Cabrillo Community College District

Educational Master Plan

June 2, 1997

MAAS, RAO, TAYLOR AND ASSOCIATES
Introduction

Chapter One
INTRODUCTION

PURPOSE

In 1992, Cabrillo College completed a comprehensive Educational Master Plan for the District. This document is an update and revision to that plan and is the revised Educational Master Plan for Cabrillo College through the year 2006. Contained herein are program and service plans prepared by the staff of the College and the consultant, as well as analyses and descriptions related specifically to facilities needs, to the year 2006. This plan is based on the need to:

- support current, successful instructional programs and student services
- keep pace with, and anticipate the changing needs of the students and the communities served by the College
- develop partnerships with business and industry within the service area
- develop alternative strategies for delivering instruction to students
- develop a Technology Plan that will fully incorporate technology into all aspects of the operation of the courses, programs, and services of the College
- consider the development of planning strategies for additional educational centers to be located in population centers of the District
- develop a Facilities Plan that will support the anticipated courses, programs and services of the District for the next decade, and that are flexible in design to permit for change to take place in the physical structures as instructional needs change.

This master plan addresses the following concerns:

- a need for expansion of comprehensive planning and decision-making
- a stronger educational program basis to substantiate future needs
- an involvement in decision-making by all areas of the College and community, including students, faculty, staff and the community
- the need to up-date the existing campus facilities and provide additional facilities appropriate to the instructional programs and support services offered.

This Educational Master Plan addresses not only the current campus in Aptos, but also the approved Educational Center in Watsonville. In addition, analyses and recommendations have been made regarding the offering of College instructional programs at neighborhood centers throughout the College District.
Introduction

OVERVIEW

History of the College

Cabrillo Community College District was established in 1959 to serve the educational needs of residents of the Santa Cruz County area. The College initially began classes on its present site in Aptos in the mid-1960’s. From its inception, the District has recognized the unique characteristics of the various geographical areas of the County and the need to provide educational programs and services to both the Northern and Southern portions of the County. To this end, the main campus was established in Aptos which was readily accessible to all County residents. Also, an unofficial Education Center was established in Watsonville to provide classes for residents of the Southern portion of the District. In the Spring of 1997, official Educational Center status was granted by the Board of Governors of the California Community Colleges and the California Postsecondary Education Commission for the Watsonville Center.

Current enrollment at the College is approximately 13,500 students which, in turn, generate approximately 8,200 Full Time Equivalent Students (FTES). It is projected that within the next ten years, the College will continue to grow to approximately 17,500 students. These students will be enrolled at either the campus in Aptos, the Education Center in Watsonville or at education centers located throughout the College District.

In terms of organizational structure, it is anticipated that Cabrillo Community College District will remain a single College District with educational centers for the foreseeable future. In terms of geographical locations, the College will continue to have its main campus at Aptos, an Educational Center in Watsonville and additional satellite educational centers established throughout the College’s service area as needs and opportunities arise.

The main campus, the Educational Center in Watsonville and the satellite education centers will be linked using the latest distance learning technology to provide educational services to all residents of the College’s service area. There is no question that the use of technology will serve driving force in determining the future delivery systems for the educational and support services provided by the College.
Chapter Two

METHODOLOGY

PLANNING PROCESS

The need to update and revise the Educational Master Plan for Cabrillo College has been an on-going, two year process beginning with the completion of revised Unit Planning Guides (UPG's) during the 1995-96 academic year, the selection of a consulting firm to assist in the planning process in the fall of 1996 with the completion of the updated plan during the spring, 1997. The President and the Governing Board established the need for updating the master plan as one of the 1996-97 College objectives.

This past year, the California Community College Chancellor's Office established guidelines for the development of educational master plans as well as how the master planning document interfaces with the State funded, capital outlay program for facilities. The State now requires an educational master plan be submitted as part of the application process for state supported capital construction projects. This updated plan will meet those requirements.

To bring objectivity and professional guidance to the planning process, the District employed the educational planning and development firm of Maas, Rao, Taylor and Associates to assist the staff in the development of the Educational Master Plan. Initial meetings with the consultants led to the development of the master planning process which is outlined in Exhibit 2-1.
Exhibit 2-1
The Planning Process

MASTER PLAN STEERING COMMITTEE

INTERNAL REVIEW
(Focus discussion sessions and interviews with students, faculty and staff; analysis of institutional data and information)
- Programs
- Services
- Staffing
- Facilities Utilization and Condition

EXTERNAL ENVIRONMENTAL REVIEW
(Community forums, interviews with key leaders, document, and review)
- Labor Market
- Demographics
- Competitive Factors
- Geography

INTERNAL UNIT PLANNING

ENROLLMENT ESTIMATES

INSTRUCTIONAL DELIVERY NEEDS

APPLY SPACE USE STANDARDS

TOTAL SPACE NEEDS

LONG TERM EDUCATIONAL MASTER PLAN

FACILITIES PLAN
HUMAN RESOURCES PLAN
TECHNOLOGY PLAN
FINANCIAL PLAN
Methodology

PLANNING ACTIVITIES

As reflected in Exhibit 2-1, the College staff, with assistance from the consultants, focused on the following primary tasks:

• A review of the history and evolution of the College;
• an environmental scan to reveal the present and anticipated needs of the College's service area,
• the creation of a vision of the future in the form of an educational master plan focusing on the assessment of current programs and services and the development of future programs and services to meet the future needs of residents of the College's service area,
• the development of growth and enrollment estimates extending to the year 2006,
• the development of a plan to ensure access and overall success to the disadvantaged and under-represented groups within the community,
• the development of a Facilities Plan that will both modernize the existing campus facilities and plan for the future facilities to meet the needs of a College which will ultimately have an enrollment in excess of 20,000 students,
• the formation of a wide range of partnerships with area business and industry,
• the development of a phased staffing plan incorporating both the anticipated additional staff needs in the next decade and the continuing education plans for existing staff members,
• the development of a Technology Plan that will provide alternative instructional delivery strategies, improved record-keeping and record access, a more responsive student information system, systems for human resources and business services
• establishment of a Financial Plan, including strategies for the development of alternative income sources.

This master plan addresses the needs and purposes as outlined above. The planning process focused on the need to build campus/community relationships and identify future trends, needs, and sensitivities influencing the long range development of the Cabrillo Community College District. The documentation presented herein:

• reflects an effort objectively facilitated by Maas, Rao, Taylor and Associates, but founded by student, faculty, and staff participants;
• provides substantive links between educational program and service needs and uses these concepts as the primary force in the establishment of College facility needs,
• improves the College's basis of justification with State agencies and the State Legislature in order to acquire a greater share of capital outlay funds that are
available for the improvement of public higher education through the State supported capital outlay process, and

• complements and further promotes wide participation in the College's processes which result in definitive directions for the future of the College and the communities served.

Commencing in February, 1997, the consultants met with individuals and groups to review current educational programs and support services at the College and outlined the process which would be followed to effectively develop a sense for the future direction of the College and the range of issues related to educational and facilities planning. Groups and individuals involved in the process included:

• students
• individual faculty
• faculty gathered at meetings
• College committees
• staff
• Faculty Senate
• administrators.

The completion of Unit Planning Guides for each instructional and support service area of the College allowed the planning team to gain perspectives on, and the expectations of, the role the College and District should have in providing educational programs and services for this portion of the District. The extent to which this plan has provided a sense of vision and a guide for multi-year planning for programs, services and facilities is a tribute to, and the result of, the contributions of many individuals and groups.

The planning process began with a simultaneous examination of both the internal and external environments influencing future development at the College, and an examination of the present and anticipated development of both the instructional and support service areas. From this point, the study progressed to an analysis of the data obtained, and the development of a series of conclusions on topics ranging from instructional and support services program development, to instructional delivery, to additional education centers within the communities served, and the staffing and financial support necessary to bring these plans to an operational reality.

Combined with the information obtained from group meetings and workshops, written information, and meetings with individual staff members, the planning team focused on the College's philosophy and goals, the major themes as developed in the Unit Planning Guides, implementation strategies, and specific instructional disciplines and support service units for insights into the present and future operational agenda of each component of the institution.

As illustrated in Exhibit 2-1, the environmental reviews and the programmatic goals of the College guided the development of enrollment estimates, future educational programs and
support services. These assessments then led to the development of the future plans for facilities, human resources, technology and funding.

**GOVERNANCE/APPROVAL PROCESS**

As noted earlier, Cabrillo Community College District is a single-College District. As part of the educational master planning process, it was determined that the planning process would emanate from the faculty, staff and students of the College. Thus, the consultants met with the various departments at the College to review the Unit Planning Guides and discuss what future programs and services should be provided by that particular department. Once this review process was completed, then the individual planning guides were integrated into the revised Educational Master Plan for the College.

In the spirit of shared governance the College plan has been reviewed and discussed with faculty, staff, administrators and students at the College prior to the approval by the Governing Board.
Chapter Three

BACKGROUND RESEARCH AND DATA COLLECTION

EXTERNAL TRENDS

One of the key factors in the creation of an Educational Master Plan is the development of an environmental data base that is descriptive of both the external and internal environment of the College District as well as the service area for the College. This data base is then used to make projections on population increase/decrease, student participation rates, enrollment, occupational trends, new program development, and the development or expansion of support service area. This information is also utilized in the establishment of rationale for the development of new College educational centers and for projections used in the development of new or remodeled facilities and staffing. The development of this information is thus crucial to the planning process and the importance of gathering a wide range of information cannot be over-estimated.

To establish such a base of information, the consultants worked with the Cabrillo College Institutional Research Office as well as city, county and state agencies to gather and/or prepare the necessary data needed for a comprehensive environmental scan. Sources of information which were accessed included:

- District Enrollment information, past and present
- District Zip Code Analysis of attendance
- District demographic data on students
- Census data and revised Census Data
- Data supplied by regional government agencies
- Information supplied by local service area cities
- Information obtained from State educational agencies
- Information obtained as the result of special studies and surveys
- Chamber of Commerce Information on local economic development
- Information contained in the data bases of Maas, Rao, Taylor and Associates

Using the above information, plus any additional studies developed on an "as-needed" basis, an environmental scan was developed that is descriptive of the external and internal environment of the college district. Those factors having influence on the long-range planning process of the district were then incorporated into the basic planning assumptions at all levels.

Summarized in the tables which follow are some of the key data elements obtained from the review of the County and service area demographics. (See Exhibit 3-1 for a map of the County) A complete, comprehensive presentation of the information can be found in the appendix to the Plan. It should be noted that the Santa Cruz County area, and, accordingly, the College service area, has a wide range of demographic information. This is a challenge to
Background Research and Data Collection

Exhibit 3-1
Santa Cruz County Map

SANTA CRUZ COUNTY

San Mateo County

Santa Clara County

Scotts Valley

San Benito County

Monterey County

Pacific Ocean

Monterey Bay
the College in that the programs and services for the College needs to be specifically designed
to meet the needs of the residents of each unique area of the County. The Northern portion of
the County is distinctly different from the Southern portion of the County. This is especially
true when an analysis is made of ethnicity and family income. Further, the Southern portion of
the County is expected to increase in ethnic diversity much more than the Northern portion of
the County. The exhibits included in this chapter reflect first the County population
projections, then the service area information by zip codes and finally and analysis of
demographics within a 5-mile and a 10 mile radius of the campus in Aptos, the Education
Center in Watsonville and a geographical mid-point in the Northern area of the County. These
radius analysis are especially helpful in analyzing the service area population because it equates
to travel times to the College which is one of the major factors which determine attendance.

The Area

Santa Cruz County is the second smallest county in California with a total area of 439
square miles. Two-thirds of this area is considered to be forest land by the United States
Department of Agriculture. The boundaries of the county are natural. The east is defined by
the Santa Cruz Mountains, while the southern area is bordered by the Pajaro River and the
west contained by the Monterey Bay and the Pacific Ocean. Lastly, the North is enclosed by
mountains and woods, the other side of which is San Mateo County.

Santa Cruz County is a vacation and recreation retreat for several of the surrounding
counties which have significant metropolitan areas. The County is well known for its well
maintained coastline, beaches, and forested mountains. There are six state parks and numerous
state beaches. In the North-Central part of the county is the largest city, Santa Cruz. The
northern section is separated by a range of hills from the Southern section of the county. Each
of the two sections are geographically distinct regions. A significant variance in the cultures
and economies have evolved between the two regions.

The Southern part of the County, which includes part of Pajaro Valley, is essentially
agricultural. The agriculture industry is labor intensive and seasonal in nature. Ethnic groups
have immigrated to the Valley to take advantage of employment opportunities in this industry.
The largest community in the south county is the City of Watsonville.

Transportation in and around the County is supplied by four major intrastate roads.
Coastal Highway 1 goes through the City of Santa Cruz and has historically been a major
North-South thoroughfare with some of the most scenic sights in the state. Highways 9 and 17
also go through the City of Santa Cruz and connect the major metropolitan San Jose areas to
the city and county. Highway 152 cuts through the Southern edge of the county and connects
Watsonville to Highway 1. The County also has a small airport which can receive private
planes and one major railroad which provides freight service for the coast and Watsonville. In
interviews with Santa Cruz County officials, it was determined that there are no plans to widen
the frequently congested Highways 1 and 17. Residents of the County have expressed a strong
desire for a very limited growth rate in population.
Background Research and Data Collection

Industry

According to the State Employment Development Department's (EDD) June, 1996 Annual Planning Information, the business services market is predicted to be a major portion of job growth for Santa Cruz County with an increase of 45% during the 1996 to 2000 period. Virtually half of all new jobs are expected to be in business services and retail trade. A boom in the business services segment is related to computer services such as software development. This segment requires fewer people than other services, however, computer services tend to grow more rapidly than the electronics or computer-related manufacturing. In addition, recent trends toward reducing costs by employers has increased their reliance on temporary services and workers. This trend has resulted in a significant increase in these service related industries.

The manufacture of non-durable goods is anticipated to decrease by 6.0%. The manufacturing of durable goods is expected to increase, however, because of gains in the electronics related companies. In addition, a significant number of jobs are in government and construction in the county. The majority of the increases in government are attributed to state population increases which have resulted in expansion at the University of California. Construction activity has also increased due to the slight improvement in the economy over the past two years. Residential permits are expected to increase at an annual rate of 2-3%.

Agriculture is expected to increase by 24% with the expansion of raspberry and strawberry land. Roses and carnations are major nursery crops for the county. The strawberry and the nursery industries are labor intensive crops which require workers for a good number of months of the year. Overall, the spring and fall crops are the largest, though some of the crops are harvested throughout most of the year. Though traditionally California has been a market maker, in recent years California's share of the agriculture market has been reduced to that of a significant supplier position.

Labor Market Projections

An important role of community colleges is to provide training and retraining for a variety of specialized occupations. The fastest growing industry statewide is services, many of the occupations in which are increasingly demanding more than a high school diploma for specialized knowledge and skills. While many service occupations do not require baccalaureate-level training, they do require skills which are not necessarily acquired during primary or secondary education. The industries with the largest growth will be in business services and technical skills generating nearly 200,000 new jobs for Californians between 1996 and 2000. Most of the occupations in these industries require special training at the associate or baccalaureate-level. California's community colleges will become an increasingly crucial resource in our economy; community colleges will need to position themselves to accommodate an increasing demand for basic skills and occupational training, and Cabrillo College will be no exception. An Associate in Arts degree has been shown to enhance job opportunities for individuals by providing a "competitive edge" in selection of applicants for employment.
The current State of California projections of growth for the labor market are presented below.

1. **State-wide** - The State Employment Development Department projects employment on a state-wide basis through the year 2000. EDD has projected a 15.2% increase in employment in California between 1996 and 2000. The primary occupational groups contributing to this growth are presented in Exhibit 3-2.

### Exhibit 3-2

**Primary Occupational Groups Contributing to California's Growth**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent Growth (1996 - 2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service occupations</td>
<td>16.9%</td>
</tr>
<tr>
<td>Sales occupations</td>
<td>15.5%</td>
</tr>
<tr>
<td>Professional, paraprofessional and technical jobs</td>
<td>39.1%</td>
</tr>
<tr>
<td>Agricultural, forestry and fishing industries</td>
<td>12.5%</td>
</tr>
<tr>
<td>Administrative jobs</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Most of the jobs within these occupational groups will require some form of postsecondary education. Jobs in occupational groups which have traditionally not required training beyond high school, such as mining, construction and manufacturing, will either decline in the number of job opportunities offered or grow at a rate significantly slower than those within the primary occupational groups. Of interest is that between service occupations, sales occupations, and professional, paraprofessional, technical, and administrative jobs, the absolute growth in occupations between 1996 and 2000 is 936,473 which is nearly two-thirds of the entire growth in the labor market.

2. **Santa Cruz County** - Exhibit 3-3 lists the occupations with the largest absolute growth between 1992-1999 and Exhibit 3-4 lists the occupations with the largest percentage growth between 1992-1999. Occupations experiencing the largest overall growth include the following groups:

- retail trade salespersons and cashiers;
- business services professionals: general managers, top executives, accounting clerks, counter and rental clerks;
- manufacturing: assemblers, fabricators, traffic shipping, and receiving clerks;
• nurses;

• hospitality: cooks, waiters and waitresses, bartenders, hosts, and hostesses;

• computer programmers and systems analysts;

• electronics/engineering technician and electronic engineers;

• groundskeepers and gardeners;

• carpenters, helpers - carpenters and related;

• automotive mechanics;

• light truck drivers; and

• guards and watch guards.

While Cabrillo College appears to have programs in place to respond to occupational needs in the health services and food services industries, questions should be raised regarding the adequacy of programs available to serve a growing need for retail service persons, hospitality management, building construction and repair, and material moving. Programs are not currently in place at Cabrillo College to serve students specifically in these occupations; although some existing programs could be expanded or altered to provide training for these occupations. A survey of the four adjoining community colleges indicates that only three surrounding colleges (Gavilan, Monterey Peninsula and West Valley), have programs for retail service persons. The need for such programs should be carefully explored.

Numerous high growth occupations listed in Exhibit 3-3 would require training at the baccalaureate level or above. These occupations include:

• engineer, math and natural science managers;
• teachers - secondary school;
• teachers - vocational education and training;
• teachers - elementary school; and
• financial managers.

Because of the continuing increase in the cost of higher education, Cabrillo College will become increasingly attractive to baccalaureate-bound students for their first two years of liberal and general education. Continued strong enrollment of transfer students at Cabrillo College over the last three to five years supports this belief.
### Exhibit 3-3

**Occupations With The Greatest Absolute Growth - 1992 - 1999**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Annual Averages</th>
<th>Absolute Growth</th>
<th>Percent Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salespersons - Retail(Non-Vehicle)</td>
<td>11,120</td>
<td>1,580</td>
<td>14.2%</td>
</tr>
<tr>
<td>General Office Clerks</td>
<td>9,750</td>
<td>1,320</td>
<td>13.5%</td>
</tr>
<tr>
<td>Cashiers</td>
<td>7,110</td>
<td>1,170</td>
<td>16.5%</td>
</tr>
<tr>
<td>Systems Analysts - Elec. Data. Proc.</td>
<td>1,990</td>
<td>1,050</td>
<td>52.8%</td>
</tr>
<tr>
<td>Waiters And Waitresses</td>
<td>4,720</td>
<td>800</td>
<td>16.9%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>4,710</td>
<td>700</td>
<td>14.9%</td>
</tr>
<tr>
<td>Food Preparation Workers</td>
<td>3,630</td>
<td>660</td>
<td>18.2%</td>
</tr>
<tr>
<td>General Managers, Top Executives</td>
<td>8,020</td>
<td>580</td>
<td>7.2%</td>
</tr>
<tr>
<td>Truck Drivers, Light</td>
<td>2,450</td>
<td>580</td>
<td>23.7%</td>
</tr>
<tr>
<td>Receptionists, Information Clerks</td>
<td>3,420</td>
<td>520</td>
<td>15.2%</td>
</tr>
<tr>
<td>Janitors, Cleaners - Except Maids</td>
<td>3,910</td>
<td>480</td>
<td>12.3%</td>
</tr>
<tr>
<td>Accountants And Auditors</td>
<td>2,060</td>
<td>400</td>
<td>19.4%</td>
</tr>
<tr>
<td>Guards And Watch Guards</td>
<td>1,610</td>
<td>390</td>
<td>24.2%</td>
</tr>
<tr>
<td>Maint. Repairers, Genl. Utility</td>
<td>2,840</td>
<td>390</td>
<td>13.7%</td>
</tr>
<tr>
<td>Cooks - Restaurant</td>
<td>1,610</td>
<td>350</td>
<td>21.7%</td>
</tr>
<tr>
<td>Computer Engineers</td>
<td>550</td>
<td>340</td>
<td>61.8%</td>
</tr>
<tr>
<td>Engineer, Math And Nat. Sci. Mgrs.</td>
<td>1,350</td>
<td>310</td>
<td>23.0%</td>
</tr>
<tr>
<td>Instructional Aides</td>
<td>3,530</td>
<td>300</td>
<td>8.5%</td>
</tr>
<tr>
<td>Truck Drivers, Heavy</td>
<td>2,640</td>
<td>300</td>
<td>11.4%</td>
</tr>
<tr>
<td>Financial Managers</td>
<td>2,480</td>
<td>290</td>
<td>11.7%</td>
</tr>
<tr>
<td>Computer Programmers, Incl. Aides</td>
<td>2,080</td>
<td>270</td>
<td>13.0%</td>
</tr>
<tr>
<td>Nurse Aides, Orderlies, Attendants</td>
<td>1,770</td>
<td>270</td>
<td>15.3%</td>
</tr>
<tr>
<td>Mkting., Adv., Public-Relations Mgrs.</td>
<td>1,300</td>
<td>260</td>
<td>20.0%</td>
</tr>
<tr>
<td>Elect. And Electronic Engineers</td>
<td>1,290</td>
<td>250</td>
<td>19.4%</td>
</tr>
<tr>
<td>Bookkeeping, Accounting Clerks</td>
<td>5,750</td>
<td>250</td>
<td>4.3%</td>
</tr>
<tr>
<td>Sales Reps., Non-Scientific Ex Ret</td>
<td>2,650</td>
<td>240</td>
<td>9.1%</td>
</tr>
<tr>
<td>Stock Clerks - Sales Floor</td>
<td>2,520</td>
<td>240</td>
<td>9.5%</td>
</tr>
<tr>
<td>Automotive Mechanics</td>
<td>1,600</td>
<td>240</td>
<td>15.0%</td>
</tr>
<tr>
<td>Drafters</td>
<td>1,010</td>
<td>220</td>
<td>21.8%</td>
</tr>
<tr>
<td>Carpenters</td>
<td>2,210</td>
<td>220</td>
<td>10.0%</td>
</tr>
<tr>
<td>Civil Engineers - Including Traffic</td>
<td>770</td>
<td>210</td>
<td>27.3%</td>
</tr>
<tr>
<td>Traffic, Shipping, Receiving Clerks</td>
<td>2,080</td>
<td>210</td>
<td>10.1%</td>
</tr>
<tr>
<td>Hairdressers, Hairstylists</td>
<td>1,060</td>
<td>210</td>
<td>19.8%</td>
</tr>
<tr>
<td>Teachers - Secondary School</td>
<td>3,250</td>
<td>200</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

1 Based On Data From The State Of California, Employment Development Department, Labor Market Information Division. July. 1996
### Exhibit 3-3 (Continued)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Annual Averages</th>
<th>Absolute Growth</th>
<th>Percent Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardeners, Groundskeepers - Ex. Farm</td>
<td>1,830</td>
<td>2,030</td>
<td>200</td>
</tr>
<tr>
<td>Adjustment Clerks</td>
<td>1,000</td>
<td>1,190</td>
<td>190</td>
</tr>
<tr>
<td>Data Entry Keyers - Ex. Composing</td>
<td>1,010</td>
<td>1,200</td>
<td>190</td>
</tr>
<tr>
<td>Combined Food Prep. And Service</td>
<td>2,030</td>
<td>2,220</td>
<td>190</td>
</tr>
<tr>
<td>Hand Packers And Packagers</td>
<td>1,100</td>
<td>1,290</td>
<td>190</td>
</tr>
<tr>
<td>Loan Officers And Counselors</td>
<td>950</td>
<td>1,130</td>
<td>180</td>
</tr>
<tr>
<td>Elec., Electronic Engineering Tech.</td>
<td>890</td>
<td>1,070</td>
<td>180</td>
</tr>
<tr>
<td>Teachers - Special Education</td>
<td>800</td>
<td>980</td>
<td>180</td>
</tr>
<tr>
<td>Licensed Vocational Nurses</td>
<td>1,300</td>
<td>1,480</td>
<td>180</td>
</tr>
<tr>
<td>Secretaries, General</td>
<td>6,160</td>
<td>6,340</td>
<td>180</td>
</tr>
<tr>
<td>Human Services Workers</td>
<td>490</td>
<td>660</td>
<td>170</td>
</tr>
<tr>
<td>Cooks - Specialty Fast Food</td>
<td>1,000</td>
<td>1,170</td>
<td>170</td>
</tr>
<tr>
<td>Dental Assistants</td>
<td>790</td>
<td>960</td>
<td>170</td>
</tr>
<tr>
<td>Teachers, Preschool &amp; Kindergarten</td>
<td>1,140</td>
<td>1,300</td>
<td>160</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>690</td>
<td>850</td>
<td>160</td>
</tr>
<tr>
<td>Construction Managers</td>
<td>630</td>
<td>780</td>
<td>150</td>
</tr>
</tbody>
</table>
### Exhibit 3-4

**Occupations With The Greatest Percentage Of Growth - 1992 - 1999**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Annual Averages</th>
<th>Absolute Growth</th>
<th>Percent Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Engineers</td>
<td>550</td>
<td>340</td>
<td>61.8%</td>
</tr>
<tr>
<td>Systems Analysts-Elec. Data. Proc.</td>
<td>1,990</td>
<td>1,050</td>
<td>52.8%</td>
</tr>
<tr>
<td>Human Services Workers</td>
<td>490</td>
<td>170</td>
<td>34.7%</td>
</tr>
<tr>
<td>Civil Engineers - Including Traffic</td>
<td>770</td>
<td>210</td>
<td>27.3%</td>
</tr>
<tr>
<td>Guards And Watch Guards</td>
<td>1,610</td>
<td>390</td>
<td>24.2%</td>
</tr>
<tr>
<td>Construction Managers</td>
<td>630</td>
<td>150</td>
<td>23.8%</td>
</tr>
<tr>
<td>Truck Drivers, Light</td>
<td>2,450</td>
<td>580</td>
<td>23.7%</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>690</td>
<td>160</td>
<td>23.2%</td>
</tr>
<tr>
<td>Engineer, Math And Nat. Sci. Mgrs.</td>
<td>1,350</td>
<td>310</td>
<td>23.0%</td>
</tr>
<tr>
<td>Teachers - Special Education</td>
<td>800</td>
<td>180</td>
<td>22.5%</td>
</tr>
<tr>
<td>Drafters</td>
<td>1,010</td>
<td>220</td>
<td>21.8%</td>
</tr>
<tr>
<td>Cooks - Restaurant</td>
<td>1,610</td>
<td>350</td>
<td>21.7%</td>
</tr>
<tr>
<td>Dental Assistants</td>
<td>790</td>
<td>170</td>
<td>21.5%</td>
</tr>
<tr>
<td>Elec., Electronic Engineering Tech.</td>
<td>890</td>
<td>180</td>
<td>20.2%</td>
</tr>
<tr>
<td>Mkting., Adv.,Public-Relations Mgrs.</td>
<td>1,300</td>
<td>260</td>
<td>20.0%</td>
</tr>
<tr>
<td>Hairdressers, Hairstylists</td>
<td>1,060</td>
<td>210</td>
<td>19.8%</td>
</tr>
<tr>
<td>Accountants And Auditors</td>
<td>2,060</td>
<td>400</td>
<td>19.4%</td>
</tr>
<tr>
<td>Elect. And Electronic Engineers</td>
<td>1,290</td>
<td>250</td>
<td>19.4%</td>
</tr>
<tr>
<td>Adjustment Clerks</td>
<td>1,000</td>
<td>190</td>
<td>19.0%</td>
</tr>
<tr>
<td>Loan Officers And Counselors</td>
<td>950</td>
<td>180</td>
<td>18.9%</td>
</tr>
<tr>
<td>Data Entry Keyers - Ex. Composing</td>
<td>1,010</td>
<td>190</td>
<td>18.8%</td>
</tr>
<tr>
<td>Food Preparation Workers</td>
<td>3,630</td>
<td>660</td>
<td>18.2%</td>
</tr>
<tr>
<td>Hand Packers And Packagegers</td>
<td>1,100</td>
<td>190</td>
<td>17.3%</td>
</tr>
<tr>
<td>Cooks - Specialty Fast Food</td>
<td>1,000</td>
<td>170</td>
<td>17.0%</td>
</tr>
<tr>
<td>Waiters And Waitresses</td>
<td>4,720</td>
<td>800</td>
<td>16.9%</td>
</tr>
<tr>
<td>Cashiers</td>
<td>7,110</td>
<td>1,170</td>
<td>16.5%</td>
</tr>
<tr>
<td>Nurse Aides, Orderlies, Attendants</td>
<td>1,770</td>
<td>270</td>
<td>15.3%</td>
</tr>
<tr>
<td>Receptionists, Information Clerks</td>
<td>3,420</td>
<td>520</td>
<td>15.2%</td>
</tr>
<tr>
<td>Automotive Mechanics</td>
<td>1,600</td>
<td>240</td>
<td>15.0%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>4,710</td>
<td>700</td>
<td>14.9%</td>
</tr>
<tr>
<td>Salespersons - Retail(Non-Vehicle)</td>
<td>11,120</td>
<td>1,580</td>
<td>14.2%</td>
</tr>
<tr>
<td>Teachers, Preschool &amp; Kindergarten</td>
<td>1,140</td>
<td>160</td>
<td>14.0%</td>
</tr>
<tr>
<td>Licensed Vocational Nurses</td>
<td>1,300</td>
<td>180</td>
<td>13.8%</td>
</tr>
<tr>
<td>Maint. Repairers, Genl. Utility</td>
<td>2,840</td>
<td>390</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

注：本列表基于1992年和1999年的数据，由加利福尼亚州就业发展部门，劳动市场信息部门，1996年7月提供。

17
Employer Assessment of the College and the Business Environment

Most comprehensive community colleges provide career-specific training and, therefore, provide trained human resources to local industry. As such, industry often views community colleges as a resource. Community colleges view industry as an opportunity for which to provide training. To develop a sense for the relationship between Cabrillo College and local employers, interviews were conducted with representatives of the Chamber of Commerce, the County and local industry representatives to validate the community's perception of the College.

Employers indicated that the market in Santa Cruz County is shifting due to layoffs in the computer industry. These layoffs have resulted in an increased emphasis by job-seekers in service sector, causing competition for these jobs. Health services is a major part of the service sector but the uncertainty of delivery systems in this field is also causing employers to be very cautious about expanding employment positions. Most jobs in the health care field are replacements for retiring employees. Of all fields analyzed, tourism is the largest growing industry in Santa Cruz. Due in part to the major shift, employers suggested that instructional programs be implemented to provide trained human resources in the service sector. Several areas of expansion in course offerings by Cabrillo College were also suggested by employers. These, in addition to several general evaluative comments that were made, are listed below.

- Electronic and mechanical technician programs continue to have merit
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- Board assembly, test technicians, and financial clerks
- Certificated health care management training should be offered. Also, training in quality control should be offered (training technicians to be managers);
- Focus on training LVN (Licensed Vocational Nurse), (CNA) Certified Nursing Assistant and Aides which can take duties from ADD’s (Associate Degree Nurses). Also, need trained general nurses with the specialty training in critical care and drug addiction;
- Micro coding and assembly language classes and engineering technology
- Word processing skills utilizing current software systems;
- Agriculture has a constant need for continuing education in the area of safety and management.

Some individuals interviewed continued to emphasize that course offerings need to be tailored to the job market and that the hands-on aspects of training needs to be emphasized. Many employers are interested in using Cabrillo to assist in developing specific educational or training programs for employees. Overall, most employers continue to believe that Cabrillo College provides a good basic education in vocational technical skills and lower division education preparation. Cabrillo’s program is perceived as a dependable vehicle to spring to upper division institutions or professional/technical trades. However, a desire was expressed for more flexibility to structure classes around work schedules and responsiveness to employer's needs.

Employers who had a specific contact at the College conveyed that they were pleased with the College. Others, who did not have a contact, expressed appreciation in knowing the College has established an employer liaison at the College. Employers were interested in developing a sense for what the College has to offer and how far the college is willing to go to give industry the specific and timely training necessary.

Unemployment in Santa Cruz County

Typically, there is an inverse relationship between unemployment and higher education enrollment. When unemployment is low and jobs are plentiful, people are less likely to find it necessary to enroll in postsecondary education. When unemployment is higher, however, people are much more likely to enroll in school, hoping to gain a competitive advantage over others searching the job market. In recent times, students admit to enrolling in colleges and universities hoping that by the time of their graduation, the economy will have improved.

With the restoration of some additional funding from the state, it is again possible for the College to be responsive to the educational and retraining needs of area residents. Even with work force reductions which would tend to understate unemployment, an analysis of this factor indicates that unemployment in Santa Cruz County is higher than the average for the
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state. This fact supports the need to maintain and enrich programs to train a wide variety of individuals.

Competitive Factors

By and large, other public institutions of higher education in the Santa Cruz area are actually contributing to, rather than competing for, students in the Cabrillo District. In interviews with faculty and staff at the College, a common theme was conveyed related to increases in the enrollment of students who were denied admission to the University of California and specifically, UCSC.

While California's four-year segments in postsecondary education have raised tuition and fees, the public community colleges charge $13 per unit. This low-cost benefit will continue to make Cabrillo College, and other public community colleges, increasingly more attractive to potential students, particularly those who realize that they must acquire skills and training beyond the high school level but have limited resources.

In addition to attracting greater numbers of students who wish to acquire training (skills) or retraining, especially for specific trades or occupations the College will also attract large numbers of students who desire to transfer to a four-year institution after completing lower division course work, particularly if the economy continues to grow increasingly unstable. As transfer/articulation agreements between Cabrillo College and four-year institutions solidify, the option of attending Cabrillo College before entering a four-year institution is likely to interest increasing numbers of students.

As mentioned throughout this analysis, Cabrillo College is well-known within its local service area, and beyond, as a College that provides excellent lower division higher education. By reputation alone, the College attracts increasingly large numbers of students. The reputation and the attractiveness of the College in the local area should continue.

