,256	61,112
7	Fin Affairs	Web-based Financial Management Training		10,000	88,816			10,000	88,816
8	Fin Affairs	Web-based On-line Training Module		42,064	1,000			42,064	1,000
9	Fin Affairs	Web-based AP & Travel Accounting Trng		156,580				156,580	0
10	Fin Affairs	E-Procurement System Interface w/AP		23,630				23,630	0
11	Fin Affairs	E-Procurement System Interface to FIS		41,064	92,243		116,128	41,064	208,371
12	Fin Affairs	New Business Architecture Projects			46,997		195,756	0	242,753
		Sub-total Financial Services	**0**	**1,171,958**	**343,848**	**0**	**311,884**	**1,171,958**	**655,732**
INFORMATION TECHNOLOGY									
1	CATS	Disaster Preparedness		177,000	36,400	120,000	131,200	297,000	167,600
2	CATS	Security Enhancements		283,000	191,200	175,000	55,000	458,000	246,200
3	CATS	Campus Cabling Upgrade		6,514,495		434,000	6,250,000	6,948,495	6,250,000
4	CATS	New Business Architecture		1,307,750	1,256,300	75,000	178,750	1,382,750	1,435,050
5	CATS	Enhanced Messaging		516,000	202,650	158,000	191,600	674,000	394,250
6	CATS	Fiber Optics	157,250	157,250				157,250	0
7	CATS	Electronic Reports Distribution		364,500				364,500	0
8	CATS	Wireless Network Service Implementation		1,011,800			275,000	1,011,800	275,000
9	CATS	Natural Sciences Lab		209,045	408,568		643,421	209,045	1,051,989
10	CATS	Cowell Infill Apt. Lab		209,045	297,607		669,430	209,045	967,037
11	CATS	Streaming Video for Academic Courses			311,218		356,756	0	667,974
12	CATS	Research Computing Infrastructure Support		52,500				52,500	0
13	CATS	Silicon Valley Center Communications Srvcs		104,160			1,034,160	104,160	1,034,160
14	CATS	Silicon Valley Center Academic Tech Srvcs		258,000	269,085		1,567,173	258,000	1,836,258
15	CATS	Voice Over IP		286,800		1,086,800		1,373,600	0
16	CATS	Radio System Improvement		400,000				400,000	0
17	CATS	Applicant Tracking Replacement		136,890				136,890	0
18	CATS	NBA Portal (FIS)		45,003		366,716		411,719	0
19	CATS	NBA E-Procurement		85,549		469,230		554,779	0
		Sub-total Information Technology	**157,250**	**12,118,787**	**2,973,028**	**2,884,746**	**11,352,490**	**15,003,533**	**14,325,518**
PHYSICAL ENVIRONMENT									
1	PP&C	PP&C Initiative		8,000,000	300,000			8,000,000	300,000
1	campus/PP	Cogeneration Feasibility Study		150,000				150,000	0
1	Phys Plnt	Undrgrnd 21kV Cable Rplcmnt	150,000	600,000				600,000	0
2	Phys Plnt	Underground Data &Comm Cabling Rplcmnt		900,000				900,000	0
3	Phys Plnt	Vegetation Management	60,000	298,000				298,000	0
4	Phys Plnt	Drainage & Erosion Control	60,000	1,555,000				1,555,000	0
5	Phys Plnt	Bldg&Utilities Svcs Staffing	15,000	262,581				262,581	0
6	Phys Plnt	Monitor High Vltage Sys Instr	150,000	300,000				300,000	0
7	Phys Plnt	Pedestrian Pthwy & Circlultn	300,000	1,475,000				1,475,000	0
8	Phys Plnt	Tree Management	90,000	555,000	70,000			555,000	70,000
9	Phys Plnt	Campus Recycling	100,000	1,125,000	70,000			1,125,000	70,000
10	Phys Plnt	Centralized Irrigation Control	10,000		88,000			0	88,000
11	Phys Plnt	Site Stewardship Program		25,000	40,000			25,000	40,000
		Sub-total Physical Infrastructure	**935,000**	**7,245,581**	**268,000**	**0**	**0**	**7,245,581**	**268,000**
SAFETY SERVICES									
1	EH&S	Environmental Safety Facility		4,650,000				4,650,000	0
1	Fire	Fire Station Renovation				1,500,000		1,500,000	0
2	Fire	Personal Protective Equipment		50,000		50,000		100,000	0
3	Fire	EOC Renovation		100,000				100,000	0
4	Fire	Maintenance & Purchase of Fire Apparatus		10,000		500,000		510,000	0
1	Police	Two Police Officers to Assist Santa Cruz PD		34,177	141,928			34,177	141,928
2	Police	Dispatch Equipment Replacement/Upgrade		500,000				500,000	0
3	Police	Community Services Program			80,000		10,000	0	90,000
4	Police	Staffing for 3rd Kiosk Entrance		14,040	115,661			14,040	115,661
		Sub-total Safety Services	**0**	**5,358,217**	**337,589**	**2,050,000**	**10,000**	**7,408,217**	**347,589**
		BAS INITIATIVE TOTAL	**1,111,250**	**29,886,239**	**6,436,877**	**4,934,746**	**12,792,618**	**34,820,985**	**19,229,495**

BAS Information Technology Plan

Overview

Many of the services provided by BAS units to the campus are enabled and enhanced using information technology. BAS provides central information technology (IT) services to the campus primarily through the efforts of Communications and Technology Services (CATS). These services include support for both academic and administrative computing and telecommunications. Academic services include managing fourteen instructional computing labs, supporting faculty developing and maintaining web-based instructional materials and supporting the graduate mission via high-speed network access. Administrative services include planning and maintaining central voice and data services for the main campus and remote facilities, supporting the "core" IT services such as telecommunications, authentication, authorization, timeshare, disk storage, end-user support services, central electronic mail services and the Financial Information System.

In the coming decade, UCSC will continue to follow the path forged in the late-1980s with the campuswide adoption of personal computers and later, the Internet. Various campus entities, including BAS, must use the next several years to establish campus standards for IT system development and collaboration methods to create an IT environment capable of making the transformative changes necessary to support the campus of 2010-11.

Information Technology Vision

Over the next ten years, we expect to see revolutionary changes in the way IT is deployed in support of campus instructional, research, student services, and business processes. However, because IT changes so rapidly, it is impossible to precisely predict the future. We know that students will expect to have ubiquitous access to courses, instructional materials and basic student services through a combination of high-speed network connections and wireless devices. Similarly, faculty and staff will expect to have access to information, services and business processes through personalized portals that will be tailored to meet their individual needs. We expect that voice, data and video communications will be consolidated into a single network that will demand ever increasing bandwidth.

Consider the following examples of how faculty, students and staff may interact with information systems in the year 2010-11.

- Intelligent systems and agents will gather information and present it to employees customized to their exact needs, on demand.

- Simulation based instruction will be delivered using Virtual Reality (VR) modalities. For example, a pair of eyeglasses and "smart" clothing that connects a user to a network may replace today's clunky VR headset and wiring.

- Instructional space will continue to extend beyond traditional brick and mortar buildings. Virtual spaces, chat rooms, threaded discussions and mail lists, will undergo multiple version upgrades and will become increasingly integrated into our daily communications, thus extending the modalities and locations for instruction.

A primary IT goal for BAS is to engage in more collaborative efforts. This will enable us to achieve divisional and campus goals. Perhaps more importantly, collaboration will be essential to controlling IT costs and leveraging campus ownership of IT. The costs of supporting a decentralized campus IT model is becoming increasingly prohibitive. An excellent example of recent, highly successful cross-campus collaboration of the type we hope to engage in the future is the planning and implementation of the CruzTime project. This end-user driven project resulted in the adoption and implementation of an enterprise level system, located at CATS, governed by a cross-campus committee and funded in a partnership between BAS, Student Affairs and the Executive Vice Chancellor/Campus Provost.

New Models for Funding Information Technology

A recent campus Information Technology Committee report entitled "Web Activity Based Cost Report for Fiscal Year 2000-01" states that the campus spent conservatively $2.28 million in 2000-01 on building and maintaining a web presence. Of these costs, $1.88 million were labor costs. We recognize the value of the web work created to-date, yet we must examine the effectiveness of these efforts. BAS does not seek to create a monolithic, centrally administered web presence. However, it does want to provide a secure and robust IT infrastructure that can adapt to the campus's needs in the future. This will only be possible by funding CATS to a degree where they can strategically respond to the IT needs of the future. Thus, we propose the campus begin to review and adopt a new generation of network and IT funding models that can provide a sustainable future for IT infrastructure on the campus.

One such funding model, first conceived on the San Diego campus, is the "Next Generation Network" (NGN). In this funding model, NGN introduces a new way of billing for services, which assesses a fixed monthly charge for each "Communication User", rather than billing for each phone or computer line on campus. A "Communication User" would be a UCSC employee who makes use of a telephone and/or the network as a part of his or her daily work. That status is determined by an individual's payroll title code. Charges will only be assessed for employees whose title codes classify them as a Communication User. An alternative funding model that will help the campus achieve its IT goals would be to fund CATS in such a way that it can provide the breadth and level of services the campus requires.

Our vision for information technology in the coming decade is one of convergence, timing and funding. Our planning and system development principles for IT systems will result in simplifying policies and procedural requirements, automating repetitive tasks and increasing the "intelligence" designed into systems. As funding opportunities arise and technologies mature, we will have in place the planning efforts necessary to implement IT systems when and where appropriate.

Governance

As a division, BAS must establish a governance model for IT that includes workstation support, server support, database, and web development. This model must meet the needs of individual BAS units and incorporate the best practices necessary in a large enterprise. A related divisional goal will be to adopt standard practices for acquisitions of hardware and software, server hosting and web application development. OPA and CATS will work together to develop service and staffing level proposals sufficient to meet the demands for workstation support and server hosting for BAS units. Another goal for the division will be to address database and web application development standards through a process overseen by OPA. This strategy will allow us to maintain the initial development work created to-date, and build a successful model for future web and database development.

Using the AIS project as an example, BAS has and will continue to develop governance models for systems and processes throughout the division. The adoption of a governance model for enterprise-level systems assigns accountability and performance measurements by way of service level agreements. Service level agreements help to provide clear expectations of services, roles and responsibilities and provide better management of resources. Governance models in turn lead to more thoughtful IT proposals where multi-year costs such as server replacement schedules, software and maintenance costs, and staffing requirements are carefully planned at the time of the proposal. Using this methodology and other system development principles provides a common understanding for BAS governed systems that will be developed in the next ten-year time frame.

Beyond the governance needs of the division, BAS will continue to work with the existing

Provost Advisory Council committee structure for both IT issues and campus processes. We anticipate continual evolution of the existing committee structure that may someday lead to an "eSanta Cruz" governance model for IT. In the short term, BAS will continue to lead the campus New Business Architecture efforts via the NBA Steering Committee and will solicit feedback from the ITC and other campus advisory groups as project plans evolve.

Emerging Campus IT Trends

IT trends act as "drivers" of change, and impact the BAS division in a variety of ways. Trends help to shape and align services, support, new system development, and process improvements. BAS units continually work to understand their core customers and IT trends in order to meet the increasingly high expectations of faculty, students and staff, on the campus IT infrastructure.

Ubiquitous Network Access Gaining access to the campus network today means plugging a computer into a wall jack. As wireless technologies continue to mature, CATS has begun the planning efforts necessary for delivering secure, robust wireless networking where appropriate. By 2010-11, we predict information appliances and antennae will significantly supplement the existing computer and wall jack model. Users will simply need to be adjacent to a space that has wireless service in order to authenticate and receive network service.

Gigabit Network Existing 10/100Mbit wall-jack provided ethernet service will evolve to gigabit speeds. CATS has already begun deploying 1Gbit service in the campus data center. Campus units can expect 1Gbit service availability (by request) in 2002-03. By 2010-11, we predict 5-10Gbit technologies will have evolved and will become part of the campus's core IT infrastructure.

System and Data Security

Cyber security encompasses the systems, policies and procedures that relate to the security of information systems. In the after-math of the September 11th tragedy, cyber security issues have become more prevalent in our discussions of IT. BAS has conducted an analysis of campus security that assessed overall campus security, telecommunications, cyber security and disaster preparedness. This analysis has produced several recommendations that appear in this long range planning document as initiatives.

One of the primary cyber-security goals BAS must achieve for the campus is that of a strong, central authentication service that can identify and communicate with our campus population. Currently the campus cannot identify who is in the campus population and thus, we are vulnerable in many areas of cyber security. The CATS Electronic Directory initiative will serve as an authorized electronic repository of information about our campus population. This system is a critical cornerstone for establishing a secure foundation for future IT development. BAS units will also work to improve basic workstation and server security using established best practices that include encrypting email passwords and providing Secure Socket Layer (SSL) connections to web sites.

Backup and Hacking Plans Another IT goal that BAS will undertake is the establishment of unit-based written backup plans for those units who maintain servers. As a policy, we expect units to document their systems. BAS will develop a standard backup template that states the baseline information necessary to recover a system in case of an unexpected interruption in service.

With the basic unit backup plan, we will ask our units to prepare a "hacking" plan to increase campus cyber security. This plan will act as a checklist that documents what a system administrator will do in the case of a system security breach. In conjunction with CATS and University Police, we will share templates, which will contain best practice information.

Over the next several years, UCSC will continue to develop systems at both the unit and campus levels. While not exhaustive, these

examples provide initial information about the components of larger systems that may be developed over the coming decade.

Electronic Commerce E-commerce comprises the systems and processes necessary to conduct a transaction electronically. Based on existing market conditions, we predict a continuing demand for E-commerce enabling technologies to be deployed on campus. Campus units want to be able to conduct electronic transactions seamlessly integrating unit-based services with the FIS. The E-commerce service model must expand to include recharge, credit card, and other financial transactions such as automated clearinghouses. For example, creating the ability to process recharges online could have a major impact on costs.

Several key components of E-commerce are not yet mature, and standards will need to be developed over the next several years. Collaboration between BAS and UCOP to establish standard operating procedures for authentication and authorization schemas, security, and systemwide policies are slowly being developed through systemwide committees.

BAS units will play a critical role in the development of campus E-commerce services. Through the work of the NBA Steering Committee, E-commerce initiatives will be assessed and analyzed. Representatives from CATS, Campus Controller, Internal Audit, SHR and Materiel Management will each contribute expertise as the campus moves closer towards achieving the goal of simplifying and automating basic electronic transactions.

Web-Based Systems Access to information via the web has grown dramatically in the past five years. Near-term campus information systems projects, such as AIS, are built on guiding principles and premises that include 24-hour availability and personalized interactions with the system. BAS will approach the development of future systems utilizing guiding principles developed by the AIS Transition Team in both unit-based and centrally provided web-based systems.

Web-based systems have already begun to evolve from traditional human-computer based interactions to include interactions via information appliances such as phones and Personal Digital Assistants (PDAs). This evolution is in part dependent upon wireless technologies that are not currently robust enough to meet the rigors of geography and topography of the Santa Cruz campus. Wireless technologies, both Local Area Network (LAN) and cellular-based networks, will need expanded coverage to serve the needs of the campus community in the future. BAS units will continue to work with vendors to increase wireless coverage for the campus and support secure wireless LAN technologies where appropriate.

As in private industry, the enabling technological infrastructure that delivers web-based systems content to users based on the information appliance they are currently using will become increasingly important to web developers especially as their audiences become more sophisticated and demand different modalities of human-web application interaction. The CruzTime project team is currently assessing how the Santa Barbara campus is implementing a wireless feature of the Corporate Time server that connects a user's cell phone to the online calendar system. Wireless Application Protocol (WAP) enabled cell phones communicate with the server alerting users of meeting creation and modification.

IT Service Delivery in the Next Ten Years

Centralized versus Decentralized IT Services
While BAS units continually align their services with the campus academic priorities and the demands of their users, a dichotomy of IT perspectives exists. Nowhere is this dichotomy more evident than when discussing centralized and decentralized IT services on campus. The campus architect uses the phrase "the spaces in between" to describe facilities and systems that support and benefit the entire campus but are not the responsibility of any single sponsor. For IT, the "spaces in between" represent the difference between the core IT services CATS

can offer and the drive to web-enable unit-based processes and services. The result of this dichotomy is that many "enterprise-level services", systems providing service beyond the individual unit, are located outside of CATS.

Over the past five years, BAS units and campus units have tended to implement unit-based and/or division-based IT systems and services. This is clearly seen in the proliferation of web and email servers found across the campus. This trend towards decentralization requires additional staffing at the unit level; the justification given for this additional IT staffing is that local IT staffing are more responsive to the needs of the local unit. This trend is accelerating. It is due, in large part, to the inability of CATS, due to resource constraints, to provide the breadth and level of service demanded. This being said, it is important to note that BAS does understand that unit-provided, decentralized IT systems, services and support may be appropriate in some cases. However, in an effort to optimize IT-related spending, BAS will begin to work toward a goal of centralizing IT systems, services and support, where appropriate. One strategy that it will employ is to consolidate web and file services onto servers that serve more than a single unit and are located in the campus data center. BAS units who do not have their own IT staff to provide workstation support will be encouraged to budget for and purchase recharge based workstation support from CATS.

One model BAS will consider for delivering web applications and database development is to create a divisional support group to develop unit and divisional projects. This model would offer the BAS units services from initial design and project management through implementation. Using the Student Affairs web development group as an example, BAS could standardize and continue to build upon the work that the BAS units have begun. Internal reallocation from unit budgets would be used to fund this model.

An alternative to a divisional support model is

an enhanced Contract Technical Support Service (CTTS) model from CATS that provides web application and database development service to the campus. CTSS service is intended as a mid- to long-term support mechanism. As such, CTSS time is purchased in increments and requires a minimum commitment over the course of the contract (e.g., one day every other week, or one half-day per week).

Looking to the future, the division will need to plan for IT staffing in a cohesive and consistent manner that addresses a balance between BAS or campus needs and available campus services. Our challenge will be to address the needs of the units who need workstation support and web application development with the role of CATS as the central IT provider for the campus.

Using these and other strategies, BAS units will work to streamline IT services, systems and support and serve as a model for the campus. We realize that our strategies cannot be fully realized without a strong and nimble central IT service provider. Therefore, we will strive for continual improvement and enhancements in CATS. This will only be possible if CATS receives support from the campus community.

Collocation The idea of collocating programmer analysts and user analysts is a planning principle and is outlined as a recommendation in the Academic Information System (AIS) Transition Team report. BAS recognizes the value in collocating technical staff where feasible and will work with its units to identify and realize collocation where possible within the limits of our space constraints.

