



Pasadena City College

EDUCATIONAL MASTER PLAN

project 90 and beyond



PASADENA
CITY COLLEGE

1570 East Colorado Boulevard
Pasadena, California 91106
626-744-9872
www.pasadena.edu



Pasadena Area Community College District

Educational Master Plan

Volume I

Prepared by:



MIG, Inc.
800 Hearst Avenue | Berkeley, California 94710p

FINAL | January 2011

Acknowledgments

The Educational Master Plan (EMP) is part of an ongoing effort to ensure continued success of the Pasadena Area Community College District's programs, facilities, faculty, staff, and students. The cornerstone of this success lies within the leadership and guidance of the entire College community. The development of the EMP was a collaborative effort with broad engagement of the College community. The Educational Master Plan Steering Committee was a shared governance committee that set the framework for an inclusive process in the development of this plan. The EMP/Accreditation Faculty Based Task Team integrated the ideas, strategies, suggestions, and data gathered throughout the process to bring us the Signature Goals and the Project 90 Achievement Areas. With the leadership of the Board of Trustees and the work of both of these groups the Educational Master Plan will guide PCC to a truly global future.

Board of Trustees

William E. Thomson, President, Area 4
Geoffrey L. Baum, Vice President, Area 1
Dr. Jeanette Mann, Area 2
Berlinda Brown, Area 3
Linda Wah, Area 5
John Martin, Board Clerk, Area 6
Dr. Anthony R. Fellow, Area 7
Nolan Pack, Student Trustee
Dr. Mark W. Rocha, Board Secretary, Superintendent/President Pasadena City College

Educational Master Plan Steering Committee

EMP / Accreditation Faculty Based Task Team

Consultant Team

MIG, Inc.
Daniel Iacofano, Principal-in-Charge
Mindy Craig, Project Manager
Mark Sillings, Data Analyst
Nicole Lewis, Project Associate

TABLE OF CONTENTS

1. PLAN OVERVIEW

- A. Project 90 1-1
 - 1. Signature Goals
- B. Mission Critical Priorities and Strategies 1-3
- C. Project 90 Action Plan 1-9

2. INTRODUCTION

- A. Background 2-1
- B. Purpose and Organization of the Educational Master Plan 2-1
- C. Planning Methods Overview 2-2
- D. Process Overview 2-3
 - 1. Environmental Scan
 - 2. Instructional/Student Services Review

3. PLANNING FRAMEWORK

- A. EMP Vision 3-1
- B. Strategic Foundation 3-1
 - 1. Mission
 - 2. Core Values
 - 3. Planning Principles
- C. Organizational Structure 3-3
 - 1. Operational Areas
 - 2. Shared Governance
- D. College Functions 3-5
 - 1. Basic Skills
 - 2. College Transfers
 - 3. Career and Technical Education
 - 4. Non-Credit / Not-for-Credit Education

4. PLANNING ENVIRONMENT

A. Service Area	4-1
B. Environmental Scan: Trends and Projections	4-2
1. Population and Demographics	
2. Age	
3. Immigration and Language	
C. High School Enrollment Trends	4-7
1. PCC Feeder School Characteristics	
D. Pasadena City College Enrollment Trends	4-9
1. PCC Student Enrollment	
2. Educational Attainment in Los Angeles County and the PACCD	
3. Degrees and Certificates	
E. Regional Education Choice	4-11
1. Course and Program Offerings	
F. Employment and Workforce Needs and Trends	4-14
1. Overview	
2. Los Angeles County Trends	
3. Fast Growing Occupations, “Hot Jobs” in California	
4. Skills Gap	
G. Community Perspectives	4-17
1. Strengths and Assets	
2. Issues and Challenges	
3. Opportunities	
H. Planning Implications	4-21

5. GROWTH PROJECTIONS

A. Introduction5-1

B. Historic Enrollment Trends5-1

 1. Headcounts

 2. Weekly Student Contact Hours

 3. Enrollment

C. Instructional Divisions and Disciplines—Historic Growth Rates5-4

D. California Chancellor’s Office Projections5-11

 1. Participation Rates

E. Program Recommendations5-13

 1. Filling the Gap

 2. Opportunity Areas

6. INSTRUCTIONAL / STUDENT SERVICES REVIEW

A. Introduction.....6-1

B. Forecasted Growth Trends6-1

C. Strategic Directions and Rationale 6-7

7. PROGRAM SERVICE DELIVERY

A. Facilities7-1

 1. Re-Use of Existing Facilities

 2. Rescheduling

 3. Sustainability

B. Faculty and Staff7-4

 1. Professional Development and Training

 2. Faculty and Staff Recruitment

 3. Enhanced Collaboration Across Divisions

C. Information Technology7-6

D. Institutional Research	7-8
1. Vision and Goals	
2. Planning, Program Review, and Accreditation	
3. Institutional Research and Evaluation	
4. Organizational and Professional Development	
5. Center for Innovation and Student Success	
E. Revenue Enhancement	7-10
1. PCC Foundation	
2. Extension	
3. International Students	
4. Business Revenue	

FIGURES

3-1 Operational Areas	3-4
3-2 Shared Governance	3-5
4-1 Pasadena Area Community College District (Trustee Areas 1-7)	4-2
4-2 Population Projections for Los Angeles County	4-3
4-3 Populations Projections for Pasadena Area Community College District	4-4
4-4 Los Angeles County Population by Age, 2000 and 2030	4-5

TABLES

1-1	Student Success Achievement Areas and Targets: 2010-2015.....	1-2
1-2	Action Items	1-9
4-1	Los Angeles County Population by Age, 2000 and 2030	4-5
4-2	Statistics and Demographics of Top Feeder Schools for Pasadena City College*.....	4-8
4-3	PCC Student Enrollment, 2000/01 to 2007/08	4-9
4-4	Educational Attainment, PACCD and Los Angeles County	4-10
4-5	Self-Reported Student Educational Goals, Fall 2008.....	4-10
4-6	Degrees Awarded, 2004/05 to 2008/09	4-11
4-7	Total Certificates and Recipients, 2004/05 to 2008/09	4-11
4-8	2008/09 Degrees and Certificates Awarded, by Community College (Credit Only).....	4-14
5-1	Total College, CCCC Long-Range Student “Headcount” Trends	5-2
5-2	Total College, IPRO Long-Range Student “Headcount” Trends.....	5-3
5-3	Total College, Long-Range WSCH Trends	5-3
5-4	Total College “Enrollment” Trends And Forecast	5-4
5-5	Declining or Slow Growth Instructional Divisions	5-5
5-6	High Growth Disciplines and Instructional Divisions	5-5
5-7	Declining Growth Disciplines and Instructional Divisions	5-6
5-8	Instructional Divisions and Disciplines Annual Growth Rates	5-8
5-9	CCCCO Long-Range Enrollment and WSCH Forecast for PACCD	5-12
5-10	Total College Enrollment Trends and Forecast.....	5-13
6-1	Strong Potential.....	6-2
6-2	Stable Potential.....	6-4
6-3	Low Potential.....	6-6
7-1	Existing Facility Square Footage and Condition.....	7-2
7-2	Existing Facility Types	7-3

APPENDICES

A.	Environmental Scan	A-1
B.	Town Hall Meeting Overall Summary	B-1
C.	EMP Web Survey Summary Report.....	C-1



1. PLAN OVERVIEW

1. Plan Overview

Proud Past, Global Future

The purpose of our Educational Master Plan (EMP) is to guide the college's transformation to educate students for this global 21st century.

Our EMP establishes our college's most important priorities and goals as a continuing guide to our actions and our decisions about the allocation of resources.

Pasadena City College (PCC) was founded in 1924 in a spirit of innovation to respond to the dynamic needs of our community. Through the Great Depression, earthquake, World War and many other challenges, Pasadena City College has changed with the changing needs of our students. Our current Educational Master Plan will indeed bring change and renewal to Pasadena City College. It is precisely because we are open to this change that we are keeping faith with our College's proud past.

Vision: Our Global Future

By our 90th anniversary celebration in 2014, Pasadena City College will be the leading community college in California as defined by the key student success outcomes of transfers to four year universities, associate degrees awarded and workforce certificates awarded.

Our college motto, Proud Past, Global Future is at once a statement of respect for our long heritage of excellence and a statement of our aspiration to become the first truly "global" California community college in every sense of the word — a diverse faculty and staff and a diverse curriculum that prepares our students for a 21st century global economy without boundaries.

Project 90

PCC will celebrate its 90th anniversary during the 2014-2015 academic year. The college has challenged itself to become the premier community college in California by that time. Building on the extensive work done during this process, the EMP/Accreditation Faculty-Based Task Team worked efficiently to identify five achievement areas that are tied to our priorities, measure our progress, and evaluate our effectiveness. The first phase of this effort is PROJECT 90: Guiding PCC into the Future.

The Signature Goals reflect the vision developed in this plan and further defines what it means to take PCC to the Highest Level. The Student Achievement Areas and Targets align with the priorities developed during the EMP process and will serve as benchmarks to help adjust and improve strategies as PCC implements this plan.

Signature Goals

- **Guaranteed Enrollment for In-District High School Students**
- **Premier Transfer California Community College**
- **Degree and Certificate Programs that Address Market-Place Needs**
- **Cutting-Edge Learning Environments (Pedagogy, Technology, and Facilities)**
- **Dedication to Lifelong Learning**
- **A Sustainable College Community**

Table 1-1: Student Success Achievement Areas and Targets: 2010-2015

Student Success Achievements	September 2010 Baseline	2010-2011 Target	2011-2012 Target	2012-2013 Target	2013-2014 Target	2014-2015 Target
Transfers to 4-Year Institutions	PCC – 1787 (4 th in CA) #1 college in CA -- 1930	1787	1787	1858	1932	2048
Associate Degrees Awarded	PCC – 1687 (7 th in CA) #1 college in CA – 2594*	1687	2483	2648	2814	2979**
Associate STEM Degrees Awarded	PCC – 362*** (3 rd in CA) #1 college in CA – 778*	362	400	440	490	550
Certificates Awarded (18+Units)	PCC – 1187 (3 rd in CA) #1 college in CA -- 1564	1306	1424	1543	1662	1781
Basic Skills Sequence Completion Rate	PCC Math – 13%**** English – 36%**** ESL – 21%****	Math – 13% English – 36% ESL – 21%	Math – 16% English – 43% ESL – 25%	Math – 18% English – 50% ESL – 29%	Math – 21% English – 58% ESL – 34%	Math – 23% English – 65% ESL – 38%

* Multi-campus district

**Of all students who identify degree completion as their goal, the degree is completed within 2 years of full-time enrollment if the students started at college-level English and math.

***PCC currently offers a degree in Natural Sciences. Other degrees in science, technology, engineering, and math (STEM) have yet to be developed. The baseline figure “362” is defined by the course-taking behavior of PCC students who are enrolled in STEM courses but do not necessarily seek an AA degree.

****Completion rate is based on Level One entry. The number of levels in PCC’s pre-transfer sequences: Math – 3, English – 2, and ESL – 5.

Mission Critical Priorities and Strategies

Twelve mission critical priorities, each of which is accompanied by a variety of strategies, as shown on the following pages, have emerged through an ongoing dialogue with the PCC community, the Board of Trustees, faculty, staff, managers, and students. These mission critical priorities, listed below, were developed based on qualitative and quantitative data gathered in the EMP's Environmental Scan.

- A. Student Success, Equity, and Access
- B. Professional Development
- C. Technology
- D. Pathways: K-12, 2-Year, 4-Year, and Community Connections
- E. Student Support Services
- F. Institutional Effectiveness
- G. Enrollment Management
- H. Sustainability
- I. Revenue Enhancement Strategies
- J. Life-Long Learning
- K. Curriculum Responsive to Market Needs
- L. Facilities and Resource Management

A. *Student Success, Equity, and Access*

- A1 Start students right and ensure their path toward goal completion
 - A1.1 Ensure that all students who place into developmental math, English, and ESL have access to sustained orientations, for example, summer bridges and “jams”
- A2 Improve the success of our diverse student body in the pursuit and persistence of students' educational and career goals
 - A2.1 Develop short and intense course offerings in basic skills to accelerate course and sequence completion
 - A2.2 Develop hybrid and online courses to expand the availability of transfer and CTE courses
- A3 Place special emphasis on underperforming students and close the achievement gap for African Americans and Latinos
 - A3.1 Hire faculty, staff, and managers committed to serving underperforming students
 - A3.2 Engage all departments campus-wide in working with basic skills/underprepared students

B. Professional Development

- B1 Create and sustain a culture of ongoing professional learning at all levels of the institution
 - B1.1 Provide all faculty, staff, and managers with the training needed to work effectively with underprepared students
 - B1.2 Offer a well-defined and extensive professional mentoring program to enhance cross-discipline and interdisciplinary learning
 - B1.3 Support and reward effective teaching approaches, including success in using hybrid formats and alternative methods of instruction
 - B1.4 Support a culture of innovation by rewarding new approaches and improvements in all areas of the college (facilities, administration, academics, and student services)
- B2 Create centers of excellence and innovation hubs that are cross-functional and cross-divisional
 - B2.1 Provide professional development opportunities for faculty, staff and managers to learn about new trends and effective practices
 - B2.2 Develop consistent training programs to enable faculty, staff, and managers to learn new technology as it becomes available

C. Technology

- C1 Identify and address the technology needs that support the successful operations of the institution
 - C1.1 Implement a technology plan that ensures that all systems are fully integrated and reduces duplication of effort
 - C1.2 Increase the use of technology to enhance productivity and efficiency
- C2 Identify and address the technology needs that support innovative and successful teaching and learning methodologies
 - C2.1 Enhance and grow distance learning programs, hybrid and online courses
 - C2.2 Create state-of-the-art “learning studios” for the development of faculty innovations
 - C2.3 Ensure that all classrooms are equipped with state-of-the-art technologies
- C3 Identify and address the technology needs that sustain all student support service and the library
 - C3.1 Provide varied student communication mechanisms (online, smart phones, social networks, etc.) to address students’ needs
 - C3.2 Create a state-of-the-art, easily accessible student information system i.e., admissions, registration, advisement, counseling etc.
 - C3.3 Re-design the application, admission, financial aid, degree audit and other student services processes to leverage web-based tools