Service Area Population Projections

Using the data from the concentric ring analysis, in the following section, a review of the three designated service areas indicates a projected increase in population in all areas, with a projected increase of 3,083 in Mid-County (1996 - 2001), 1,656 in the Northern Santa Cruz County Area, and 1,484 in the Southern, for a total in the three areas of 6,223, or an increase of 1.4% for the five year period. This increase equates to .28% per year increase for the period (1996-2001), an extremely modest increase that indicates projected stability, but not significant growth.
### Exhibit 3-5
#### Population Projections

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1996</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>151,018</td>
<td>154,303</td>
<td>155,959</td>
</tr>
<tr>
<td>Middle</td>
<td>181,381</td>
<td>186,667</td>
<td>189,750</td>
</tr>
<tr>
<td>Southern</td>
<td>109,548</td>
<td>112,339</td>
<td>113,823</td>
</tr>
</tbody>
</table>

![Population Projections Chart](chart.png)
Percent Growth:
When a percent growth analysis is performed on the above population growth projections for the period 1990 - 2001, very small increases are anticipated. Historically, when a growth rate of less than 1% is projected, areas will often actually show no growth or decline slightly. This could occur in the case of Santa Cruz County. However, even though the total population of the County may not increase significantly, it is anticipated the southern portions of the County will grow in population over the next 5 years.

**Exhibit 3-6**
**Percent Growth 1990-2001**

<table>
<thead>
<tr>
<th></th>
<th>1990-96</th>
<th>1996-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>2.18%</td>
<td>1.07%</td>
</tr>
<tr>
<td>Middle</td>
<td>2.91%</td>
<td>1.65%</td>
</tr>
<tr>
<td>Southern</td>
<td>2.55%</td>
<td>1.32%</td>
</tr>
</tbody>
</table>
Racial Composition of the Areas:
The following chart and graph illustrates the racial composition of the areas studied:

Exhibit 3-7
Racial Composition of Service Area—1990

<table>
<thead>
<tr>
<th></th>
<th>Northern</th>
<th>Middle</th>
<th>Southern</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>90.80%</td>
<td>86.60%</td>
<td>70.40%</td>
</tr>
<tr>
<td>Black</td>
<td>1.40%</td>
<td>1.20%</td>
<td>0.80%</td>
</tr>
<tr>
<td>Asian/P.I.</td>
<td>3.20%</td>
<td>3.80%</td>
<td>4.80%</td>
</tr>
<tr>
<td>Amer.Ind.</td>
<td>0.80%</td>
<td>0.80%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Other</td>
<td>3.60%</td>
<td>7.60%</td>
<td>23.10%</td>
</tr>
<tr>
<td>Hispanic Origin</td>
<td>9.70%</td>
<td>16.40%</td>
<td>41.40%</td>
</tr>
</tbody>
</table>

Note: The total percentage is greater than 100% because US Census data does separate Hispanic Origin from the other categories. Thus, individuals with Hispanic Origin may be included in any of the other categories.
Changes in the Ethnic Composition of the Areas

The following changes in the ethnic composition of the service areas is anticipated:

Exhibit 3-8
Racial Composition of Service Area—2001

<table>
<thead>
<tr>
<th></th>
<th>Northern</th>
<th>Middle</th>
<th>Southern</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>88.50%</td>
<td>84.30%</td>
<td>68.80%</td>
</tr>
<tr>
<td>Black</td>
<td>1.90%</td>
<td>1.60%</td>
<td>1.00%</td>
</tr>
<tr>
<td>Asian/P.I.</td>
<td>4.80%</td>
<td>5.60%</td>
<td>6.80%</td>
</tr>
<tr>
<td>Amer.Ind.</td>
<td>0.70%</td>
<td>0.70%</td>
<td>0.80%</td>
</tr>
<tr>
<td>Other</td>
<td>4.20%</td>
<td>7.80%</td>
<td>22.60%</td>
</tr>
<tr>
<td>Hispanic Origin</td>
<td>13.90%</td>
<td>21.60%</td>
<td>48.80%</td>
</tr>
</tbody>
</table>
Per Capita Income:

Per capita income is projected as follows:

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1996</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>18,184</td>
<td>22,477</td>
<td>27,607</td>
</tr>
<tr>
<td>Middle</td>
<td>19,232</td>
<td>23,871</td>
<td>29,434</td>
</tr>
<tr>
<td>Southern</td>
<td>10,674</td>
<td>12,198</td>
<td>14,400</td>
</tr>
</tbody>
</table>

Exhibit 3-9
Per Capita Income
Fourteen significant ZIP Code areas were used for the analysis that follows. All of these ZIP Code areas are identified in Exhibit 3-10 which also includes the graphic codes used in the analysis. All data related to the ZIP Code areas are based upon the 1990 U.S. Census.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphic Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
</tr>
</tbody>
</table>
Service Area Population Changes 1990 - 1996

Evidence that the service area of Cabrillo College is in a slight growth pattern can be found by an examination of recent population changes within the ZIP Codes. As shown in Exhibit 3-11, between 1990 and 1996, there was an overall population increase of 3.1% (7,382) for the service area.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>Numeric Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>24,552</td>
<td>25,976</td>
<td>1,424</td>
<td>5.8%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>1,126</td>
<td>1,111</td>
<td>-15</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>7,475</td>
<td>7,628</td>
<td>153</td>
<td>2.0%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>9,434</td>
<td>9,872</td>
<td>438</td>
<td>4.6%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>9,337</td>
<td>8,823</td>
<td>-514</td>
<td>-5.5%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>8,412</td>
<td>8,369</td>
<td>-43</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>5,561</td>
<td>5,463</td>
<td>-98</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>40,510</td>
<td>40,847</td>
<td>337</td>
<td>0.8%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>34,287</td>
<td>36,033</td>
<td>1,746</td>
<td>5.1%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>4,658</td>
<td>5,218</td>
<td>560</td>
<td>12.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>8,130</td>
<td>8,444</td>
<td>314</td>
<td>3.9%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>10,465</td>
<td>10,252</td>
<td>-213</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>8,041</td>
<td>8,609</td>
<td>568</td>
<td>7.1%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>68,706</td>
<td>71,431</td>
<td>2,725</td>
<td>4.0%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>240,694</td>
<td>248,076</td>
<td>7,382</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

Service Area Population Changes 1990 - 1996

Zip Code Areas
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Service Area Population Changes 1996 - 2006

As indicated by Exhibit 3-12, a continuation of the current growth pattern is projected for the Cabrillo College service area. These growth is projected to result in an additional population increase of 8,169 (3.3%) by 2006.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>25,976</td>
<td>27,872</td>
<td>1,896</td>
<td>7.3%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>1,111</td>
<td>1,053</td>
<td>-58</td>
<td>-5.2%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>7,628</td>
<td>7,746</td>
<td>118</td>
<td>1.5%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>9,872</td>
<td>10,382</td>
<td>510</td>
<td>5.2%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>8,823</td>
<td>7,962</td>
<td>-861</td>
<td>-9.8%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>8,369</td>
<td>8,144</td>
<td>-225</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>5,463</td>
<td>5,240</td>
<td>-223</td>
<td>-4.1%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>40,835</td>
<td>40,841</td>
<td>-6</td>
<td>0.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>36,033</td>
<td>38,346</td>
<td>2,313</td>
<td>6.4%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>5,218</td>
<td>6,026</td>
<td>808</td>
<td>15.5%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>8,444</td>
<td>8,781</td>
<td>337</td>
<td>4.0%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>10,252</td>
<td>9,826</td>
<td>-426</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>8,609</td>
<td>9,363</td>
<td>754</td>
<td>8.8%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>71,431</td>
<td>74,663</td>
<td>3,232</td>
<td>4.5%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>248,064</td>
<td>256,245</td>
<td>8,169</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

Service Area Population Change, 1996 - 2006

Zip Code Areas
Background Research and Data Collection

Changes In Number Of Service Area Households 1996 - 2006

As shown in Exhibit 3-13, the number of households in the service area is projected to decline by 2.2% between 1996 and 2006. However, it should be noted that ZIP Code area 95064 in Santa Cruz is projected to have a 65.9% increase in the number of households by 2006.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>10,515</td>
<td>10,828</td>
<td>313</td>
<td>3.0%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>352</td>
<td>328</td>
<td>-24</td>
<td>-6.8%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>2,657</td>
<td>2,518</td>
<td>-139</td>
<td>-5.2%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>3,616</td>
<td>3,570</td>
<td>-46</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>4,085</td>
<td>3,528</td>
<td>-557</td>
<td>-13.6%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>3,077</td>
<td>2,828</td>
<td>-249</td>
<td>-8.1%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>1,532</td>
<td>1,368</td>
<td>-164</td>
<td>-10.7%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>15,092</td>
<td>14,069</td>
<td>-1,023</td>
<td>0.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>14,671</td>
<td>14,736</td>
<td>65</td>
<td>0.4%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>675</td>
<td>1,120</td>
<td>445</td>
<td>65.9%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>3,133</td>
<td>3,178</td>
<td>45</td>
<td>1.4%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>3,866</td>
<td>3,500</td>
<td>-366</td>
<td>-9.5%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>3,416</td>
<td>3,554</td>
<td>138</td>
<td>4.0%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>20,342</td>
<td>20,029</td>
<td>-313</td>
<td>-1.5%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>87,029</td>
<td>85,154</td>
<td>-1,875</td>
<td>-2.2%</td>
</tr>
</tbody>
</table>

Changes in Service Area Households, 1996-2006
Educational Level Of The Population

Exhibit 3-14 illustrates the percentage of college graduates as of 1996 within each of the ZIP Code areas. This study shows that the lowest percentage of the population with a college degree is found in Freedom (12.0%) while the highest is in ZIP Code area 95064 in Santa Cruz (82.8%). For the service area as a whole the percentage of college graduates is 38.2%.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>College Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>51.7%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>28.4%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>43.7%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>39.1%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>37.7%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>43.7%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>12.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>45.7%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>34.9%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>82.8%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>44.0%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>47.9%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>42.1%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>21.0%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>38.2%</td>
</tr>
</tbody>
</table>

College Graduates in Population, 1996
**Background Research and Data Collection**

**Median Age Of The Population**

As depicted in Exhibit 3-15 the lowest median age is found in ZIP Code area 905064 in Santa Cruz (20.4 years) and the highest median age is found in Aptos (38.7 years). The median age of the population within all the ZIP Code areas is 34.3 years of age.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>38.7</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>35.3</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>35.6</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>34.7</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>37.1</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>35.4</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>29.5</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>34.5</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>35.3</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>20.4</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>37.1</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>37.7</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>37.3</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>31.2</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>34.3</td>
</tr>
</tbody>
</table>

**Exhibit 3-15**

**Median Age of the Population**
Background Research and Data Collection

Percentage Of The Population Between 18 And 44 Years Of Age

Exhibit 3-16 illustrates the percentages of the population in the ZIP Code areas between the ages of 18 and 44 years. The ZIP Code areas have between 40.5% (Freedom) and 82% (95064 in Santa Cruz) of their population within these age parameters indicating that a substantial pool of potential community college students exists within these areas. For the service area as a whole, 46.3% of the population is between 18 and 44 years of age.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>18 To 44 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>43.5%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>42.1%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>46.5%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>49.5%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>47.3%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>48.7%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>40.5%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>50.8%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>49.8%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>82.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>42.5%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>41.5%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>44.9%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>41.3%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>46.3%</td>
</tr>
</tbody>
</table>

Percent of Population 18-44
Background Research and Data Collection

Percentage of the Population Under 18 Years of Age

As indicated by Exhibit 3-17, in the ZIP Code areas, 10.6% to 33.3% of the population is less than 18 years of age. In all of the ZIP Code areas combined, 24.8% of the population is under 18 years of age. This indicates a significant number of future additions to the pool of potential community college students.

Exhibit 3-17
Percentage Of Population Under 18 Years Of Age

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Under 18 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>21.0%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>28.7%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>27.2%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>27.8%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>18.6%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>25.6%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>33.3%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>20.7%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>20.7%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>10.6%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>24.4%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>23.1%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>23.1%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>31.0%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>24.8%</td>
</tr>
</tbody>
</table>

Percent of Population Under Age 18

[Bar chart showing percentage of population under age 18 for different areas, with some values exceeding 35%.]
Family Structure

Exhibit 3-18 illustrates the percentage of single parent households within the ZIP Code areas. In twelve of the areas at least 10% of all households are single parent households, and for the service area 14.9% of all households are single parent households. Of these numbers, the vast majority are single parent females which suggests the magnitude of special services that may be necessary to support these individuals while attending college.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Single Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>10.4%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>6.2%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>10.2%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>13.6%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>18.8%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>11.5%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>17.1%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>13.9%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>19.2%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>31.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>11.6%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>8.1%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>12.2%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>13.7%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>14.9%</td>
</tr>
</tbody>
</table>
Background Research and Data Collection

Median Household Income

One indicator of the economic circumstances of an area is median household income. Exhibit 3-19 illustrates the median income for the ZIP Code areas. The highest median income is found in Aromas ($57,206) and the lowest is in ZIP Code area 95064 in Santa Cruz ($25,068). For the service area as a whole, the median household income is $47,159.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Median Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>$53,487</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>$57,206</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>$59,035</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>$56,675</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>$38,466</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>$53,677</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>$34,100</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>$43,619</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>$41,349</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>$25,068</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>$52,323</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>$55,429</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>$49,417</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>$40,377</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>$47,159</td>
</tr>
</tbody>
</table>

Median Household Income

![Bar chart showing median household income by city/area with values matching the table entries.](chart)
Background Research and Data Collection

Annual Income Between $10,000 And $20,000

Exhibits 3-20 and 3-21 illustrate the percentage of households that are at or near the poverty level. Exhibit 3-20 illustrates the percentage of households with annual incomes between $10,000 and $20,000. These figures extend from 6.9% in Capitola to 2.5% in four of the ZIP Code areas. For the service area as a whole, 4.8% of the households have annual incomes between $10,000 and $20,000.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Annual Income $10,000 - $20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>3.6%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>2.5%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>2.5%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>2.7%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>6.9%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>3.1%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>4.9%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>5.1%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>6.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>2.5%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>3.4%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>3.8%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>5.0%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>3.8%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>4.8%</td>
</tr>
</tbody>
</table>
Background Research and Data Collection

Annual Income Less Than $10,000

Exhibit 3-21 depicts the percentage of households with annual incomes less than $10,000. The number of households at this level of income ranges from 0.9% in Aromas to 4.2% in Freedom. For the service area as a whole, 2.9% of the households have annual incomes of less than $10,000.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>Zip Code</th>
<th>Graphics Code</th>
<th>Annual Income Under $10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>2.6%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>1.1%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>1.8%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>3.8%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>1.9%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>4.2%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>3.2%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>3.6%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>2.5%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>2.5%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>1.9%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>2.9%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>2.0%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>2.9%</td>
</tr>
</tbody>
</table>
Median Home Values

Another indicator of the economic circumstances of an area is the median home value within the area. Exhibit 3-22 illustrates that median home values range from $187,292 in Freedom to $312,253 in Scotts Valley. The over-all median home value for the service area is $243,632.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Median Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>$300,354</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>$252,551</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>$238,806</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>$205,625</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>$267,780</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>$204,877</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>$187,292</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>$280,181</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>$244,884</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>$131,250</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>$283,993</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>$312,253</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>$292,820</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>$208,178</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>$243,632</td>
</tr>
</tbody>
</table>
Percent Renter Occupied Housing

Yet another indicator of the economic circumstances of an area is the percentage of renter occupied housing within the area. Exhibit 3-23 shows that renter occupied housing ranges from 16.1% in Aromas to 73.1% in ZIP Code area 95064 (Santa Cruz). For the service area as a whole the percentage of renters is 35.3%.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Percent Renting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>26.0%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>16.1%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>23.6%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>22.9%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>49.3%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>24.9%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>44.3%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>42.9%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>48.2%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>73.1%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>31.5%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>22.3%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>26.8%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>38.1%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>35.3%</td>
</tr>
</tbody>
</table>
**Background Research and Data Collection**

**White vs. Blue Collar Occupations**

Exhibit 3-24 indicates that the percentage of white collar occupations ranges from 39.8% in Scotts Valley to 14.1% in Freedom while the percentage of blue collar occupations ranges from 85.9% in Freedom to 60.2% in Scotts Valley. Overall, the percentage of white collar occupations is 29% and the percentage of blue collar occupations is 71% within the service area.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>White Collar</th>
<th>Blue Collar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>37.4%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>22.9%</td>
<td>77.1%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>36.3%</td>
<td>63.7%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>35.1%</td>
<td>64.9%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>39.3%</td>
<td>60.7%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>32.1%</td>
<td>67.9%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>14.1%</td>
<td>85.9%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>34.2%</td>
<td>65.8%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>30.5%</td>
<td>69.5%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>24.8%</td>
<td>75.2%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>36.2%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>39.8%</td>
<td>60.2%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>32.1%</td>
<td>67.9%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>18.3%</td>
<td>81.7%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>29.0%</td>
<td>71.0%</td>
</tr>
</tbody>
</table>

**White Collar v Blue Collar Occupations**

![Bar Chart showing the comparison of white collar and blue collar occupations across various cities and ZIP codes.](chart.png)
Racial/Ethnic Composition

Exhibit 3-25 depicts the racial and ethnic composition of the service area. Racially, the service area is 81.7% white and 1.4% black with other races accounting for the remaining 17.2%. In addition, 26.2% of the population consider themselves to be of Hispanic origin.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>White</th>
<th>Black</th>
<th>Other</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>93.1%</td>
<td>0.7%</td>
<td>6.2%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>81.3%</td>
<td>0.9%</td>
<td>17.9%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>95.1%</td>
<td>1.0%</td>
<td>3.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>94.7%</td>
<td>0.7%</td>
<td>4.5%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>90.8%</td>
<td>1.7%</td>
<td>7.5%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>95.1%</td>
<td>0.8%</td>
<td>4.1%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>61.9%</td>
<td>0.7%</td>
<td>37.3%</td>
<td>71.4%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>86.0%</td>
<td>2.4%</td>
<td>11.7%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>88.8%</td>
<td>1.7%</td>
<td>9.4%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>70.8%</td>
<td>5.7%</td>
<td>23.5%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>89.8%</td>
<td>1.3%</td>
<td>8.9%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>93.9%</td>
<td>0.7%</td>
<td>5.4%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>92.4%</td>
<td>0.6%</td>
<td>7.1%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>62.2%</td>
<td>0.8%</td>
<td>37.0%</td>
<td>57.6%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>81.7%</td>
<td>1.4%</td>
<td>17.2%</td>
<td>26.2%</td>
</tr>
</tbody>
</table>

Racial/Ethnic Composition

- White
- Black
- Other
- Hispanic
Service Area Composition By Gender

The percentage of females is greater than the percentage of females in eight of the ZIP code areas. Overall females represent 50.2% of the population.

<table>
<thead>
<tr>
<th>City/Area</th>
<th>ZIP Code</th>
<th>Graphics Code</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos</td>
<td>95003</td>
<td>1</td>
<td>50.8%</td>
<td>49.2%</td>
</tr>
<tr>
<td>Aromas</td>
<td>95004</td>
<td>2</td>
<td>49.3%</td>
<td>50.7%</td>
</tr>
<tr>
<td>Ben Lomond</td>
<td>95005</td>
<td>3</td>
<td>48.4%</td>
<td>51.6%</td>
</tr>
<tr>
<td>Boulder Creek</td>
<td>95006</td>
<td>4</td>
<td>48.5%</td>
<td>51.5%</td>
</tr>
<tr>
<td>Capitola</td>
<td>95010</td>
<td>5</td>
<td>52.0%</td>
<td>48.0%</td>
</tr>
<tr>
<td>Felton</td>
<td>95018</td>
<td>6</td>
<td>48.7%</td>
<td>51.3%</td>
</tr>
<tr>
<td>Freedom</td>
<td>95019</td>
<td>7</td>
<td>50.3%</td>
<td>49.7%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95060</td>
<td>8</td>
<td>49.0%</td>
<td>51.0%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95062</td>
<td>9</td>
<td>51.2%</td>
<td>48.8%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95064</td>
<td>10</td>
<td>53.1%</td>
<td>46.9%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>95065</td>
<td>11</td>
<td>51.4%</td>
<td>48.6%</td>
</tr>
<tr>
<td>Scotts Valley</td>
<td>95066</td>
<td>12</td>
<td>49.9%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Soquel</td>
<td>95073</td>
<td>13</td>
<td>51.6%</td>
<td>48.4%</td>
</tr>
<tr>
<td>Watsonville</td>
<td>95076</td>
<td>14</td>
<td>49.7%</td>
<td>50.3%</td>
</tr>
<tr>
<td>All Areas</td>
<td>N/A</td>
<td>15</td>
<td>50.2%</td>
<td>49.8%</td>
</tr>
</tbody>
</table>

Service Area By Gender

![Service Area By Gender Chart](chart.png)
Background Research and Data Collection

ADDITIONAL ANALYSIS OF SERVICE AREA DEMOGRAPHIC TRENDS

In addition to the data supplied by the 1990 U.S. Census above, other data bases were searched for information related to Cabrillo College. The following data/projections were supplied by Urban Decision Systems, Inc. which uses a 5 and 10 mile geographical ring approach to analyze the demographic trends of a designated geographical location.

It should be noted that in this analysis three locations were used as the focal points for the study. The first, in the Mid-county (Soquel Drive and Cabrillo College Drive), the second, in the Northern area (Highway 9 and Mt. Herman Drive), and the third in the Southern area (Union Street and E. Beach).

The advantage of this form of analysis is that it reviews those areas in immediate proximity to the focal points and as the points are within a ten mile radius of the site., are strong indicators of the likely attendees at the site and the general composition of the service area in each region.

For purpose of reference, each of the above three subdivisions is indicated by a map of the area, providing the researcher with both a point of reference and potential overlaps between the selected focal points.

An executive summary is also provided in order to briefly summarize the extracted data and to assist in the drawing of educational and operational conclusions.

In reference to ethnic composition data, the reader is reminded that the category “Hispanic” is a self-defined category, and as such will include Hispanic participants defining themselves as white, black, or other. For this reason, any such racial analysis will total more than 100% when white, black, Asian/Pacific Islander, American Indian and other categories are totaled with those of Hispanic origin. Typically, individuals of Hispanic origin self-identify as white/Hispanic origin, with the second most common category being black/Hispanic origin.
Background Research and Data Collection

Exhibit 3-28

EXECUTIVE SUMMARY
Aptos, CA: Soquel Dr & Cabrillo College Dr
50 Mile Ring

POPULATION * the population is expected to grow at a moderate rate during the 1990's
* the population declined during the 1980-1990 period
* population density is low
* the median age is very near the national average
* a well-above average percentage of the adult population have college degrees

HOUSEHOLDS * household size is smaller than the national average

INCOME * average income is somewhat above the national average

EMPLOYMENT * unemployment rates are low
* white collar occupations dominate

HOUSING * a majority of housing units are owner occupied
* moderate percentage of condominiums
* housing is relatively expensive

Exhibit 3-29

EXECUTIVE SUMMARY
Aptos, CA: Soquel Dr & Cabrillo College Dr
50 Mile Ring

POPULATION * the population is projected to grow slightly during the 1990's
* the population declined during the 1980-1990 period
* population density is very low
* there are one or more college dormitories within this area
* the median age is very near the national average
* an above average share of the population are foreign-born
* a well-above average percentage of the adult population have college degrees

HOUSEHOLDS * typical household size is average

INCOME * average income is somewhat above the national average

EMPLOYMENT * unemployment rates are at average levels

HOUSING * a majority of housing units are owner occupied
* moderate percentage of condominiums
* housing is relatively expensive
### Background Research and Data Collection

#### Exhibit 3-30

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
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<tbody>
<tr>
<td>In Group Quarters</td>
<td>84,794</td>
<td>88,360</td>
<td>90,664</td>
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<tr>
<td>PER CAPITA INCOME</td>
<td>$19,232</td>
<td>$23,871</td>
<td>$29,434</td>
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#### Households

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<tr>
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<th>2001 Projection</th>
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<tr>
<td>Less than $5,000</td>
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<td>1,407</td>
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<td>3,963</td>
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<td>836</td>
<td>1,283</td>
<td>2,407</td>
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#### Median Household Income

- 1990 Census: $36,369
- 1996 Estimate: $45,632
- 2001 Projection: $56,973

#### Average Household Income

- 1990 Census: $46,589
- 1996 Estimate: $58,041
- 2001 Projection: $73,526

#### Families

<table>
<thead>
<tr>
<th>Income Level</th>
<th>1990 Census</th>
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<th>2001 Projection</th>
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<td>238</td>
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<td>574</td>
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<td>641</td>
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#### Median Family Income

- 1990 Census: $44,317
- 1996 Estimate: $53,976
- 2001 Projection: $65,981

#### Average Family Income

- 1990 Census: $56,531
- 1996 Estimate: $72,162
- 2001 Projection: $92,979

Source: 1990 Census, March 15, 1996 UDS Estimates

Clairitas Data Services / 4676 Admiralty Way Ste 624 / Marina del Rey, CA 90292 / (800) 633-9568
### Background Research and Data Collection

#### Exhibit 3-31

**INCOME: 1990-1996-2001**  
Aptos, CA: Soquel Dr & Cabrillo College Dr  
10 Mile Ring  

<table>
<thead>
<tr>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
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<tbody>
<tr>
<td>POPULATION</td>
<td></td>
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</tr>
<tr>
<td>In Group Quarters</td>
<td>181,381</td>
<td>186,667</td>
</tr>
<tr>
<td>PER CAPITA INCOME</td>
<td>$17,652</td>
<td>$21,670</td>
</tr>
<tr>
<td>Aggregate Income ($Mill)</td>
<td>3,201.8</td>
<td>4,045.0</td>
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<table>
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<tr>
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<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
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<td>By Income</td>
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</tr>
<tr>
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<td>1,462</td>
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<td>6,800</td>
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<td>6,257</td>
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<td>8,887</td>
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<td>5,351</td>
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<td>8,661</td>
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<tr>
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<td>2,815</td>
<td>4,590</td>
<td>6,520</td>
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<tr>
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<td>1,865</td>
<td>3,266</td>
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<tr>
<td>$150,000+</td>
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<td>2,425</td>
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Median Household Income: $37,374  
Average Household Income: $47,454  

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<tr>
<th>FAMILIES</th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
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<tbody>
<tr>
<td>By Income</td>
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<tr>
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<td>4,135</td>
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<td>5,620</td>
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<td>5,075</td>
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<td>2,108</td>
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<td>4,741</td>
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<td>$125,000 - $149,000</td>
<td>694</td>
<td>1,455</td>
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<tr>
<td>$150,000+</td>
<td>1,413</td>
<td>1,970</td>
<td>3,545</td>
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</table>

Median Family Income: $44,904  
Average Family Income: $56,336  

Source: 1990 Census, March 15, 1996 UOS Estimates  
Claritas Data Services / 4676 Admiralty Way Ste 624 / Manna del Rey, CA 90292 / (800) 633-8668  
462372
## Background Research and Data Collection

Exhibit 3-31

### INCOME: 1990-1996-2001
Aptos, CA: Soquel Dr & Cabrillo College Dr
10 Mile Ring

<table>
<thead>
<tr>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
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</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Group Quarters</td>
<td>181,381</td>
<td>186,867</td>
</tr>
<tr>
<td></td>
<td>6,889</td>
<td>6,617</td>
</tr>
<tr>
<td><strong>PER CAPITA INCOME</strong></td>
<td>$17,652</td>
<td>$21,670</td>
</tr>
<tr>
<td>Aggregate Income ($Mil)</td>
<td>3,201.8</td>
<td>4,045.0</td>
</tr>
<tr>
<td><strong>HOUSEHOLDS</strong></td>
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<td>%</td>
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<td>5,101</td>
<td>7.6%</td>
</tr>
<tr>
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<tr>
<td>$ 40,000 - $ 49,999</td>
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<td>12.3%</td>
</tr>
<tr>
<td>$ 50,000 - $ 59,999</td>
<td>6,257</td>
<td>9.3%</td>
</tr>
<tr>
<td>$ 60,000 - $ 74,999</td>
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<td>9.9%</td>
</tr>
<tr>
<td>$ 75,000 - $ 99,999</td>
<td>5,351</td>
<td>7.9%</td>
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<tr>
<td>$100,000 - $124,999</td>
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<td>3.9%</td>
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<td>866</td>
<td>1.3%</td>
</tr>
<tr>
<td>$150,000 +</td>
<td>1,669</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

**Median Household Income** | $37,374 | $46,061 | $57,190 |
**Average Household Income** | $47,454 | $58,644 | $73,996 |

| FAMILIES | 42,228 | 41,450 | 39,826 |
| By Income | % | % | % |
| Less than $ 5,000 | 835 | 2.0% | 634 | 1.5% | 484 | 1.2% |
| $ 5,000 - $ 9,999 | 1,599 | 3.8% | 1,147 | 2.8% | 770 | 1.9% |
| $ 10,000 - $ 14,999 | 2,094 | 5.0% | 1,355 | 3.3% | 987 | 2.5% |
| $ 15,000 - $ 19,999 | 2,324 | 5.5% | 1,943 | 4.7% | 1,192 | 3.0% |
| $ 20,000 - $ 24,999 | 2,810 | 6.7% | 2,358 | 5.7% | 1,746 | 4.4% |
| $ 25,000 - $ 29,999 | 2,533 | 6.2% | 1,956 | 4.7% | 1,675 | 4.2% |
| $ 30,000 - $ 34,999 | 3,088 | 7.3% | 1,960 | 4.7% | 1,482 | 3.7% |
| $ 35,000 - $ 39,999 | 2,890 | 6.8% | 2,815 | 6.8% | 1,453 | 3.8% |
| $ 40,000 - $ 49,999 | 5,739 | 13.8% | 4,696 | 11.3% | 4,135 | 10.4% |
| $ 50,000 - $ 59,999 | 4,477 | 10.6% | 4,597 | 11.1% | 3,830 | 9.6% |
| $ 60,000 - $ 74,999 | 5,218 | 12.4% | 5,371 | 13.0% | 5,620 | 14.1% |
| $ 75,000 - $ 99,999 | 4,369 | 10.3% | 5,583 | 13.5% | 5,705 | 14.3% |
| $100,000 - $124,999 | 2,108 | 5.0% | 3,609 | 8.7% | 4,741 | 11.9% |
| $125,000 - $149,000 | 694 | 1.6% | 1,455 | 3.5% | 2,462 | 6.2% |
| $150,000 + | 1,413 | 3.3% | 1,970 | 4.8% | 3,545 | 8.9% |

**Median Family Income** | $44,904 | $54,049 | $65,765 |
**Average Family Income** | $56,336 | $71,602 | $92,229 |

Source: 1990 Census, March 15, 1996 UDS Estimates
Claritas Data Services / 4676 Admiralty Way Ste 624 / Manna del Rey, CA 90292 / (800) 633-9568
03/03/97
## Background Research and Data Collection

### DEMOGRAPHIC TRENDS: 1990-1996-2001

Aptos, CA: Soquel Dr & Cabrillo College Dr

5 Mile Ring

<table>
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<th>1996 Estimate</th>
<th>2001 Projected</th>
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<tbody>
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<tr>
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<td><strong>HOUSEHOLDS</strong></td>
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<td>9,773</td>
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<td>12,957</td>
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<td>5+ Person</td>
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<td>85 +</td>
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<td>Median Age</td>
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<td>43,106</td>
</tr>
<tr>
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<td>11,318</td>
</tr>
<tr>
<td>21 - 44</td>
<td>19,175</td>
<td>19,276</td>
</tr>
<tr>
<td>45 - 64</td>
<td>6,826</td>
<td>7,883</td>
</tr>
<tr>
<td>65 - 84</td>
<td>3,870</td>
<td>4,138</td>
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<tr>
<td>85 +</td>
<td>418</td>
<td>492</td>
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<tr>
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<td>45,254</td>
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<td>21 - 44</td>
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<td>18,700</td>
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<td>65 - 84</td>
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<tr>
<td>85 +</td>
<td>1,192</td>
<td>1,387</td>
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<tr>
<td><strong>Owner-Occupied Hhlds</strong></td>
<td>19,942</td>
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<tr>
<td><strong>Renter-Occupied Hhlds</strong></td>
<td>15,060</td>
<td>15,311</td>
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</table>

Source: 1990 Census, March 15, 1996 UDS Estimates; Claritas Data Services (DTP)

Claritas Data Services / 4676 Admiralty Way Ste 624 / Marina del Rey, CA 90292 / (800) 633-8668
**Background Research and Data Collection**

**DEMOGRAPHIC TRENDS: 1990-1996-2001**

Aptos, CA: Soquel Dr & Cabrillo College Dr

10 Mile Ring

<table>
<thead>
<tr>
<th></th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projected</th>
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<tr>
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<td></td>
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<tr>
<td>In Group Quarters</td>
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<td>6,617</td>
<td>6,534</td>
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<td><strong>HOUSEHOLDS</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1 Person</td>
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<td>67,466</td>
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<td>2 Person</td>
<td>16,763</td>
<td>17,581</td>
<td>17,837</td>
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<td>23,809</td>
<td>23,387</td>
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<td>20,539</td>
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<td>Average Hhld Size</td>
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<td>2.63</td>
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<td><strong>FAMILIES</strong></td>
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<tr>
<td></td>
<td>42,228</td>
<td>41,450</td>
<td>39,828</td>
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<td>159,937</td>
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<td>1,341</td>
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<td>11,786</td>
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<td>38,007</td>
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<td>38,081</td>
<td>36,804</td>
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<tr>
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<td>19,492</td>
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<td>1,784</td>
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<td>Owner-Occupied Hhlds</td>
<td>40,311</td>
<td>40,949</td>
<td>40,458</td>
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<tr>
<td>Renter-Occupied Hhlds</td>
<td>27,161</td>
<td>27,435</td>
<td>27,008</td>
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</tbody>
</table>

Source: 1990 Census, March 15, 1996 UDS Estimates

Clartas Data Services / 4676 Admiralty Way Ste 624 / Marina del Rey, CA 90292 / (800) 633-8658

3/3/97
Background Research and Data Collection

Exhibit 3-34

Population+Graphics (National Base)
Aptos, CA: Soquel Dr & Cabrillo College Dr
5 Mile Ring

5 Mile Ring United States

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Households</th>
<th>Families</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
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<td>88,360</td>
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<tr>
<td>United States</td>
<td>265,253,151</td>
<td>100,066,862</td>
<td>67,724,960</td>
<td>34.6</td>
</tr>
</tbody>
</table>

Population by Age and Sex (1996)

Race/Hispanic Origin, 1996 (%)

Educational Attainment, 1996 (%)

Occupation, 1996 (%)

50
Background Research and Data Collection

Exhibit 3-35

Population+Graphics (National Base)
Aptos, CA: Soquel Dr & Cabrillo College Dr
10 Mile Ring

<table>
<thead>
<tr>
<th>10 Mile Ring</th>
<th>Population</th>
<th>Households</th>
<th>Families</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>186,667</td>
<td>68,384</td>
<td>41,450</td>
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<tr>
<td></td>
<td>265,253,151</td>
<td>100,066,882</td>
<td>67,724,960</td>
<td>34.6</td>
</tr>
</tbody>
</table>

Population by Age and Sex (1996)

Race/Hispanic Origin, 1996 (%)

Educational Attainment, 1996 (%)

Occupation, 1996 (%)