Standardized Reporting BAS is aware of several standardized business reporting initiatives being developed. We recognize the value in adopting standard reports and recommend that the divisions incorporate training for managers about basic business reporting. A related goal for Financial Affairs and Staff Human Resources will be to incorporate standardized report training into the supervisory and management training courses offered by

Training and Development.

Training Many BAS units are charged with developing and deploying training to their customers. Methods of instruction vary from formal classroom presentation to "self-service" web sites. The division recognizes that having its units continue with their present models of information dissemination must be assessed and analyzed so that we may achieve our goal of effective, consistent training.

One of the questions we must answer is "how effective is our method of instruction?" BAS believes the optimal strategy to adopt is a "Just in time, just for me" model of web-based training. Our goal is to position our training initiatives to use the best pedagogical techniques and enabling technology available and to develop the flexibility necessary to change the training model over the next decade.

Therefore, utilizing training guidelines developed by the AIS Transition Team, we will adopt multi-faceted strategies for delivering consistent training to our colleagues. Specifically, we will assess the training needs of BAS units and analyze the ability to develop and deliver curriculum from within the SHR Training and Development unit. BAS units will work within these training guidelines from the AIS Transition Team final report:

- Design training using both "formal" and "Just in time, just for me" models of delivery
- Document all training development
- Provide ongoing training and evaluation
- Ensure that access to BAS-governed systems are based on completion of formal training, the scope of which will be based on the user's "roles" within the system.
- Use the "train the trainer" method for training development; find the best staff to serve the trainer role
- Avoid using project development personnel as staff trainers
- Assess a trainee's access needs and roles before he/she is enrolled in training

- Follow-up training and assistance with evaluation at the participant and supervisory levels

Instructional Technology Academic computing services will grow dramatically over the next ten years as we invest in online course materials to supplement classroom instruction and deliver distance education. In addition, instructional technologies improvements and their expanded application will place heavy demand on the campus IT infrastructure. From ethernet-enabled classrooms to curriculum development to distance education, BAS units support the daily academic mission. As enrollment increases, reliance on IT solutions will also increase. Our challenge is to plan and deliver an infrastructure that can meet the demands. One such planning effort we endorse is a governance structure for distance education. Currently, distance education (a service provided by a cross-campus collection of units) is in need of a governance model and system steward who can retain accountability and plan for the future.

Web and Database Integration BAS and other campus units continue to web-enable business processes and procedures to streamline transactions with their customers. As a trend, we predict that the campus as a whole will continue to move services to the web where appropriate.

Web database applications can be built with a variety of tools, allowing units to publish information to the Internet utilizing staff of varying skill levels. Examples of web applications found within the BAS division include the ability to purchase parking permits online, create and manage event registration, create and modify student narrative evaluations, take the required ProCard test and review unit phone bills. Although each web application's functionality differs, all share the same foundation - database, business rules to enforce security and an interface via a web browser.

As previously mentioned, the campus has seen

a proliferation of web applications created by units across the campus. As we look five and ten years into the future, we expect that IT systems such as a campus portal, directory services, distributed authentication and authorization will become realities. A key challenge for BAS will be to balance the efforts of unit-based web application development with central IT services.

An overall goal for BAS units and the campus is to establish a set of standards for campus web developers that will allow them to smoothly transition unit-based content and web applications into a larger campus portal. BAS units will be encouraged to participate in this discussion. We look to the ITC to establish a cross-campus committee that can make recommendations to the campus in the next one- to two-year time period that include standard security policies and content standards.

Document Management Document management, the ability to electronically store, retrieve and archive information is a trend that BAS units have identified as an issue that requires an IT-based solution. From paper-based payroll records to drawings and blueprints, BAS units are required to store this ever-expanding volume of material, at an steadily increasing cost for storage and retrieval. As a division, our goal will be to store our information and provide timely retrieval service for document retention. Our strategy for addressing this situation will be to form a divisional committee to examine BAS and campus needs and current market trends and provide a report to the vice chancellor in 2003. Based on those and other recommendations, we will develop detailed strategies to address our long-term goals.

In the short term, we will perform basic research and development for document management using off-the-shelf tools such as Oracle's WebDB. The results of this research and development effort will inform the BAS Document Management Committee.

UC System-wide Trends and Efforts

New Business Architecture In July 2000, the Office of the President released UC *2010: A New Business Architecture for the University of California*. The NBA report offers a plan and strategies for managing the tremendous enrollment growth the University expects in the next decade, while controlling costs, improving the work environment, and employing the best business practices. Once implemented, NBA initiatives will provide the scalable framework needed to support the tremendous growth of the university, the rapid advances in technology, and the high expectations the public hold for the university. Examples of NBA initiatives can be seen at both campus- and systemwide levels. HRIS and E-procurement are UC system wide initiatives that fall under the NBA umbrella.

Human Resources Information System (HRIS) The university's leaders recognized that current issues regarding HR systems and processes needed to be addressed before the anticipated addition of 60,000 new students and 7,000 new faculty members by the year 2010-11 further strained business operations at the university. In January 2000, the university's Vice Chancellors for Administration issued a call to their colleagues that a "New Business Architecture" was needed to allow campus departments, administrative operations, and UCOP to support the university's growth in student enrollment over the next decade. The New Business Architecture provided a framework for focusing process and system improvement efforts in several key administrative functions, one of which was HR.

Recently, a consulting firm conducted a needs assessment. The firm issued a report that outlines recommendations for HRIS strategies and provides an implementation framework and deployment approach consisting of short, measurable project steps. It is clear that current campus HR processes are outdated, cumbersome, and there exist many data needs currently unmet by the Payroll/Personnel System (PPS)

that would benefit from implementation of an HRIS. Implementing the recommendations will be extremely costly, especially for the Santa Cruz campus. The report estimates that it will cost each campus roughly $7.9 million to deploy an HRIS over a two-year period, with ongoing costs estimated to be roughly $543,000 annually. BAS will continue participating in systemwide discussions involving HRIS. In fact, we are currently discussing strategies where UCSC could obtain HRIS services by partnering with UCOP or another campus.

Electronic-procurement UCOP has engaged KPMG consultants to advise the university on a strategy for E-procurement including opportunities to reduce the costs of goods and services through aggregating purchasing volume and to further streamline purchasing procedures. An E-procurement solution will consolidate spending and streamline the processes inherent in purchasing goods and services. It consists of IT architecture, web interface, contract strategies and electronic catalogs. Via a web-based interface to catalogs and suppliers' sites, an end-user would be able to conduct a purchasing transaction. Business rules, approvals, receiving, billing and payment provisions are incorporated into the transaction.

The potential benefits to UC and UCSC would be a user-friendly purchasing process at the end-user's desk, improved pricing from the consolidation of volume, reduction in "maverick" buying in the departments, and rebates from increased usage of the purchasing card. Materiel Management, Internal Audit, CATS and Financial Affairs are keeping abreast of this UCOP initiative and the funding implications it implies. As with the HRIS initiative, UCSC may choose to purchase this service from UCOP or one of the other campuses.

UC 2010: A New Business Architecture for the University of California

As mentioned above, NBA initiatives are being planned at both UCOP and the campuses. At UCSC, BAS will play a leadership role and has

begun the planning efforts necessary to implement the NBA objectives.

In light of current and near-term economic forecasts that predict budget shortfalls, BAS and the campus must continue the planning efforts for NBA related initiatives. While the UC campuses and the UCOP have engaged in process redesign activity in many areas within business administration and operations, not surprisingly, the financial and human resources functions have received the greatest attention. We will use the budget shortfall years, 2001-2003 to set in place the reengineering efforts necessary to implement enabling technologies when funding becomes available.

We propose that several methods of funding NBA-related initiatives be developed and implemented to support this campuswide process. One potential model is the creation of a "pool" of funds created by divisional contributions from all divisions. In this model, an NBA initiative developed by a unit would be reviewed and approved by the NBA Steering Committee, the ITC and other campus bodies as necessary. Upon endorsement of an initiative and project plan, funding would become available.

To date, a steering committee has been chaired by Vice Chancellor Vani to begin preparing both BAS and the campus for implementing NBA initiatives at UCSC. We anticipate broad campus representation and a close working relationship with the ITC to help develop campuswide NBA initiatives. The steering committee will:

- Establish priorities and outline the actions necessary to prepare the campus for the NBA

- Be responsible for communication and coordination with UCOP and other UC campuses, and for developing the plan for implementing the NBA

- Develop governance and system stewardship models

- Create and direct the efforts of workgroups to study and assess the requirements for the NBA, identify campus initiatives, and develop an implementation strategy.

Currently, several NBA-related initiatives are underway. As information becomes available, it will be collated and presented via the NBA web site (http://nba.ucsc.edu).

- A Process Risk Assessment is being conducted by the Campus Controller to identify issues related to the employment recruitment process. This risk assessment is a precursor to process reengineering.

- An assessment of campus web presence is being conducted via the ITC. The outcome of this assessment will inform the campus on a variety of web-related issues.

- A process for campuswide participation in NBA initiatives will be developed. This process will become the basis of a series of workshops used to inform and engage the campus in identifying issues and strategies that may result in controlling costs, improving the work environment, and employing the best business practices at UC Santa Cruz.

- A project team has been formed to begin the planning efforts necessary to implement a Recruitment Management System for UCSC. One of the goals of this project is to be responsive and attractive to prospective UCSC employees.

To promote the objectives of the NBA report to the campus, a series of workshops will be developed and offered in 2002-2003. These workshops will be used to encourage campus-wide initiatives related to the six broad NBA strategies for the University of California in the coming decade. These strategies are:

- Develop campus business portals to integrate the components of the New Business Architecture;

- Apply new approaches to recruit, retain, and develop the very best people;

- Streamline UC policies and procedures;

- Leverage new technology to contain costs and improve services;

- Integrate campus financial systems and provide enhanced financial reporting through implementation of emerging technology standards; and,

- Embed performance management in UC business processes and focus on the most important financial controls.

The workshops will also act as a feedback tool to gather information and brainstorm with campus managers, promoting the NBA objectives at the local level. The campus as a whole must begin to think about how we can employ NBA strategies and people most efficiently in tight economic times to solve campus problems.

Process and Policy Simplification

Achieving a high level of administrative "nimbleness" will require simplifying administrative policies and processes. Operating in such an environment will require campus faculty to fully understand their roles and responsibilities within "simplified" administrative processes. In addition, they will need to know the basic control elements of pertinent administrative processes. BAS units have already begun efforts to prepare for this transition. These efforts include the following:

- BAS will re-establish a Business Process and Policy Work Group (BPPWG). This cross-divisional workgroup originally convened about five years ago to take advantage of opportunities to streamline campus administrative processes. At the time such opportunities were made possible by the implementation of the then-new Financial Information System. The reconstituted BPPWG will be expected to play a similar, critical role in the development and implementation of simplified administrative processes and practices for future new system implementations, and will also be integrated into the New Business Architecture.

- The Campus Controller's Office has implemented three of the five campus financial management workshops intended to give campus business officers and staff members a common understanding of key university and campus financial management responsibilities, methods of assessing and managing business risks in order to make prudent decisions, and expectations in conducting university business. Two remaining workshops will address the issues of providing a better understanding of key campus business risks, such as conflict of interest, and providing a detailed understanding of the key control elements of important campus business processes, such as cash collection and paying vendors. Together, these workshops will improve the competency, judgment, and knowledge of campus business managers and staff, thereby enabling them

to succeed in operating within a more streamlined, less bureaucratic campus business environment.

- As mentioned earlier, the Campus Controller's Office is poised to implement an online web-based workplace culture assessment survey that will provide campus management with a tool to assess the strengths and weakness of key factors that contribute to a productive work environment with simplified processes and practices.

- Over the next year, the Campus Controller's Office will be implementing a campus financial management control oversight structure intended to provide an organized process in which to develop, evaluate, and implement university and campus-specific business policies and practices that support process and policy simplification. This oversight structure will also provide a more effective means of monitoring the campus's decentralized business environment.

Accountability and Performance

Partnership for Performance

The Partnership for Performance (P4P) was designed to engage business area managers from the nine UC campuses (prior to UC Merced) in identifying their common goals and objectives and in developing performance measures that provide insight into the achievement of these goals. Measurement teams were established in the following business areas:

Human Resources

Environmental Health and Safety

Facilities Management

Information Technology

Financial Operations, specifically:

 - Disbursements/Accounts Payable

 - Payroll

 - Purchasing

Two documents written by Kristine Hafner (UCOP Business Initiatives) were borrowed from for this section:
 • "University of California Partnership for Performance: Summary prepared for the UC Regents May 2000"
 • "Partnership for Performance 1995-2000: Observations and Lessons Learned"

- Extramural Funds Accounting
- Travel Management
- Worker's Compensation

Senior managers from across the UC system collaborated on the development of systemwide goals and performance measures for their business areas. They defined metrics, set targets, gathered data and analyzed results. Results were compared from campus to campus, and when available, performance data from other institutions were included to broaden the field of analysis. The ultimate objective was to identify opportunities to improve administrative organizations' delivery of critical services to the campuses.

Several challenges surfaced in the process of identifying common business area goals:

- The delivery of business services can vary significantly from campus to campus
- Finding common ground can easily lead to "lowest common denominator" thinking, and excessive limitation of the scope of some metrics

Nonetheless, campus-based performance measurement initiatives have proven to be very useful complements to the systemwide efforts. While the systemwide goals and measures are useful points of comparison, and provide a context for sharing information and solutions, campus-specific programs anchor the performance measurement activity in the practices of campus business and administrative services organizations.

Although the UCOP Office of Business Initiatives (which led the P4P effort) is no longer staffed, managers involved in the systemwide measurement teams continue to compare recent data and discuss performance measurement within their regular business area meetings. In addition, staff from campuses which have chosen to incorporate organizational performance measurement into their campus administrative operations (UCSC, UCSD, UCB, UCD, UCI, and UCLA) continue to network as their plans evolve and improvements are implemented.

Balanced Scorecard

Partnership for Performance teams communicate strategy and current performance through the use of the "balanced scorecard", a model that is widely used in the private and public sectors for tracking the performance of organizational units. The balanced scorecard links performance measures to goals, and assesses performance from four perspectives: customer satisfaction, financial indicators, business process metrics, and workplace climate gauges.

The Balanced Scorecard
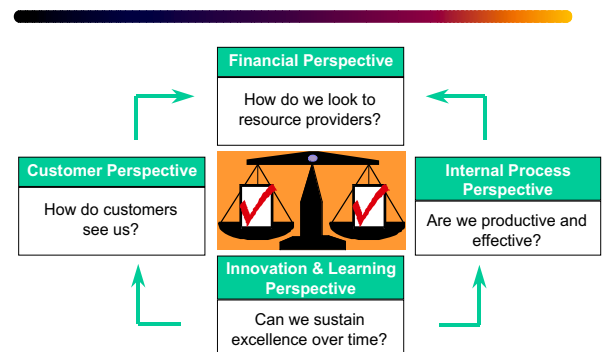
Performance Measurement in BAS

Since 1999, the vice chancellor of BAS has worked with unit managers to adapt the concepts of Partnership for Performance for use at the unit level. BAS unit heads have been provided training in the Balanced Scorecard model of performance measurement, in identifying the critical success factors for their key products and services, and in developing performance metrics specific to their unit. OPA is responsible for developing, distributing, and analyzing the results of the biannual customer satisfaction survey and the future organizational climate survey (the results of which are publicized via the BAS performance web site at http://bas.ucsc.edu/performance). Because OPA's efforts cover both the customer perspective (customer satisfaction survey) and the innovation and learning perspective (the organizational climate survey), unit managers focus on the financial and internal business

perspectives of their departments. In the grey bar to the right is a short listing of some of the metrics used by BAS units, as well as the actual data for the 2000-2001 fiscal year.

Customer Satisfaction

The launch of BAS' performance measurement initiative began with an initial campuswide

customer satisfaction survey. Faculty and staff were asked in the winter of 1999 to rate their experiences with BAS units over the preceding 12 months. This survey provided baseline data to all 42 units and sub-units within the division. The next iteration of the survey is taking place in December 2001, and every other year thereafter. Unit managers are expected to make improvements to their services based on the results of these surveys; changes made as a result of the initial survey are listed on page 55. If the results point to significant problems, or are unclear in any way, managers are encouraged to "drill down" by using focus groups, point-of-contact surveys, or other follow-up activities.

In an effort to reduce the amount of paper used and to increase the efficiency of the data, the division has invested in web-based survey software. The December 2001 version of the survey will be entirely web-based.

Lessons Learned

The most valuable performance measures allow units to improve their performance over time, and to compare their performance with other institutions. Lessons learned from the development of metrics through Partnership for Performance include:

- It is better to start with fewer measures–the critical few.
- The data collected for each metric should present the opportunity for the unit to take action to improve.
- The measures themselves should indicate what is important to the unit and where the unit is focusing its attention and resources.

Sample metrics currently in use in BAS (data from FY 2001 in parentheses)

Financial Affairs:
- salary cost per W-2 form ($24.59)
- average cycle time for purchase order payments (32.37 days)
- FIS system availability (99.5%)

Materiel Management:
- number of occupational injuries per 100 FTE (6.4)
- % of inventory reports returned by due date (89%)
- turnaround time of purchase orders >$10K (6.03 days)

IPMTS:
- % increase/decrease of general temporary services provided (74% higher than FY 2000)
- % of work returned for poor quality requiring reprinting (.00073%)
- % of cash deposits with problems (.024%)

Physical Plant:
- cost of OMP per gross sq. ft. ($6.98)
- cost of custodial service per sq.ft. ($1.28)

Police:
- conviction to arrest ratio (82:110, or 75%)

TAPS:
- cost per shuttle rider ($.80)

Fire Department:
- number of campus residents per firefighter FTE (289)

Service Improvements

As a result of the 1999 BAS Customer Satisfaction Survey, BAS units have made the following changes:

Environmental Health and Safety:
- Enhancements to web site
- Increased staff awareness about customer service

Communications and Technology Services:
- Improved problem/work order tracking system in Network and Telecommunications sub-unit
- Established a customer service team in Network and Telecommunications sub-unit

Physical Plant:
- Increased frequency and outreach of customer visits
- Developed new brochure and started using Public Information Information Office (PIO) to disseminate information to campus

Materiel Management (conducted follow-up surveys on their own):
- Receiving now collects and disposes of all surplus equipment, including computer equipment
- Business Contracts now allocates more time to process highly complex contracts
- Business Contracts revised and improved the policies, procedures, and forms on their web site
- The ProCard program was expanded and offered to all units on campus

Transportation and Parking Services/Parking Sales Office:
- Name tags of each employee have been posted at the window where they work
- A point-of-contact survey was developed to encourage customer feedback
- Candidates with extensive customer service backgrounds were hired for vacant positions
- Introduction of online permit purchases has resulted in faster process
- Posters explaining parking policies have been displayed in Parking Sales Office lobby
- A computer is now in the lobby so that customers can fill out applications while they wait

Dispatch:
- Wrote and implemented a procedures manual

Parking Enforcement:
- Increased focus on repeat violators to discourage parking without a permit
- New supervisor meets with complainants to resolve problems promptly
- Hired additional parking enforcement officer to ensure better consistency on campus

Kiosk Guards:
- Hired additional guard to reduce delays at West Gate, and to improve screening consistency

Police Officers:
- Added another motorcycle to improve traffic enforcement efforts

Controller's Office:
- Developed a regular publication for campus business officers (Slugbert's World)

Accounting Office:
- Implemented Accounts Payable Users Group to improve communication

Financial Information System:
- Assisted CATS Information Resource Center in streamlining the new account set-up process

Physical Planning and Construction:
- Collaborated with Physical Plant to design and implement building commissioning procedures
- Worked with PIO to provide construction impacts information through the campus web site

- The measures must be adapted to changing business processes and systems. As the systems change, so must the measures.