C4 Identify and address students' technology training needs to prepare them for technology-driven professions

C4.1 Review and update course curricula to address real-world technology demands

D. Pathways: K-12, Two-Year, Four-Year, and Community Connections

D1 Create K-12 school pathways programs to engage all PCC feeder high schools, particularly high schools within the PCC district

D1.1 Evaluate and implement model pathway programs, i.e.,LBUSD/LBCFC/CSULB

D2 Develop cohort pathways to ensure program and course series are aligned in a logical sequence for efficient completion

D2.1 Build student pathways from noncredit to credit, as well as first-year and transfer pathways

D2.2 Create clear definitions of Science, Technology, Engineering, Math (STEM) majors, degrees, and certificates

D2.3 Increase the number of transfer pathways

D2.4 Guarantee timely progression through degree and certificate programs

D3 Engage in partnerships with four-year institutions to facilitate articulation and transfer

D4 Provide programs to meet educational, training, and skill-development needs of the businesses within the region

D4.1 Adjust curricula to prepare students for success in a global, and multicultural society

D4.2 Strengthen community and alumni pathways

D4.3 Utilize labor market studies and other labor-needs assessments to develop and revise courses, programs, and curricula

D4 Engage the PCC Board of Trustees in community outreach in support of constituent needs and student success

E. Student Support Services

E1 Support students effectively and efficiently in and out of the classroom

E1.1 Provide comprehensive, integrated, and sustained support to students (monitor, mentor, and stay-in-touch)

E1.2 Develop an interactive online student educational plan system

E1.3 Broaden the range of student counseling services, such as in-classroom and online advisement, and informal questions-and-answer forums

E1.4 Expand hours and ease of access to counseling/advisement

E2 Expand the role and visibility of career counseling

- E3 Provide students with robust Financial Aid orientation and counseling
- E4 Establish a culture of counseling in which everyone (faculty, staff, and managers) is involved
 - E5.1 Develop a seamless integration between student services and instruction that supports student success
- E5 Develop robust student support services (tutoring, cohort learning groups, library services, etc.) to help students achieve their goals
- E6 Refine and revamp assessment policy and procedures to improve course placement

F. *Institutional Effectiveness*

- F1 Reduce administrative and decision-making layers and barriers to increase flexibility
 - F1.1 Empower the PCC Board of Trustees to advocate to local, state, and federal agencies to reduce regulatory and policy barriers to student success
- F2 Systematically document functions, roles, responsibilities, and accomplishments of district and college committees and councils
- F3 Promote trust and transparency in decision-making at all levels
 - F3.1 Create consistent procedures and formats for reports, meeting materials, and other documents to develop institution-wide ownership
 - F3.2 Develop a clear policy for program and certificate discontinuance and the additions of new programs and certificates
- F4 Establish a procedure for creating rapid response teams that can quickly develop and implement organizational-change initiatives
- F5 Implement alternative ways of defining and tracking student success outside of degrees, certificates, and transfer

G. *Enrollment Management*

- G1 Establish partnerships with other providers and community colleges to offer complementary, rather than, duplicative programs
- G2 Identify educational institutions, businesses, and other organizations or sites to provide satellite learning centers
- G3 Remove barriers to obtain certificates and make completion process student and faculty “friendly”
- G4 Develop and implement a state-of-the-art, easily accessible registration process
- G5 Align course section offerings with student demand

H. Sustainability

- H1 Adopt a campus-wide initiative to integrate sustainability principles for all facility development
- H2 Develop sustainable landscape and hardscape plans to reduce water use and maintenance
- H3 Create baseline waste reduction and diversion targets
 - H3.1 Create baselines and targets for recycling, water use, electricity use, garbage costs, and other sustainable measures
- H4 Create academic programs that train students in broad areas of sustainability, including, but not limited to: alternative energy development, sciences related to climate change, and career tech programs

I. Revenue Enhancement Strategies

- I1 Identify and develop alternative funding and revenue streams, i.e., expand the annual giving campaign
- I2 Develop stronger partnerships with commercial interests to enhance program offerings without increased expenses
- I3 Expand grant-writing activities to increase sources and levels of funding
 - I3.1 Identify partnership opportunities with other institutions and entities for mutually advantageous grant projects
- I4 Develop a robust college Extension program i.e., Contract Education, Continuing Education, and Extended Learning
- I5 Continue to build and support the PCC Foundation to increase funding and develop a larger contributor base
- I6 Develop a strong PCC alumni network through more aggressive outreach to graduates, certificate recipients, and students involved in leadership or specific campus programs
- I7 Provide deans and senior administrators with the time and opportunity to invest in outreach and community development
- I8 Explore corporate sponsorships
- I9 Develop a robust revenue stream derived from facilities rentals
 - I9.1 Develop a facility rental policy that balances revenue generation with equitable access for community members
- I10 Create a marketing plan that targets the district community and includes a statewide public relations element
- I11 Expand International student education program

J. *Life-Long Learning*

- J1 Offer additional life-long learning opportunities to better serve non-traditional, new, and returning students
- J2 Provide second-career options and counseling support
- J3 Develop and align revenue enhancement strategies with life-long learning opportunities to ensure they are self-sustaining

K. *Curriculum Responsive to Market Needs*

- K1 Partner with other organizations in the city/county/service area (e.g., Jet Propulsion Lab and hospitals) to offer lab access to classes dependent on expensive facilities
- K2 Annually update the EMP external scan document, particularly around job development and growth trends, to inform programs
- K3 Identify and implement new programs and activities to meet community needs
- K4 Develop a Program Review process element which regularly assesses a program's effectiveness in support of employer needs

L. *Facilities and Resource Management*

- L1 Develop a comprehensive Facilities Master Plan
- L2 Ensure existing facilities are utilized to their full extent
 - L2.1 Adjust section scheduling to use facilities to full capacity
- L3 Improve/replace existing facilities to ensure they meet seismic, infrastructure, and other safety and usability standards
- L4 Work to refurbish buildings to meet the highest level of accessibility (ADA)
- L5 Increase as needed natural science and other STEM classroom and lab facilities as needed
- L6 Centralize operations of appropriate services, such as technology support offices, for cost effectiveness and increased productivity

Project 90 Action Plan

The EMP sets the direction for the College over the next 10 years. In order to effectively implement this direction, there are a number of critical tasks which must be addressed immediately and within the next two years to achieve the aggressive transformation envisioned. The following 15 actions are drawn from the Mission Critical Priorities and Strategies and address multiple mission critical areas as indicated in the third column. This action plan will be assessed and adapted to ensure that the benchmarks in the Student Success and Achievement Area Targets are being positively impacted.

Table 1-2: Action Items

Action Item	Time Frame	Mission Critical Area Addressed
Action 1. Systematically increase number of courses available for Transfer and Basic Skills Courses until needs are adequately addressed	Fall 2011 - ongoing	A/G
Action 2. Develop a comprehensive online education curriculum <i>2.a Launch pilot online programs</i> <i>2.b Launch complete online offerings</i> <i>2.c Initiate staff and faculty training</i>	Spring 2011 Fall 2011 Fall 2012 Summer 2011	A/B/C/E/G
Action 3. Update and Align the Facilities Master Plan with the EMP <i>3.a Develop immediate Action Plan for Building U replacement</i> <i>3.b Reschedule facilities to maximize use and availability at minimum 5 days/week</i> <i>3.c Evaluate opportunities to provide classes at satellite locations throughout the District</i>	Spring 2012 Winter 2011 Winter/Spring 2011 Winter/Spring 2011	G/L
Action 4. Create and Adopt a Professional Learning and Mentoring Plan <i>4.a Launch first phase of trainings</i> <i>4.b Initiate mentoring program</i>	Spring 2011 Sum/Fall 2011 Fall 2011	B/A/F
Action 5. Update and Align the Technology Plan with the EMP <i>5.a Initiate critical technology improvements and upgrades</i>	Spring 2011 Summer 2011	C/E/F/G
Action 6. Develop and Adopt College Sustainability Plan <i>6.a Develop a college resolution for a commitment to sustainability</i> <i>6.b Expand sustainability "green" oriented programs</i>	Spring 2012 Winter 2011 Fall 2011	H/K
Action 7. Initiate In-District K-12 and 4 year Partnership Pathway Programs <i>7.a Target 2-4 critical schools to pilot</i>	Spring 2011 Summer 2011	A/D

Action Item	Time Frame	Mission Critical Area Addressed
<i>7.b Expand partnerships District-wide</i>	<i>Fall 2012</i>	
Action 8. Increase access to Counseling Services with additional hires, expanded hours and alternative methods for counseling, i.e. technology	Winter 2011	A/E
Action 9. Develop a Comprehensive Revenue Enhancement Program <i>9.a Implement a Contract Education/Corporate Training program</i> <i>9.b Expand Extended Learning/Community Education to include Credit and Non-Credit courses and programs</i> <i>9.c Expand Continuing Education Units (CEUs) program</i> <i>9.d Develop robust Annual and Planned Giving programs</i> <i>9.e Develop a Corporate Sponsorship program</i>	Spring 2011 <i>Fall 2011</i> <i>Fall 2011</i> <i>Summer 2011</i> <i>Spring 2011</i> <i>Spring 2011</i>	I/J/K
Action 10. Adopt a Program Viability Policy <i>10.a Align Ongoing Program Review with Annual EMP Update process</i> <i>10.b Continue program evaluation and effectiveness reviews to ensure alignment with needs, mission and resources</i>	Spring 2011 <i>Spring 2011</i> <i>Spring 2011</i>	A/F/G/I/K
Action 11. Develop policies and procedures committed to diversity and specifically focused on hiring faculty, staff, and administrators committed to closing the achievement gap	Winter 2011	A/B/D/G
Action 12. Establish a Center(s) of Excellence Policy and Implementation Plan	Summer 2011	B/K
Action 13. Complete Implementation of Office of Institutional Effectiveness	Winter 2011	F/L
Action 14. Formerly adopt Guaranteed Access to In-District students 14.a Develop enrollment management tools to manage staffing, resource allocation and <i>registration processes</i>	Fall 2011	A/G
Action 15. Develop a Comprehensive Business Outreach and Engagement Program to enhance program offerings, interest in Contract Education, career opportunities, and partnerships	Fall 2012	D/E/I/K



2. INTRODUCTION

2. Introduction

Background

Beginning in summer 2009, the Pasadena Community College Area District (PACCD) initiated a planning process to develop an Educational Master Plan (EMP) as Pasadena City College (PCC) looks forward to 2020. The EMP is an important part of the college's long-range planning, designed to align the PACCD's efforts with the needs of its students and the greater community it serves. The EMP outlines a long-term vision and goals for the College along with a tangible 5-year action plan for how PCC can address the College's mission and achieve the EMP vision by its 90th Anniversary in 2014.

The EMP Steering Committee spearheaded the process, providing oversight for Plan content and methodology. In addition, the Educational Deans, Support Service Managers, Administrators, Faculty, Classified Staff, students and the Board of Trustees provided valuable input and feedback throughout the process.

To assist in the effort, PCC retained MIG, Inc. to conduct a comprehensive environmental scan, review and evaluate current programs and broad community needs, and recommend goals, priorities, and strategies for future program development.

Purpose and Organization of the Educational Master Plan

The EMP outlines a strategy for how PCC can best leverage available resources to meet high standards and to accommodate its projected enrollment by the year 2020. The overarching purposes of the EMP are to:

- Further PCC's educational goals and programs through a set of integrated priorities and strategies for future programmatic, resource allocation, and service planning;
- Set direction based on faculty, administration, and staff input;
- Provide an assessment of student and community needs; and
- Identify program directions and related student support service requirements.

Following this introductory chapter, the Plan is organized as follows.

Chapter 1, **Plan Implementation**, outlines the overall strategy framework, including signature goals and critical priorities and strategies to guide future decision making. It also sets specific action items to implement the EMP.

Chapter 3, **Planning Framework**, presents PCC's mission, core values, and overarching planning principles. This chapter also describes the College's organizational structure and key functional areas.

Chapter 4, **Planning Environment**, provides an overview of the planning service area, findings from the environmental scan, and a summary of community perspectives derived from an extensive outreach process. It also summarizes key planning implications based on these findings.

Chapter 5, **Growth Projections**, presents enrollment projections based on historic trends, emerging community needs, and program direction for each instructional division, and California Chancellor's Office projections.

Chapter 6, **Educational Program Assessment**, evaluates existing programs and explores potential new programs. This assessment was based on findings from the faculty and staff questionnaires, and is organized by Instruction Divisions, Office of Instruction, and Student and Learning Services. It is presented in two parts: strategic direction and rationale for the programs over the next five to 10 years; and a forecast for programs with potential strong, stable, and low growth potential.

Chapter 7, **Program Service Delivery**, outlines implications for re-allocating limited resources among facilities, programs, faculty and staff (including retention and recruitment), information technology, institutional research/effectiveness, and resource enhancement opportunities.

Planning Methods Overview

The planning team used a variety of information sources to develop the EMP, including evaluation of:

- Data culled from a variety of sources, including U.S. Census, the California Department of Finance, the Southern California Association of Governments (SCAG), the California Community College Chancellor's Office, the California Department of Education, the California Employment Development Department, the Legislative Analyst's Office, the Los Angeles County Economic Development Corporation, the Postsecondary Education Commission, and reports generated by Pasadena City College. Also reviewed were additional information and reports, as they pertain to PCC, which have been gathered from local county, city and private organizations. (Note: In order to look at projected trends, data for Los Angeles County was also evaluated);
- Programs (degree and certificate) offered by the most common competitive educational providers. Research included identifying which programs PCC currently offers;
- Existing PCC plans, reports, and data elements;
- Current program needs and projected trends through an Educational Program/Discipline Planning Questionnaire completed by faculty, academic staff, and division deans; and
- Qualitative information gathered through a comprehensive series of forums and meetings conducted with community and business leaders, faculty, staff, and students.

Process Overview

Outreach

The EMP development process strived to include as many voices as possible in the analysis, evaluation of needs, and the articulation of PCC's future. Below is a summary of the various opportunities to participate which were provided.