51
Background Research and Data Collection

Exhibit 3-37

EXECUTIVE SUMMARY
Santa Cruz County, CA: Hwy 9 & Mt Herman Dr
5.00 Mile Ring

POPULATION
* the population is projected to grow slightly during the 1990's
* the population declined during the 1980-1990 period
* population density is very low
* there are one or more college dormitories within this area
* this area has a slightly younger population than the nation as a whole
* a well-above average percentage of the adult population have college degrees

HOUSEHOLDS
* typical household size is average
* a large share of households have 3 or more vehicles

INCOME
* average income is well above the national average
* a high share of households earn over $50,000 per year

EMPLOYMENT
* unemployment rates are at average levels
* white collar occupations dominate

HOUSING
* a majority of housing units are owner occupied
* housing is relatively expensive

Exhibit 3-38

EXECUTIVE SUMMARY
Santa Cruz County, CA: Hwy 9 & Mt Herman Dr
10.00 Mile Ring

POPULATION
* the population is projected to grow slightly during the 1990's
* the population declined during the 1980-1990 period
* population density is very low
* there are one or more college dormitories within this area
* the median age is very near the national average
* a well-above average percentage of the adult population have college degrees

HOUSEHOLDS
* household size is smaller than the national average

INCOME
* average income is somewhat above the national average
* a high share of households earn over $50,000 per year

EMPLOYMENT
* unemployment rates are low
* white collar occupations dominate

HOUSING
* a majority of housing units are owner occupied
* moderate percentage of condominiums
* housing is relatively expensive
### INCOME: 1990-1996-2001

Santa Cruz County, CA: Hwy 9 & Mt Herman Dr

5 Mile Ring

#### Exhibit 3-39

<table>
<thead>
<tr>
<th></th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Group Quarters</td>
<td>37,629</td>
<td>38,404</td>
<td>38,770</td>
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<td></td>
<td>4,229</td>
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<td>3,939</td>
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<td><strong>HOUSEHOLDS</strong></td>
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</tr>
<tr>
<td>By Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $ 5,000</td>
<td>326</td>
<td>284</td>
<td>250</td>
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<tr>
<td>2.6%</td>
<td>2.2%</td>
<td>2.0%</td>
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</tr>
<tr>
<td>$ 5,000 - $ 9,999</td>
<td>500</td>
<td>400</td>
<td>321</td>
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<td>4.0%</td>
<td>3.1%</td>
<td>2.6%</td>
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</tr>
<tr>
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<td>635</td>
<td>620</td>
<td>413</td>
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<tr>
<td>5.0%</td>
<td>4.9%</td>
<td>3.3%</td>
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</tr>
<tr>
<td>$ 15,000 - $ 19,999</td>
<td>640</td>
<td>507</td>
<td>471</td>
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<td>5.1%</td>
<td>4.0%</td>
<td>3.8%</td>
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</tr>
<tr>
<td>$ 20,000 - $ 24,999</td>
<td>683</td>
<td>645</td>
<td>511</td>
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<tr>
<td>5.4%</td>
<td>5.1%</td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>$ 25,000 - $ 29,999</td>
<td>824</td>
<td>593</td>
<td>532</td>
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<tr>
<td>6.5%</td>
<td>4.7%</td>
<td>4.2%</td>
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</tr>
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<td>$ 30,000 - $ 34,999</td>
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<td>5.7%</td>
<td>4.4%</td>
<td>3.1%</td>
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<td>$ 35,000 - $ 39,999</td>
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<td>737</td>
<td>473</td>
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<tr>
<td>6.4%</td>
<td>5.8%</td>
<td>3.8%</td>
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</tr>
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<td>1,525</td>
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<td>10.3%</td>
<td>9.1%</td>
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<td>1,646</td>
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<td>1,809</td>
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<td>14.4%</td>
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<td>3.9%</td>
<td>6.6%</td>
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<tr>
<td>By Income</td>
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<tr>
<td>Less than $ 5,000</td>
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<td>1.0%</td>
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<tr>
<td>$ 5,000 - $ 9,999</td>
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<td>1.4%</td>
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<td>174</td>
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<td>2.2%</td>
<td>2.1%</td>
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<td>1.8%</td>
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<td>4.5%</td>
<td>3.0%</td>
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<td>297</td>
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<td>3.4%</td>
<td>3.6%</td>
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<td>$ 30,000 - $ 34,999</td>
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<td>2.8%</td>
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<td>$ 35,000 - $ 39,999</td>
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<td>893</td>
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<td>$ 50,000 - $ 59,999</td>
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<td>15.3%</td>
<td>13.6%</td>
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<td>1,084</td>
<td>1,148</td>
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<td>7.8%</td>
<td>12.5%</td>
<td>13.9%</td>
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<tr>
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<td>672</td>
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<td>4.8%</td>
<td>8.1%</td>
<td></td>
</tr>
<tr>
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### Background Research and Data Collection

#### Exhibit 3-40

**INCOME: 1990-1996-2001**

Santa Cruz County, CA  Hwy 9 & Mt Herman Dr

10 Mile Ring

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<th>2001 Projection</th>
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Median Household Income: $37,878  
Average Household Income: $47,385

|                      | 34,901      | 34,028        | 32,498          |
| By Income            |             |               |                 |
| Less than $ 5,000    | 618         | 470           | 363             |
| $ 5,000 - $ 9,999    | 1,372       | 943           | 623             |
| $ 10,000 - $ 14,999  | 1,524       | 1,060         | 796             |
| $ 15,000 - $ 19,999  | 1,906       | 1,464         | 940             |
| $ 20,000 - $ 24,999  | 2,310       | 1,900         | 1,340           |
| $ 25,000 - $ 29,999  | 2,170       | 1,569         | 1,344           |
| $ 30,000 - $ 34,999  | 2,397       | 1,579         | 1,177           |
| $ 35,000 - $ 39,999  | 2,474       | 2,199         | 1,164           |
| $ 40,000 - $ 49,999  | 4,316       | 3,792         | 3,269           |
| $ 50,000 - $ 59,999  | 3,804       | 3,546         | 3,081           |
| $ 60,000 - $ 74,999  | 4,462       | 4,492         | 4,391           |
| $ 75,000 - $ 99,999  | 3,917       | 4,781         | 4,707           |
| $100,000 - $124,999  | 1,869       | 3,255         | 4,015           |
| $125,000 - $149,000  | 664         | 1,309         | 2,193           |
| $150,000 +           | 1,125       | 1,871         | 3,094           |

Median Family Income: $45,824  
Average Family Income: $56,796
### Exhibit 3-41

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### Background Research and Data Collection

Santa Cruz County, CA: Hwy 9 & Mt Herman Dr
10 Mile Ring

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57
Background Research and Data Collection

Exhibit 3-43

Population+Graphics (National Base)
Santa Cruz County, CA: Hwy 9 & Mt Herman Dr
5 Mile Ring

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<th>Households</th>
<th>Families</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Mile Ring</td>
<td>38,404</td>
<td>12,746</td>
<td>8,672</td>
<td>34.4</td>
</tr>
<tr>
<td>United States</td>
<td>265,253,151</td>
<td>100,066,882</td>
<td>67,724,980</td>
<td>34.5</td>
</tr>
</tbody>
</table>

Population by Age and Sex (1996)

Race/Hispanic Origin, 1996 (%)

Educational Attainment, 1996 (%)

Occupation, 1996 (%)
Background Research and Data Collection

Exhibit 3-44

Population+Graphics (National Base)
Santa Cruz County, CA: Hwy 9 & Mt Herman Dr
10 Mile Ring

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Households</th>
<th>Families</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Mile Ring</td>
<td>154,303</td>
<td>58,287</td>
<td>34,028</td>
<td>35.3</td>
</tr>
<tr>
<td>United States</td>
<td>265,253,151</td>
<td>100,066,882</td>
<td>67,724,960</td>
<td>34.6</td>
</tr>
</tbody>
</table>

Population by Age and Sex (1996)

Race/Hispanic Origin, 1996 (%)

Educational Attainment, 1996 (%)

Occupation, 1996 (%)
Background Research and Data Collection

Exhibit 3-47

EXECUTIVE SUMMARY
Watsonville, CA: Union St & E Beach
50 Mile Ring

Clartas Data Services
03/03/1997

POPULATION
* the population is expected to grow at a moderate rate during the 1990’s
* the population declined during the 1980-1990 period
* population density is very low
* there is a significant population living in emergency shelters
* this is a very ‘young’ area – with median age significantly below the national average
* Asian/Pacific Islanders comprise an above average share of the population
* a majority of the residents of this area are of Hispanic origin
* a large share of the population were foreign-born
* there is an above average population of Portuguese ancestry
* a large percentage of the adult population did not complete high school

HOUSEHOLDS
* household size is well above average
* an above average number of households are large (5+ persons)
* a large share of families have children living at home

INCOME
* average income is similar to national average

EMPLOYMENT
* unemployment is high
* agriculture, forestry, and fishing are important industries
* blue collar occupations dominate
* high employment in primary occupations

HOUSING
* a majority of housing units are owner occupied

Exhibit 3-46

EXECUTIVE SUMMARY
Watsonville, CA: Union St & E Beach
50 Mile Ring

Clartas Data Services
03/03/1997

POPULATION
* the population is projected to grow slightly during the 1990’s
* the population declined during the 1980-1990 period
* population density is very low
* this area has a slightly younger population than the nation as a whole
* a large share of the residents of this area are of Hispanic origin
* an above average share of the population are foreign-born
* a well-above average percentage of the adult population did not complete high school

HOUSEHOLDS
* household size is well above average
* a large share of households have 3 or more vehicles

INCOME
* average income is somewhat above the national average

EMPLOYMENT
* unemployment rates are above the national average
* agriculture, forestry, and fishing are important industries
* high employment in primary occupations

HOUSING
* a majority of housing units are owner occupied
* housing is relatively expensive

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### Background Research and Data Collection

**Exhibit 3-48**

**INCOME: 1990-1996-2001**

Watsonville, CA: Union St & E Beach
5 Mile Ring

<table>
<thead>
<tr>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Group Quarters</td>
<td>62,464</td>
<td>65,552</td>
</tr>
<tr>
<td><strong>PER CAPITA INCOME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregate Income ($Mil)</td>
<td>$10,674</td>
<td>$12,198</td>
</tr>
<tr>
<td><strong>HOUSEHOLDS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $5,000</td>
<td>613</td>
<td>497</td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>1,470</td>
<td>991</td>
</tr>
<tr>
<td>$10,000 - $14,999</td>
<td>1,404</td>
<td>1,266</td>
</tr>
<tr>
<td>$15,000 - $19,999</td>
<td>1,509</td>
<td>1,357</td>
</tr>
<tr>
<td>$20,000 - $24,999</td>
<td>1,777</td>
<td>1,504</td>
</tr>
<tr>
<td>$25,000 - $29,999</td>
<td>1,637</td>
<td>1,306</td>
</tr>
<tr>
<td>$30,000 - $34,999</td>
<td>1,534</td>
<td>1,164</td>
</tr>
<tr>
<td>$35,000 - $39,999</td>
<td>1,246</td>
<td>1,492</td>
</tr>
<tr>
<td>$40,000 - $49,999</td>
<td>2,169</td>
<td>2,118</td>
</tr>
<tr>
<td>$50,000 - $59,999</td>
<td>1,758</td>
<td>1,918</td>
</tr>
<tr>
<td>$60,000 - $74,999</td>
<td>1,426</td>
<td>2,006</td>
</tr>
<tr>
<td>$75,000 - $99,999</td>
<td>596</td>
<td>1,446</td>
</tr>
<tr>
<td>$100,000 - $124,999</td>
<td>267</td>
<td>607</td>
</tr>
<tr>
<td>$125,000 - $149,000</td>
<td>112</td>
<td>223</td>
</tr>
<tr>
<td>$150,000+</td>
<td>175</td>
<td>334</td>
</tr>
<tr>
<td><strong>Median Household Income</strong></td>
<td>$31,125</td>
<td>$38,448</td>
</tr>
<tr>
<td><strong>Average Household Income</strong></td>
<td>$37,466</td>
<td>$43,634</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13,844</th>
<th>13,825</th>
<th>13,470</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $5,000</td>
<td>331</td>
<td>244</td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>576</td>
<td>437</td>
</tr>
<tr>
<td>$10,000 - $14,999</td>
<td>1,020</td>
<td>381</td>
</tr>
<tr>
<td>$15,000 - $19,999</td>
<td>1,118</td>
<td>1,015</td>
</tr>
<tr>
<td>$20,000 - $24,999</td>
<td>1,317</td>
<td>1,168</td>
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<tr>
<td>$25,000 - $29,999</td>
<td>1,259</td>
<td>926</td>
</tr>
<tr>
<td>$30,000 - $34,999</td>
<td>1,288</td>
<td>926</td>
</tr>
<tr>
<td>$35,000 - $39,999</td>
<td>1,089</td>
<td>1,259</td>
</tr>
<tr>
<td>$40,000 - $49,999</td>
<td>1,975</td>
<td>1,700</td>
</tr>
<tr>
<td>$50,000 - $59,999</td>
<td>1,568</td>
<td>1,643</td>
</tr>
<tr>
<td>$60,000 - $74,999</td>
<td>1,291</td>
<td>1,736</td>
</tr>
<tr>
<td>$75,000 - $99,999</td>
<td>522</td>
<td>1,219</td>
</tr>
<tr>
<td>$100,000 - $124,999</td>
<td>234</td>
<td>500</td>
</tr>
<tr>
<td>$125,000 - $149,000</td>
<td>96</td>
<td>187</td>
</tr>
<tr>
<td>$150,000+</td>
<td>162</td>
<td>286</td>
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<tr>
<td><strong>Median Family Income</strong></td>
<td>$35,056</td>
<td>$42,108</td>
</tr>
<tr>
<td><strong>Average Family Income</strong></td>
<td>$41,092</td>
<td>$49,059</td>
</tr>
</tbody>
</table>
### Background Research and Data Collection

#### Exhibit 3-49

**INCOME: 1990-1996-2001**

**Watsonville, CA Union St & E Beach**

**10 Mile Ring**

<table>
<thead>
<tr>
<th></th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Group Quarters</td>
<td>1,577</td>
<td>1,663</td>
<td>1,795</td>
</tr>
<tr>
<td><strong>PER CAPITA INCOME</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregate Income ($Mil)</td>
<td>$14,566</td>
<td>$17,368</td>
<td>$20,989</td>
</tr>
<tr>
<td><strong>HOUSEHOLDS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $ 5,000</td>
<td>1,088</td>
<td>914</td>
<td>724</td>
</tr>
<tr>
<td>$ 5,000 - $ 9,999</td>
<td>2,117</td>
<td>1,518</td>
<td>1,110</td>
</tr>
<tr>
<td>$ 10,000 - $ 14,999</td>
<td>2,297</td>
<td>2,025</td>
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</tr>
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<td>$ 15,000 - $ 19,999</td>
<td>2,366</td>
<td>2,167</td>
<td>1,673</td>
</tr>
<tr>
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<td>2,876</td>
<td>2,410</td>
<td>1,908</td>
</tr>
<tr>
<td>$ 25,000 - $ 29,999</td>
<td>2,618</td>
<td>2,155</td>
<td>1,838</td>
</tr>
<tr>
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<td>2,670</td>
<td>1,977</td>
<td>1,474</td>
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<td>$ 35,000 - $ 39,999</td>
<td>2,379</td>
<td>2,541</td>
<td>1,557</td>
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<tr>
<td>$ 40,000 - $ 49,999</td>
<td>4,338</td>
<td>3,885</td>
<td>3,720</td>
</tr>
<tr>
<td>$ 50,000 - $ 59,999</td>
<td>3,374</td>
<td>3,795</td>
<td>3,245</td>
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<tr>
<td>$ 60,000 - $ 74,999</td>
<td>3,517</td>
<td>3,866</td>
<td>4,612</td>
</tr>
<tr>
<td>$ 75,000 - $ 99,999</td>
<td>2,514</td>
<td>3,637</td>
<td>4,332</td>
</tr>
<tr>
<td>$100,000 - $124,999</td>
<td>1,046</td>
<td>1,956</td>
<td>3,039</td>
</tr>
<tr>
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<td>424</td>
<td>784</td>
<td>1,557</td>
</tr>
<tr>
<td>$150,000 +</td>
<td>703</td>
<td>1,110</td>
<td>2,151</td>
</tr>
</tbody>
</table>

- **Median Household Income**: $37,168
- **Average Household Income**: $46,451

<table>
<thead>
<tr>
<th></th>
<th>2001 Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FAMILIES</strong></td>
<td>$55,656</td>
</tr>
<tr>
<td></td>
<td>$69,512</td>
</tr>
</tbody>
</table>

- **Median Family Income**: $41,495
- **Average Family Income**: $51,300

**03/03/97**

**Claritas Data Services**

**Ciaritas Data Services**
### Background Research and Data Collection

Watsonville, CA: Union St & E Beach
5 Mile Ring

#### Exhibit 3-50

<table>
<thead>
<tr>
<th></th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Group Quarters</td>
<td>1,185</td>
<td>1,235</td>
<td>1,315</td>
</tr>
<tr>
<td><strong>HOUSEHOLDS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Person</td>
<td>3,113</td>
<td>3,472</td>
<td>3,885</td>
</tr>
<tr>
<td>2 Person</td>
<td>4,573</td>
<td>4,804</td>
<td>4,895</td>
</tr>
<tr>
<td>3-4 Person</td>
<td>5,593</td>
<td>5,784</td>
<td>5,801</td>
</tr>
<tr>
<td>5+ Person</td>
<td>4,518</td>
<td>4,166</td>
<td>3,740</td>
</tr>
<tr>
<td>Average Hhld Size</td>
<td>3.44</td>
<td>3.53</td>
<td>3.66</td>
</tr>
<tr>
<td><strong>FAMILIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13,844</td>
<td>13,825</td>
<td>13,470</td>
</tr>
<tr>
<td><strong>RACE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>36,897</td>
<td>38,457</td>
<td>39,310</td>
</tr>
<tr>
<td>Black</td>
<td>407</td>
<td>512</td>
<td>605</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>3,386</td>
<td>4,337</td>
<td>5,126</td>
</tr>
<tr>
<td>American Indian</td>
<td>599</td>
<td>571</td>
<td>546</td>
</tr>
<tr>
<td>Other</td>
<td>21,175</td>
<td>21,675</td>
<td>21,981</td>
</tr>
<tr>
<td><strong>HISPANIC ORIGIN</strong></td>
<td>36,471</td>
<td>42,251</td>
<td>46,144</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>0 - 5</td>
<td>7,322</td>
<td>6,120</td>
<td>5,788</td>
</tr>
<tr>
<td>6 - 13</td>
<td>8,570</td>
<td>10,331</td>
<td>10,338</td>
</tr>
<tr>
<td>14 - 17</td>
<td>4,037</td>
<td>4,385</td>
<td>4,572</td>
</tr>
<tr>
<td>18 - 20</td>
<td>3,026</td>
<td>2,796</td>
<td>3,015</td>
</tr>
<tr>
<td>21 - 24</td>
<td>4,202</td>
<td>3,861</td>
<td>4,163</td>
</tr>
<tr>
<td>25 - 34</td>
<td>11,154</td>
<td>10,351</td>
<td>9,392</td>
</tr>
<tr>
<td>35 - 44</td>
<td>8,506</td>
<td>10,033</td>
<td>10,496</td>
</tr>
<tr>
<td>45 - 54</td>
<td>4,923</td>
<td>6,408</td>
<td>7,707</td>
</tr>
<tr>
<td>55 - 64</td>
<td>4,171</td>
<td>4,170</td>
<td>4,752</td>
</tr>
<tr>
<td>65 - 74</td>
<td>3,630</td>
<td>3,715</td>
<td>3,581</td>
</tr>
<tr>
<td>75 - 84</td>
<td>2,235</td>
<td>2,537</td>
<td>2,762</td>
</tr>
<tr>
<td>85 +</td>
<td>689</td>
<td>844</td>
<td>1,003</td>
</tr>
<tr>
<td>Median Age</td>
<td>28.6</td>
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<td>31.4</td>
</tr>
<tr>
<td><strong>MALES</strong></td>
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<td></td>
</tr>
<tr>
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<td>12,082</td>
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<tr>
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<td>12,583</td>
<td>12,449</td>
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<tr>
<td>65 - 84</td>
<td>2,548</td>
<td>2,766</td>
<td>2,847</td>
</tr>
<tr>
<td>85 +</td>
<td>256</td>
<td>307</td>
<td>368</td>
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<tr>
<td><strong>FEMALES</strong></td>
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<td></td>
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<tr>
<td>0 - 20</td>
<td>11,196</td>
<td>11,551</td>
<td>11,577</td>
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<tr>
<td>21 - 44</td>
<td>11,441</td>
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<td>11,602</td>
</tr>
<tr>
<td>45 - 64</td>
<td>4,731</td>
<td>5,449</td>
<td>6,391</td>
</tr>
<tr>
<td>65 - 84</td>
<td>3,316</td>
<td>3,486</td>
<td>3,495</td>
</tr>
<tr>
<td>85 +</td>
<td>433</td>
<td>537</td>
<td>634</td>
</tr>
<tr>
<td>Owner-Occupied Hhlds</td>
<td>9,718</td>
<td>9,927</td>
<td>9,845</td>
</tr>
<tr>
<td>Renter-Occupied Hhlds</td>
<td>8,079</td>
<td>8,300</td>
<td>8,275</td>
</tr>
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</table>

Claritas Data Services
3/997
### Exhibit 3-51

<table>
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<tr>
<th></th>
<th>1990 Census</th>
<th>1996 Estimate</th>
<th>2001 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Group Quarters</td>
<td>109,548</td>
<td>112,339</td>
<td>113,823</td>
</tr>
<tr>
<td></td>
<td>1.577</td>
<td>1.663</td>
<td>1.795</td>
</tr>
<tr>
<td><strong>HOUSEHOOLS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Person</td>
<td>34,352</td>
<td></td>
<td>34,202</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>2 Person</td>
<td>6,036</td>
<td>17.6%</td>
<td>7,218</td>
</tr>
<tr>
<td></td>
<td>1.567</td>
<td>19.6%</td>
<td>21.1%</td>
</tr>
<tr>
<td>3-4 Person</td>
<td>10,466</td>
<td>30.5%</td>
<td>10,999</td>
</tr>
<tr>
<td></td>
<td>1.046</td>
<td>31.5%</td>
<td>32.2%</td>
</tr>
<tr>
<td>5+ Person</td>
<td>11,218</td>
<td>32.7%</td>
<td>10,835</td>
</tr>
<tr>
<td></td>
<td>1.121</td>
<td>32.0%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Average Hhld Size</td>
<td>6,833</td>
<td>19.3%</td>
<td>5,150</td>
</tr>
<tr>
<td></td>
<td>0.683</td>
<td>16.9%</td>
<td>15.1%</td>
</tr>
<tr>
<td><strong>FAMILIES</strong></td>
<td>26,268</td>
<td></td>
<td>24,640</td>
</tr>
<tr>
<td><strong>RACE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>77,104</td>
<td>70.4%</td>
<td>78,330</td>
</tr>
<tr>
<td></td>
<td>70.1%</td>
<td></td>
<td>68.8%</td>
</tr>
<tr>
<td>Black</td>
<td>857</td>
<td>0.8%</td>
<td>1,021</td>
</tr>
<tr>
<td></td>
<td>0.8%</td>
<td></td>
<td>1.0%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>5,246</td>
<td>4.8%</td>
<td>7,687</td>
</tr>
<tr>
<td></td>
<td>5.2%</td>
<td></td>
<td>6.8%</td>
</tr>
<tr>
<td>American Indian</td>
<td>1,021</td>
<td>0.9%</td>
<td>905</td>
</tr>
<tr>
<td></td>
<td>0.9%</td>
<td></td>
<td>0.8%</td>
</tr>
<tr>
<td>Other</td>
<td>25,320</td>
<td>23.1%</td>
<td>25,774</td>
</tr>
<tr>
<td></td>
<td>23.1%</td>
<td></td>
<td>22.6%</td>
</tr>
<tr>
<td><strong>HISPANIC ORIGIN</strong></td>
<td>45,364</td>
<td>41.4%</td>
<td>55,587</td>
</tr>
<tr>
<td></td>
<td>41.4%</td>
<td></td>
<td>48.8%</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 5</td>
<td>11,111</td>
<td>10.3%</td>
<td>8,720</td>
</tr>
<tr>
<td></td>
<td>10.3%</td>
<td></td>
<td>7.7%</td>
</tr>
<tr>
<td>6 - 13</td>
<td>14,017</td>
<td>12.8%</td>
<td>16,179</td>
</tr>
<tr>
<td></td>
<td>12.8%</td>
<td></td>
<td>14.2%</td>
</tr>
<tr>
<td>14 - 17</td>
<td>6,636</td>
<td>6.1%</td>
<td>7,196</td>
</tr>
<tr>
<td></td>
<td>6.1%</td>
<td></td>
<td>6.3%</td>
</tr>
<tr>
<td>18 - 20</td>
<td>4,932</td>
<td>4.5%</td>
<td>4,699</td>
</tr>
<tr>
<td></td>
<td>4.5%</td>
<td></td>
<td>4.1%</td>
</tr>
<tr>
<td>21 - 24</td>
<td>6,257</td>
<td>5.7%</td>
<td>6,067</td>
</tr>
<tr>
<td></td>
<td>5.7%</td>
<td></td>
<td>5.3%</td>
</tr>
<tr>
<td>25 - 34</td>
<td>18,105</td>
<td>16.5%</td>
<td>14,689</td>
</tr>
<tr>
<td></td>
<td>16.5%</td>
<td></td>
<td>12.9%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>17,765</td>
<td>16.2%</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>16.2%</td>
<td></td>
<td>17.6%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>10,673</td>
<td>9.7%</td>
<td>15,115</td>
</tr>
<tr>
<td></td>
<td>9.7%</td>
<td></td>
<td>13.3%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>8,297</td>
<td>7.6%</td>
<td>8,850</td>
</tr>
<tr>
<td></td>
<td>7.6%</td>
<td></td>
<td>7.8%</td>
</tr>
<tr>
<td>65 - 74</td>
<td>6,858</td>
<td>6.3%</td>
<td>6,424</td>
</tr>
<tr>
<td></td>
<td>6.3%</td>
<td></td>
<td>5.6%</td>
</tr>
<tr>
<td>75 - 84</td>
<td>3,678</td>
<td>3.4%</td>
<td>4,423</td>
</tr>
<tr>
<td></td>
<td>3.4%</td>
<td></td>
<td>3.9%</td>
</tr>
<tr>
<td>85 +</td>
<td>1,007</td>
<td>0.9%</td>
<td>1,460</td>
</tr>
<tr>
<td></td>
<td>0.9%</td>
<td></td>
<td>1.3%</td>
</tr>
<tr>
<td>Median Age</td>
<td>31.6</td>
<td></td>
<td>34.6</td>
</tr>
<tr>
<td><strong>MALES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 20</td>
<td>55,002</td>
<td>34.8%</td>
<td>18,944</td>
</tr>
<tr>
<td></td>
<td>34.8%</td>
<td></td>
<td>33.2%</td>
</tr>
<tr>
<td>21 - 44</td>
<td>21,605</td>
<td>39.3%</td>
<td>20,836</td>
</tr>
<tr>
<td></td>
<td>39.3%</td>
<td></td>
<td>36.5%</td>
</tr>
<tr>
<td>45 - 64</td>
<td>9,301</td>
<td>16.9%</td>
<td>11,842</td>
</tr>
<tr>
<td></td>
<td>16.9%</td>
<td></td>
<td>20.7%</td>
</tr>
<tr>
<td>65 - 84</td>
<td>4,702</td>
<td>8.5%</td>
<td>4,959</td>
</tr>
<tr>
<td></td>
<td>8.5%</td>
<td></td>
<td>8.7%</td>
</tr>
<tr>
<td>85 +</td>
<td>365</td>
<td>0.7%</td>
<td>520</td>
</tr>
<tr>
<td></td>
<td>0.7%</td>
<td></td>
<td>0.9%</td>
</tr>
<tr>
<td><strong>FEMALES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 20</td>
<td>54,546</td>
<td>32.8%</td>
<td>17,850</td>
</tr>
<tr>
<td></td>
<td>32.8%</td>
<td></td>
<td>31.5%</td>
</tr>
<tr>
<td>21 - 44</td>
<td>20,532</td>
<td>37.6%</td>
<td>19,921</td>
</tr>
<tr>
<td></td>
<td>37.6%</td>
<td></td>
<td>35.1%</td>
</tr>
<tr>
<td>45 - 64</td>
<td>9,670</td>
<td>17.7%</td>
<td>12,123</td>
</tr>
<tr>
<td></td>
<td>17.7%</td>
<td></td>
<td>21.4%</td>
</tr>
<tr>
<td>65 - 84</td>
<td>5,835</td>
<td>10.7%</td>
<td>5,888</td>
</tr>
<tr>
<td></td>
<td>10.7%</td>
<td></td>
<td>10.4%</td>
</tr>
<tr>
<td>85 +</td>
<td>642</td>
<td>1.2%</td>
<td>940</td>
</tr>
<tr>
<td></td>
<td>1.2%</td>
<td></td>
<td>1.7%</td>
</tr>
</tbody>
</table>

| Owner-Occupied Hhlds | 21,880 | 22,020 | 21,591 |
| Renter-Occupied Hhlds| 12,472 | 12,722 | 12,612 |

**Claritas Data Services**

3/3/97
Population by Age and Sex (1996)

Race/Hispanic Origin, 1996 (%)

Educational Attainment, 1996 (%)

Occupation, 1996 (%)

6 Mile Ring

United States

Population

Households

Families

Median Age

65,552

18,227

13,825

30.3

265,253,151

100,066,882

67,724,960

34.6
Background Research and Data Collection

Student Enrollment Statistics:
The following statistics describe the Cabrillo College student characteristics:

Exhibit 3-54
Enrollment By Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Fall 1993</th>
<th>Fall 1994</th>
<th>Fall 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-25</td>
<td>3,325</td>
<td>3,009</td>
<td>3,280</td>
</tr>
<tr>
<td>26-30</td>
<td>1,526</td>
<td>1,498</td>
<td>1,471</td>
</tr>
<tr>
<td>31-40</td>
<td>2,380</td>
<td>2,367</td>
<td>2,135</td>
</tr>
<tr>
<td>41-50</td>
<td>1,540</td>
<td>1,523</td>
<td>1,398</td>
</tr>
<tr>
<td>51-60</td>
<td>374</td>
<td>454</td>
<td>393</td>
</tr>
<tr>
<td>60+</td>
<td>258</td>
<td>250</td>
<td>221</td>
</tr>
</tbody>
</table>

Enrollment by Age

Number

Fall 1993
Fall 1994
Fall 1995

Age
Exhibit 3-55
Enrollment By Gender:

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1990</td>
<td>42.1</td>
<td>57.9</td>
</tr>
<tr>
<td>Fall 1991</td>
<td>42.3</td>
<td>57.7</td>
</tr>
<tr>
<td>Fall 1992</td>
<td>42.1</td>
<td>57.9</td>
</tr>
<tr>
<td>Fall 1993</td>
<td>42.3</td>
<td>57.7</td>
</tr>
<tr>
<td>Fall 1994</td>
<td>41.6</td>
<td>58.4</td>
</tr>
<tr>
<td>Fall 1995</td>
<td>41.9</td>
<td>58.1</td>
</tr>
</tbody>
</table>

Enrollment by Gender

[Bar chart showing enrollment by gender from Fall 1990 to Fall 1995.]
### Exhibit 3-56
**Enrollment By Non-White Ethnicity's**

<table>
<thead>
<tr>
<th></th>
<th>Am.Ind.</th>
<th>Asian/PI</th>
<th>Black</th>
<th>Hispanic</th>
<th>Filip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1990</td>
<td>1</td>
<td>3.1</td>
<td>1.1</td>
<td>11.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Fall 1991</td>
<td>1.1</td>
<td>3.3</td>
<td>1.2</td>
<td>13.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Fall 1992</td>
<td>1.1</td>
<td>3.4</td>
<td>1.2</td>
<td>14.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Fall 1993</td>
<td>1.3</td>
<td>3.7</td>
<td>1.3</td>
<td>16.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Fall 1994</td>
<td>1.4</td>
<td>4</td>
<td>1.6</td>
<td>17.8</td>
<td>1</td>
</tr>
<tr>
<td>Fall 1995</td>
<td>1.3</td>
<td>3.9</td>
<td>1.8</td>
<td>19.7</td>
<td>1.5</td>
</tr>
</tbody>
</table>

#### Non-White Enrollment

![Bar chart showing enrollment by non-white ethnicity from Fall 1990 to Fall 1995](chart.png)
**Background Research and Data Collection**

Exhibit 3-57  
**Enrollment by Semesters**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-91</td>
<td>13,027</td>
<td>13,680</td>
</tr>
<tr>
<td>1991-92</td>
<td>13,500</td>
<td>14,373</td>
</tr>
<tr>
<td>1992-93</td>
<td>13,529</td>
<td>12,654</td>
</tr>
<tr>
<td>1993-94</td>
<td>12,341</td>
<td>12,834</td>
</tr>
<tr>
<td>1994-95</td>
<td>12,516</td>
<td>12,850</td>
</tr>
<tr>
<td>1995-96</td>
<td>11,398</td>
<td>13,051</td>
</tr>
</tbody>
</table>

**Enrollment by Semesters**

![Bar chart showing enrollment by semesters from 1990-91 to 1995-96](chart.png)
Exhibit 3-59

Enrollment by Schedule Pattern

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>Day</th>
<th>Day/Eve</th>
<th>Evening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1987</td>
<td>4,468</td>
<td>4,038</td>
<td>3,356</td>
</tr>
<tr>
<td>Spring 1988</td>
<td>4,259</td>
<td>4,603</td>
<td>3,353</td>
</tr>
<tr>
<td>Fall 1988</td>
<td>4,328</td>
<td>4,577</td>
<td>3,179</td>
</tr>
<tr>
<td>Spring 1989</td>
<td>4,383</td>
<td>4,770</td>
<td>3,635</td>
</tr>
<tr>
<td>Fall 1989</td>
<td>5,069</td>
<td>4,851</td>
<td>3,112</td>
</tr>
<tr>
<td>Spring 1990</td>
<td>5,267</td>
<td>4,619</td>
<td>3,056</td>
</tr>
<tr>
<td>Fall 1990</td>
<td>5,477</td>
<td>4,542</td>
<td>3,008</td>
</tr>
<tr>
<td>Spring 1991</td>
<td>5,786</td>
<td>4,407</td>
<td>3,487</td>
</tr>
<tr>
<td>Fall 1991</td>
<td>5,742</td>
<td>4,638</td>
<td>3,381</td>
</tr>
<tr>
<td>Spring 1992</td>
<td>5,954</td>
<td>5,265</td>
<td>3,152</td>
</tr>
<tr>
<td>Fall 1992</td>
<td>5,629</td>
<td>4,888</td>
<td>3,001</td>
</tr>
<tr>
<td>Spring 1993</td>
<td>5,230</td>
<td>4,036</td>
<td>3,356</td>
</tr>
<tr>
<td>Fall 1993</td>
<td>4,722</td>
<td>3,965</td>
<td>3,602</td>
</tr>
<tr>
<td>Spring 1994</td>
<td>4,880</td>
<td>4,144</td>
<td>3,749</td>
</tr>
<tr>
<td>Fall 1994</td>
<td>4,714</td>
<td>4,161</td>
<td>3,749</td>
</tr>
<tr>
<td>Spring 1995</td>
<td>4,914</td>
<td>4,292</td>
<td>3,567</td>
</tr>
<tr>
<td>Fall 1995</td>
<td>4,629</td>
<td>3,996</td>
<td>2,943</td>
</tr>
<tr>
<td>Spring 1996</td>
<td>4,877</td>
<td>4,216</td>
<td>3,936</td>
</tr>
</tbody>
</table>
Background Research and Data Collection

Exhibit 3-60

SELECTED WATSONVILLE CENTER STATISTICS

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>F87</td>
<td>569</td>
</tr>
<tr>
<td>S88</td>
<td>559</td>
</tr>
<tr>
<td>F88</td>
<td>703</td>
</tr>
<tr>
<td>S89</td>
<td>784</td>
</tr>
<tr>
<td>F89</td>
<td>754</td>
</tr>
<tr>
<td>S90</td>
<td>797</td>
</tr>
<tr>
<td>F90</td>
<td>788</td>
</tr>
<tr>
<td>S91</td>
<td>851</td>
</tr>
<tr>
<td>F91</td>
<td>782</td>
</tr>
<tr>
<td>S92</td>
<td>855</td>
</tr>
<tr>
<td>F92</td>
<td>837</td>
</tr>
<tr>
<td>S93</td>
<td>866</td>
</tr>
<tr>
<td>F93</td>
<td>896</td>
</tr>
<tr>
<td>S94</td>
<td>1143</td>
</tr>
<tr>
<td>F94</td>
<td>1243</td>
</tr>
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<td>S95</td>
<td>1328</td>
</tr>
<tr>
<td>F95</td>
<td>1212</td>
</tr>
<tr>
<td>S96</td>
<td>1256</td>
</tr>
</tbody>
</table>

Enrollment History of Watsonville Center/Area
Exhibit 3-61

DISTRIBUTION OF ETHNICITY OF ALL STAFF MEMBERS AT CABRILLO

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afr. Am</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Am. Ind.</td>
<td>8</td>
<td>0.8</td>
</tr>
<tr>
<td>ASIAN</td>
<td>39</td>
<td>3.9</td>
</tr>
<tr>
<td>HISPANIC</td>
<td>126</td>
<td>12.5</td>
</tr>
<tr>
<td>WHITE</td>
<td>811</td>
<td>80.8</td>
</tr>
<tr>
<td>Total</td>
<td>1004</td>
<td>100</td>
</tr>
</tbody>
</table>
Faculty Information

Age Distribution of Full-time Faculty at Cabrillo

DISTRIBUTION OF THE NUMBER OF YEARS FULL-TIME FACULTY HAVE WORKED AT CABRILLO
Distribution of Gender of All Full-Time Staff Members at Cabrillo

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>586</td>
<td>58.4</td>
</tr>
<tr>
<td>Males</td>
<td>418</td>
<td>41.6</td>
</tr>
<tr>
<td>Total</td>
<td>1004</td>
<td>100</td>
</tr>
</tbody>
</table>
Background Research and Data Collection

Summary and Implications:

An analysis of the Cabrillo Community College District external environment scan has identified the following factors which must be considered in District planning.

