



**2009 Merritt College  
Integrated Educational and Facilities Master Plan**  
February 17, 2009



# Acknowledgments

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**2009 Merritt College  
Integrated Educational and Facilities Master Plan**

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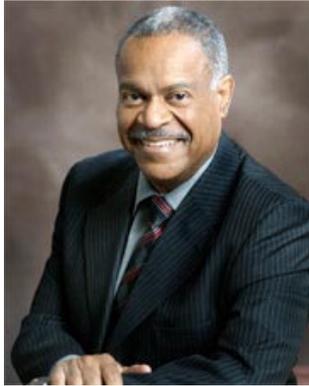
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## Letter from the President

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The *2009 Merritt College Integrated Educational and Facilities Master Plan* is a document that serves multiple purposes. The plan is an integral component that will assist the College in planning for its future facilities. It also bridges two other important documents in the planning process by connecting the Educational Master Plan to the Facilities Master Plan. The Educational Master Plan was developed internally over the past year by the Merritt College community. This undertaking was a critical element in the planning process and will be the foundation for the college to plan and build what is needed for the future student population and our facilities. Combining the Educational

Master Plan with the Integrated Educational and Facilities Master Plan will guide the development and implementation of the Facilities Master Plan. Good planning is the result of engaging everyone in the process on a constant basis and reviewing the results along with updating the goals and recommendations in a timely fashion. Merritt College will continue to serve its students in a positive way, and the only way that can be achieved is by preparing for the future in a proactive manner. A solid planning process that results in obtainable goals that are reviewed on a timely basis will allow us to support our mission of helping people help themselves through education. The Integrated Educational and Facilities Master Plan will assist us in achieving this goal.

Robert A. Adams, Ed.D.  
President

# Introduction to Process

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## SCOPE OVERVIEW

The *2009 Merritt College Integrated Educational and Facilities Master Plan* (“Plan”) is a comprehensive plan for the College, including educational master planning, facilities planning and financial plans input and projections. This Plan has been developed in support of the 2008 Educational Master Plan prepared by Merritt College. The 2008 Educational Master Plan was developed over the past twelve months with contributions from the administration, faculty and staff of Merritt College, and completed independently of this process. The *2009 Merritt College Integrated Educational and Facilities Master Plan* provides specific direction and parameters for the implementation of programs and activities relating to the educational, support service and facility programs of the College. The Plan is meant to be the “bridging document” between the Educational Master Plan and the Facilities Master Plan for Merritt College being developed by WLC Architects.

The goal of the *2009 Merritt College Integrated Educational and Facilities Master Plan* is to assist the College in projecting the educational programs, support services and facilities that will be needed through the year 2022. The Plan provides direction for improving the College’s services to students and the community. It is a dynamic document, flexible enough to adjust to new issues and needs that may arise, which will guide decision-making at the institution for years to come.

The *2009 Merritt College Integrated Educational and Facilities Master Plan* has its roots in both qualitative input and quantitative data. Information from inside and outside of the College was used to explain the changes that occurred in the past, and to forecast the needs for the future. The Plan is to project the future program of instruction and student services and determine the amount of space that will be required to accommodate these needs through the year 2022. It will serve as the foundation upon which the Facility Master Plan will be built.

**The objectives of the Plan were:**

- To bring together educational components—the physical, programmatic and human resources of the College—into a long-range plan that will support facility development and decision-making for the future.
- To identify and allocate academic and support services space through the year 2022.
- To provide the facility master planners with appropriate and quantified space, by category, that meets State educational codes and Title 5 standards.
- To position the College to take the next step in the planning process—forecasting space into the physical dimensions of buildings that meet State criteria and identifying a finance plan and strategy to meet all the facility needs of the institution.

**The planning process included the following tasks:**

- Conducting an overview and assessment of the College and the area it serves.
- Conducting data research on the historic growth of student enrolment and weekly student contact hours (WSCH).
- Completing a physical capacity analysis—determining the viability of the physical space to support the current program of instruction and support services.
- Assessing the internal environment of the College relative to the current composition/profile of the students served.
- Conducting an external environmental scan—viewing the College in relationship to its service area and external environment.

The planning process included, but was not limited to, the following areas to create a platform to support the forecast of future needs and directions of the College:

- Incorporated the data of the 2008 Educational Master Plan that was developed internally by Merritt College and verifying the information that was provided to the Peralta Community College District by the independent consultant firm of Chuck McIntyre for that planning process.
- Conducting a section level analysis of the current program of instruction.
- Creating a baseline curriculum that reflects current WSCH values by discipline/program, by school and the College.
- Integrating the qualitative input with quantitative data.

Defining the capacities for WSCH generation in the future and determining the needs for space through year 2022:

- Creating a WSCH generation forecast by discipline/program and school relative to the program of instruction for the future.
- Quantifying the academic space needs in assignable square feet (ASF) for the future.
- Quantifying the College's total space needs in assignable square feet (ASF) for the future.
- Evaluating space needs for consistency with the Title 5—Administrative Code standards of the State.
- Producing a surplus/deficit analysis for future space requirements.



## Framework for the Plan

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### OVERVIEW

The framework for the *2009 Merritt College Integrated Educational and Facilities Master Plan* commences with an analysis of the students who attend the College. It covers who they are, where they live, why they come to Merritt College, and what College facilities and services they will utilize during their enrollment at the College. The students and their educational needs are the basis for programs and services provided by the College. Without students, there would be no need for the College. Students determine the future programs and services for the College and, in turn, the facilities needed to house those activities. Historically, this concept of using a student-based model to generate all future planning efforts has been difficult to implement at many Colleges. However, with today's ever-changing economic environment and the competition

for students, Colleges must use the student-based planning model when preparing master plans for the College.

The framework of the plan also creates baselines, or reference points from which future programs, services and facilities are developed. For the *2009 Merritt College Integrated Educational and Facilities Master Plan*, baseline references have been established using fall semester 2007 as the baseline. All external and internal environmental scan information included in the Plan is based on 2007-08 information.

### MISSION AND VALUES

#### Mission

The mission of Merritt College is to enhance the quality of life in the communities we serve by helping students to attain knowledge, master skills, and develop the appreciation, attitudes, and values needed to

succeed and participate responsibly in a democratic society. To accomplish its mission, the College provides open access to excellent instructional programs and comprehensive support services in a culturally-rich, caring and supportive learning environment. The College's purpose is to provide opportunities for lifelong learning, contribute to the economic growth of our communities while assisting students to attain degrees and certificates, earn credits to transfer and develop the skills necessary to complete their educational goals.

#### Core Values

***Student Success:*** We provide challenging and rigorous learning experiences that support the academic and personal success of our students.

***Caring Spirit:*** We genuinely care about every member of our campus community.

**Teamwork and Inclusion:** We encourage everyone to participate in College governance and assume responsibility for acting on our shared commitment to provide exceptional learning experiences.

**Campus Climate:** We strive to create a student-centered learning environment that

leads to student retention, persistence and success.

**Diversity:** We honor and respect the different backgrounds, experiences, languages, values and cultures of everyone at the College.

## **STRATEGIC DIRECTIONS 2005-2010**

In 2005, the College's Integrated Planning Committee met to draft five-year Strategic Directions for review and approval by the College Governance Committees. The agreed-upon Strategic Directions are as follows.

### **Strategic Direction I: Student learning Outcomes**

Improve the effectiveness of teaching and learning at Merritt College through the development and implementation of student learning outcomes for both instruction and support services.

#### **Statement of Intent**

As reflected in our mission statement, Merritt College is committed to helping students attain knowledge, master skills, and develop the appreciation, attitudes and values needed to succeed and participate responsibly in a democratic society. Towards this end, the College will identify expected outcomes as to what students should know and/or be able to do as a consequence of completing a course program or utilizing a



support service. The College should systematically and routinely measure the attainment of those outcomes, effectively communicate the results of this assessment, utilize the measurement /assessment data to revise /refine courses, support services, and to inform allocation of human, fiscal and physical resources.

### **Strategic Direction II: Culture of Communication**

To have clear communication and listening be a way of life at Merritt College in order to arrive at true shared values, and develop an appreciation of the diverse perspectives in the College community.

#### **Statement of Intent**

Consistent with Merritt's mission to develop appreciation and attitudes for success, provide lifelong learning opportunities, and foster a caring learning environment. We will develop a community that excels in the communication of ideas, values and decisions among all segments of the Merritt College community in a timely, efficient and

free flowing manner. Towards this end, Merritt College will develop mechanisms to create a shared understanding of how institutional effectiveness is defined and measured; provide regular and timely communication of ideas, information, decisions, news, priorities, action plans and progress among College constituencies; and develop a feedback loop through which College constituencies can participate.

### **Strategic Direction III: Technology And Media Resources**

Develop and maintain technological, information and media resources that support the needs of students, faculty, and staff and that are consistent with the College's mission.

#### **Statement of Intent**

An examination of the College technological infrastructure and media resources suggests that there are disparities in the technology and media available to various segments within the College community. Some of these disparities exist as a result of resources

managed by the PCCD; while others are specific to the Merritt College campus. These disparities impact the ability of the College to optimize quality education and opportunities for life-long learning. In order to enhance student experiences, increase faculty capacity to support growth, and improve the College's ability to provide effective instruction and College services, Merritt College will provide technology and media resources, along with appropriate infrastructure modifications, and staff training sufficient to eliminate the current disparities. The College will develop and implement its technology and media standards; and provide training so that information and learning resources may be used effectively and efficiently.

### **Strategic Direction IV: Resource Development**

Develop an institutional approach to optimize the utilization of existing resources and develop adequate future resources to support Merritt's mission.

### Statement of Intent

To enhance institutional effectiveness, attain student learning outcomes, implement more effective communication strategies, and to provide appropriate technological and media resources, it is imperative that the College maximize the utilization of current human,

fiscal and physical resources, invest in innovation and develop new revenue streams. Specifically Merritt will pursue business partnerships that effectively link our curriculum with industry needs, as well as service learning opportunities for students, pursue grants, gifts, donations, and

additional facility rental; provide faculty/staff training and mentoring as an investment in our human resources. It also needs to systematically maintain and upgrade campus facilities to provide an excellent, clean, and safe environment for learning.

### **INSTITUTIONAL LEARNING OUTCOMES (ILOS): 2005-2009**

Institutional Learning Outcomes were drafted late in 2005, and presented to the College community in 2006. These ILOs were reviewed, revised, and adopted in Spring of 2008. ILO's are defined as "*What students will be able to do out in the world as a result of their experiences at Merritt College.*" The following are Merritt College's approved Institutional Learning Outcomes.

#### **Communication**

Communicate with clarity and precision using oral, nonverbal, and/or written language, expressing an awareness of audience, situation, and purpose.



**Critical thinking**

Think critically using appropriate methods of reasoning to evaluate ideas and identify and investigate problems; and also to develop creative and practical solutions to issues that arise in workplaces, institutions, and local and global communities.

**Quantitative Reasoning**

Apply college-level mathematical reasoning to analyze and explain real world issues, and to interpret and construct graphs, charts, and tables.

**Information and Computer Literacy**

Use appropriate technology to identify, locate, evaluate and present information for personal, educational and workplace goals.

**Cultural Awareness**

Through knowledge of history and cultural diversity, recognize and value perspectives and contributions that persons of diverse backgrounds bring to multicultural settings, and respond constructively to issues that

arise out of human diversity on both the local and the global level.

**Civic Engagement and Ethics**

Internalize and exhibit ethical values and behaviors that address self respect and respect for others, with integrity and honesty that will enable success and participation in the larger society.

**STUDENT LEARNING OUTCOMES (SLOS): 2005-2010**

College faculty, staff, administrators and students have been provided information and training on Student Learning Outcomes and Assessment in the context of how SLOs reveal the student's journey through the institution, and the many ways in which a student's progress and success can be measured and demonstrated.

In 2003, the Landscape Horticulture and Child Development departments were led by the Vice President of Instruction in a pilot project to identify program SLOs and to create a program map in order to elucidate a student's progress through the program. In

succeeding years, Dr. Ruth Stiehl has been invited to present workshops on identification and assessment of learning outcomes, as measurements of student learning and success in the institution. In Fall 2007, a Student Learning Outcomes and Assessment Committee (SLOAC) was created, and the SLOAC Coordinator was given .5 release time to work with faculty and staff on developing program outcomes and drafting program maps.

To date, most of Merritt College's programs have identified program outcomes and created program maps. In 2008-09, instructional and student services faculty and staff will create rubrics as assessment tools. They will continue to articulate outcomes at the course level, along with communicating those outcomes through course syllabi, and begin the work of aligning course outcomes with program outcomes and ILOs.

## EDUCATIONAL MASTER PLAN

### The Process

The District-Wide Educational Master Plan is an overall framework for the evolution and development of the Peralta Community College District master planning process. Drawing on environmental scan reports, program reviews, and unit plans, the plan establishes a direction for meeting the needs of students and the community through a



coordinated approach across the four Colleges and District service centers.

The College Master Plans and the District-Wide EMP were developed collaboratively to create an integrated planning framework linking program review, educational planning, facilities improvement and resource allocation. This integrated planning approach achieves one of the major goals of the District Wide Strategic Plan and fulfills a major District-level accreditation recommendation.

### PURPOSE

The purpose of the educational master plan is to present a shared educational “road map” for the Colleges and District service centers for the next several years. This shared District-wide road map is made up of the agreed-upon educational principles, goals, and integrated planning; along with budgeting processes that provide both a clear future direction and a set of adaptive mechanisms to ensure the plan is a living document. The District Wide EMP is an

umbrella statement of direction for the four College Educational Master Plans, and documents the common planning criteria, methodologies, and agreements that bring consistency to, and provide a context for, the *College Educational Master Plan*.

The *2009 Merritt College Integrated Educational and Facilities Master Plan* is a companion planning document based on the College’s Educational Master Plan that focuses specifically on facilities and funding. All planning documents are part of the District and College-wide master planning process. As such, the framework for all plans have their origin in the District’s Strategic Plan and Educational Master Plan. Key planning parameters or guidelines extracted from the District-wide process to support the *2009 Merritt College Integrated Educational and Facilities Master Plan* include:

**Educational Program Framework:**

The set of overarching program themes provide a shared focus for the Colleges and the unique areas of career-technical focus for each College.

**Integrated Instructional and Student Service Strategies:**

The educational strategies for instruction and student services enable the College to meet current and anticipated needs of students.

**Shared Decision-Making Criteria and Processes:**

The intent is to document the processes shared across the Colleges on a District-wide basis that will enable the Colleges and District, as a whole, to remain flexible and adaptive to change.

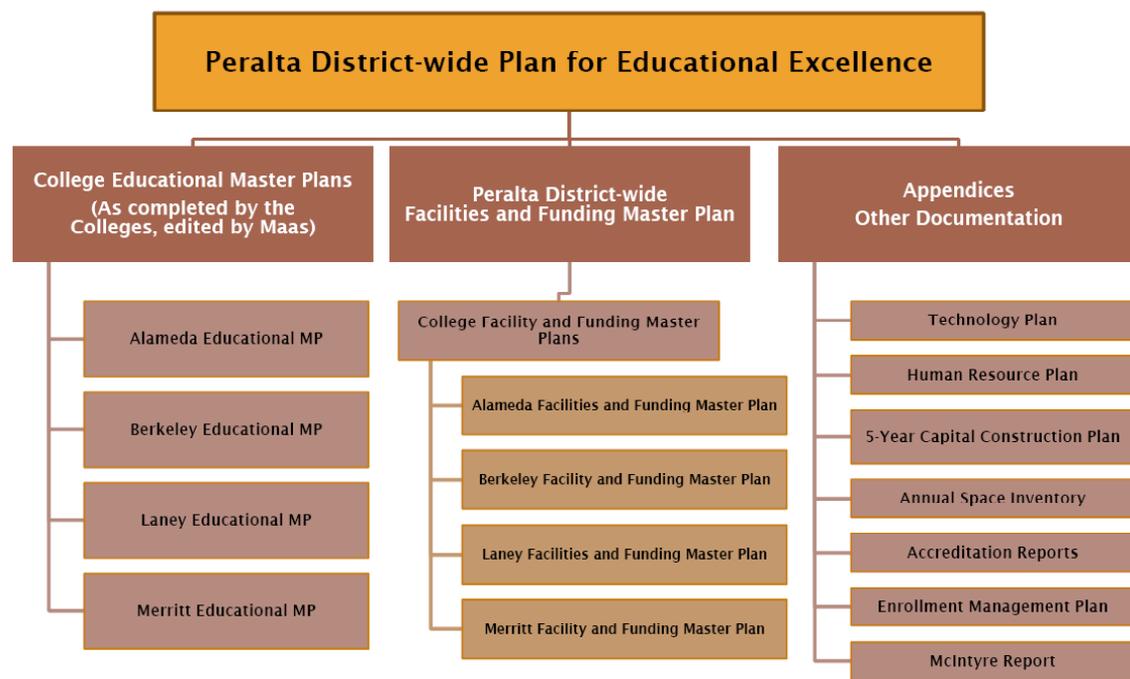
**Planning Integration**

The chart illustrates how the components of the master planning process have been integrated into one, overall, master planning process.