BAS unit managers have now gathered their first year of data, which gives them baseline information. This baseline data becomes useful when it is compared with subsequent data, and trends can be established. As managers review the data their metrics have provided, they will determine whether this data is useful to them in making operational and/or strategic decisions. They must also decide if the cost of gathering the data exceeds the value that the data provides. This is the process of refining metrics down from the "trivial many" to the "the critical few." BAS management expects that the development of goals and performance measures will continue to evolve. As BAS unit managers and their staff become more accustomed to the practice of measurement, analysis, and action based on findings, it is expected that units will become more adept at the continuous improvement of their service delivery in support of academic priorities.

Next Steps

Within the next year, BAS management hopes to review the revised metrics being used by unit managers, and use a small sub-set of them in a divisional Balanced Scorecard. This scorecard will provide a snapshot of how the division is doing in providing its mission-critical programs and services. This, too, will be reviewed and revised on a regular basis, to make sure that the metrics chosen continue to provide relevant and meaningful information.

Because BAS has incorporated performance measurement into our divisional resource planning and operational improvement process, unit managers are aware that any new program or initiative must have critical success factors and performance metrics defined before implementation is begun. This is as true for small unit improvements as it is for major campuswide initiatives such as the New Business Architecture.

From a campuswide perspective, OPA anticipates serving as a key campus resource in providing advice and guidance to other divisions as they introduce performance measurement initiatives.

Challenges

Fulfilling BAS' responsibilities to the campus over the past decade has been challenging. Doing so over the next decade will be even more challenging. BAS will be confronted with a number of serious issues, some of which have already been identified and are further described below.

Space

Like many other campus divisions, BAS suffers from a serious lack of adequate workspace. Addressing academic workspace needs has received top priority in terms of allocating existing and new workspace. Over the past few years, academic and academic support workload growth has quickly depleted the availability of space throughout the campus. BAS is among the divisions most adversely impacted by this phenomenon. And the trend, if not addressed, will likely continue over the next decade. Currently, BAS units are dispersed throughout the campus, most being located wherever space is available, without regard to overall organizational or divisional efficiency. In a few cases, supervisors are not located in proximity to their respective staffs, resulting in inefficiency and increased costs associated with traveling from location to location.

In order to accommodate anticipated workload growth over the next decade, BAS estimates that its sub-units will need an additional 35,522 square feet (s.f.) of space for personnel by 2005-06. An additional 19,348 s.f. of space will be needed by 2010-11. In addition, approximately 16,700 s.f. of space will be needed for storage and to serve as shop space. These figures exclude space needed for new initia-

tives, as outlined in individual BAS initiative proposals. Please refer to the spreadsheet on page A-17 for a breakdown of space needs by unit.

BAS' workspace shortage problem will be alleviated somewhat with the construction of the following projects:

Emergency Response Building This new facility for the Police Department is currently slated for occupancy in 2005. It will solve the problems experienced by the Police Department due to lack of specific types of program-related space: showers, locker rooms, confidential interview rooms, evidence handling and storage facilities, private offices, and custody holding areas. This facility will also house the dispatch center (currently located in the Communications Building), and provide space for a new Emergency Operations Center (EOC). While safety staff have worked for years to create a portable and functioning EOC (equipment is stored in a storage locker behind the Fire Department, and can be deployed in the apparatus bay when needed), there are limitations with this arrangement in emergency situations. This new EOC will be equipped and ready to activate in any emergency, and will provide adequate space for not only emergency responders, but also senior administrators who need designated workspace in a disaster. Recent calls for heightened security measures underscore the need for this facility as soon as possible.

Environmental Safety Facility Environmental Health & Safety is in the planning stages of building a new Environmental Safety Facility, to be located in the "science hill" area of

campus. This new facility will not only accommodate existing and future office space needs for personnel currently housed in a temporary trailer, but will also provide space to expand the hazardous waste program, as well as centralized storage for EH&S equipment. The facility will include an office block to house staff, a laboratory block for industrial hygiene monitoring and laboratory instrument calibration, and a hazardous materials processing and storage area.

Despite the construction of these buildings, there will remain many unmet BAS workspace needs. These include the following:

- The existing fire station will require the relocation of the current firefighter living quarters so the fire apparatus parking area can be expanded to accommodate new equipment. A second floor addition to the fire station is proposed; this will accommodate the living quarter relocation, as well as provide for the expected growth in firefighter staff.

- The two existing entrance kiosks need to be replaced immediately, as they can no longer handle the increased volume of people and vehicles on campus. Both are too small, have no insulation or security, cannot be modified to provide work space necessary to meet modern ergonomic standards, and present a poor first impression for campus visitors. The Police Department and TAPS are working with the campus architect to replace the kiosks, and improve traffic and people management for entering or exiting the campus.

- Until recently, a 4,800 square foot barn housed most of the large equipment used in grounds maintenance; however, the barn was condemned due to structural problems resulting from aging and must be replaced. Until that time, much of this equipment is scattered about the campus. This has resulted in both operational inefficiencies and accelerating equipment deterioration.

- As personal computing devices become smaller, more mobile, and more commonplace, we anticipate the need for computing lab space will grow more slowly in comparison to the growth in the general student population. This will allow CATS to:

  - Increase the ratio of students to lab computers

  - Host more academic classes in lab facilities

  - Invite researchers to use lab workstation computing cycles and facilities during off-hours

Document retention is an important part of many BAS responsibilities. Retaining critical documents is often required and enables the campus to fulfill its stewardship responsibilities. The volume of these documents has increased substantially over time, requiring additional space for storage. Some BAS units have been able to use electronic means to archive documents in order to turn file cabinet floor space into staff desk space. However, most do not have sufficient resources to do this. As one of the most entrepreneurial operations, IPMTS is researching the possibility of offering centralized digital record storage to the campus. Start-up costs and (ironically) lack of space are the two largest hurdles to initiating such a service.

The problems resulting from the shortage of space is about to extend to the storing of large pieces of equipment and supplies on campus. The campus corporation yard, where large equipment, vehicles, and supplies are stored, is already at capacity. Additional space will be needed to store new equipment and vehicles and additional supplies purchased over the next ten years.

Risk Management Issues

In an effort to control costs injury and illness prevention has been a primary focus in Materiel Management, and with initiative funding provided in 2000-2001, Materiel Management partnered with EH&S to implement the campus Injury Prevention Program. There has been a favorable downward trend in injury rates as the following measurements indicate:

Measurement	FY 1999	FY 2000	FY 2001	Increase/ Decrease
Injury rate per 100 FTE	8.43	7.25	6.44	-11%
Total number of injuries	297	261	240	-8%
Number of indemnity injuries	179	180	163	-9%
Number of repetitive stress injuries	114	66	71	8%

The program goal is now focused on the severity (cost) of individual injuries. It is widely accepted that the most effective way to reduce per claim costs is by getting injured workers back to work in transitional work assignments as soon as possible. Therefore, it is necessary for UCSC to implement a campuswide transitional return to work program that will minimize the cost for missed work time, minimize workload impacts on co-workers, and reduce disruptions to departments that result from occupational injuries. BAS is in the process of hiring a transitional return to work coordinator for a minimum of two years at which time we believe cost saving data will support making the position permanent.

Claim Losses by Type FY 1997-2001

- Employment Liability 5%
- General Liability 2%
- Auto Liability 5%
- Property Losses 9%
- Workers' Compensation 79%
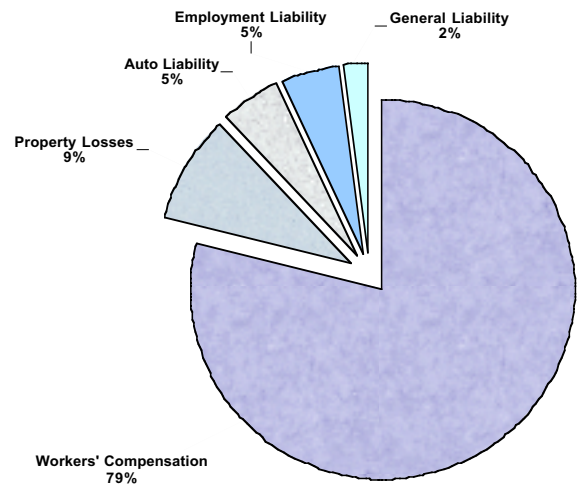
UCSC Injury Rates Since Injury Prevention Program Implementation
Number of injury claims per 100 FTE 1999-2000

Research units
- 1999: 5.83
- 2000: 3.75
- 2001: 4.98 Net decrease: 14.6%

Average injury rate decrease since program implementation: 17.32%

Student Affairs
- 1999: 12.53
- 2000: 9.61
- 2001: 8.57 Net decrease: 31.6%

BAS
- 1999: 14.46
- 2000: 12.7
- 2001: 11.34 Net decrease: 21.5%

Colleges
- 1999: 9.27
- 2000: 3.56
- 2001: 3.96 Net decrease: 57.3%

Academic Units
- 1999: 5.72
- 2000: 6.87
- 2001: 10.42 Net increase: 45.1%

Chancellor's Unit
- 1999: 8.43
- 2000: 7.25
- 2001: 6.41 Net decrease: 24%

0 2 4 6 8 10 12 14 16
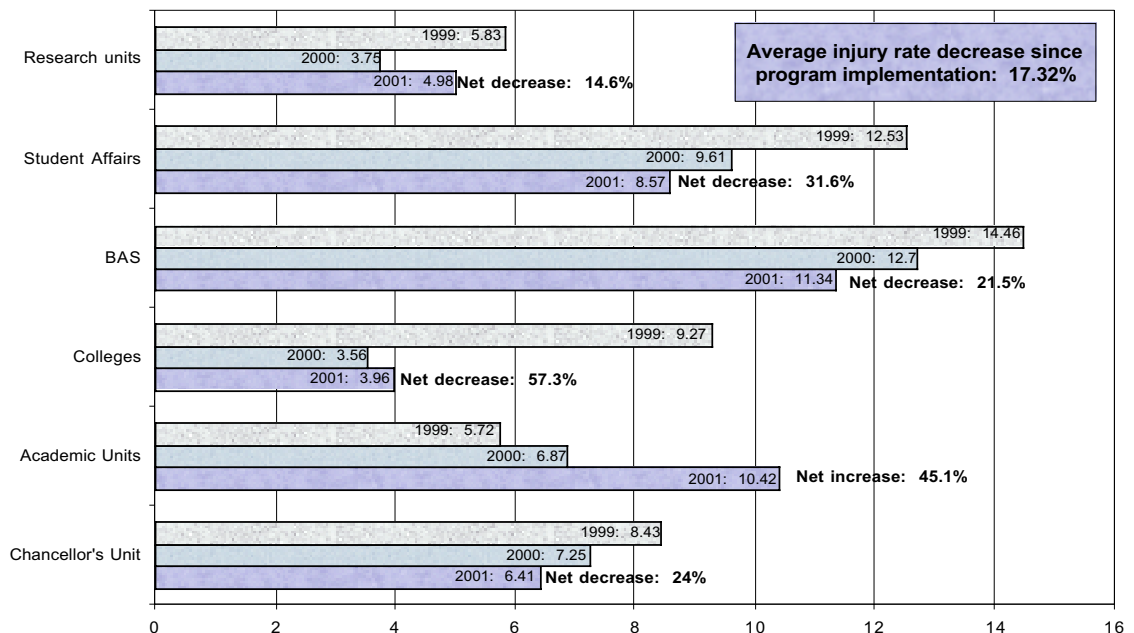
Two events, the tragedy of September 11th, and the substantial decline in the value of most equity investment instruments will result in dramatic increases in insurance costs for the university. To offset some of these cost increases, the university will likely resort to assuming a greater share of the risk by self-insuring a larger portion of any potential losses. As a result, the campus faces a substantially greater risk of unexpected expenses related to covering losses. Campus Risk Management will explore mitigating this risk with proactive policies and practices that make campus departments accountable for identifying and managing risks within their control. This is likely to result in an overall reduction in risk of loss and cost. However, pursuing this strategy will require an investment of resources.

Succession Planning/Retirement Data

The composition of 2000-01 BAS staffing reveals that currently 26% of BAS staff are between the ages of 50-65, and thus eligible for retirement. That figure grows to 35% in 2005-06, as the following chart shows:

Number of those eligible to retire as a percentage of BAS FTE
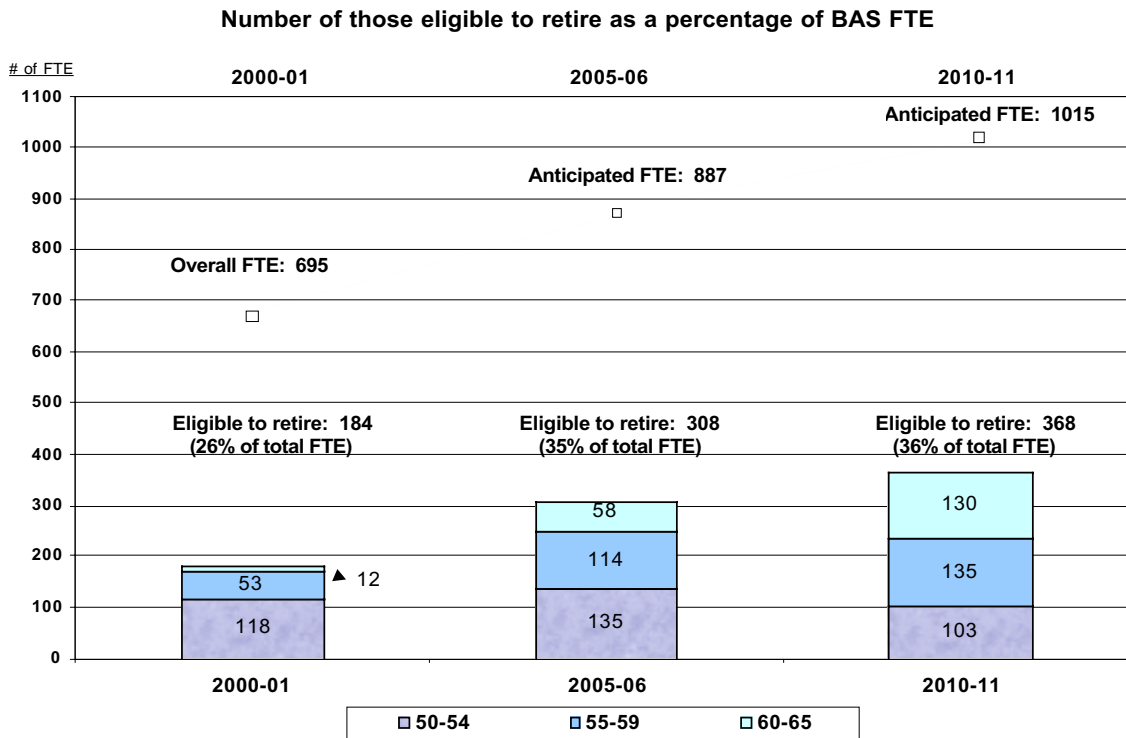
Considering this transition in the workforce, organized succession planning is becoming a key issue for BAS units as it is for the entire campus. Retirements will provide growth opportunities for existing campus employees and there will be increased opportunities through attrition to reexamine activities for possible reorganization or elimination.

Utility Costs

In 2000, the state experienced an unprecedented energy crisis and a corresponding spike in natural gas prices as a commodity, a condition unforeseen by experts in the field. The Physical Plant, working with the campus, has taken every possible action to reduce campus usage in order to control costs. In fact, the following usage chart demonstrates UCSC has the best use record among all UC campuses and has invested in conservation projects whenever possible.

Beyond these efforts, Physical Plant exerts minimal control over utility usage by campus departments and programs even though it has oversight responsibility for the funding provided for purchased utilities. This has created a dilemma of large proportions. For fiscal year 2000-01, the cost overrun for purchased utilities amounted to $673,000, of which the central campus provided $500,000 to offset a portion of the deficit. BAS strongly believes that sub-units within the Physical Plant should not be held responsible for what amounts to a campuswide problem. BAS management is working on a new model for funding campuswide utility deficits in order to avoid this situation in the future.

The California energy crisis also pointed to the vulnerability of the campus to power outages. In an effort to maintain critical operations and to have flexibility in resource deployment, the campus purchased the cogeneration plant. The plant is not sized to meet the needs of the entire campus. To determine the size, location, and desirability of a new cogeneration facility to support a growing campus, a feasibility study estimated at $150,000 must be undertaken. The study will provide the necessary information for how the campus should proceed in order to provide reliable energy to users. It is projected the cost of a new facility could cost as much as $20,000,000.

Radar Screen Issues

Ongoing strategic planning has provided the division with "radar screen" issues to be faced by the campus in the near future. These issues have cost factors that will have a significant impact on the campus.

Until now campus development has been guided by a the Long-Range Development Plan (LRDP) which was adopted by the Regents in May 1989. As noted earlier, this twelve-year-old document is reaching the end of its life expectancy and work has begun to review and update assumptions underlying the LRDP. These efforts will lead to an updated LRDP that will guide campus development beyond 2006. The 1989 agreements entered into with the city regarding mitigation measures related to impacts on the city as a result of campus growth are included in the Radar Screen list on page A-18. This list underscores the capacity issues the campus is facing and the key decision making and one-time capital outlay needed to resolve them.