- The economies of communities in Santa Cruz County will depend on opportunities in postsecondary education; with increasing tuition and limited enrollment at the University of California and California State University Campuses, Cabrillo College will be an ever attractive opportunity to local residents.

- Employment opportunities in Santa Cruz County continue to grow at a moderate rate. Most new jobs will likely require postsecondary education which Cabrillo will need to be prepared to provide.

- Professional/technical training at Cabrillo needs to focus on providing training in retail service occupations, hospitality, mid-level management, nursing, clerical service occupations, and material movers.

- Local industry should be viewed as an opportunity; the College should ensure that there is an adequate match between needs in industry and training programs with mechanisms to foster change.

- "Overflow" from UC and CSU may increase transfer education enrollment at Cabrillo College.

- A higher than state-wide average unemployment rate in Santa Cruz County caused by recent changes in the computer industry and related fields along with a restoration of some state funding will translate to higher enrollment at Cabrillo College.

- The combination of low participation in the Hispanic-dominated South County should be addressed by the establishment of the Watsonville Education Center.

- Agriculture is still and is likely to remain a strong aspect of the South County area -- Cabrillo must determine how it wishes to be involved in this industry.

- Capital outlay projects will need to be funded from a variety of federal, state and local sources. Dependency on the state for funding is not realistic. Partnerships with both public and private agencies is essential as has been demonstrated with the development of the Watsonville Center.
Background Research and Data Collection

Internal Assessment

As part of the process of updating Educational Master Plan, interviews were conducted with both groups and individuals within the College and the community. In addition, open forums were held for anyone wishing to provide additional information. As part of this process, individuals were asked to identify what they perceived to be Cabrillo College's greatest strengths and also the College's most prominent weaknesses.

Clearly, the most commonly cited strength was related to "a caring and compassionate faculty and staff." The most commonly cited weaknesses were related to the physical condition, signage and overall deterioration of the campus. Also, the need to move as quickly as possible to establish the new education center in Watsonville and to carefully assess the need for additional satellite education centers in other areas of the District was expressed.

Listed in the next section are brief lists of perceived strengths and weaknesses which were considered in the development of the master plan. These items should also serve as a guide as the District as it considers its on-going implementation strategies for the master plan.

Community Perception of Most Prominent Strengths

Community residents shared the following perceptions and indicated that the College had:

• a strong faculty that teams together to help students
• high quality instruction ensuring student success
• strong scholarship programs
• excellent Foundation
• excellent sabbatical program
• strong transfer-oriented curriculum.

Internal Perceptions of Greatest Strengths

Faculty and staff at the College listed the following strengths and stated the College:

• has a good relationship with the County and City officials
• is known for having a high quality of instruction
• has local support from the community
• offers diversity in the curriculum
• students who transfer have had greater success at 4-year colleges and universities than students who begin their education at those institutions
• enjoys among the highest rates of transfer to the University of California
• has an excellent reputation in the community
Background Research and Data Collection

• has a faculty and staff who work together as a team oriented toward meeting student needs
• students with learning disabilities are treated well
• has a dedicated staff who have provided services to students under less than ideal facility conditions

Internal Weaknesses

Unfortunately, developing a list of weaknesses for nearly any established institution is always a simpler task than developing a list of strengths. However, developing a complete understanding of weaknesses is useful in developing a strategy to address needed improvements.

External Perception of Greatest Weaknesses

Discussion with representatives from the community revealed perceived weaknesses related to Cabrillo College, including:

• poor physical appearance of the campus, particularly along Soquel Drive
• poor handicapped accessibility onto and on the campus
• parking capacity is inadequate at night
• community services component needs to be enhanced
• while course content is undoubtedly strong, instruction is not "high tech or innovative," but instead traditional, "which may not be good for all students";
• there needs to be a stronger relationship with school districts in the County;
• the college has not attempted to identify the needs of the agricultural community;
• the college is not well lit at night;
• the college does not get sufficient public exposure;
• the college is slow to move forward or make changes;
• the college does not have proper signage
• the enrollment process is complex, inflexible and difficult to understand.

Internal Perceptions of Greatest Weaknesses

Weaknesses brought out by members of the faculty and staff were consistently focused on the same general areas. Identified weaknesses included:

• the need to update, remodel and refurbish existing facilities
• the need to interface more with the community
• the commitment to information technology is lagging behind the demand in terms of equipment availability and management information
Background Research and Data Collection

- change is very difficult to accomplish at the college
- the college does not use instructional space as it was intended to be used
- the college reacts to problems rather than being proactive
- there is a need to accommodate more than transfer students by offering professional and technical training along with developmental courses for potential students who currently do not attend the college
- It is difficult for first-time students to enroll
- Directional signs are needed throughout the campus
- the college needs to become more entrepreneurial
- The college has not kept up with technology or technological advances in education
- the college needs to address some very specific facility issues including:
  a. each classroom and laboratory needs to be reviewed for compatibility with the number of students assigned to the classes in that room
  b. window louvers need to be replaced
  c. painting, everywhere
  d. poor lighting throughout the campus
  e. walkways need repair.

Unit Planning Guides

As part of the master planning process, each instructional and support service unit of the college was asked to complete a Unit Planning Guide (UPG) for their particular instructional discipline or support service. The UPG is an analysis of current programs/services offered by that particular unit and what the faculty/staff perceived to be the needs of the unit for the next ten years. The completed Unit Planning Guides are included in the appendix to this plan.

In completing the Unit Planning Guide, the faculty and staff were asked to summarize their vision for the future of their program or service in a brief summary statement. These summaries, as prepared by the faculty and staff, are as follows:

Instruction Office

The goal of the instruction office is to create the structure which will allow the time and provide resources needed to effectively lead the College through the changes necessary to meet the needs of students in today’s world; to have the staff, facilities, equipment, software, staff development and college support to provide instructional services efficiently and effectively; to meet the information and support requirements of students, staff and faculty; and to respond to external and internal demands for accountability and data.
Background Research and Data Collection

Division Offices
The Division office of the future must promote efficiency and effectiveness yet address the human needs of students and staff. This can only be accomplished with up-to-date office equipment, communication and instructional technology; staff and faculty development and sufficient staff to support the increasing responsibility of the Division office.

Library Division Office
The Library Division office has the responsibility of coordinating the delivery of quality, responsive library service to the community. The Library Division office facilitates the maintenance of existing programs and the development of new library programs which serve the student body, faculty and other administrative units on campus and the community at large. The list is a digest of the critical activities necessary to accomplish this vision:

- Implement a stable budget plan endorsed and supported by the College.
- Manage the complex of activities associated with the F & E list and planning for service delivery in the new building.
- Using traditional resources and new technologies, the library will participate in the CWIS, plan for new services to the Watsonville Center and contribute to the campus-wide effort to increase information literacy at Cabrillo College.
- Cooperate with the Teaching and Learning Center, Computing Resources, Computer High Tech Center and other campus divisions to provide a setting for the development and delivery of networked courseware.

Accounting
a. Accounting students need adequate access to the internet in order to complete research required in the transfer class
b. Accounting classrooms must have stationary demonstration computer units in order to use the most up-to-date teaching materials provided by publishers.
c. The budget for business-oriented reference materials should be increased. It sends a poor message to the students when we ask them to research companies and the materials at our library are out-of-date, hand-me-downs from other libraries.
d. Coordination between other vocational departments and accounting could lead to specialized programs or improved curriculum for vocational students.
e. The Watsonville Center should be better utilized to provide access to students seeking vocational accounting employment in the Watsonville area.

Computer Applications and Office Systems-ACHIEVE Program
During the next five years, the ACHIEVE Program will meet these objectives:

a. Continue to align curriculum with local employer needs
b. Acquire and maintain state-of-the-art office equipment, including email/internet capabilities and presentation software.
c. Review competency assessments yearly to reflect current job market needs.
Background Research and Data Collection

d. Develop a tracking system for ACHIEVE graduates through 5 years after program completion to effectively study and report job placement and retention rates, ability to become self-sufficient and successful teaching/learning strategies.

e. Expand services to meet community/College needs which may include new program models, added sections of the existing program or an expanded student base in the current program.

Adaptive Physical Education

1. Establish aggressive plan for securing more space in the weight room and/or new facility for A.P.E.
2. Ensure sufficient funding for additional certificated faculty.
3. Increase the number of A.P.E. activity course offerings.
4. Increase the length of study for the P.E. 11-Introduction to Disabilities class for declared majors in rehab therapies.
5. Alleviate accessibility barriers remaining in gymnasium, locker rooms and pool area.

Aeronautics

The Aeronautics program would greatly benefit from implementation of the following objectives:

1. Re-establish existing Aeronautic course offerings to restore departmental vitality.
2. Build an up-to-date aviation media center in the ILC.
3. Follow through in establishing a physical presence at the Watsonville Airport by pursuing the use of a hanger provided by the airport management.

Allied Health: Nursing, Dental Hygiene, Medical Assisting, Radiologic Technology

This proposal was developed to meet the changing needs of the health care industry. The primary purpose is to consolidate program areas and develop curriculum to prepare future multi-skilled practitioners.

There exists a great deal of redundancy among the four program areas that could be eliminated, and thus, create a cost savings to the College. Currently, all health programs function with separate curriculum, independent health advisory committees and isolated program planning and review processes. This proposal is intended to eliminate duplication and strengthen collaboration and cooperation between two divisions and among four programs. In addition, the Dean, program directors and faculty will explore strategies in which to share resources and leverage funds.

Anthropology

In order to assist student success in transfer institutions and in the workplace, we need to:

- offer new courses in both traditional and distance learning formats
- maintain, expand and upgrade student learning aids
Background Research and Data Collection

- teach about and model a multi-cultural learning environment
- generate innovative, student-centered computer learning environments which will enhance students' academic and/or work place career skills
- support student success through faculty professional activities, collaborating with regional colleagues and by promoting faculty participation in professional meetings
- build anthropology offerings particularly in applied fields.

Applied Living Arts

In order to offer curricula which responds to present and anticipated needs with emphasis on occupational and transfer education, the ALA department must continue to evaluate the comparison data gathered from other community colleges and selected 4-year institutions. (ALA Strategic Plan 1993-95, p. 25. Data collected in Volume 2 of Strategic Plan)

The expansion of the foods, nutrition and clothing curriculum is long overdue. Planning certificate programs in dietetics and clothing will provide the necessary balance between occupational and transfer programs. It is also important to continue to provide basic transferable courses in all areas of the ALA department. Thus, we must continue to monitor the articulation agreements, both at the secondary level and with transfer institutions, in order to support the educational goals of our students.

Archaeological Technology

To respond to the changing employment market and transfer requirement in Archaeology, it is necessary to increase student outreach, develop the historical archaeological strand of the program, expand the GIS/GPS programs, maintain and strengthen the field excavation and survey program, develop and interface with other Cabrillo programs around Environmental Studies, establish staffing and systems that adequately support equipment, archives and collections.

Art History

The Art History program offers a balanced curriculum of Western and Non-Western courses, yet there continues to be an imbalance in the staffing needed to effectively maintain the curriculum. A full-time faculty member needs to be hired to oversee and to teach in the Non-Western area so that up-to-date visual and written resources are developed for students seeking quality education in Non-Western, multi-cultural, art history education.

The Art History program would improve significantly with increased contract classified staffing for the art slide library which is used extensively by both art history and art studio faculty and with increased funding for art slide library acquisitions and art history instructional supplies. Better control over the slides and slide library operations are needed, including audio visual use and future CD-ROM and Internet use by faculty.
Background Research and Data Collection

With the purchase of high technology instructional equipment for room 454 and the Watsonville Center, new up-to-date instruction methods for better student learning can be accomplished. With the possibilities of distance learning by Internet access, efforts can be made to undertake a study of offering art history courses by distance learning methods.

Students in art history classes have been negatively affected by the 75% reduction in the van driver budget which has significantly curtailed field trips to art museums and galleries to see original art work. The effectiveness of art history instruction is increased with reliable machine copies for classroom assignments, study guides and exams.

Art Studio

The loss of key full-time teachers through retirement without replacement has created enormous problems, particularly in the Small Scale Metals/Jewelry program, a complex program currently without a contract staff member. Beyond the loss of teaching/program management skills, reducing the full-time staff has altered the balance of the department and posed grave indicators for an aging staff, stretched thin by course loads which require a lot of outside classroom preparation and a long-standing, active involvement in division and College governance. It is strongly felt that the time has come to re-invest in contract staff so as to revitalize and re-strengthen an excellent component of the College.

Facilities have been and continue to be the weakest aspect of the department. Staff members have gone to great lengths to identify shortcomings, changes in teaching styles and more towards safe, effective classrooms. The completion of the identified safety modifications stands as a critical component of present and future realities. While it is felt the core of the visual art program will continue to be taught with established modes of delivery, it is clear that the graphic design program can be more fully developed. Finally, the department has been losing ground in the battle to remain on top of matters such as equipment repair/replacement, instructional supplies, support staffing and deferred maintenance. While some of these issues would be addressed through remodeling of facilities (or creating a new facility), most are separate and require separate attention.

Articulation-School Outreach Office

The School Outreach office need to continue to expand and streamline high school articulation agreements and articulation outreach activities with high schools and Regional Occupational Programs. The office is essential to recruitment and transitioning of high school students into higher education opportunities at Cabrillo.

Articulation: Instruction Office

The Articulation office needs to continue to expand and update articulation agreements with 4-year universities. The office also needs to be proactive in seeing that these agreements are available to both counselors and students. The Watsonville Center
Background Research and Data Collection

needs to have the same access to information as the main campus. It is essential that the Articulation office is available to answer curriculum questions for faculty.

The Articulation office should be located near the Dean of Transfer so that clerical help can be shared.

Athletics

To meet the requirement of Title IX, athletic programs for women must be added as they are sanctioned by the COA. The Office of Civil Rights will not allow lack of funding as a criterion to not offer a program. The introduction of women's soccer in the fall of 1996 is a beginning. The District, however, must continue to investigate ways to introduce women's water polo and other women's sports sanctioned by the COA. In any new program, inadequate conference competition or lack of programs in the local high schools could be the only deterrents.

A comprehensive plan to maintain and renovate existing facilities to meet the needs of proposed new programs as well as existing programs should be developed in concert with maintenance and operations.

The District athletic budget allocation needs to be increased so external sources of funds be directed to facility needs rather than to balancing the operating budget.

Support services need to increase with the anticipated increase in athletes and athletic programs. Additional reassigned time for the existing athletic counselor, increased staff in the training room, equipment room and grounds are all vital.

Bilingual, Bicultural Studies

The Bilingual Bicultural Studies program fulfills an important role at this college in the context of this county and state. Across a vast array of disciplines, from health care to marketing, from the arts to scientific research, from public policy to international trade, the Spanish speaking and diverse Latino cultural world has become a major player and the most prepared students need to be adept at functioning in that world. In both the public and private sector, bilingual and bicultural sensitivity and awareness is fast becoming not only a valued advantage but, in many places an indispensable skill.

In addition, the need to retain Latino students in the educational system, not only at the K-12 level but also at the post secondary level, continues to be critical as this population consistently suffers the highest drop out rates. The human resource potential these students bring to the workforce and pool of national expertise is immense and well-worth additional efforts of recruitment and retention. There are also many re-entry students included in this population, either having to retrain for new jobs as traditional ones are exported, or seeking to renew educational goals at a later age.
There are many ways in which the program's potential could be further developed and at such time that the College again has the resources to fund a coordinator's position, this should be explored. Until then, because of the interdepartmental nature of the program and the vitality of Latino student organizations now at the College, the essential objectives and purpose of the program should be able to be accomplished.

**Biology**

a. Replacement, remodeling or repair of facilities in the 600 building as stated in Section 4.

b. Permanently increase the LIA position held by Martha Balogh to 75%.

c. Increase supply budget to reflect increased enrollment.

d. Decrease in class size to increase student/teacher interaction.

e. Replace and obtain equipment needed to maintain the learning experiences in our laboratories as stated in Section 4.

f. Acquire multi-media equipment for lecture presentations.

g. Offer evening sections of laboratory classes for non-majors.

h. Reinstall special topic and field biology courses.

**Business (General), Finance & Banking**

a. Business students need training in computer applications and in use of the internet as a research tool. Therefore, internet access must be available. Also, access at the College to word processing programs is essential to enable students who do not own computers to prepare written class assignments.

b. The business department must offer a flexible delivery system that appeals to currently employed individuals as well as students who are enrolling in classes for transfer and retraining. This requires a variation in class scheduling to include distance learning, short-term intense courses and self-managed classes.

c. Establishment of local business partnerships and internships to enhance practical applications of business theories and concepts.

d. Increased emphasis on project-based assignments and encourage students networking and development of human relationships and social skills that ultimately increase work retention abilities.

e. Development of modules to be used in other vocational and/or academic courses as well as industry specific modules to be used in business classes.

f. Consistent course offerings at the Watsonville Center.

g. Development of new class offerings that are pertinent to today's labor market.

h. Creating and support of educational partnerships.

**Cabrillo Stage**

a. Representing the College, Cabrillo Stage would like to foster a more diverse performance environment by entering and educating the community and our students about different periods and subject matter in the history of musical theater.
Background Research and Data Collection

b. Cabrillo State would like to initiate a program to generate input from the Santa Cruz community as to show selection each year and be able to respond to this program.

c. Cabrillo Stage and the Performing Arts department would like to see the College more aggressively pursue the remodel of Forum 450 for a more user-friendly, multi-purpose room for theater and music performances as well as day-to-day instruction. A small performance facility (space) is sorely needed on the Cabrillo College campus.

Chemistry

The Chemistry Department hopes to maintain and improve the quality, currents and number of its offerings to meet expected enrollment increases and changes in chemical technology. To accomplish this we need to:

a. Remodel and expand the chemistry facilities
b. Increase computer usage in both laboratory and lecture settings
c. Upgrade chemical instruments and other equipment
d. Offer tutoring and computer-based learning services
e. Improve support services.

Children's Center

The Children's Center has been tremendously impacted by the expansion of services for students, the College and the community. The ECE Department has taken the project under it's wing. In the first semester of full operation, it has become apparent that the ECE Department has shrunk to two, rather than three, full-time faculty because of the Center Director's full-time involvement with Center operations. The Center office staff, director and teachers are carrying very heavy loads. This is a planning time for the Center, a time of change and responsiveness and a time to look for additional support. The field is under a lot of pressure as needs for service expands and resources shrink. It’s a time for collaboration, reorganization and creative solutions.

Community Education

Trends suggest that our cost of doing business is increasing and that we need to make planning decisions that are consistent with sound business decisions. Potentially lucrative programs (teens college, professional development workshops, motorcycle safety, arts and crafts) should be expanded and/or developed. Programs with little or no financial return and those with high incidence of problems should be reassigned to areas that benefit and have control (Threshers reassigned as an off-campus user, sports camps reassigned to athletics).

Changing the status quo on how we advise suggests fewer Calendars per year, increasing the number and type of targeted publications and going on-line.
Background Research and Data Collection

Increasing the focus on Community and Contract Ed program and staff on those two revenue generating areas suggests decreasing the focus on other activities.

Creating a first class program suggests appropriate quality publications and a business structure that includes a fully trained staff, a service oriented process, appropriate office space and equipment that moves us into the next century as a successful and responsive business.

Computer Applications/Computer Science

The objectives of the Computer Applications and Office Systems department are focus on improving the quality of instruction. Over the next several years, we plan to shift all of our classes to performance based assessment. We believe this will result in higher standards for student performance and more careful attention to student’s success and the classroom practices which contribute to that success. We recognize that adjunct faculty comprise a larger proportion of our faculty than elsewhere on campus and that we must make extra efforts to support their work and improve communication and coordination between us all.

We believe our success as a department should be measured in the numbers of students that complete courses with the ability to perform at the required level of competency. To help us maintain our focus on that end, we propose to set up reporting mechanisms that help us track our performance over time. We also will propose that the College experiment with the notion of allocating resources to us on that basis rather than on the basis of opening census.

Maintaining access to current computer technology is essential for the success of our students. Maintaining our knowledge of developments in the field is essential to our ability to serve our students. Both of these require an on-going investment by the College. We will urge the College to make such commitments a regular part of the budget.

Construction and Energy Management

The Construction and Energy Management program must continue to train people for supervisory, managerial and administrative positions in the construction industry. The program must include detailed hands-on training in modern computer construction management techniques in our classes. The Department must provide more hands-on skills training, and must continuously update the curriculum to stay current with changing methods and materials in the construction industry.

Contract Education

Trends suggest that a vital and lucrative Contract Education program can be developed. The program can play a role in community economic development and generate positive rewards for Cabrillo. Appropriate resources (especially in the form of staff) must be committed to ensure the success. An on-going evaluation of the program
Background Research and Data Collection

development and delivery may suggest that we increase focus of Community and Contract Education program and staff on those two revenue generating areas and decrease the focus on other activities.

To be competitive and move successfully into the next century as a successful business, we must create a first class program with appropriate quality publications and facilities and a business structure that includes a fully trained staff, a service oriented process, appropriate office space and equipment.

Strong relationships with other areas of the College and with individual faculty members and consultants will be key to this success.

Co-operative Work Experience

The Co-op program currently provides only occupational major students with the opportunity to learn in an environment of the workplace, open occupational/career doors and integrate efficiently into the community. To continue and expand, the Co-op program will

- Gain transfer status for Co-op offerings
- Establish cross-discipline or General Co-op Work Experience Education for undeclared or non-occupational majors.
- Collaborate with all other teaching and student support services to provide workplace learning experiences for Cabrillo students.
- Acquire personnel and facilities to support the operation of the Co-op program.

Criminal Justice

To meet the increased need for qualified employees in the criminal justice system it's necessary to modify existing education and training delivery systems by establishing a linear progression of preparation and knowledge through high school, the community college and ultimate completion of a baccalaureate degree or entry level state certified training program.

To accomplish this, we must:
1. Implement a formal corrections program.
2. Modify existing curricula to meet contemporary needs.
3. Establish a system of articulation that eliminates duplication and encourages advanced placement to students seeking careers in criminal justice and/or public safety.

Dance

Necessary support includes remodeling dance studio 1117 and building a new Dance/Somatic Arts or a new Performing Arts facility, increasing instructional units and budgets, a new contract dance position and a publicity/marketing budget. The continued vitality of the dance program depends upon enhancing the curriculum to meet
current student and state needs, specifically the new job market for the California K-12 Dance Certificate and the growing areas of Somatics/Dance Therapy and Dance Technology, including distance learning in yoga.

**Dental Hygiene**

Dental Hygiene must revitalize its curriculum to train practitioners for the 21st century. We can meet our objectives by:

1. Revising the curriculum by modernizing it and eliminating now redundant, marginally useful information.
2. Use new technology to decompress existing curriculum to allow room to add new, needed curricula such as research, business management, ergonomics new treatments, etc.
3. Shift instructional methods from lecture to guided seminars and other active learning strategies that better develop critical thinking and problem solving skills.
4. Maintain, and possibly expand, and better manage our clinical teaching facility, the campus Dental Hygiene Clinic.
5. Train our faculty in computer technology.
6. Hire a clinic business manager to relieve the faculty of these now unpaid duties.

In addition, the department believes the following items need to be addressed:

1. The ventilation system in the facility needs to be improved to handle nitrous oxide fumes.
2. If the program is expanded to a 12-month program, additional staff such a program specialist and a laboratory instructional aide will be needed.
3. Responding to the increase in technology, six computer stations will be needed to provide tutorial assistance to students.

**Desktop Publishing and Multimedia**

Key points for inclusion in the Master Plan:

1. Advisory Board needs to be formed.
2. Partnerships with industry need to be established.
3. Equipment should comply with industry standards.
4. A full-time faculty member is needed for the Desk Top Publishing/Multimedia Program.
5. Faculty should be professionals in the field.
6. Lab assistants in Desk Top Publishing and Multimedia should be hired from actual adjunct instructors of those specific courses first. They know the system best and they know the software.
7. Counselors need to be responsible for staying informed about changes in the program and industry.
8. Transfer credit for qualifying courses needs to be established.
9. Develop and explore interrelationships mentioned in UPG.
10. Develop video curriculum.
11. Offer a Technology Arts major to accommodate diverse study tracks and varied areas of interest.

**Developmental Studies/Adaptive Computer Technology**

Provide state-of-the-art instructional support for students who need to learn how to use special adaptations in the computer lab.

- Ensure sufficient funding for classified hourly staff to provide critical instructional support.
- Increase number of disabled students enrolled in high demand vocational fields i.e. medical transcription and microcomputer management.
- Provide staff development activities demonstrating the use of computers and computer adaptations and foster communication and mutual respect for disabled students.
- Fully implement access to all campus computers and computer facilities.
- Provide direct access options such as the Internet and the World Wide Web to offer state-of-the-art mobility to limited access students.
- Increase user centered adaptive computer offerings in both a lecture and lab format.

**Disabled Student Services**

Over the past five years, significant funds have been expended to improve disabled student access to the campus. Unfortunately the physical constraints of the campus require that a significant number of projects remain incomplete. To this end, Disabled Student Services continues to present the following goals: These goals include:

- to provide wheelchair access and access for disabled and elderly students and community members to the college bookstore;
- to provide access for disabled students to instructional classrooms;
- to provide adequate access for blind and elderly students and community members;
- to provide access from the gymnasium to the main part of campus utilizing the existing college bridge;
- to expand inter-campus transportation services for disabled students;
- to install Assistive Listening Devices in classrooms for the hearing impaired;
- to improve access to bathroom facilities for the disabled;
- to provide the disabled access to the general campus from Soquel Drive; and
- to provide access to the theatre stage for the disabled.

**Distance Learning**

The distance learning function should continue to facilitate the use of technology in the delivery of courses to students and potential students. This will involve the consideration of many modalities and the need for finding funding for the staff, technology and facilities that support these delivery systems.
Background Research and Data Collection

Drafting Technology

The Drafting Technology program is in a situation where some type of transformation is needed. The original purpose of this program, to educate entry-level drafters, is no longer justified due to the reduced employment market for entry level drafters without design skills. At the same time, past course offerings have shown there is not sufficient demand to offer the design courses needed to increase employment potential.

There still is, and will likely continue to be, demand for retraining existing drafters, designers, engineers and architects on evolving and emerging computer graphics technologies as these relate to their professions. One possibility is to maintain this program with an emphasis on continued technical education for these design professions.

The most promising future would be to evolve this program to provide education in a broader range of computer graphics technologies, including the aforementioned design fields, plus related areas such as animation, video production, desktop publishing and multimedia production.

Early Childhood Education

The Child Development/Early Childhood Education (CD/ECE) field is experiencing rapid growth and requiring more specialized and increased training for employees. New licensing requirements are being developed which will require greater articulation between educational systems and will require each campus to certify content of training for State licenses and permits. As families face increased demands and stresses with decreased resources, the need for parent education becomes critical. The department has developed a beginning bilingual ECE training program to meet the need for trained bilingual ECE teachers, but is hampered by lack of appropriate staff and facilities. The department’s need for more faculty limits development in all areas. Departmental support services are stretched to the maximum.

Economics

1. To attract and retain excellent economics instructors.
2. To continually update the coverage of micro and macro topics, to serve transfer education needs.
3. To support economics instructors’ investigation of diverse learning and assessment methods.
4. To schedule sections to maximize enrollment opportunities.
Engineering

The goal of the Engineering Program is to provide facilities, equipment and staff which will present the very finest low division engineering education to the greatest number of district students so they can successfully transfer to a four-year school and complete a baccalaureate degree in engineering.

Establish and improve the engineering facilities and equipment including the addition of a fully functional properly plumbed "wet" engineering laboratory and an engineering classroom with 24-30 computer work stations or a shared computer laboratory with MSE and BECHO. Upgrade classroom and laboratory equipment and software to match current anticipated use by the engineering industry.

Incorporate new teaching strategies into the engineering curriculum with an emphasis on the following: the integration of design, hands-on skills through laboratories, communication skills (written, graphical, oral, leadership, teamwork) and computers across the engineering curriculum.

Coordinate with counseling, transfer center and career center in providing program and career advisement to Cabrillo engineering students and collaborate with the local engineering industry in providing engineering students with co-ops, internships, facility tours and job shadowing. Continue student involvement in the Cabrillo Engineering Society and the engineering tutoring program.

Develop engineering and engineering technology courses to provide training, retraining, certification and licensing of employees in the engineering industry.

Further develop communication with four-year schools, local high schools and the Math Engineering Science Achievement/Minority Program (MESA/MEP).

English

a. The department must implement basic skills and associate-level multi-disciplinary programs in writing, reading and math with an emphasis on critical thinking and study skills to confront the growing numbers of under prepared students entering Cabrillo.

b. The department should develop an inter-disciplinary transfer-level program that emphasizes the connectedness of the humanities and the common ground they provide for critical thinking.

c. The department should provide writing courses with Internet access, decide if it's appropriate to offer computer-based distance learning courses and develop computer-assisted instruction.

d. The department must address the issue of too many students moving prematurely in the composition sequence.
Background Research and Data Collection

**English As a Second Language**

The ESL department would like to expand teaching units to allow for a full range of classes in Watsonville an, if indicated, in Aptos. We would like our ESL labs to be able to provide day and evening support to ESL and limited English proficiency (LEP) students on both campuses. Our students need easy access to word processing computers for course work both in Watsonville and Aptos and CD and VCRs for ESL software and videos in our labs. We need to resolve the crisis in our full to part-time ratio and in our directorship and expand our outreach and accessibility, both locally and internationally. We want to make Cabrillo competitive in the field of Contract Education and continue to explore options to provide a distance learning ESL class.

Last, but by no means least, we would like to ensure the continued safety of our teachers in Watsonville by bring them into the main facility there.

**Environmental Technology/Environmental Studies**

This proposal would enhance the employment opportunities for students attending Cabrillo College and meet the needs of the environmental technology industry. It will also provide an avenue for students intending on obtaining a B.S. in Environmental Studies to complete the necessary lower division coursework.

**Fire Protection Technology**

To meet the increased need for qualified entry level applicants in the fire service, it will be necessary for students to be appraised by counselors and instructors of the need for basic educational skills.

To meet the needs of contemporary fire protection, we must modify and update curricula and provide a pathway to four-year institutions for those individuals seeking four year fire protection degrees.

**Foreign Languages**

We need to incorporate new technology including computers, video, CD-ROM, teleconferencing, and distance learning in a coherent proficiency-based program which focuses on the diverse needs of transfer students and career development. There, our most vital, future-oriented objectives are the following: (1) Incorporate new technology and technologically oriented methodologies into the instructional program, including computers, new television monitors with excellent sound quality and closed captioning, VCRs, camcorders and editing equipment; (2) Expand language lab facilities and computer services for students; (3) Gear the curriculum increasingly toward student proficiency as a basis for credit and advancement by expanding the utilization of native speakers in all language classes and in video conversation labs; and, (4) Upgrade foreign language holding in CD-ROM and video selections.
Background Research and Data Collection

Geography, Meteorology

To maintain current Geography and Meteorology offerings and improve teaching methods as funds and equipment permit. To make course work in geography suitable for inclusion in multicultural programs. To teach GIS to all geography majors. To organize environmental studies courses into a program. To find a suitable location for the Map Library when the current Swenson Library remodel is finished and maintain the Map Library's USGS map collection. To maintain and improve data collection in the Cabrillo Weather Station (440A) and to make this data available to students at Cabrillo and to others in need within the community and to contribute this data to outside users on the internet.

