APPENDIX A

THE HAWAI`I PLANNING CONTEXT
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SIGNIFICANT EXTERNAL ISSUES

GLOBAL AND NATIONAL ISSUES

Several of the major global and national trends of particular relevance to the Community Colleges are noted below:

- **Economic** - The world economy is becoming more international. The rules of competition appear to be overtaken by the advantages of technology, human resource management, and resource strategy in the global economy. People now insist on products that are low cost, very high quality, and innovative. Whether from Japan, Germany, the United States, or Mexico, the net result of this powerful transformation is that the United States industry and business are de-layering, restructuring, retraining employees, and teaching them new skills as well as basic math, science, reading, and thinking—to improve productivity and total quality.

- **Social** - There is a looming threat from changes in the nature of our U.S. society. The traditional family of a working husband, a wife at home, and two children now represents only 6% of the American families. The rise of the single parent family, poverty among children, teenage pregnancy, crime, and the growth of an underclass are strong social forces requiring attention by government, the private sector, postsecondary education, and citizens.

- **Political** - There will be declining federal support for programs related to education and training, but a greater emphasis on accountability for specific program outcomes. This will require the establishment of new resource allocation and accountability processes to demonstrate effectiveness, and the development of new sources of support, including private foundations. There will be increased federal funding for programs to meet the education and workforce preparation needs of Native Hawaiians.

- **Educational** - Profound changes are causing a reexamination of the fundamental nature of education in the U.S. The leadership of this country has placed increasing emphasis upon the quality and effectiveness of education. The business community has experienced the need to participate in the preparation of students for jobs and careers. Means of success and excellence of students are shifting toward the ability to self-manage and deal with change; rather than resting on past laurels, self-evaluation of the system is needed to maintain global leadership in education, and multi-cultural education has become a necessity for our students to compete in both the global environment and the increasingly culturally diverse U.S.

- **Technological** - In addition to a shift from an agricultural/industrial economy to a services oriented economy, the U.S. is placing increasing emphasis on the use of telecommunications and Internet technologies in all sectors of the economy. The quest for global competitiveness also relies on the effectiveness of U.S. to enhance research and development and the rapid application of state-of-the-art technology. The deployment of broadband Internet access will make massive information and education resources available on demand almost anywhere in the world.
STATE AND LOCAL ISSUES

As our community’s colleges, we must be attentive and responsive to major issues that will affect the nature of who we serve, the type of programs and services we must provide, and sources of support to provide the resources needed to serve the people of Hawai`i.

Our communities are in a state of transition; our traditional economic mainstays have dramatically changed over the past fifteen years, and for the past eight years, our economy has shown little growth. While this as been a very difficult period in our economy, and resulted in declining State’s financial support for higher education, it also has promoted efforts to stimulate and diversify our economic base.

Population - The 2000U.S. Census shows Hawaii’s population has grown to 1.21 million —— up 9.3 percent over 1990 despite the state's sluggish economy during much of the decade.

21.4 percent of the population now identify themselves by two or more race, the highest percentage in the country; almost a quarter of the state reported at least some Native Hawaiian ancestry, and 58 percent of the state’s population reported being at least part Asian. About 39 percent of the state reported some white ancestry.

Growth on O'ahu, where 876,156 people live, was less than 5 percent; the Big Island remained the second most-populated county in the state, with 148,677 residents, an increase of nearly 24 percent; Maui County's population grew almost 28 percent, to 128,094 residents; On Kaua‘i, the Census counted 58,463 residents, an increase of a little more than 14 percent.

Economic - Major changes in Hawai`i’s economy and workplace have resulted in a transformation in the kind of skills and knowledge one need to be successful. Employment conditions today require skills which are in many cases not evident in today’s island labor market. The paradox is that while our rate of unemployment has remained at historic levels over the past six years, there are often many high paying jobs going unfilled.

In today’s economy, plantation agriculture has declined significantly in terms of acreage, production, and economic value (Figure 1). In contrast, visitor expenditures grew from $2.875 billion in 1980 to $10.279 billion in 1999 (State Data Book 2000).