Faculty, Staff and Student Input. In addition to a 60-person EMP Faculty-based Team, which included a Dean and full-time faculty member from each Division and the EMP Steering Committee, a number of additional outreach efforts were conducted, including:

- Faculty forum and focus group
- Classified staff forum
- Student forum and separate focus group
- Management staff forum
- Facilities focus group
- College Coordinating Council Forum
- Stakeholder interviews
- Series of three Instructional Deans and Manager meetings

Community Input. Held in September and October 2009, the PACCD hosted 12 Town Hall Meetings and three President's Advisory Council meetings. Over 170 community members and 20 Council members participated in this round of outreach.

Web Survey. A web-based community survey was available in early 2010, enabling people to make comments and provide input into the planning process. Over 1,000 community members responded.

Environmental Scan

The Environmental Scan was conducted to identify major internal and external trends related to service area implications, demographics, enrollment, and employment and workforce needs. (See Appendix A for complete document.)

Instructional/Student Services Review

The basis for the EMP is a stronger understanding of the current needs and projected trends for PCC program. Faculty members and division deans provided expertise and knowledge through a questionnaire, in which each instructional/student services program was evaluated. The evaluation included potential program projections and opportunities, pedagogical shifts, existing strengths and challenges, and future enrollment growth. Data collected through the process was analyzed to identify program specific needs, as well as broad directions for PCC.



3. PLANNING FRAMEWORK

3. Planning Framework

This chapter sets forth the EMP’s planning framework, organized around the PCC’s strategic foundation, organizational structure, and college functions. Working in collaboration, administrators, faculty, staff, and students will use this framework to guide future decision-making.

EMP Vision

As part of this process, the College has articulated an overarching Vision for the Plan and for PCC which is informed by the mission and its values.

Vision: Our Global Future

By our 90th anniversary celebration in 2014, Pasadena City College will be the leading community college in California as defined by the key student success outcomes of transfers to four year universities, associate degrees awarded and workforce certificates awarded.

Our college motto, Proud Past, Global Future is at once a statement of respect for our long heritage of excellence and a statement of our aspiration to become the first truly “global” California community college in every sense of the word — a diverse faculty and staff and a diverse curriculum that prepares our students for a 21st century global economy without boundaries.

Strategic Foundation

Mission

PCC’s mission is to provide a high quality, academically robust learning environment that encourages, supports, and facilitates student learning and success. The College provides an academically rigorous and comprehensive curriculum for students pursuing educational and career goals, as well as learning opportunities designed for individual development. The College is committed to providing access to higher education for members of the diverse communities within the District service area and to offering courses, programs, and other activities to enhance the economic conditions and the quality of life in these communities.

Pasadena City College serves their students by:

- Providing courses and programs, in a variety of instructional modalities, which reflect academic excellence and professional integrity;
- Fostering a dynamic and creative learning environment that is technologically, intellectually, and culturally stimulating;
- Challenging students to participate fully in the learning process and encouraging them to be responsible for their own academic success;
- Respecting them as individuals who may require diverse and flexible learning opportunities;

- Supporting organizational practices that facilitate student progress towards their goals; and
- Encouraging and supporting continuous learning and professional development in those who serve our students: faculty, staff, managers, and administrators.

Core Values

As an institution committed to successful student learning in an environment of intellectual freedom, PCC is guided by the following essential, enduring, and shared values:

Passion for Learning. We recognize that each one of us will always be a member of the community of learners.

Commitment to Integrity. We recognize that ethical behavior is a personal, institutional, and societal responsibility.

Appreciation for Diversity. We recognize that a diverse community of learners enriches our educational environment.

Respect for Collegiality. We recognize that it takes the talents, skills, and efforts of the entire campus community, as well as the participation of the broader community, to support our students in their pursuit of learning.

Recognition of Our Heritage of Excellence. We recognize that we draw upon the college's rich tradition of excellence and innovation in upholding the highest standard of quality for the services we provide to our students and community.

Planning Principles

The EMP is part of an overarching integrated and ongoing planning process at PCC. Reflecting PCC's mission and core values, the following principles express the approach to developing the plan and instituting change over the next ten years.

Shared Governance. PCC will implement and update the EMP based on a shared governance process. All PCC constituencies will engage and participate in the continued implementation process.

Change Process. EMP implementation will be through an evolutionary process that encourages research, development, and testing of innovative approaches to improve programs and increase student success. PCC will build on current strengths and organizational capacity, while maintaining a commitment to academic excellence.

Diversified Learning Modalities. Diverse learning needs of all students will be respected and support services will be provided to students to improve their success and achievement. Improving student course success and retention will be supported through all teaching approaches, including traditional classroom based instruction, online delivery, team teaching, and integrating of technology and curriculum.

Integrated, Full Service. PCC programs and services (instructional and support) will work in concert to provide the highest level of support for all students, providing integrated service models that offer a holistic approach to meeting students' needs. Communication methods, systems, and processes will be developed and supported to ensure the success of internal PCC partnerships.

Innovative and Flexible Facilities. PCC will strive to develop facilities that are flexible to support a multiplicity of instructional methods, as well as respond to pedagogical and programmatic changes in the future. Facilities will be scheduled and managed to maximize their use and functionality.

Social Interactions. PCC will support interaction between all levels of the organization—students, faculty, staff, and administrators. Opportunities will be provided for informal dialogue and discussion between colleagues.

Learning Environments. PCC campus will provide active, dynamic spaces that facilitate and support student engagement and participation in college life. The physical space and environments will provide welcoming places, and places that promote learning.

Information Technology. Technology will be a primary focus for improving and integrating office, educational, and support spaces. Increased use of technology will complement the educational experience, streamline administrative processes, and increase communication—both internally and externally. Whenever possible, PCC technology systems will be upgraded and implemented to capitalize on cutting-edge innovations and instructional methods.

Resource Management. PCC will plan for and use resources efficiently to ensure continuous fiscal support for all operational areas. Leveraging partnerships, promoting the growth of the PCC Foundation, and diversifying income streams will be pursued to supplement traditional funding sources.

Professional Development. PCC will invest in its human capital by providing opportunities for continued professional development and training.

Sustainability. PCC will incorporate the concept and practice of sustainability in a broad sense by encompassing economic, organization, environment, and equity. Together these areas will enable PCC to foster a holistic system to be nurtured and well maintained, in every aspect.

Organizational Structure

The PACCD service area includes the following school districts: Arcadia, a portion of El Monte, La Cañada Flintridge, Pasadena, Rosemead, San Marino, South Pasadena, and Temple City. It is governed by an elected seven-member Board of Trustees representing the seven trustee areas, a Student Trustee elected by the student body, and the Superintendent-President of the College (also chief administrative officer of the District).

Operational Areas

As shown in Figure 3-1, Pasadena City College has six operational areas reporting to the Superintendent/President who in turn reports to the Board of Trustees..

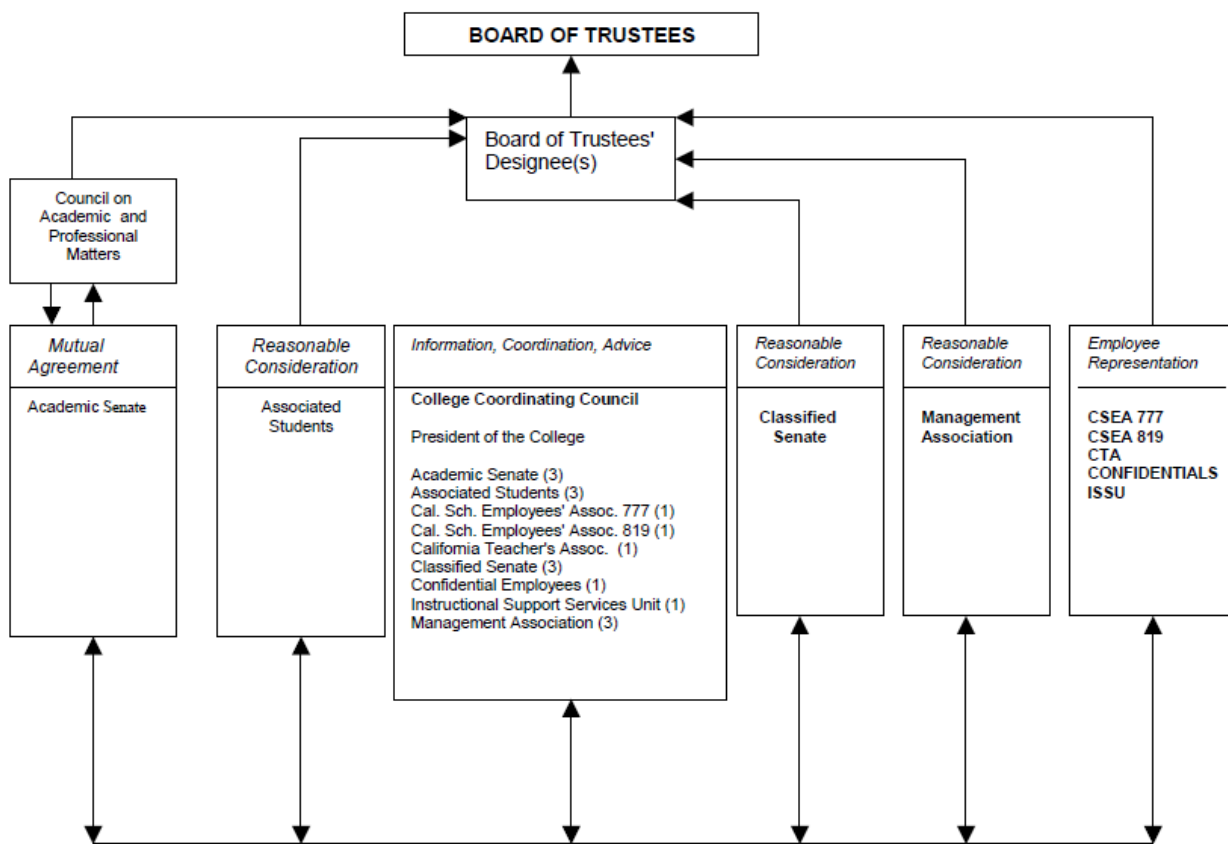
Figure 3-1: Operational Areas



Shared Governance

PCC actively encourages faculty, staff, management, and student participation in College governance through an ongoing consultative process as identified in the campus policies. The College Council serves as an overarching forum for shared governance at PCC and is illustrated in Figure 3-2.

Figure 3-2: Shared Governance



College Functions

The PCC has four major academic programs designed to meet students' continuing education needs. These functional areas reflect the College's mission, core values, and planning principles.

Basic Skills

Student success and attainment of educational and career goals must be supported with strong foundational skills. PCC has established graduation requirements to achieve the objectives of general education, with a focus on basic skills in math, science, and language. In addition to class work, students are encouraged to participate in student government, public and departmental forums, radio and television presentations, concerts, art gallery exhibits, and other PCC-sponsored events.

College Transfer

Students may qualify for transfer with junior status to an accredited college or university if they follow the lower division pattern of study required by the four-year institution and transfer with a minimum of 60 transferable units. Acceptance to a particular college or university depends upon conditions at the four-year institution, which are subject to change.

Career and Technical Education

The Office of Career and Technical Education supports the expansion of area businesses and industries, and economic growth in the community by promoting educational programs, training, and services that contribute to a quality workforce. It also provides leadership and coordination for all vocational education programs. PCC's many career programs prepare students for entry-level employment, as well as providing additional occupational skills for those already employed. The curricula are developed in coordination with industry advisory committees that provide input to ensure the training is consistent with industry standards. Responsibilities also include coordination between PCC's occupational programs and area high schools. The Office administers federal programs for career and technical education and job training and manages special grants and projects related to occupational programs and economic development services.

Non-Credit/Not-for-Credit Education

PCC offers a variety of courses to meet the needs of students who do not desire or need to obtain college unit credit.

Community Education Center. The Community Education Center provides non-credit (state-funded) education, training, and services designed to continuously improve California's workforce. The Center offers vocational, technical, and academic courses including High School Diploma Program, Graduate Equivalent Degree, Business Office Systems, Printing Technology, Apparel Skills, Fashion Retail, English as a Second Language, Adult Basic Education, Parent Education, enrichment classes for seniors and disabled students, and a wealth of support programs. The Center also offers a cosmetology credit program.

Extended Learning. Extended Learning offers not-for-credit (fee-based) classes designed for the community at large. These classes are designed to provide learning opportunities, for personal interest, cultural enrichment and recreational enjoyment. Classes are primarily geared toward adults and are complemented by Youth College offerings for those under 18. Classes are held on and off campus and grade credit is not earned. Extended Learning is a self-supporting entity of the College and is not funded by taxpayer dollars.



4. PLANNING ENVIRONMENT

4. Planning Environment

The purpose of this chapter is to provide an overview of the current planning environment at PCC, including the present service area, demographic trends and projections (as outlined in the Environmental Scan, Appendix A), and community perspectives. Understanding the planning environment helps to inform decisions about the overall goals and strategic direction of programs, resources and services.