Energy Consumption Costs: P4P Data
BTU Consumption per Million Gross Square Feet

Systemwide average: 218

Campus	Value
UCSC	149
UCB	181
UCD	286
UCI	153
UCLA	270
UCR	170
UCSD	275
UCSF	322
UCSB	159

Contents

Appendix

PP&C Staffing Study
1993-2010

	2,128,000 asf / 82,000 asf/yr	600,000 asf / 60,000 asf/yr	3,052,000 asf / 305,000 asf/yr

■ asf added   —●— proj. mgmt. staff   —■— planning staff
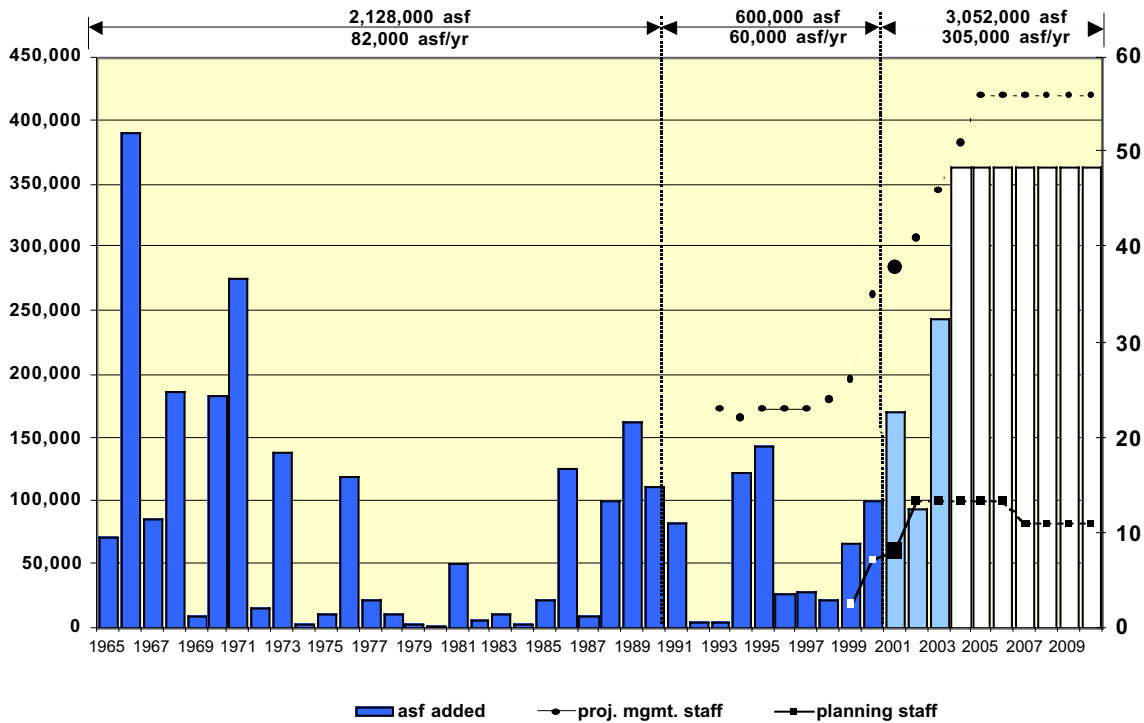
Campus & Community Planning
Planning Activities and Costs to Support Campus Growth Goals

#	PLANNING ACTIVITY SUMMARY	Consultants				Planning Staff Hours				Notes
		2000-2001	2001-2002	2002-2003	Total	2000-2001	2001-2002	2002-2003	Total	
1	Habitat Conservation Plans	$10,000	$190,000	$525,000	$725,000	$10,000	$65,000	$65,000	$140,000	EIR w/Consultants
	EAG Staff Hours					$2,500	$40,000	$40,000	$82,500	
2	Campus Utility	$150,000	$485,000	$230,000	$865,000	$9,700	$63,050	$50,000	$122,750	
3	Circulation/Parking		$75,000		$75,000		$9,700		$9,700	
	EAG Staff Hours						$1,800		$1,800	
4	Analytic/Consulting	$10,000	$65,000	$50,000	$125,000				$0	
5	Core Area Planning			$75,000	$75,000			$15,000	$15,000	
6	North Campus	$75,000	$625,000	$240,000	$940,000	$50,000	$95,500	$30,000	$175,500	EIR w/Consultants
	EAG Staff Hours						$17,875	$40,000	$57,875	
7	South Campus	$50,000	$25,000	$30,000	$105,000	$19,400	$20,000	$25,000	$64,400	EIR w/Consultants
	EAG Staff Hours					$10,000		$150,000	$160,000	
8	Tools/Staffing		$77,000		$77,000		$72,750	$72,500	$145,250	
9	Communications/Outreach	$25,000			$25,000				$0	
10	Long Marine Lab	$614,270	$195,000		$809,270	$21,500	$60,000	$50,000	$131,500	EIR w/Consultants
	EAG Staff Hours					$11,500	$47,000		$58,500	
	TOTAL	$934,270	$1,737,000	$1,150,000	$3,821,270	$134,600	$492,675	$537,500	$1,164,775	

	2000-2001	2001-2002	2002-2003	Total
Consultant Cost	$934,270	$1,737,000	$1,150,000	$3,821,270
Planning Staff Recharge	$110,600	$386,000	$307,500	$804,100
EAG Staff Recharge	$24,000	$106,675	$230,000	$360,675
Grand Total	$1,068,870	$2,229,675	$1,687,500	$4,986,045

University of California
2001-2002 Deferred Maintenance Program
Summary of Funded Projects for 2001-2002
Santa Cruz Campus

Campus Contact: Associate Director-Physical Plant Jim Dunne
Phone Number: 831/459-3411

Campus Project Priority	Status	New or Existing Project	Project Title	Building or Facility Name	Funds	Total Project Cost
1	00/01	Existing	Replace air handlers	Oakes Acad	Bond	331,854
3	00/01	Existing	Reroof	McHenry Library	Bond	375,827
4	99/00	Existing	Drainage system renewal	Jordan Gulch	Bond	85,000
5	99/00	Existing	Condensing water crossovers	Comm,NSII,Thimann	Bond	431,521
5	00/01	Existing	12KV transformer replacement	Theater Arts	Bond	199,356
8	00/01	Existing	Replace fire sprinkler system	Communications	Bond	338,333
9	00/01	Existing	Replace retaining wall	Crown College	Bond	97,534
10	99/00	Existing	Chiller Replacement	Communications	Bond	100,000
10	00/01	Existing	Reroof Academic Building	Merrill Academic	Bond	219,404
11	00/01	Existing	Replace HVAC system	Kresge Town Hall	Bond	85,058
12	99/00	Existing	Drainage system renewal	Jordan Gulch Middle	Bond	205,000
12	00/01	Existing	Replace AC-1 chiller	McHenry Library	Bond	119,558
13	00/01	Existing	Replace emergency power system	Thimann	Bond	192,867
14	99/00	Existing	Drainage system renewal	Jordan Gulch West	Bond	175,000
14	00/01	Existing	Reroof penthouse	Baskin Engineering	Bond	207,774
15	00/01	Existing	Reroof Academic Building	Stevenson	Bond	32,506
16	00/01	Existing	Reroof	Thimann Shop	Bond	38,074
19	99/00	Existing	Reroof	Classroom Building	Bond	135,000
20	99/00	Existing	Replace Delta 2000 to XL-50	Cogen Plant	Bond	227,748
21	00/01	Existing	Replace fire alarm system	Communications	Bond	46,600
Sub-Total Bond Funded Deferred Maintenance						*3,644,014*
	99/00	Existing	Drainage	West Dam	State	13,503
	00/01	Existing	Upper Hagar road repairs	Campus	State	125,000
	00/01	Existing	Lower Hagar road repairs	Campus	State	200,000
	00/01	Existing	Chinquapin road repairs	Campus	State	233,000
	00/01	Existing	Path work	Kerr Hall	State	46,980
	01/02	New	Hagar & Coolidge sink hole repair	Lower Campus	State	260,400
Sub-Total State Funded Deferred Maintenance						*878,883*
TOTAL Bond and State Funded Deferred Main.						**4,522,897**

Unfunded Deferred Maintenance Projects

Priority	Location	Description	Total Est. Cost (thousands)	Est. State Cost
1	APPL SCI	REHAB RESTROOMS	$140.0	$140.0
1	APPL SCI	VINYL ASBESTOS FLOOR TILE ABATEMENT	$215.0	$215.0
1	APPL SCI	ELEC, REPLACE EMERGENCY GENERATOR	$48.5	$48.5
1	APPL SCI	ELEVATOR, REPLACE CONTROLS	$61.0	$61.0
1	APPL SCI	AIR DAMPER REPLACEMENT	$84.0	$84.0
1	APPL SCI	FUMEHOOD FAN EXTENSION	$16.0	$16.0
1	APPL SCI	MECH, BALANCE HVAC SYSTEM	$97.5	$97.5
1	APPL SCI	MECH, REPLACE REVERSE OSMOSIS SYSTEM	$26.0	$26.0
1	APPL SCI	REFRIGERANT REPLACEMENT	$33.5	$33.5
1	APPL SCI	NE APP SCI REMOVE & REPLACE STEPS	$20.0	$20.0
1	APPL SCI	REMOVE & REPLACE CONCRETE ENTIRES	$30.0	$30.0
1	APPL SCI	STAIRS FOR STEEP PATH AREA APP SCI	$42.0	$42.0
1	APPL SCI	REPLACE GAMEWELL FIRE ALARM SYSTEM	$150.0	$150.0
1	APPL SCI	DOORS, REPLACE HARDWARE ON ALL	$56.5	$56.5
1	ARBORETUM	DRAINAGE DITCH FROM WEST PERK POND TO ARBORETUM	$250.0	$250.0
1	ARBORETUM	ROAD, BASE ROCK & PAVE ENTRANCE	$50.0	$50.0
1	AUTO BRIDGE CHINQUAPIN	ASPHALT RECONSTRUCTION	$230.0	$230.0
1	BARN H	TERMITE INFESTATION	$186.5	$186.5
1	BASKIN ARTS	ROOF REHAB	$260.0	$260.0
1	CAMPUS	REPLACE UNDERGROUND FEEDERS	$680.0	$680.0
1	CAMPUS	REPLACE UNDERGROUND OIL SWITCHES	$250.0	$250.0
1	CAMPUS	BRIDGE REPAIR (PEDESTRIAN 4 BRIDGES)	$180.0	$180.0
1	CAMPUS	DECKS, REPLACE REDWOOD EXT	$32.0	$32.0
1	CAMPUS	EROSION CONTROL @ COOLIDGE	$127.5	$127.5
1	CAMPUS	ET BASED IRRIGATION SYSTEM UPGRADE	$250.0	$250.0
1	CAMPUS	HARD SURFACE REPAIR (PRTR, PA, CWL, MRL)	$120.0	$120.0
1	CAMPUS	ROAD REPAIR & RESURFACE, PORTER/KRESGE	$295.0	$295.0
1	CAMPUS	ROAD RESURFACE ACCESS @ CARDIFF HOUSE	$48.0	$48.0
1	CAMPUS	FIRE ALARM SYSTEM Y2K COMPATIBLE	$50.0	$50.0
1	CAMPUS	REMOVE GAMEWELL FIRE ALARM REPLACE	$1,971.0	$1,971.0
1	CAMPUS	SEWER, ROOT OBSTRUCTION @ VARIOUS LOCATIONS	$100.0	$100.0
1	CAMPUS	FIRE ALARM SYS REPLACEMENT**	$3,412.0	$2,787.9
1	CARDIFF LANE	TREE EVALUATION & MTCE OF HERITAGE TREES	$125.0	$125.0
1	CARRIAGE HOUSE	TERMITE FUMIGATION	$16.5	$4.3
1	CARRIAGE HOUSE	WINDOW REPLACEMENT	$79.0	$20.5
1	CLASSRM BLDG	PATH REPAIRS	$20.0	$20.0
1	CLASSRM BLDG	WOOD STAIR REPLACEMENT	$190.0	$190.0
1	CLASSRM BLDG	MECH, MAJOR REHAB OF BOILER	$32.5	$32.5
1	COGEN PLANT	ROOF REHAB & RECAULK JOINTS	$129.5	$129.5
1	COGEN PLANT	REPLACE FIRE ALARM SYSTEM	$62.0	$62.0
1	COLLEGE 8 ACAD	REPLACE PEDESTRIAN DECKING	$15.0	$15.0
1	COMMUNICATIONS	E SIDE REPLACE/REPAIR WOODEN NOSINGS	$40.0	$40.0
1	COMMUNICATIONS	REPLACE FIRE ALARM SYSTEM	$100.3	$100.3
1	COOK HOUSE	REPLACE 13 WOOD STAIRS	$26.0	$26.0
1	COWELL	REPLACE 10 WOOD STAIRS N OF COWELL	$30.0	$30.0
1	COWELL ACAD	FLOOR TILE REPLACE	$123.0	$123.0
1	COWELL ACAD	REHAB RESTROOMS IN BUILDING	$60.0	$60.0
1	COWELL ACAD	REPLACE MEMBRANE UNDER TILE ROOF	$180.0	$180.0
1	COWELL ACAD	REPLACE SEWER PIPING	$18.0	$18.0
1	COWELL ACAD PATIO	INSTALL EXPANSION MATERIALS IN CONCRETE	$53.0	$53.0
1	COWELL COLLEGE	ASPHALT RECON, FOUNTAIN SERVICE RD	$55.0	$55.0
1	COWELL COMMONS	ROOF REHABILITATION (state portion only)	$170.5	$58.0
1	COWELL,STEVENSON	ASPHALT WORK AT COWELL/STEVENSON	$260.0	$260.0
1	CROWN	ROOF REPLACEMENT CROWN QUADRANGLE	$110.0	$110.0
1	CROWN	WINDOWS, REPLACE (WOOD) @ ADMIN, ACAD & CLASS	$97.5	$50.7
1	CROWN	REPAIR/REPLACE 8 WOODEN STEPS	$20.0	$20.0
1	CROWN	HARDWARE, REPLACE @ADMIN,ACAD, & CLASSRMS	$56.5	$29.4
1	CROWN	ELECTRICAL PANEL REPLACEMENT	$48.5	$48.5
1	CROWN	REPLACE 14 SETS OF WOOD STAIRS	$50.0	$50.0
1	CROWN ANNEX	UP-GRADE/REPLACE 6 WOOD STAIRS	$15.0	$15.0
1	APPL SCI	REHAB RESTROOMS	$249.1	$249.1
1	CROWN-ADMIN	REPLACE STEPS AT PATH THAT LEADS TO 2ND LEVEL	$20.0	$20.0
1	CROWN-CLASSROOM	REPLACE BOILER	$28.0	$28.0
1	CROWN-FAC WING	REPLACE BOILER	$28.0	$28.0
1	CROWN-LIBRARY	REPLACE MULTIZONE AHU	$28.5	$14.8