The spectacular increase in visitor expenditures has transformed the Hawai`i labor market. Service industry job growth has been dramatic. Employment in services has grown from 48,310 in 1970 to 183,400 in 2000, and wholesale and retail trade employment has grown from 61,044 to

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Figure 1
136,950. During this same period, agricultural employment decreased from 12,572 or 4.4% of the civilian workforce in 1970 to 7,850 or 1.4% of the workforce in 2000 (State Data Book 2000).

It is important to note that while our major growth sector since 1970 has been the Service Industry, many of the jobs produced during that period required individuals with significant specialized education and training beyond high school. These jobs included: professionals such as those in health, education, and technical fields; managers and administrators; clerical and administrative support specialists; audit and financial specialists; etc. In addition, between 1969 and 1999, self employment grew from 47,012 to 133,430, nearly 20% of the Hawai‘i workforce.

**Workplace** - The dramatic change in Hawai‘i’s economic environment have been matched by changes in the workplace. Workplace “re-engineering,” coupled with workforce downsizing, has put great demands on remaining workers to become more skilled and more productive.

- **A More Competitive Environment** - The opening of major national chain retailers such as WalMart, K-Mart, COSTCO, Macey’s, Sports Authority, etc. have been major factors in the changing retail sales environment.
- **Adoption of New Technologies** - Over the past fifteen years, development of the computer microprocessor and personal computers have transformed many of the tools and practices in the workplace. The personal computer and its accompanying software applications have become essential components of the new jobs in our transforming economy.
- **Focus on Productivity** - Hawai‘i’s economy was productive in the past because it had a population whose education and training matched the requirements and expectations of its major industries, agriculture and defense. However, as the mix of industries and required skills have changed, the education and training providers have not yet been able to produce enough individuals with the new skills and knowledge necessary to meet current market demand. A significant decline in external investment has resulted in sharply reduced economic growth since 1990. Given the sharp decline in the level of capital available to support continued development, taking steps to improve worker productivity appears to be a critical element in revitalizing Hawai‘i’s economy.

**Education** - Improving the quality of public K-12 education is still one of the top issues of community concern. While a number of efforts have been initiated, such as school-community based governance, charter schools, student performance standards, student assessment, etc.; national measures of student performance have significantly lagged behind community and employer expectations.

A recent national state-by-state assessment, *Measuring Up 2000*, reported (Figure 2) that while we have high school graduation rates that...
mirror the top performing states, students’ academic performance fall well behind the leaders. The result is, a great many adults need to improve their basic literacy skills to be successful either continuing their education, or in the changing Hawai‘i workplace. The following are the highlights of the Hawai‘i report:

P Preparation. A very high percentage of Hawaii’s young adults earn a high school diploma or a General Education Development (GED) diploma by age 24. However, the state’s 8th graders perform very poorly on national assessments of math, reading and writing, indicating that they are not being prepared for challenging high school coursework. Also, low proportions of 11th and 12th graders perform well on college entrance exams.

P Participation. A large percentage of Hawaii’s students go on to college immediately after high school, and a high proportion of young adults (ages 18 to 24) are enrolled in education or training beyond high school. But a fairly low percentage of the state’s working-age adults (ages 25 to 44) are enrolled in college-level education or training.

P Affordability. Hawaii requires families to devote a relatively large share of family income, even after financial aid, to attend its public two- and four-year colleges and universities, which enroll 75% of the state’s students. Hawaii makes almost no investment in need-based financial aid.

P Completion. A high proportion of freshmen at Hawaii’s public and private four-year colleges and universities return for their sophomore year. But a small proportion of first-time, full-time college students receive a bachelor’s degree within five years of enrolling. Only a fair proportion of students complete certificates and degrees relative to the number enrolled.

P Benefits. Only a fair proportion of Hawaii’s residents have a bachelor’s degree and this impairs the state economically. The state also receives only fair civic benefits from its population, as measured by the percentage of residents who vote.