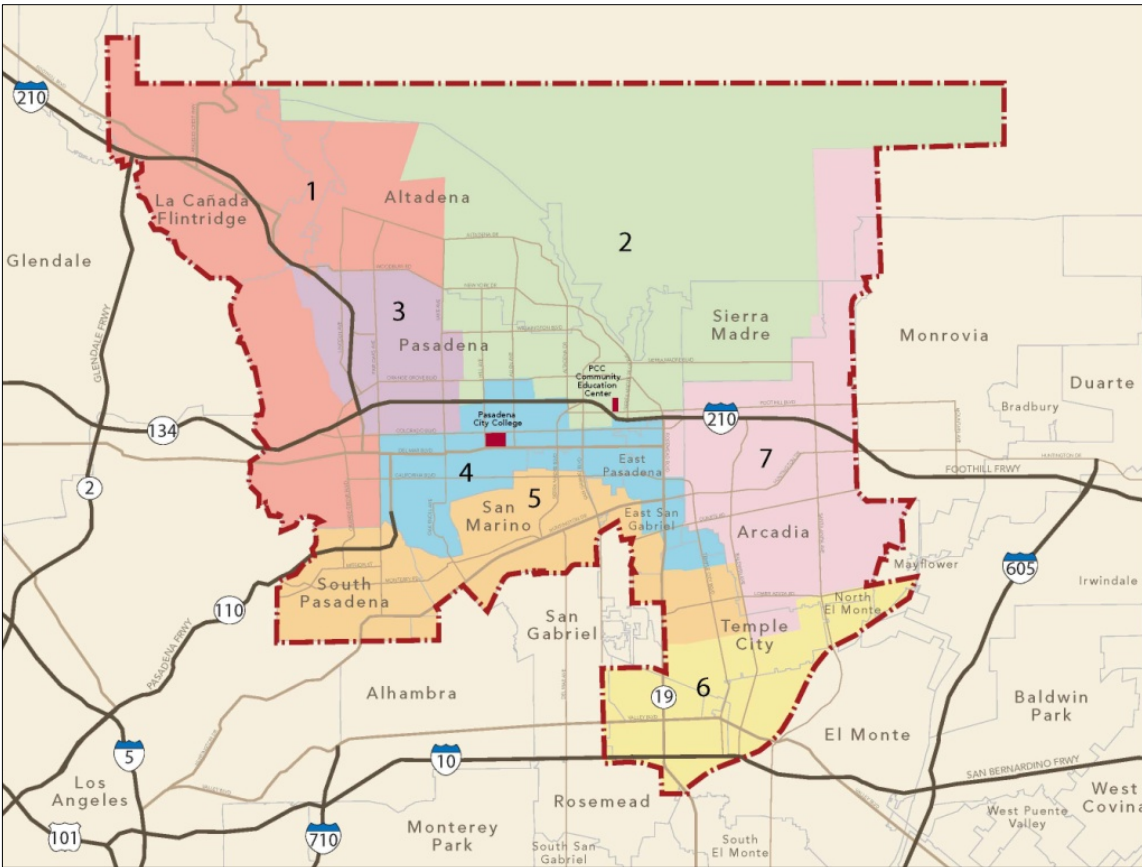
Service Area

PACCD is one of several community college districts within Los Angeles County. Located in the western portion of the San Gabriel Valley, it encompasses the unincorporated community of Altadena, and the cities of Arcadia, La Canada-Flintridge, Pasadena, San Marino, Sierra Madre, South Pasadena, and Temple City, as well as portions of El Monte and Rosemead (Figure 4-1).

PCC, however, draws the 63 percent of its credit students from outside of the District in the surrounding San Gabriel Valley and Los Angeles County (Figures 4-2 and 4-3).¹ The main campus on Colorado Boulevard, the separate Community Education Center on Foothill Boulevard, and the Child Development Center on Green Street are all located within Pasadena.

¹ Source: PCC Observations: 2008-2009

Figure 4-1: Pasadena Area Community College District (Trustee Areas 1-7)



Environmental Scan: Trends and Projections

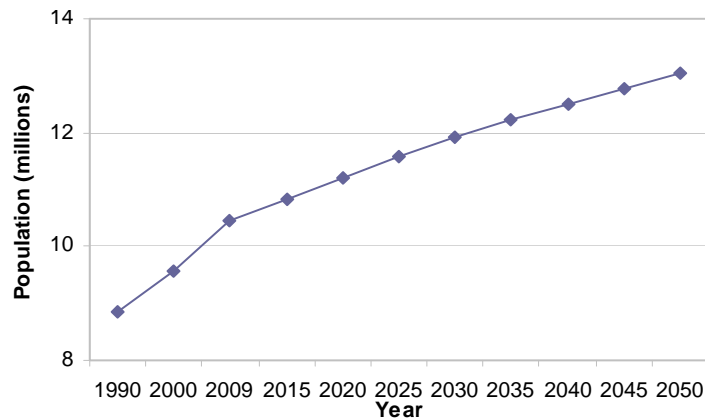
The environmental scan is intended to summarize trends and projects that may affect PCC strategic directions and priorities for new and existing programs and services, and re-allocation of resources. This scan addresses population and demographics, age, immigration and language.

Population and Demographics

With nearly two-thirds of PCC's student population residing outside the District, student enrollments will necessarily be impacted by population changes beyond the formal PACCDC boundaries. For this reason, evaluating the population and demographic trends in the surrounding San Gabriel Valley and Los Angeles County are critical to understanding PCC's future.

Figure 4-2 illustrates projected population growth in Los Angeles County from 2000 to 2050. Between 2000 and 2009, Los Angeles County grew by approximately 890,000 individuals, or 9.3 percent. Los Angeles County population is expected to grow from over 10.5 million in 2010 to over 11.9 million in 2030. By 2050, the County will be home to over 13 million people.

Figure 4-2: Population Projections for Los Angeles County



Source: L.A. Stats, Los Angeles County Economic Development Corp., April 1, 2009; State of California, Dept. of Finance, May 2008.

The Southern California Association of Governments (SCAG) forecasts that between 2000 and 2030 the San Gabriel Valley will grow by over 30 percent, adding 620,000 residents to its current population of approximately 1.6 million.² Population density will increase in both the PACCD and the rest of the San Gabriel Valley, as projected growth will be taking place in an area that is already 99 percent built out.

Maintaining the quality of life in the face of significant population growth will be a challenge in coming decades. A planned extension of the MTA light rail system, which now serves Pasadena, to communities in the eastern portion of the San Gabriel Valley, will help maintain access to PCC, despite increased congestion on nearby freeways.³

In 2009 an estimated 436,000 residents lived within the PACCD.⁴ As shown in Figure 4-3, the SCAG projects population within the PACCD will increase at a rate of approximately eight percent to nearly 480,000 by 2020 and by seven percent to 515,000 by 2035⁵.

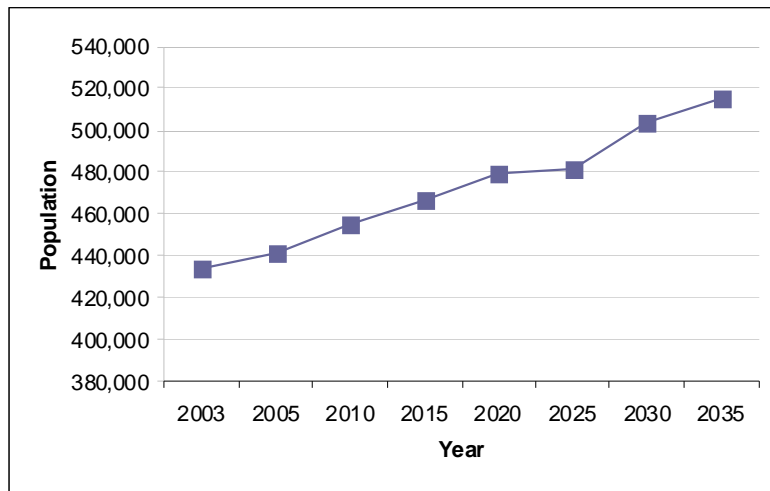
² Source: San Gabriel Valley Council of Governments.

³ The Foothill Extension will continue the Metro Gold Line for an additional 24 miles beyond its current terminus in East Pasadena. The new route will include 12 cities from Arcadia to Montclair. A trip from Montclair to downtown Pasadena would take a little over 40 minutes.

⁴ Source: California Department of Finance, Population Estimates for Cities, Counties and State, 2001-2009.

⁵ Source: Southern California Association of Governments, Adopted 2008 Regional Transportation Plan Growth Forecast, by Census Tract.

Figure 4-3. Population Projections for Pasadena Area Community College District



Source: Southern California Association of Governments, Adopted 2008 Regional Transportation Plan Growth Forecast, by Census Tract.

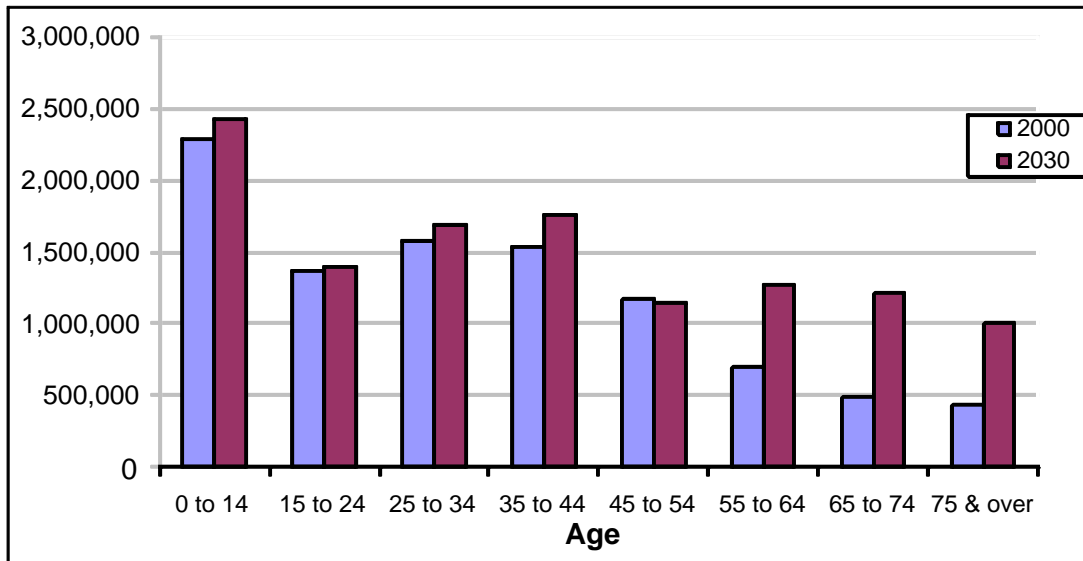
Age

People attend community college for a wide variety of reasons and at all different ages. Identifying trends and general characteristics of the different age cohorts can improve understanding of program and support service needs.

Typically, people in the 17 to 25 year age group are high school graduates interested in securing a two-year degree, earning units to prepare for transfer to a four-year institution, or building vocational and basic skills for the workforce. Students younger than 17 who are attending high school enroll concurrently to complement high school work. Those in the age group of 25 and older often attend to learn new skills to better compete in the workforce, to earn a certificate applicable to a specialized field of practice, or earn credits to transfer to a four-year school. People in the 60 + age group who have retired often come to community college to continue learning, to develop new skills to support new hobbies and activities, and to build their social network or community.

As the overall population increases over the next few decades, the age breakdown of the Los Angeles County population will gradually shift, with the older age groups gaining a slight majority. Figure 4-4 and Table 4-1 illustrate this shift.

Figure 4-4: Los Angeles County Population by Age, 2000 and 2030



Source: California Department of Finance

Table 4-1: Los Angeles County Population by Age, 2000 and 2030

Age	2000		2030	
	Pop.	%	Pop.	%
0 to 14	2,287,266	23.8	2,433,107	20.4
15 to 24	1,370,970	14.3	1,393,567	11.7
25 to 34	1,574,224	16.4	1,690,325	14.2
35 to 44	1,534,249	16.0	1,762,587	14.8
45 to 54	1,168,108	12.2	1,141,285	9.6
55 to 64	706,701	7.4	1,272,353	10.7
65 to 74	496,879	5.2	1,221,634	10.3
75 and	440,563	4.6	1,005,431	8.4
Total	9,578,960		11,920,289	

Source: California Department of Finance

In 2000, almost 56 percent of County residents were less than 35 years of age. By 2020, this age group is expected to account for less than 50 percent of the overall population, and by 2030 this age group will comprise approximately 46 percent of the County population.

Overall population is expected to increase by 20 percent from 2000 to 2030. However, the population of the 15 to 24 age group will decline as a proportion of the overall population, from 14.3 percent in 2000 to 11.7 percent in 2030.

During the same period, the number of residents in the 55 and older age group will increase substantially, from 1.64 million in 2000 to 3.5 million in 2030, growing from 17.2 percent to 29.4 percent of the County population.

The 75+ age group is projected to grow by 3.8 percent relative to the entire county population, while the 65 to 74 age group will grow by over five percentage points, representing approximately 10.3 percent of the entire county population by 2030.

Immigration and Language

Similar to the rest of Los Angeles County, residents in the PACCD area are ethnically diverse, with no single group constituting a majority. According to the U.S. Census 2000, ethnic groups included:

- White (38.6 percent)
- Hispanic (25.6 percent)
- Asian/Pacific Islander (24.3 percent)
- African Americans (almost nine percent)
- Multi-racial (about three percent)

There were two key factors driving population change in Los Angeles County.

- **Natural increase**, i.e. the number of births exceeding deaths. Between 2000 and 2004, natural increase added 374,000 new residents, while immigration accounted for 366,000 additional residents.
- Between 2000-2004 the County experienced a net loss of 139,000 people due to **domestic migration** (i.e. more people were leaving Los Angeles County for other parts of California or other states than were arriving).⁶ Given these high immigration rates, in 2003 over one-third of County residents were foreign-born. About 56 percent of the County's residents spoke a language other than English at home. Only 41 percent of foreign-born County residents have become naturalized citizens.^{7 8}

224 different languages have been identified in Los Angeles County, including 92 different languages among students of the Los Angeles Unified School District. Spanish, Asian/Pacific Island languages, and Armenian are the leading languages other than English that are spoken at home in Los Angeles County.⁹

⁶ Source: Public Policy Institute of California, March 2005

⁷ Ibid.

⁸ These immigration rates cover a period preceding the current recession. According to a U.S. Census report released on September 21, 2009 there was small dip in the foreign-born U.S population which in 2008 dropped below 38 million after reaching an all time-high in 2007.

⁹ Source: Los Angeles Almanac website.

High School Enrollment Trends

The below average achievement levels of students in the California State education system, kindergarten through high school, critically impacts the Community College System, PCC and the level of services and programs required to prepare students for success.

The No Child Left Behind (NCLB) Act requires that individual schools and school districts demonstrate adequate yearly progress (AYP) in academic proficiency. Federal minimum proficiency requirements under NCLB increased in 2008, resulting in a significant decrease in the percentage of California schools and school districts making AYP. Given current trends, the Public Policy Institute of California (PPIC) predicts that approximately three out of four schools and nine out of ten districts in California will fail to make AYP in 2010.