Geology and Oceanography

a. The Geology and Oceanography Departments need access on a part-time basis to a computer lab facility with approximately 10 terminals or stations. We need the facility to be fully equipped with Macintosh computers, CD-ROMS and to have access to the internet and the world wide web.

b. We need to obtain at least 2 Macintosh computer that will be permanently housed in room 705 for use by the Geology, Oceanography and Astronomy Departments. These computers, capable of similar function as described above, would be used in both the lecture and lab format.

c. The Oceanography Department needs a lecture hall facility that is designed strictly for courses with a lecture format only. This facility needs to permanently house a Macintosh computer equipped with LCD attachment, CD-ROM and to have access to the internet and World Wide Web. The computer system needs to be readily available and convenient to get into an operational mode.

d. The equipment and supplies budget for the Geology and Oceanography Program needs to be increased by approximately 20% and the Teacher Assistant budget for the Oceanography program needs to be increased by $00 per academic year. This will enable the Teacher Assistants to stay in the labs for at least the first 9 weeks of classes instead of only five weeks as our current budget allows.

e. We hope to expand course offerings in both lecture and field Geology classes.

Health Science

As a result of the master planning process, our future oriented goals are the establishment of a fitness laboratory facility with measurement tools, including four or five computer stations, for students/staff health assessment and analysis. Additionally, at least one classroom Macintosh computer is needed for student use. Also, it will be necessary to develop course curriculum to include a Health Science Individualized Learning course, a Health and Fitness Assessment Laboratory course and a vocational certificate program for Fitness Assessment and Personal Training.
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Hazardous Materials Technology
To meet the increased need for qualified entry level applicants, it will be necessary for students to be appraised by counselors and instructors of the need for basic educational skills.

To meet the needs of United States contemporary environmental issues, we must modify and update curricula and provide a pathway to four-year institutions for those individuals seeking four-year degrees.

History
a. We must hire two full-time historians. In order to respond to the changing discipline and the changing needs of our students, we must have new faculty to assist use. The year 1996 marks the 20th anniversary of our last full-time history hire.
b. We must increase the part-time unit allocation to allow the resumption of the teaching of the history of Latin America, Africa and short-term, issue specific courses, as well as offering the History of California.
c. We must upgrade the infrastructure in our history classrooms including new maps for rooms 425, 426, 435, 507 and the Watsonville Center as well as modern overhead projectors and daylight screens for those classrooms.
d. We must increase our collection of videos, CD-Rooms, slides and audio tapes.

Horticulture
a. The most important objective for the Horticulture Program is the procurement of about $40,000 for: (1) a temporary, part-time “Garden Assistant” and (2) to repair and rejuvenate the greenhouses, instructional landscapes, broken tools and instructional instrumentation so badly needed in the Horticulture Facility. This includes money for a 1,000 square foot storage shed to store bulk items which, when purchased singly, cost the Department nearly $750.00/year in individual shipping costs.
b. To increase the use of computer technology as described in the Unit Planning Guide.
c. To use the campus landscape more effectively as a learning laboratory for students to learn plants as described in UPG.
d. To integrate Spanish into the curriculum with Spanish-Horticulture tutors and “Field Spanish” brochures for horticulture terminology.
e. To upgrade instructional equipment such as instrumentation, teaching aides, sampling equipment, displays and software, none of which has been purchased for over 8 years because of funding cutbacks.
f. Assist in the planning, design and construction of the new, state funded facility.
**Industrial Technology**

To meet the needs of our students who seek the vocational training necessary to enter the market place of our local industries, and to provide them with options like the AWS welder certification, it is paramount to maintain a flexible curriculum that allows students the ability to take the technical and hands-on occupational courses during schedules conducive to an apprenticeship like transition. Since no one college is capable of supporting the variety of courses necessary to address the need of our regional industries, it is in the best interest of students for them to be able to assemble the necessary courses for their specialty from amongst the regional colleges and be able to obtain a certificate or AS degree.

To accomplish this we must:

1. Implement a joint Industrial Technology program articulated with other regional colleges.
2. Focus our course offerings on those areas of Industrial Technology that we are best suited to maintain and provide.
3. Upgrade and electrical outlets in our facility to provide safe and effective hands-on vocational training.

**Journalism**

There is little dispute that the future of society, let alone journalism is more tightly than ever tied into technology, mainly computers and their Hydra-headed applications. Journalism is both an application and a way of thinking. The application, words on paper for the most part, is giving way to words and images in the ether and through fiber-optic electrons. But journalism’s way of teaching students how to think about events and how to assign meaning to them is not appreciably changing. What Cabrillo needs to do is save what is valuable in the journalism program—the production of a newspaper, a time-honored grounding in its way of thinking— but expand into other areas where new delivery is taking place: on the airways; and will take place: on the Internet. Not only are these areas that already attract students, they’re where most of the new jobs will be. We’ve just got to show them that journalism can exist in those settings also.

To accomplish this, we must:

1. Expand the journalism program to offer classes in broadcast journalism, beginning with broadcast news writing.
2. Take steps to secure a space for a broadcast studio. (The use of off-campus facilities such as community access TV or TCI cable studios is possible for television broadcasting but an on-campus site should ultimately be created.
3. Establish a formal internship program with local radio stations that guarantee students hands-on, beginning instruction and training in broadcasting. (KUSP and KZSC at UCSC have espoused interest in such an operation).
4. Establish a formal internship program with local cable stations (Community Access and TCI as mentioned above) and, if possible, local TV stations.
5. Make Desktop Publishing a required course for journalism majors and make Newspaper Production a required course for students majoring in Desktop Publishing and Multimedia.
6. Get faculty members from both areas to meet together on a routine basis.

**Learning Skills**

1. Provide services at the Watsonville Center.
2. Provide evening services on the main campus for learning disability (LD) and attention deficit disorder (ADD) students.
3. Increase tutorial services for students with LD & ADD.
4. Increase the identification and referral of students with LD and ADD by providing a letter screening tool to counselors and other faculty.
5. Create and revise curricula for students with LD and ADD.
6. Continue to provide in-service training regarding LD and ADD for faculty, staff, community members and students.
7. Create a list for referrals for ADD diagnosis and treatment.

**Library Instruction**

The Library is the intellectual center of the College. The mission of library instruction is to provide the college community with open access to information and with the understanding of how to analyze, evaluate and synthesize information.

In order to achieve this mission, the library must devote its instruction resources to support a broad spectrum of the college curriculum. The library instructional program must meet the needs of students, faculty, staff, administration and community. To accomplish this mission, the library must:

- Establish a full time library instruction librarian faculty position
- Introduce a full spectrum of credit bearing and non-credit courses to provide the community with the necessary options which will facilitate information literacy.
- Develop programs to provide instruction for Watsonville students.
- Develop programs for occupational students and for articulation with high school students.

**Library Reference and Collection Development**

The Reference program provides quality service for information access and guidance in the use of computer-based learning resources. Reference librarians meet student learning needs for access to print and non-print materials. The Reference experience translates seamlessly into the activities associated with building the collection. Collection development librarians work with faculty to develop quality collections which meet the goals of the College. The library must provide the materials.
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necessary to support the educational programs designed to help students reach their academic goals.

The following is a digest of the key needs of this program.

- Establish a campus-wide goal for all students to achieve information literacy.
- Establish a collections budget adequate for the educational goals of the College.
- Provide time for part-time librarians to work on Collection Development activities; provide e-mail account for the adjunct library faculty who form the backbone of the liaison program with faculty.
- Increase staffing at the Reference Desk to meet the needs of the new building.

Library Technical Services and Systems Management

Leading the focus of the Technical Services and Systems Management department unit plan is the upgrading of interfaces and delivery systems of the library computer data bases, including both hardware and software improvements. Also, major changes and developments in technology are spearheading a shift in the purchasing, cataloging, processing and delivery of library materials. This transition impacts the entire paradigm of the Technical Services department. Our most important goals are to maintain the integrity of our local data base and to provide the best possible technological access to our on-line catalog, to other databases and to other forms of information.

To attain these goals and as a result of this planning process, our most vital, future-oriented objectives are:

- Campus-wide access to the library’s on-line catalog, periodical data bases and other information resources.
- Delivery of the library’s on-line catalog and related data bases using graphical user interfaces.
- Upgrade current World Wide Webb (WWW) server for use as a library information gateway on the WWW.
- Campus-wide resources, available to students, added to the library’s on-line catalog.

Mathematics

a. With the further incorporation of technology into the curriculum, students enrolled in mathematics courses (and other MSE courses) need open access to a microcomputer facility. This facility needs to be equipped with computers
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capable of reading CD-ROM's, running the necessary software and connecting to the internet and the World Wide Web (WWW).

b. The mathematics department needs the use of two additional classroom within the 700 building.

c. To assist in the development of a more up-to-date curriculum, the mathematics faculty need access to the internet and the WWW within the 700 building. Also, to present a curriculum that is technologically current, we need access to appropriate presentation equipment. This equipment includes at least two portable computers that can be taken into the classroom, at least two color LCD display panels and suitable overhead projectors and at least two classrooms equipped with monitors (capable of displaying images produced by computers and video equipment) and sufficient network connections.

d. The mathematics faculty need to increase the level of communication and discussion with other departments on campus. This will pay dividends in both curriculum development and in service to the students.

Matriculation Office

a. Early Assistance: This program provides a way for instructors to be directly involved in student retention, self-esteem and success in part of giving feedback to students having a difficult time in classes and who need support and advice to succeed. Instructors are provided with a list of problems a student might need some advice on and referral forms to student service on campus. A variety of Student Success workshops are given throughout the year both in and out of the classroom. Offering more of these workshops in English and in Spanish is suggested.

b. Assessment: Expand Assessment. A testing room with computers, exclusively for assessment, would allow centralized campus testing day and night. Computerized and other individualized assessment there would allow more accommodations for students with disabilities and for working students.

Media Services

In order to serve the crucial needs of the campus at large, Media Services must have adequate funding to replace aging and obsolete equipment. New technologies in the area of information management and dissemination have created a competitive environment for the community college which has never before existed. The virtual classroom threatens to supplant traditional teaching methods and multimedia is rapidly becoming more than a catch word with distant and theoretical applications. Multimedia is the merging of a multitude of traditional presentation technologies into a singular digital format and will ultimately replace all previous technologies. Individuals and institutions who remain rooted in prior technologies will be incapable of providing future generations with meaningful skills. Digital technology continues to infiltrate every educational discipline.
In order to remain an effective and useful part of the College, the Media Services unit must develop skills in multimedia and internet technologies and expand our support capabilities to include delivery systems for new interactive educational models. In addition, there is an immediate need to participate in a campus-wide effort to upgrade equipment in support of teaching.

Medical Assistant

During the next five years, the Medical Assistant program will complete these objectives:

- Do self-study for accreditation modifying MA program to meet AAMA essentials and guidelines
- Develop curriculum that meets accreditation and health care skill needs including three new programs
- Identify and equip classrooms, storage and adjacent faculty offices to support an accredited program
- Use multimedia to augment classroom instruction
- Integrate computer skills into MAP courses
- Strengthen networks with employers, potential and previous students
- Expand work experience sites
- Continue collaboration with other health care programs
- Collaborate with Watsonville Center to implement MA Program courses in Watsonville
- Research, design and implement an expanded on-site health clinic using student interns for support staff while collaborating with Health Services
- Collaborate with Contract Education Department
- Develop an effective orientation process for students
- Provide continued staff training
- Support efforts to provide home access for faculty to expanded campus network
- Support MAP changes with an increased MAP base budget.

MESA

MESA’s most pressing need is more space. Current facilities are in an excellent location because of close proximity to the MSE Division and MSE faculty offices and classrooms but the study center will only accommodate twenty students and is cramped at theater number. There are often students who are turned away at our busy times because of lack of space and who, consequently, participate less fully in MESA than they would otherwise. Our overcrowded conditions at times makes for noise levels which are not conducive to study and which affect neighboring offices. Furthermore, we are expecting to have to convert some more of our study space to computer space soon when we receive computer equipment from MESA state offices.
Currently, we have to schedule MESA student meetings in adjoining classrooms to have enough room and compete with class scheduling for that. The same is true for the sections for academic excellence, four of which are to be held twice weekly throughout the semester. We would like to be able to use the study center to present a film/video series, a regular colloquium and special workshops but for this we need about four times the space we have now.

**Microcomputer Management**

The objectives of the Microcomputer Management program are focused on improving the quality of instruction. Over the next several years we plan to shift all of our classes to performance based assessment. We believe this will result in higher standards for student performance and more careful attention to student's success and the classroom practices which contribute to that success. We recognize that adjunct faculty comprise a larger proportion of our faculty than elsewhere on campus and that we must make extra efforts to support their work and improve communication and coordination between us all.

We believe our success as a department should be measured in the numbers of students that complete courses with the ability to perform at the required level of competency. To help us maintain our focus on that end, we propose to set up reporting mechanisms that help us track our performance over time. We also will propose that the College experiment with the notion of allocating resources to us on that basis rather than on the basis of opening census.

Maintaining access to current computer technology is essential for the success of our students. Maintaining our knowledge of developments in the field is essential to our ability to serve our students. Both of these require an on-going investment by the College. We will urge the College to make such commitments a regular part of the budget.

**Music**

The Cabrillo College Music Department support the College mission in many ways with its student-centered teaching and its contributions to the community. Many students experience their first music course here and go on to become majors or minors. Students enroll in our classes with the expectation for participation in outstanding choral and instrumental groups who have represented Cabrillo College throughout the county, state and internationally. Enrollment in music classes has grown significantly in spite of major reductions in units, staffing and budgets. To maintain a strong, viable and balance music program:

- The program needs to hire a full time contract band/winds instructor which will complete a comprehensive education program in each of the major areas: Winds, Strings, Piano, Vocal, Jazz; Theory and Appreciation.
- The program needs adequate staff support (Professional Services, Accompanists, lab Teaching Assistants, Students Assistants) and equipment and supply budgets.
- The program needs a dedicated Music facility. As the plans for the Music facility drawn in 1978 addressed and the Rao report affirmed, we need larger, dedicated rehearsal halls, additional performing spaces, storage, library space, practice rooms and improved sound proofing. For example, there are 6 practice room for 260 plus students per
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semester. Vibes/marimbas students must practice outside in the hallway where the instruments are stored. All brass, wind, and percussion instruments are stored in lockers inside Room 205 and are inaccessible to students during class hours. The instrumental and choral libraries are at full capacity. A new music facility would also lessen the impact of Music courses on the Forum. An alternative solution to the problem could be accomplished with a centralized Performing Arts Facility which would house music theater and dance.

d. The program needs to improve the Music Technology component of the music program. Students in Music Technology, piano, and theory courses utilize computer programs, equipment and instruments on a daily basis. Currently, there is no dedicated budget for maintaining, upgrading, repairing or replacing equipment. Student success in this area cannot happen without this need support in equipment, supplies and staffing.
e. The program needs to offer courses that will serve student needs and act as feeder programs.
f. The program needs a classified position to oversee choral and instrumental libraries, instruments and equipment.
g. The program needs to replace practice pianos which are beyond turning or repair.
h. The program needs to support our choral program in its outreach efforts which represent Cabrillo College with the purchase of choral uniforms.

In order to succeed as educators, we must enable students to begin their music education and provide comprehensive instruction and support to help them prepare and improve in order to transfer to a four-year school. At the same time, Performing Arts is a vital part of the general student’s education and reaches out to our community. We must continue to provide opportunities for our students and the public to participate in the love for making and listening to music and to experience the aesthetic importance of music in our culture and in the world at large.

Nursing

To meet the challenges in today’s health care environment, the nursing department must revise the existing Associate Degree Nursing (AND) and Vocational Nursing (VN) programs to meet the changes in practice settings, technologies and changes in the health care work force and plans to implement new programs based on needs of the community and state.

Occupational Education

Lifelong learning, the heart of the mission of Cabrillo College, rests in the school to community connection. Providing educated and adept employees for our economy depends on an effective and responsible network of business, education and students. The expectations of the returning student, either or job retraining or job upgrading, require that occupational education and contract education collaborate closely with the needs of the business community.

Therefore, this master plan specifies the following areas as most vital:
1. Specific occupational education curriculum matching the needs of employers.
2. Integrated use of technology.
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3. Information and communication between Cabrillo and regional businesses.
4. Collaboration and coordination between occupational and academic programs.

Office Systems

During the next five years, the Office Systems (OS) program will complete these objectives:

- Align program curriculum with job market demands and provide relevant student training that includes model office practicum, on-campus internships and off-campus work experience for all program tracks.
- Acquire Room 515 as a technology classroom; augment lab and classroom equipment and software to support teaching/learning of current business applications software, multiple platforms, multimedia, electronic communications and color output in an office environment.
- Develop model office curricula for all program tracks and ultimately operate a fee supported secretarial service for on-campus clientele.
- Develop assessment curriculum that measures student competencies and defines student placement within the OS program.
- Strengthen articulation with ACHIEVE, the counseling department and area high schools to facilitate student matriculation, increase student program completions, recruit OS students and provide advanced placement opportunities.

Philosophy

The objectives listed in the Unit Planning Guide are listed in order of priority. The most important result of the master planning process, as far as the philosophy department is concerned, would be that our students would benefit from a more varied and effect set of teaching strategies and tools. In order for this to happen, we need differently configured classroom than the tiered auditoriums in which the department classes are usually placed and we need access to computers for our students. If we were to employ multimedia presentation, we would need the requisite equipment for that purpose.

Photography

With the new photography lab facility and new equipment, expansion of the program in faculty, support staffing, curricula, number of course offerings can be realized. No-lab classroom for photography will continue to be limited and difficult to schedule. There is a high need for a full-time, contract instructor in Photography. With the increase in the number of stations per class from 15 to 24c, and by increasing the number of sections in AP 9A--Photography, AP 42--Intermediate Photography and the first offering of AP 46 Electronic Digital Photography. The high demand by students for photography courses will be accommodated. An increase in support staffing for the electronic photography lab will be needed to assist students who will need open lab time to complete their assignments. Expanded curricula, to provide students with a more complete education in art photography, includes an incremental plan to propose courses in color photography, studio lighting and larger format photography.
Physical Education and Recreation

The following is a summary that highlights our most vital, future oriented objectives that we would like to see happen as a result of our Master Planning process.

The most vital, future-oriented objectives we would like to see happen as a result of the Master planning process would be the renovation of the existing weight room facility (to include new equipment and an expansion of floor space), the establishment of a fitness assessment lab facility, a super-circuit fitness program in conjunction with the fitness facility and the introduction of technological literacy into current curriculum.

The future success of a physical education program will depend on its ability to implement new assessments techniques, educate its clientele on the values of fitness in relation to wellness and provide opportunities to meet exercise needs. Meeting the recommendations of the combined committees of the Center for Disease Control, Sports Medicine Academy and the President's Council on Physical Fitness regarding life-long physical activity, daily exercise requirements and the delivery of comprehensive health programs must be the goal of the Physical Education program at Cabrillo College.

HPERD Equipment Room

Upgrading the technological resources in the equipment room will increase efficiency, accuracy and inventory control. In-service training to allow staff to maximize use of this computer technology is essential.

Increase services to students and staff with the reinstatement of the towel service and increased temporary hourly support.

New storage lockers for the Men's and Women's locker rooms is essential for safety and access reasons.

Physics

a. Better serve our students by offering our full program, adding evening sections, coordinating with other disciplines and exploring alternative course structures.

b. Remodel our lab and lecture facilities for improved delivery of instruction. This should incorporate plans for the open access physics learning center below.

c. Establish an open access physics learning and technology center in conjunction with math, engineering and possibly chemistry and biology.

d. Enhance our computer and video learning resources, including high bandwidth LAN and internet connectivity and purchase or repair other needed lab and demonstration equipment.

Radiologic Technology

The Radiologic Technology Department needs space and funding to install a working laboratory with 3 non-energized, radiographic work stations and one energized fluoroscopic/general radiographic work station. The department needs classroom and
laboratory equipment capable of utilizing CD-ROM with access to the Internet and the World Wide Webb. Also, the department would like to offer various courses in special modality preparation for graduate/practicing technologists to obtain further licensure, certification and/or permit to achieve multi-competency.

**Political Science**

a. The established offerings in Political Science should be maintained.

b. Renewed attention needs to be paid to those course offerings which have become moribund, with an eye toward increasing offerings which address the growing diversity of California residents.

c. Increased discussion is necessary to introduce students to interdisciplinary transfer programs.

d. Increased use of information technology is necessary to make students aware of the wealth of political information available to those who know how to access such technologies.

**Psychology**

1. We need to emphasize active learning and critical thinking in our General Psychology. For most students and teachers this means more reading, writing and individual attention, which means classes of 35, not the 125 that has been the norm. Some students and a few teachers might be able to achieve success in a large class format if they have ready access to computer based multisensory technology and staff development in the effective use of it. This, along with high quality interactive computer simulations of psychological concepts for use outside of class might allow these students to develop critical thinking skills by the active manipulation of simulations that demonstrate these concepts.

2. We must offer Research Methods more often. The largest major at UCSC is Psychology, it is the third largest major we transfer there and “Methods” is required for transfer.

3. We should broaden our course offerings in line with the trends in psychology today.

**Reading**

The first future oriented goal of the Reading Department is simply to accommodate the needs of its students. The necessity of offering enough basic skill reading classes to meet the increase in basic skill students due to assessment must not compromise or cut into those classes currently offered to our advanced students; therefore, the Reading Department will probably have to offer additional classes at both Aptos and the Watsonville Center.

Since the Reading Department reaches across disciplines, our strongest desire is to continue to meet the changing needs of an ever-changing student population in this high tech world. We wish to provide our students with the most up-to-date selection of books, dictionaries and conventional learning materials; computer software which complement our program yet plays over into other disciplines; and various types of instructional media to accommodate the diversity of learning styles so prevalent in our reading program.
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The final area is to explore a viable, interdisciplinary block comprised of various departments and support groups to increase retention in the area of basic skill students.

Real Estate
1st priority: Continue offering the Principles course as it serves both the licensing needs and needs of the general population for personal knowledge. Offer other courses as the market and program interest grow.

2nd priority: Research competing organizations’ offerings and the State Board curriculum for insight into possible adjustments to our curriculum to make it competitive in terms of speed of completion, ease of study, and method of delivery.

3rd priority: Redesign curriculum; create course materials if necessary (video delivery, correspondence or self-paced manuals and materials, etc.)

4th priority: Establish off-campus locations and finalize collaborative strategies with other colleges.

Small Business Development Center
In spite of serious facility problems, budgetary restraints and a small staff, the Central Coast Small Business Development Center has annually increased its level of service to the small business community of Santa Cruz and Monterey counties and consistently exceeded all contract milestones. It is anticipated that demand will increase. In order to conserve resources, counseling will be geared towards establishing businesses, not start-up ventures. Many start-ups never come to fruition and use up valuable counseling dollars. These will be referred to outside resources and classes offered by the Small Business Training Program and Community Education.

Bi-monthly workshops in business plan development and monthly workshops in marketing plans will be offered to provide “group” counseling. One-on-one counseling will be reserved for existing and viable start-ups.

Outside resources will be utilized for marketing the SBDC so as to not incur costs to the SBDC’s budget. Community TV, radio and other media will be sought after to become marketing partners and provide in-kind advertising to the SBDC. Chambers of Commerce newsletters and trade fairs will also assist use in performing vital outreach services.

Small Business Training Program
Overall, the program by its nature is constantly changing and evolving to meet short-term community needs. It also requires a great deal of attention and planning, curriculum development, research, telephone/clerical/student counseling effort, labor hours and promotional support to function effectively and efficiently. This document is written to achieve this mission and focuses on the following priorities:

1st priority: Implement a tutoring/mentoring curriculum that will produce a usable business plan and prepare students for interaction with the Small Business Development Center.

2nd priority: Review and improve the current set of short class offerings.
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3rd priority: Increase community awareness of the Program.
4th priority: Attract and keep qualified outstanding instructors/find and hire instructors in a timely manner.
5th priority: Increase interaction, coordination and collaboration with the Small Business Development Center.

Sociology
1. Develop the video tape library and budget for guest speakers referenced in the UPG and the laser disc players.
2. Acquire the dedicated classroom space discussed in the UPG.
3. Find a location for student use of computers.
5. Create a 60-80% contract position.

Speech
The Speech Communications Department needs to combine new technology including computers, state-of-the-art audio-visual equipment and camcorders with a humanistic, cooperative learning environment in our classrooms. There, our most vital, future-oriented objectives are as follows:
1. Replace obsolete equipment with large screen televisions and modern VCR’s.
2. Acquire a permanent space for our Speech Communication Lab and expand services.
3. Upgrade faculty computers and provide internet access for faculty research in curriculum development.
4. Develop interdisciplinary links throughout the Cabrillo campus and at CSUMB.
5. Sound proof and carpet Speech rooms.

Expanding and developing cooperative learning techniques and the intercultural communications curriculum is an on-going process.

Staff Development
1. Be sure the goals of the Cabrillo College Master Plan are incorporated into the Human Resources Development Plan. Especially goal number six which addresses strengthening technology in the classroom and throughout the College by providing training to administration, faculty and staff.
2. The first task of each year for the Staff Development Committee should be reviewing the Human Resources Development Plan to determine if it still reflects the goals and objectives of the Cabrillo College Master Plan.
3. Meet with the College President, Vice-President, Personnel Director, Faculty Senate, Student Senate, affirmative Action officer and Division Chair Council to receive fresh input for the updated Human Resources Development Plan.

Stroke Center
The Stroke Center needs to formalize and strengthen its contribution to both the transfer and occupational education components of Cabrillo’s revised mission statement. The
Stroke Center is uniquely positioned to provide leading edge knowledge and experience regarding curriculum and program development for Cabrillo’s goal of responding to the community’s present and future needs with respect to the provision of health care and the demands of an aging society. In addition, the Stroke Center can provide a new dimension of accessibility through the establishment of a distance learning component bringing therapy to serve confined individuals through television, multimedia and the World Wide Web.

**Teaching and Learning Center**

The forces of dynamic societal change fueled by rapidly advancing technology are challenging all educational institutions. Preparing students to creatively respond to rapid changes in the environment require sophisticated strategies for learning involving communication and collaboration with individuals, groups and communities—both real and virtual. This will require developing competencies in computing, information retrieval, electronic publishing, critical thinking problem solving, communicating in written and oral forms as well as understanding and appreciating diverse cultures. The edges of the classroom and the College will become more transparent and boundless. The success of the teaching and Learning Center will depend on:

- involvement by the faculty and staff in Teaching and Learning Center planning.
- diffusion of internet and CWIS access to desktops and classrooms throughout the campus.
- ready access to technical support.
- well-trained Teaching the Learning Center support staff.
- access to Instructional Design expertise.
- an integrated mission for Staff Development and Teaching and Learning Center activities.
- funding for equipment upgrades minimally every five years.
- funding for instructional software upgrades minimally every two years.
- collaboration with regional education institutes for sharing professional development and infrastructure resources.
- on-going CWIS development.

**Theater Arts**

The Theater Arts department is challenged by significant limitations in facilities which negatively affects the foundations of Theater Arts education for students. There is no dedicated classroom or rehearsal space or “black box” studio for performance instruction. There is no lab for lighting design or scene painting. The existing stage has no “fly” space, limiting potential scenic designs to less than a professional level. The department’s greatest need is a new facility, a performance center used in collaboration with Music and Dance.

Students in Theater Arts can attain a better education with up-to-date equipment in the scene shops, costume shop, video equipment for instruction and CAD stations with CAD site licenses for students and instructors in Theater Technology.
The effectiveness and reliability of the Theater Arts program would increase significantly with classified support position (50% contract) for a Costume Coordinator; and a classified support position (50% contract) for a Productions Manager/Publicist whose duties could be shared with the Music and Dance departments.

**Theater Management**

While quantity and quality of events and resultant income to the College and its programs are valued, foremost on our minds is to foster an environment that is responsive to student needs, nurtures creativity and is conducive to learning.

1. We would like to see the stage used as a performance space and removed from use as a classroom. We envision a new Performing Arts Center that would include a Performance Gallery/Black Box Studio Theater to give students an appropriate, flexible learning environment. Additionally such a center will be capable of generating income in support of instruction.

2. To deal with current facility needs, we believe acoustic insulation between music classrooms and the theater is vital to making both of them more available for effective student learning.

3. We would like to see funding for current needs in theater maintenance and renovation.

4. We envision additional storage space to house the equipment currently being stored outside where it is subject to theft and vandalism.

5. We want to provide the campus with quality front and rear screen projection capabilities.

**Tutorials**

The most vital change in the future for Tutorials is to open it up to the student population with the stipulation that math and English will be open through our program for the externally funded students and to be able to extend the hours to the evening students. This can only be done by receiving more funding externally and having a guaranteed internal funding base. The LLA position will need to be fully funded as a 9 month full-time position. The Program Assistant position will also need to be funded fully by the District as will the operating costs of the program. Extra moneys will be needed to enhance tutorial support for the student population.

**Women's Studies**

There are four areas which the Women's Studies department will concentrate on during the next five years. The first is leadership, the second is transfer curriculum development, the third is a need to focus on classes for those students who will not be transferring to other colleges and universities and the last is the need to provide more support for staff development.

**Writing Center**

As the student population becomes increasingly less college prepared, the Writing Center will need to be able to take an expanded role in helping them to succeed. And, as more and more students whose first language is not English enroll, we will need to give them the additional support they will require. Technology offers teaching potential that cannot be
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ignored and the Writing Center needs to supplement its offerings with well chosen software and provide a place for students to work on writing assignments on computers with tutor assistance readily available. The Writing Center needs to make their services more visible to the College at large. To accomplish these goals, the program needs to implement its objective as defined in the Unit Planning Guide.

Watsonville Center-Main Office

The Watsonville Center office staff has remained at status quo since the center opened in the fall of 1987 with 450 students, 25 courses and 28 faculty members in a facility with one office and three classrooms. The enrollment at the center is now 1,183 students with 60 courses offered and 43 faculty members. The center is housed in a two-story building that includes seven classrooms, six offices in addition to the main one and facilities that serve five student service function as well as community resources. As well as increased registration and financial aid responsibilities, increased activities includes year-around assessment testing, weekend classes, the use of rooms by other agencies, circulating telecourse materials and being vigilant about mechanical problems in the building (elevator, plumbing, doors and windows) as well as instructional equipment, copy machines and vending machines.

With the help of part-time, hourly personnel and the automated telephone system, the staff has absorbed as much of an increased workload as possible without serious detriment to student, community and faculty service. In fact, much of the internal support the office was able to provide has diminished because of other demands. The recommendations under staffing should be examined closely in order to fulfill department objectives.

The Watsonville Center main office must promote efficiency and effectiveness, yet address the human needs of staff and students. This can be accomplished with up-to-date office, communication and instructional technology; staff and faculty development and sufficient staff to support the increasing responsibility of the Division office.

Campus Wide Information System (CWIS)

The forces of dynamic societal change fueled by rapidly advancing technology are challenging all educational institutions. Preparing students to creatively respond to rapid changes in the environment require sophisticated strategies for learning involving communication and collaboration with individuals, groups and communities—both real and virtual. This will require developing competencies in computing, information retrieval, electronic publishing, critical thinking, problem solving, communicating in written and oral forms as well as understanding and appreciating diverse cultures. The edges of the classroom and the College will become more transparent and boundless. While the CWIS will provide effective communication with students and the community for the College in comparison with printed information, the greatest benefit will be with teaching and learning applications. The successful implementation of the CWIS will depend on:

- involvement by the faculty and staff in the planning and implementation of the CWIS.
- diffusion of Internet and CWIS access to desktops and classroom throughout the campus.
Background Research and Data Collection

- familiarization of CWIS benefits throughout the campus and community.
- on-going training for "home page" construction, implementation and management.
- regularly scheduled upgrades of the campus information infrastructure and instructional technology resources.

Using "the net" has a very leveling influence and the WWW is so new there are few true experts. This brings teachers and students and teachers together as "co-discovers" and "co-learners" and provides a platform for students to make significant community contributions rather than performing empty academic exercises. Examples abound locally and globally regarding cross institutional collaborations regarding "real life" learning mediated through the internet. Examples such as student conceived experiments on the Hubble Space Telescope to San Lorenzo High Schools students reporting results of San Lorenzo water quality experiments illustrate some of the empowering influences of internet mediated communication--none the least of which is access to global resources previously unavailable.

Needless to say, opportunities abound for Cabrillo faculty and students to participate in meaningful learning greatly augmented by the integration of technology. Cabrillo's endorsement and support of a Campus Wide Information System for both community and instructional uses is an important moment in the evolving history and culture of the College.

Organization of Instructional Services

The College has organized its academic or instructional programs into nine divisions. The Divisional structure is as follows:

Biology, Environment, Chemistry, and Health Occupations Division

The Biology, Environment, Chemistry, and Health Occupations (BECHO) Division includes the following disciplines:

- biology
- chemistry
- dental education
- horticulture
- nursing education
- construction energy management technology.

Business and Computer Science Division

The Business and Computer Science Division (BCS) includes the following disciplines:

- accounting
- business
- real estate
- medical assistant
Background Research and Data Collection

- banking and finance
- computer science
- microcomputer management
- office systems
- multi-media
- digital publishing

**English Division**
The English Division includes the following disciplines:
- English
- English as a Second Language
- Reading Center
- Journalism
- Writing Center.

**Foreign Languages and Communications Division**
The Foreign Languages and Communications Division (FLAC) includes the following disciplines:
- administration of justice
- bilingual/bicultural studies
- fire protection technology
- foreign languages
- hazardous materials technology
- learning skills
- sign language studies
- speech
- speech improvement.

**Health, Physical Education, and Recreation Division**
The Health, Physical Education, and Recreation Division (HPER) includes the following disciplines:
- athletics
- health science
- physical education
- recreation
- dance.

**Human Arts and Services Division**
The Human Arts and Services Division (HAS) includes the following disciplines:
- applied living arts
- women's studies
- early childhood education
Background Research and Data Collection

- children's center
- culinary arts and hospitality management.
- stroke center

Math, Science and Engineering Division
The Math, Science and Engineering Division includes the following instructional disciplines:
- astronomy
- drafting technology
- engineering
- mathematics
- physics
- aeronautics
- welding
- geology/oceanography

Visual and Performing Arts Division
The Visual and Performing Arts Division (VAPA) includes the following instructional disciplines:
- Art
- Art History
- Music
- Theater Arts
- Photography

Social Sciences Division
The Social Sciences Division (SS) includes the following instructional disciplines:
- anthropology
- archaeological technology
- economics
- geography
- history
- meteorology
- philosophy
- political science
- psychology
- sociology

Organization of Student Services
When the College campus opened in the early 1960s, the majority of facilities for student support services were designed and built to accommodate 5,000 students. Unfortunately, the campus has nearly tripled in student enrollment with only minimal adjustments in the square footage allocated for student services.
This past year, the Associated Students passed the Student Center Fee which allows for the assessment of a fee to cover the cost of construction of a new student center. In addition, nearly every office within students services has proposed facility modifications or reallocations. Meetings with the students, faculty and staff brought to light the following concerns:

- student services are scattered about the campus
- the present student center is unattractive and non-functional
- the bookstore is too small and poorly located
- the financial aid office is overcrowded
- the counseling area is overcrowded and unattractive
- the admission, records registration area is crowded, with out-of-date equipment
- health services is located in a converted hallway
- career planning, job placement and the transfer center are not close to counseling
- there is a lack of space for meetings and activities

Significant needs exist in the student services areas which must be carefully addressed in this plan. At present, student services are fragmented and scattered in several places on the campus. This dispersion has resulted from an evolution of decisions prompted by the need for expedient solutions to various crises. Consequently, student services development has not benefited from a single, coherent strategy and design. It has been pointed out in accreditation reports and is generally accepted that students are not served adequately or efficiently by such a decentralized services delivery system. In an open forum on campus, students cited scattered student services as being among the greatest weaknesses. In addition to the adverse effects of these conditions on student services, certificated/classified/administration staff coordination and cooperation suffer. This problem was identified in the 1980's and has still not been adequately addressed.