The need for adults to improve their basic literacy skills is evident from the entering student placement data summarized in Figure 3. All new UHCC students (approximately 5,000 individuals) are expected to take our placements tests in mathematics and English. On the basis of their performance, students are eligible to enroll in either remedial, developmental, or baccalaureate level classes in mathematics and/or English. In addition, placement levels also serve as prerequisites for other selected courses or programs.
Political - State financial support for the University has declined from 13% of the State Budget in 1985 to 9% in 2000. A decade of budget reductions has placed us well behind other states in our expenditures per FTE student. A national study conducted by the Educational Commission of the States reported (Figure 4) that our $3,696 per FTE student (including fringe benefits) is the lowest among the 50 states.

Historically, Hawai‘i has promoted student access to postsecondary education by maintaining a low tuition at the community colleges. When looking at the issue of affordability, the Measuring Up 2000 report gives Hawai‘i a grade of “C-“ (figure 5). This grade was attributable to the level of the cost of attendance at the community colleges and the low level of State grant-in-aid for low income families.

In 1995, State law changed allowing the University to keep its tuition; the General Fund appropriation was reduced by a similar amount. In addition, legislatively set tuition waivers became the responsibility of the University to be funded from tuition. While this policy change may have been an appropriate device to encourage the baccalaureate campuses to increase their tuition, taken together these actions have made it extremely difficult for the community colleges to provide tuition assistance to students with demonstrated financial need. Although increases in student tuition have softened the impact of the budget reductions, we have probably reached the limit of our ability to maintain access to students with low or moderate incomes.

Emerging Opportunities - To diversify the economy it is essential to build upon Hawai‘i’s strategic competitive advantages. These advantages include: culture, location, and geography. Our rich Asian and Pacific cultural heritage and population provide us with ready entre to developing economies in the region. Our location can allow us to play a role in educating and training people from throughout Asia and the Pacific. Our geography provides us with unique physical advantages. For example, our mountains, ocean, and relative isolation from the continental U.S. provide a natural laboratory for agriculture; the biological sciences; oceanographic, atmospheric, and astronomical research; and the economic product development, education, and training that can evolve from these activities. There are a number of areas of economic potential that can be pursued with the right mix of “cutting-edge” education and training programs in place. These include: Biotechnology,

**Planned Decline in the UHCC “Going Rate”** - Over the past decade there have been significant changes in Hawai‘i’s workforce; change in the mix of low-skilled and high-skilled job; an absolute increase in the number technical, professional and managerial jobs in the State; and increased availability of new education and training opportunities developed in response to these changes. However, there has been a decline in the student “Going Rate” from the public high schools to the Community Colleges.

**SIGNIFICANT INTERNAL ISSUES**

**STUDENT DEMAND**

**P** Credit Enrollment - Between 1989 and 1994, enrollment grew about 23% to 27,905. Since 1994, severe budget cuts resulted in fewer opportunities for students to enter the community colleges and enrollment decreased by nearly 4% in 1995, and 5% in 1996. A significant portion of this decline can be attributed to our no longer counting adult basic level remedial students as regular credit students, and the change in welfare regulations that forced individuals to work rather than continue their education. Enrollment increased in Fall 201 to approximately 25,000 students.
P Educational Level - Between 1990 and 1992, the number of freshman increased to nearly 17,300 or 66% of total enrollment. During the same period, sophomore enrollment declined to about 5,200 20% of total enrollment. An increased emphasis on student retention issues resulted in a significant growth in sophomore enrollment through 1996, where it peaked at 9,220 students (36% of total). We have been able to maintain sophomore enrollment at about 34% through Fall 2001. The Fall 2001 enrollment increase was the result of increased unclassified and freshmen registrations.

P Non-Credit Registrations - Non-credit student registrations have had some decline in the mid-1990s as more private sector training providers entered the Hawai`i market, particularly in the computers and computer software areas, and the slowdown in construction that resulted in fewer apprentice enrollments. However, there has been strong enrollment growth over the past several years. This increased enrollment has generated significant additional tuition and fees revenues. This is also a potential source for increased future revenues. The Community Colleges account for nearly 70% of the total University non-credit registrations.