Despite the downward AYP trend, the PPIC report also states there have been some positive developments among California students. This included an increase from 35 to 46 percent between 2003 and 2008 in the share of California's students proficient in English language arts. During the same period, students proficient in mathematics increased from 35 to 43 percent.¹⁰ Despite these signs of progress, and although California's academic standards are among the highest in the country, California students continue to score below the national average in English and math on the National Assessment of Educational Progress.¹¹ This low level of proficiency will continue to be a major issue for the state and the education system, particularly the Community College System which has been identified as a primary strategy for addressing the educational shortfall.^{12 13}

Educational performance trends at the local schools, especially high schools, will directly impact PCC and the programs and services required. Student graduation rates along with demographics at local PCC feeder schools are highlighted in Table 4-2. The level of preparation that students attain in high school determines what kinds of courses, programs, and support services students need both before and once they reach college. In addition, projected demographic shifts, historical enrollments and success trends, and the impacts of the California High School Exit Exam (CAHSEE) will all be important factors for the College to monitor.

¹⁰ Source: Public Policy Institute of California (PPIC). California 2025: Planning for a Better Future: "California Education." July 2009.

¹¹ Source: Public Policy Institute of California (PPIC). California 2025: Planning for a Better Future: "California Education." July 2009.

¹² A key goal of the California Community Colleges Strategic Plan: "Ensure that basic skills development is a major focus and an adequately funded activity of the Community Colleges."

¹³ Source: Faculty Association of California Community College; Basic Skills and the New Millennium: A Post "3Rs" Brave New World?" Suzanne Crawford, Spring 2007 Newsletter.

PCC Feeder School Characteristics

In Fall 2008, the five top feeder schools¹⁴ for PCC were Arcadia High, Pasadena High, Alhambra High, Temple City High and San Gabriel High. Two of these schools, Alhambra High and San Gabriel High, are located outside the PACCD service area. Table 4-2 below provides an overview of key characteristics of PCC's top feeder schools.¹⁵ The high schools are listed in order of the number of their 2008 graduates who enrolled at PCC in the two academic years following graduation.

These statistics indicate that the graduating students will need substantial assistance in English/Language Arts and Math. The average Academic Performance Index (API) score for feeders schools are just at or below the State target API score of 800. In addition, the majority of the students graduating are below proficiency in both Language Arts and Math.

Table 4-2: Statistics and Demographics of Top Feeder Schools for Pasadena City College*

High School¹⁶	Enrollment	Percent Non-White	Graduation Rate¹⁷	English Language Learners	Percent Free Lunch	API Base Rank	Percent Language Arts Proficient	Percent Math Proficient
Arcadia	3657	80.6%	99.8	7.7%	11.0%	859	63%	51%
Pasadena	2214	80.8%	85.4	8.6%	40.8%	713	29%	10%
Alhambra	3218	96.2%	87.9	29.7%	66.3%	730		
Temple City	1979	83.2%	96.8	11.7%	33.1%	822	54%	47%
San Gabriel	2431	98.8%	85.5	27.6%	82.4%	722		
Mark Keppel	2401	97.8%	95.8	25.0%	61.3%	806		
Rosemead	2059	96.6%	92.3	18.5%	73.1%	708	32%	26%
So. Pasadena	1508	66.4%	95.8	4.6%	8.8%	857	70%	52%
Gabrielino	1794	92.9%	96.6	23.7%	50.1%	787	50%	31%
Eagle Rock	3067	91.9%	90.9	12.6%	64.1%	717	38%	16%
Franklin	2645	98.4%	72.0	23.2%	72.2%	604	19%	4%
Marshall High	1827	81.6%	91.2	9.4%	52.4%	732	27%	11%
Arroyo	2231	93.9%	93.0	20.3%	73.4%	709	31%	20%

*Schools are listed in order of the number of 2008 graduates that enrolled at PCC within two academic years following graduation.

Source: California Department of Education. Enrollment, ethnicity rates, English Learners, Free Lunch Program, API Base Rank are for the 2008/09 academic year; graduation rates for 2007/08; and proficiency statistics are for academic year 2003/04.

¹⁴ PCC feeder schools are the high schools that provide a significant number of graduates who intend to continue their studies at PCC.

¹⁵ Source: Postsecondary Education Commission, Guide to California Colleges and Universities.

¹⁶ Source: PCC Institutional Planning and Research Office; schools listed in order of number of students from each high school enrolled at PCC in 2006.

¹⁷ Source: California Department of Education, Graduation Rates Based on NCES Definition (2007/08).

Pasadena City College Enrollment Trends

Current and historical PCC enrollment trends will help guide the planning process and assess how effective the College has been in achieving its mission to ensure successful student learning. In order to gain an understanding of PACCD progress towards achieving its related goals, the following summarizes the enrollment trends for the College. Detailed growth projections and the implications for the future of PCC are further explored in Chapter 5 of this document.

PCC Student Enrollment

The level of student enrollment is measured in a number of different ways including:

- The actual number of physical students (**headcount**)
- The number of course sections in which these students are registered (**enrollment**)
- A calculation used by the State to determine funding levels per student (**Full Time Equivalent Student, or FTES**). One FTES represents 525 class hours of student instruction/activity in credit and non-credit courses based on the number of days of instruction required each year (175 days) and a student attending three hours per day for 175 days will be in attendance for 525 hours.¹⁸

Table 4-3 below illustrates changes in PCC headcount and FTES between 2000/01 and 2007/08. Headcount increased by over nine percent during this eight-year period, fluctuating somewhat with an increase in 2001/02, a decline to 2005/06, and a new peak in 2007/08.

During the same eight-year time span, the number of FTES increased by 16 percent. Most of this growth occurred at the start and end of this period, with the number of FTES remaining relatively stable during the six intervening years (2001/02 to 2006/07).

The most dramatic change in enrollment occurred in 2006/07, when total enrollment increased by over 8 percent, or 14,831 enrollments. Academic year 2007/08 witnessed an additional increase in enrollment of roughly 2.5 percent.

Table 4-3: PCC Student Enrollment, 2000/01 to 2007/08

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Annual Headcount	40,371	44,091	43,204	42,133	41,508	41,934	43,0981	44,091
Total Enrollment (credit/non-credit)	176,585	183,754	186,129	181,625	180,272	183,151	197,982	202,898
Full-Time Equivalent Students	21,294	23,467	23,199	23,457	23,124	23,107	23,226	24,782

Source: California Community Colleges Chancellor's Office

¹⁸ Source: California Postsecondary Education Commission – Glossary of Terms.

Educational Attainment in Los Angeles County and the PACCD

The 2006 California Community Colleges System Strategic Plan recognized the importance of educational attainment levels in relation to earning potential. As the state economy requires a more educated workforce, future earning potential will be increasingly influenced by an individual’s level of education. Table 4-4, derived from 2000 U.S. census data, provides a comparative overview of educational attainment in the PACCD and in Los Angeles County. The PACCD has a higher level of educational attainment than the County, with 47% receiving an Associate Degree or higher.

Table 4-4: Educational Attainment, PACCD and Los Angeles County

Educational Attainment	PACCD	LA County
Graduate or professional degree	17%	9%
Bachelor degree	23%	18%
Associate degree	7%	7%
Some college, or no degree	5%	18%
High school diploma or equivalency	25%	23%
Less than high school diploma	23%	25%

Note: Educational attainment for adults 25 years and older.

Source: 2000 U.S. Census

Based on self-reported goals by students enrolled in Fall 2007 (see Table 4-5), the majority of PCC students planned to transfer to a four-year college with or without an associate degree. This represents an increased over the past five years from 52.8 percent in 2003 to 60.3 percent in 2008. At the same time the percentage of students planning to simply obtain an associate degree declined.¹⁹

Table 4-5: Self-Reported Student Educational Goals, Fall 2008

Educational Goal	Percentage of Students
Transfer with or without Associate degree	60.3%
Terminal Associate degree	9.4%
Certificate/Job Skills	8.6%
Interest Development	6.4%
Basic Skills/High School Credits	2.6%
Other/Unknown	12.5%

Source: PCC Observations 2008/09

¹⁹ As this information is self-reported, it does not always accurately reflect what the student may ultimately do in the pursuit of their academic and professional goals.

Degrees and Certificates

As shown in Tables 4-6 and 4-7, PCC has seen a gradual decrease in both Associate in Arts (AA) degrees, Associate in Science (AS) degrees and certificates awarded to its students.

Table 4-6: Degrees Awarded, 2004/05 to 2008/09

	2004/05	2005/06	2006/07	2007/08	2008/09
Number					
AA Degree	1,137	1,129	1,074	1,078	1,116
AS Degree	715	603	560	544	571
Total Degrees Awarded	1,852	1,732	1,634	1,622	1,687
Percent					
AA Degree	61.4%	65.2%	65.7%	66.5%	66.2%
AS Degree	38.6%	34.8%	34.3%	33.5%	33.8%
Recipients					
Total Degree Recipients	1,489	1,456	1,387	1,399	1,468
Percent with Both Degrees	24.4%	19.0%	17.8%	15.9%	14.9%

Note: The total number of degrees awarded exceeds the total number of degree recipients, as a percentage of students (e.g. 14.9% in 2008/09) receive two degrees.

Source: PCC Observations 2008/09

Table 4-7: Total Certificates and Recipients, 2004/05 to 2008/09

	2004/05	2005/06	2006/07	2007/08	2008/09
Total Certificates Awarded	735	699	665	635	606
Total Certificate Recipients	600	560	571	546	524
Percent with more than one Certificate	14.0%	14.3%	8.2%	9.3%	9.7%

Regional Education Choices

PCC is one of twenty community colleges in Los Angeles County. Seven of these are located within 22 miles of the PCC main campus, including two within less than ten miles. In addition to the seven community colleges that are geographic neighbors of PCC, (including Glendale, Citrus and Mt. SAC, which have traditionally been viewed as comparable benchmark colleges) four other colleges that are located in the southern and western areas of Los Angeles County are comparable benchmarks for PCC: Cerritos, El Camino, Long Beach City College and Santa Monica. Details about these colleges are provided in Appendix A.

In addition to the many community colleges, there are over 40 other colleges and universities in Los Angeles County. The San Gabriel Valley alone includes over 30 colleges, universities and graduate schools (including five of the benchmarked community colleges noted above). Given the nearby presence of a large number of other academic institutions, PCC operates in an environment that offers prospective students a wide range of post secondary educational options while also potentially influencing their perception of PCC.

The relationships between PCC and these other schools are varied and complex. Many PCC graduates will transfer to these nearby CSU or UC schools to complete a four year degree. In response to rising tuition costs, some first year students who might otherwise have gone directly to CSU or UC will choose instead to attend a community college.²⁰ In the past some have also transferred to a private university and this is likely to continue in the future. The list also includes some nearby private technical schools as some prospective students who might otherwise have attended a community college may opt instead to attend a for-profit school.²¹,²²

Course and Program Offerings

To better understand PCC's program offerings in comparison to the other benchmarked California community colleges identified, information from these colleges' websites and online catalogs as well as information from the California Community Colleges Chancellor's Office have been compiled and evaluated. All California community colleges offer a full range of programs in math, language arts, natural sciences, humanities, fine arts and social sciences. Differences arise with the depth of programs in certain specialty areas, the provision of tailored vocational and transfer programs as well as extent of degree and certificate programs offered.

Pasadena City College offers a comprehensive range of programs and classes, making it highly competitive with other community colleges in the region. Pasadena City College offers 65 academic and 76 career and technical programs.²³ In addition, PCC has a number of strong program areas that distinguish it from the benchmarked California community college. The following programs available at PCC are offered by less than half of the benchmarked community colleges. These programs include, but are not limited to:

- Administrative Medical Assisting
- Biotechnology and Biomedical Technology
- Construction Crafts Technology and Construction Inspection
- Cosmetology and Barbering
- Culinary Arts
- Dental Assistant, Hygienist and Laboratory Technician
- Engineering Technology (general)
- Fashion
- Hospitality
- Multimedia
- Public Relations
- Radio and Broadcast Journalism
- Restaurant and Food Services Management
- Speech-Language Pathology and Audiology

²⁰ CPEC: Ready or Not Here They Come: Community College Enrollment Demand Projections, 2009-2019. September 2009.

²¹ The Chronicle for Higher Education: For-Profit Colleges Have Advantages, but Community Colleges Have Some, Too, April 7, 2008.

²² The Chronicle for Higher Education: How For-Profit Institutions Chase Community-College Students. December 8, 2000.

²³ California Community Colleges Chancellor's Office Data Bank, PCC Fact Sheet and Website.

According to the Chancellor’s office inventory of approved programs and review of PCC catalog, community colleges in the region offer more comprehensive degree and certificate programs²⁴ that are limited or not available at PCC. A sampling of these programs is listed below.²⁵ Based on the Chancellor’s Office Taxonomy of Programs, a more comprehensive comparative listing of programs offered by the eleven benchmarked California community colleges listed is found in the Appendix D.

Program	Colleges Offering Program
▪ Agriculture	Mt. SAC
▪ Animal Science	Mt. SAC
▪ Aviation Technology	Long Beach, Mt. SAC
▪ Desktop Publishing	East LA, Glendale, Long Beach City, Mt. SAC
▪ Environmental Control	Citrus, El Camino, LA Trade-Tech, Long Beach
▪ Health Information Technology	East LA
▪ Logistics and Material	Cerritos
▪ Parks and Outdoor Recreation	Mt. SAC
▪ Pharmacy Technology	Cerritos
▪ Real Estate	Cerritos, East LA, El Camino, Glendale, LA City, LA Trade-Tech, Long Beach City, Mt. SAC
▪ Water and Waste Water	Citrus, LA Trade-Tech, Mt. SAC

PCC has the opportunity to develop educational and vocational programs that few of its peers currently offer, but that are highly relevant to today’s economy. Specific vocational training opportunities for the health-related fields and professions fall into this category, including pharmacy and health information technology, physical therapy assistants and sports medicine. Additional opportunities include alternative energy and sustainability, water infrastructure and engineering, animal science, agriculture sciences, bilingual education, educational aide, and recreation and park management.

In addition, to program offerings, PCC should evaluate the type and number of awards for Associate Degrees and Certificates. Table 4-8 summarizes the offerings from the regional Community Colleges and illustrates a substantial difference in the number of degrees and certificates awarded. PCC awards more AA and AS degrees than the statewide average, as well as more Certificates in the 30-59 units category than any other school listed. A number of the comparable schools offer a broader range of certificates with awards for 6 to 18 units.

²⁴ The California Community Colleges Chancellor’s Office approved program awards are Associate of Arts, Associate of Science, Certificate requiring 18 to fewer than 30 semester units, Certificate requiring 30 to fewer than 60 semester units and Certificate requiring 60 or more semester units.