Unfunded Deferred Maintenance Projects

Priority	Location	Description	Total Est. Cost (thousands)	Est. State Cost
1	EARTH & MARINE SCIENCES	ENG & DESIGN FOR UPGRADING STORM DRAIN SYSTEM	$50.0	$50.0
1	EAST CAMPUS	PATH REPAIR	$80.0	$80.0
1	EAST ENTRANCE	DRAIN, INSTALL & EXPAND RADIUS	$50.0	$50.0
1	EAST FIELD HOUSE	REPAIR WINDOWS & DOORS, REPLACE DECK	$27.0	$27.0
1	EAST FIELD HOUSE	REPLACE WINDOWS AROUND BIG GYM	$90.0	$90.0
1	EAST FIELD HOUSE	REPAIR PATHWAYS EFH	$60.0	$60.0
1	EAST FIELD HOUSE	REPLACE DOOR HARDWARE, STATE AREAS ONLY	$12.5	$12.5
1	EAST FIELD HOUSE	REPLACE MAIN GYM HARDWOOD FLOOR	$350.0	$350.0
1	EFH POOL	REPLACE CONCRETE DECK AROUND POOL	$80.0	$80.0
1	EFH POOL	MECH, REPLACE CHLORINE GAS DELIVERY SYSTEM	$168.0	$168.0
1	EFH POOL	STRUCTURAL REPAIRS/GUTTERS	$500.0	$500.0
1	EIGHT-ACAD	PLAZA & WALKWAY AREAS NEED HARDSCAPE REPAIRS	$30.0	$30.0
1	HAGAR & COOLIDGE	EROSION CONTROL @ HAGAR/COOLIDGE	$250.0	$250.0
1	HAHN ART	WINDOWS, REGLAZE NORTH GLASS WALL (LEAK'G)	$25.0	$25.0
1	HAHN STUDENT SERVICES	REPLACE 2ND FLOOR CEILING (ASBESTOS ABATEMENT)	$80.0	$48.0
1	HAHN STUDENT SERVICES	RECONFIGURE CONCRETE ENTRANCE	$61.0	$36.6
1	HAHN STUDENT SERVICES	REMOVE & REPLACE PATHS	$45.0	$27.0
1	HAHN STUDENT SERVICES	REPLACE 1ST & 2ND FLOOR VENTILATION FANS	$224.0	$134.4
1	HAHN STUDENT SERVICES	REPLACE EXISTING FIRE ALARM SYSTEM	$26.0	$15.6
1	HAHN STUDENT SERVICES	REPLACE HEATING HOT WATER SYSTEM BOILER	$60.0	$36.0
1	HAHN STUDENT SERVICES	REPLACE ENERGY MANAGEMENT CONTROL SYSTEM	$27.0	$16.2
1	HAHN STUDENT SERVICES	REPLACE FIRE ALARM SYSTEM	$27.0	$16.2
1	HEALTH CENTER	REPLACE TAR AND GRAVEL ROOF	$188.0	$0.0
1	HEALTH CENTER	REMOVE & REPLACE STEPS	$42.0	$0.0
1	HEALTH CENTER	REPLACE ENERGY MANAGEMENT CONTROL SYSTEM	$27.0	$0.0
1	HEALTH CENTER	REPLACE FIRE ALARM SYSTEM	$27.0	$0.0
1	HELLER DRIVE	ASPHALT RECON MEYER DRIVE TO MCLAUGHLIN	$410.0	$410.0
1	HELLER DRIVE	ASPHALT RECONSTRUCTION	$410.0	$410.0
1	HELLER DRIVE	ASPHALT RECONSTRUCTION	$280.0	$280.0
1	JORDAN GULCH	REPLACE 20 STEPS ON PATH	$64.0	$64.0
1	KERR HALL	ASBESTOS FLOOR TILE ABATEMENT	$213.5	$213.5
1	KERR HALL	REPLACE ROOFING & CALKING	$100.0	$100.0
1	KERR HALL	WATERFROOF MEMBRANE UNDER DECK	$27.0	$27.0
1	KERR HALL	ELEVATOR, REPLACE SYSTEM	$70.5	$70.5
1	KERR HALL	REPAIR PATHWAYS AND EXT STAIRWAYS	$48.0	$48.0
1	KERR HALL	REPLACE STEPS	$70.0	$70.0
1	KERR HALL	LOADING DOCK LIFT REPLACE	$28.0	$28.0
1	KERR HALL	REPLACE LOCK HARDWARE	$72.5	$72.5
1	KERR, PA, MCHENRY	REPLACE PRESSURE CONTROL VALVES	$75.0	$75.0
1	KRESGE	ELECTRICAL PANEL REPLACEMENT	$92.0	$92.0
1	KRESGE	REPLACE WOOD GRATES	$30.0	$30.0
1	KRESGE	HARDWARE, REPLACE @ADMIN,ACAD, & CLASSRMS	$56.0	$29.1
1	KRESGE ADM	REPLACE EXT STAIRWAY	$100.0	$100.0
1	KRESGE ADMIN	REPLACE HEATING HOT WATER BOILER	$21.5	$21.5
1	KRESGE N BRIDGE	STEP REPLACEMENT N BRIDGE TO HELLER	$50.0	$50.0
1	KRESGE REC BUILDING	REPLACE VCT FLOORING	$17.5	$9.1
1	KRESGE REC BUILDING	RESURFACE ASPHALT	$21.5	$21.5
1	KRESGE REC BUILDING	FURNACE REPLACE	$33.5	$17.4
1	KRESGE,OAKES, CR/MERR	REPLACE FPE SWITCHGEAR @ SUBSTATIONS	$275.0	$275.0
1	KRESGE-ACADEMIC	REPLACE AHU ABOVE CLOSET	$36.0	$18.7
1	KRESGE-CLASSROOM	STUCCO REPLACEMENT	$70.0	$70.0
1	KRESGE-CLASSROOM	REPLACE AHU/FURNACES	$35.0	$35.0
1	KZSC	REPLACE 35 WOOD STAIRS W OF RADIO STATION	$0.0	$90.0
1	LICK LAB	REPLACE 7 WOOD STAIRS	$16.0	$16.0
1	LONG MARINE LAB	RECOAT MAMMAL TANKS, REFURBISH GATES	$75.0	$75.0
1	LONG MARINE LAB	STRUCTURAL ANCHOR BOLTS, REPAIR/REPLACE	$67.0	$67.0
1	LONG MARINE LAB	REPLACE EXHAUST FAN	$13.0	$13.0
1	MAIN ENTRANCE	KIOSK REPAIR/REPLACE	$6.7	$6.7
1	MCHENRY LIB	DOOR REPLACEMENT	$54.0	$54.0
1	MCHENRY LIB	FLOOR COVERING REPLACEMENT	$160.0	$160.0
1	MCHENRY LIB	FLOOR, REPL STAIRWAY NON-SKID SURFACES	$23.5	$23.5
1	MCHENRY LIB	ELEC, REPLACE 12KV SWITCH	$39.5	$39.5
1	MCHENRY LIB	REPLACE 12 STEPS, UPGRADE DESIGN	$28.0	$28.0
1	MCHENRY LIB	REPLACE WOOD RETAINING WALLS	$60.0	$60.0
1	MCHENRY LIB	REPLACE WOOD RETAINING WALLS	$60.0	$60.0

Unfunded Deferred Maintenance Projects

Priority	Location	Description	Total Est. Cost (thousands)	Est. State Cost
1	MCHENRY LIB	ROAD RESURFACE SERVICE	$35.0	$35.0
1	MCHENRY LIB	MECH, REPLACE AIR DAMPERS	$58.5	$58.5
1	MCHENRY LIB	MECH, REPLACE TEMP CONTROLS @ SPECIAL COLL	$27.0	$27.0
1	MCLAUGHLIN ROAD	ASPHALT RECONSTRUCTION,REMOVAL ETC	$225.0	$225.0
1	MCLAUGHLIN ROAD	REPAIR PATHS HEALTH CENTER TO HAGAR	$60.0	$60.0
1	MCLAUGHLIN ROAD	REPAIR PATHWAYS MCLAUGHLIN TO CROWN	$76.0	$76.0
1	MERRILL ACAD	WINDOWS, REPAIR TO MAKE WATERTIGHT	$12.0	$12.0
1	MERRILL ACAD	RETAINING WALL ADJACENT TO ACAD BLDG	$50.0	$50.0
1	MERRILL ACAD	RETAINING WALL ADJACENT TO GATE HOUSE	$40.0	$40.0
1	MERRILL ACAD	STEP REPLACEMENT	$15.0	$15.0
1	MOORE CREEK	DRAINAGE & EROSION CORRECTION	$466.0	$466.0
1	MT HAMILTON	PAINT SHANE DOME	$72.5	$72.5
1	NAT SCI II	REPLACE COUNTER TOPS VARIOUS	$130.0	$130.0
1	NAT SCI II	REMOVAL & REPLACE PAVEMENT ON SERVICE ROADS	$45.3	$45.3
1	OAKES ADMIN	WINDOW REPLACEMENT	$400.0	$400.0
1	OAKES ADMIN	ELECTRICAL PANEL REPLACEMENT	$88.0	$88.0
1	OAKES ADMIN	HARDWARE, REPLACE @ADMIN,ACAD, & CLASSRMS	$26.0	$26.0
1	OAKES COLLEGE	RECONFIGURE CONCRETE STEPS & ENTRY	$100.0	$100.0
1	OAKES-ACADEMIC	STAIRS, EXTERIOR, WEST END, REBUILD	$62.5	$32.5
1	OAKES-ACADEMIC	REPLACE AMPITHEATER RETAINING WALLS	$160.0	$160.0
1	PORTER	REPLACE WOOD WALKWAY/PATIO AREAS	$79.0	$79.0
1	PORTER	HARDWARE, REPLACE @ADMIN,ACAD, & CLASSRMS	$56.0	$56.0
1	PORTER TO FSH	REPAIR PATHWAYS PORTER TO FSH	$60.0	$60.0
1	PORTER/KRESGE	SEWER, REPLACE 10" MAIN	$117.0	$117.0
1	PORTER-ACADEMIC (D)	REHAB RESTROOMS	$16.0	$16.0
1	RECEIVING BARN	ELEC, REPLACE BUILDING ELECTRICAL PANEL	$9.5	$9.5
1	REDWOOD BLDG	REPAIR STEPS LEADING TO STEINHART	$35.0	$35.0
1	SCIENCE HILL	LOOP PATH REPAIRS	$55.0	$55.0
1	SINSHEIMER LABS	REFRIGERANT REPLACEMENT	$100.5	$100.5
1	STEVENSON ADMIN	FLOOR, REPLACE ASBESTOS TILE	$160.0	$142.7
1	STEVENSON ADMIN	REHAB RESTROOMS	$60.0	$60.0
1	STEVENSON ADMIN	REROOF STEV COLLEGE QUADRANGLE	$90.0	$90.0
1	STEVENSON ADMIN	PATH REPAIRS STEVENSON MUSIC ROOMS	$70.0	$70.0
1	STEVENSON ADMIN	RE-HARDWARE OMP AREAS	$47.0	$47.0
1	THEATER ARTS	DRAPES, REPLACE	$125.5	$125.5
1	THEATER ARTS	FLOOR, THEATRE STAGE REPLACE	$32.0	$32.0
1	THEATER ARTS	DRAIN, INSTALL TRENCH DRAIN ON EAST WALL	$30.5	$30.5
1	THEATER ARTS	REMOVE & REPLACE STAIRS	$70.0	$70.0
1	THEATER ARTS	PAINT EXTERIOR SURFACES	$133.5	$133.5
1	THIMANN	REPLACE COUNTER TOPS	$64.0	$64.0
1	THIMANN	REPLACE ROOF AND REPAIR ROOF GUTTERS	$157.0	$157.0
1	THIMANN	REPLACE ELEVATOR CONTROLLER	$20.0	$20.0
1	THIMANN	REPLACE ASPHALT CONCRETE LANDING	$40.0	$40.0
1	THIMANN	REPLACE/RESET BRICKS	$15.5	$15.5
1	THIMANN	PATH RECONSTRUCT,REPLACE WOOD STAIRS	$75.0	$75.0
1	THIMANN GREENHOUSE	REPLACE EPOXY FLOOR	$32.0	$32.0
1	THIMANN RM 303	A/C 36 REPLACE	$39.5	$39.5
1	THIMANN,NSII	UPGRADE DELTA 2000 CONTROLLERS	$346.5	$346.5
1	UPPER QUARRY	BENCHES, REBUILD	$626.0	$626.0
1	WEST CORE	REPLACE RETAINING WALLS OAKES/MEYER	$100.0	$100.0
1	WEST ENTRANCE	KIOSK REPAIR/REPLACE	$6.7	$6.7
1	WEST ENTRANCE	TO COLLEGE 8 ENT ASPHALT RECONSTRUCTION	$500.0	$500.0
2	APPL SCI	REPLACE LAB BENCH TOPS & REPAIR FUME HOODS	$150.5	$150.5
2	CAMPUS	ELEC, EXT LITE REPR/REPLCE	$67.0	$67.0
2	CAMPUS	ELEC, LITE PATH REPR/REPLCE-PHASE 3	$79.0	$79.0
2	CAMPUS	FENCES, R/R BROKEN BOUNDRY/CONTROL	$40.0	$40.0
2	CAMPUS	HANDRAILS, REFINISH TO ORIGINAL CONDITION	$33.5	$33.5
2	CAMPUS	ROAD REPAIR UPPER CAMPUS FIRE RDS	$50.0	$50.0
2	CAMPUS	MECH, INSULATION REP & REPL @ PIPES	$187.5	$187.5
2	CAMPUS	REP SECURITY PANELS & HEADEND	$346.0	$346.0
2	CLASSRM BLDG	ELEC, LITE DIMMERS AND CONTROLS REPLACE	$24.0	$24.0
2	COGEN PLANT	BOILERS UPGRADE	$75.0	$75.0
2	COWELL ACAD	REPLACE CEILING W/ACOUSTICAL	$12.5	$6.5
2	COWELL-LIBRARY	SEAL PANELING/TRIM	$6.5	$3.4
2	CROWN-ADMIN	BOILER REPLACEMENT	$17.0	$8.8

Unfunded Deferred Maintenance Projects

Priority	Location	Description	Total Est. Cost (thousands)	Est. State Cost
2	EARTH & MARINE SCIENCES	REPLACE CHILLER CH-10	$133.5	$133.5
2	EARTH & MARINE SCIENCES	REPLACE CHILLER CH-11	$133.5	$133.5
2	EAST FIELD HOUSE	REPAIR RUNNING TRACK	$100.0	$100.0
2	EAST FIELD HOUSE	REPLACE DANCE STUDIO FLOOR	$60.5	$60.5
2	FIRE HOUSE	REPLACE COMPOSITION SHINGLE ROOFING	$6.0	$6.0
2	HEALTH CENTER	RELOCATE SUPPLY INTAKE	$30.0	$0.0
2	KERR HALL	REPLACE CALKING IN EXPANSION JOINT OF WALLS	$90.0	$90.0
2	KERR HALL	ELEC, REPLACE EMERGENCY GENERATOR	$66.0	$66.0
2	KRESGE ADM	FUMIGATION	$11.5	$11.5
2	KRESGE REC BUILDING	REPLACE AHU	$28.5	$14.8
2	KRESGE REC BUILDING	RETUBE BOILER	$16.5	$8.6
2	KRESGE-CLASSROOM	REPLACE CEILING W/ACOUSTICAL	$6.0	$6.0
2	LONG MARINE LAB	FLOOR, RESURFACE IN LABS & HALLS	$35.0	$35.0
2	LONG MARINE LAB	MECH, REPR/RPLC SEA WATER SUCTION PIPING	$324.0	$324.0
2	MCHENRY LIB	REPAIR/RESURFACE CIRCLE PATH	$45.0	$45.0
2	MCHENRY LIB	HVAC, REPLACE SUPPLY/RETURN FAN BEARINGS	$19.0	$19.0
2	MCHENRY LIB	MECH, HEAT & VENT REPAIR & BALANCE SYSTEM	$52.5	$52.5
2	MERRILL ACAD	REPLACE CEILING W/ACOUSTICAL	$13.0	$13.0
2	MERRILL ACAD	REPLACE VCT FLOORING	$11.5	$11.5
2	MERRILL-LIBRARY	REFINISH ALL COUNTERS/CABINETS	$8.0	$4.2
2	MERRILL-LIBRARY	REFINISH ALL WOOD TRIM	$6.5	$3.4
2	MT HAMILTON	INSULATION & WEATHERPROOFING	$165.0	$165.0
2	MT HAMILTON	PAINT CROSSLEY TELESCOPE DOME	$25.0	$25.0
2	OAKES TO MEYER	REPAIR PATHWAYS OAKES TO MEYER DR	$97.0	$97.0
2	PORTER-ACADEMIC (D)	ACID WASH CONCRETE	$16.0	$8.3
2	PORTER-ACADEMIC (D)	REPLACE CABINETS/SINK	$7.0	$3.6
2	SINSHEIMER LABS	REPLACE ABSORPTION CHILLER CH-3	$133.5	$133.5
2	SINSHEIMER LABS	REPLACE CENTRIFUGAL CHILLER CH-6	$133.5	$133.5
2	SINSHEIMER LABS	REPLACE CHILLER CH-4	$133.5	$133.5
2	STEVENSON ADMIN	REPLACE AHU IN PENTHOUSE	$28.7	$14.9
2	STEVENSON-LIB	BOILER, RETUBE	$19.0	$9.9
2	THEATER ARTS	SEAT REPLACEMENT	$145.0	$145.0
2	THIMANN	WINDOW COVERING REPLACE	$50.0	$50.0
2	THIMANN LECT	SEAT REPAIR & RECOVERING	$160.0	$160.0
2	UPPER QUARRY	STRUCTURAL, DRESSING ROOM	$32.5	$32.5
3	ARBORETUM	STORAGE BUILIDING	$5.0	$5.0
3	BASKIN ARTS	REPLACE LAB COUNTER TOPS	$21.5	$21.5
3	CAMPUS	WATERPROOF TRAILERS (NS, LONG, etc)	$130.0	$130.0
3	CAMPUS	FURNITURE, OUTDOOR REPAIR & REPLACE	$19.5	$19.5
3	CAMPUS	COIN OP DISPENSERS, REPLACE COIN MECHANISMS	$10.0	$10.0
3	COMMUNICATIONS	REPLACE DAMPERS & ACTUATORS IN AIR HANDLING SYSTEM	$56.0	$56.0
3	HAHN STUDENT SERVICES	HEATING & VENTILATING REPAIRS 1ST FLOOR	$53.5	$32.1
3	KERR HALL	RELANDSCAPE EXTERIOR AREAS	$54.0	$54.0
3	NAT SCI II	REPLACE ALL EXISTING FUME HOODS	$500.0	$500.0
3	OAKES-ACADEMIC	INSTALL SAFETY STOPS ON WINDOWS	$10.0	$5.2
3	STEVENSON-LIB	REPLACE BASEMENT AHU	$29.0	$15.1
3	THEATER ARTS	REPLACE DAMPERS & ACTUATORS IN AIR HANDLING SYSTEM	$56.0	$56.0
3	THIMANN	REPLACE ALL EXISTING FUME HOODS	$500.0	$500.0

			$28,137.7	$26,562.9
U.C. PRIORITY TOTALS				
PRIORITY:	1		$23,262.5	$21,837.6
	2		$3,430.7	$3,320.9
	3		$1,444.5	$1,404.4
TOTALS:			$28,137.7	$26,562.9

BUSINESS AND ADMINISTRATIVE SERVICES
Operating Detail

Unit Name	2001-2002 Permanent Budget	2005-2006 State Funds One-time	2005-2006 State Funds Ongoing	2005-2006 Recharge & Fees One-time	2005-2006 Recharge & Fees Ongoing	2005-2006 Total Funds One-time	2005-2006 Total Funds Ongoing	2005-2006 % Change	2010-2011 State Funds One-time	2010-2011 State Funds Ongoing	2010-2011 Recharge & Fees One-time	2010-2011 Recharge & Fees Ongoing	2010-2011 Total Funds One-time	2010-2011 Total Funds Ongoing	2010-2011 % Change *
VC-BAS/OPA															
FTE	7.50		8.50			0	8.50	13%		8.50			0	8.50	13%
Salary Costs	613,076		673,076			0	673,076	10%		683,886			0	683,886	12%
Benefits Costs			10,810			0	10,810	n/a		0			0	0	n/a
Non-Salary Costs	127,786		127,786			0	127,786	0%		127,786			0	127,786	0%
Major Purchases						0	0	n/a					0	0	n/a
Collection Cntr/Spec Proj	30,161		30,161			0	30,161	0%		30,161			0	30,161	0%
Sub-total VC-BAS/OPA	771,023		841,833			0	841,833	9%		841,833			0	841,833	9%
CATS															
FTE	84.67		72.60		69.00	0	141.60	67%		78.25		77.75	0	156.00	84%
Salary Costs	5,761,444		3,442,107		4,341,284	0	7,783,391	35%		3,785,373		4,768,356	0	8,553,729	48%
Benefits Costs	740,821				1,050,585	0	1,050,585	42%				1,144,785	0	1,144,785	55%
Non-Salary Costs	5,386,180		1,904,857		4,733,448	0	6,638,305	23%		2,117,521		5,181,382	0	7,298,903	36%
Major Purchases	658,000		528,466		534,735	0	1,063,201	62%		688,445		975,839	0	1,664,284	153%
Sub-total CATS	12,546,445		5,875,430		10,660,052	0	16,535,482	32%		6,591,339		12,070,362	0	18,661,701	49%
EH&S															
FTE	10.00		13.85		0.15	0	14.00	40%		16.35		0.15	0	16.50	65%
Salary Costs	725,072		948,052		12,781	0	960,833	33%		1,052,938		14,641	0	1,067,579	47%
Benefits Costs	2,891		11,470		2,891	0	14,361	397%		25,503		2,891	0	28,394	882%
Non-Salary Costs	174,830	15,000	132,000			15,000	132,000	-24%	11,000	156,000			11,000	156,000	-11%
Major Purchases		40,000	15,600			40,000	15,600	n/a	40,000	10,000			40,000	10,000	n/a
Sub-total EH&S	902,793	55,000	1,107,122		15,672	55,000	1,122,794	24%	51,000	1,244,441		17,532	51,000	1,261,973	40%
FINANCIAL AFFAIRS															
FTE	49.48		56.58		5.00	0	61.58	24%		63.72		5.00	0	68.72	39%
Salary Costs	2,363,068		2,922,211		140,224	0	3,062,435	30%		3,274,780		140,224	0	3,415,004	45%
Benefits Costs			112,673		33,621	0	146,294	n/a		189,558		33,621	0	223,179	n/a
Non-Salary Costs	560,586	14,650	874,749		94,522	14,650	969,271	73%	10,200	1,013,248		96,294	10,200	1,109,542	98%
Major Purchases		55,250	5,938			55,250	5,938	n/a	52,250	6,563			52,250	6,563	n/a
Sub-total Fin Affairs	2,923,654	69,900	3,915,571		268,367	69,900	4,183,938	43%	62,450	4,484,149		270,139	62,450	4,754,288	63%
FIRE															
FTE	16.00		20.00			0	20.00	25%		27.00			0	27.00	69%
Salary Costs	859,242		1,430,120		61,649	0	1,491,769	74%		2,385,564		61,649	0	2,447,213	185%
Benefits Costs	7,031		17,100			0	17,100	143%		33,555			0	33,555	377%
Non-Salary Costs	53,930		20,000		13,860	0	33,860	-37%		20,000		13,860	0	33,860	-37%
Major Purchases	55,730					0	0	-100%					0	0	
Sub-total Fire	975,933		1,467,220		75,509	0	1,542,729	58%		2,439,119		75,509	0	2,514,628	158%
INTERNAL AUDIT															
FTE	5.00		7.75			0	7.75	55%		8.75			0	8.75	75%
Salary Costs	347,001		547,807			0	547,807	58%		657,198			0	657,198	89%
Benefits Costs			44,005			0	44,005	n/a		67,802			0	67,802	n/a
Non-Salary Costs	46,292		40,000			0	40,000	-14%		45,000			0	45,000	-3%
Major Purchases						0	0						0	0	
Sub-total Intrnl Audit	393,293		631,812			0	631,812	61%		770,000			0	770,000	96%

* Percent of change for 2010-2011 is from 2001-2002 to 2010-2011.