P Student Ethnicity - Part of the Community Colleges role in meeting the goal of access has been to provide opportunities to individuals previously under-represented in higher education. In Hawai`i, that has included Hawaiians and Filipinos. A concerted effort in dealing with identifying and removing barriers to minority student enrollment, retention and success in the late 1980s appears to be having success. Between 1990 and 2001, Hawaiian student enrollment increased significantly. Hawaiian and Filipino students now representing the largest ethnic groups in the Community Colleges.
OPERATIONAL EFFICIENCY

SSH per FTE Faculty - The ratio of Student Semester Hours (SSH) to FTE Faculty, which increased steadily in both liberal arts and vocational programs between 1990 and 1995, has been declining for the past six years. In Fall 2000, the system average stood at 246 SSH per FTE faculty member, the same level it was in 1990.

Percent of Small Classes - The percent of small classes (fewer than 10 students) declined dramatically from 1991 through 1994. However, since 1995, the percent of small classes being offered has been steadily increasing. In Fall 2000, the percent for Arts & Sciences classes was at 5% and occupational technical was at 16%.

Average Class Size - Increased class enrollment ceilings in selected classes and programs have allowed more student registrations in fewer classes, thus increasing average class size in our occupational/technical programs. Between Fall 1991 and Fall 1998, average class size in vocational programs increased from 16 to 18 (12.5%), and in Arts & Sciences courses from 22 to 25 (13.6%). Average class size has been declining since 1999. In Fall 2001, the average for Arts & Sciences was 23 and occupational/technical was 16.
**LEARNER OUTCOMES**

**P Degrees Awarded** - Despite the decline in student enrollment since 1994, the actual number of degrees awarded in total has increased significantly over the past ten years. The number of liberal arts degrees awarded increased 18% between 1991 and 2001, while the number of occupational/technical - degrees and certificates awarded increased by 15% during that same period.

**Figure 14**

**P Transfers** - One of the major functions of the community colleges is to prepare students for transfer to baccalaureate level programs. In 1995, 1,217 new students at UH Hilo, UH M- noa and UH West Oahu were transfers from the Community Colleges. In 2001, this number stood at 1044, a 14% reduction from 1995.

**Figure 15**

**P Preparation for Transfer** - Since Fall 1992, surveys of Community College graduates and leavers have been conducted at the conclusion of each semester. These surveys have included students from all campuses and all programs. Fall 2000 graduates and leavers were asked how well the education and training they received prepared them for their new college. Approximately 92% of the students who had transferred to another college indicated that they believed they were prepared to meet the expectations of their new college.

**Figure 16**
Preparation for Work - In the Fall 2000 graduate and leaver surveys, former students were asked to indicate how well the education and training they received prepared them for their current jobs. Approximately 89% of the respondents to the question indicated that they believed they were prepared to meet the requirements of their current job. However, more than 10% responded that they felt poorly prepared. Vocational education students employed in a job closely related to their study were the most satisfied.

**ORGANIZATIONAL AND FINANCIAL ISSUES**

Staffing and Organization - Between 1995 and 2001, total UHCC General Funded staffing increased from 1,470 FTE to 1,518 FTE, an increase of 3.3%. These increases included 24 FTE Administrative Professional Technical (APT)/Civil Service, 22 faculty, and 2 Executive & Managerial (E&M). All of this growth took place at the campuses; staff assigned to UHCC system administration declined by about 3 FTE during that same period. At all UHCC campuses except Honolulu faculty FTE counts increased.

Revenues - Between FY 1997 and FY 2001, revenues from all sources increased 25% from $108.7M to $136.4M. However, there were significant shifts in the sources of those revenues. General Fund revenues declined from 58.1% of revenues in FY 1997 to 50.7% in FY 2001. Tuition and fees revenues (including non-credit) increased from 21.1% in FY 1997 to 26.1% in FY 2001, and contract and grant revenues increased from 13.1% of revenues to 15% during the same period.
Expenditures - The UHCC expenditure pattern remained steady between FY 1997 and FY 2001. The dollars spent on Instruction and Public Services held steady at 54% of total expenditures, but increased in absolute terms from $70.3M in FY 1997 to $78.9M in FY 2001. The proportion of other expenditures also remained the same: Academic Support 9%, Student Services 9%, and Institutional Support 12%.