²⁵ Post Secondary Education Commission; Institutional Comparisons.

Table 4-8: 2008/09 Degrees and Certificates Awarded, by Community College (Credit Only)

	Cerritos	Citrus	East LA	El Camino	Glendale	LA CC	LA Trade- Technical	Long Beach	Mt. San Antonio	Rio Hondo	Santa Monica	PCC	Statewide Average (72 Districts)
AA Degrees	1,068	571	1,088	643	476	576	263	709	1,467	438	1,329	<i>1,116</i>	838
AS Degrees		380	127	497	204	80	123	259	642	395		<i>571</i>	318
Certificates: 18-29 units	76	189	31	177	122	40	52	114	681	126	158	<i>64</i>	124
Certificates: 30-59 units	180	259	541	251	108	85	452	240	452	73		799	215
Certificates: 60+ units	16			17				162	1	1		<i>95</i>	23
Total Awards	1,340	1,399	1,787	1,585	910	781	890	1,484	3,243	1,032	1,487	2,645	1,518

Source: California Community Colleges Chancellor's Office

Employment and Workforce Needs and Trends

Overview

The analysis of employment and workforce trends includes a review of national, state, and regional markets. The U.S. Department of Labor, Bureau of Labor Statistics (BLS) and other sources projected workforce trends for the period between 2006-2016. Additional data was used to describe the growing gap between the skills required to thrive in a high tech economy and the limited supply of workers with the necessary communication, technical, and thinking skills. Given this challenge, the New Democratic Leadership Council and other sources continue to advocate the role community colleges play in developing highly skilled workers needed for projected high paying occupations.

Los Angeles County Trends

Below is a brief snapshot of the current Los Angeles County economy, highlighting many challenges and opportunities to consider when planning for the future. Appendix A, Environmental Scan, provides a detailed summary of this evaluation. Major findings for California and Los Angeles County are outlined below and address “Hot Jobs” and skill gaps.

- Leading industries include tourism and hospitality, business and professional services, direct international trade, entertainment, and wholesale trade and logistics.
- International trade is considered fundamental to the current and future health of the regional economy.

- Technology is a growing industry cluster, including bio-medical technology, digital information technology and environmental technology, all supported by the County’s technological research capabilities.
- Health care is one of the fastest growing industries in San Gabriel Valley, with demand rising due to population growth and the aging trend in the overall population.
- The County is the largest manufacturing center in the country, with the most significant sectors being apparel, fabricated metals, food products, aerospace parts and products, and search, detection, and navigation products.
- Construction jobs decreased by almost eight percent between 2006 and 2008, largely attributed to the housing market decline.
- San Gabriel Valley has a mixed outlook for professional and business services. Accounting and legal services should continue to grow following the subprime and financial industry debacles of 2008.
- The Valley expects continued growth in scientific research and development.
- During the continued economic downturn in 2009, the County unemployment rate averaged 11.7 percent. Very modest economic improvement is anticipated in 2010, but the jobless rate is expected to be near the peak level of 12.4 percent through most of 2010 and only declining to 12 percent later in 2011.²⁶ Healthcare services and private education remain strong industries in the County economy, and international trade, tourism and retail sales are expected to see improvement.
- The County can expect continued struggles in the non-residential real estate, apartment and condominium construction, local government finance, and manufacturing sectors.

Fast Growing Occupations, “Hot Jobs” in California

The California Employment Development Department used BLS’s 2006-2016 data to develop employment projections for California and individual counties. Major findings include:

- The fastest growing sector will be professional, scientific and technical services.
- Health care and social assistance is expected to be the second fastest growing sector.
- Manufacturing is still one the state’s largest industry sectors, but is expected to continue a decline that began over the past decade.
- In Los Angeles County, three out of four new jobs are expected to occur in: education services, health care and social assistance, professional and business services, retail trade, and government.

Many of the projected “fastest growing” occupations at the national level are also anticipated to be key to the California and Los Angeles County economies. There are, however, some differences.

- Growth rate for some computer occupations projected to be the fastest growing in the nation, such as network systems and data communications analysts, will be even greater in California (58.8 percent vs. 53.4 percent).

²⁶ Los Angeles County Economic Development Corporation, 2010-2011 Economic Forecast and Industry Outlook, The Kyser Center for Economic Research.

- In California, and especially Los Angeles County, many more of the fastest growing occupations are in special education and post-secondary education.
- Other fast growing occupations include multi-media artists, animators, and theatrical and performance makeup artists, reflecting the importance of film, television and related industries to California's economy.

Many of the “hot jobs” are found in five of the fastest growing sectors of the economy, identified in the DLC report: education, health care, information technology, and energy and environment. According to the BLS, education and health services is an industry supersector that will create more than three out of 10 new jobs in the U.S. economy between 2006 and 2016, more than any other part of the economy.²⁷

Forty-one of the 230 “hot jobs” are in the health care/education sector, and the education/training requirement for 11 of these jobs, listed below, is an associate degree:

- Physical therapist assistants
- Dental hygienists
- Cardiovascular technologists
- Occupational therapist assistants
- Radiation therapists
- Registered nurses
- Respiratory therapists
- Diagnostic medical sonographers
- Radiologic technologists and technicians
- Medical and clinical laboratory technologists
- Nuclear medicine technologists

Trends indicate opportunities for community colleges like PCC to enhance and expand their programs and courses to prepare their students for tomorrow's jobs. Many community colleges around the nation are already engaged in creating new certificate and degree programs either in response to local work force needs or opportunities emerging from national economic trends²⁸. These developments are tied to a growing desire among both students and employers to see a stronger and more direct link between course work and what is required for recent graduates to succeed. As a result there will be changes within existing academic and vocational programs, a proliferation of more interdisciplinary courses of study, as well as the creation of new programs that better reflect the needs of a rapidly changing economy.

²⁷ Source: U.S. Bureau of Labor Statistics Tomorrow's Jobs, Occupational Outlook Handbook, 2008/09 Edition.

²⁸ Source: Karen Fischer and David Glenn, “5 College Majors On the Rise,” “Students and Businesses Demand More Training in Job Skills,” “It Pays to Be Nimble: New Majors at Community Colleges,” The Chronicle of Higher Education, August 31, 2009.

Skills Gap

Reforming the educational system to provide more of the high skilled, technical workers in demand by employers is seen as the most viable long term method to close the skills gap. As an essential component of the nation's educational system, community colleges are expected to play a crucial role in preparing workers with the necessary skills and knowledge to succeed in a rapidly changing economy. It is critical to try to anticipate which specific academic and technical skills will be most needed by employers, and how best to provide such tools for the future workforce as they prepare to meet present day challenges and the opportunities of the future.

Given the uncertainty inherent in planning for an inter-connected global economy, the only firm prediction is that there will be an ongoing need for community colleges to carefully monitor work force trends and developments, while retaining the institutional flexibility required to adapt and thrive in this evolving environment.

Community Perspectives

The EMP is an important part of the College's long-range efforts and is designed to reflect and respect the needs of its students and the greater community it serves. To gather public input, PACCD hosted 12 Town Hall Meetings and three President's Advisory Council meetings. In 2009, over 200 community members and 21 City Council and Board of Education members participated in this outreach. Additional meetings were held in September and October at multiple locations throughout the District, including:

- Saturday, September 12th (*Pasadena*)
- Tuesday, September 15th (*Arcadia*)
- Monday, September 21st (*Sierra Madre*)
- Tuesday, September 22nd (*South Pasadena*)
- Wednesday, September 23rd (*Altadena*)
- Wednesday, September 30th (*Temple City*)
- Thursday, October 1st (*Pasadena*)
- Thursday, October 8th (*Pasadena*)
- Saturday, October 10th (*Pasadena*)

These meetings served to educate participants about the EMP, to identify desired process outcomes, and to facilitate discussion about participants' visions and values related to PCC's programs, facilities, and services. Individual meeting notes are extensive and indicative of the impressions, concerns, and hopes expressed in support of PCC's future. The following key themes emerged over the course of the EMP community outreach process. They are organized around strengths and assets, issues and challenges, and opportunities.

Strengths and Assets

A beautiful and well-located campus. Many Town Hall meeting participants noted the beauty and cleanliness of PCC's campus. PCC's geographic location and resulting accessibility to students throughout the Los Angeles region helps to position the College as an important local resource.

A high transfer rate. PCC enjoys a high transfer rate to the University of California and California State University systems, consistently ranking as one of the State's community colleges with the highest transfer rates to four-year colleges and universities. PCC's Transfer Alliance Program maintains a very strong alliance with UCLA.

Highly qualified faculty. Meeting participants praised College faculty for the experience and expertise they bring to PCC, and consider the quality of faculty central to the quality of PCC's academic and career and technical education programs.

Diverse student body. PCC's student body is remarkably diverse in terms of ethnicity, age, and student ability. Participants encouraged PCC to continue to nurture differences and diversity and to take advantage of opportunities created by this diversity.

Strong academic and extra-curricular programs. PCC boasts excellent and innovative programs and activities that bring strong disciplinary focus to the campus and help provide students an identity within the College. Biotechnology and stem cell research and communications media are two examples of exceptional academic, career, and technical education programs. PCC's excellent extra-curricular programs include award-winning debate and math competition teams, and the Puente and Ujima programs.

Cost-effective educational opportunity. PCC and community colleges throughout California provide students the opportunity to pursue their academic and professional goals at a low cost relative to the cost of attending four-year institutions and private vocational schools. The importance of this role in the education system cannot be understated, particularly given the current economic downturn.

Issues and Challenges

Limited campus accessibility. Campus accessibility remains a concern with respect to transportation and parking access to the main campus. Some meeting participants noted an improvement to the parking situation with new parking areas now available.

Limited access to core courses. Many individuals described a frustrating and onerous registration process. Meeting participants noted a clear need to improve access to core, required, and basic skills classes such as English and math. Completing associate level coursework is contingent upon the ability of students to access core courses when needed. Others recommended creating more course sections in the disciplines needed to help resolve this problem.

Low basic skills performance. Many PCC students enter the College lacking basic English and math skills, and are unprepared to excel or be successful in their classes. Among other serious repercussions, this results in a disproportionate allocation of college resources to teach basic skills.

Gaps in student achievement and representation. Overall, PCC’s Latino students do not perform as well as other groups in terms of basic skills. Meeting participants also noted the steady decline in the size of PCC’s African American student body and its disproportionate size relative to that of the PACCD’s African American population. In addition, a relatively small number of residents in the District choose to study at PCC.

Lack of a consistent professional development program. Participants commented on the need to provide faculty, staff, and managers with on-going professional development opportunities to respond to the needs of the diverse student population and to assist with economic, cultural, and organizational challenges.

Lack of classroom space and laboratory facilities. Meeting participants noted the lack of classroom space and science laboratory facilities available at PCC during peak class times and the need to optimize the use of existing space during established hours of instruction. This included non-peak hours and weekends to increase eligibility for state funds.

Antiquated and inefficient database management system. The PCC’s current, antiquated online systems are often duplicative. Also, individual systems such as registration, accounting, human resources, and student accounts are managed separately, and at the expense of efficiency and ease of use for faculty, staff, and students.

Limited resources and inadequate State funding model. The current State funding model does not provide sufficient resources for PCC.

Opportunities

Strengthen and target community outreach. Town Hall Meeting participants called on PCC to improve communications and outreach to local communities within the District and to reach out to students early in their education. Outreach should focus on middle-school aged students and the PACCD’s African American community, perhaps involving PCC student ambassadors and additional faculty.

Build a culturally and linguistically representative faculty and staff. Participants noted how important it will be to build a more diverse faculty and staff that better represent PCC’s student population, both culturally and linguistically.

Streamline registration process. Many participants called on PCC to improve the registration process so that students can complete their degree and certificate programs, and/or transfer to a four-year school, in a timely manner. The topic of priority registration for in-District students was also raised.

Align programs to the changing economy to meet student needs. As PCC student demographics continue to change and evolve, PCC must design and implement appropriate responses to meet student needs. PCC must provide specialized services rather than a “one size fits all” approach in order to meet the diverse needs of its students. Meeting participants frequently noted the importance of adapting and developing programs and facilities to meet the many needs of the changing economy.

Pursue contract education opportunities. To provide the community with the support it needs, PCC must provide more workplace-oriented and vocational training. Meeting participants encouraged PCC to pursue contract education opportunities.

Focus on student development of “soft skills.” Many called for a more strategic focus on developing the “soft skills” that all employers seek, including communications, time management, and analytic problem-solving skills. By encouraging faculty and programs to emphasize the development of soft skills, PCC can help prepare students for success in the work force, irrespective of their career goals.

Develop sustainability curriculum. Participants called on PCC to develop a sustainability curriculum to prepare students to compete in the growing “green collar” economy. Community members also expressed interest in courses that support individuals in their efforts to become more active and adept stewards in helping sustain the region’s limited resources.

Update technology. Meeting participants expressed the need for PCC to conduct a complete “information technology overhaul.” Suggestions included an integrated database management system and a consistently reliable internet service with adequate capacity to meet campus needs. Participants also called for additional science and laboratory facilities to accommodate science-based programs critical to developing skills in industries with anticipated future demand.

Many suggested establishing a satellite campus and/or offering additional course sections at other locations in the District. Some contended that establishing a satellite campus in one of the lesser served, more remote areas of the District would help alleviate problems with access to programs and services and would also help resolve transportation-related sustainability concerns. Others cautioned that a satellite campus would need to provide the full range of student services in order to adequately serve students and meet State accreditation standards. All seemed to agree that it was important to find ways to provide course opportunities at locales other than the main and Community Education Center campuses to satisfy the needs of District students.

Build strategic partnerships and tap underutilized resources. PCC can bolster student achievement and strengthen its academic and community-based programs by cultivating relationships with the surrounding communities’ rich array of resources and facilities. Participants frequently noted the need to build strategic partnerships with the K-8 and K-12 systems, California Institute of Technology, the Jet Propulsion Laboratory, and the Art Center College of Design. Currently, PCC does not have an official alumni organization, indicating that existing PCC alumni remain an untapped resource for the College. In addition, the PCC Foundation could do more to secure resources for its students.