**PLAN DEVELOPMENT PROCESS**

The concepts contained herein reflect the contributions and agreements of faculty, staff, students and administrators who participated in several planning processes over the period from September 2006 to June 2008. The plan includes, and is derived from, an iterative process of District-wide planning discussions integrated with College-based discussions.

The District-wide foundational planning began with the Strategic Planning Steering Committee, which was guided in the process by the Strategic Management Team and District-Wide Educational Master Planning Committee (DWEMPC). It also received input from faculty and deans via program review, members of the Committee for Strategic Education Planning (CSEP), Academic Senate Presidents and Vice



Presidents of Instruction, student services planning staff, faculty input at the District August 2007 and College spring 2008 Flex Days, unit and College planning 2007-2008, the College educational master planning committee, department chair planning sessions, and District-wide plan integration in spring, 2008.

### **PLAN IMPLEMENTATION**

The implementation of the District and the various College master plans will require District-wide collaboration and engagement of all stakeholders, modeled after the two year process that resulted in the formal publishing of the District strategic plan in June 2006. Merritt College will engage the following groups in its implementation plan.

The Council of Department Chairs and Program Directors established in 2001 by the Academic Senate President and Vice President of Instruction. The Council is responsible for making recommendations regarding budget allocations and faculty hires, along with participating in peer

evaluations, unit planning, program review and accreditation self study.

**Basic Skills Task Force:** The Basic Skills Task Force works with faculty and staff on planning for enhanced academic success of basic skills students. Several projects have been selected for funding for 2008-09 with the expressed intent to increase retention, persistence, and success of basic skills students.

**College Facilities and Budget Committees:** The College's facilities and budget committees play an integral role in planning and implementation of the College's ongoing Educational Master Plan. The College has completed a major renovation of its Student Center, and next plans to relocate the Learning Center programs and to design a new Allied Health/Sciences building.

**The College Council:** The Council provides input and insight into College issues, and ultimately sends a recommendation to the College President.

**The President's Three Initiatives:** The three initiatives are an integral part of planning at the College. Led by the President's senior administrative staff, they focus on Recruitment, Retention, and Resource Development (the College's 3 R's).

### **COLLEGE VISION**

Merritt College's *2008 Educational Master Plan* and the *2009 Integrated Educational and Facilities Master Plan* share the vision of the District-wide planning efforts. A successful College plan will reflect the vision, values and goals of the District, as represented by its strategic plan, and the mission, values and goals of the California Community College System. The College will implement that plan through the effective, efficient, and equitable deployment of available resources and by identifying the educational, economic, social and cultural needs and resources of Merritt College today, and in the future. The Plan will identify the available programs and resources of the Colleges and District; providing an analysis of capacity to respond to community needs.



Additionally, it will articulate the operational priorities that will allow the College to best use available and planned future resources within the context of both the District's and the College's strategic plans.

In 2005-2007 Merritt College engaged in detailed program reviews, unit reviews, and CSEP analysis as part of the College's strategic planning, its response to ACCJC recommendations, its preparation for the

accreditation self-study cycle, and its response to District requests. These reviews and summaries were used to prioritize budget, faculty and staff, and Measure A requests. In addition, they form the basis for the College's Educational Master Plan, which reflects the McIntyre internal and external scans, and prioritizes allocations for College facilities, technology, budget and staffing. A major factor in Merritt College's

achievement of the educational master plan goals will be the development of a marketing strategy that will promote new and ongoing instructional and student service programs. Marketing objectives for each program and discipline need to be articulated, along with strategies, tasks, and individuals responsible for each of these. The plan for each discipline should be derived from market segmentation research.

The process of formulating Student Learning Outcomes and designing assessment tools to measure these outcomes is ongoing, and much work has already been completed. All programs at Merritt College have identified program outcomes and mapped the students' journey through the program. The plan for 2008-2010 is to assess program outcomes and identify course outcomes for inclusion on course outlines and syllabi. A workshop on developing rubrics was presented on the August 19, 2008 Professional Day. The final work, in 2010-12, will be to align course outcomes

with program outcomes and institutional learning outcomes.

CSEP data was included in Unit Plan Summaries; the Unit Plan summaries are presented in Chapter 4 of this document.

**PRINCIPLES AND GOALS:**

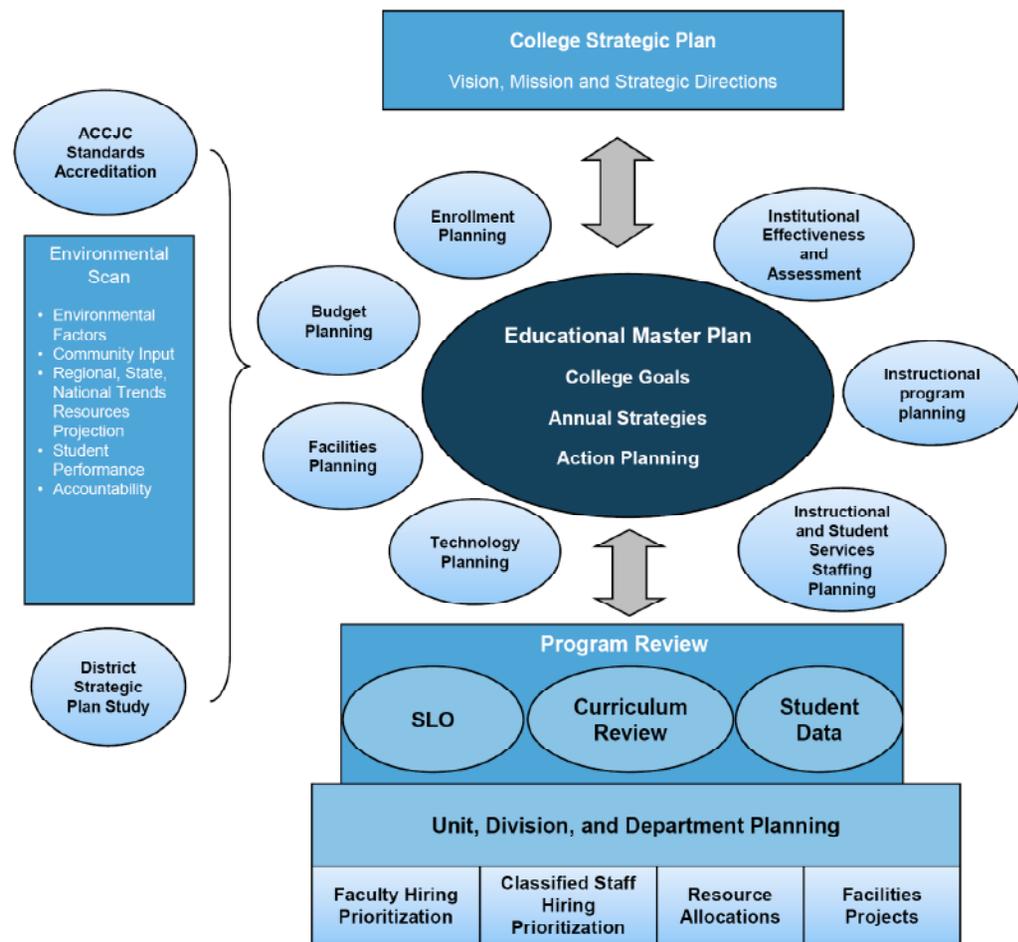
The principles and goals of Merritt College align with those of the District as a whole. They are:

- Advance Student Access, Equity, and Success
- Engage our Community and Partners
- Build Programs of Distinction
- Create a Culture of Innovation and Collaboration
- Ensure Financial Health

As discussed earlier in this section, the College’s planning efforts are anchored to its mission, vision and strategic directions and are centered on its Educational Master Plan. The Educational Master Plan specifies broad College goals, objectives, and action plans. In turn, the *2009 Merritt College Integrated Educational and Facilities Master Plan* utilizes this baseline information to establish the

priorities for facilities, and the resulting financing strategies to fund the identified projects. As a College within the Peralta Community College District, Merritt College’s master planning efforts closely

interact with the strategic plans of the District and are appropriately synchronized with District-wide planning efforts. Common among all planning efforts is the commitment to a culture of evidence, shared



governance, College-wide participation and leadership transparency. The chart shows the integration of the District/College planning components.

### **FORMAT OF PLAN**

In the sections that follow, a detailed analysis is presented of facility and financial requirements needed to implement the *2009 Merritt College Integrated Educational and*

*Facilities Master Plan*. All recommendations and strategies are based on the Strategic and Educational Master Plan previously developed by the College.

Included in the *2009 Merritt College Integrated Educational and Facilities Master Plan* are the following sections:

- External Environmental Scan
- Internal Environmental Scan

- Future Capacities
- Determination of Future Space Needs
- The Financial Plan
- Total Cost of Ownership
- Recommendations
- Glossary of Terms

### **BOARD OF TRUSTEE'S APPROVAL OF PLAN**

As part of the planning approval process, the *2009 Integrated Educational and Facilities Master Plan* for each College and also the *2009 Peralta District Integrated Educational and Facilities Master Plan*, will be reviewed utilizing the shared governance process for the Colleges and the District. Upon approval of the draft Plans by the constituent shared governance groups, the College Plans and the District Plan will be presented to the Peralta Community College District Board of Trustees for approval.



## External Environmental Scan

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The external relationships that follow were identified as important and/or significant in their potential to have an impact on the future of Merritt College. While that future will largely be shaped by the Board of Trustees, staff, contractors and vendors operating within the framework of the Plan, and therefore under close control of College management, external trends and conditions will also impact the College's immediate and long-term destiny. These trends and conditions—national, regional or local in scope – will influence the future direction of the College, its programs, curriculum, support services and operation.

### **THE COLLEGE IN RELATIONSHIP TO THE NATION**

Overall, the College forms a part of a vast nationwide system of higher education. At any given time, the economic environment of the United States necessarily affects the

educational community generally and the College specifically. In addition, federal laws, regulations and policies can exert direct and indirect pressures on College leaders, staff and students. Currently, the state of the nation's economy, indeed the state of the world's economy, is at risk and will predictably bring substantial change to the educational environment for all learning institutions, including Merritt College. According to a recent advance estimate by the Bureau of Economic Analysis (BEA), the Real Gross Domestic Product—the output of goods and services produced by labor and property located in the United States—decreased at an annual rate of 0.3 percent in the third quarter of 2008. This follows a weak second quarter report of annualized Real GDP growth of 2.8 percent. The BEA may revise the third quarter estimate after receipt of additional data, but

the outlook has begun to look somewhat grim.

The Bureau of Labor Statistics (BLS) has issued some more disturbing news: “Nonfarm payroll employment fell by 240,000 in October [2008], and the unemployment rate rose from 6.1 to 6.5 percent....” Unemployment had bottomed out in early 2007 at approximately 4.4 percent, but has risen lately at an accelerating rate. The BLS report continues: “Employment has fallen by 1.2 million in the first 10 months of 2008; over half of the decrease has occurred in the past 3 months. In October, job losses continued in manufacturing, construction, and several service-providing industries.” The Labor Department recently reported that the 516,000 unemployment claims for early November 2008 almost matches the heavy layoffs suffered immediately after the 9/11

attacks of 2001, and compares to the data seen during the deep recession of the early 1990's. In short, the evidence of a weak economy appears to be worsening, even accelerating, and indicates the probability of a deep and lasting recession.

Although the prices in crude oil, gasoline and diesel fuel have moderated recently, serious spikes in gasoline and diesel fuel costs have imposed a heavy toll on individuals, companies, government agencies, and other organizations. A return to higher prices at the pump may affect students who travel between their jobs, their homes, and the College. The continuation of national military deployments will also affect enrollment at the College.

As a general rule, if the economy flourishes then community college enrollments decrease. Conversely, when the economy flounders then enrollments tend to increase as more students seek to improve, expand, or change their job skills. As recently reported by the Austin Texas American-



Statesman, community colleges are “well-suited to serve the rising number of students who are older, less affluent, and who work or have families. The downturn in the economy could boost enrollment even more as families try to stretch scarce dollars.” Rey Garcia, president of the Texas Association of Community Colleges says, “In tough economic times, folks tend to lean on community colleges to retool their skill set.”

#### **THE COLLEGE IN RELATIONSHIP TO THE STATE**

The California economy has a direct influence on Merritt College, both because it affects jobs and services in the community and region, and because it impacts resources available for community college spending. As with the national economy, California’s economic prospects have lately shown serious weakness. The State reported the unemployment rate for September 2008 was 7.5%, according to the State Employment Development Department (EDD), worsening from 5.6% in September 2007. The EDD estimated the state’s

unemployment rate for October 2008 at 8.2%, an extraordinary increase. The national rate, previously mentioned, has now risen to 6.5%.

After steady declines in unemployment since 2003, the last year has seen significant increases in Californians out of work. According to the U.S. Bureau of Labor Statistics, of the 17 metropolitan divisions that reported employment losses over the past year in the United States, three of the five biggest losers were in California, including Orange County, Los Angeles, and the Oakland area. The Oakland-Fremont-Hayward area reported 22,500 lost jobs, a 2.1 percent increase in joblessness.

The State has suffered a series of budget crises over the past several years. Although Governor Schwarzenegger has made a concerted effort to control State spending, the current challenges appear particularly daunting. As reported by the Sacramento Bee on Tuesday, November 12, the non-partisan Legislative Analyst issued a

statement saying “California will face massive budget shortfalls through at least 2014 without immediate action by lawmakers and Gov. Arnold Schwarzenegger.” The Bee continues, “In the midst of high unemployment, shaky consumer confidence and plummeting investments, the state needs a slew of tax increases and spending cuts to resolve a \$27.8 billion problem over the next 20 months,” according to this official. Of the \$4.5 billion spending reduction now proposed by the governor, over half, \$2.5 billion, would come from reductions in education funding. That includes a \$322 million cut for community colleges, a cut of 10%. The Bee writes, “While Schwarzenegger proposed a \$2.5 billion mid-year cut in education spending, the legislative analyst said the reduction should be just \$1 billion because school districts already have locked in yearlong decisions on staff and class size. The report suggested eliminating school cost-of-living adjustments while suspending professional development fees

and raising community college fees.” Regardless of the specific short term outcome of the current budget crisis, community colleges will suffer a significant impact. Clearly, community college districts that have built a sizeable reserve fund may weather the fiscal storm better than those

that have not done so.

### **Enrollment**

The anticipated cuts in community college budgets will collide with the apparent rise in enrollment demand. As a rule of thumb, two main factors traditionally influence

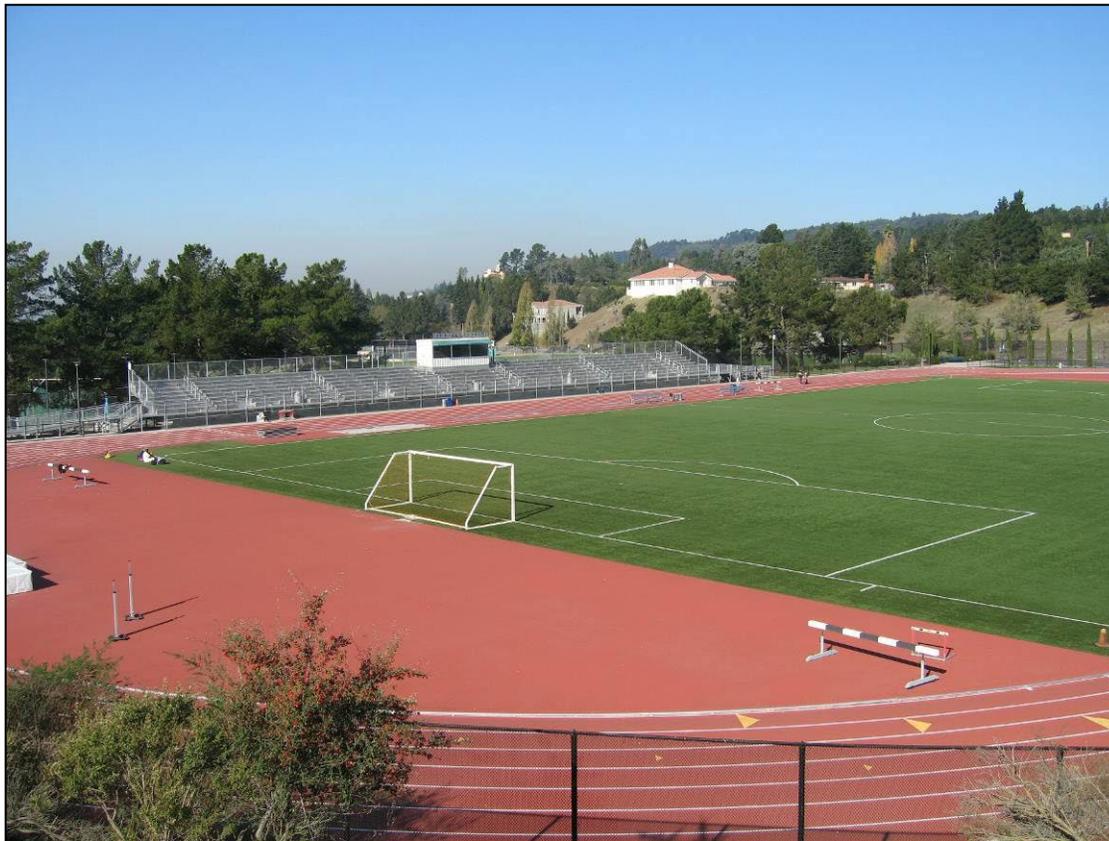
enrollment growth in California’s higher education system, Population Growth and Participation Rate (the ratio of the number of students attending community college to the population). The current and projected Economic Conditions will impose some significant, if not wholly predictable, negative consequences.