INSTITUTIONAL ASSESSMENT ISSUES

Over the past few years, there have been a number of external reviews and analyses that have identified significant issues that affect our ability to deliver quality education. These have included our most recent WASC re-accreditation (2000), the University Strategic Plan for Information Technology (2000), Measuring Up 2000 - The State-by-State Report card for Higher Education (2000), and the NCHEMS UH Financing Study (2000). Each of these studies has identified critical issues that we must deal with over the next four years.

WASC Accreditation

Each campus of the University of Hawai‘i Community Colleges is separately accredited by the Western Association of Schools and Colleges - Accrediting Commission for Community and Junior Colleges (WASC - ACCJC). ACCJC policy calls for all its member colleges to conduct an in-depth evaluation and assessment, including a visit by a team of external evaluators at least once every six years, to maintain its accreditation. Nearly twenty years ago, the Community Colleges and the ACCJC jointly agreed to a process that has all seven campuses evaluated simultaneously and an informal assessment of the functioning of the UHCC as a system. The in-depth evaluations result in reports that recommend specific actions to be undertaken by the time of the next accreditation visit.

In Fall 2000, the UHCC campuses were evaluated by seven accreditation teams, the chairs of whom served as an eighth team to assess the functioning of the system. The team chairs developed fourteen recommendations tied to the standards and based not only on interviews with system staff, but on information gleaned from the visits to the colleges. The recommendations fall under the following five major themes:
• **Research and Planning**: Though the system has made impressive gains over the past six years despite the bleak financial picture, more remains to be done. The Program Health Indicators can be broadened to include all programs, not just vocational ones. The newly decentralized institutional research model needs additional attention to fully realize its potential to inform decisions at the system and college levels. A system-wide database awaits development, especially in light of the delays the primary vendor had been experiencing. In a word, the promise is there, but much needs to be done before the benefits can be seen.

• **Student Assessment and Placement**: Systemwide tools for assessing student competence and proper placement also await refinement and implementation, especially for the growing number of students who attend more than one college, students who attend either in a traditional way or through the increasing availability of distance education.

• **Staff Development**: One underlying theme of this report is the growing need to reassert the needs for staff development. Sadly, one of the main victims of financial retrenchment was the system’s staff development program. The current budget is one-tenth of the budget in the late 1980’s. However, the need for staff development, given the accelerated pace of change this past decade, has only increased. The system is urged to continue developing low-cost, creative alternatives to address its staff development budget, to seek sources of private giving, and to establish programs for staff development in technology, new institutional research databases, revised accounting methods, and so forth.

• **Financial Support for Capital and Other Needs**: Other victims of the recent retrenchment were the system’s maintenance, repair, and capital development funds. Yet despite a growing backlog of maintenance and repair, new facilities have been constructed, unfortunately without adequate support for the on-going costs associated with expanded facilities and services. Likewise, though the system has emphasized entrepreneurship and the search for revenues outside of those provided by the Governor and the legislature, the results are uneven among the colleges and the policy and procedures, including accounting procedures, are not yet developed.

• **System Governance**: As a “system within a system,” the UHCC continuously faces the threat of becoming buried within the larger UH structure. Despite the near universal respect accorded to the Senior Vice President/Chancellor and her colleagues, the Board of Regents needs to always protect the integrity of the system within the larger University. The Board of Regent’s Community College Subcommittee is a primary vehicle for maintaining the system’s identity and integrity, and it should be maintained and strengthened. In addition, the Board of Regents should address its own procedure of self-evaluation in order to enhance its performance in carrying out its role.