Advocate for changes to the current State funding model. Town Hall participants called on the District to advocate for changes to the current State funding model in order to improve the availability of resources for community colleges.

Planning Implications

The following findings, combed from the Environmental Scan and the community input process, provide a context and focus in developing the EMP and its Implementation Plan.

1. **Anticipated population growth in the San Gabriel Valley and Los Angeles County.** This growth will create an increased need for post-secondary school education and challenge existing providers to serve a growing student demand for higher education. As PCC is at its funded “full time equivalent student” (FTES) capacity, if not over capacity, it needs to consider several related questions to determine how best to serve the needs of this growing population, including: how to optimally allocate its constrained resources among the many different programs offered by the divisions at PCC; determine what type and number of facilities will be required to support any program changes; as well as how to develop the staff and faculty in alignment with these possible shifts in program offerings and facilities.
2. **Continued increase in English Language Learners (ELL).** Through its already extensive experience with ELL students, PCC is accustomed to the needs of a very diverse population. Embracing and serving this diversity will be a major goal for the college in the coming years.
3. **Shifting age patterns.** Although the current student population is relatively young, the region’s population is aging. This means that PCC must expand programs for older individuals who are more interested in developing new skill sets, changing careers or building upon an existing career to be better positioned for future jobs.
4. **Participation Rate Out of District.** The fact that PCC draws two-thirds of its students from out of district indicates that potential students within the District may not be as well served as they should be. The lack of in-District participation should be addressed with better communication, outreach and understanding of the choices potential students are making about PCC and why.
5. **Increased need for Basic Skills programs.** The need to provide remedial training for poorly prepared K-12 students and returning students lacking basic skills is anticipated to continue even with more rigid academic standards in place in the K-12 system. Bringing students up to par to effectively learn the critical skills needed to succeed is a major challenge that every community college will face. Adequate Yearly Progress scores indicate there are wide variations among PCC feeder schools in both language and math proficiency. PCC will need to address this issue by continuing programs with local feeder high schools, developing curriculum to help students tackle their basic skills as effectively as possible, ensuring the faculty is well prepared to teach these students and providing critical student support services from financial aid to counseling.
6. **Increased need for highly skilled professionals.** The careers of today and the next ten years will require increasingly highly trained and skilled people with technical degrees in the sciences, mathematics, and technology as well as critical thinking and analytical capabilities. PCC can both provide this training and create a bridge between the community of students it serves, four-year institutions to which PCC students transfer, and businesses that will hire PCC graduates with an AA or AS degree.

7. **Declining degree award rates.** In recent years the number of Associate Science degrees awarded at PCC has declined. This is at a time when the economy is demanding even more educated workers. The reasons for this decline will need to be further investigated during the course of the EMP process.
8. **Creating niche programs.** The comparison of PCC program offerings to other benchmarked colleges in the region indicates an opportunity to identify and strengthen unique programs to PCC. By looking at the economic climate, community need, faculty interest/capabilities and the PCC mission, new programs may be identified and developed that set PCC apart from its counterparts in the area. Programs focusing on alternative energy, sustainability, health care, and other high growth areas are potential opportunities for PCC program expansion.
9. **The need for organizational agility.** The opportunities and anticipated changes in the global, national, and local economy will require that PCC become as flexible and adaptable as possible in creating new programs and services to meet their changing needs. Industries and occupations that include green infrastructure and sustainability, health care, water, energy, and transportation infrastructure will be evolving as new technologies and approaches are invented. PCC has both a need and a chance to capture this new wave of innovation by developing and delivering cutting-edge programs.
10. **Address new ways of learning.** Current studies indicate a shift in how students will learn in the future with an increased reliance on technology as well as more informal learning environments. With these changing habits and learning modalities, PCC needs to consider how to best deliver high quality academic programs while adapting to the way students want to learn. PCC currently has very limited but growing online program offerings. Online programs as well as facilities with the technology systems to support online learning, interactive lectures and the like will be increasingly important. In addition, more hands-on approaches and group-oriented learning spaces will need to be built into the PCC offerings.
11. **Leverage partnerships and opportunities with similar institutions.** The Scan indicates that there are already a number of students who are benefiting from the tremendous number of educational providers in the area. PCC can consciously develop relationships, programs and partnerships with other community colleges, four-year universities and other providers to expand what it can offer to its students via more facilities, programs, faculty and specialty training.



5. GROWTH PROJECTIONS

5. Growth Projections

Introduction

The purpose of this chapter is to review historic enrollment trends at PCC and forecast potential growth through 2020. This analysis will inform strategic direction for expanding or altering existing programs.

Enrollment growth is influenced by a number of different factors, including internal and external variables, both local and state-wide.

- Internal factors affecting growth include the type and quality of instructional programs, the quality and availability of faculty and staff that support the programs, the quality of support services and programs, and the availability of classrooms and appropriate facilities for each program.
- Local external factors that affect community college growth include general population trends and changes in specific population sectors as defined by age, ethnicity, high school graduation rates, participation rates, and the number and nature of educational competitors or collaborators within the region.
- Broader external factors include general economic and employment trends, public policy initiatives (e.g. greenhouse gas reduction), and shifts in post-secondary educational funding levels. (Note: Appendix A, Environmental Scan, presents many of these factors in detail).

Community colleges measure enrollment in a number of different ways. These include overall headcount, enrollment, Fulltime Equivalent Students (FTES), and Weekly Student Contact Hours (WSCH), among other measures. Where appropriate, the trends and projections are primarily presented in terms of headcount and student enrollments¹.

Historic Enrollment Trends

In spite of short-term fluctuations in overall enrollment PCC has experienced relatively steady growth over the years and decades, based on long-term trends. Although the apparent rate of growth will vary depending on the data source, the time period, and the unit of measurement applied, the overall trend has tended to be upward.

Headcounts

According to student “headcount” enrollment data provided by the California Community College Chancellor’s Office (CCCCO), in the two decades between 1989 and 2008, PCC experienced a gradual increase in the number of students enrolled, at a rate of 0.86 percent per year (see Table 5-1). Between 1999 and 2008, however, PCC experienced a sharply higher annual average growth rate (2.46 percent). This

¹ Enrollment, as defined by PCC, is the student headcount multiplied by the number of sections in which students are registered.

increase masks a significant short-term, one-year decline (11.4 percent) in student headcount enrollment between 1998 and 1999. When enrollment growth is measured beginning only one year earlier over an 11-year period between 1998 and 2008, the average annual growth rate of 0.76 percent is more consistent with the longer term two-decade growth trend.

In effect, the apparent faster growth rate between 1999 and 2008 simply returned PCC to the level of student headcount enrollment it would have had anyway had it not experienced a sharp decline in the number of students at the beginning of the decade. Although it has experienced short-term drops and jumps in enrollment, PCC, has from the long-term perspective of two decades, experienced steady growth of 0.86 percent per year.

Table 5-1: Total College, CCCC Long-Range Student “Headcount” Trends

0.86% Annual Average Growth 1989 to 2008			
0.75% Annual Average Growth		2.46% Annual Average Growth	
1989	1998	1999	2008
25,733	27,657	24,505	29,943

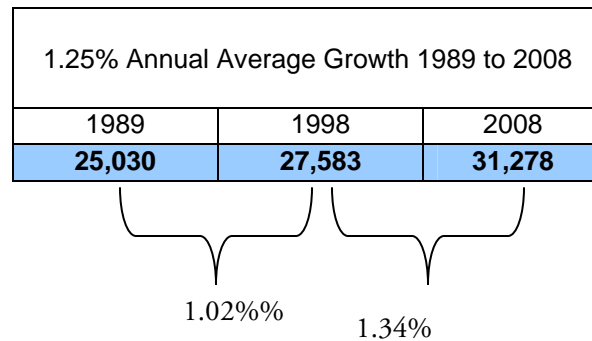
Source: California Community Colleges Chancellor’s Office, February 2010

Student “headcount” enrollment data provided by the Institutional Planning and Research Office (IPRO) at PCC shows a similar upward trend over the same time period but at a higher overall annual rate. According to (IPRO), over the two decades between 1989 and 2009, PCC experienced an average annual growth rate of 1.25 percent. During the first decade between 1989 and 1998, PCC experienced an annual growth rate of 1.02 percent and then saw a slight increase to 1.34 percent during the second decade between 1998 and 2008. An apparent data reporting issue between the College and the CCCC underlies the different reported average annual growth rates, but the basic pattern of steady enrollment growth, as measured by headcount, remains consistent.

Table 5-2: Total College, IPRO Long-Range Student “Headcount” Trends

1.25% Annual Average Growth 1989 to 2008			
1.02% Annual Average Growth		1.10% Annual Average Growth	
1989	1998	1999	2008
25,030	27,583	28,168	31,278

Source: PCC Institutional Planning and Research Office



Weekly Student Contact Hours

The CCCCO also monitors historic enrollment in terms of WSCH, taking into account the amount of time students spend on campus interacting with faculty. This provides a more thorough understanding of the extent to which student enrollment translates into use of facility and faculty resources, beyond what can be determined from tracking student headcount alone.

According to data provided by the CCCCO, over the past two decades WSCH has grown at an annual rate of 2.56 percent, which is considerably higher than the 0.86 percent reported for student headcount alone. This implies that the collective level of demand on faculty and facilities was increasing at a faster rate than the increase in the number of students alone would otherwise have predicted. In addition, between 1999 and 2008, the rate of growth in WSCH was an even greater 3.52 percent per year, as summarized in Table 5-3.

Table 5-3: Total College, Long-Range WSCH Trends

2.56% Annual Average Growth 1989 to 2008			
1.05% Annual Average Growth		3.52% Annual Average Growth	
1989	1998	1999	2008
254,120	278,290	286,928	377,840

Source: California Community Colleges Chancellor’s Office, February 2010

Enrollment

PCC also relies on measures other than student headcount to assess the level of demand placed on the college by the student population, as well as each on division and discipline within the college. Rather than WSCH, PCC uses an enrollment figure based on the student headcount multiplied by the number of sections in which students are registered. From this perspective PCC experienced a higher annual average growth rate of 3.9 percent between the 2003/04 and 2008/09 academic years. Although the PCC enrollment growth is not equivalent to the Chancellor's WSCH annual rate of 3.2 percent, between 1999 and 2008, it does provide a useful comparative frame of reference (see Table 5-4).

Table 5-4: Total College “Enrollment” Trends and Forecast

3.9 % Annual Average Growth		
2003/04	2006/07	2008/09
160,605	173,163	192,157

Note: “Enrollment” is the headcount of students multiplied by the number of sections in which students are registered.

Source: PCC Institutional Planning and Research Office

Instructional Divisions and Disciplines—Historic Growth Rates

This “enrollment” unit of measurement provides a way to compare historic growth rates of the various instructional divisions at PCC and the diverse programs they offer. Over the past five academic years, historic enrollment trends show the fastest growing instructional divisions have been:

- Natural Science
- Mathematics
- Performing and Communication Arts
- Visual Arts and Media Studies
- Social Sciences
- Languages
- English

Using the overall 3.9 percent annual average growth rate in enrollment at PCC as a baseline, the Natural Science and Mathematics divisions both exceeded the overall growth rate for the entire college. The annual growth rate for a third division, Performing and Communication Arts, was nearly equivalent to this rate. During the same period, some instructional divisions experienced slow or negative growth, as shown in Table 5-5.

Table 5-5: Declining or Slow Growth Instructional Divisions

Instructional Division	Annual Growth Rate 2003/04 to 2008/09
Library	-4.71%
Community Education Center	-2.63%
Health Sciences	-1.56%
Business and Computer Technology	-0.27%
Engineering and Technology	0.63%
Kinesiology, Health and Athletics	0.72%

These differences do not provide the level of detail needed to thoroughly understand shifts in student demand within PCC. Instead, a discipline growth trend analysis within each division is needed. As illustrated in Table 5-8, Instructional Divisions and Disciplines Growth Rates, not only are there significant variations in discipline growth rates across PCC, but also within each division of the College. As a result, a division with low overall growth may contain one or more high growth disciplines and a division with high overall growth may include some low growth disciplines. Moreover, the overall growth rate of a division can be negatively or positively impacted by only a few disciplines.

The top ten fastest growing instructional divisions are shown in Table 5-6.

Table 5-6: High Growth Disciplines and Instructional Divisions

Discipline	Instructional Division	Annual Growth Rate 2003/04 to 2008/09
American Sign Language	Languages	36.76%
Dance	Performing and Communication Arts	24.18%
Education	Social Sciences	18.63%
Statistics	Social Sciences	16.92%
Building Construction and Inspection	Engineering and Technology	16.11%
Foreign Languages	Languages	10.67%
Anthropology	Social Sciences	9.23%
Dental Laboratory Technology	Health Sciences	9.11%
Computer Science	Business and Computer Technology	8.08%
Fashion	Business and Computer Technology	8.08%

Many of these high growth disciplines have relatively small enrollments compared to other academic disciplines. As they are starting with a lower enrollment base, a relatively modest increase will translate into a higher overall growth rate compared to other larger disciplines that may actually be attracting a significantly greater number of new student enrollments. Major findings include:

- American Sign Language (ASL) achieved a 36.76 percent annual growth rate by starting with a low enrollment (176 in 2003/04 to an enrollment of 491 in the 2008/09).
- A few of the high growth academic disciplines have relatively large enrollments, including Foreign Languages with over 7,700 enrollments in the 2008/09 academic year, and Anthropology with over 3,000 enrollments.
- Among the 20 instructional divisions that exceeded the overall annual growth rate of 3.9 percent, a few are among the largest in the college. Although their annual growth rates were not in the top ten, these divisions were adding the most new student enrollments.
- Mathematics, with 16,533 enrollments and a 4.08 percent annual growth rate, is the largest division among the top 20 to exceed the 3.9 percent benchmark. This growth rate translates into over 3,100 new enrollments between 2003/04 and the 2008/09 academic years.
- Physical Sciences had a 4.55 percent annual growth rate with 8,530 enrollments, constituting an increase of nearly 1,600 new enrollments.
- Natural Sciences, which had 8,145 enrollments in the 2008/09 academic year, also had the 11th highest annual growth rate of 7.20 percent. This translates into nearly 2,200 new student enrollments between 2003/04 and the 2008/09 academic years.²
- The Social Sciences division saw the largest overall increase in student enrollments during this five-year period (over 5,500 student enrollments), but this increase is distributed over a large number of disciplines rather than concentrated in a few as described above.