### **Population Growth**

An increase in the state’s college-age population generally causes a proportional increase in those who are eligible to attend postsecondary education. Although statewide population figures remain interesting, local trends carry more relevance. Please see below a discussion of current and projected data under the subsection, Local Population Growth.

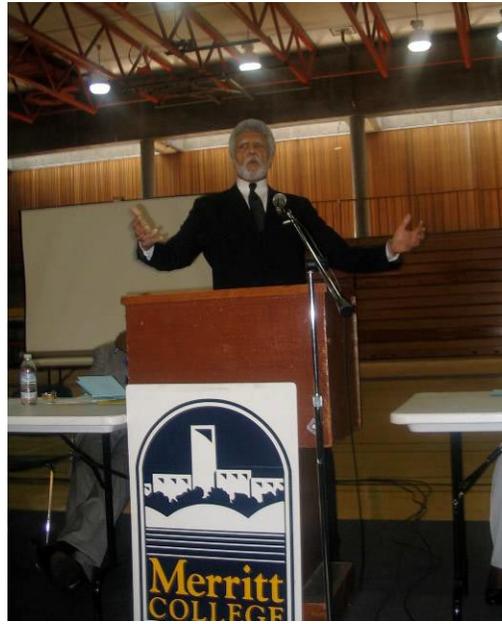
### **Participation Rate**

The participation rate is the number of people enrolled at the college per 1,000 people living in the College Service Area. California maintains one of the highest participation rates in the nation, primarily



because California has a more highly-developed and extensive system of community colleges than most other states, facilitating local accessibility. A number of factors may influence participation rates in the future.

- Enrollments have seen a significant and sometimes dramatic increase around the country at community colleges. Increases over a five or six year span that range from 15% to over 40% in some areas have been reported (e.g. 42% increase at a community college campus in Arlington, Texas). Similar increases are generally attributed to the diversion of new students away from more expensive universities during economic downturns and the return of older students for retraining as unemployment rises. California, with an unemployment rate significantly higher than the national figure, will surely experience these same effects.
- Cost. If the cost-per-unit can be kept low, community colleges will continue to attract students and keep the demand for college instruction high. However, State budget cuts will endanger the ability of community colleges to offer classes and services, possibly forcing administrators to impose hard caps on enrollments at each campus. Additionally, community



college districts may require additional student fees. Interestingly, budget cuts and consequential enrollment caps at the two statewide four-year university systems will probably increase the likelihood that students will attend community colleges to take transferable lower division classes, thereby further increasing demand.

- State funding comes in several forms, and financial aid opportunities represent an important part of the package of Sacramento's support. Any cutbacks in the availability of financial aid will probably affect the availability and attractiveness of postsecondary options.

- Historically speaking, the most significant bill passed by the California legislature that affected community college funding was Proposition 13 in 1978. This legislation diminished property tax rates by 57% and resulted in a dramatic reduction in the amount of local property tax revenue available for cities, counties, and especially for schools. In 2000, Proposition 39 amended the California Constitution to allow school and community college districts and county offices of education to issue bonds for construction, reconstruction, rehabilitation or replacement of facilities and to authorize property taxes higher than the existing 1% annual growth rate limit to repay bonds. A major caveat of Proposition 39 was the lowering of the vote requirement on a relative percentage basis. As a result, Proposition 39 allows community college districts to approve bond funding with 55% of the voter consent as opposed to 66.6%. In assessing the future impacts that the State of California could have on Merritt College, funding will be the greatest. Funding formulas for community colleges presently exist in a state of flux. While the mechanisms are in place, escalating costs in construction have caused the State to rethink how the gap can be narrowed between what the State allows and the actual (marketplace) cost of

construction. Additionally, the competition for available State dollars through statewide initiatives (bonds) has become very intense. In the 2006 fall election, state voters passed Proposition 1D. This authorized the State to sell bonds totaling \$10.4 billion to fund repair and upgrade of educational facilities for K-12 schools, state colleges, universities and community colleges. Of this total, \$1.5 billion is designated for the State's community colleges. The State's decision to raise and then reduce tuition fees (currently \$20/unit) for community colleges created yet another impact and challenge for the District. The overall economic climate of the State of California and the annual budget debate regarding spending priorities make the budget process an annual challenge for all community college districts, especially now and for the next several years.

### **Economic Conditions**

As noted above, pertinent to the Participation Rate, the current economic and fiscal challenges bode ill for the state's community college system. Community colleges in many areas of the nation have reported remarkable increases in enrollments

at a time when they can least afford a flood of additional students.

The Oakland Tribune very recently quoted Martha Kanter, chancellor of Foothill-DeAnza Community College District: "Many students who planned to attend the Cal State schools may instead aim for community colleges." This comes in response to a preliminary decision by the chancellor of the CSU system, Charles Reed, that his colleges will "no longer [be] able to accept everyone into next fall's freshman class," due to funding cuts by Sacramento. In addition, he plans to impose a system whereby admission priority will be given to freshman applicants from each campus' "service area." That is, local students will get preference over applicants from areas near other CSU campuses, and most definitely over international students or people wishing to enroll for a second bachelor's degree. In areas where a CSU campus capacity is tight or capped, some of the demand for transferable lower division sections will flow to nearby community

colleges. Increasing on-line opportunities may offer one of the only ways to quickly increase service to educational patrons, whether or not they need transferable credits.

### **THE COLLEGE IN RELATIONSHIP TO THE LOCAL REGION**

Merritt College lies in Oakland's foothills, east of the interchange of Interstate 580 and State Highway 13, the Warren Freeway. The city has a population of approximately 400,000. Oakland is the county seat of Alameda County and ranks as the eighth largest city in California. It forms part of a metropolitan district in the heavily populated East San Francisco Bay Area that employs well over a million people.

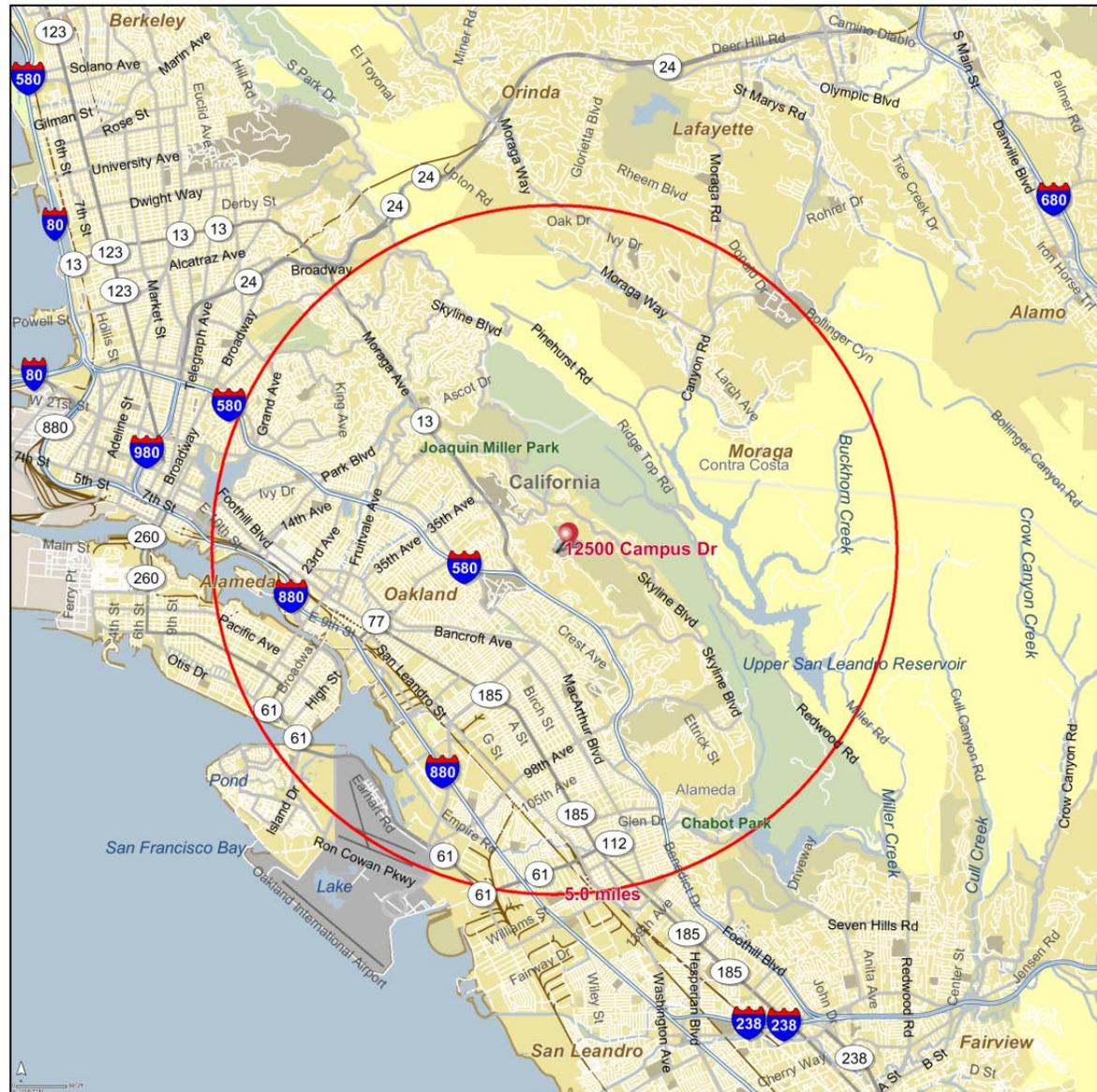
According to the most recent forecast by the Association of Bay Area Governments (ABAG), "we expect that between 2005 and 2035 the Bay Area's population will grow by about 2 million people." Much of the population growth will occur in the outlying suburbs. However even densely populated western Alameda County will experience

some noticeable growth with implications for community college enrollments.

### THE AREA TO BE SERVED

As part of the process to assess conditions at Merritt College, the College’s service area was examined. Based on an analysis of student origins by zip codes and input from the College, this area was determined to be best represented by a circular geographic area with a five mile radius, and with the College at the center. This five mile “effective service area” encompasses the majority of the enrollments at the College.

The following tables show some of the key demographic markers for the Merritt College effective service area.



### SNAPSHOT OF THE SERVICE AREA

The College service area is represented by a circular ring on the map.

This geographical area has a current (2007) population of 382,142 people. This population is growing at a rate of 0.21% per year. This is exceptionally slower growth than that of the State (1.33%) and of the nation (1.23%).

#### Households by Income

The service area’s income level is higher than that of the state. The median household income of \$62,679 is only slightly higher than the state level (\$61,779), but the per capita income of the service area, \$33,249, is noticeably higher than that of the state (\$29,536). This indicates a smaller average household size in the service area relative to the state.

The service area’s percentage of low income households is slightly lower compared to the state as a whole. Households in the service area earning less than \$50,000 comprise 40.1% of the total. This compares with

DEMOGRAPHIC AND INCOME PROFILE – MERRITT COLLEGE – FIVE MILE RADIUS						
Summary	2000		2008		2013	
Population	375,571		382,142		386,170	
Households	132,905		133,815		134,463	
Families	86,404		86,943		86,895	
Average Household Size	2.78		2.81		2.82	
Owner Occupied HUs	68,597		71,291		69,986	
Renter Occupied HUs	54,308		62,524		64,477	
Median Age	34.0		34.7		34.9	
<b>Trends: 2008-2013 Annual Rate</b>						
	Area	State		National		
Population	0.21%	1.33%		1.23%		
Households	0.10%	1.23%		1.26%		
Families	-0.01%	1.20%		1.05%		
Owner HHs	-0.37%	0.96%		1.07%		
Median Household Income	3.14%	3.04%		3.19%		
<b>Households by Income</b>						
	2000		2008		2013	
	Number	Percent	Number	Percent	Number	Percent
< \$15,000	19,836	14.9%	14,564	10.9%	12,003	8.9%
\$15,000 - \$24,999	14,711	11.1%	10,207	7.6%	8,796	6.5%
\$25,000 - \$34,999	14,922	11.2%	12,016	9.0%	9,543	7.1%
\$35,000 - \$49,999	20,296	15.3%	16,894	12.6%	13,292	9.9%
\$50,000 - \$74,999	23,998	18.0%	24,413	18.2%	25,270	18.8%
\$75,000 - \$99,999	14,098	10.6%	16,143	12.1%	16,796	12.5%
\$100,000 - \$149,999	13,988	10.5%	19,601	14.6%	24,204	18.0%
\$150,000 - \$199,999	5,268	4.0%	8,732	6.5%	8,162	6.1%
\$200,000+	5,853	4.4%	11,243	8.4%	16,395	12.0%
Median Household Income	\$47,111		\$62,679		\$73,150	
Average Household Income	\$68,051		\$93,582		\$114,455	
Per Capita Income	\$24,420		\$33,249		\$40,418	
Source ESRI Data Systems, 2008; Analysis by Maas Companies, Inc.						

40.6% for the State of California. Median household incomes however are growing faster in the service area—3.14% versus 3.04% for the state.

### Age Profile

Over the next five years, there will be an increase of about 4029 people in the Merritt College service area, only a 1.05% increase. However, the 20-24 age group may see an increase of approximately 4267 (+15.32%). During the same period, there will be a drop of nearly 2000 (1946) young adults in the 15-19 age group (-6.7%) which, if proven accurate, will soften the impact of the increases in other age groups living near the College.

The age of the service area population is currently almost identical to that of the state, on average. The Merritt College area has a median age of 34.7, just slightly older than the state, 34.3.

Drops in the youth sectors under age 19 will offset some of the growth in younger adults

AGE AND ETHNICITY PROFILE – MERRITT COLLEGE – FIVE MILE RADIUS						
	2000		2008		2013	
Population by Age	Number	Percent	Number	Percent	Number	Percent
0 - 4	27,227	7.2%	27,600	7.2%	28,639	7.4%
5 - 9	29,619	7.9%	26,110	6.8%	25,611	6.6%
10 - 14	26,857	7.2%	27,605	7.2%	24,219	6.3%
15 - 19	25,206	6.7%	28,978	7.6%	27,032	7.0%
20 - 24	25,145	6.7%	27,861	7.3%	32,128	8.3%
25 - 34	60,114	16.0%	54,412	14.2%	55,755	14.4%
35 - 44	59,184	15.8%	55,377	14.5%	46,367	12.8%
45 - 54	52,653	14.0%	53,876	14.1%	55,020	14.2%
55 - 64	29,356	7.8%	40,624	10.6%	45,183	11.7%
65 - 74	20,149	5.4%	19,575	5.1%	23,119	6.0%
75 - 84	14,689	3.9%	13,389	3.5%	12,701	3.3%
85+	5,371	1.4%	6,733	1.8%	7,395	1.9%
	2000		2008		2013	
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent
White Alone	140,653	37.5%	130,822	34.20%	125,455	32.5%
Black Alone	105,063	28.0%	100,006	26.20%	96,023	24.9%
American Indian Alone	2,524	0.7%	2,314	0.60%	2,200	0.6%
Asian Alone	60,147	16.0%	68,698	18.00%	73,886	19.1%
Pacific Islander Alone	2,249	0.6%	2,314	0.60%	2,327	0.6%
Some Other Race Alone	45,980	12.2%	53,984	14.10%	58,846	15.2%
Two or More Races	18,954	5.0%	24,004	6.30%	27,432	7.1%
Hispanic Origin (Any Race)	88,037	23.4%	103,485	27.10%	112,813	29.2%

Source ESRI Data Systems, 2008; Analysis by Maas Companies, Inc.

from 20 to 34. While a drop is anticipated in the 35 to 44 age group, marked increases in the 45 to 74 bracket are predicted over the coming five years.

This period of significant readjustment and change may provide an opportunity to tailor new or ongoing programs to accommodate these demographic shifts.

**WORKFORCE CHARACTERISTICS OF THE LOCAL REGION**

**Rate of Unemployment**

Since the Bay Area’s bursting of the “dot com bubble” several years ago, the region has rebounded substantially. Today the area carries an unemployment rate noticeably lower than other areas of the state. According to California’s Employment Development Department (EDD), Alameda County has suffered an increase in the unemployment rate from 4.9% in October 2007 to 7.1% in October 2008. However, that compares to a statewide rate of 8.0%.