Student services include a wide range of activities with independent identity, staff and organization including:

- Admissions and Records
- Health Services
- Counseling Services
- Financial Aid
- Women's Center
- Veterans/Scholarship Services
- Student Activities/Associated Students
- Extended Opportunity Programs and Services
- Disabled Student Services
- Learning Resources

The following observations and objectives for each of these areas are presented within the context of a major overall objective to centralize all student service functions in one area on the campus. This physical consolidation of services will provide better services, easier access
Background Research and Data Collection

for students and better coordination within student services as well as with other administrative areas of the College.

Student Activities/Associated Students

As indicated earlier, the Associated Students approved a Student Center Fee this past year to raise funds for the construction of additional space for student activities. In meetings with the student leadership and their advisors, a commitment has been made to include their needs in the proposed Student Success Center. As part of these discussions, it has been estimated that approximately 10,000 square feet of space is needed for the Associated Students and their activities.

Also, as part of the discussions, the need for the implementation of a College Hour program on the campus was discussed. This concept, where one hour per week is set aside for College-wide activities, has merit and should be carefully considered by all segments of the college community.

Admissions and Records

An overall assessment of this area's space would indicate that it needs to be totally revamped. The work space for staff is very cramped and maximum use has been made of the current space. The present office and registration space is totally inadequate to serve large numbers of students and increasing office functions. Because of remodeling, the space currently available for these functions is less than what was available when the College had a much lower enrollment. During registration, lines are extremely long, processes seemed chaotic and frustrating to students.

As part of the master planning process, the staff in Admissions and Records have developed specific goals that address the office's needs for additional space, improved technology and appropriate levels of staffing. Achieving these goals will enable the staff to provide improved service to students, faculty, other staff and the community.

A major goal is the implementation of the telephone registration system projected for the summer of 1998. This long-term goal will require a major conversion of the current College Information System. The College staff is currently evaluating this information system requirement with the anticipated outcome of providing the College with a comprehensive, integrated information system. The vast majority of changes proposed in the Office of Admissions and Records will be dependent on the installation of this information system.

Health Services

Goals of Health Services focus on increasing the functional capacity of Health Services to adequately and efficiently address current and future college community health demands.

This includes expanding services to meet growing student population needs and the needs of students in off-campus service areas such as the new Watsonville Center. One important aspect
of meeting this goal is to continue to develop an association with off-campus health agencies in
order to broaden the scope and accessibility of services available to students. Another related
goal is to expand public information programs on health issues such as AIDS, Drugs on
Campus, etc.

The achievement of these goals may have significant facilities implications. Currently, it
is thought that the approximately 700 ASF facility is inadequate. It does not provide adequate
privacy, noise management or access for disabled students. In addition, computer support for
record-keeping and creation of publications is insufficient to meet program needs.

Counseling Services
As indicated in the introductory comments, the current counseling space is inadequate.
A few short-term modifications can be made but the viable, long-term solution is to consolidate
counseling services along with other student services in one overall facility. In the interim, the
Counseling program will continue to provide services to students in accordance with the
following goals:

- to improve career planning and job placement center services through automation
  enhancements;
- to develop, working closely with instruction, a central theme and program strategy for
counseling services delivery;
- to expand counseling services for the center in Watsonville;
- to continue to support specialized student programs such as Matriculation, Articulation
  and Project ASSIST; and
- to assist in the development of short-term and long-term facility planning and
  implementation for counseling services.

Financial Aid
A major goal of Financial Aid is to improve communication with instructional leadership
and staff. The function of financial aid would become an integral part of a comprehensive
student services facility.

Re-Entry/Women’s Center
This is a center which should also be included in the design of the comprehensive
student services facility.

Veterans/Scholarship Services
Veteran's and scholarship services should also be included in the consolidation of
student services.

Extended Opportunity Programs and Services (EOPS)
The EOPS program is another student service which must be integrated into the
proposed comprehensive facility. It should be located in close proximity to counseling and
financial aid.
Background Research and Data Collection

**Learning Resource Center**

With the opening of the new Learning Resource Center this year, the long-term facility requirements will have been met. Within this new facility the expressed goals of the LRC staff will be:

- to expand opportunities for student access to computers for no-class assigned work such as word processing;
- to improve college television production capability; and
- to expand and coordinate tutorial services and, where possible, centralize the location of tutorial services.

**The Establishment of the Watsonville Center**

The Education Center in Watsonville received official approval in June, 1997. Currently, the college staff is working with the City and the architect to design the new facility. Preliminary facility plans have been established and discussions with staff have begun in terms of instructional programs and support services which will be offered at the new, expanded center. It is anticipated this center will be available sometime during the 1998-99 academic year.

In planning for the Education Center in Watsonville, the College established the following planning assumptions:

- Cabrillo College can expect continued enrollment growth.
- Cabrillo College must prepare to increase facilities support services and the number of course offerings in Watsonville.
- Cabrillo College will serve a student body characterized by increasing cultural diversity and a growing percentage of non-native English speakers. These students will increase further the demand of basic skills and ESL courses as well as academic support systems which address their special needs.
- Cabrillo College will continue to service the community by preparing residents to work in new jobs created in the service and retail trade industries.
- Adults whose skill levels are below college entry level will be facing unemployment or underemployment and thus will be in need of extensive retraining.
- Cabrillo College will be required to shift the emphasis of many occupational programs toward basic and transferable skill, curriculum breadth, and retraining.
- Cabrillo College must develop new approaches/strategies using new technologies and staff development in order to maintain a high quality academic and vocational curricula while also making this curriculum accessible to under-prepared students.
- Cabrillo College must continue to modify its courses and services that are now primarily geared to full-time, on-campus students.

As the center evolves from its present enrollment to a projected enrollment of nearly 3,000 students by the year 2006, it is anticipated this center will:

- provide transfer and general education curricula
Background Research and Data Collection

- provide developmental education
- provide local career-specific training
- provide service and retail training
- provide high tech training
- provide training in English as a second language;
- provide some level of comprehensiveness in offerings to encourage students to explore a wide range of educational opportunities.

Preliminary planning discussions with College staff indicate that a number of programmatic decisions have been made which will impact the design of instructional and support service space and the staffing which will need to be implemented. These decisions include:

- emphasis on instruction involving use of computers and other technology;
- responsive, welcoming reception space as well as adequate "intake" space for prospective or new students;
- inclusion of tutoring programs to support students in need of individualized instruction;
- spaces for students to study and "live" during operating hours (lounge);
- assembly-type classroom space to accommodate large classes;
- adequate range of student services, including:
  - EOPS
  - Financial Aid
  - Women's re-entry
career and guidance counseling
  - program advising
  - transfer facilitation
  - health services
  - child care services

Instructional Offerings Planned for the Watsonville Center

General Business (including accounting)
Real Estate
Computer Science - lecture and laboratory
Office Systems - lecture and laboratory
Biology - lecture and laboratory
Mathematics (range of courses)
Music Appreciation
Introduction to Acting
Appreciation of Theater Arts
Sociology
History
Psychology
Anthropology
Economics
Political Science
Background Research and Data Collection

Studio Art
Art History
English (range of courses)
Foreign Language and Communication (range of courses)
Physical Education (limited)
Counseling and Guidance
Fire Protection Technology
Geography/Meteorology
Hazardous Materials Technology
Engineering/Drafting
Women's Studies
Medical Assisting
Criminal Justice
Early Childhood Education

Comments: Instruction will involve the use of a variety of instructional aids and materials implying a need for storage space. Also, provision for student support services including a bookstore, a media-intensive language laboratory and a computer laboratory are also planned. In terms of facilities, the following types of spaces are planned for the Watsonville Education Center:

- classroom
- laboratory
- non-class laboratory
- office
- library
- instructional media
- assembly
- bookstore
- physical plant.

In addition, parking and limited outdoor physical education space will need to be provided.

Business Services

Business Services includes Fiscal Services, Computer Services, Personnel and Human Resources, Health, Safety and Protective Services, Bookstore, and Maintenance and Operations. Business Services programs have established a set of goals which fully support those of the District.

Most of the goals for Business Services focus on enhancing support to instruction/student services and do not have specific facilities implications. However, one major long term goal of Business Services does hold facilities implications. As the Cabrillo Community College District grows, it will need to separate and build on the budget.
Background Research and Data Collection

development component and the accounting/controller component. This will undoubtedly require increased space for each function.

In addition to operational goals, several issues were raised by staff in individual and group discussion sessions which have significant facilities implications and require attention in the master plan. These include:

- Increase and improve office space for most Business Services operations. The "bull pen" working environment for fiscal and personnel services is not conducive to effective or efficient operations. Crowded conditions do not provide the level of privacy required to handle sensitive discussions/confidential transactions.

- Correct deficiencies in existing utilities and HVAC systems to provide adequate power and other utilities to support instruction and improve room use flexibility. Currently, space in some buildings, e.g. Building 400, is designed in such a way that temperature cannot be controlled from room to room. Space modifications in other buildings, such as Administration, have resulted in space heaters being used in the winter months. Existing systems are often inadequate to handle loads required to support this extra power drain.

- Based on generally accepted standards for bookstore space, Cabrillo's current 3,000 square foot facility is much smaller than that which is needed. Thus, the significant revenue stream potential of a full-sized retail operation is limited. In addition, storage is currently limited and logistics to receive and handle large shipments is constrained by the lack of a loading dock on campus. The bookstore needs to be included in the proposed comprehensive, student services facility.

- The current number of on-campus parking spaces is 2,751. Based on state averages for community colleges the campus should presently have an additional 477 spaces and should provide an additional 1,027 spaces when it achieves an enrollment of 15,000 students. This estimate is based on gradually improving the parking ratio on the campus from its present ratio of one space for every six students to one space for every four students and also eliminating the parking on the perimeter road.
Chapter Four

A VISION FOR THE FUTURE

BACKGROUND

Like many community colleges, Cabrillo College is presently facing the challenges of keeping pace with a society that is experiencing monumental changes in the economic base, the social structure, the amount of change occurring in the information base of many fields of study, employment trends, technological advancement, the development of new non-traditional service populations, and the attitudes of the public with respect to the education process.

As an example, the traditionally strong economic foundation of California has been severely damaged by recession, cut-backs in the defense/aerospace and high tech industries, plant closures, industry re-locations, and natural disasters such as fires, water damage, and earthquakes.

In addition to the impacts of these factors, the accompanying reductions in the workforce have presented the compound problem of simultaneous reductions in tax revenues and increases in welfare and unemployment benefits. All of these factors have reduced the present and long-range ability of the State to support higher education. These reductions have hampered community colleges in their efforts to function as an economic generator for the State and the resultant negative spiral of declining State ability to support education has produced a reduced ability of these institutions to aid in the generation of new economic power within the State. The over-all impact of this situation has produced a maelstrom of economic decline within the State.

All these factors have presented themselves at a time when community colleges are in need of funds to support both the needs for replacement of equipment and the need to continually purchase equipment that will permit them to maintain state-of-the-art programs. With new technology also comes the need to retrain staff in new technologies and new methods of instructional delivery that will ultimately save the college money. New technology also underlines the need to hire specialists to teach new programs, and develop new means of instructional delivery. This new technology will also facilitate the extension of existing courses, programs, and services in other locations within the College’s service area.

This situation has presented a series of challenges to the College faculty and staff to both seek new ways of improving service to the residents served by the College, and assuring the continuing growth of the College and the District.

COLLEGE AND DISTRICT ORGANIZATION

The Cabrillo Community College District will be a single college district with educational centers strategically placed at population centers throughout the District. The first of these centers is at Watsonville with the potential need in the future of an additional center in the Northern portion of the District. Over the next 10-15 years it is not anticipated that the
Watsonville Center or any other center in the District will evolve to a point of being considered a campus.

In establishing off-campus education centers, the College should pursue locations which lend themselves to either a public/private partnership, public/public partnership or a location from which contract education is a viable option. Other than Watsonville, these locations are not "official" education centers but rather locations where the College is creatively responding to the needs of private and public clients within its service area. Through the use of technology, as well as on-site instruction, these programs and facilities can be operated on a cost-effective basis and are a natural extension of the College into the community.

PROJECTIONS

Population

As indicated earlier, the best estimate of future population growth for the College service area is an analysis of the population within a 5 and 10 mile radius of a campus or center. The population growth in these two rings surround the Aptos campus is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Mile</td>
<td>84,794</td>
<td>90,664</td>
<td>5,870</td>
</tr>
<tr>
<td>10 Mile</td>
<td>181,381</td>
<td>189,750</td>
<td>8,369</td>
</tr>
</tbody>
</table>

This growth pattern indicates that the College should grow by approximately 0.63% each year. This projection is slightly less than the growth projection provided by the California Community College Chancellor's Office and the State Department of Finance, Demographic Unit which estimates an annual growth over the next ten years of between 1%-2%.

Enrollment Projection

As outlined in Chapter 3 and in the previous section, Cabrillo College is in a unique position in terms of student enrollment due to its attractiveness as a transfer institution. As such, it attracts students from a larger than normal geographical area. This factor impacts the overall educational master planning for the District. However, this factor is off-set by the very conservative growth rate of the County.

In terms of long-term planning, any significant growth experienced by the College will be in the Southern portion of the District, specifically in the Watsonville area.
A Vision for the Future

By the year 2010, Cabrillo College has the potential to reach a maximum enrollment of 17,500 students. When this occurs, the District should plan for an enrollment of 14,000 students on the Aptos campus, 3,000 students at Watsonville and 500 at other satellite education centers throughout the District.

Assuming the Educational Master Plan is utilized as the basis for future planning and also funding, the College should anticipate the following growth in student enrollment:

<table>
<thead>
<tr>
<th>Year</th>
<th>Campus</th>
<th>Watsonville</th>
<th>Satellites</th>
<th>Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>12,300</td>
<td>800</td>
<td>100</td>
<td>13,200</td>
</tr>
<tr>
<td>2001</td>
<td>12,500</td>
<td>1,800</td>
<td>200</td>
<td>14,500</td>
</tr>
<tr>
<td>2006</td>
<td>13,100</td>
<td>2,500</td>
<td>300</td>
<td>15,900</td>
</tr>
<tr>
<td>2010</td>
<td>14,000</td>
<td>3,000</td>
<td>500</td>
<td>17,500</td>
</tr>
</tbody>
</table>

Curricular Offerings of the College

In an effort to assist the College in the development of a comprehensive, balanced curriculum, the consultants have reviewed and quantified the instructional offering of the College. The instructional programs have been grouped in general categories for scheduling and for facility planning purposes. This grouping does not correspond to the administrative structure of the College. It is for capital construction purposes only!

In developing the model, information was obtained from the College regarding the course offerings for Fall semester, 1996 and Spring semester, 1997. In addition, the WSCH and FTE data for each Division for Fall, 1995 and Fall, 1996 was reviewed. With this information as a basis, the number of sections of class recommended have been developed using guidelines and standards prevalent in California community colleges. If the guidelines are followed, the College will have an efficient, cost-effective, balanced schedule which will meet the needs of area residents.

The initial data obtained from the College and the projection for the next ten years is outlined in the exhibits which follow:
# A Vision for the Future

## Exhibit 4-2

**Cabrillo College**

**Summary of Instructional Disciplines and TOPS Codes**

*By Program for Facility Planning Purposes*

<table>
<thead>
<tr>
<th>Instructional Discipline</th>
<th>TOPS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>0500</td>
</tr>
<tr>
<td>Aeronautics</td>
<td>0900</td>
</tr>
<tr>
<td>Anthropology</td>
<td>2200</td>
</tr>
<tr>
<td>Applied Living Arts</td>
<td>1300</td>
</tr>
<tr>
<td>Archeological Tech.</td>
<td>2200</td>
</tr>
<tr>
<td>Art</td>
<td>1000</td>
</tr>
<tr>
<td>Astronomy</td>
<td>1900</td>
</tr>
<tr>
<td>Banking and Finance</td>
<td>0500</td>
</tr>
<tr>
<td>Bilingual/Bicultural Studies</td>
<td>2100</td>
</tr>
<tr>
<td>Biology</td>
<td>0400</td>
</tr>
<tr>
<td>Business</td>
<td>0500</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1900</td>
</tr>
<tr>
<td>Chinese</td>
<td>1100</td>
</tr>
<tr>
<td>CAOS/Office Systems</td>
<td>0500</td>
</tr>
<tr>
<td>CAOS/Computer Applications</td>
<td>0700</td>
</tr>
<tr>
<td>Computer Science</td>
<td>0700</td>
</tr>
<tr>
<td>Construction/Energy Mgt.</td>
<td>0900</td>
</tr>
<tr>
<td>Counseling/Guidance</td>
<td>4900</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>2100</td>
</tr>
<tr>
<td>Criminal Justice/Corrections</td>
<td>2100</td>
</tr>
<tr>
<td>Culinary Arts/Hospit. Mgt.</td>
<td>1300</td>
</tr>
<tr>
<td>Dance</td>
<td>1000</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>1200</td>
</tr>
<tr>
<td>Developmental Studies</td>
<td>4900</td>
</tr>
<tr>
<td>Drafting</td>
<td>0900</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>1300</td>
</tr>
<tr>
<td>Economics</td>
<td>2200</td>
</tr>
<tr>
<td>Engineering</td>
<td>0900</td>
</tr>
<tr>
<td>English As A 2nd Language</td>
<td>4900</td>
</tr>
<tr>
<td>English</td>
<td>1500</td>
</tr>
<tr>
<td>Fire Protection Technology</td>
<td>2100</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>1100</td>
</tr>
<tr>
<td>Foster Parent</td>
<td>1300</td>
</tr>
<tr>
<td>French</td>
<td>1100</td>
</tr>
<tr>
<td>Geography</td>
<td>2200</td>
</tr>
<tr>
<td>Geology</td>
<td>1900</td>
</tr>
<tr>
<td>German</td>
<td>1100</td>
</tr>
</tbody>
</table>
### Exhibit 4-2 (Continued)
### Cabrillo College
### Summary of Instructional Disciplines and TOPS Codes
### By Program for Facility Planning Purposes

<table>
<thead>
<tr>
<th>Department</th>
<th>TOPS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials Tech.</td>
<td>2100</td>
</tr>
<tr>
<td>Health Science</td>
<td>0800</td>
</tr>
<tr>
<td>History</td>
<td>2200</td>
</tr>
<tr>
<td>Horticulture</td>
<td>0100</td>
</tr>
<tr>
<td>Industrial Technology</td>
<td>0900</td>
</tr>
<tr>
<td>Italian</td>
<td>1100</td>
</tr>
<tr>
<td>Japanese</td>
<td>1100</td>
</tr>
<tr>
<td>Journalism</td>
<td>0600</td>
</tr>
<tr>
<td>Learning Skills</td>
<td>4900</td>
</tr>
<tr>
<td>Liberal Arts and Sciences</td>
<td>4900</td>
</tr>
<tr>
<td>Library</td>
<td>1600</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1700</td>
</tr>
<tr>
<td>Medical Assist.</td>
<td>0500</td>
</tr>
<tr>
<td>Microcomputer Management</td>
<td>0700</td>
</tr>
<tr>
<td>Music</td>
<td>1000</td>
</tr>
<tr>
<td>Nursing (ADN/LVN)</td>
<td>1200</td>
</tr>
<tr>
<td>Oceanography</td>
<td>0400</td>
</tr>
<tr>
<td>Philosophy</td>
<td>1500</td>
</tr>
<tr>
<td>Physical Education</td>
<td>0800</td>
</tr>
<tr>
<td>Physics</td>
<td>1900</td>
</tr>
<tr>
<td>Political Science</td>
<td>2200</td>
</tr>
<tr>
<td>Psychology</td>
<td>2000</td>
</tr>
<tr>
<td>Radiologic Tech.</td>
<td>1200</td>
</tr>
<tr>
<td>Reading</td>
<td>4900</td>
</tr>
<tr>
<td>Real Estate</td>
<td>0500</td>
</tr>
<tr>
<td>Recreation Assistant</td>
<td>2100</td>
</tr>
<tr>
<td>Russian</td>
<td>1100</td>
</tr>
<tr>
<td>Sign Language</td>
<td>1100</td>
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<tr>
<td>Social Science</td>
<td>2200</td>
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<td>Sociology</td>
<td>2200</td>
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<td>Spanish</td>
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<td>Speech Communications</td>
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<td>Theater Arts</td>
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</tr>
<tr>
<td>Women’s Studies</td>
<td>2200</td>
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</table>
A Vision for the Future

Cabrillo College

An Analysis of Weekly Student Contact Hours (WSCH) and Full-Time Faculty Equivalents (FTE)

Fall-1995 and 1996

<table>
<thead>
<tr>
<th>Division</th>
<th>Fall-1995 WSCH</th>
<th>Fall-1995 FTE</th>
<th>Fall-1995 WSCH/FTE</th>
<th>Fall-1996 WSCH</th>
<th>Fall-1996 FTE</th>
<th>Fall-1996 WSCH/FTE</th>
<th>WSCH/FTE Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCS</td>
<td>10,561</td>
<td>27.3</td>
<td>387</td>
<td>13,386</td>
<td>28.5</td>
<td>470</td>
<td>83</td>
</tr>
<tr>
<td>BECHO</td>
<td>13,208</td>
<td>33.6</td>
<td>393</td>
<td>13,440</td>
<td>232.0</td>
<td>405</td>
<td>12</td>
</tr>
<tr>
<td>C &amp; G</td>
<td>1,091</td>
<td>1.9</td>
<td>587</td>
<td>1,285</td>
<td>1.9</td>
<td>662</td>
<td>75</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>14,391</td>
<td>41.1</td>
<td>350</td>
<td>14,661</td>
<td>39.9</td>
<td>368</td>
<td>18</td>
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<tr>
<td>FLAC</td>
<td>9,287</td>
<td>22.8</td>
<td>407</td>
<td>9,846</td>
<td>24.0</td>
<td>410</td>
<td>3</td>
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<tr>
<td>HAS</td>
<td>6,200</td>
<td>18.6</td>
<td>334</td>
<td>6,420</td>
<td>219.6</td>
<td>330</td>
<td>-4</td>
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<tr>
<td>HPERD</td>
<td>9,898</td>
<td>19.6</td>
<td>504</td>
<td>10,277</td>
<td>20.2</td>
<td>507</td>
<td>3</td>
</tr>
<tr>
<td>LIBRARY</td>
<td>967</td>
<td>1.4</td>
<td>711</td>
<td>1,055</td>
<td>1.5</td>
<td>693</td>
<td>-18</td>
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<tr>
<td>MSE</td>
<td>17,585</td>
<td>33.5</td>
<td>524</td>
<td>18,777</td>
<td>34.7</td>
<td>541</td>
<td>17</td>
</tr>
<tr>
<td>SS</td>
<td>14,908</td>
<td>26.8</td>
<td>556</td>
<td>14,794</td>
<td>27.1</td>
<td>547</td>
<td>-9</td>
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<tr>
<td>VAPA</td>
<td>14,015</td>
<td>32.9</td>
<td>426</td>
<td>15,045</td>
<td>33.0</td>
<td>456</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>112,111</td>
<td>259</td>
<td>432</td>
<td>118,986</td>
<td>263.5</td>
<td>452</td>
<td>20</td>
</tr>
</tbody>
</table>
**Exhibit 4-4**

**Cabrillo College**

**An Analysis of Instructional Offerings**

*Fall-1996*

<table>
<thead>
<tr>
<th>Instructional Discipline</th>
<th>TOPS Code</th>
<th>Total Number of Sections Offered</th>
<th>Total WSCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture</td>
<td>0100</td>
<td>11</td>
<td>1,316</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>0400</td>
<td>43</td>
<td>5,355</td>
</tr>
<tr>
<td>Business/Mgt.</td>
<td>0500</td>
<td>115</td>
<td>7,358</td>
</tr>
<tr>
<td>Communications</td>
<td>0600</td>
<td>7</td>
<td>518</td>
</tr>
<tr>
<td>Computer Info. Sys.</td>
<td>0700</td>
<td>78</td>
<td>4,040</td>
</tr>
<tr>
<td>P.E./Education</td>
<td>0800</td>
<td>160</td>
<td>10,513</td>
</tr>
<tr>
<td>Engineering/Tech.</td>
<td>0900</td>
<td>46</td>
<td>2,455</td>
</tr>
<tr>
<td>Fine/Applied Arts</td>
<td>1000</td>
<td>151</td>
<td>14,886</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>1100</td>
<td>57</td>
<td>5,587</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>1200</td>
<td>59</td>
<td>3,765</td>
</tr>
<tr>
<td>Cons. Ed./Child Dev.</td>
<td>1300</td>
<td>84</td>
<td>5,132</td>
</tr>
<tr>
<td>Humanities</td>
<td>1500</td>
<td>168</td>
<td>15,646</td>
</tr>
<tr>
<td>Library</td>
<td>1600</td>
<td>8</td>
<td>1,027</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1700</td>
<td>87</td>
<td>13,612</td>
</tr>
<tr>
<td>Physical Science</td>
<td>1900</td>
<td>40</td>
<td>6,168</td>
</tr>
<tr>
<td>Psychology</td>
<td>2000</td>
<td>17</td>
<td>2,139</td>
</tr>
<tr>
<td>Public Affairs/Services</td>
<td>2100</td>
<td>49</td>
<td>2,438</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>2200</td>
<td>101</td>
<td>10,804</td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td>4900</td>
<td>124</td>
<td>6227</td>
</tr>
</tbody>
</table>

**TOTAL**  1,405  118,986
**Exhibit 4-5**

**Cabrillo College**

**A Projection of Instructional Offerings**

and Lecture and Laboratory ASF for 15,000 Students

<table>
<thead>
<tr>
<th>Instructional Discipline</th>
<th>TOPS Code</th>
<th>Number of Sections</th>
<th>Total WSCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture</td>
<td>0100</td>
<td>14</td>
<td>1,750</td>
</tr>
<tr>
<td>Biological Science</td>
<td>0400</td>
<td>38</td>
<td>5,203</td>
</tr>
<tr>
<td>Business/Mgt.</td>
<td>0500</td>
<td>97</td>
<td>7,580</td>
</tr>
<tr>
<td>Communications</td>
<td>0600</td>
<td>6</td>
<td>576</td>
</tr>
<tr>
<td>Computer Info. Sys..</td>
<td>0700</td>
<td>86</td>
<td>6,286</td>
</tr>
<tr>
<td>Education/P./E.</td>
<td>0800</td>
<td>142</td>
<td>10,421</td>
</tr>
<tr>
<td>Engineering/Tech.</td>
<td>0900</td>
<td>55</td>
<td>3,712</td>
</tr>
<tr>
<td>Fine/Applied Arts</td>
<td>1000</td>
<td>143</td>
<td>16,206</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>1100</td>
<td>49</td>
<td>6,208</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>1200</td>
<td>53</td>
<td>4,225</td>
</tr>
<tr>
<td>Consumer Ed./Child Dev.</td>
<td>1300</td>
<td>78</td>
<td>5,702</td>
</tr>
<tr>
<td>Humanities</td>
<td>1500</td>
<td>152</td>
<td>16,884</td>
</tr>
<tr>
<td>Library</td>
<td>1600</td>
<td>7</td>
<td>1,141</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1700</td>
<td>84</td>
<td>14,874</td>
</tr>
<tr>
<td>Physical Science</td>
<td>1900</td>
<td>42</td>
<td>7,600</td>
</tr>
<tr>
<td>Psychology</td>
<td>2000</td>
<td>26</td>
<td>3,971</td>
</tr>
<tr>
<td>Public Affairs/Services</td>
<td>2100</td>
<td>49</td>
<td>2,601</td>
</tr>
<tr>
<td>Social Science</td>
<td>2200</td>
<td>106</td>
<td>11,166</td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td>4900</td>
<td>132</td>
<td>6,099</td>
</tr>
</tbody>
</table>

**TOTAL**

1,359

132,205
Support Services

Support Services are an integral part of the College learning environment. As such, there is a need to place an equal priority on these services along with the instructional offerings of the College. Currently, the facilities, equipment and staffing in support services is not conducive to the environment described above. Rather, they are disjointed, spread about the campus, have limited equipment and are not perceived as being an integral part of the campus environment.

To solve this concern, it is essential that Student Services be consolidated in one location on the campus. Ideally, the need for a Student Services facility and the opening of the new Learning Resource Center should be integrated into a common facility which can be described as a “Student Success Center.” This center would serve as the “front door” of the College and incorporate the following programs and services:

- A comprehensive system of student support services including:
  1. Student Activities/Associated Students
  2. Admission, Records and Registration
  3. Bookstore
  4. Food Services
  5. Meeting Rooms/Lounge Areas
  6. Orientation/Testing/Assessment
  7. Counseling/Career Planning
  8. DSPS
  9. EOP & S
  10. Special Grant Programs and Services
  11. Transfer Center
  12. Veteran’s Office
  13. Articulation Services
  14. Financial Aid
  15. Student Employment/Job Placement
  16. International Student Services
  17. Student Health Center

Facilities

As indicated in the introduction to this Plan, one of the major outcomes of the planning process is the ability to identify, evaluate, and organize the long-term instructional and support service facility needs of the College and organize that information into a prioritized, future Facilities Plan for the College. The following parameters were established to guide the process:

1. The Facilities Plan would be driven by the educational program and service needs of the communities served by the College;
2. The educational program and service needs, as well as facilities priorities, would be identified by faculty, and staff and the facilities needs prioritized.

3. All needs identified would be evaluated and organized based primarily on reasonableness in consideration of the State's basis for determining facilities priorities.

In addition, it was understood that without a clear process to ensure widespread involvement in building the educational bases for the Plan, it is unlikely that individuals and constituent groups within the College would support the plan. Also, without utilizing parameters imposed by the State in evaluating facilities needs District-wide, the proposed plan would be unachievable and unrealistic. In response to these planning parameters, a number of tasks were undertaken during the course of the project, including:

1. A brief review of the College's environment, both external and internal;

2. A self-analysis of existing and future programs and services by students, faculty, and staff through an instrument termed the "Unit Planning Guide;" and

3. Consultant analysis of basic quantitative elements which drive facilities needs, including headcount enrollment, Weekly Student Contact Hours (WSCH for both lecture and laboratory activities), and Day-Graded Enrollment, for the College.

The final task involved synthesizing the bases of information on educational programs provided by members of the College together with quantitative projections of facilities needs by type of space. This section presents:

1. An analysis of the existing campus facilities.

2. Projections of total space needs (or excesses) by building space category for 14,000 students on the campus and for 3,000 students at the Watsonville Education Center (Year 2010+)

3. A comprehensive listing of projects, the rationale for the project, and the types and magnitudes of square footages involved.

Facilities Utilization and Condition

Prior to the development of plans to expand facilities, there are four primary factors which must be considered related to existing campus spaces: classroom and laboratory utilization; general building condition; facilities inventory; and existing space capacity. Utilization analysis is crucial to establish an accurate assessment of the overall match of room
type, class size and course type (lecture or laboratory). Frequently, campuses do maintain utilization data, but their data are not calculated in concert with state use standards. Tightening state resources and stricter adherence to rules guiding project and plan approvals have made it critical that districts have a clear understanding of the way in which facilities are used. An element of this understanding is ensuring that the campus and the state have the same inventory of rooms on campus. It is not uncommon for a division dean or chair to execute a change in the way a room is used and fail to inform the business or facilities office of this change. The impact of changes of this nature must be accounted for to accurately evaluate room utilization.

To create a full picture of the campus and the feasibility of using each building to the fullest extent possible, an overall building evaluation was conducted. The primary focus was to provide the College with an indicator of where deferred maintenance dollars might be needed in conjunction with, or instead of, new facilities construction. The result of these combined analyses is a clear picture of the direction the College should head to maximize current space and to justify any new space needs.

Classroom and Laboratory Utilization Analysis

As part of this master planning effort, an analysis was made of the current utilization of scheduled instructional space. Due to the significant capital outlay and operational cost associated with facilities, the state requires that space be used at a specified minimum level to accommodate student demands for programs and services. Space use standards/guidelines are used to evaluate a district's use of space and thus, the need for new construction or renovation. It is important to note that California's space guidelines for community college classrooms, laboratories and faculty offices are very stringent. In 1990 and again in 1996, the California Postsecondary Education Commission (CPEC) recommended revised standards which would be more in line with those used in other states. However, CPEC's recommendations have not been adopted.

The guidelines for classroom and laboratory space are comprised of three basic utilization assumptions which include hours of room use each week, percent of student stations filled when rooms are in use, and a campus-wide average assignable square feet per student station. These assumptions work together in a formula to create a "space factor," assignable square feet (ASF) per weekly student contact hours (WSCH). WSCH is used as a denominator since it is a common term among colleges and universities and is relatively well defined, especially when compared to such terms as full-time equivalent (FTE), Day Graded Enrollment (DGE) and headcount (HC).

Based on the classroom and laboratory WSCH generated by enrollments, the amount of each category of instructional space needed can be estimated and compared to the amount recorded in the district's official inventory to determine if there is a space surplus or deficit. Before new space can be
A Vision for the Future

justified, a district must demonstrate that existing space utilization meets state standards or that extenuating circumstances, such as geographical access, require additional facilities to meet student needs. New space must be planned on the basis that state standards for utilization will be met. Thus, any scenario will require that, sooner or later, each district master the use of space to meet state standards in order to accommodate the student demand estimated in the master planning process.

As part of its master planning process, it is incumbent upon each district to assure that it has analyzed its use of space to determine which, if any, components of the space use formula are contributing to inefficiencies. This knowledge should encourage discussion at the campus level to determine what, if anything, can be done to improve space use.

Space use is an area where conflicts may evolve between instructional styles and administrative requirements. For example, if trends are toward smaller course sections when space has been built to accommodate larger course sections, the station use component of the standard is compromised. Something must change to optimize space use; either teaching must be flexible enough to reverse the trend or planning should intervene to modify existing space to more nearly match diverse teaching style requirements.

Caution must also be taken interpreting the results of applying the space standards to different categories of space. For example, a room-by-room campus space utilization analysis in a district may appear to reveal a need for laboratories based on course generated WSCH. However, further room use analysis may reveal that a high percent of laboratory space use was for lecture purposes. This scenario raises significant planning and policy issues. The fact is that this phenomenon may result from legitimate college needs or it may not. The real need may be for classrooms rather than laboratories or there may not be a need for any new space.

Trends in many disciplines are toward greater use of demonstrations in classroom instruction. Traditionally, classrooms have not been designed with demonstration areas and facilities. Consequently, shifts in teaching toward experiential learning has resulted in instructor preference for laboratories for lecture instruction. If this is the case, college planning should address these needs by adding more demonstration facilities rather than building more expensive laboratory facilities.