BUSINESS AND ADMINISTRATIVE SERVICES
Operating Detail

Unit Name	2001-2002 Permanent Budget	2005-2006 State Funds One-time	2005-2006 State Funds Ongoing	2005-2006 Recharge & Fees One-time	2005-2006 Recharge & Fees Ongoing	2005-2006 Total Funds One-time	2005-2006 Total Funds Ongoing	2005-2006 % Change	2010-2011 State Funds One-time	2010-2011 State Funds Ongoing	2010-2011 Recharge & Fees One-time	2010-2011 Recharge & Fees Ongoing	2010-2011 Total Funds One-time	2010-2011 Total Funds Ongoing	% Change *
IPMTS															
FTE	40.25		5.50		43.50	0	49.00	22%		5.50		43.50	0	49.00	22%
Salary Costs	1,346,858		169,245		1,453,046	0	1,622,291	20%		169,245		1,453,049	0	1,622,294	20%
Benefits Costs	406,438				508,141	0	508,141	25%				508,141	0	508,141	25%
Non-Salary Costs	3,560,791				4,638,585	0	4,638,585	30%				5,191,477	0	5,191,477	46%
Major Purchases		76,000		14,000		90,000	0		92,500		17,500		110,000	0	
Sub-total IPMTS	5,314,087	76,000	169,245	14,000	6,599,772	90,000	6,769,017	27%	92,500	169,245	17,500	7,152,667	110,000	7,321,912	38%
MATERIEL MANAGEMENT															
FTE	23.80		30.00		6.00	0	36.00	51%		36.00		8.00	0	44.00	85%
Salary Costs	1,107,304		1,541,468		169,572	0	1,711,040	55%		899,513		200,568	0	1,100,081	-1%
Benefits Costs	16,900		83,056		40,764	0	123,820	633%		1,055,055		56,351	0	1,111,406	6476%
Non-Salary Costs	58,920		150,359		54,838	0	205,197	248%		180,159		59,038	0	239,197	306%
Major Purchases		76,000		14,000		90,000	0	n/a	92,500		17,500		110,000	0	
Sub-total Mat Mgmt	1,183,124	76,000	1,774,883	14,000	265,174	90,000	2,040,057	72%	92,500	2,134,727	17,500	315,957	110,000	2,450,684	107%
PP&C															
FTE	31.75		7.00		31.75	0	38.75	22%		7.00		31.75	0	38.75	22%
FTE (Contract Employees)	10.25				29.25		29.25	185%				27.25		27.25	166%
Salary Costs	2,631,851		652,379		3,611,220	0	4,263,599	62%		652,379		3,479,627	0	4,132,006	57%
Benefits Costs	450,000				729,000	0	729,000	62%				706,500	0	706,500	57%
Non-Salary Costs	602,986		100,557		876,280	0	976,837	62%		100,408		846,280	0	946,688	57%
Major Purchases						0	0						0	0	
Sub-total PP&C	3,684,837		752,936		5,216,500	0	5,969,436	62%		752,787		5,032,407	0	5,785,194	57%
PHYSICAL PLANT															
FTE	251.00		317.00			0	317.00	26%		382.00			0	382.00	52%
Salary Costs	9,205,431		10,586,246			0	10,586,246	15%		12,174,187			0	12,174,187	32%
Benefits Costs	363,625		418,168			0	418,168	15%		480,890			0	480,890	32%
Non-Salary Costs	10,692,274		12,296,115			0	12,296,115	15%		14,140,532			0	14,140,532	32%
Major Purchases	244,776		281,492			0	281,492	15%		323,716			0	323,716	32%
Sub-total Phys Plant	20,506,106		23,582,021			0	23,582,021	15%		27,119,325			0	27,119,325	32%
POLICE															
FTE	42.08		38.85		14.58	0	53.43	27%		43.85		15.58	0	59.43	41%
Salary Costs	1,912,347		2,121,052		622,317	0	2,743,369	43%		2,499,822		622,317	0	3,122,139	63%
Benefits Costs	75,000	65,701	262,190		138,933	65,701	401,123	435%	55,690	262,190		146,678	55,690	408,868	445%
Non-Salary Costs	198,571	39,070	143,171		249,678	39,070	392,849	98%	10,750	218,671		249,264	10,750	467,935	136%
Major Purchases	12,250				27,398	0	27,398	124%				27,398	0	27,398	124%
Sub-total Police	2,198,168	104,771	2,526,413		1,038,326	104,771	3,564,739	62%	66,440	2,980,683		1,045,657	66,440	4,026,340	83%
STAFF HUMAN RESOURCES															
FTE	31.26		38.67		2.34	0	41.01	31%		44.67		2.34	0	47.01	50%
Salary Costs	1,515,495		1,782,808		207,592	0	1,990,400	31%		2,101,041		207,592	0	2,308,633	52%
Benefits Costs	21,555		95,953		21,555	0	117,508	445%		149,046		21,555	0	170,601	691%
Non-Salary Costs	288,664	46,100	303,637		63,883	46,100	367,520	27%	16,400	332,668		63,883	16,400	396,551	37%
Major Purchases		12,600		2,500		15,100	0	n/a	18,100				18,100	0	n/a
Sub-total SHR	1,825,714	58,700	2,182,398	2,500	293,030	61,200	2,475,428	36%	34,500	2,582,755		293,030	34,500	2,875,785	58%
TAPS															
FTE	33.72				42.82	0	42.82	27%				49.91	0	49.91	48%
Salary Costs	2,479,766				3,266,022	0	3,266,022	32%				3,877,796	0	3,877,796	56%
Benefits Costs	728,506				987,939	0	987,939	36%				1,092,106	0	1,092,106	50%
Non-Salary Costs	3,883,628				5,000,287	0	5,000,287	29%				6,331,820	0	6,331,820	63%
Major Purchases	400,000				486,202	0	486,202	22%				620,531	0	620,531	55%
Sub-total TAPS	7,491,900				9,740,450	0	9,740,450	30%				11,922,253	0	11,922,253	59%
TOTAL BAS	60,717,077	364,371	44,826,884	16,500	34,172,852	380,871	78,999,736	30%	306,890	52,110,403	17,500	38,195,513	324,390	90,305,916	49%

* Percent of change for 2010-2011 is from 2001-2002 to 2010-2011.

A-9

			2005-2006		2010-2011		Total	
BAS INITIATIVE DETAIL — Listing by unit (prioritized within unit)								
Unit Name		**Unit Budget Available**						
Priority	**Initiative**		**One-time**	**Ongoing**	**One-time**	**Ongoing**	**One-time**	**Ongoing**
CATS								
1	*Disaster Preparedness*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		105,000	32,800	100,000	131,200	205,000	164,000
	Major Purchases		72,000	3,600	20,000		92,000	3,600
	Sub-total		177,000	36,400	120,000	131,200	297,000	167,600
2	*Security Enhancements*							
	FTE			1.00				1.00
	Salaries			75,000				75,000
	Benefits			18,000				18,000
	Nonsalary Costs		135,000	88,000	125,000	55,000	260,000	143,000
	Major Purchases		148,000	10,200	50,000		198,000	10,200
	Sub-total		283,000	191,200	175,000	55,000	458,000	246,200
3	*Campus Cabling Upgrade*							
	FTE		0.30-1.00/yr		1.00/yr		10.00	
	Salaries		273,000		350,000		623,000	
	Benefits		65,520		84,000		149,520	
	Nonsalary Costs							
	Major Purchases		6,175,975			6,250,000	6,175,975	6,250,000
	Sub-total		6,514,495		434,000	6,250,000	6,948,495	6,250,000
4	*New Business Architecture*							
	FTE		0.50-1.50/yr	12.00		2.00	5.00	14.00
	Salaries		372,250	976,750		160,000	372,250	1,136,750
	Benefits							
	Nonsalary Costs		696,500	243,400	75,000	18,750	771,500	262,150
	Major Purchases		239,000	36,150			239,000	36,150
	Sub-total		1,307,750	1,256,300	75,000	178,750	1,382,750	1,435,050
5	*Enhanced Messaging*							
	FTE		0.50/yr	1.00		1.50	2.50	2.50
	Salaries		190,000	75,000		132,500	190,000	207,500
	Benefits							
	Nonsalary Costs		157,000	100,050	63,000	41,500	220,000	141,550
	Major Purchases		169,000	27,600	95,000	17,600	264,000	45,200
	Sub-total		516,000	202,650	158,000	191,600	674,000	394,250
6	*Fiber Optics*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs	157,250						
	Major Purchases		157,250				157,250	
	Sub-total	157,250	157,250				157,250	0
7	*Electronic Reports Distribution*							
	FTE		1.50				1.50	
	Salaries		135,000				135,000	
	Benefits							
	Nonsalary Costs		175,500				175,500	
	Major Purchases		54,000				54,000	
	Sub-total		364,500				364,500	0
8	*Wireless Network Service Implementation*							
	FTE		1.00/yr				5.00	
	Salaries		273,000				273,000	
	Benefits		28,800				28,800	
	Nonsalary Costs							
	Major Purchases		710,000			275,000	710,000	275,000
	Sub-total		1,011,800			275,000	1,011,800	275,000
9	*Natural Sciences Lab*							
	FTE			2.50/yr		2.50/yr		5.00/yr
	Salaries			161,336		201,670		363,006
	Benefits							
	Nonsalary Costs							
	Major Purchases		209,045	247,232		441,751	209,045	688,983
	Sub-total		209,045	408,568		643,421	209,045	1,051,989

BAS INITIATIVE DETAIL						
Listing by unit (prioritized within unit)						

Unit Name		Unit Budget Available	2005-2006		2010-2011		Total	
Priority	**Initiative**		**One-time**	**Ongoing**	**One-time**	**Ongoing**	**One-time**	**Ongoing**
10	*Cowell Infill Apt. Lab*							
	FTE			2.50/yr		2.50/yr		25.00
	Salaries			122,583		204,355		326,938
	Benefits							
	Nonsalary Costs							
	Major Purchases		209,045	175,024		465,075	209,045	640,099
	Sub-total		209,045	297,607		669,430	209,045	967,037
11	*Streaming Video for Academic Courses*							
	FTE			0.50/yr		0.50/yr		5.00
	Salaries			162,500		162,500		325,000
	Benefits							
	Nonsalary Costs							
	Major Purchases			148,718		194,256		342,974
	Sub-total			311,218		356,756	0	667,974
12	*Research Computing Infrastructure Support*							
	FTE		0.50				0.50	
	Salaries		32,500				32,500	
	Benefits							
	Nonsalary Costs							
	Major Purchases		20,000				20,000	
	Sub-total		52,500				52,500	0
13	*Silicon Valley Center Communications Services*							
	FTE		2.00/yr			3.00/yr	10.00	15.00
	Salaries		84,000			834,000	84,000	834,000
	Benefits		20,160			200,160	20,160	200,160
	Nonsalary Costs							
	Major Purchases							
	Sub-total		104,160			1,034,160	104,160	1,034,160
14	*Silicon Valley Center Academic Technology Services*							
	FTE			4.00/yr		4.00/yr		40.00
	Salaries			269,085		1,125,425		1,394,510
	Benefits							
	Nonsalary Costs							
	Major Purchases		258,000			441,748	258,000	441,748
	Sub-total		258,000	269,085		1,567,173	258,000	1,836,258
15	*Voice Over IP*							
	FTE		1.00/yr		1.00/yr		10.00	
	Salaries		70,000		70,000		140,000	
	Benefits		16,800		16,800		33,600	
	Nonsalary Costs							
	Major Purchases		200,000		1,000,000		1,200,000	
	Sub-total		286,800		1,086,800		1,373,600	0
16	*Radio System Improvement*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs							
	Major Purchases		400,000				400,000	
	Sub-total		400,000				400,000	0
17	*Applicant Tracking Replacement*							
	FTE						0	
	Salaries		102,600				102,600	
	Benefits		24,624				24,624	
	Nonsalary Costs		8,166				8,166	
	Major Purchases		1,500				1,500	
	Sub-total		136,890				136,890	
18	*NBA Portal (FIS)*							
	FTE							
	Salaries		34,200		273,600		307,800	
	Benefits		8,208		65,664		73,872	
	Nonsalary Costs		2,095		23,452		25,547	
	Major Purchases		500		4,000		4,500	
	Sub-total		45,003		366,716		411,719	

			BAS INITIATIVE DETAIL					
			Listing by unit (prioritized within unit)					

Unit Name		Unit Budget Available	2005-2006		2010-2011		Total	
Priority	Initiative		One-time	Ongoing	One-time	Ongoing	One-time	Ongoing
19	*NBA E-Procurement*							
	FTE							
	Salaries		64,800		355,680		420,480	
	Benefits		15,552		85,363		100,915	
	Nonsalary Costs		4,197		23,187		27,384	
	Major Purchases		1,000		5,000		6,000	
	Sub-total		85,549		469,230		554,779	
	Total CATS	157,250	12,118,787	2,973,028	2,884,746	11,352,490	15,003,533	14,325,518
EH&S								
1	*Environmental Safety Facility*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		150,000				150,000	
	Major Purchases		4,500,000				4,500,000	
	Total EH&S		4,650,000				4,650,000	0
FINANCIAL AFFAIRS								
1	*Web-based Student Account Information Access*							
	FTE		1.00	0.20			1.00	0.20
	Salaries		35,000	7,000			35,000	7,000
	Benefits		8,400	1,680			8,400	1,680
	Nonsalary Costs			10,000				10,000
	Major Purchases		75,000	20,000			75,000	20,000
	Sub-total		118,400	38,680			118,400	38,680
2	*Vendor Payment Process Simplification and Improvement*							
	FTE		1.00				1.00	
	Salaries		31,100				31,100	
	Benefits		7,464				7,464	
	Nonsalary Costs		2,500				2,500	
	Major Purchases		20,000				20,000	
	Sub-total		61,064				61,064	0
3	*Electronic Document Management System*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		50,000	15,000			50,000	15,000
	Major Purchases		100,000				100,000	
	Sub-total		150,000	15,000			150,000	15,000
4	*On-line Payroll Time Reporting System*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		17,000				17,000	
	Major Purchases							
	Sub-total		17,000				17,000	0
5	*EMF/OSP Data Interface*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		32,900				32,900	
	Major Purchases							
	Sub-total		32,900				32,900	0
6	*Travel Expense Process Simplification*							
	FTE		3.00	1.00			3.00	1.00
	Salaries		299,400	43,800			299,400	43,800
	Benefits		71,856	10,512			71,856	10,512
	Nonsalary Costs		15,000	2,500			15,000	2,500
	Major Purchases		133,000	4,300			133,000	4,300
	Sub-total		519,256	61,112			519,256	61,112
7	*Web-based Financial Management Training*							
	FTE			1.00				1.00
	Salaries			68,400				68,400
	Benefits			16,416				16,416
	Nonsalary Costs		10,000	4,000			10,000	4,000
	Major Purchases							
	Sub-total		10,000	88,816			10,000	88,816

BAS INITIATIVE DETAIL
Listing by unit (prioritized within unit)