**P**

**UH Strategic Plan for Information Technology 2000**

The following are relevant portions from the approved UH Strategic Plan for Information Technology 2000 that identify issues of concern for Community Colleges:

This plan is designed to build on the University’s successes and remedy its deficiencies within the new institutional environment that has emerged over past several years of financial constraint. The most fundamental changes at the University are the result of the new financial relationship between the University and the State as the University now retains its tuition and struggles with the complex issues of implementing greater autonomy. Individual units must incorporate this revenue stream into their financial planning and, as a result, entrepreneurship is more critically required and highly valued. Students are increasingly viewed as important customers in the University’s new economy. The University is no longer subject to the State Procurement Code for purchasing and has been given greater flexibility across most administrative areas. The University System is seeking a new set of equilibria that balance the unique missions and characteristics of
each campus with the need for systemwide collaboration to provide improved service to a statewide student population in a cost-effective manner.

**Teaching, Learning and Students:** The University will effectively use technology to extend its instructional activities throughout the State and beyond, while applying technology to improve the quality of instruction and services delivered to students both on and off campus.
- Enhance Instructional Technology Support
- Upgrade Classroom Technology
- Assess / Enhance Campus Information Technology Labs
- Connect Student Housing
- Address Student Access Issues
- Expand Technical Infrastructure for Distance Learning
- Develop Policies that Support Teaching with Technology

**Administrative Services:** Modern administrative information systems will provide every member and customer of the University community with integrated access to appropriate administrative information and services in a reduced paper environment.
- Develop Integrated Access to Administrative Services
- Implement Integrated Data Warehouse

**Space and Facilities:** All University campuses and facilities will be information technology friendly, with a reliable modern technical infrastructure equipped for services appropriate to their use.
- Develop, Apply and Maintain Construction Standards
- Construct ITS Building at Manoa

**Faculty and Staff Support:** The University community will be able to use information technologies appropriately and effectively with the assistance of an able and committed information technology support staff.
- Provide Staff with Up-to-Date Networked Computers
- Increase Technical Support Staff
- Increase Professional Development Opportunities
- Improve HR Practices for IT Professionals

**Information Technology Management and Funding:** The University will effectively manage the converging and rapidly advancing technologies of computing and communications across the University system and at each campus or college by employing sound fiscal practices.
- Reinvigorate IT Advisory Committees and IT Planning
- Budget IT Costs as Ongoing Operational Expenses

The most critical action is the last one, that the University implement funding mechanisms to treat all aspects of information technology as recurring costs that include stable budgets for computers, software, maintenance, training and replacement of obsolete technology on a regularly scheduled basis.

# NCHEMS - Funding Analysis of the University of Hawai`i System

Since 1980, the National Center for Higher Education Management Systems (NCHEMS) has been active in assisting states and national agencies to develop effective approaches to policy in the areas of governance, assessment and accountability, and in directed resource allocation. Work in these areas has included joint projects with such agencies as the Education Commission of the
In the Spring 2000, NCHEMS was contracted to evaluate the financing of the University relative to its various peer institutions across the country. A published a report of its analysis of the funding of the University as compared with similar institutions made the following observations:

- Resources per FTE student are at the lowest point since 1980.
- UHS, relative to peers, is collectively under-funded by $117-$137 million.
- The levels of under funding are proportionally higher at most of the CCs.
- Four-year campuses get relatively more funding from the state and less from tuition than their peers. The reverse is true for the Community Colleges. It should be noted that this pattern is counter to that normally found. More typical are patterns in which students contribute a greater share at four-year institutions and a lesser share at two-year institutions.
- Hawaii institutions receive far less revenues from sources other than tuition and state appropriations than peer institutions. This is true regardless of peer groups used as the basis of comparison and is for all campuses.
- The funding gap to be filled cannot be acquired from a single source; revenues will have to be increased from all sources if the gap is to be closed.
- It is appropriate to address the structural problem reflected in the high System Support Index number for the state. In simple terms, this means establishing University of Hawaii System policy that has the net effect of funneling future growth to places less expensive to operate than Manoa.

### Analysis of UHS Financing

**Additional Revenues to Reach Institutional Peer Medians**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Unadjusted</th>
<th>CGI Adjusted</th>
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<tbody>
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<tr>
<td>UH Hilo</td>
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Figure 21