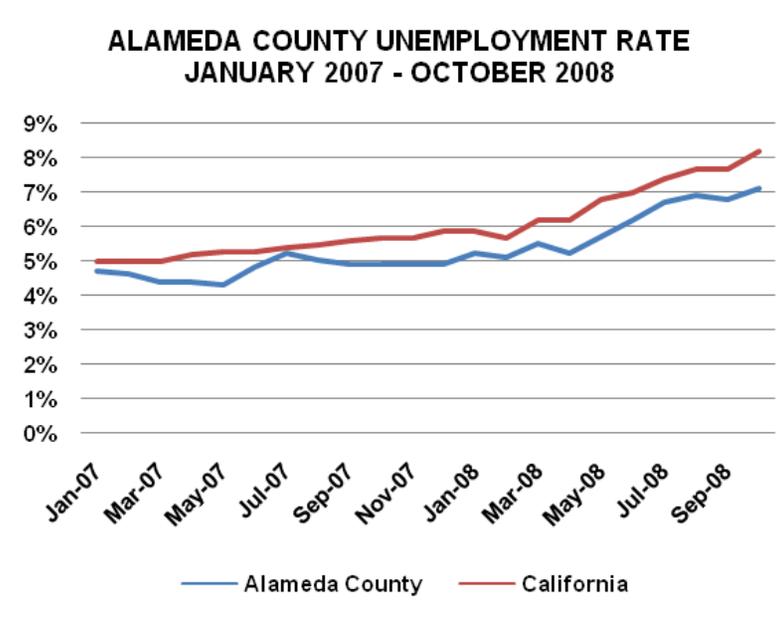
**Sources of Employment**

The service-related employers in the area provide, by far, the most jobs (884,000) compared to goods-producing industries (168,700). However, since construction jobs suffered the largest losses of any sector, the goods-producing industries overall took the largest percentage losses, not the service providers. In their description of the job situation in the Oakland-Fremont-Hayward Metropolitan Statistical Area (MSA), the EDD says 22,500 jobs were lost over the last year since October 2007. That accounts for a 2.1% increase in joblessness. The construction trades lost 6,100 jobs. Trade, transportation and utilities jobs declined by 5,300, mostly in retail positions. Financial jobs fell by 5,300. Not only are

these job losses substantial, but the economic conditions suggest that the unemployment rate will continue to increase in the near term.

**Growth Occupations**

Since the current economic crisis causes the risks of forecasting to greatly increase, prudence dictates that no prognostications could be responsibly offered. However, the short-term job loss data suggests that in the



upcoming economic turnaround, whenever it occurs, the region should experience a rebound in these same job sectors. Specifically, construction activity should resume when the consumer credit markets revive, and the retail jobs sector should closely match the recovery of the economy.

### Data References and Resources

References, resources and sources of information for the external environmental scan included the following:

- Alameda County
- Association of Bay Area Governments
- U.S. Department of Commerce, Bureau of Economic Analysis
- U.S. Department of Labor
- U.S. Department of Education, National Center for Education Statistics
- California Department of Education
- California Department of Finance, Economic Research Unit

- California Employment Development Department, Labor Market Information Division
- Center for Continuing Study of the California Economy

- California Community College Chancellor's Office
- ESRI BIS Marketing and Data Systems
- The Maas Companies Database



## Program of Instruction

### OVERVIEW

Before forecasting future growth, it is necessary to begin with a benchmark or a baseline. For the purposes of this Plan, the fall 2007 semester was used as the baseline. In the following pages, the fall 2007 program of instruction is analyzed using several different metrics. This analysis then serves as the basis for all future projections regarding the instructional program.

### Baseline Curriculum

The fall 2007 semester was used as a starting point for determining the College’s current, “baseline curriculum.” Defining the current program of instruction served two primary purposes:

1. It assessed the current condition at the College from a curricular perspective; and
2. It provided a foundation from which the future programs of instruction could be projected.

### THE BASELINE PROGRAM OF INSTRUCTION BY COLLEGE DEPARTMENT

The current program of instruction is captured in a comprehensive manner in the table on the following pages. The key elements of the current program of instruction have been highlighted in this assessment. The College’s internal organizational structure (departments) was used as the format. The key elements included the number of net sections offered, average seats per section, WSCH generated, the full-time equivalent students (FTES), the full-time equivalent faculty (FTEF), and the

number of lecture and laboratory hours produced.

MERRITT COLLEGE PROGRAM OF INSTRUCTION - FALL 2007	
NET CLASS SECTIONS OFFERED	493
WEEKLY STUDENT CONTACT HOURS	59,591
FULL-TIME EQUIVALENT STUDENTS PER SEMESTER (FTES)	1,986
FULL-TIME EQUIVALENT FACULTY (FTEF)	137

MERRITT COLLEGE - CURRENT PROGRAM OF INSTRUCTION BY COLLEGE DEPARTMENT - FALL 2007

DEPARTMENT	NET SEC	ENR	ENR/ SEC	WSCH	FTES	FTEF	LEC WSCH	LAB WSCH
Administration of Justice	10	364	36.4	3,479	116.0	1.6	3,273.3	205.8
African American Studies	12	345	28.8	1,079	36.0	2.4	1,050.0	28.7
Anthropology	10	247	24.7	995	33.2	2.6	968.3	26.4
Art	17	461	27.1	1,958	65.3	4.5	803.3	1,155.0
Asian/Asian-American Studies	2	68	34.0	204	6.8	0.4	198.6	5.4
Astronomy	3	49	16.3	166	5.5	0.6	95.8	70.6
Biology	30	1,137	37.9	8,464	282.1	12.9	2,215.5	6,248.3
Business	10	297	29.7	983	32.8	2.1	979.9	3.5
Child Development	37	1,038	28.1	3,250	108.3	8.7	1,915.8	1,333.7
Chemistry	8	234	29.3	1,740	58.0	4.2	1,001.5	738.4
Chinese	1	50	50.0	300	10.0	0.3	247.9	52.1
Computer Information Systems	13	307	23.6	1,111	37.0	3.3	897.6	213.5
Communications	12	431	35.9	1,396	46.5	2.4	808.5	587.6
Cooperative Work Experience	2	57	28.5	162	5.4	0.4	112.7	49.3
Community Social Services	6	512	85.3	2,421	80.7	2.3	2,277.8	143.2
Counseling	9	171	19.0	494	16.5	1.3	343.4	150.3
Economics	2	66	33.0	238	7.9	0.4	231.3	6.3
Education	1	11	11.0	33	1.1	0.2	14.2	18.8
Emergently Medical Technician	3	83	27.7	594	19.8	1.1	155.6	438.7
English	38	980	25.8	3,954	131.8	10.4	3,344.7	608.9
Environmental Management	12	216	18.0	450	15.0	2.0	315.1	135.0
Environmental Studies	1	18	18.0	26	0.9	0.2	25.7	-
English as a Second Language	17	328	19.3	1,537	51.2	4.8	1,069.1	467.9
Fire Science	3	106	35.3	782	26.1	0.4	735.8	46.3
Geography	4	77	19.3	250	8.3	0.8	243.6	6.6

MERRITT COLLEGE - CURRENT PROGRAM OF INSTRUCTION BY COLLEGE DEPARTMENT - FALL 2007								
DEPARTMENT	NET SEC	ENR	ENR/ SEC	WSCH	FTES	FTEF	LEC WSCH	LAB WSCH
Geology	1	14	14.0	101	3.4	0.4	58.0	42.8
History	3	72	24.0	235	7.8	0.6	228.4	6.2
Health Education	2	68	34.0	245	8.2	0.4	105.3	139.5
Health Professions & Occupations	2	58	29.0	127	4.2	0.4	33.2	93.7
Humanities	4	91	22.8	299	10.0	1.0	252.8	46.0
Human Services	8	137	17.1	381	12.7	1.4	358.4	22.5
Insurance	3	46	15.3	112	3.7	0.5	111.6	0.4
Landscape Horticulture	32	891	27.8	3,049	101.6	6.9	1,524.5	1,524.5
Learning Resources	6	1,857	309.5	303	10.1	2.1	303.3	-
Mathematics	36	1,150	31.9	4,339	144.6	8.3	4,224.2	114.8
Medical Assisting	1	20	20.0	263	8.8	0.8	68.8	194.1
Music	8	240	30.0	845	28.2	1.6	346.7	498.5
Nursing	8	489	61.1	2,618	87.3	12.5	685.3	1,932.7
Nutrition	17	347	20.4	852	28.4	2.5	222.9	628.7
Physical Education	20	1,072	53.6	1,716	57.2	5.6	738.1	978.2
Paralegal Studies	10	243	24.3	742	24.7	1.8	742.0	-
Philosophy	2	44	22.0	143	4.8	0.4	120.8	22.0
Physics	5	67	13.4	394	13.1	1.7	226.8	167.2
Political Science	5	122	24.4	391	13.0	1.0	380.8	10.4
Psychology	11	425	38.6	1,363	45.4	2.2	1,326.5	36.2
Radiologic Technology	10	295	29.5	1,720	57.3	4.1	450.2	1,269.6
Recreation & Leisure Services	1	36	36.0	130	4.3	0.2	76.4	53.2
Real Estate	22	639	29.0	1,374	45.8	4.4	1,368.9	4.9
Sociology	4	139	34.8	450	15.0	0.8	438.0	12.0
Spanish	8	192	24.0	784	26.1	2.1	648.1	136.3
Vocational Nursing	1	19	19.0	551	18.4	2.9	144.3	406.8
<b>TOTAL</b>	<b>493</b>	<b>16,426</b>	<b>33.3</b>	<b>59,591</b>	<b>1,986.4</b>	<b>136.6</b>	<b>38,509.3</b>	<b>21,081.5</b>

Source: Peralta Community College District Office of Institutional Research

**THE BASELINE PROGRAM OF INSTRUCTION BY TOP CODE**

So that community colleges and educational centers can be evaluated with a common yardstick, the State has adopted the Taxonomy of Programs (TOP) Code instructional division format. This system

assigns standard classifications for each academic discipline and groups them into common instructed divisions so that the institution’s instructional program can be compared equally and fairly with those across the state. The TOP Code format is used by the State to determine space needs.

It is also the format that supports the District’s 5-Year Capital Construction Plan from which the capacity-to-load ratios of the College are derived. The instructional divisions of the College by TOP Code classification are translated in the following table.

MERRITT COLLEGE - CURRENT PROGRAM OF INSTRUCTION BY TOP CODE INSTRUCTIONAL DIVISION - FALL 2007									
TOP CODE		NET SEC	ENR	ENR/ SEC	WSCH	FTES	FTEF	LEC WSCH	LAB WSCH
0100	AGRICULTURE & NATURAL RESOURCES	44	1,107	25.2	3,499	117	9	1,840	1,659
0300	ENVIRONMENTAL SCIENCES & TECH	1	18	18.0	26	1	0	26	-
0500	BUSINESS & MANAGEMENT	35	982	28.1	2,469	82	7	2,460	9
0600	MEDIA & COMMUNICATIONS	12	431	35.9	1,396	47	2	808	588
0700	INFORMATION TECHNOLOGY	13	307	23.6	1,111	37	3	898	214
0800	EDUCATION	23	1,151	50.0	1,994	66	6	858	1,137
1000	FINE & APPLIED ART	25	701	28.0	2,803	93	6	1,150	1,653
1100	FOREIGN LANGUAGE	9	242	26.9	1,084	36	2	896	188
1200	HEALTH	72	2,448	34.0	15,188	506	37	3,976	11,212
1300	FAMILY & CONSUMER SCIENCES	38	1,074	28.3	3,379	113	9	1,992	1,387
1400	LAW	10	243	24.3	742	25	2	742	-
1500	HUMANITIES	44	1,115	25.3	4,395	147	12	3,718	677
1600	LIBRARY SCIENCE	6	1,857	309.5	303	10	2	303	-
1700	MATHEMATICS	36	1,150	31.9	4,339	145	8	4,224	115
1900	PHYSICAL SCIENCES	17	364	21.4	2,401	80	7	1,382	1,019
2100	PUBLIC & PROTECTIVE SERVICES	27	1,119	41.4	7,063	235	6	6,645	418
2200	SOCIAL SCIENCES	53	1,561	29.5	5,204	173	11	5,065	138
4900	INTERDISCIPLINARY STUDIES	28	556	19.9	2,193	73	7	1,525	668
	<b>TOTAL</b>	<b>493</b>	<b>16,426</b>	<b>33.3</b>	<b>59,591</b>	<b>1,986</b>	<b>137</b>	<b>38,509</b>	<b>21,081</b>

Source: Peralta Community College District Office of Institutional Research

**PRODUCTIVITY**

Following is the Productivity Report generated by the Committee for Strategic Educational Planning (CSEP) for all four of the Peralta Community College District Colleges.

PERALTA COMMUNITY COLLEGE DISTRICT - PRODUCTIVITY REPORT (Last 4 years)									
DEPARTMENT	ALAMEDA		BERKELEY		LANEY		MERRITT		NOTES
	Status	Terms	Status	Terms	Status	Terms	Status	Terms	
Administration of Justice							G	8	
African American Studies	WM	1	G	8	G	8	W	2	
American Sign Language			M	5					bcc: 30 students per class
Anthropology	G	5	G	8	GM	4	W	0	
Apparel Design & Merchandising	WM	3							coa: 15.5 proposed
Apprenticeship					W	0			lc: not a program
Arabic			GM	0					
Architecture/Engineering Tech					W	0			lc: grow, 12.5 proposed
Art	G	7	G6		G	7	W	0	
Asian American Studies	G	5	G	3	G	6			
Astronomy	WM	3	GM	7	G	8	W	0	
Autobody and Paint	M	4							coa: 17.5 proposed
Automotive Technology	WM	5							coa: 15.5 proposed
Aviation Maintenance Tech	W	0							coa: 12.0 proposed
Aviation Operations	W	0							coa: 12.0 proposed
Banking and Finance					W	0			lc: part of business dept.
Biology	G	7	GM	4	G	8	G	8	
Business			M	3	G	7	W	0	lc: 17.0 proposed
Carpentry					M	6			lc: 14.5 proposed
Chemistry	WM	2	GM	7	G	7	M	3	mc: 15.0 is productive

PERALTA COMMUNITY COLLEGE DISTRICT - PRODUCTIVITY REPORT (Last 4 years)

DEPARTMENT	ALAMEDA		BERKELEY		LANEY		MERRITT		NOTES
	Status	Terms	Status	Terms	Status	Terms	Status	Terms	
Child Development							M	5	mc: 12.5 proposed
Chinese	G	5			GM	4	G	4	mc: only offered 4 terms
Communication	G	6			G	5	G	7	
(Speech)					M	2			lc: now communications
Community Social Service							M	8	
CIS	W	0	WM	1	W	2	W	1	coa: 14.0 proposed; bcc: growth in last 2 terms; lc: grow, 15.0 proposed; mc: 15.5 proposed
Construction Management					M	8			lc: 17.0 proposed
COPED					W	2			
Cosmetology					G	8			lc: 17.0 proposed
Counseling	WM	2			G	6	W	2	
Culinary Arts					G	5			lc: 13.0 proposed
Dance	G	6			G	8			
Dental Assisting	W	0							coa: 10.0 proposed
Diesel Mechanics	W	0							coa: 13.0 proposed
Economics	MG	3	M	7	G	8			
Education							W	0	
Electricity/Electronics Tech					G	7			lc: 17.0 proposed
Engineering					W	0			lc: grow, 11.0 proposed
English	W	0	M	0	M	0	W	1	bcc: grow, exception (14.17 avg); lc: grow, 15.0 proposed
ESL	W	0	M	4	M	0	W	0	bcc: grow, exception (12.92 avg); lc: grow, 15.0 proposed
Environmental Control Tech					M	2			lc: grow, 12.5 proposed
Environmental Science							W	1	

PERALTA COMMUNITY COLLEGE DISTRICT - PRODUCTIVITY REPORT (Last 4 years)									
DEPARTMENT	ALAMEDA		BERKELEY		LANEY		MERRITT		NOTES
	Status	Terms	Status	Terms	Status	Terms	Status	Terms	
Fire Science							W	1	
French	W	0	GM	1	W	0			
Geography	W	1	GM	3	G	8	W	0	
Geology			GM	2	G	1	W	1	lc: 1 class, not a program
German	WM	1							
Graphic Arts					W	0			lc: 12.5 proposed
Health Education			GM	7	M	8	M	6	lc: not a program
Health Professions/Occupation	G	7	GM	4	M	2			lc: not a program
History	G	6	G	3	G	5	W	1	
Human Services			GM	0			W	0	
Humanities	W	1		8	G	8	W	0	
International Trade			W	0					
Japanese					G	7			
Journalism					W	0			
Labor Studies					W	0			lc: 12.5 proposed
Landscape Horticulture							G	7	mc: 14.5 proposed
Learning Resources					M	2			lc: includes DSPS and specialized learning support courses, not a program
Library Information Studies	W	1			W	0			coa: new program; lc: not a program
Machine Shop					W	0			lc: 10.0 proposed
Management & Supervision					W	2			lc: part of business dept.
Mathematics	WM	2	G	8	G	5	G	6	
Media Communications					W	0			lc: grow, 10.5 proposed
Medical Assistant							W	0	
Mexican/Latin American Studies	W	1			W	0	W	1	
Multimedia Arts			G	4					bcc: last 4 terms high
Music	W	0			G	8	W	3	

PERALTA COMMUNITY COLLEGE DISTRICT - PRODUCTIVITY REPORT (Last 4 years)

DEPARTMENT	ALAMEDA		BERKELEY		LANEY		MERRITT		NOTES
	Status	Terms	Status	Terms	Status	Terms	Status	Terms	
Native American Studies					W	0	W	0	lc: 1-2 classes, not a program
Nursing (AD)							W	0	
Nursing (LVN)							W	0	
Nutrition/Dietetics							G	5	mc: 14.5 proposed
Paralegal							W	1	
Philosophy	WM	3	GM	5	G	8	W	0	
Photography					W	0			lc: 10.6 proposed
Physical Education	W	1			M	0	W	0	
Physical Science			GM	7	W	0			lc: only offered 2 terms
Physics	W	0			G	6	W	0	
Political Science	G	6			M	3	W	1	
Psychology	G	6	G	8	G	7	M	8	
Radiologic Science							M	5	mc: 13.5 proposed
Real Estate					M	7	W	4	lc: part of business dept., not a program
Recreation/Leisure Services							W	2	
Sociology	G	5	G	7	G	8			
Spanish	W	1	GM	0	M	3	W	0	
Theatre Arts					W	1			
Travel Industry			W	0					
Vietnamese	G	5							
Welding					M	4			lc: grow, 12.5 proposed
Wood Technology					W	1			lc: 12.5 proposed

Source: Peralta Community College District

G – Grow  
M – Maintain  
W – Watch

bcc – Berkeley City College  
coa – College of Alameda  
lc – Laney College  
mc – Merritt College

## Internal Environmental Scan

### LOCAL POPULATION GROWTH

Early in this decade, the California community college student pool was expected to grow from 1.5% to 2.0% through the remainder of this decade. Those estimates were low statewide and Peralta CCD has grown at a substantially faster rate. From spring 2006 to spring 2008, statewide community college enrollment increased by 6.8%. Peralta CCD increased by 14.5% over the same period.