Unit Name / Priority	Initiative	Unit Budget Available	2005-2006 One-time	2005-2006 Ongoing	2010-2011 One-time	2010-2011 Ongoing	Total One-time	Total Ongoing
8	Web-based On-line Training Module							
	FTE		0.50				0.50	
	Salaries		31,100				31,100	
	Benefits		7,464				7,464	
	Nonsalary Costs		3,500	1,000			3,500	1,000
	Major Purchases							
	Sub-total		42,064	1,000			42,064	1,000
9	Web-based Accounts Payable and Travel Accounting Training							
	FTE		2.00				2.00	
	Salaries		117,000				117,000	
	Benefits		28,080				28,080	
	Nonsalary Costs		7,500				7,500	
	Major Purchases		4,000				4,000	
	Sub-total		156,580				156,580	0
10	E-Procurement System Interface with Accounts Payable							
	FTE		1.00				1.0	
	Salaries		18,048				18,048	
	Benefits		4,332				4,332	
	Nonsalary Costs		1,250				1,250	
	Major Purchases							
	Sub-total		23,630				23,630	0
11	E-Procurement System Interface to Financial Information System							
	FTE		0.50				0.5	
	Salaries		31,100				31,100	
	Benefits		7,464				7,464	
	Nonsalary Costs		2,500	92,243		116,128	2,500	208,371
	Major Purchases							
	Sub-total		41,064	92,243		116,128	41,064	208,371
12	New Business Architecture for the University of California (NBA) Projects							
	FTE					1.00		1.0
	Salaries					62,200	0	62,200
	Benefits					14,928	0	14,928
	Nonsalary Costs			46,997		118,628	0	165,625
	Major Purchases						0	0
	Sub-total			46,997		195,756	0	242,753
	Total Financial Affairs		**1,171,958**	**343,848**	**0**	**311,884**	**1,171,958**	**655,732**
FIRE								
1	Fire Station Renovation							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs							
	Major Purchases				1,500,000		1,500,000	
	Sub-total				1,500,000		1,500,000	0
2	Personal Protective Equipment							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		50,000		50,000		100,000	
	Major Purchases							
	Sub-total		50,000		50,000		100,000	0
3	EOC Renovation							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs							
	Major Purchases		100,000				100,000	
	Sub-total		100,000				100,000	0
4	Maintenance & Purchase of Fire Apparatus							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		10,000				10,000	
	Major Purchases				500,000		500,000	
	Sub-total		10,000		500,000		510,000	0
	Total Fire		**160,000**	**0**	**2,050,000**	**0**	**2,210,000**	**0**

BAS INITIATIVE DETAIL
Listing by unit (prioritized within unit)

Priority	Initiative	Unit Budget Available	2005-2006 One-time	2005-2006 Ongoing	2010-2011 One-time	2010-2011 Ongoing	Total One-time	Total Ongoing
MATERIEL MANAGEMENT								
1	*Satellite Buyers*							
	FTE			1.50		2.50		4.00
	Salaries			71,604		129,336		200,940
	Benefits							
	Nonsalary Costs							
	Major Purchases							
	Sub-total			71,604		129,336	0	200,940
2	*E-Procurement*							
	FTE							
	Salaries		2,545,000	1,288,900			2,545,000	1,288,900
	Benefits							
	Nonsalary Costs							
	Major Purchases		1,300,000	165,000			1,300,000	165,000
	Sub-total		3,845,000	1,453,900			3,845,000	1,453,900
3	*Bar Coding*							
	FTE							
	Salaries		20,000				20,000	
	Benefits							
	Nonsalary Costs		20,000				20,000	
	Major Purchases		5,000				5,000	
	Sub-total		45,000				45,000	0
	Total Materiel Management		3,890,000	1,525,504	0	129,336	3,890,000	1,654,840
PHYSICAL PLANNING & CONSTRUCTION								
1	*PP&C Initiative*							
	Unallocated		8,000,000	300,000			8,000,000	300,000
	Sub-total							
	Total PP&C		8,000,000	300,000			8,000,000	300,000
PHYSICAL PLANT								
campus	*Cogeneration Feasibility Study*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs		150,000				150,000	
	Major Purchases							
	Sub-total		150,000				150,000	0
1	*Underground 21K High Voltage Cabling Replacement*							
	FTE							
	Salaries	100,000	400,000				400,000	
	Benefits							
	Nonsalary Costs							
	Major Purchases	50,000	200,000				200,000	
	Sub-total	150,000	600,000				600,000	0
2	*Underground Data and Communication Cabling Replacement*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs							
	Major Purchases		900,000				900,000	
	Sub-total		900,000				900,000	0
3	*Vegetation Management*							
	FTE		1.00				1.00	
	Salaries	60,000	153,000				153,000	
	Benefits							
	Nonsalary Costs		60,000				60,000	
	Major Purchases		85,000				85,000	
	Sub-total	60,000	298,000				298,000	0
4	*Drainage and Erosion Control*							
	FTE							
	Salaries	60,000	160,000				160,000	
	Benefits							
	Nonsalary Costs		1,395,000				1,395,000	
	Major Purchases							
	Sub-total	60,000	1,555,000				1,555,000	0

| | | | BAS INITIATIVE DETAIL | | | | | |
| | | | Listing by unit (prioritized within unit) | | | | | |

Unit Name		Unit Budget Available	2005-2006		2010-2011		Total	
Priority	**Initiative**		**One-time**	**Ongoing**	**One-time**	**Ongoing**	**One-time**	**Ongoing**
5	*Building & Utility Services Staffing*							
	FTE							
	Salaries	15,000	186,986				186,986	
	Benefits		60,595				60,595	
	Nonsalary Costs		15,000				15,000	
	Major Purchases							
	Sub-total	15,000	262,581				262,581	0
6	*Monitoring High Voltage System Instrumentation*							
	FTE							
	Salaries	75,000	150,000				150,000	
	Benefits							
	Nonsalary Costs	75,000	150,000				150,000	
	Major Purchases							
	Sub-total	150,000	300,000				300,000	0
7	*Pedestrian Pathway and Circulation*							
	FTE							
	Salaries	25,000	100,000				100,000	
	Benefits							
	Nonsalary Costs	275,000	1,375,000				1,375,000	
	Major Purchases							
	Sub-total	300,000	1,475,000				1,475,000	0
8	*Tree Management*							
	FTE			2.00				2.00
	Salaries			70,000				70,000
	Benefits							
	Nonsalary Costs	90,000	320,000				320,000	
	Major Purchases		235,000				235,000	
	Sub-total	90,000	555,000	70,000			555,000	70,000
9	*Campus Recycling*							
	FTE			2.00				2.00
	Salaries			70,000				70,000
	Benefits							
	Nonsalary Costs							
	Major Purchases	100,000	1,125,000				1,125,000	
	Sub-total	100,000	1,125,000	70,000			1,125,000	70,000
10	*Centralized Irrigation Control*							
	FTE							
	Salaries	10,000		0.25				0.25
	Benefits							
	Nonsalary Costs							
	Major Purchases			88,000				88,000
	Sub-total	10,000		88,000			0	88,000
11	*Site Stewardship Program*							
	FTE			1.00				1.00
	Salaries			40,000				40,000
	Benefits							
	Nonsalary Costs		25,000				25,000	
	Major Purchases							
	Sub-total		25,000	40,000			25,000	40,000
	Total Physical Plant	935,000	7,245,581	268,000	0	0	7,245,581	268,000
POLICE								
1	*Two Police Officers to Assist Santa Cruz PD*							
	FTE			2.00				2.00
	Salaries			135,428				135,428
	Benefits		18,677				18,677	
	Nonsalary Costs		15,500	6,500			15,500	6,500
	Major Purchases							
	Sub-total		34,177	141,928			34,177	141,928
2	*Dispatch Equipment Replacement/Upgrade*							
	FTE							
	Salaries							
	Benefits							
	Nonsalary Costs							
	Major Purchases		500,000				500,000	
	Sub-total		500,000				500,000	0

			2005-2006		2010-2011		Total	
BAS INITIATIVE DETAIL								
Listing by unit (prioritized within unit)								

Unit Name / **Priority**	**Initiative**	Unit Budget **Available**	**One-time**	**Ongoing**	**One-time**	**Ongoing**	**One-time**	**Ongoing**
3	*Community Services Program*							
	FTE							
	Salaries			60,000		5,000		65,000
	Benefits			10,000				10,000
	Nonsalary Costs			10,000		5,000		15,000
	Major Purchases							
	Sub-total			80,000		10,000	0	90,000
4	*Staffing for 3rd Kiosk Entrance*							
	FTE			3.00				3.00
	Salaries			83,880				83,880
	Benefits			22,431				22,431
	Nonsalary Costs		14,040	9,350			14,040	9,350
	Major Purchases							
	Sub-total		14,040	115,661			14,040	115,661
	Total Police		**548,217**	**337,589**	**0**	**10,000**	**548,217**	**347,589**
STAFF HUMAN RESOURCES								
1	*Recruitment Management System*							
	FTE		2.00				2.00	
	Salaries		33,096				33,096	
	Benefits		12,000				12,000	
	Nonsalary Costs		2,500				2,500	
	Major Purchases							
	Sub-total		47,596				47,596	0
2	*Job Evaluation & Classification Methodology*							
	FTE	0.25		1.00		1.00		2.00
	Salaries	19,000		62,000		62,000		124,000
	Benefits			11,642		11,642		23,284
	Nonsalary Costs		4,100	6,700		6,700	4,100	13,400
	Major Purchases							
	Sub-total	19,000	4,100	80,342		80,342	4,100	160,684
3	*Human Resources Information System*							
	FTE			3.00		3.00	0	6.00
	Salaries			176,500		176,500	0	353,000
	Benefits			32,066		32,066	0	64,132
	Nonsalary Costs		50,000	700,000		700,000	50,000	1,400,000
	Major Purchases						0	0
	Sub-total		50,000	908,566		908,566	50,000	1,817,132
	Total SHR	**19,000**	**101,696**	**988,908**	**0**	**988,908**	**101,696**	**1,977,816**
BAS INITIATIVE TOTAL		1,111,250	37,886,239	6,736,877	4,934,746	12,792,618	42,820,985	19,529,495

BAS Additional Space Needs 2005-06 and 2010-11
for mandated, key activies, and workload growth
(space calculation of 1.0 FTE = 212 s.f. used unless otherwise noted)

Unit	Add'l. FTE 2005-06	Total s.f. needed	Add'l. FTE 2010-11	Total s.f. needed	Notes
CATS	56.93	12,069	14.40	3,053	6,383 s.f. needed in 2002-3 for AIS; cost to lease off-campus space @ $180K/year
EH&S	4.00	848	2.50	530	A new Environmental Safety Facility (EFS) is planned in the Science Hill area for office and equipment space needs
Financial Affairs	12.10	2,565	7.14	1,514	If records storage initiative not funded, additional space needed for storage
Fire Department	4.00	—	7.00	—	3000 s.f. additional living space needed for additional firefighters. Second floor addition to Fire Station will accommodate.
Internal Audit	2.75	583	1.00	212	
IPMTS	8.75	—	0.00	—	3000 s.f. needed for new Printing Services equipment. 2000 s.f. needed for additional Mail Services sorting area.
Mat'l Management	12.20	2,586	8.00	1,696	An additional 300 s.f. of storage needed for Equipment Management. One-time costs to retrofit Barn H for receiving/surplus/storage are unknown at this time.
PP&C	7.00	1,484	0.00	0	Decrease in planners by 2010-11. Current and on-going need for archival storage space.
Physical Plant					
Building & Utility Svcs./ Admin.		0	13.00	2,756	Starting construction of additional space at Central Heat Plant. Additional 2000 s.f. of space needed for HVAC repair, Paint & Sign Shop, and remaining B&US operations by 2005-6.
Grounds	8.00	1,696	7.00	1,484	4800 s.f. covered storage space needed to replace Equipment Barn; additional 1000 s.f. covered space needed by 2005-6.
Custodial	46.50	5,136	45.00	5,136	Office space needed for six employees. Supply space of 100 s.f. per custodian also reflected.
Police	11.35	2,406	6.00	1,272	Construction of new Emergency Response Building in 2005 will solve current and anticipated space problems. However, both entrance kiosks need to be replaced immediately.
Staff HR	9.75	2,067	6.00	1,272	
TAPS					
Shuttle	5.85	—	4.18	—	Approx. 600 s.f. of space will be needed for administrative staff and driving staff break/lunch area.
Fleet Services	1.00	—	1.00	—	
Parking Program	2.25	477	2.00	424	

Total additional square footage of workspace needed:				
2005-6:	**31,918**	**2010-11:**	**19,348**	**(plus 16,700 s.f. for storage)**

RADAR SCREEN INFRASTRUCTURE COSTS
(Includes LRDP Mitigation Measures and University Assistance Measures)

UNIT		INITIATIVE	2005-2006		2010-2011		TOTAL	
			One-Time	On-Going	One-Time	On-Going	One-Time	On-Going
Mitigation-University Assistance Measures								
PP&C		Storey/King intersection improvements	300,000				300,000	
PP&C		Hagar/Coolidge Intersection improvements	300,000				300,000	
PP&C		Hagar/McLaughlin Signalization	300,000				300,000	
PP&C		Heller/Empire Grade Signalization	300,000				300,000	
PP&C		Cam Fac/Coolidge Signalization	300,000				300,000	
PP&C		CSC Sewer Line Uprade					TBD	
PP&C		Eastern access					TBD	
PP&C		Interchange at Hwy 1 & 9					TBD	
PP&C		Bay Street Resurfacing					TBD	
PP&C		New sources of water					TBD	
PP&C		Seismic upgrade of building fixture mounting					TBD	
PP&C		Expand wastewater treatment plant capacity					TBD	
ESTIMATED SUB-TOTAL			1,500,000				1,500,000 + TBD	
Other Radar Screen Infrastructure Costs								
PP		Storm Drainage Repairs/ongoing monitoring	2,500,000	15,000		15,000	2,500,000	30,000
PP&C		Natural Gas Improvements	1,000,000				1,000,000	
PP&C		Electrical Upgrade	1,000,000				1,000,000	
PP&C		Water System Improvements	2,000,000				2,000,000	
PP&C		Chilled Water System Improvements	2,000,000				2,000,000	
PP&C		Jordan Gulch Bridges	14,000,000				14,000,000	
PP&C		Central Condensing Water Expansion	2,000,000				2,000,000	
PP&C		North Campus Infrastructure Development	3,000,000				3,000,000	
PP&C		LML Access Road/other Marine infra.	1,000,000				1,000,000	
PP&C		South Campus Impr's(includes entrance/historic)	2,000,000				2,000,000	
PP&C		Pedestrian path circulation impr's - Phase 1	2,000,000				2,000,000	
EH&S		Casmalian EPA superfund clean-up	57,000				57,000	
EH&S		Hazardous Waste Facility	4,000,000				4,000,000	
CATS		Campus Wiring Infrastructure	12,800,000				12,800,000	
CATS		2010 New Business Architecture					TBD	
MM		Seismic Retrofit of H-Barn					TBD	
MM	New	Business Contracts-Accelerated Growth					TBD	
MM	New	Real Estate Svcs-Accelerated Growth					TBD	
MM	New	Risk Management-Workers'Comp Costs					TBD	
MM	New	Equipment Administration-Bar Coding	45,000				45,000	
MM	New	Financial/Safety Svc Ctr-Co-location of Svc Ctrs					TBD	
Police	New	Police Overtime		28,800		36,000	0	64,800
Police	New	Police Officer (8 new officers+S&E)	54,465	253,370	65,903	355,231	120,368	608,601
Police	New	Police Captain (salary & equipment)	20,000	108,000			20,000	108,000
Police	New	Police Records Clerk	10,000	31,721	12,000	37,109	22,000	68,830
TAPS	New	Parking Demand					TBD	
TAPS	New	Development of Upper Campus					TBD	
TAPS	New	Planning for Summer Session Growth					TBD	
TAPS	New	City of SC Master Transportation Study					TBD	
TAPS	New	Expanded Campus Transit System to Off-Campus Facilities					TBD	
ESTIMATED SUB-TOTAL			49,486,465	436,891	77,903	443,340	49,564,368 + TBD	880,231
ESTIMATED TOTAL			50,986,465	436,891	77,903	443,340	51,064,368 + TBD	880,231

Security Review

**Business and Administrative Services
Campus Disaster Preparedness and Security—Review**

Shortly after the tragic events of September 11, BAS units began an evaluation of disaster preparedness levels throughout the division. Each BAS safety and security unit conducted an extensive review of existing response procedures and took steps to enhance and adapt protocols to address the changing times. Other critical support units such as Communication and Technology Services (CATS), Physical Plant, and Campus Mail Services participated in the evaluation of campus security planning measures.

The results of this evaluation/review have been summarized in the following report. This document represents the highest priorities in BAS and will be used for immediate planning and upgrading of campus disaster preparedness and security.

This document was meant to inform the campus community of the immediate, short-term, and longer term needs surrounding campus disaster preparedness and security, and for this reason some of the action items will also appear in the initiative summaries of the BAS Long-range plan for 2001-2011.

Prepared by
Business & Administrative Services
Vice Chancellor Thomas Vani
November 2001

BAS Safety and Security Action Items—Summary

IMMEDIATE — Costs

Unit	Action	Status/Notes	One-time	Ongoing	*Category
BAS	Safety, Security Biohazard Communication	Done	None	None	2
CATS	Reverse 911Notification System	32 port system	$42,900	$4,000	1,2,3
CATS	Firewall System & Junior Security Administrator		$55,500	$115,200	1
CATS	Backup Server with Offsite, Secure, Climate-Controlled Storage		$84,500	$47,800	1,2
EH&S	Hazardous Waste Facility Alarm Installation	Targeted completion Dec 2001	$5,742	None	1
EH&S	Regional Haz-Mat Response Team MOU with county		None	$3,000	2,3
Fire	Update Building Coordinators List & Responsibilities		None	None	1,2,3
Fire	Building Coordinators Training		None	$2,000	2,3
Fire	Update Fire Communications		$5,000	$1,300	2
Police	Additional Police Patrols to water tank, hazardous waste facility		None	None	1
Police	Chancellor's Office Security-alarms	Currently being ordered	TBD	TBD	1,2
Police	Discontinue Propping stairwell door open	Done	None	None	1
Police	Incident Commander Back-up	Chief Tepper & Director Kolbus; AVC Valentino in training	None	None	2,3
SUB-TOTAL			$193,642	$173,300	

SHORT-TERM (By July 2002) — Costs

Unit	Action	Status/Notes	One-time	Ongoing	*Category
Various	Update EOC cards	Done	None	None	2,3
CATS	800 Megahertz Radio Upgrades		$657,000	None	2,3
CATS	Network Intrusion Detection System Upgrade		$55,000	$20,500	1
CATS	Central Anti-viral Update Server, Email filters, other Security Software		$30,500	$14,400	1,2
CATS	Secure Connections to Email Services via SSl & Virtual Private Networks		$32,500	$8,250	1,2,3
CATS	Disaster Recovery Planning		$25,000	None	2,3
CATS	Un-interruptible Power Supply (UPS) Planning		$10,000	None	1,2,3
EH&S	Hazardous Waste Pick Up	Frequency	TBD	TBD	1
EH&S	Radio Active Chemicals/Biologicals-Lab Security	Working with academic divisions	TBD	TBD	1,2,3
Fire	Building Emergency Plan Developement & Evacuation Drills		None	$10,000	2,3
Physical Plant	Chancellor's Emergency Exit Gates		TBD	None	2
Police	Interim EOC		TBD	TBD	
Police	Chancellor's Office Security-Card readers	Estimate for 3 readers	$30,000	None	1,2
Police	Replace Two Entrance Kiosks		$100,000	None	1,2
Police	Message Display and Radar Trailer		$26,900	None	2,3
SUB-TOTAL			$966,900	$53,150	

LONG-TERM — Costs

Unit	Action	Status/Notes	One-time	Ongoing	*Category
CATS	Central Security Scanning Workstation/Junior Security		$9,500	$96,800	1
CATS	Network Intrusion Detection System for ResNet, Host Intrusion Detection Systems for Critical Servers		$47,500	$15,250	1
CATS	Comprehensive Uninterruptible Power Supply Installation		$132,000	$14,400	1,2,3
CATS	Offsite, Hot-sites for Systems Operations		TBD	TBD	2,3
EH&S	Physical Sciences Building Security		TBD	TBD	1,2
Fire	Interim Emergency Operations Center Training		None	None	2,3
Fire	First Responder NBC Kits		$13,000	None	2,3
Fire	Building Coordinator-Student Emergency Preparedness Kits	5,610 students x $20	None	$115,200	2,3
Physical Plant	Campus Water Supply Enhanced Security (estimate)	System monitored remotely	$20,000	None	1,2
Police	Kiosks		TBD	TBD	2
Police	Security of Campus Labs-Card Reader (estimate per reader)		$10,000	None	1,2
Various	Facilities Management System		$420,000	TBD	2,3
TBD	Full-time campus Emergency Coordinator		TBD	TBD	1,2,3
			$652,000	$241,650	

| **TOTAL** | | | $1,812,542 | $468,100 | |

*Category of Action Items: 1) Prevention 2) Preparation 3) Incident Management

BACKGROUND INFORMATION BY UNIT

UNIVERSITY POLICE

1. IMMEDIATE: **Police Patrols**

Brief Description: Increased police patrols of the water storage tank and the hazardous waste facility. This is a short-term response until security can be improved on the waste facility and evaluated on the water storage system. It is not practical to provide consistent patrols to the water tank on a routine basis.