A reason for using laboratory space for lecture classes that may not be legitimate is to accommodate lecture instruction at the time of day desired by instructor rather than at another time of day when classroom space is available. In this case, the most prudent policy for space use would encourage lecture space to be used for lecture purposes throughout the day unless student demands constrain or preclude the time of day of instruction.

These examples demonstrate how planning should include goals and objectives related to the use of space and effectiveness of course and room scheduling. If it is determined that it is appropriate for some lecture classes to be held in laboratories, then these WSCH should be treated as laboratory contact hours in determining needs for different categories of space.
Likewise, policies and procedures should be in place which assure that every effort is made to meet Legislatively established guidelines. Otherwise an inappropriate conclusion about capital construction needs is inevitable.

Methodology for Space Utilization Analysis

In the sections which follow, the methodology used to evaluate facilities, the findings and suggested recommendations have been presented to improve the use of instructional space at the College.

Classrooms

Each classroom's utilization rate was calculated using two separate methodologies. First, a station-based utilization rate for classrooms combining the two space use components of California's standards/guidelines; hours of room use each week and percent of stations filled when rooms are in use was performed. California's standards expect classrooms to be used an average of 53 hours during the 70 hour week from 8:00 a.m. to 10:00 p.m., Monday through Friday. This represents approximately 76% of the time classrooms are available for use. When rooms are in use, an average of 66% of student stations are expected to be filled. These standards for classrooms generate an average of 34.98 (.66 x 53 = 34.98) Weekly Student Contact Hours (WSCH) expected use per student station. Since this exercise focuses on how well the College is using space rather than how well space is designed, the third component of California's space planning standards for classrooms, space per station, is ignored. In this methodology, the number of stations in each room is assumed to be appropriate regardless of the room's size (assignable square feet).

In the second methodology, space-based potential stations for lecture space was calculated. This methodology begins by assigning a number of stations to each room based on generally accepted assignable square feet (ASF) per student station characteristics of several ranges of room sizes. Typically, the larger the room the smaller the student station. Smaller rooms tend to have a table with chairs, medium size rooms have tablet arm chairs and larger room have fixed auditorium-style seating. As a basis for the analysis, the following room and station size ranges:

<table>
<thead>
<tr>
<th>Room Size (ASF)</th>
<th>Student Station Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 - 350</td>
<td>17.5 ASF/Station</td>
</tr>
<tr>
<td>351 - 650</td>
<td>15.0 ASF/Station</td>
</tr>
<tr>
<td>651 - 1000</td>
<td>14.0 ASF/Station</td>
</tr>
<tr>
<td>1001 - 1300</td>
<td>13.0 ASF/Station</td>
</tr>
<tr>
<td>1300 +</td>
<td>12.0 ASF/Station</td>
</tr>
</tbody>
</table>
A Vision for the Future

This methodology produces "potential student stations" for each room based on the size of the room. Such an analysis is important because it allows the district to assess its performance against the third part of the state's utilization guideline, space per station. The state guideline of 15 ASF per station is used to assess the need for lecture space. This methodology enables colleges to identify where rooms may not be used to their fullest potential or where architectural barriers or other use constraints exist which preclude the capacity which the room may support based on the "potential," versus actual, number of student stations.

Laboratories

Each laboratory's station-based utilization rate was calculated using the two space use components of the state's standards/guidelines; hours of room use each week and percent of stations filled when rooms are in use. The state's standards for laboratory space expect laboratories to be used an average of 28 hours per week during the 70 hour week. This represents 40% of the time a room is available for use. The standard for lab student station use is 85% of stations in labs being used are expected to be filled. These standards generate an average 23.8 (0.85 x 28 = 23.8) WSCH of expected use per student station for laboratories. As in the case of classrooms, the space per station component of the space planning standards is ignored for this station-based analysis. Finally, since space per station is usually tailored to each type of lab, it was assumed that the existing number of stations is appropriate rather than attempting to calculate "potential" stations for laboratories.

Findings

Summarized in the following sections are the results of the review of the use of space at the College. In the graphical exhibits which accompany each narrative, the solid horizontal line reflects the room or station use standard used to evaluate utilization. The dashed horizontal line reflects the average station or room use experienced by the College.

Lecture Space

As shown in Exhibit 4-5, Cabrillo's station-based utilization for Fall 1996 was about 53% of standards for 52 rooms in which credit courses were scheduled.

Applying the space-based methodology would indicate that the overall ASF of classroom space may support more stations than are currently used. A room-by-room analysis of "existing" versus "potential" stations may reveal where additional stations would be appropriate.

The average space per station based on actual stations in lecture space at the College is approximately 15.6 ASF. The State guideline for lecture ASF per station is 15 ASF. This means that, to achieve the State guideline for lecture space of 0.429 ASF per WSCH, Cabrillo must find a way to 1) lower its average space per station, 2) increase its room use or 3) station
use to compensate for the difference between 15.6 ASF and 15 ASF. If Cabrillo lecture space could accommodate the number of stations suggested by the space-based analysis, the average ASF per station would drop to approximately 13.1 ASF. At this level, space per station would work to the District's advantage in the State's space factor formula since room use and/or station use could be reduced and still achieve the State's guidelines for space use. Nevertheless, particularly in smaller rooms, 13.1 average ASF per student station would create a very crowded situation.
### A Vision for the Future

#### Exhibit 4-6

**Classroom Space Utilization Analysis**

<table>
<thead>
<tr>
<th>Room #</th>
<th>Assignable SQFT</th>
<th>Actual Student Stations</th>
<th>Potential Student Stations</th>
<th>Percent Actual/Potential Stations</th>
<th>Approx. WSCH Total</th>
<th>WSCH Capacity Based on Actual Stations</th>
<th>Utilization Based on Actual Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>204</td>
<td>912</td>
<td>70</td>
<td>70</td>
<td>100.00%</td>
<td>776</td>
<td>2449</td>
<td>31.69%</td>
</tr>
<tr>
<td>311</td>
<td>760</td>
<td>35</td>
<td>54</td>
<td>64.47%</td>
<td>1194</td>
<td>1224</td>
<td>97.53%</td>
</tr>
<tr>
<td>312</td>
<td>772</td>
<td>43</td>
<td>55</td>
<td>77.98%</td>
<td>970</td>
<td>1504</td>
<td>64.49%</td>
</tr>
<tr>
<td>313</td>
<td>772</td>
<td>40</td>
<td>55</td>
<td>72.54%</td>
<td>850</td>
<td>1399</td>
<td>60.75%</td>
</tr>
<tr>
<td>406</td>
<td>746</td>
<td>42</td>
<td>53</td>
<td>78.82%</td>
<td>964</td>
<td>1469</td>
<td>65.62%</td>
</tr>
<tr>
<td>410</td>
<td>749</td>
<td>44</td>
<td>54</td>
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Exhibit 4-6
Classroom Space Utilization Analysis

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<th>Percent Actual/Potential Stations</th>
<th>Approx. WSCH Total</th>
<th>WSCH Capacity Based on Actual Stations</th>
<th>Utilization Based on Actual Stations</th>
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| Total  | 42787 | 2745 | 3275 | 83.83% | 50720 | 96020 | 52.82% |
Exhibit 4-6 reflects the room use experience. The College averaged 34 hours of room use each week per room, 48% of the hours space is available. The standard established for classrooms used for credit offerings at the College is 53 hours per week, 76% of the 70 hours available Monday through Friday from 8:00 a.m. to 10:00 p.m. Classroom use appears to be relatively consistent each day of the week with the exception of very low use after noon on Friday. At its highest from 9 a.m. to noon, room use drops off in the afternoons with the 2-6 p.m. period reflecting the least use.

Exhibit 4-7 reflects the lecture station use experience. The College averaged 52% station use or rooms used during the day. The standard established for classrooms used for credit offerings is a 66% use rate. Overall, station use appears slightly higher on Monday, Wednesday and Friday. Station use is relatively consistent throughout each day except during the 3-6 p.m. period on Fridays. The station use standard is almost never exceeded.

Laboratory Space

As shown in Exhibit 4-8, the College's station-based utilization for Fall, 1996 was about 81% of standards for 39 rooms in which credit courses were scheduled. Time-of-day analyses for enrollment scheduled into these rooms are shown in Exhibits 4-9 and 4-10. Exhibit 4-9 reflects the room use experience. The College averaged 26 hours of room use each week per room, 37% of the 70 hours available Monday through Friday from 8:00 a.m. to 10:00 p.m. The standard established for laboratories used for credit offerings is 28 hours per week, 40% of the 70 hours available. Generally, room use meets or exceeds the standard from 9 a.m. to 3 p.m., and in the evenings after 6 p.m. The lowest use is on Friday when laboratory room use falls well below the standard during all hours of the day. Certain laboratories have particularly low utilization. These include 407, 516, 605, 614, 1072, 1301, 1303, 1508, 1520, 1401B, 1403A, and 1403B.

Exhibit 4-10 reflects the laboratory station use for Fall, 1996. The College's station use averaged 62% compared to the standard established for laboratories of 85%. The station use falls short of the standard all days of the week and hours of the day.
Exhibit 4-7
Classroom Utilization
Fall, 1996

Exhibit 4-8
Classroom Station Utilization
Fall, 1996
### Exhibit 4-9
Laboratory Space Utilization Analysis

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### Exhibit 4-9
Laboratory Space Utilization Analysis (Continued)

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</table>
Exhibit 4-10
Laboratory Utilization Fall, 1996

Laboratory Utilization

Exhibit 4-11
Laboratory Station Utilization Fall, 1996

Laboratory Station Utilization
Conclusions and Recommendations

Space utilization is a multi-faceted subject incorporating both technical and human potential for inefficiencies. Technical questions which must be answered correctly to assure efficient space use go well beyond whether or not space is available. Room size, location, equipment/layout and time available must also be considered. Human relations questions which must be answered include student and instructor preference as well as institutional policy which may influence the willingness of faculty and students to compromise those preferences for the sake of efficiency. Several important technical and human issues are raised by the space utilization analyses outlined above. These issues which directly impact the College include:

- match and co-ordination of course size and room size;
- use of lab space for lecture purposes; and
- space scheduling methods.

All of these issues affect the use of instructional space on the campus. Each is discussed in the following sections.

Course/Room Size Match

Room use data often appears to indicate that the demand for larger rooms is greater than that for smaller rooms. However, our studies indicate that there is no direct correlation between room size and the number of hours per week rooms are used or the percent of stations occupied. If greater use of larger rooms is evidenced, it is usually due to the fact that fewer larger rooms are available on a campus and the associated demand. It cannot be concluded that a campus would attain better room use by merely adding larger rooms.

However, a link does exist between room size and space use which is not related to the proportion of smaller or larger rooms on a campus, but to the match between the size of available rooms and the size of course sections scheduled in those rooms. If utilization were not a determinant in estimating space needs, a mismatch between room size and course size would be academic. However, this is not the case. At Cabrillo College, a mismatch is found for both classrooms and laboratories. In classrooms, only 52% of all stations are typically filled while in laboratories, only 62% of all stations are filled. The average section size for courses scheduled in classrooms in the Fall, 1996 term was 28 students while the median number of stations in classrooms is 41. This inherent mismatch creates a natural barrier to achieving efficient space use.

Cabrillo College has a total of 52 classrooms in which to schedule all courses. Exhibit 4-12 compares the percentage of total course enrollments in increments of ten students to the percentage of existing classrooms physically sized to match the increment. As the chart shows, 41% of all courses enroll 20 to 29 students, but only 4% of the classrooms on campus are sized for that number of student stations. Conversely, 46% of all classrooms have space for 50 to 59
A Vision for the Future

student stations, but only 2% of all courses enroll 50 to 59 students. Another important comparison is the large classrooms to course enrollments. Classrooms of assignable square feet for 80 to over 200 student stations total 19.5% or 10 classrooms of the 52 available. Only one-half of one percent (0.5%) of all courses enroll above 80 students.

With approximately 13-14,000 students, the College must have the capability to offer small, individual classes, multiple section classes and large lecture classes. To do so, there needs to be appropriate facilities available. Therefore, regardless of average course size, there must always be some large classrooms. It would be short-sighted to divide or repatriation all larger classrooms into smaller rooms. Nevertheless, as Exhibit 4-11 indicates, a closer match of course enrollment to room size is necessary for increasing room utilization.

While classroom space can be generic to an instructional discipline, laboratory space is usually very specific for a given instructional program or group of programs. Using the Fall, 1996 semester as a guide, the following summary of laboratory use by instructional division was determined:

Exhibit 4-13
Laboratory Space Needs Analysis By Division
Fall-1996

<table>
<thead>
<tr>
<th>Division/Department</th>
<th>Available Lab ASF</th>
<th>Required Lab ASF</th>
<th>Excess (Shortage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCS</td>
<td>7,508</td>
<td>12,070</td>
<td>(4,562)</td>
</tr>
<tr>
<td>BECHO</td>
<td>17,540</td>
<td>12,170</td>
<td>5,370</td>
</tr>
<tr>
<td>C &amp; G</td>
<td>832</td>
<td>596</td>
<td>236</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>2,385</td>
<td>5,158</td>
<td>(2,773)</td>
</tr>
<tr>
<td>FLAC</td>
<td>2,786</td>
<td>2,512</td>
<td>274</td>
</tr>
<tr>
<td>HAS</td>
<td>2,583</td>
<td>2,211</td>
<td>372</td>
</tr>
<tr>
<td>HPERD</td>
<td>2,129</td>
<td>4,686</td>
<td>(2,557)</td>
</tr>
<tr>
<td>LIBRARY</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MSE</td>
<td>25,305</td>
<td>13,776</td>
<td>11,529</td>
</tr>
<tr>
<td>SS</td>
<td>6,743</td>
<td>3,886</td>
<td>2,857</td>
</tr>
<tr>
<td>VAPA</td>
<td>19,674</td>
<td>23,213</td>
<td>(3,539)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>87,485</strong></td>
<td><strong>80,278</strong></td>
<td><strong>7,207</strong></td>
</tr>
</tbody>
</table>

The situation created by these circumstances is complicated. First, since the space and stations to absorb total enrollment may appear adequate in a planning analysis, it would be difficult to justify adding or modifying space to improve the match in an effort to improve station utilization. Over time, if enrollments grow, inability to justify new space or modify
existing space will, by necessity, begin to drive curriculum and teaching delivery decisions; an extremely undesirable scenario. Approximate WSCH supported by existing classrooms and laboratories is approximately 75,000. Based on State space guidelines, Cabrillo's existing space capacity is approximately 125,000 WSCH. Thus, substantial additional WSCH must be absorbed before new space can be justified for state funding.

Unless changes are made to improve the match between course and room size, the best possible station utilization is limited. To improve space utilization, course offerings should be studied and discussed with divisions to determine how teaching methods may be modified to offer instruction in larger or smaller sections which more closely match room size. In this way, the course enrollment configuration may be influenced to more closely match the room size configuration. In the Recommendations/Plan of Action section of this report, a recommendation has been made to repartition classrooms to gradually accommodate course sizes at the College.

Use of Laboratory Space for Lecture Purposes

It is often found that many WSCH generated in laboratory space is for lecture courses. This situation raises serious policy questions related to efficient space use. Laboratory space is typically characterized by specialized attributes such as access to utilities, scientific work stations, etc. These attributes make lab space significantly more costly to construct and maintain. Subsequently, use of laboratory facilities for classroom instruction if laboratory instruction could, at the same time, be scheduled is not desirable. Unfortunately, this often occurs when an instructor desires to teach a course during peak hours of the day; hours when classrooms may not be available.

Planning and policy issues raised by this phenomenon are significant. Given the cost of space in terms of both capital outlay and operating expense, space use should be carefully managed and closely monitored. As expressed in an earlier example, the phenomenon of using laboratory space for lecture purposes can result in a scenario which would indicate that additional classroom space is needed when, in fact, the need is for laboratories or there is no need at all.

Thus, for planning purposes, College policy should set strict parameters within which laboratories may be used for lecture purposes. Utilization analyses should be conducted routinely to assess the use of space. Finally, planning should include goals and objectives related to the use of space and effectiveness of course/room scheduling. The most prudent policy for space use would encourage lecture space to be used for lecture purposes throughout the day unless student demands constrain or preclude the time of day of instruction.

If it is determined that it is appropriate that a fixed percentage of lecture classes be held in laboratories, then these WSCH should be treated as laboratory contact hours in determining needs for different categories of space. Otherwise, an inappropriate conclusion about capital construction needs is possible.
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Space Scheduling Methods

Currently, the College's scheduling of instructional space is decentralized, accomplished by staff in each division. Divisions have long-held rights to designated classrooms and laboratories. Although use analyses have been conducted in the past to evaluate and adjust room priority assignments, Divisions have not been required to achieve specified levels of utilization. The greatest problem facing the College in this area is the lack of an information system to assist in scheduling. The College's information system is in dire need of upgrade or replacement. Interactive room scheduling or manipulation of space schedules within the District's data system is not currently possible.

The advantages of an automated room/course scheduling system to assist the faculty in overcoming some of the inefficiencies described above would clearly help the College to use its space more efficiently. This can be achieved considering the preferences of divisions and instructors and without significant change in traditional process and procedures. Due to the complexities associated with room scheduling, it would be difficult to achieve noticeable improvement in space use without acquiring some automation capability.

Building Condition Overview

An evaluation of the current physical condition of campus buildings is designed to provide facilities managers with a broad, relative assessment of the overall condition of their buildings. The results of the evaluation are intended to provide facilities managers with some evaluative criteria which may be valuable in establishing priorities for deferred maintenance projects and for isolating areas where further study is necessary. It is not intended to be the only source used in project planning.

To accomplish this evaluation, each building was visually inspected, interior and exterior. Where possible, visual inspection of appropriate mechanical systems was conducted. When visual inspection was not possible, facilities management staff provided responses based on a working knowledge of the systems and equipment in question. The following is a narrative summary of the findings of the evaluation.

Exterior Building Condition

After the earthquake in 1989, structural engineers were hired by Cabrillo College to assess the structural integrity of the buildings. All buildings were found to be in good condition at that time. The exterior walls are in good condition overall. One wall of the Social Science Building (400) shows significant calcium deposits in one area, apparently from an old leak from the second level. The Police/Safety Building (950) exterior walls are in poor shape and the building is infested with termites.

Throughout the campus, the roofs are in poor condition. The cedar shake roofs currently in place are between 25 and 30 years old and were treated with an oil sealant 10 years ago. Currently, they do not leak, but there is a need for immediate intervention.
Most buildings on the campus are trimmed with louvered windows. Many of the louvers are broken and the hardware holding them in place is weakened to the point that they can easily be removed by pulling on the louver. Louvered windows throughout the campus should be replaced. The doors on the Administration Building need to be painted. The majority of the doors on the lower level of the Theater Building are off center with gaps of up to an inch between the door and the frame.

The majority of the rain gutters exhibit signs of leaking, resulting in water damage to the surrounding trim. Most of the railings and other trim need paint and are warped and water damaged.

**Interior Building Condition**

Overall, the interior of the buildings is in fair condition. A few buildings had specific problems such as:

- **Floors**: The Student Center floor is settling.

- **Fixed Equipment**: The Science Building's hoods are inadequate for necessary ventilation. This is currently being addressed as part of a renovation project.

- **Fixed Equipment**: Visual Arts Building has inadequate ventilation in Room 307. Additionally, the kilns are housed in a tin shed behind the Visual Arts. The kiln venting hoods are not adequately supported and the roof leaks so that water stands in the room where the kilns are in operation. This is also being addressed as part of a renovation project.

**Mechanical Systems Condition**

The Mechanical Systems as a whole are in fair condition. Generally, the electrical systems are not in good condition. Electrical systems are inadequate to carry the electrical load requirements of current equipment. The voltage and amperage in the Police/Safety Building is improper and the main electrical panel and panel room do not conform to electrical code requirements. There are also problems in the areas related to properly grounded outlets, use of fuses rather than circuit breakers and damaged or missing parts in some junction boxes.

There is a significant amount of deferred maintenance in the plumbing and heating systems which should be addressed. Generally, the buildings are not in violation of specific codes, but some equipment appears close to the point of failure. Throughout the campus, the plumbing and heating systems are the original systems, with parts replaced as they failed, rather than replaced as part of a comprehensive deferred maintenance plan. Consequently, there are significant problems in the same areas in most buildings. In the plumbing system, fixtures are more than 15 years old, the fittings' plantings are deteriorated, many have mineral deposits in the hot and cold water pipes and many do not have water heaters which operate at more than 80%
efficiency. In some buildings, the water main shut off valves are rusted to the point that it is not possible to completely cut off the flow of water. The problems in the heating systems are also similar and widespread: the air handling unit casing and fans show rust, the fan bearings have logged more than 20,000 operating hours, the heating coils are rusted, and in a significant number of buildings the combustion systems are not in good working condition.

Overall, the lighting in the buildings is in good condition; this does not imply, however, that the quality of the lighting is adequate. The Visual Arts building has additional large flood lights set up throughout the rooms, using extension cords from wall outlets, in order to effectively light the model and work areas.

**Provisions for the Disabled**

There is an on-going program to complete the barrier removal projects for disabled students. This is a 50/50 matching program with the state. The total project will be completed over a number of years as funds become available. Unfortunately, the geographical layout of the campus causes significant problems for disabled students. If possible, it would be very helpful to accelerate the completion of the identified projects.

**Bridge/Overpass**

The current student traffic pattern on the campus indicates there is a need for an additional bridge/overpass over Soquel Drive West of Cabrillo College Drive. This structure should be designed in a manner to accommodate handicapped vehicles and maintenance vehicles as well as pedestrians.

**Gymnasium**

The Gymnasium is in need of some significant renovation. The structure and walls are in good condition, but the roof, windows/doors and trim are all in poor condition. The interior of the building is in fair condition overall but as with the other buildings, the heating and plumbing systems are in poor condition. The cooling and lighting systems are in good condition, as are the means of exit and fire control capability.

**Duplication**

The Duplication Building is in overall fair condition in the exterior and interior areas. There are significant problems which need to be addressed in the mechanical systems, safety/building code and provisions for handicapped.

**Landscaping/Parking Areas**

All landscaping and parking areas at the College are in need of major renovation and repair. The landscape areas have been neglected due to fiscal constraints over the past five years and as a result, are significantly overgrown and/or dead. The parking lots all need to be repaired and resurfaced.
Exterior Lighting

A plan for the replacement/renovation of all exterior campus lighting needs to be developed and implemented. Not only is this a health and safety issue, it is also an energy conservation issue. As part of this plan it will be essential to address the latest design in 'Down-Lighting' to preserve the ability of the astronomy observatory to continue to function at its present, hilltop, campus location.

Methods.

When space needs are projected, a total square footage requirement is compared against current space holdings. This comparison results in a net space capacity. The following sections provide a definition of capacity, a listing and explanation of the utilization and planning standards used to determine capacity, and net space capacity in all categories of educational space for the College.

Facilities Inventory

The inventory of facilities is an important tool in planning and managing college campuses. The California Community Colleges Facilities Inventory Manual includes descriptive data on buildings and rooms for each college district. These data are essential elements in developing the annual Five-Year Capital Construction Plan and in scheduling and controlling campus space. In addition, planning for new capital outlay construction projects, projecting future facilities, developing capital outlay and deferred maintenance budgets and analyzing space utilization are all tasks which rely heavily on the facilities inventory documents and procedures.

The California Education Code mandates an annual inventory of all facilities in a district. A well-kept, regularly monitored, accurate facilities inventory is clearly in the best interest of a district. As part of the initial review of facilities in the College, a room-by-room analysis was completed for every building. The results of this inventory have been integrated into the current data base and used for the projection of future building projects presented later in this section. Exhibit 4-12 summarizes the current space inventory for the College.
Exhibit 4-12
Cabrillo College
Facilities Inventory
January, 1997

<table>
<thead>
<tr>
<th>Room Use Category</th>
<th>Description</th>
<th>Assignable Square Footage (ASF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Classroom (Lecture)</td>
<td>53,108.</td>
</tr>
<tr>
<td>200</td>
<td>Laboratory</td>
<td>87,485</td>
</tr>
<tr>
<td>300</td>
<td>Office</td>
<td>56,982</td>
</tr>
<tr>
<td>400</td>
<td>Library</td>
<td>13,897</td>
</tr>
<tr>
<td>520-525</td>
<td>Physical Education/Athletics</td>
<td>24,367</td>
</tr>
<tr>
<td>530-535</td>
<td>Instructional Media AV./TV</td>
<td>506</td>
</tr>
<tr>
<td>500's</td>
<td>Demonstration, Etc.</td>
<td>10,219</td>
</tr>
<tr>
<td>610-620</td>
<td>Assembly/Exhibit</td>
<td>12,753</td>
</tr>
<tr>
<td>600's</td>
<td>Merchandise/Lounge/Meeting Rm.</td>
<td>17,108</td>
</tr>
<tr>
<td>700</td>
<td>Data Processing, Shop/Storage</td>
<td>27,446</td>
</tr>
<tr>
<td>050-070</td>
<td>Inactive</td>
<td>1,391</td>
</tr>
<tr>
<td></td>
<td><strong>College Total</strong></td>
<td><strong>305,262</strong></td>
</tr>
</tbody>
</table>

**Existing and Future Space Capacity**

By combining existing and future enrollment estimates with appropriate space use standards, space capacity for the current year or future years, respectively, is developed. Space Capacity is the direct relationship between the amount of space available, by type, which may be used to serve students, and the number of students participating in campus programs. Space Capacity analysis typically includes the following types of spaces:

- Classrooms
- Teaching laboratories
- Non-class laboratories
- Library/learning resources
- Offices
- Audio visual, radio and television (instructional media) facilities
- Teaching gym
- Assembly/exhibition
- Food service
- Lounge
- Bookstore
- Health services
- Theater
- Meeting room
- Data processing
- Physical plant
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The above space categories represent the majority of the total educational and general facility space on a typical community college campus. Space Capacity analysis enables an institution to identify the types of space it needs and/or the types of space it holds in excess. Analysis of Space Capacity forms the core of the Facilities Plan.

Space Utilization and Planning Standards
To determine Space Capacity requirements for a College's enrollment, the enrollment itself, or an appropriate form thereof, is applied to a set of standards for each type of space.

Prescribed State Space Standards
Title V of the California Administrative Code (Sections 57000-57140) prescribes standards for the utilization and planning of most educational facilities in public community colleges. These standards, when applied to the total number of students served (or some variant thereof, e.g., weekly student contact hours), results in the total capacity requirement expressed in assignable square feet (space available for assignment to occupants). The subsection which follows presents utilization and planning space standards not prescribed by the State. The Title V space planning standards used to determine both existing and future capacity requirements are as follows:

- **Classrooms**
  - Assignable square feet (ASF) per student station: 15
  - Station utilization rate: 66%
  - Average hours room used per week: 53

- **Teaching Laboratories**
  - ASF per student station (See Exhibit 4-12)
  - Station utilization rate: 85%
  - Average hours room used per week: 27.5

- **Offices, Office Service, Conference Rooms, and Reception Areas**
  - ASF per FTE instructional staff: 122

- **Library/Learning Resources Facilities**
  - Base ASF allowance: 3,795
  - Incremental ASF allowances
    - ASF for first 3,000 DGE: 3.83
    - ASF per 3,001 - 9,000 DGE: 3.39
    - ASF per for more than 9,000 DGE: 2.94

- **Instructional Media/AV, TV, Radio**
  - Base ASF allowance: 3,500
  - Incremental ASF allowances
    - ASF per first 3,000 DGE: 1.50
    - ASF per 3,001 - 9,000 DGE: 0.75
    - ASF per for more than 9,000 DGE: 0.25
Each component of these standards is mathematically combined with an appropriate form of enrollment to produce a total assignable square feet (ASF) capacity requirement for each category of space. The sum of these categories is the total building requirement for the College.

**Exhibit 4-13**
Assignable Square Feet (ASF) For Laboratory Space

<table>
<thead>
<tr>
<th>Classification of Instructional Disciplines</th>
<th>Subject Grouping</th>
<th>ASF/STN</th>
<th>ASF/100 WSCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>0100</td>
<td>Agriculture</td>
<td>115</td>
<td>492</td>
</tr>
<tr>
<td>0200</td>
<td>Architecture</td>
<td>60</td>
<td>257</td>
</tr>
<tr>
<td>0400</td>
<td>Biological Sciences</td>
<td>55</td>
<td>235</td>
</tr>
<tr>
<td>0500</td>
<td>Business and Management</td>
<td>30</td>
<td>128</td>
</tr>
<tr>
<td>0600</td>
<td>Communications</td>
<td>50</td>
<td>214</td>
</tr>
<tr>
<td>0700</td>
<td>Computer and Information Science</td>
<td>40</td>
<td>171</td>
</tr>
<tr>
<td>0800</td>
<td>Education</td>
<td>75</td>
<td>321</td>
</tr>
<tr>
<td>0930</td>
<td>Diesel</td>
<td>200</td>
<td>856</td>
</tr>
<tr>
<td>0944</td>
<td>Air Conditioning</td>
<td>130</td>
<td>556</td>
</tr>
<tr>
<td>0945</td>
<td>Refrigeration</td>
<td>130</td>
<td>556</td>
</tr>
<tr>
<td>0946</td>
<td>Auto Body and Fender</td>
<td>200</td>
<td>856</td>
</tr>
<tr>
<td>0947</td>
<td>Auto Mechanics</td>
<td>200</td>
<td>856</td>
</tr>
<tr>
<td>0948</td>
<td>Auto Technology</td>
<td>75</td>
<td>321</td>
</tr>
<tr>
<td>0949</td>
<td>Small Engine Repair</td>
<td>100</td>
<td>428</td>
</tr>
<tr>
<td>0950</td>
<td>Aviation Maintenance</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>0954</td>
<td>Plastics</td>
<td>130</td>
<td>556</td>
</tr>
</tbody>
</table>
## Exhibit 4-12 (Continued)
### Assignable Square Feet (ASF) For Laboratory Space

<table>
<thead>
<tr>
<th>Classification of Instructional Disciplines</th>
<th>Subject Grouping</th>
<th>ASF/STN</th>
<th>ASF/100 WSCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>0955</td>
<td>Stationary Engineering</td>
<td>200</td>
<td>856</td>
</tr>
<tr>
<td>All other 900's</td>
<td>(Engineering)</td>
<td>75</td>
<td>321</td>
</tr>
<tr>
<td>1000</td>
<td>Fine and Applied Arts</td>
<td>60</td>
<td>257</td>
</tr>
<tr>
<td>1100</td>
<td>Foreign Language</td>
<td>35</td>
<td>150</td>
</tr>
<tr>
<td>1200</td>
<td>Health Services</td>
<td>50</td>
<td>214</td>
</tr>
<tr>
<td>1300</td>
<td>Home Economics</td>
<td>60</td>
<td>257</td>
</tr>
<tr>
<td>1500</td>
<td>Letters</td>
<td>35</td>
<td>150</td>
</tr>
<tr>
<td>1600</td>
<td>Library Science</td>
<td>35</td>
<td>150</td>
</tr>
<tr>
<td>1700</td>
<td>Mathematics</td>
<td>35</td>
<td>150</td>
</tr>
<tr>
<td>1900</td>
<td>Physical Sciences</td>
<td>60</td>
<td>257</td>
</tr>
<tr>
<td>2000</td>
<td>Psychology</td>
<td>35</td>
<td>150</td>
</tr>
<tr>
<td>2100</td>
<td>Public Affairs and Services</td>
<td>50</td>
<td>214</td>
</tr>
<tr>
<td>2200</td>
<td>Social Sciences</td>
<td>50</td>
<td>214</td>
</tr>
<tr>
<td>3000</td>
<td>Commercial Services</td>
<td>50</td>
<td>214</td>
</tr>
<tr>
<td>4900</td>
<td>Interdisciplinary</td>
<td>60</td>
<td>257</td>
</tr>
<tr>
<td>5330</td>
<td>Carpentry</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5331</td>
<td>Electricity</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5332</td>
<td>Plumbing</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5333</td>
<td>Glazing</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5334</td>
<td>Roofing</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5335</td>
<td>Masonry</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5336</td>
<td>Dry-Wall</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5337</td>
<td>Plastering</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5338</td>
<td>Painting</td>
<td>175</td>
<td>749</td>
</tr>
<tr>
<td>5339</td>
<td>Millwork</td>
<td>90</td>
<td>385</td>
</tr>
<tr>
<td>5340</td>
<td>Metal Trades</td>
<td>90</td>
<td>385</td>
</tr>
<tr>
<td>5341</td>
<td>Welding</td>
<td>90</td>
<td>385</td>
</tr>
<tr>
<td>5342</td>
<td>Machine Tools</td>
<td>90</td>
<td>385</td>
</tr>
<tr>
<td>5343, 5344</td>
<td>Heavy Equipment</td>
<td>200</td>
<td>856</td>
</tr>
<tr>
<td>5345</td>
<td>Auto Mechanics</td>
<td>200</td>
<td>856</td>
</tr>
<tr>
<td>5346</td>
<td>Auto Body and Fender</td>
<td>200</td>
<td>856</td>
</tr>
<tr>
<td>5347</td>
<td>Graphic Arts</td>
<td>80</td>
<td>342</td>
</tr>
</tbody>
</table>
This worksheet (Exhibit 4-13) is derived from the Five Year Capital Construction Plan program. Each year, the district completes this chart as a part of its submittal to the State. For long-term planning purposes, this chart is used to project staffing for the College. Five categories of Full Time Equivalent (FTE) of staff are specified. These five categories are defined as follows:

- **Instructors**: Included are the professional instructional staff for day, extended-day, and adult education, except those whose office is located in an off campus location.
- **Counselors**: Includes the professional counseling staff, special programs coordinators, extended opportunity program coordinators, statutory and Title 5 required staff.
- **Department Administrators**: Includes professional staff responsible for coordinating or supervising departmental activities. This category is dependent upon the organizational structure of the college, but is generally defined as the department chair for an instructional or support service area.
- **Librarians**: Professional librarians and directors of media services.
- **Institutional Administrators**: Professional administrators with responsibilities covering the entire institution such as a President, Vice President, Deans, Business managers, etc. This category generally covers all administrators above the department level.

### Non-State Space Standards.

The State provides standards for utilization and planning for more than 60% of all types of spaces on campus; however, capacity estimates for remaining spaces must also be based on some factor of the size or nature of the institution. Standards for the remaining types of spaces are presented in Exhibit 4-14. They were formed based on a national study of space standards and discussions with colleagues in California community colleges and the Chancellor's Office.