Ethnically, African-Americans account for the largest group and they increased their student population by 7.2%. Asians nearly caught up with African-Americans by spring 2008 with a 13.0% increase. The third largest ethnic group, Non-Hispanic Whites, gained the largest number of additional students, an increase of 20.4%. Hispanics, a smaller group and ranking as the fourth largest ethnicity, did not add as many students, but

still increased by 23.3%. All of these enrollment increases occurred in the Peralta District over a two-year period in the immediate past, as reported by the California Community Colleges Chancellor’s Office.

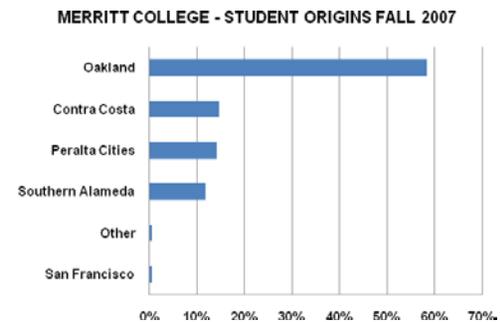
### STUDENT DEMOGRAPHIC PROFILE

The consulting team relied on data included in the College’s Educational Master Plan as well as data in the environmental scan provided to the District by the McIntyre Group. The following section contains some key demographic information that help to describe who the students are that attend Merritt College.

#### Student Origins

The vast majority of students (58%) attending Merritt College reside in the city of Oakland. The next three largest places of origin for students at the College are Contra Costa County (15%), Peralta Cities (14%) and Southern Alameda (12%). Together

these four communities account for 99% of the total student enrollment.

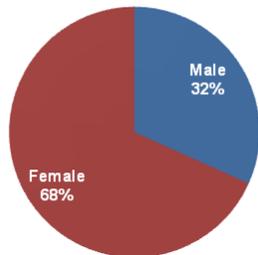


Over the past five years, the student origin profile has undergone some change. The most dramatic changes were in student enrollments from addresses in Contra Costa County and Southern Alameda. From 2006 to 2007, Contra Costa County enrollments jumped from 7% to 15%. Over the same time period, enrollments from Contra Costa County fell from 19% to 12%.

### Gender Profile

The ratio of female to male students at Merritt College has been steady for the past four years at around 68:32. This is quite high relative to the average across all community colleges in the state. The statewide ratio is 55:45. The College might want to consider adjustments to curricular content to attract more male students to the College.

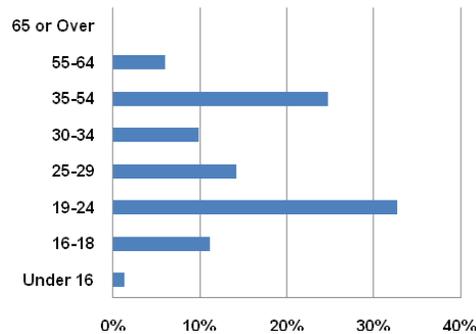
**MERRITT COLLEGE  
STUDENT GENDER PROFILE - FALL 2007**



### Age Profile

Community colleges traditionally target individuals between the ages of 19-24 years old. This age group makes up roughly 33% of the student population. The next largest segment at Merritt College is 35-54 year olds (25%), followed by 25-29 year olds (14%). Compared to community colleges statewide, Merritt College has attracted a higher percentage of students over the age of 34. This is a positive trend as these are the age groups that will show the most growth in the next five years in the service area.

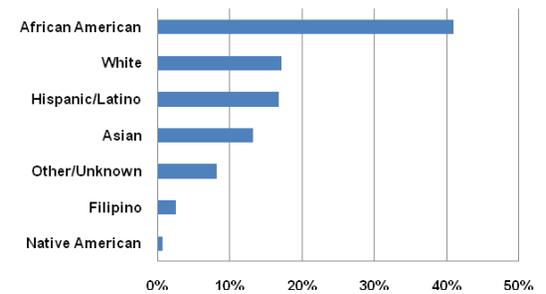
**MERRITT COLLEGE  
STUDENT AGE PROFILE FALL 2007**



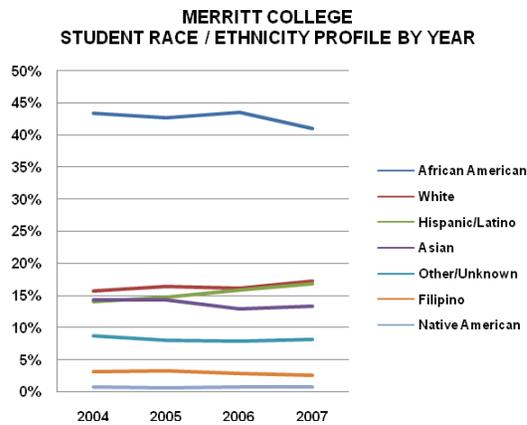
### Race and Ethnicity

African Americans comprise the largest racial/ethnic segment (41%) at the College. The next largest segments are Whites and Hispanics at 17% each and Asians (13%).

**MERRITT COLLEGE  
STUDENT RACE / ETHNICITY PROFILE FALL 2007**



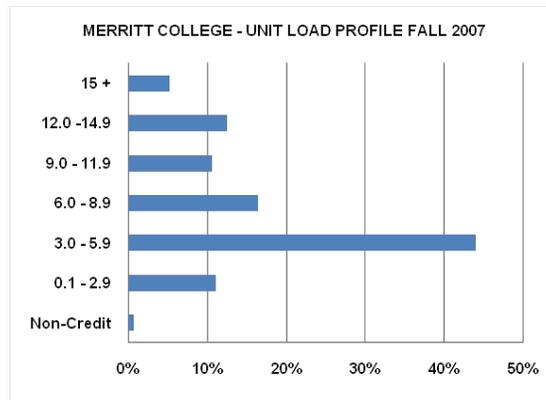
Over the past four years, the race/ethnicity profile of the student population at Merritt College has changed slightly. As a percentage of the overall student body, there has been a decline in African-American students and an increase in Hispanic students. These trends are consistent with the demographic trends in the overall service area population.



**Unit Load**

Students taking between 3 and 5.9 units during the fall 2007 semester comprised 44% of the student population. The next largest segments were those taking 6 to 8.9 units (16%), 12 to 14.9 units (12%), 0.1 to 2.9 units (11%) and 9 to 11.9 units (10%).

During the fall 2007 semester, 17.6% of students at Merritt College attended on a full-time basis (at least 12 units). This is below the statewide community college average of 26%.



# Future Capacities

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## KEY ELEMENTS

Several key elements were referenced in the process of determining the future capacities of Merritt College. Those that received the closest attention included the following.

### Capacity for Future Growth

One of the most important elements for determining future capacity is growth of the population base, or “natural growth.” The Merritt College service area will have little growth over the next five years. The forecast is for population growth to be 0.21% per year and growth in households to be a mere 0.10%.

It is also important to look at population growth by age range. In the Merritt College service area, the population between 10 and 19 years of age is projected to decrease as a percentage of the overall service area population between 2008 and 2013. This will

make “natural growth” even more unlikely for the College.

The College can expect that there will be an upward trend for the age group target, 20 to 24 year olds. The demographic data currently shows an increase in this age group segment over the next five years. At the same time, there will be a sizeable increase in age groups 55 to 74 years of age.

As mentioned in the previous section, the College has a large number of students between the ages of 35 and 54 years of age. The demographic data projects that this service area population in this age range will decrease by the year 2013.

### Conclusions

In the coming years, the College will need to become even more creative in its efforts to attract new students to the campus. One strategy might be to include more

compacted or accelerated classes, (e.g., 8 week sessions) or weekend class offerings. Many of these students will probably be older. Classes for retraining older individuals and for retirees should also be considered.

## EXISTING CURRICULUM

The current programs of instruction (fall 2007) are characterized as follows:

- Unduplicated, credit-enrollments of approximately 7,233 students
- WSCH—Credit weekly student contact hours of 59,591
- FTES—Full-time equivalent students of 1,986 for a given semester.

This “baseline” will be used as the initial benchmark for forecasting future capacities of the College.

The existing program of instruction provides a starting point against which future growth can be forecast. Looking ahead for the next five years, curricular content will most likely not undergo wholesale changes or deviate

far from where it is today. The existing program of instruction, therefore, provides a solid foundation from which the future program of instruction can be determined.

### **The Internal and External Elements of the College**

In order to develop a growth model for the future program of instruction at the College, the consulting team paid close attention to the knowledge gained and input assimilated via the College's Educational Master Plan.

The team also utilized the internal and external environmental scans prepared by Chuck McIntyre. Additionally, data from the Maas Database was used for the forecasting process and ultimately, the calculation of future space needs.

### **Weekly Student Contact Hours (WSCH)**

Changing trends on community college campuses across the state have often had the effect of creating higher levels of student enrollment, but decreasing the amount of time that a student spends on-campus using the facilities. The gauge for measuring the need for space has shifted accordingly. Where institutions once used enrollments to measure future needs for facilities, today's measurement centers around the number of hours that a student spends on campus pursuing his/her education. This measurement is referred to as contact hours, the number of hours a student is engaged in the program of instruction at the institution. This is the only measurement that accurately determines the total student demand on



facilities. It is the key to determining the future program of instruction, and the future capacities of the District.

### **GROWTH RATE TARGETS FOR WSCH AND ENROLLMENT**

To address the capacities for future WSCH and enrollment growth, a planning model was created. The model used, relied on credit-WSCH as the primary measure for determining growth. The consulting team then made projections consistent with the scope of the Plan, projecting growth out to the year 2022.

With all of the factors and key planning elements taken into consideration, credit-WSCH generation and student headcount is projected to grow at 2.4% annually. This growth is not expected to be linear. Specifically, credit-WSCH generation is anticipated to grow from the fall 2007 level of 59,591 to 84,744 by 2022. Student headcount, over this same period of time, is projected to grow from the current level of 7,233 at the College to 10,323 by 2022.

The most important outcome of the forecasting process was to assure that when a certain level of WSCH was achieved, the College had designated (or will have constructed) new or remodeled, facilities in place to meet the space demands for academic and support services. Whether that level of WSCH is reached exactly in the year 2022 is not of utmost importance. What is key is that to accommodate this future level of WSCH, the College knows what its space needs will be and has planned accordingly. The forecasting model that was used for the College meets this standard.

### **PROFILE OF THE FUTURE PROGRAM OF INSTRUCTION**

Space needs for the future cannot be determined without first determining the capacity of the future program of instruction. To achieve this, Merritt College's fall 2007 program of instruction was used as the basis for the future forecast.

The projections for the future program of instruction are not intended to dictate curricular content but rather to provide a

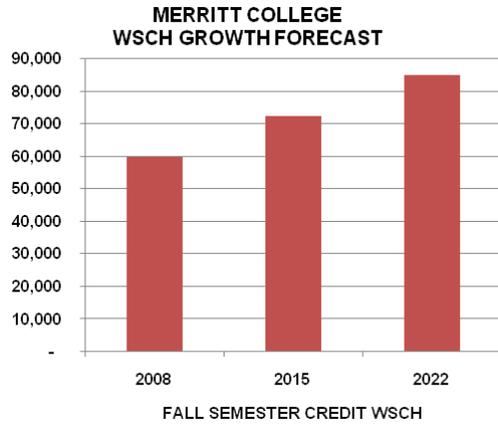
perspective of what the current curriculum would look like if extended forward. It is very likely that the curriculum will change relative to its content over the next fifteen years. The more important consideration and assumption, however, was that there will be a curriculum of some sort and that it will have a certain number of class sections, enrolled students, credit-WSCH, lecture hours and laboratory hours. While the program of instruction could be forecast forward using a generic curriculum and similar results obtained, the existing program of instruction at the College offered the most current and accurate form for the forecasting process.

The College's forecast of its future programs of instruction also relied heavily on several references and planning documents. Some of the more critical documents reviewed include:

- The 2008 Peralta Community College District, Report 17 ASF/OGSF Summary and the Capacities Summary, a facilities inventory recorded annually with the State Chancellor's Office.
- The Peralta Community College District's 5-Year Construction Plan.
- The 2007 fall semester data reports depicting sections offered, WSCH generated, lecture/lab ratios, seat-count and full-time equivalent faculty loads as provided via Peralta Community College District, Office of Institutional Research.
- The Maas Companies database, containing data and information from 80 community colleges throughout the State of California.

The following chart illustrates the forecast for WSCH generation by the College through the year 2022.





Source: Maas Companies projections

The following pages contain the forecast for WSCH generation by instructional departments of the College.



MERRITT COLLEGE - PROFILE OF FUTURE PROGRAM OF INSTRUCTION BY COLLEGE DEPARTMENT, 2007 - 2022											
DEPARTMENT	2007 ACTUALS						2022 PROJECTED				
	NET SEC	ENR/ SEC	WSCH	FTES	LEC WSCH	LAB WSCH	NET SEC	WSCH	FTES	LEC WSCH	LAB WSCH
Administration of Justice	10	36.4	3,479	116	3,273.3	205.8	14	4,948	165	4,655.0	292.6
African American Studies	12	28.8	1,079	36	1,050.0	28.7	17	1,534	51	1,493.2	40.7
Anthropology	10	24.7	995	33	968.3	26.4	14	1,415	47	1,377.1	37.6
Art	17	27.1	1,958	65	803.3	1,155.0	24	2,785	93	1,142.3	1,642.5
Asian/Asian-American Studies	2	34.0	204	7	198.6	5.4	3	290	10	282.4	7.7
Astronomy	3	16.3	166	6	95.8	70.6	4	237	8	136.2	100.4
Biology	30	37.9	8,464	282	2,215.5	6,248.3	43	12,036	401	3,150.7	8,885.7
Business	10	29.7	983	33	979.9	3.5	14	1,398	47	1,393.5	5.0
Child Development	37	28.1	3,250	108	1,915.8	1,333.7	53	4,621	154	2,724.5	1,896.7
Chemistry	8	29.3	1,740	58	1,001.5	738.4	11	2,474	82	1,424.2	1,050.0
Chinese	1	50.0	300	10	247.9	52.1	1	427	14	352.5	74.1
Computer Information Systems	13	23.6	1,111	37	897.6	213.5	19	1,580	53	1,276.5	303.7
Communications	12	35.9	1,396	47	808.5	587.6	17	1,985	66	1,149.7	835.7
Cooperative Work Experience	2	28.5	162	5	112.7	49.3	3	230	8	160.2	70.1
Community Social Services	6	85.3	2,421	81	2,277.8	143.2	9	3,443	115	3,239.3	203.6
Counseling	9	19.0	494	16	343.4	150.3	13	702	23	488.4	213.7
Economics	2	33.0	238	8	231.3	6.3	3	338	11	328.9	9.0
Education	1	11.0	33	1	14.2	18.8	1	47	2	20.2	26.7
Emergency Medical Technician	3	27.7	594	20	155.6	438.7	4	845	28	221.2	623.9
English	38	25.8	3,954	132	3,344.7	608.9	54	5,622	187	4,756.5	865.9
Environmental Management	12	18.0	450	15	315.1	135.0	17	640	21	448.1	192.0
Environmental Studies	1	18.0	26	1	25.7	-	1	37	1	36.6	-
English as a Second Language	17	19.3	1,537	51	1,069.1	467.9	24	2,186	73	1,520.4	665.4
Fire Science	3	35.3	782	26	735.8	46.3	4	1,112	37	1,046.4	65.8
Geography	4	19.3	250	8	243.6	6.6	6	356	12	346.4	9.5
Geology	1	14.0	101	3	58.0	42.8	1	143	5	82.5	60.8