Summary of Costs: None

2. IMMEDIATE: **Chancellor's Office Security**

Brief Description: Additional alarms in Chancellor's Office.

Summary of Costs: To be determined. Currently being ordered.

3. IMMEDIATE: **Discontinue propping stairwell door open.**

Summary of Costs: None

4. IMMEDIATE: **Incident Commander Back-up**

Brief Description: In Vice Chancellor Vani's absence, either Director Kolbus or Chief Tepper will serve as Incident Commander, depending on the nature of the emergency. If the event involves response to a hazardous materials incident or fire, Chief Tepper will serve as incident commander. If the emergency is being managed primarily by the police department, Director Kolbus will serve as Incident Commander. The first one to arrive on the scene will act as Incident Commander, and may be relieved by the other if circumstances require more operational involvement by either party. It is expected that Assistant Vice Chancellor Valentino will be "in training" for Incident Commander over the next year.

Summary of Costs: None

5. SHORT-TERM: **Interim EOC**

Brief Description: Relocate current EOC (until Emergency Response Building is built) to McHenry Library room 481. The current Fire Station EOC would have to be evacuated in a wild land fire due to its location and type of construction (wood). McHenry would serve as the interim EOC allowing the chancellor and vice chancellors easy and quick access from their offices. Moving the EOC out of the Fire Department would enable the Fire Department to continue to operate out of their building, and would provide lodging space for mutual aid responders. Relocating the EOC involves installing phone lines, installing a base radio station in a locked cabinet, installing an antenna and storage bins for EOC responders.

Summary of Costs: To be determined after a complete assessment is conducted to determine where such equipment could be stored, and the radio and phone line capability of the site.

6. SHORT-TERM: **Chancellor's Office Security**

Brief Description: Install proximity card reader system in Chancellor's office area on all exterior doors and the stairwell door. The proximity card readers would be hooked up to the Housing proximity card system.

Summary of Costs: $5,000-15,000 per door ($15,000-45,000 total for 3 doors). The campus Residential Card Access System Coordinator will coordinate an estimate.

7. SHORT-TERM: Kiosks

Brief Description: Replace two entrance kiosks with modular units. Current kiosks are not big enough to securely store and use reference manuals and computer links to campus directories and resources used by guards to screen visitors. TAPS and Police will work with PP&C to design the new kiosks.

Summary of Costs: $100,000 already budgeted by TAPS.

8. SHORT-TERM: Radar Trailer

Brief Description: One fully-equipped radar trailer with traffic counter, and 4 x 8 foot message board, solar powered, with compatible laptop computer. Message board has alphanumeric and graphic display capability. To be used for incident management, traffic control, and speed control.

Summary of Costs: $26,900

9. LONG-TERM: Emergency Response Building

Brief Description: Accelerate the design and construction of the new Emergency Response Building to create a functional and secure campus Emergency Operations Center (EOC), and move emergency dispatch to secure space within police operations and adjacent to the EOC.

Summary of Costs: Unknown amount to accelerate construction. Project was recently approved in the Regents' budget for state funding, and planned for completion November 2005.

10. LONG-TERM: Emergency Operations Center

Brief Description: Move the campus EOC to the new Emergency Response Building in 2005 (or sooner if ERB is accelerated).

Summary of Costs: To be determined.

11. LONG-TERM: Kiosks

Brief Description: Redesign both campus entrance roads to provide better screening capability and access control from the kiosks and to enable kiosk guards to screen visitors from the safety of the kiosk booth, rather than standing in the roadway.

Summary of Costs: To be determined by PP&C (see Police #7, above)

12. LONG-TERM: Security of Campus Labs

Brief Description: Obtain estimate to install proximity card system for campus buildings housing hazardous chemicals. Card system would be used on exterior doors to the buildings and on selected interior doors to sensitive labs, using the Housing proximity card system.

Summary of Costs: To be determined after consulting with EH&S and Natural Sciences to determine locations to be improved. Depending on the existence of wiring in place, estimate range from $5,000 to $15,000 per door.

FIRE DEPARTMENT

1. IMMEDIATE: Update Building Coordinators List and Responsibilities

Brief Description: UCSC Building Coordinators List has been divided into three divisions: {1} BAS {2} Student Affairs and {3} Academic. The lists should be turned over to those three Divisions and building coordinators assigned. ERG shall review current building coordinators duties and responsibilities and update as necessary.

Summary of Costs: None

2. IMMEDIATE: Building Coordinators Training

Brief Description: The new duties and responsibilities will require development of new curriculum and lesson plans. Shortly after the production of these materials the training will commence.

Summary of Costs: $2,000 Overtime Ongoing Funding

3. IMMEDIATE: Update Fire Communications

Brief Description: Purchasing VHF portable radios to communicate with mutual aid responders.

• EOC 800 MHz radio batteries

• EOC 800 MHz radio charger

Summary of Costs: $5,000 Portable Radios   One-time Funding

                             $800 Radio Batteries   Ongoing Funding

                             $500 Radio Charger   Ongoing Funding

4. SHORT-TERM: Building Emergency Plan Development and Evacuation Drills

Brief Description: Each building coordinator shall develop emergency and evacuation plans to be reviewed on an ongoing basis by fire personnel.

Summary of Costs: Overtime $10,000 Ongoing Funding

5. LONG-TERM: Interim Emergency Operations Center Training

Brief Description: Develop and implement a comprehensive emergency exercise including all participants in a real time environment.

Summary of Costs: None

6. LONG-TERM: First Responder NBC Kits

Brief Description: Nuclear – Biological – Chemical Kits will be required on all fire apparatus and police units in Santa Cruz County during the next year. Kits contain medications to be self-administered in the event first responders are exposed to any of the above.

Summary of Costs: (see #7 below)

7. LONG-TERM: Building Coordinator–Student Emergency Preparedness Kits

Brief Description: Kits containing reflective vests, helmets, flashlights, basic First Aid supplies, maps, phone numbers and other needs.

Summary of Costs: $3000 Overtime   Ongoing Funding

                           $13,000 (5) NBC Kits   One-time Funding

                           $112,200 student EP Kits   Ongoing Funding

ENVIRONMENTAL HEALTH & SAFETY

1. IMMEDIATE: Hazardous Waste Facility

Brief Description: Alarm installation.

Summary of Costs: $5,742 One-time

Implementation Timeline: Targeted completion by December 2001

2. IMMEDIATE: Regional Haz-Mat Response Team MOU

Brief Description: UCSC participation via MOU in this upgrade to the county capability for response to Haz-Mat/Bio incidents. The Fire Department team members will be trained at UCSC and EH&S will participate as technical suppport members. To date, EH&S has assisted with radiological responses within the county area. Participation gives UCSC access to the county Regional Haz-Mat Team for incidents beyond our capabilities.

Summary of Costs: $3,000 Ongoing Funding

3. SHORT-TERM: Hazardous Waste Pick Up (frequency)

Brief Description: We will be increasing the frequency of waste pickups.   Currently, discussions with the UC systemwide contractor are underway regarding their availability to provide an increased frequency of service. At issue is the irregular rate of campus waste generation so we are exploring setting up regular shipments at 2-month intervals in conjunction with a trigger volume (based on facility shelf space) that would dictate more or less frequent pickups. Next pick-up is scheduled for December 2001.

Summary of Costs: Unknown

4. SHORT-TERM: Radioactive and chemicals/biological-lab security

Brief Description: Radioactive materials are currently secured inside lockable cabinets, refrigerators, etc. inside of laboratories as part of a license agreement. The issue of lab door and building access security as it pertains to chemicals and biological material is more problematic. EH&S is working with the Natural Sciences Division on finding a solution to this problem. EH&S will also review the possibility of issues with security of hazardous materials in the Arts Division.

Summary of Costs: Unknown

5. LONG-TERM: Physical Sciences Building Security

Brief Description: We will work with the Natural Sciences Division to determine the status of security of materials in the new Physical Sciences Building.

Summary of Costs: Unknown

PHYSICAL PLANT

1. SHORT-TERM: Chancellor's Office Improved Emergency Exit Gates

Brief Description: Provides gates on the rod iron fencing.

Summary of Costs: Estimate in process.

2. LONG-TERM: Campus Water Supply Enhanced Security

Brief Description: Enhanced security measures including additional alarms for the water tank and pump station.

Summary of Costs: $15,000-$25,000 One-time.

COMMUNICATIONS AND TECHNOLOGY SERVICES (CATS)

1. IMMEDIATE: **Reverse 911 Notification System**

Brief Description: The Reverse 911-(R911)-notification system allows for a pre-recorded broadcast message to be delivered to telephones via a call that produces a ring.

Summary of Costs:	$42,900 (32 ports)	One-time Funding
	$4,000 (32 ports)	Ongoing Funding

2. IMMEDIATE: **Managed Firewall System and Junior Security Administrator**

Brief Description: This project provides for a firewall architecture that can be monitored and managed centrally and protect campus network resources and data. The junior security administrator would focus on operations, which includes the review of intrusion detection system logs, investigation of reports on compromised systems, and review of emerging security threats or indications of threats through network data.

Summary of Costs:	$55,500 (Managed Firewall)	One-time Funding
	$22,200 (Managed Firewall)	Ongoing Funding
	$93,000 (Jr. Security Admin.)	Ongoing Funding

3. IMMEDIATE: **Disaster Preparedness: Backup Server with Offsite, Secure, Climate-Controlled Storage**

Brief Description: This project provides for a data backup server and the storage of data backup tapes in offsite, secure, climate-controlled storage.

Summary of Costs:	$74,500 (Backup Server)	One-time Funding
	$29,800 (Backup Server)	Ongoing Funding
	$10,000 (Offsite Storage)	One-time Funding
	$18,000 (Offsite Storage)	Ongoing Funding

4. SHORT-TERM: **800 Megahertz Radio System Upgrade**

Brief Description: The 800 MHz trunk radio system provides two way radio communications service to campus departments, primarily public safety and service organizations. The upgrade would improve the following areas: (1) coverage in marginal areas through replacement primary antennas, (2) greater in-building coverage through the use of supplemental antennas, (3) expansion and improvement of existing areas with satellite receivers, and (4) provide redundancy in operation with backup repeater site at the base of campus.

Summary of Costs:	$3,000 (Primary Antennas)	One-time Funding
	$33,000 (Supplementary Antennas)	One-time Funding
	$421,000 (Satellite Receivers)	One-time Funding
	$100,000 (Backup Repeater)	One-time Funding
	$100,000 (Construction Costs)	One-time Funding

5. SHORT-TERM: **Network Intrusion Detection System Upgrade for Campus Network Entrance**

Brief Description: This project provides for an upgrade to our existing Intrusion Detection System (IDS) at the campus network entrance. An IDS system monitors traffic in and out of the campus network and flags suspicious activity.

Summary of Costs:	$55,000 (Main Network)	One-time Funding
	$20,500 (Main Network)	Ongoing Funding

6. SHORT-TERM: **Central Anti-Viral Upgrade Server, Email Anti-Viral, Anti-Spam Filters and Other Security Software**

Brief Description: This project provides for a central server to serve anti-viral updates to desktop systems throughout campus and provides filters with anti-viral and anti-spam capabilities for the central email server.

Summary of Costs	$5,500 (Anti-Viral Server)	One-time Funding
	$2,200 (Anti-Viral Server)	Ongoing Funding
	$15,000 (Email Filter)	One-time Funding
	$3,750 (Email Filter)	Ongoing Funding
	$10,000 (Security Software)	One-time Funding
	$8,450 (Security Software)	Ongoing Funding

7. SHORT-TERM: **Secure Connections to Services via SSL (Email) and Virtual Private Networks**

Brief Description: This project provides for secure connections for implementation of SSL connections to email and the implementation of Virtual Private Networks (VPN) to access other central servers behind managed firewalls. This SSL email service would serve @cats.ucsc.edu users only.

Summary of Costs:	$17,500 (SSL Email Server)	One-time Funding
	$2,250 (SSL Email Server)	Ongoing Funding
	$15,000 (VPN)	One-time Funding
	$6,000 (VPN)	Ongoing Funding

8. SHORT-TERM: **Disaster Recovery Planning**

Brief Description: This project provides for the outline of an IT Disaster Recovery Plan by a consultant, including priorities for implementation.

Summary of Costs: $25,000 (Consultation)   One-time Funding

9. SHORT-TERM: **Uninterruptible Power Supply (UPS) Planning**

Brief Description: The uninterruptible power supply provides power continuity for outages, including very short periods when the Communications Building switches over to Co-Gen. CATS is working with PP&C to complete the electric engineering and planning activities for a comprehensive UPS serving the Communications Building machine room and Data Center.

Summary of Costs: $10,000   One-time Funding

10. LONG-TERM: Central Security Scanning Workstation and Junior Security Adminis-trator

Brief Description: This project provides for a central server to perform scans of networked systems for vulnerabilities. Results of the scans would be shared with systems administrators in order to patch the systems appropriately. The junior security administrator will add to the operational support for emerging security activities in the area of central scanning and follow-up with systems administrators.

Summary of Costs:	$9,500 (Scanning Workstation)	One-time Funding
	$3,800 (Scanning Workstation)	Ongoing Funding
	$93,000 (Jr. Security Admin.)	Ongoing Funding

11. LONG-TERM: Network Intrusion Detection System for ResNet, Host Intrusion Detection Systems for Critical Servers

Brief Description: This project provides for an extension to the existing Intrusion Detection System (IDS) (between ResNet and the campus network) and adds an extra layer of security around critical servers with Host-based IDS.

Summary of Costs:	$27,500 (ResNet)	One-time Funding
	$10,250 (ResNet)	Ongoing Funding
	$20,000 (Host-based)	One-time Funding
	$5,000 (Host-based)	Ongoing Funding

12. LONG-TERM: Comprehensive Un-interruptible Power Supply (UPS) Installation

Brief Description: This project provides for the procurement and installation of a comprehen-sive UPS serving the Communications Building machine room/Data Center.

Summary of Costs:	$60,000 (Installation/Setup)	One-time Funding
	$72,000 (Purchase/Maint.)	One-time Funding
	$14,400 (Purchase/Maint.)	Ongoing Funding

13. LONG-TERM: Offsite, Hot-sites for Systems Operations

Brief Description: This project provides for the operation of mission-critical applications and systems in an off-site facility in the event of a disaster that affects our primary operations location or systems.

Summary of Costs: To be determined.

CAMPUS MAIL SERVICE

In response to the threat of handling suspicious mail, Campus Mail Services has done the following:

- Conducted training sessions with Campus Police and EH&S on identifying, handling, and proper response to receiving suspicious mail, and reviewed evacuation procedures
- Consulted with US postal inspectors and local postal managers on postal service screening of UCSC mail before delivery to the campus
- Provided for mail processing staff both latex and non-latex gloves, and an N95 two-strap fitted dust mask
- Developed procedures for isolating questionable mail, and for opening such mail with gloves and mask in an area segregated from the main work area
- Daily monitoring of CDC and Postal web resources on latest information for handling suspect mail
- Sent electronic memo to the campus on identifying and handling suspicious mail
- Distributed alert posters to all mail stops
- Recommended to all mail handling staff to get a flu shot

FACILITIES MANAGEMENT SYSTEM (FMS)

Brief Description: The campus has a strong need for a unified FMS. Safety service units, Capital Planning, Planning and Budget, Physical Planning and Construction, and the Physical Plant all have facilities information requirements that are not currently met. This project addresses the campuswide need to create and maintain accurate computer aided designed (CAD) drawings that are dynamically linked to facilities inventory.

A secure FMS would allow authorized users access to a variety of facility related information. For example, safety service units would be able to store and retrieve safety information regarding campus facilities such as plans for fire fighting, floor plans, HVAC plans, hazardous materials information and building coordinator information. Campus planning units would be able to utilize CAD drawings for construction projects, as well as for space inventory, ADA compliance, and emergency incident management.

Using UC San Diego's FacilitiesLink as an example, the FMS would work to incorporate additional facilities related information such as campus maps, department information, general reporting, "as-built" drawings, and maintenance.

A more thorough project assessment is necessary in order to determine the scope and costs for implementing this system. In addition we will expore the possibililty of expanding the FMS system for other campus management purposes.

Summary of Costs: The cost for a new FMS is estimated at $420,000 in one-time funding. Currently, discussions are underway with UCSD regarding the possibility of obtaining the UCSD FacilitiesLink at UCSC at a lower cost.