---

<table>
<thead>
<tr>
<th></th>
<th>Total Professional</th>
<th>Non-Instructional</th>
<th>Net Total Statutory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Instructed and</td>
<td>Portion</td>
<td>Staff</td>
</tr>
<tr>
<td></td>
<td>Statutory Staff</td>
<td></td>
<td>FTE</td>
</tr>
<tr>
<td></td>
<td>FTE</td>
<td></td>
<td>FTE</td>
</tr>
<tr>
<td>Instructors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Admin.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Librarians</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional Admin.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exhibit 4-14
Non-State Space Standards

<table>
<thead>
<tr>
<th>Category of Space</th>
<th>ASF Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-class Lab</td>
<td>ASF per headcount student</td>
</tr>
<tr>
<td>Teaching Gym</td>
<td>ASF per FTE student</td>
</tr>
<tr>
<td>Assembly/Exhibition</td>
<td>ASF per seat</td>
</tr>
<tr>
<td>Food Service</td>
<td>ASF per DGE</td>
</tr>
<tr>
<td>Lounge</td>
<td>ASF per FTE student</td>
</tr>
<tr>
<td>Bookstore</td>
<td>Base ASF allowance</td>
</tr>
<tr>
<td></td>
<td>ASF per student</td>
</tr>
<tr>
<td>Health Service</td>
<td>ASF allowance</td>
</tr>
<tr>
<td>Meeting Room</td>
<td>ASF per headcount student</td>
</tr>
<tr>
<td></td>
<td>Percent of total headcount students</td>
</tr>
<tr>
<td>Child Care</td>
<td>Percent of DGE or ASF allowance</td>
</tr>
<tr>
<td></td>
<td>see also, State child care standards</td>
</tr>
<tr>
<td>Data processing</td>
<td>ASF allowance</td>
</tr>
<tr>
<td>Physical Plant</td>
<td>Percent of all other space</td>
</tr>
</tbody>
</table>

Analysis of Available Capacity

Determining excess space capacity is an essential starting point in the master planning process for facilities. Prior to determining future capacity needs, there must be an assessment of current space holdings. Space in the current inventory for each campus is deducted from the total need in each type of space based on current enrollment, which results in a net ASF need.

Projections of Future Capacity Requirements

Future capacity requirements for each location were determined following the steps outlined on the following page.

- Enrollment estimates, or the appropriate form thereof, were applied in combination with appropriate space planning standards (space planning standards were presented in Exhibit 4-13 and 4-14) to result in a total space requirement in ASF by type of space.
- The current space inventory for the College was subtracted from the total space requirements described above in step one to result in net ASF need by type of space for the projected 10-year facilities plan.

The result, net assignable square footage by type of space for the 10-year cycle was then used to assist in phasing projects with certain types of space requirements. Included in these exhibits is a detailed breakdown by major category of the type and amount of facility space needed by the College to serve 15,000 students which is projected for sometime after the year 2010.
Exhibit 4-4 lists the credit instructional offerings of the College for Fall, 1996. In turn, Exhibits 4-17 through 4-20 analyzes the WSCH generated by each instructional discipline and then utilizes that information to project facility requirements for the College.

### Exhibit 4-17

**Cabrillo College**

**A Projection of Instructional Offerings and Lecture and Laboratory ASF for 15,000 Students**

<table>
<thead>
<tr>
<th>Instructional Discipline</th>
<th>TOPS Code</th>
<th>Number Sections</th>
<th>Lec. ASF</th>
<th>Lab. ASF</th>
<th>Total ASF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture</td>
<td>0100</td>
<td>14</td>
<td>570</td>
<td>6,006</td>
<td>6,576</td>
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<tr>
<td>Biological Science</td>
<td>0400</td>
<td>38</td>
<td>1,043</td>
<td>6,337</td>
<td>7,380</td>
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<tr>
<td>Business/Mgt.</td>
<td>0500</td>
<td>97</td>
<td>1,589</td>
<td>1,354</td>
<td>2,943</td>
</tr>
<tr>
<td>Communications</td>
<td>0600</td>
<td>6</td>
<td>145</td>
<td>616</td>
<td>761</td>
</tr>
<tr>
<td>Computer Info. Sys.</td>
<td>0700</td>
<td>86</td>
<td>1,361</td>
<td>6,251</td>
<td>7,612</td>
</tr>
<tr>
<td>Education/P./E.</td>
<td>0800</td>
<td>142</td>
<td>585</td>
<td>*33,746</td>
<td>*34,331</td>
</tr>
<tr>
<td>Engineering/Tech.</td>
<td>0900</td>
<td>55</td>
<td>397</td>
<td>10,301</td>
<td>10,698</td>
</tr>
<tr>
<td>Fine/Applied Arts</td>
<td>1000</td>
<td>143</td>
<td>3,729</td>
<td>20,379</td>
<td>24,108</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>1100</td>
<td>49</td>
<td>2,488</td>
<td>1,863</td>
<td>4,351</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>1200</td>
<td>53</td>
<td>730</td>
<td>8,350</td>
<td>9,080</td>
</tr>
<tr>
<td>Consumer Ed./Child Dev.</td>
<td>1300</td>
<td>78</td>
<td>2,049</td>
<td>4,058</td>
<td>6,107</td>
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<tr>
<td>Humanities</td>
<td>1500</td>
<td>152</td>
<td>7,839</td>
<td>2,607</td>
<td>10,446</td>
</tr>
<tr>
<td>Library</td>
<td>1600</td>
<td>7</td>
<td>571</td>
<td>0</td>
<td>571</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1700</td>
<td>84</td>
<td>6,820</td>
<td>2,268</td>
<td>9,088</td>
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<tr>
<td>Physical Science</td>
<td>1900</td>
<td>42</td>
<td>1,523</td>
<td>10,719</td>
<td>12,242</td>
</tr>
<tr>
<td>Psychology</td>
<td>2000</td>
<td>26</td>
<td>1,533</td>
<td>596</td>
<td>2,129</td>
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<tr>
<td>Public Affairs/Services</td>
<td>2100</td>
<td>49</td>
<td>1,043</td>
<td>1,113</td>
<td>2,156</td>
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<tr>
<td>Social Science</td>
<td>2200</td>
<td>106</td>
<td>5,315</td>
<td>1,194</td>
<td>6,509</td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td>4900</td>
<td>132</td>
<td>1,158</td>
<td>7,504</td>
<td>8,662</td>
</tr>
</tbody>
</table>

**TOTAL**

|                  | 1,359 | 40,488 | 91,516 | 132,004 |

**Notes:**

1. *Physical Education Activity utilization is a separate calculation and is not included in the allocation of laboratory space.*

2. ASF is calculated using Fall-1996 WSCH and FTES as a base and then assuming the College will operate at the same efficiency when it achieves a student enrollment of 15,000 students.

3. The College is in the process of modifying the TOPS coding for a number of instructional disciplines. This recoding will have an impact on the allocation of lecture and laboratory space per discipline and, in turn, the overall allocation of lecture and laboratory space for the campus.
A Vision for the Future

Exhibit 4-18*
Cabrillo College
A Comparison of The Current Building Inventory with That Needed for 15,000 Students

<table>
<thead>
<tr>
<th>Space Category</th>
<th>Current Space Inventory</th>
<th>ASF for 15,000 Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture/Classroom</td>
<td>53,108</td>
<td>40,488</td>
</tr>
<tr>
<td>Laboratory</td>
<td>87,485</td>
<td>91,516</td>
</tr>
<tr>
<td>Office</td>
<td>56,982</td>
<td>52,461</td>
</tr>
<tr>
<td>Library</td>
<td>13,897</td>
<td>27,678</td>
</tr>
<tr>
<td>Instructional Media (AV/TV)</td>
<td>506</td>
<td>10,682</td>
</tr>
<tr>
<td>Physical Education (Indoor)</td>
<td>24,367</td>
<td>38,362</td>
</tr>
<tr>
<td>Assembly/Exhibition</td>
<td>12,753</td>
<td>24,456</td>
</tr>
<tr>
<td>Food Service</td>
<td>9,967</td>
<td>23,545</td>
</tr>
<tr>
<td>Lounge</td>
<td>1,744</td>
<td>7,554</td>
</tr>
<tr>
<td>Bookstore</td>
<td>4,171</td>
<td>8,148</td>
</tr>
<tr>
<td>Health Services</td>
<td>550</td>
<td>1,229</td>
</tr>
<tr>
<td>Meeting Room</td>
<td>488</td>
<td>4,077</td>
</tr>
<tr>
<td>Data Processing</td>
<td>1,852</td>
<td>4,174</td>
</tr>
<tr>
<td>Child Care</td>
<td>0#</td>
<td>10,000</td>
</tr>
<tr>
<td>Physical Plant</td>
<td>25,593</td>
<td>20,602</td>
</tr>
<tr>
<td>All Other</td>
<td>11,799</td>
<td>11,130</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>305,262 ASF</strong></td>
<td><strong>376,102 ASF</strong></td>
</tr>
</tbody>
</table>

Notes:
1. *The current space inventory is currently being re-evaluated. The outcome of this analysis will result in this Exhibit being revised by October 1, 1997.
2. #Child Care space is currently coded as laboratory space.
### Exhibit 4-19*

**Cabrillo College**

**Building Requirements**

*To Meet the Needs of 15,000 Students*

<table>
<thead>
<tr>
<th>Space Category</th>
<th>Current Space Inventory</th>
<th>ASF for 15,000 Students</th>
<th>Additional ASF Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture/Classroom</td>
<td>53,108</td>
<td>40,488</td>
<td>&lt;-12,620</td>
</tr>
<tr>
<td>Laboratory</td>
<td>87,485</td>
<td>91,516</td>
<td>4,031</td>
</tr>
<tr>
<td>Office</td>
<td>56,982</td>
<td>52,461</td>
<td>&lt;-4,521</td>
</tr>
<tr>
<td>Library</td>
<td>13,897</td>
<td>27,678</td>
<td>13,781</td>
</tr>
<tr>
<td>Instructional Media (AV/TV)</td>
<td>506</td>
<td>10,682</td>
<td>10,176</td>
</tr>
<tr>
<td>Physical Education (Indoor)</td>
<td>24,367</td>
<td>38,362</td>
<td>13,995</td>
</tr>
<tr>
<td>Assembly/Exhibition</td>
<td>12,753</td>
<td>24,456</td>
<td>11,703</td>
</tr>
<tr>
<td>Food Service</td>
<td>9,967</td>
<td>23,545</td>
<td>13,578</td>
</tr>
<tr>
<td>Lounge</td>
<td>1,744</td>
<td>7,554</td>
<td>5,810</td>
</tr>
<tr>
<td>Bookstore</td>
<td>4,171</td>
<td>8,148</td>
<td>3,977</td>
</tr>
<tr>
<td>Health Services</td>
<td>550</td>
<td>1,229</td>
<td>679</td>
</tr>
<tr>
<td>Meeting Room</td>
<td>488</td>
<td>4,077</td>
<td>3,589</td>
</tr>
<tr>
<td>Data Processing</td>
<td>1,852</td>
<td>4,174</td>
<td>2,322</td>
</tr>
<tr>
<td>Child Care</td>
<td>0#</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Physical Plant</td>
<td>25,593</td>
<td>20,602</td>
<td>&lt;-4,991</td>
</tr>
<tr>
<td>All Other</td>
<td>11,799</td>
<td>11,130</td>
<td>&lt;-669</td>
</tr>
</tbody>
</table>

**TOTAL**                    | **305,262 ASF**          | **376,102 ASF**          | **70,840 ASF**        |

**Notes:**

1. *The current space inventory is currently being re-evaluated. The outcome of this analysis will result in this Exhibit being revised by October 1, 1997.*
2. #Child Care space is currently coded as laboratory space.
Facilities Phasing Plan

Four new buildings are envisioned for development on the main campus of Cabrillo College. These new buildings include the Student Success Center, the Visual and Performing Arts Complex, the Wellness/Allied Health Center and the Horticulture Center. In addition, fourteen renovation, secondary effect or site improvement projects are also proposed. The projects are listed in Exhibit 4-20. Each description lists the ASF of the proposed new projects and the total project cost in constant July, 1997 dollars is estimated. The completion of the LRC is not listed on Exhibit 4-20 but will require some monitoring during the 1997-98 fiscal year.

Deferred maintenance projects are shown on the summary in general order of priority. However, emergency conditions will likely influence the order of deferred maintenance issues. It is recommended the District prepare a detailed and comprehensive investigation and plan for the actual deferred maintenance schedule. The identified deferred maintenance projects are proposed over a ten-year schedule. An on-going scheduling cycle for deferred maintenance should be developed to include the new facilities constructed in this plan.

Site Plan

As indicated in Exhibit 4-20, there are four new buildings and, in turn, fourteen additional projects which can be termed major renovations or secondary effect projects which will have a major impact on the campus.

A key factor in the development of the new site plan for the campus is the recommended acquisition of the Haas/Sterling property. Assuming this does occur, Exhibits 4-21 through 4-25 outline the sequential development of the campus and also illustrate the general placement of the proposed buildings and the related site improvements such as additional parking areas.
### Exhibit 4-20
#### Capital Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Commencement Date</th>
<th>Estimated Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Watsonville Center</td>
<td>30,000 Sq. Ft. Building</td>
<td>1998</td>
<td>$5.0 M</td>
</tr>
<tr>
<td>2. 300/600 Bldg. Remodel</td>
<td>Health/Safety Remodel</td>
<td>1997</td>
<td>$4.0 M</td>
</tr>
<tr>
<td>3. Arch. Barr. Removal</td>
<td>ADA Projects (50% Match)</td>
<td>1997</td>
<td>$3.5 M</td>
</tr>
<tr>
<td>4. Student Success Center</td>
<td>30,000 Sq. Ft. Addition</td>
<td>1998</td>
<td>$8.0 M</td>
</tr>
<tr>
<td>5. Horticulture Center</td>
<td>10,000 Sq. Ft. Building</td>
<td>1997</td>
<td>$4.0 M</td>
</tr>
<tr>
<td>6. Campus Signage</td>
<td>Master Sign Program</td>
<td>1998</td>
<td>$0.5 M</td>
</tr>
<tr>
<td>7. Visual &amp; Performing Arts</td>
<td>50,000 Sq. Ft. Complex</td>
<td>1999</td>
<td>$15.0 M</td>
</tr>
<tr>
<td>8. Wellness/Allied Health Cntr.</td>
<td>15,000 Sq. Ft. Center</td>
<td>2000</td>
<td>$3.0 M</td>
</tr>
<tr>
<td>9. Parking Areas</td>
<td>1,000 Additional Spaces</td>
<td>2001</td>
<td>$3.0 M</td>
</tr>
<tr>
<td>10. Campus Lighting</td>
<td>Rework Exterior Lighting</td>
<td>1998</td>
<td>$0.8 M</td>
</tr>
<tr>
<td>11. 100/200 Building Remodel</td>
<td>Secondary Eff. of Proj. #4</td>
<td>2001</td>
<td>$4.0 M</td>
</tr>
<tr>
<td>12. 300/800 Building Remodel</td>
<td>Secondary Eff. of Proj. #7</td>
<td>2001</td>
<td>$2.0 M</td>
</tr>
<tr>
<td>13. 1100 Building Renovation</td>
<td>Health/Safety Project</td>
<td>2002</td>
<td>$0.5 M</td>
</tr>
<tr>
<td>14. Deferred Maintenance</td>
<td>Campus-wide Projects</td>
<td>1998</td>
<td>$5.0 M</td>
</tr>
<tr>
<td>15. Landscaping</td>
<td>Campus-wide Projects</td>
<td>1998</td>
<td>$0.5 M</td>
</tr>
<tr>
<td>16. Bridge over Soquel Dr.</td>
<td>Second Overpass</td>
<td>1999</td>
<td>$1.2 M</td>
</tr>
<tr>
<td>17. Interim Projects</td>
<td>Short-term Projects</td>
<td>1997</td>
<td>$0.5 M</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$60.5M</strong></td>
</tr>
</tbody>
</table>
I. EXISTING CAMPUS

Exhibit 4-21

LEGEND:
1. BLDG 100
2. ULDG 200
3. O1 DG 300
4. BLDG 400
5. BLDG 500
6. BLDG 600
7. BLDG 700
8. DLDG 800
9. BLDG 900
10. BLDG 1000
11. BLDG 1100
12. BLDG 1200
13. BLDG 1300
14. BLDG 1400
15. BLDG 1500
16. BLDG 1600
17. BLDG 1700
18. BLDG 1800
19. BLDG 1900
20. BLDG 2000
21. BLDG 2100
22. BLDG 2200
23. BLDG 2300
24. PHOTOGRAPHY LAB
25. CHILD CARE CENTER
A Vision for the Future

2. STUDENT SUCCESS CENTER

LEGEND:
1. BLDG 100
2. BLDG 200
3. BLDG 300
4. BLDG 400
5. BLDG 500
6. BLDG 600
7. BLDG 700
8. BLDG 800
9. BLDG 900
10. BLDG 1000
11. BLDG 1100
12. BLDG 1200
13. BLDG 1300
14. BLDG 1400
15. BLDG 1500
16. BLDG 1600
17. BLDG 1700
18. BLDG 1800
19. BLDG 1900
20. BLDG 2000
21. BLDG 1550
22. BLDG 1050/70
23. BLDG 955
24. PHOTOGRAPHY LAB
25. CHILD CARE CENTER
Exhibit 4-24

2. STUDENT SUCCESS CENTER
3. VISUAL AND PERFORMING ARTS COMPLEX
4. WELLNESS/FITNESS CENTER

LEGEND:
1. BLDG 100
2. BLDG 200
3. BLDG 300
4. BLDG 400
5. BLDG 500
6. BLDG 600
7. BLDG 700
8. BLDG 800
9. BLDG 900
10. BLDG 1000
11. BLDG 1100
12. BLDG 1200
13. BLDG 1300
14. BLDG 1400
15. BLDG 1500
16. BLDG 1600
17. BLDG 1700
18. BLDG 1800
19. BLDG 1900
20. BLDG 2000
21. BLDG 1550
22. BLDG 1050/70
23. BLDG 955
24. PHOTOGRAPHY LAB
25. CHILD CARE CENTER
26. VISUAL AND PERFORMING ARTS COMPLEX
27. WELLNESS/FITNESS CENTER

MAAS, RAO, TAYLOR AND ASSOCIATES
CABRILLO COLLEGE DEVELOPMENT PLAN

A Vision for the Future
A Vision for the Future

Human Resources

This master plan is a research-based document which has been developed to a large extent as a result of input from faculty and staff of the College. As modifications to instructional programs and support services were mentioned by the faculty and staff, in nearly every case there were staffing implications. Needless to say, this meant additional staff, not a reduction in staff! Consequently, as part of this plan, it is essential that the current procedures relating to the area of human resources be addressed so as to provide guidelines for the prioritization for the potential hiring of additional staff and the ramifications of those decisions.

Selection of Staff

In accordance with the current bargaining unit contract, there is a District process for the allocation of faculty (FTES) to comply with the State mandated 75/25 staffing ratio requirements. The process involves meeting annually, and as needed, for a discussion on faculty staffing.

Upon completion of the Educational Master Plan, this document should serve as the basis for the aforementioned process. In this way, the educational and support service priorities established on a District-wide basis should serve as the basis for the staffing plan.

In terms of planning, the District Human Resources staff will need to update and revise hiring procedures and continually update job descriptions.

Qualifications of Staff

The District hiring policy for all employees requires that all candidates demonstrate minimum standards of academic training and/or professional experience in order to carry out the responsibilities listed in the job description, in accord with the College’s missions and goals. A District affirmative action policy is in effect and procedures are also being developed to implement requirements of the Americans with Disabilities Act.

Through Governing Board policy, the District has established minimum standards for all employee positions. Job descriptions have been developed and are on file in the Personnel Office.

In terms of planning, future growth in the College means an effort will need to be made to attract qualified staff to the College, especially those who help the College reflect the diversity of the College’s service area population.

Evaluation of Staff

The College currently has an evaluation process in place which is typical of most community colleges. The goals of the process are to assess the performance of individuals, to help to develop and enhance individuals' achievements in their jobs and to increase the effectiveness of the institution through the evaluation process. The evaluation is based on direct observation and knowledge of the individual by the evaluator(s). Areas of strength and recommendations for improvement are identified.
A Vision for the Future

With respect to planning for the future, it appears the evaluation process for faculty seems to be working well. However, as the Educational Center in Watsonville expands and faculty and staff are assigned to that location on a full-time basis, it will be important to ensure that the processes for evaluating faculty and staff is carried out in a uniform manner.

Staff Development

If many of the recommendations included in this Educational Master Plan are to be implemented in a timely manner, it will be critical that a comprehensive staff development program be implemented on an on-going basis. Financial support for employees to attend conferences, workshops and seminars which allow them to maintain competency and gain new knowledge in especially the technology area is essential to the implementation of this plan.

Current FLEX activities are good and should continue. However, when the opening of the Learning Resources Center and the development of the "Student Success Center," occurs; provision needs to be made for day-to-day staff development activities for all segments of the College staff. In the interim, a location needs to be identified and responsibility assigned for implementation of a college-wide staff development program.

In summary, the implementations of the recommendations in this Educational Master Plan should provide the basis for a well-founded, comprehensive Human Resources Plan including assessment of the need for new positions, replacement of existing positions, evaluation of employees and the need for on-going staff development activities.

Financial Plan

As a vital segment of the California Master Plan for Higher Education, the California Community Colleges and specifically the Cabrillo Community College District, has traditionally been a State-funded institution. Unfortunately, over the past twenty years, the level of financial support from the State has been very erratic and unpredictable from year-to-year. There have been periods of unlimited growth and periods when the State has "tapped" the level of support. The one constant factor that has been in place since the passage of Proposition 13 in 1978 is that funding is totally State mandated and totally unpredictable.

Today, because of the unpredictability and level of available funding as well as the likelihood that State funding will not be available at a level to support both the capital and operational needs of the College, it is important to assess the financial future of the College and suggest alternate sources of revenue which the College will need to cultivate in order to maintain quality educational programs, support services and facilities for residents of the service area.

To this end, this current educational master planning process summarizes strategies which have been implemented as well as strategies which can be implemented in the future. These strategies are summarized in a general manner in the section which follows. However, it is important to realize that the real implementation of these strategies is contingent upon the College recognizing and responding in a timely manner to financial opportunities as they become available. Each financial opportunity is a unique opportunity. No financial plan can
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spell out, in detail, how to respond; but it can predict the general areas of funding within which
the opportunities will occur.

Thus, this plan will address, in outline form, the various sources of funding available to
the Cabrillo Community College District together with an assessment of support potential for
both operations and capital projects. In the sections that follow, an assessment has been made
of the strength of the potential financial sources which may be available to the District and the
College:

Sources of Financial Support

- State Revenue Sources

The projection of the availability of State Funds for support of the District's programs
and service is as follows:

1. Operational Funds: It is likely that the District will receive annual fund increases
   in this category of no more than 3% for the next decade. Also, it seems very likely
   that there will be no major financial windfalls from the State. Should the State fail
   to experience full financial recovery, plus the attitude of taxpayers regarding tax
   increases, and the demands of other agencies and programs on the finite number of
tax dollars, the revenue increases could be less than 2%. The one certainty is that
the District cannot expect to fully fund both its increasing costs of operations and
any new innovative programs from State revenue sources.

2. Tuition Increases: Tuition increases in the next decade will most likely cause a
doubling of tuition over the present level. This is not an appreciable revenue
increase for the District, however, since the tuition revenues are offset by
adjustments in State apportionment funding.

3. Capital Funds: While there are many variables in the allocation of State Capital
Outlay funds such as District growth potential, age and condition of buildings,
health and safety issues, and needs for specialized programs, the District can
probably anticipate receiving funding for at most two to three buildings at any
given time in the next decade.

4. Funds for Disabled Programs: State increases in funding in this category will be
in no greater amount than necessary to offset services.

5. Lottery Funds: The District should not anticipate any increases in the amount of
lottery funds received over the next decade.
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- **Local District Funds**

  1. **Bond Issue**: The option of utilizing a local bond issue to fund capital construction of buildings and equipment is a funding source which must be seriously considered by the District. The feasibility of approaching the electorate should be assessed and if a positive response is determined a well-planned effort to pass a local bond should be pursued.

  2. **Health Fees**: The College has implemented this fee to provide funds to offset the cost of providing health services to students.

  2. **Parking Fees**: Parking Fees will continue to provide funds to offset the costs of constructing and maintaining parking facilities as well as the assistance in providing local bus services via the area rapid transit company.

  3. **Student Center Fee**: By vote of the student body, this fee has been implemented. The fee provides for the construction of student centers. Unfortunately, the fee at its present level is not sufficient to fully fund construction of these facilities.

- **Community-Based Funds**

  1. **Redevelopment Funds**: The primary source of community-based revenue is Redevelopment Funds, a one-time funding source that should be utilized for capital projects. These funds are being utilized as part of the financing for the Watsonville Center.

  2. **Special Assessment Districts**: Mello Roos, lighting districts, and other special assessment districts can be utilized as planning progresses at the campus and at the satellite centers. However, these assessments can only be implemented with a two-thirds voter approval from the effected group of voters.

- **Implementation of Resource Development Model**

  Financial resources are always a critical part of any planning effort. Without funds for implementation, any plan which is developed quickly loses support from the faculty and staff of the College. Thus, it is essential that the District exert a maximum effort to explore all options with respect to resource development. A proactive, positive approach is needed with everyone considering new, innovative approaches to funding. Sole reliance on the State of California to fund the College is not a viable answer. The College must maximize its ability to receive State funds and at the same time explore all alternate sources of funding.
A Vision for the Future

To this end, it is important to involve as many faculty and staff as possible in resource development. Resource acquisition must be organized and logical. Accomplishments must be promoted so faculty and staff see incentives and a sense of purpose in some form of alternative revenue acquisition (e.g., fund raising, grant writing, partnership solicitation). The College Foundation, alumni, local business leaders, key businesses in the area and local governmental agencies such as cities, can be instrumental in the overall scheme of resource acquisition.

- **For the Future: Significant Endowments**
  Significant efforts should be made to secure major donor interest in the college mission. Alumni relations are most effective on an individual basis initiated by personal contacts. Numerous discussions with various affluent alumnae and friends can reap great benefits to the College. These types of donations generally require a minimum of 1.5 years to cultivate.

- **Alternate Funding Sources**
  1. **Energy Programs**: The District is already participating in an energy conservation program and there is the potential for further participation in both State and utility sponsored programs.
  2. **Real Estate Management**: The District has the option to manage current District real estate holdings not needed for instructional purposes. Also, the District can acquire additional property adjacent to the campus, in Watsonville or at other potential satellite educational center sites which may be developed as educational needs indicate. These sites can then be developed via joint venture agreements or public/private partnerships. In some cases, these can be revenue generating activities. The outcome of these asset management efforts will generate an additional and predictable revenue stream that can be used for future capital outlay projects.
  3. **Fee-Based Programs**: Through the development of special fee-based classes for general audiences and through contract education with local businesses and industries, the College can develop a revenue-generating educational services organization that will enhance the over-all financial condition of the District and that can provide additional funds for equipment, supplies, and facilities.
  4. **Federal Programs**: While it is recognized that Cabrillo College is presently participating in both student and institutional Federal Programs, it is necessary to maintain an awareness of the total spectrum of Federal involvement in higher education which seems to be changing and it is important to closely monitor proposed and new programs. It appears additional opportunities in areas such as
child care, training partnerships and technology grants are becoming increasingly available.

5. **Private Grants:** The area of private grants is one that holds increasing opportunity for the College. This is especially true if the College pursues public/private partnerships for training programs.

6. **Public-Private Partnerships:** An increasing opportunity for alternative funding lies in the area of public-private partnerships. In particular, the current land management program should open additional opportunities. Such potential partnerships should include private businesses, and industries within the community as well as nonprofit entities and other educational institutions.

7. **Public-Public Partnerships:** Partnerships with cities, civic organizations, and other public entities are of increasing value to the College. Such partnerships provide another source of both revenue and educational opportunity for the community.

8. **Foundation Activities:** Through the Foundation, the College can realize additional income, scholarships for students and special project funding. Endowment Trust Funds and other estate planning instruments can provide long-term income to the College as can shorter range Foundation fund raising activities, and planned giving programs.
Chapter Five
RECOMMENDATIONS/PLAN OF ACTION

The following plan of action and accompanying recommendations have been developed in response to the observations and findings listed in the preceding chapters. The list of recommendations have been divided into general recommendations for the College and specific recommendations for an identified program, service, function or facility:

General Recommendations:

1. After completion of the District Plan, the Board of Trustees should take action to formally adopt the Educational Master Plan.

2. It is recommended the future organization of the District continue to be that of a single college with educational centers. The current campus is well-positioned in the center of the District. The Watsonville Education Center should meet the needs of residents in the southern portion of the District and future needs of residents in the northern portion of the District can be met through a satellite education center in that area and/or the use of distance learning technology. Public and private partnerships for the development of the education centers are strongly encouraged. The working relationship the College has forged with the City of Watsonville is a model for this type of partnership and should be maintained.

3. The college-wide commitment to on-going staff development activities is important. The flex days provide some opportunities in this area but additional activities focused on the implementation of technology in the workplace and classroom for faculty and staff needs to be implemented.

4. The analysis of the instructional program of the College reflects the number of sections of classes which should be offered when the College achieves an enrollment of 15,000 students at the Aptos Campus, 3,000 students at the Watsonville Center and 500 students at other community education centers throughout the District. These guidelines should be implemented as part of an overall enrollment management program for the District. If followed, the guidelines presented will allow the College to increase its current average class size of twenty-three (23) students to an average class size of twenty-eight (28) students.

5. Alternate sources of funding must be aggressively pursued. The State will not provide sufficient funds to meet the operational and capital improvement needs of the College. The options, as listed in the financial planning section of this Plan, should be considered for implementation.
To successfully implement the proposed Capital Outlay Construction Plan for the District, it is essential that the District consider the acquisition of parcels of property adjacent to the campus in Aptos. Specifically, in priority order, the Haas/Sterling property, the Twin Lakes Church property on Soquel Drive and the Koch property.

Future 5-Year Capital Construction Projects should continue to be developed in accordance with the facility needs identified in this Plan. Specifically, the highest priorities in terms of future facilities are as follows:

a. Utilizing a location adjacent to the existing student center, the development of a new, centralized “Student Success Center”. This project would include the remodel of the existing student center as well as the addition of 30,000-40,000 square feet of new space. Included in the facility would be all services associated with the matriculation of students including admissions, records, registration, counseling, assessment, financial aid, EOPS, veterans services, health services, career planning, job placement, transfer center, re-entry center, learning skills center, disabled student services and bookstore. In addition, space for student activities, student government and related space specifically requested by the Associated Students. The location of the Center should be in close proximity to the proposed entrance to the campus on Soquel Drive as illustrated on the revised campus site plan.

b. The development of a formal, “Front Door,” or visitors entrance to the College off Soquel Drive. This location is in essentially the same location as the original main entrance to the campus. In addition, a secondary entrance should be considered from the West side of the campus. (See revised campus plan)

c. The revitalization of all parking and landscape areas. Because of years of funding and staffing constraints, there is a need to renovate and resurface all parking areas. These same funding limitations have caused an overall deterioration of the landscape areas. To create the proper learning environment, these areas must be addressed.

d. The design and implementation of a comprehensive signage program for the College. This includes signage for the main entrance as well as campus directional, parking and building signs.

e. The development of a new visual and performing arts complex. The location of a new visual and performing arts complex is dependent on the potential acquisition of property adjacent to the campus. Once the acquisition is finalized, specific details regarding the secondary effects of this facility can be defined.
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f. The College needs to review the current assignment of instructional space on the campus. As part of this review, specific lecture, laboratory and office spaces need to be identified which are not functional and would be more effectively used if the space were remodeled. Such remodel projects may include the 400, 500, 700, 800, 1300 and 1500 buildings. Once identified, these projects need to be included in the 5-Year Capital Construction Program of the College.

g. As part of the facilities master planning process, all temporary structures, portable buildings and trailers need to be eliminated. The functions currently housed in these units need to be relocated to remodeled space in permanent buildings.

h. Develop a allied health and wellness center. This center, which is a joint project of the physical education and allied health programs will be developed using a public/private partnership(s). The facility should be located on the ocean side of the campus.

8. Integration of technology and especially micro-computer technology, in all aspects of future planning is essential. This includes curriculum and support services, as well as the resulting facility plans. In particular, the technology related needs of all College employees must be met with state-of-the-art equipment and training. This is expensive, but must be done if the College is to be responsive to residents of the service area.

Specific Recommendations:

1. The remodel of the Art building is currently in the preliminary planning stage. As part of that planning process, it is recommended the foundry be relocated to the 1300 building area.

2. The relocation of a portion of the Welding program to Watsonville has merit in light of the areas population demographics and employment opportunities. If this relocation is implemented, the plan to redesign the 1300 building to include space for other instructional disciplines is viable. Specific disciplines which could be included in the facility include welding, art, engineering technology, theater arts and micro-computer technology.

3. There is a need to develop an interim plan to improve working conditions in the administration building. Better utilization of the existing space is possible. An effort must be made to minimize costs, but the current working conditions in this facility must be improved. In addition, as a secondary effect of the proposed Student Success Center, there needs to be a total renovation of the Administration
Recommendations/Plan of Action

Building to accommodate the President, Instructional Services and Business Services.

4. A program of repairing or replacing the wooden louvers adjacent to many of the doors throughout the campus needs to be implemented immediately. This is both a security/health issue and an esthetic issue.

5. The Mesa project needs additional space within the science, mathematics and engineering area. It may be possible to provide this space in the 700 building as a secondary effect of the redesign and re-allocation of space in the 1300 building.

6. The recommendation to utilize the old photography laboratory as a Radiologic Technology laboratory is viable.

7. Assuming state funding occurs for the Horticulture project, it is recommended the permanent Horticulture facility be located at the site of the present campus police facility and that the present storage and tool shed be demolished. A location for storage and tools will then be included in the new structure. In turn, the police facility will need to be relocated to another site on campus.

8. Assuming the plan for the front entrance is accepted, steps need to be taken to re-establish a left-hand turn lane on Soquel Drive into this area.

9. The College has been involved in an on-going program of handicapped barrier removal on the campus. This local/state matching funds program needs to continue as funds are provided by the state.

10. It is recommended the College faculty, staff and students review the merits of establishing a "College Hour" concept for the campus. This concept, which establishes one hour per week during which there are no instructional classes, would significantly enhance the student activities program and also allow for more efficient scheduling of college-wide committees and related activities.

11. A review of the overall movement of students on the campus indicates that there is a need for an additional overpass for Soquel Drive. This overpass should be located on the westerly side of Cabrillo College Drive. Also, the design should be done in a manner to accommodate carts.

12. There continues to be a need for additional storage and warehouse space on the campus. Specific space can be developed as part of the overall facilities master plan update.
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13. Currently, the student parking ratio on the campus is approximately six students per space. The typical state standard is between four and five students per space. As the campus grows to its maximum enrollment of 15,000 students, it will be necessary to add an additional 1,027 parking spaces to achieve the four to one ratio.

14. Student Services is proposing an interim use of the 800 building for job placement, the Puente program, transfer center and career center. The proposal is well-conceived and should be implemented while permanent space for these programs is designed in the proposed student success center.

15. As part of the planning process, it has been determined that the Financial Aid Office and the Bookstore have an immediate need for additional space at their present location. An interim proposal to expand the space needs of these two operations at their present location seems viable and should be considered for implementation.

16. There are a number of deferred maintenance projects such as painting, roof repair, heating and ventilation which need to be addressed on a systematic and timely basis.
APPENDICES