MERRITT COLLEGE - PROFILE OF FUTURE PROGRAM OF INSTRUCTION BY COLLEGE DEPARTMENT, 2007 - 2022											
DEPARTMENT	2007 ACTUALS						2022 PROJECTED				
	NET SEC	ENR/ SEC	WSCH	FTES	LEC WSCH	LAB WSCH	NET SEC	WSCH	FTES	LEC WSCH	LAB WSCH
History	3	24.0	235	8	228.4	6.2	4	334	11	324.8	8.9
Health Education	2	34.0	245	8	105.3	139.5	3	348	12	149.7	198.4
Health Professions & Occupations	2	29.0	127	4	33.2	93.7	3	180	6	47.2	133.2
Humanities	4	22.8	299	10	252.8	46.0	6	425	14	359.5	65.4
Human Services	8	17.1	381	13	358.4	22.5	11	542	18	509.6	32.0
Insurance	3	15.3	112	4	111.6	0.4	4	159	5	158.7	0.6
Landscape Horticulture	32	27.8	3,049	102	1,524.5	1,524.5	46	4,336	145	2,167.9	2,167.9
Learning Resources	6	309.5	303	10	303.3	-	9	431	14	431.4	-
Mathematics	36	31.9	4,339	145	4,224.2	114.8	51	6,171	206	6,007.3	163.3
Medical Assisting	1	20.0	263	9	68.8	194.1	1	374	12	97.9	276.0
Music	8	30.0	845	28	346.7	498.5	11	1,202	40	493.0	708.9
Nursing	8	61.1	2,618	87	685.3	1,932.7	11	3,723	124	974.6	2,748.5
Nutrition	17	20.4	852	28	222.9	628.7	24	1,211	40	317.0	894.0
Physical Education	20	53.6	1,716	57	738.1	978.2	29	2,441	81	1,049.7	1,391.1
Paralegal Studies	10	24.3	742	25	742.0	-	14	1,055	35	1,055.2	-
Philosophy	2	22.0	143	5	120.8	22.0	3	203	7	171.8	31.3
Physics	5	13.4	394	13	226.8	167.2	7	560	19	322.5	237.8
Political Science	5	24.4	391	13	380.8	10.4	7	556	19	541.5	14.8
Psychology	11	38.6	1,363	45	1,326.5	36.2	16	1,938	65	1,886.5	51.5
Radiologic Technology	10	29.5	1,720	57	450.2	1,269.6	14	2,446	82	640.2	1,805.4
Recreation & Leisure Services	1	36.0	130	4	76.4	53.2	1	184	6	108.7	75.6
Real Estate	22	29.0	1,374	46	1,368.9	4.9	31	1,954	65	1,946.8	7.0
Sociology	4	34.8	450	15	438.0	12.0	6	640	21	622.9	17.0
Spanish	8	24.0	784	26	648.1	136.3	11	1,116	37	921.7	193.8
Vocational Nursing	1	19.0	551	18	144.3	406.8	1	784	26	205.2	578.6
<b>TOTAL</b>	<b>493</b>	<b>33.3</b>	<b>59,591</b>	<b>1,986</b>	<b>38,509.3</b>	<b>21,081.5</b>	<b>704</b>	<b>84,744</b>	<b>2,825</b>	<b>54,764.0</b>	<b>29,980.0</b>

Source: Peralta Community College District Office of Institutional Research

**MEASUREMENTS FOR ATTAINING GROWTH GOALS**

The standard measure used to track growth relative to the service area population is the student participation rate (SPR). This is a mathematical ratio of the number of students attending the College per 1,000 residents of the service area. For the fall 2007 semester, Merritt College attracted 19.0 students to the College per 1,000 residents in the college service area.

In order to reach the growth target spelled out in this Plan for the year 2022, the College will have to increase the participation rate in the service area to 26.2 students per 1,000 population. This will require the College to add an average of 206 students per year.

MERRITT COLLEGE - PROJECTED STUDENT PARTICIPATION RATE 2007-2022			
YEAR	POP	ENR	SPR
2007	381,340	7,233	19.0
2015	387,795	8,744	22.5
2022	393,532	10,323	26.2

Source: ESRI Data Systems; Maas Companies projections; Peralta Community College District Office of Institutional Research



# Determination of Future Space Needs

## SPACE REQUIREMENTS: ACADEMIC PROGRAM OF INSTRUCTION

All space needs are driven by the program of instruction and its relative growth or decline for the future. This is what drives the institution, including the need for all space required for support services.

## CAP / LOAD ANALYSIS

The State Chancellor’s office tracks how efficiently a college uses space in five space categories. These categories are lecture (classroom), laboratory, office (includes offices for faculty and staff as well as student services space), library and AV/TV (instructional media). The measure used is called the capacity to load ratio or, cap/load ratio. This is the ratio of the space the college has divided by the space the college needs. This need is calculated and is based on formulae in Title 5 of the California Education Code.

Simply put, if the ratio is above 100% the college has more space than it needs (the State is unlikely to fund additional facilities in that space category). If the ratio is below 100% the college needs additional space (the college may qualify for State funding for additional space in that space category).

In the case of Merritt College, the College is currently overbuilt (has more space that it needs) in two of the five space categories tracked by the State. Laboratory, Library and AV/TV are the three space categories in which the College qualifies for additional space. In the case of AV/TV the need is significant (the cap/load ratio is well below 100%).

PERALTA DISTRICT / COLLEGES CAPACITY LOAD ANALYSIS					
College	Lecture	Laboratory	Office	Library	AV/TV
Berkeley	120%	85%	122%	75%	43%
College of Alameda	129%	195%	160%	104%	67%
Laney	116%	134%	117%	63%	24%
Merritt	171%	96%	113%	93%	41%
District	147%	125%	155%	82%	40%

Source: Peralta Community College District 5-Year Capital Construction Plan, analysis by Maas Companies

## ACADEMIC SPACE NEEDS

The following tables show the projected space needs for the academic program of instruction at Merritt College for the target year 2022. The tables present the key elements that define the future programs of instruction and identify the assignable (usable) square feet (ASF) that will be required to meet the academic space demands. Though some of the calculations use the TOP Code instructional division format, the space needs data has been presented using the instructional departments of the College for convenience.

**Academic Space Profile for 2022**

The following table depicts the program of instruction when WSCH reaches 84,744 for a given semester. The table shows the lecture

and laboratory space needs (ASF) for each department when this level of WSCH is reached.

MERRITT COLLEGE - PROGRAM OF INSTRUCTION BY COLLEGE DEPARTMENT - FALL 2022								
DEPARTMENT	NET SEC	WSCH	FTES	FTEF	LEC WSCH	LAB WSCH	LEC ASF	LAB ASF
Administration of Justice	14	4,948	164.9	2	4,655.0	292.6	2,202	626
African American Studies	17	1,534	51.1	3	1,493.2	40.7	706	61
Anthropology	14	1,415	47.2	3	1,377.1	37.6	651	56
Art	24	2,785	92.8	5	1,142.3	1,642.5	540	4,221
Asian/Asian-American Studies	3	290	9.7	0	282.4	7.7	134	12
Astronomy	4	237	7.9	1	136.2	100.4	64	258
Biology	43	12,036	401.2	15	3,150.7	8,885.7	1,490	19,015
Business	14	1,398	46.6	3	1,393.5	5.0	659	6
Child Development	53	4,621	154.0	10	2,724.5	1,896.7	1,289	4,874
Chemistry	11	2,474	82.5	5	1,424.2	1,050.0	674	2,699
Chinese	1	427	14.2	0	352.5	74.1	167	111
Computer Information Systems	19	1,580	52.7	4	1,276.5	303.7	604	519
Communications	17	1,985	66.2	3	1,149.7	835.7	544	1,788
Cooperative Work Experience	3	230	7.7	1	160.2	70.1	76	180
Community Social Services	9	3,443	114.8	3	3,239.3	203.6	1,532	436
Counseling	13	702	23.4	2	488.4	213.7	231	549
Economics	3	338	11.3	0	328.9	9.0	156	13
Education	1	47	1.6	0	20.2	26.7	10	86
Emergency Medical Technician	4	845	28.2	1	221.2	623.9	105	1,335
English	54	5,622	187.4	12	4,756.5	865.9	2,250	1,853
Environmental Management	17	640	21.3	2	448.1	192.0	212	945
Environmental Studies	1	37	1.2	0	36.6	-	17	-
English as a Second Language	24	2,186	72.9	6	1,520.4	665.4	719	1,710
Fire Science	4	1,112	37.1	0	1,046.4	65.8	495	141

MERRITT COLLEGE - PROGRAM OF INSTRUCTION BY COLLEGE DEPARTMENT - FALL 2022

DEPARTMENT	NET SEC	WSCH	FTES	FTEF	LEC WSCH	LAB WSCH	LEC ASF	LAB ASF
Geography	6	356	11.9	1	346.4	9.5	164	14
Geology	1	143	4.8	0	82.5	60.8	39	156
History	4	334	11.1	1	324.8	8.9	154	13
Health Education	3	348	11.6	0	149.7	198.4	71	637
Health Professions & Occupations	3	180	6.0	0	47.2	133.2	22	285
Humanities	6	425	14.2	1	359.5	65.4	170	140
Human Services	11	542	18.1	2	509.6	32.0	241	69
Insurance	4	159	5.3	1	158.7	0.6	75	1
Landscape Horticulture	46	4,336	144.5	8	2,167.9	2,167.9	1,025	10,666
Learning Resources	9	431	14.4	2	431.4	-	204	-
Mathematics	51	6,171	205.7	10	6,007.3	163.3	2,841	245
Medical Assisting	1	374	12.5	1	97.9	276.0	46	591
Music	11	1,202	40.1	2	493.0	708.9	233	1,822
Nursing	11	3,723	124.1	15	974.6	2,748.5	461	5,882
Nutrition	24	1,211	40.4	3	317.0	894.0	150	1,913
Physical Education	29	2,441	81.4	7	1,049.7	1,391.1	496	-
Paralegal Studies	14	1,055	35.2	2	1,055.2	-	499	-
Philosophy	3	203	6.8	0	171.8	31.3	81	67
Physics	7	560	18.7	2	322.5	237.8	153	611
Political Science	7	556	18.5	1	541.5	14.8	256	22
Psychology	16	1,938	64.6	3	1,886.5	51.5	892	77
Radiologic Technology	14	2,446	81.5	5	640.2	1,805.4	303	3,864
Recreation & Leisure Services	1	184	6.1	0	108.7	75.6	51	194
Real Estate	31	1,954	65.1	5	1,946.8	7.0	921	9
Sociology	6	640	21.3	1	622.9	17.0	295	25
Spanish	11	1,116	37.2	2	921.7	193.8	436	291
Vocational Nursing	1	784	26.1	3	205.2	578.6	97	1,238
<b>TOTAL</b>	<b>704</b>	<b>84,744</b>	<b>2,824.8</b>	<b>161</b>	<b>54,764.0</b>	<b>29,980.0</b>	<b>25,903</b>	<b>70,329</b>

Source: Peralta Community College District Office of Institutional Research

**SPACE REQUIREMENTS:  
ALL PROGRAMS AND SERVICES OF THE  
COLLEGE**

Using the allowable standards referenced in the California Code of Regulations Title 5 for calculating space (see Attachment A at the end of this Plan), and the College’s current space inventory (*the Peralta Community College District Report 17, ASF/OGSF Summary & Capacities Summary, October 2008*) the future space needs of the College have been determined for instructional and support service space categories.

The table shows the current inventory of existing facilities at the College, the future space qualification and the net need by space category. Merritt College currently has 219,030 ASF (assignable or usable square feet of space) and by the year 2022 (or when WSCH reaches 84,744 for a given semester) the College will qualify for a total of 261,341 ASF of space. The total “net need” for space through the year 2022 is 42,311 ASF.

MERRITT COLLEGE 2022 TARGET YEAR SPACE REQUIREMENTS				
SPACE CATEGORY	DESCRIPTION	CURRENT INVENTORY	2022 TITLE 5 QUALIFICATION	NET NEED
0	INACTIVE	0	0	-
100	CLASSROOM	39,728	25,903	(13,825)
210-230	LABORATORY	57,120	70,329	13,209
235-255	NON CLASS LABORATORY	0	981	981
300	OFFICE/CONFERENCE	30,305	22,598	(7,707)
400	LIBRARY	21,016	31,612	10,596
520-525	PHYS ED (INDOOR)	31,977	35,000	3,023
530-535	AV/TV	2,000	12,831	10,831
540-555	CLINIC/DEMONSTRATION	6,010	5,436	(574)
580-585	GREENHOUSE	4,581	3,593	(988)
590	OTHER	448	1,633	1,185
610-625	ASSEMBLY/EXHIBITION	1,186	10,323	9,137
630-635	FOOD SERVICE	5,178	6,194	1,016
650-655	LOUNGE/LOUNGE SERVICE	5,940	3,785	(2,155)
660-665	MERCHANDISING	1,786	8,417	6,631
670-690	MEETING/RECREATION	5,350	3,438	(1,912)
710-715	DATA PROCESSING/COMP	3,315	5,000	1,685
720-770	PHYSICAL PLANT	2,695	13,067	10,372
800	HEALTH SERVICES	395	1,200	805
<b>Total</b>		<b>219,030</b>	<b>261,341</b>	<b>42,311</b>

Source: Peralta Community College District Report 17; Maas Companies projections - Calculations based on California Code of Regulations Title 5, Chapter 8, Section 57028

The State Chancellor's Office monitors five space categories for consideration of funding support. These categories are classroom, laboratory, office/conference, library/LRC and instructional media (AV/TV). An analysis of the College's total space needs shows that by the year 2022 the College will need additional space in three of these five categories: laboratory (14,190 ASF—this combines laboratory and non-class laboratory categories), library/LRC (10,596 ASF) and AV/TV—instructional media (10,831 ASF).

The College is currently overbuilt in lecture (classroom) space by 13,825 ASF. This indicates that the classroom spaces may not be configured in the best way to accommodate the program of instruction. This can be rectified by renovating some of the existing classroom facilities, sizing them more appropriately for the classes being held in them.

The College and District may also want to consider a careful re-examination of the space coding of all campus facilities. There are additional needs in the discretionary support

service space categories of physical plant, clinic/demonstration, assembly/exhibition, data processing and health services.



## The Financial Plan

The *2009 Merritt College Integrated Educational and Facilities Master Plan* was developed around the concept of matching the future space needs of the College with required funding. The goal has been to produce a viable building and facilities program to support the instructional and support services provided by the College. Thus, the Plan was developed to first establish an economically viable and efficient program of instruction and support services, and then to determine a facilities and financing plan that will support the identified needs.

The Plan forecasts the future program of instruction and support services through the year 2022. The need for additional or remodeled space will occur in a phased manner over this 15-year period. The time frame for development will be driven both by growth in student headcount as well as by the availability of funds for capital construction.



The priorities and the identified projects do not change. The variables are time and funding. The proposed facility program that follows defines projects by site and location. The cost estimates for the projects are based on current construction costs as established by the State of California pursuant to California Construction Cost Index (CCI-4593). This index projects costs for projects that will be under construction during the 2007-08 fiscal

year. An inflation factor of 3.5% has been added for each subsequent year of the Plan.

For renovation projects, it is estimated that approximately \$275/ASF will be required to achieve the proposed level for renovation and remodel of existing buildings. All existing spaces will also need to be upgraded for technology and equipment. \$85/ASF has been budgeted for this category. Needed site improvements include: construction of parking lots, lighting ADA access routes, and development of fields and landscaping. The cost to construct these improvements is estimated at \$25/ASF of building area.

### **PROPOSED FACILITIES BY SITE**

The following table provides a summary of all proposed projects for the College. These projects are currently listed on the District Five-Year Capital Construction Plan.

## Financing Options

The table to the right provides a summary of the projected funds needed to fund the proposed capital construction program. Based on this information, it is proposed the District consider the following options to obtain the necessary funds to implement the capital development program:

- State of California Capital Outlay Funding
- Scheduled Maintenance Funds from the State<sup>1</sup>
- Joint Venture programs with Business and Industry
- Joint Venture programs with other Educational Institutions
- Fee Based Instructional Programs
- Private Donations
- Local Bond Issue

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<sup>1</sup> These funds may be distributed by the State as a "Block Grant" that also includes funding for instructional equipment. The District would need to designate these funds for augmentation of the capital construction program.

MERRITT COLLEGE FUTURE PROJECTS THROUGH THE YEAR 2022	
PROJECT	PROJECTED COST
Science Complex	\$45,112,000
Library Renovation	\$6,000,000
Modernize Trade Technology Building	\$23,786,000
Child Development Center	\$16,120,000
Horticulture Building Renovation	\$7,270,000
Renovation of Building D	\$24,096,000
<b>TOTAL</b>	<b>\$122,384,000</b>

Source: Peralta Community College District Five-Year Capital Construction Plan (accessed December 2, 2008)

A brief description and analysis of each of these funding options is provided on the following pages:

**A. State of California Capital Outlay Funding**

The California Community College Chancellor's Office is a long-standing source for funding capital construction projects. This process requires submission of an Initial Project Proposal (IPP) and a Final Project Proposal (FPP). Approvals through the State Chancellor's Office, and ultimately the Department of Finance and the legislature, typically take three years from application to receiving initial funding of a project, and five years before the project is completed and ready for occupancy.

A competitive point system drives the process, with all community colleges competing for the same funding that the State has provided via a statewide bond program. This process generally requires the District to provide a percentage of its own funds as a "match" while the State provides the balance. In the past, 10-20% District funding was a norm. Recently, the percentage of local contribution has risen to 30-50% in matching funds as districts that have passed local bonds are using those funds to gain additional "points" for their projects. Pursuant to State guidelines, the State will fund a maximum of one project per college per year. In reality, the pattern of funding has been less than the maximum due to the time it takes to plan and construct a project via this procedure. If the Peralta District can achieve the necessary "points" for a project to be funded, a reasonable expectation would be to have 4-5 projects funded by the State per campus over the next 20 years.

**B. Scheduled Maintenance Funds from the State**

As noted above, the State of California has historically funded local districts to assist in scheduled maintenance of facilities. Until 2002, funding occurred on a project-by-project basis. Since 2002, scheduled maintenance funding is included in an annually funded, block grant program that also includes funds for instructional and library equipment. There is a local match required for the use of these funds. It is not typically a large amount of funding (\$300,000-\$600,000/district/year) but it is an option to solve minor building renovation or maintenance issues.

### **C. Joint Venture programs with Business and Industry**

Joint venture options with business and industry are an option the District needs to consider for job-based, educational training programs be they on-campus, adjacent to a campus or within the community. The concept involves educational and training programs jointly developed with private business and industry at a specific site identified by the joint-venture partner. If the site is owned by the partner, rent-free facilities would be required. If the College owns the site, the cost of constructing the facility and the repayment of the construction loan for the building would be part of the joint-use agreement between the parties.

### **D. Joint Venture programs with other Educational Institutions**

Joint venture options with other educational institutions would be similar in format to the joint venture program discussed in item C. However, rather than having a joint venture partner from business or industry, the District would have another educational institution as its partner. The education partners, via the joint venture agreement, would assume responsibility for the repayment of the construction loan, in lieu of land lease payments and rent, until the building cost is paid.

### **E. Fee Based Instructional Programs**

The District has the option to develop a fee-based curriculum and compete with other public and private institutions for students who would not typically attend the traditional, State-funded, public instructional program of a community college. Any excess revenue generated from such activities could be used to fund future capital construction projects.

## F. Private Donations

Private colleges and universities have historically created capital campaigns to fund facilities. Unfortunately, the community colleges have had limited success in such alternative funding efforts. Private businesses or educational institutions may wish to “partner” with the District. Typically, such donations frequently focus on the development of technology. In recent years, it has become very popular to develop business incubators with the University of California campuses. Using this concept, businesses or educational institutions could partner (by providing capital) with the District to develop advanced technology programs and educational facilities at any site throughout the District.

## G. Local Bond Issue

The District used this option in 2000. Utilization of the funds residual funds needs to be assessed and prioritized. In developing this Plan, the analysis team has concluded that the remaining funds will not be enough to achieve the Plan’s objectives. If the Board of Trustees determines that an additional bond is a viable option, they may wish to once again request voter approval of additional bond funds. If this decision is made, pursuant to Proposition 39 guidelines, 55% of the voters must approve the issuance of bonds. There is a maximum limit of \$25/\$100,000 of assessed valuation that can be levied. Typically, the length of repayment of the obligation is 20-30 years. Elections to request voter approval of a Proposition 39 Bond must be held in conjunction with a general election such as the statewide primary or general elections. Very specific guidelines and procedures must be followed by the District if it elects to pursue this option. Finally, a comprehensive, detailed plan of public information and justification for all projects that will be funded via the bond program must be shared with all constituencies.



## **SUGGESTED FINANCING PARAMETERS**

The following general guidelines are suggested as the District considers the funding options for implementing the Integrated Educational and Facilities Master Plan:

1. The Governing Board, in concert with the District staff, should carefully review and assess all funding options. A series of Board of Trustee workshops specifically designated for this purpose may be necessary.
2. The District must prioritize the projects included in the proposed Plan. This prioritization should be based on the specific needs as well as the source of potential funding.
3. The District must maximize State funding. This should be a primary criterion for the prioritization of projects.
4. Given that State funding will not meet the total funding needs of the District, consider requesting voter approval for a local bond to fund the proposed capital construction program.
5. Carefully assess the time line for implementing the plan. Adjustment in the time line may provide additional funding options.
6. Respect the Plan. Any modifications must be carefully considered as there will likely be unanticipated secondary effects. Treat the Plan as a “living” document that is used as a decision-making guide. Update the Plan periodically, as agreed upon, through a thoughtful planning and discussion process with all parties.
7. Assess the impact of inflation on the proposed project budgets. Given the current bidding climate, the proposed budgets may not be sufficient to cover the scope of work. In all likelihood, the College and District will need to adjust the prioritization and funding of projects. Accelerating the construction time line for identified projects will help to reduce the impact of inflation.

## Total Cost of Ownership

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As part of its institutional master planning process, Merritt College and the Peralta Community College District (PCCD) are committed to developing a systematic, College and District-wide approach for all planning and budgeting activities. This approach includes the assessment of all current functions and activities and the development of a District-wide process for the ongoing assessment of future programs, services and facilities. Preliminary discussions have suggested that the concept of “Total Cost of Ownership” (TCO) may be a viable approach to addressing this concern.

### **DEFINITION OF TOTAL COST OF OWNERSHIP (TCO)**

Total Cost of Ownership (TCO), as used for College facilities, is defined for these purposes as the systematic quantification of all costs generated over the useful lifespan of the facility (30-50 years). The goal of TCO is

to determine a value that will reflect the true, effective cost of the facility, including planning, design, constructing and equipping of the facility, and also the recurring costs to operate the facility over its useful lifespan (30-50 years). The one-time costs of capital construction and related costs shall be as listed on the JCAF-32 report developed by the California Community College Chancellor’s Office. The recurring, or operational costs, shall include staffing, institutional support services, replaceable equipment, supplies, maintenance, custodial services, technological services, utilities and related day-to-day operating expenses for the facility.

### **Green / Sustainable Design**

When designing new facilities or renovating existing ones, the College should consider “green” building technologies. The College needs to consider such applications for all

future projects so as to reduce the ongoing operational costs of the facilities.

### **PURPOSE OF THE PROCESS**

The College and District intend to develop a standardized procedure for determining the TCO for existing facilities as well as for remodeled or new facilities that may be constructed throughout the District. The basis for this procedure shall be the concept of TCO as it is typically used in areas such as information technology, governmental cost assessments, and corporate budget analysis.

The purpose of TCO will be to provide an institutionally agreed upon, systematic procedure by which each existing facility in the District is evaluated. This procedure will establish a quantitative data base to assist the District and each College in determining the viability of existing facilities, as well as the feasibility of remodeling and/or constructing new facilities.

## OBJECTIVES TO BE ACHIEVED

This procedure will carry the following objectives:

1. Establish an agreed upon systematic procedure for the evaluation of existing and proposed College facilities.
2. Utilize the concept of TCO to develop a process for the evaluation of College facilities that can be integrated into the overall TCO program of the District.
3. Develop a procedure for the assessment of existing and proposed facilities that utilizes existing data from College files, as well as information from the statewide files of the California Community College Chancellor's Office.
4. Ensure that the database developed for the procedure is compatible with current State reporting systems such as Fusion.
5. Design the prototype system in a manner that allows the College to annually update the information in the system, and add additional data elements

as needed as part of the institutional planning and budgeting process.

## APPROVAL PROCESS

The College's facilities planning module is a portion of the overall Total Cost of Ownership planning model to be developed by the District. As such, it must be integrated into the overall planning system and ultimately approved through the District/College's shared governance process.

## INFRASTRUCTURE / UTILITY SYSTEMS

In addition to the capital construction cost for facilities, the District must also construct major infrastructure improvements at the project site(s) and the College campus. As part of the total cost of ownership, each building must assume a proportionate share of the infrastructure capital improvement costs. The proportionate share or ratio for a particular facility is based on the Gross Square Footage (GSF) of that facility divided by the total Gross Square Footage (GSF) for the campus. In turn, this ratio is applied to

the estimated total cost of the campus-wide infrastructure system. A typical present-value cost of a campus-wide system has been estimated at \$29,800,000. The breakdown of costs by major category is shown in the following table. The table below provides the College with an outline of the information that will be needed to implement a TCO analysis for any proposed new or remodeled facilities.

CAMPUS-WIDE INFRASTRUCTURE CAPITAL IMPROVEMENT COST	
SAMPLE DATA ONLY	
<i>Electricity</i>	<i>\$3,900,000</i>
<i>Water</i>	<i>\$2,700,000</i>
<i>Gas</i>	<i>\$1,300,000</i>
<i>Data/Communications</i>	<i>\$5,500,000</i>
<i>Sewer/Storm Drains</i>	<i>\$4,400,000</i>
<i>Roads, Parking, Landscaping</i>	<i>\$7,100,000</i>
<i>Grading, Misc. Improvements</i>	<i>\$4,900,000</i>
<b>TOTAL</b>	<b>\$29,800,000</b>

## SUMMARY OF PLANNING FOR GROWTH AND SUCCESS

Vitality and viability, taken together, define the charted waters of success. For the next six to twelve years, the College should consider maintaining the growth momentum, while carefully adjusting curriculum and program offerings. Change in instructional programs needs to be embraced by faculty and staff, relying upon trends, projections and other evidence, while fully utilizing program reviews as their primary vehicle.

These efforts alone will not guarantee the completion of planning, implementation and ultimate success. Many elements affecting the success of the College must also be considered. Space utilization and Total Cost of Ownership, among others, should be factored into the growth planning equation.



## Recommendations

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The following recommendations have been developed for Merritt College:

1. Using the previously completed Merritt College Educational Master Plan and this Facility Allocation and Financing Plan as a guide, continue to implement an ongoing, College-wide master planning process that will serve as the basis for recommendations regarding all future educational programs, support services, facility and financial decisions for the College with the intent to establish an expanded, comprehensive curriculum for the College.
2. Develop an enrollment management program that shall include an annual assessment of the WSCH/FTEF ratio for all instructional programs with a 2022 College-wide average of 525 WSCH/FTEF. This program shall include a process for managing the student enrollment for the College by establishing the number of net sections to the College-wide and departmental targets listed in the educational, facility and financial master planning documents.
3. As part of the ongoing, District-wide process for review and assessment of the curriculum, determine what unique and attractive, “magnet” instructional programs, such as programs for senior citizens, health occupations and wellness/fitness programs can be offered at the campus. Also, evaluate what programs or courses are not being successful at this time and whether these programs or courses should be eliminated or combined with similar programs at other Colleges in the District.
4. Continue to aggressively integrate the use of alternate delivery systems including on-line and distance education programs for the College with special emphasis on marketing the programs to senior adults in the College’s service area. By 2022, a College-wide objective should be to offer a minimum of 20% of all course offerings via alternate delivery systems.
5. Pursue the creation of a public/private partnership for the development of the 38-acre parcel adjacent to the campus. The development of the site should be educationally related with options such as medical, health, wellness, fitness and student/faculty/staff housing as possible joint venture options for the partnership. Under no circumstances should the District consider selling the property, but rather, should develop the parcel in accordance with the joint-

venture guidelines found in the Education Code of the State of California.

6. Address the need to provide the infrastructure and facilities needed to support a viable student activity and student support services program for the College. An outdoor meeting and activity area including an amphitheater, recreational/athletic space, meeting rooms, and a small theater are some options that should be considered.
7. In building out the remainder of space at the current site, follow the space allocation calculations included in this Facility Allocation and Financing Plan. Also, consider the financial impact of any proposed program, including the joint venture programs and their space requirements as determined by a Total Cost of Ownership analysis for the proposed program or project.
8. In response to the projected cost of the proposed capital construction program, the College should maximize the potential for State funding for future facilities and programs. The College currently has a series of projects listed in the 5-Year Capital Construction program that can serve as the basis for initial discussion regarding implementation of the Facilities Master Plan for the campus. Pursuant to this Master Plan, adjustment in this initial list and augmentation of the list should occur. In all cases, the timing, feasibility of State funding along with local bond funding should be considered when developing the project's budget..
9. As part of the Board of Trustees approval of the Facility Allocation and Financing Plan, the Board shall approve a prioritized list of capital construction projects, the proposed budget for each

project and the funding source(s) for each project. This Plan shall serve as the basis for the equitable distribution of local bond funds and State funds for each College within the District.

The District may wish to review the current curriculum at each College with the intent of consolidating course offerings at one location within the District. Potential changes could include transferring welding courses from Laney College to the mechanical technology program at the College of Alameda. Health occupations and wellness programs currently at College of Alameda could be consolidated with the current programs at Merritt College and the graphic arts and photography programs currently housed at Laney College could be consolidated into the multimedia center at Berkeley City College.

# Attachment A: Space Determination Methodology

## OVERVIEW

A combination of factors was used to arrive at future capacity requirements. These included identifying a future program of instruction, determining the amount of credit-WSCH generated, ascertaining the current space holdings of the District, and applying quantification standards outlined in Title 5 of the California Administrative Code. Title 5 standards define the tolerance thresholds for space.

## PRESCRIBED STATE SPACE STANDARDS

The California Code of Regulations, Title 5 (Sections 57000-57140) establishes 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), produce total capacity requirements

that are expressed in assignable square feet (space available for assignment to occupants). The Title 5 space planning standards used to determine both existing and future capacity requirements are summarized in the following tables.

Each component of the standards identified is mathematically combined with a commensurate factor (see table below) to produce a total assignable square foot (ASF) capacity requirement for each category of space.

PRESCRIBED SPACE STANDARDS		
CATEGORY	FORMULA	RATES / ALLOWANCES
CLASSROOMS	ASF/Student Station	15
	Station utilization rate	66%
	Avg hrs room/week	34.98
TEACHING LABS	ASF/student station *	*
	Station utilization rate	85%
	Avg hrs room/week	23.37
OFFICES/CONFERENCE ROOMS	ASF per FTEF	140
LIBRARY/LRC	Base ASF Allowance	3,795
	ASF 1st 3,000 DGE	3.83
	ASF/3001-9,000 DGE	3.39
	ASF>9,000	2.94
INSTRUCTIONAL MEDIA AV/TV	Base ASF Allowance	3,500
	ASF 1st 3,000 DGE	1.50
	ASF/3001-9,000 DGE	0.75
	ASF>9,000	0.25

Source: California Code of Regulations Title 5, Chapter 8

**STANDARDS FOR LECTURE SPACE**

The formula for determination of lecture space qualification is based on the size of the college as measured by weekly student contact hours. Colleges generating more than 140,000 WSCH are allowed a factor of 42.9 ASF/100 WSCH. Smaller colleges generating less than 140,000 WSCH are allowed a factor of 47.3 ASF/100 WSCH. Merritt College is small enough to qualify for the larger multiplier.

**STANDARDS FOR LABORATORY SPACE**

Listed in the following table are the Title 5 State standards used to determine assignable square footage (ASF) for laboratory space. The standards offer measures in both ASF per student station and in ASF per 100 WSCH generated.

ASSIGNABLE SQUARE FEET FOR LABORATORY SPACE			
TOP CODE DIVISION	CODE	ASF/STATION	ASF/100 WSCH
Agriculture	0100	115	492
Architecture	0200	60	257
Biological Science	0400	55	233
Business/Mgmt	0500	30	128
Communication	0600	50	214
Computer Info Systems	0700	40	171
Education/PE	0800	75	321
Engineering Tech/Industrial Tech	0900	200	321 to 856
Fine/Applied Arts	1000	60	257
Foreign Language	1100	35	150
Health Science	1200	50	214
Consumer Ed/Child Development	1300	60	257
Law	1400	35	150
Humanities	1500	50	214
Library	1600	35	150
Mathematics	1700	35	150
Physical Science	1900	60	257
Psychology	2000	35	150
Public Affairs/Services	2100	50	214
Social Science	2200	35	150
Commercial	3000	50	214
Interdisciplinary	4900	60	257

Source: Maas Companies - Calculations based on California Code of Regulations Title 5, Chapter 8 Section 57028

## NON-STATE SPACE STANDARDS

The State provides standards for utilization and planning for more than 60% of all types of spaces on campus. Capacity estimates for those remaining spaces, representing approximately 40%, are based on a combination of factors including the size and/or nature of the institution. Standards for the remaining types of spaces are presented in the following table. These standards were determined based on a national study of space and on approval of the State Chancellor's Office.

SPACE DETERMINATION FOR NON-STATE STANDARD FACILITIES		
CATEGORY OF SPACE	BASIS	ASF/ FACTOR
Non-class Laboratory	0.095 ASF per Student Headcount	0.095
Teaching Gym	Greater of 2.5 ASF per FTES or 35,000 ASF	2.5 – 35,000
Assembly/Exhibition	ASF Equal to Student Headcount	100%
Food Service	0.60 ASF per Student Headcount	0.60
Lounge	0.67 ASF per FTES	0.67
Bookstore	1,500 ASF plus 0.67 ASF per Student Headcount	0.75
Health Service	ASF Allowance	1,200
Meeting Room	0.333 ASF per Student Headcount	0.333
Childcare	Greater of 0.4 ASF per Student Headcount or 6,000 ASF (Also, see State Child Care Standards)	0.40 – 6,000
Data Processing	ASF Allowance	5,000
Physical Plant	ASF Allowance	5% of Total
All Other Space	ASF Allowance	2.5% of Total

Source: Maas Companies & State Chancellor's Office

## Attachment B - Glossary of Terms

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### **Academic Calendar Year:**

Begins on July 1 of each calendar year and ends on June 30 of the following calendar year. There are two primary terms requiring instruction for 175 days. A day is measured by being at least 3 hours between 7:00 AM to 11:00 PM.

**Basis/Rationale:**  $175 \text{ days} \div 5 \text{ days per week} = 35 \text{ weeks} \div 2 \text{ primary terms} = 17.5 \text{ week semester}$ .

$175 \text{ days} \times 3 \text{ hours} = 525 \text{ hours}$ , which equals one (1) full-time equivalent student.

**Notes:** Community colleges in California are required by code to provide instruction 175 days in an academic calendar year (excluding summer sessions).

### **ADA:**

Americans with Disabilities Act: Public Law 336 of the 101st Congress, enacted July 26, 1990. The ADA prohibits discrimination and

ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation.

### **Annual Five-Year Construction Plan:**

That part of the Facility Master Plan that defines the current and proposed capital improvements the College will need to undertake over the next five years if it is to achieve the learning outcomes specified in its Master Plan.

### **Annual Space Inventory:**

See 'Space Inventory'

### **API (Academic Performance Index):**

The California's Public Schools Accountability Act of 1999 (PSAA) resulted in the development of API for the purpose of measuring the academic performance and growth of schools. It is a numeric index (or

scale) that ranges from a low of 200 to a high of 1000. A school's score on the API is an indicator of a school's performance level. The statewide API performance target for all schools is 800. A school's growth is measured by how well it is moving toward, or past that goal. A school's API Base is subtracted from its API Growth to determine how much the school improved in a year. (For details, visit <http://www.cde.ca.gov/ta/ac/ap/>).

### **ASF:**

Assignable Square Feet: The sum of the floor area assigned to, or available to, an occupant or student station (excludes circulation, custodial, mechanical and structural areas, and restrooms).

### **Budget Change Proposal (BCP):**

A document reviewed by the State Department of Finance and the Office of

the Legislative Analyst which recommends changes in a State agency's budget.

**CAD:**

Computer Assisted Design

**California Community College System Office:**

The administrative branch of the California Community College system. It is a State agency which provides leadership and technical assistance to the 110 community colleges and 72 community college districts in California. It is located in Sacramento and allocates State funding to the colleges and districts.

**Capacity:**

The amount of enrollment that can be accommodated by an amount of space given normal use levels. In terms of facility space standards, it is defined as the number of ASF per 100 WSCH.

**Capacity/Load Threshold Ratio (aka Cap Load):**

The relationship between the space available for utilization (square footage that is assignable) and the efficiency level at which the space is currently being utilized. The State measures five areas for Capacity Load: Lecture, Laboratory, Office, Library and AV/TV. The Space Inventory (Report 17) provides the basis for this calculation.

**Capital Construction Programs:**

See 'Capital Projects'.

**Capital Outlay Budget Change Proposal (COBCP):**

A type of Budget Change Proposal regarding the construction of facilities and their related issues.

**Capital Projects:**

Construction projects, such as land, utilities, roads, buildings, and equipment which involve demolition, alteration, additions, or new facilities.

**Carnegie Unit:**

A unit of credit; a student's time of 3 hours per week is equivalent to one unit of credit.

**CCFS:**

320 ("The 320 Report"): One of the primary apportionment (funding) documents required by the State. It collects data for both credit and noncredit attendance. Three reports are made annually: the First Period Report (P-1), the Second Period Report (P-2) and the Annual Report. The importance of this report is whether the College or District is meeting its goals for the generation of full-time equivalent students.

**Census:**

An attendance accounting procedure that determines the number of actively enrolled students at a particular point in the term. Census is taken on that day nearest to one-fifth of the number of weeks a course is scheduled.

**DSA:**

The Division of the State Architect (DSA) determines California's policies for building design and construction. It oversees the design and construction for K-12 public schools and community colleges. Its responsibilities include assuring that all drawings and specifications meet with codes and regulations.

**EAP (Early Assessment Program):**

The Early Assessment Program (EAP) is a collaborative effort among the State Board of Education (SBE), the California Department of Education (CDE), and the California State University (CSU). The program was established to provide opportunities for students to measure their readiness for college-level English and mathematics in their junior year of high school, and to facilitate opportunities for them to improve their skills during their senior year. (For details, visit <http://www.calstate.edu/EAP/>).

**Educational Centers:**

A postsecondary institution operating at a location remote from the campus of the parent institution which administers it, and recognized by the Chancellor's Office as a Center.

**Educational Master Plan:**

A part of the College's Master Plan that defines the education goals of the College, as well as the current and future curriculum to achieve those goals. The Educational Master Plan precedes and guides the Facilities Master Plan.

**Enrollments (Unduplicated):**

A student enrollment count (also referred to as "Headcount") based on an Individual Student Number or Social Security Number that identifies a student only once in the system.

**Environmental Impact Report:**

In accordance with the California Environmental Quality Act (CEQA), if a project is known to have a significant effect

on the environment, then an EIR must be prepared. It provides detailed information about a project's environmental effects, ways to minimize those effects, and alternatives if reasonable.

**Facilities:**

All of the capital assets of the College including the land upon which it is located, the buildings, systems and equipment.

**Faculty Loads:**

The amount of "teaching time" assigned/appropriated to a given instructional class; i.e. lecture or laboratory, for a given semester or for an academic year (two semesters). It is typically defined in terms of 15 "teaching hours" per week as being equal to one (1) full-time equivalent faculty; a "full faculty load." Actual faculty loads are generally governed by negotiated agreements and collective bargaining.

**Facilities Master Plan:**

The Facilities Master Plan is an inventory and evaluation (condition/life span) of all owned facilities (the site, buildings, equipment, systems, etc.). It identifies regulations impacting those facilities and any deficiencies; and also defines a plan to correct those deficiencies. It also identifies the adequacy, capacity and use of those facilities, identifies the deficiencies relative to those criteria, and defines a plan of correction. It draws on information contained in the Educational Master Plan.

**Final Project Proposal (FPP):**

The FPP identifies the project justification, final scope and estimated costs of all acquisitions, plus all infrastructure, facility and systems projects. It contains vital information including the JCAF 31 and JCAF 32 reports, the California Environmental Quality Act (CEQA) Final Notice of Determination, federal funds detail, an analysis of future costs, a project time schedule and an outline of

specifications. It is used by the Chancellor's Office and the Board of Governors to determine whether the project has met the criteria for State funding.

**Five-Year Capital Construction Plan (aka 5-YCP):**

See Annual Five-Year Construction Plan

**FTEF:**

An acronym for “full-time equivalent faculty.” Used as a measure by the State to calculate the sum total of faculty resources (full-time and part-time combined) that equate to measurable units of 15 hours per week of “teaching time;” i.e. as being equal to one (1) full-time equivalent faculty. All academic employees are considered to be faculty for this purpose including instructors, librarians and counselors.

**FTES:**

An acronym for a “full-time equivalent student.” Used by the State as the measure for attendance accounting verification. It is also used as a student workload measure that represents 525 class (contact) hours in a full academic year.

**GSF:**

An acronym for “gross square feet.” The sum of the floor areas of the building within the outside faces of the exterior walls; the “total space” assignable and non assignable square feet combined.

**Hardscape:**

Refers to landscaping projects and components that involve everything but the plants that will be on the landscape.

**Initial Project Proposal (IPP):**

A document which provides information such as project costs, type of construction involved, relevance to master plans, capacity/load ratio analysis, and project impact. The IPP identifies the institutional needs reflected in the Educational and Facility Master Plans and the 5-YCP. It is used to determine a project's eligibility for State funding before districts make significant resource commitments into preparing comprehensive FPPs.

**Lecture:**

A method of instruction based primarily on recitation with little or no hands-on application or laboratory experiences. It is based on what is called the "Carnegie unit"; (a student's time of three hours per week is equivalent to one unit of credit). For lecture courses, each hour of instruction is viewed as one unit of credit (with the expectation of two hours outside of classroom time for reading and or writing assignments).

**Laboratory:**

A method of instruction involving hands-on or skill development. The application of the Carnegie unit to this mode of instruction is the expectation that the student will complete all assignments within the classroom hours. Therefore, three hours of in-class time are usually assumed to represent one unit of credit.

**Master Plan:**

An extensive planning document which covers all functions of the college or district. Master Plans typically contain a statement of purpose, an analysis of the community and its needs, enrollment and economic projections for the community; current educational program information and other services in relation to their future requirements. It also covers educational targets and the strategies and current resources to reach those targets, along with a comprehensive plan of action and funding.

**Middle College:**

Middle College High Schools are secondary schools, authorized to grant diplomas in their own name, located on college campuses across the nation. The Middle Colleges are small, with usually 100 or fewer students per grade level. They provide a rigorous academic curriculum within a supportive and nurturing environment to a student population that has been historically under-served and under-represented in colleges. While at the Middle College, students have the opportunity to take some college classes at no cost to themselves. (For details, visit <http://www.mcnc.us/faqs.htm>).

**Punch List:**

The items in a contract that are incomplete. If a job is designated as substantially complete for purposes of occupancy, then those remaining items to be completed or resolved form the punch list.

**Report 17:**

See Space Inventory Report.

**Scheduled Maintenance Plan:**

See Annual Five-Year Scheduled Maintenance Plan.

**Service Area:**

Any community college's service area is usually defined by geography, political boundaries, commuting distances and the historical agreements developed with adjacent community colleges. In most situations the district boundary is not the best measure of potential student participation at a given college, since students tend to look for options, including distance education.

**SLOAC:**

The Student Learning Outcomes and Assessment Cycle.

**Space Inventory Report (aka Report 17):**

A record of the gross square footage and the assignable (i.e. usable) square footage at a college. Provides information necessary for Capital Outlay Projects (IPP's, FPP's), Five-Year Construction Plan, space utilization of the college or district and projecting future facility needs.

Key Components of Space Inventory:

**Room Type (room use category):**

Identifies room by use or function.

**ASF** (assignable square feet)

**GSF** (gross square feet)

**Stations**

**STAR Test:**

Standardized Testing and Reporting developed by the California Department of Education. Under the STAR program, California students attain, and are tested for one of five levels of performance on the CSTs (California Standards Tests) for each subject tested: advanced, proficient, basic, below basic, and far below basic. (For details, visit <http://star.cde.ca.gov/>).

**Strategic Plan:**

Strategic planning is an organization's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy, including its capital and people. Various business analysis techniques can be used in strategic planning, including SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) and PEST analysis (Political, Economic, Social, and Technological analysis). The outcome is normally a strategic plan which is used as guidance to define functional and divisional plans, including Technology, Marketing, etc.

**Space Utilization:**

Rooms, or space, are assigned for a particular use and function, or a specific discipline or service. The State has a numeric code, a four-digit number that identifies the “type” of use that is supported by a particular room/space. (see TOP Code) Space Utilization: assumed by most faculty and staff on campus to mean the level or degree to which a room is utilized. It is the room’s capacity expressed as the percentage that the room is actually used.

**Example:** If the lecture weekly student contact hours were 27,500 and the classroom capacity for weekly student contact hours were 35,000, the utilization would be identified as 78.6%.

**Stations:** The total space to accommodate a person at a given task (classroom-laboratory-office, etc.). The number of appropriate student work spaces within a defined area. It generally represents the best space apportionment for a given educational program.

**TOP Code:**

The “Taxonomy of Programs” (TOP) is a common numeric coding system by which the College categorizes degree and certificate programs. Each course or program has a TOP code. Accountability to the State is reported through the use of TOP codes. The taxonomy is most technical in the vocational programs (0900’s).

**Example:** The taxonomy uses a standard format to codify the offerings. The first two-digits are used for a number of State purposes. Maas Companies commonly uses the two-digit designator for educational master planning purposes. A four-digit code is necessary for reports in the Five-Year Capital Outlay Plan.

1500 – Humanities (Letters)

1501 – English

1509 – Philosophy

2200 – Social Sciences

2202 – Anthropology

2205 – History

**Total Cost of Ownership (TCO):**

Total Cost of Ownership (TCO), as used for college facilities, is defined for these purposes as the systematic quantification of all costs generated over the useful lifespan of the facility (30-50 years). The goal of TCO is to determine a value that will reflect the true, effective cost of the facility including planning, design, constructing and equipping of the facility and also the recurring costs to operate the facility over the useful lifespan of the facility (30-50 years).

**WSCH:**

An acronym for “Weekly Student Contact Hours.” WSCH represents the total hours per week a student attends a particular class. WSCH are used to report apportionment attendance and FTES. One (1) FTES represents 525 WSCH.

**WSCH/FTEF:**

Represents the ratio between the faculty’s hours of instruction per week (“faculty load”) and the weekly hours of enrolled students in his/her sections. It is the total weekly student contact hours (WSCH) divided by the faculty member’s load. The State productivity/efficiency measure for which funding is based is 525 WSCH/FTEF.

**Examples:** A faculty member teaching five sections of Sociology, each section meeting for three hours per week with an average per section enrollment of 30 students, equals 450 WSCH/FTEF. (5 class sections X 3 hours/week X 30 students = 450 WSCH/FTEF). A faculty member teaching three sections of Biology, each section meeting for six hours per week with an average section enrollment of 25 students,

would be teaching 450 WSCH/FTEF. (3 class sections X 6 hours/week X 25 students = 450 WSCH/FTEF).



## Attachment C – Total Cost of Ownership Worksheets

The following tables can be used as worksheets to calculate the Total Cost of Ownership for a new project.

### ASSESSMENT FORMAT

Outlined in the table is a draft of the format that has been developed for the assessment of a proposed facility project. It can be used for either a new project or a remodeled project. The costs listed in the analysis must be obtained from the general operating fund of the District for the previous fiscal year.

TOTAL COST OF OWNERSHIP PROCEDURE - WORKSHEET	
College:	Dept/Division:
Date:	Planning Year:
Requestor:	
Project Title	
A. Name of Facility:	
B. State Inventory Building Number (If existing facility):	
C. Project Description:	
D. Project Justification:	
E. History of Building:	
F. Assignable Square Footage:	
G. Gross Square Footage:	
H. Initial Date of Occupancy:	
I. Programs/Services Housed in the Facility: _____ ( Instructional Program/Support Svc.)	
J. Total Project Cost:	
1. Construction Cost	
2. Architecture/Engineering Other "soft" costs	
3. State Contribution	
4. Local Contribution	
5. TOTAL Project Cost	
K. Analysis of Interior Space:	
1. Classroom (100 space)	
2. Laboratory (200 space)	
3. Office (300 space)	
4. Library (400 space)	
5. AV/TV (500 space)	
6. All Other Space	
L. Weekly Student Contact Hour Capacity (WSCH):	
M. Capacity Load Ratio/Utilization of Facility	
1. Classroom Load (State Std.) 32-35 Hours/week	
2. Classroom Use (F-06) _____Hours/week	
3. Laboratory Load (State Std.) 28 -32 Hours/week	
4. Laboratory Use (F-06) _____Hours/week	

**IMPLEMENTATION PROCESS**

The table that follows provides the College with an outline of the information that will be needed to implement a Total Cost of Ownership analysis for any proposed, new, or remodeled facilities.

TOTAL COST OF OWNERSHIP PROCEDURE - FISCAL ANALYSIS							
FACILITY: _____							
TCO FACTOR	2006	2007	2008	2009	2010	2011	2012
Assignable Square Feet							
Gross Square Feet							
Initial Date of Occupancy							
Total Cost for Facility							
Space Allocation							
Classroom							
Laboratory							
Office							
Library							
AV/TV							
All Other							
WSCH Capacity							
Capacity Load Ratios							
Classroom							
Laboratory							
Office							
Library							
AV/TV							
Faculty Costs (2 FTEF)							
Support Staff Costs (__FTE)							
Instructional Aide (___FTE)							
Facilities Mgt. (___FTE)							
Infrastructure Operating Costs (Prorated share of Total)							
Infrastructure Operating Costs (Prorated share of Total)							
Electrical							
Water/Sewer/Waste Mgt.							
Gas							
Maintenance/Operation Costs							
Custodial							
Service Contracts							
Supplies							
Maintenance/Operation Costs							
Landscaping/Grounds/Parking							
Equipment and Supplies							
Insurance Costs							
District-wide Indirect Cost Factor (0.668 of all other costs)							