During the same time period, ten disciplines experienced negative growth in enrollments, as shown in Table 5-7.

Table 5-7: Declining Growth Disciplines and Instructional Divisions

Discipline	Instructional Division	Annual Growth Rate 2003/04 to 2008/09
Business Math/Statistics	Business and Computer Technology	-13.05%
Culinary Arts	Engineering and Technology	-12.59%
Business Office Systems	Community Education Center	-10.20%
Parents Education, Seniors and Disabled	Community Education Center	-7.16%
Electronics	Engineering and Technology	-6.93%
Nursing (RN, LVN, CAN)	Health Sciences	-5.46%
Library	Library	-4.71%
Emergency Medical Technician	Health Sciences	-4.37%
Computer Information Systems	Business and Computer Technology	-3.56%
Business Administration and Marketing	Business and Computer Technology	-2.55%

² The high growth rate for the Natural Sciences program and the resulting increase in student enrollments is tempered by the fact that much of this increase, but not all, is due to the transfer of Nutrition classes from the Natural Sciences Division to the Health Sciences Division, representing over 1,400 enrollments during this time period.

Many of these are relatively small disciplines, such as Culinary Arts, which had 40 enrollments in the 2008/09 academic year³. Other disciplines experiencing negative growth were significantly larger, including:

- Business Administration and Marketing with nearly 4,400 enrollments;
- Parents Education, Seniors and Disabled Adults program with nearly 4,000 enrollments; and
- Computer Information Systems with over 2,800 enrollments.

Historic growth trends are also monitored for some disciplines outside the instructional divisions such as Distance Education in the Office of Instruction, and Counseling/Career Services and Special Service divisions within Student and Learning Services. The latter two divisions encompass a number of individual disciplines, but enrollment data was tracked at the divisional level rather than by discipline.

Distance Education is being tracked over time as it is a new instructional methodology, rather than a specific academic discipline. Data includes all sections throughout the College that are either web-enhanced or were taught on-line and represents the “total number of seats” in these sections rather than standard enrollment. For the five-year period beginning in the 2005/06 academic year and ending in 2009/10, the number of seats in web-enhanced and on-line sections increased from 11,123 to 37. This strong growth constitutes a remarkable annual rate increase of 47.12 percent per year. Although this growth rate is based on the number of total seats rather than enrollments (as defined by headcount multiplied by sections registered), this information does reinforce the strong potential for continued future growth in this new area.

Growth rates for disciplines in Counseling/Career Services and Special Services divisions are more comparable to disciplines in the instructional division as they are based on standard enrollment data derived from courses offered by these two divisions. Both divisions exhibit strong growth rates.

- Enrollments in courses provided by Counseling and Career Services have also grown at a fast rate (6.37 percent), which exceeds the overall college growth rate of 3.9 percent during the same five-year time span.
- Special Services enrollment increased from 407 in the 2003/04 academic year to 1,666 in 2008/09. Although not as large as many individual disciplines in the instructional divisions, enrollments nevertheless increased at an annual rate of 37.3 percent, which exceeds all other programs in the college except for American Sign Language.

³ Discipline growth for Culinary Arts was disrupted by facility closure and its later re-opening during this time period, so this negative growth rate may not be an accurate indicator of its future potential.

Table 5-8: Instructional Divisions And Disciplines Annual Growth Rates*Blue – disciplines that exceed overall PCC growth rate**Tan – disciplines with negative growth*

INSTRUCTIONAL DIVISIONS		
Division and Discipline	5-Year Annual Growth Rate	2008/09 Enrollment
Business and Computer Technology	-0.27%	15,175
Accounting / Bookkeeping	0.38%	2,189
Business Administration and Marketing	-2.55%	4,388
Business Information Technology	6.93%	2,486
Business Law and Paralegal	0.61%	1,347
Business Math/Statistics	-13.05%	82
Computer Information Systems	-3.51%	2,846
Computer Science	8.08%	504
Fashion	8.08%	1,067
Hospitality	1.45%	266
Community Education Center	-2.63%	13,176⁴
Apparel Skills	6.67%	40
Business Office Systems	-10.20%	234
Cosmetology (credit program)	0.83%	353
Electronic Assembly	3.00%	115
ESL/Americanization/Civic Education/ABE	1.11%	5,475
High School Diploma Program (GED)	1.49%	2,512
Parents Education, Seniors and Disabled Adults	-7.16%	3,991
Printing Technology	0.00%	98
Engineering and Technology	0.63%	15,622
Administration of Justice	-1.20%	1,285
Architecture	6.73%	1,160
Automotive Technology	1.92%	766
Building Construction and Inspection	16.11%	547
Culinary Arts	-12.59%	40
Electrical Technology	5.98%	339
Electronics	-6.93%	266
Engineering	-3.57%	216
Engineering Design Technology (Drafting)	-1.17%	290
Fire Technology	-1.84%	376
Graphic Communications Technology	-1.58%	804
Machine Shop	0.71%	175
Welding	-0.99%	212

⁴ 2009/10 enrollment data

INSTRUCTIONAL DIVISIONS		
Division and Discipline	5-Year Annual Growth Rate	2008/09 Enrollment
English	2.40%	15,622⁵
Composition	Unavailable	
Creative Writing		
Literature		
Reading		
Health Sciences ⁶	-1.56%	5,693
Dental Assisting	0.63%	328
Dental Hygiene	1.50%	401
Dental Laboratory Technology	9.11%	476
Emergency Medical Technician	-4.37%	229
Medical Assisting	3.62%	444
Nursing (RN, LVN, CNA)	-5.46%	1,810
Radiologic Technology	5.58%	578
Kinesiology, Health, and Athletics	0.72%	11,434
Health	-0.91%	2,005
Kinesiology + Athletics Programs ⁷	1.09%	9,843
Languages	2.75%	14,535
American Sign	36.76%	491
ESL	2.76%	6,063
Foreign Languages	10.67%	7,718
Linguistics	Data Unavailable	
Library	-4.71%	419
Library	Data Unavailable	
Library Technology		
Mathematics	4.13%	18,236
Mathematics	4.08%	16,533
Statistics	4.57%	1,703
Natural Sciences	5.78%	16,675
Life Sciences ⁸	7.20%	8,145
Physical Sciences	4.55%	8,530

⁵ English enrollment does not include Writing Labs (900 courses) enrollment: 15.9% annual growth rate if Writing Labs are included which became a part of English Division in 2006/07 academic year.

⁶ The overall growth rate for Health Sciences division was impacted by the transfer of Nutrition classes to the Life Sciences program. Had those classes representing 1,427 enrollments remained with Health Sciences the annual growth rate would have been a positive 4.6% instead of a negative 1.56%.

⁷ Enrollment data in PCC computer system uses same prefix code for all Athletics and Kinesiology classes, so growth rates and enrollment data presented here represents both disciplines.

⁸ The overall growth rate for Life Sciences was positively impacted by the transfer of Nutrition classes from the Health Sciences division. See footnote #3 above. Annual growth rate would otherwise have been a positive 2.44% instead of 7.20%.

INSTRUCTIONAL DIVISIONS		
Division and Discipline	5-Year Annual Growth Rate	2008/09 Enrollment
Performing and Communication Arts	3.89%	19,941
Dance	24.18%	1,862
Music	1.78%	8,203
Speech Communication	2.87%	6,699
Speech-Speech/Language Pathology Assistant Program	Unavailable	
Television and Radio	0.24%	1,174
Theater Arts	2.81%	1,463
Social Sciences	3.09%	41,129
Anthropology	9.23%	3,093
Child Development Center	2.37%	2,158
Economics	2.63%	2,802
Education	18.63%	423
History	1.90%	7,222
Humanities, Philosophy and Religious Studies	2.54%	7,456
Political Science/American Institutions	1.86%	5,067
Psychology	2.57%	7,232
Sociology	4.85%	4,479
Special Ed Technology	0.00%	174
Statistics	16.92%	336
Visual Arts and Media Studies	3.21%	15,156
Art (includes all art disciplines)	0.96%	8,755
○ <i>Art Gallery</i>	Unavailable	
○ <i>Art History</i>		
○ <i>Design</i>		
○ <i>Film</i>		
○ <i>Media Studies</i>		
○ <i>Studio</i>		
Communication	3.55%	491
Journalism	2.70%	437
Photography	2.89%	1,737
Theater Arts ⁹	11.29%	3,736

⁹ The Visual Arts and Media Studies (VAMS) division does not have a separate theater arts discipline. VAMS offers two film history classes which were once in the Theater Arts discipline of the Performing and Communications Arts Division. These two classes are a part of the VAMS film program and they are popular General Ed classes. The overall number of students can fluctuate widely depending on the number of sections offered.

INSTRUCTIONAL DIVISIONS		
Division and Discipline	5-Year Annual Growth Rate	2008/09 Enrollment
OFFICE OF INSTRUCTION/STUDENT AND LEARNING SERVICES		
Office of Instruction		
Distance Education	47.12%	37,326 ¹⁰
Student and Learning Services		
Counseling and Career Services	6.37%	2,210
Special Services	37.30%	1,116

California Chancellor’s Office Projections

For planning purposes, the EMP uses an assumption of **0.75 percent annual growth in enrollment**, defined by PCC as student headcount multiplied by the number of sections in which students are registered. This annual growth rate aligns with the long-range enrollment and WSCH forecast provided by the CCCCCO. The CCCCCO prepares district-wide projections based on Fall enrollment. CCCCCO forecasts PCC to experience an enrollment growth of approximately 7.5 percent from 2009 through 2018, which equates to the annual growth rate of 0.75 percent¹¹.

This annual growth rate forecast is less than the 2.46 percent annual growth rate reported by the CCCCCO that existed between 1999 and 2008. As noted earlier, growth experienced by PCC during the most recent decade was an apparent anomaly created by a short term drop in student headcount at the start of the decade. The forecasted growth rate of 0.75 percent a year does conform to the longer term and more consistent 0.86 percent annual growth rate in student headcount that prevailed over two decades beginning in 1989. At the same time, however, this forecasted growth rate does not correlate with other related measures for growth.

CCCCCO’s forecast does not align with the higher annual growth rates reported by PCC for either student headcount (an annual rate of 1.25 percent from 1989 to 2008) or enrollment based on student headcount multiplied by number of sections registered (an annual rate of 3.9 percent from 2003/04 to 2008/09).

CCCCCO applies the forecasted 0.75 percent growth rate to student headcount and to WSCH, even though the historic annual growth rate for WSCH (also reported by the CCCCCO) has been a significantly higher annual 2.56 percent. The CCCCCO assumes, using a methodology started in 2001, that the ratio of annual average WSCH to Fall enrollments (i.e. student headcounts) will remain constant at PCC’s last actual ratio. In 2008, the ratio of WSCH to Fall enrollment was 12.62 and this ratio has been applied as a constant to the growth forecast for the coming decade, even though the historic record has shown WSCH growing at a faster rate than student headcount enrollment (see Table 5-9).

¹⁰ Data developed for period from 2004/05 through 2009/10 academic year and represents “total seats” in web-enhanced and on-line sections, and not “enrollments” as defined by headcount multiplied by the number of registered sections.

¹¹ California Community College’s Chancellor’s Office. Pasadena Area CCD – 2009 Long Range Enrollment and WSCH Forecast. February 2010.

Table 5-9: CCCC CO Long-Range Enrollment and WSCH Forecast for PACCD

Year	Enrollment Forecast (Headcount)	WSCH Forecast	WSCH/ Enrollment Ratio
2009	29,922	377,580	12.62
2010	30,380	383,360	12.62
2011	30,822	386,930	12.62
2012	31,218	393,924	12.62
2013	31,523	397,773	12.62
2014	31,765	400,835	12.62
2015	31,940	403,045	12.62
2016	32,033	404,217	12.62
2017	32,113	405,220	12.62
2018	32,180	406,066	12.62

The 0.75 percent annual enrollment growth forecast for PCC is also less than the 1.03 percent annual growth rate in enrollment “demand” between 2008 and 2019 projected by the California Postsecondary Education Commission (CPEC) for the entire California Community Colleges system.¹² However, a baseline forecast, also from CPEC, which estimates community college demand due solely to population growth, predicts a lower 0.87 annual growth rate.

In this same analysis, the CPEC expressed concern that, due to statewide funding cuts, enrollment demand could exceed capacity. This is expected to result in as many as 400,000 prospective students being denied access over the next two years. The CCCC CO confirmed a statewide drop in community college enrollment for the first time in five years due to a drop in state funding and not due to a drop in demand.¹³ Although many community colleges, including PCC, continue to serve students for whom they receive no state funding, the growing gap between student demand for services provided by community colleges and the ability to pay for those services is forcing colleges to re-think how best to manage their resources.

The CCCC CO growth forecast for PCC does appear to conform to the expected increase in enrollment demand if it were based solely on population growth, as determined by participation rates. Participation rates are calculated as the participation per 1,000 population, generally in terms of adult population. In academic year 2008/09 the participation rate for the California Community College system was 89.9 persons per 1,000 adults.¹⁴ The participation rate at PCC is approximately 33 persons per 1,000 adults.¹⁵ This rate is based on the number of PCC students who actually live within the District compared to the total number of adults from 18 to 65 years of age living within the District.

¹² California Postsecondary Education Commission. “Community College Enrollment Demand Projections, 2009-2019: Ready or Not, Here They Come.” September 2009.

¹³ California Community Colleges Chancellor’s Office, “California Community Colleges Chancellor Jack Scott Announces 2009/10 Enrollment Decline,” February 24, 2010.

¹⁴ Community College League of California. Fast Facts 2010.

¹⁵ 31% of PCC students are PACCD residents = 9,282 students/adult population for PACCD = 279,040 x 1,000 = 33 persons per 1,000 adults.

Participation Rates

The PCC participation rate appears to be significantly less in comparison to the system-wide rate, but only because the CCCC rate includes all students in the system without reference to whether or not they reside within the boundaries of each district. Therefore, this participation rate cannot be used to forecast future enrollment. The 33 students per 1,000 participation rate would only be meaningful for forecasts if it was a goal to increase the share of PCC students who live within the District, while working to decrease the share that come from outside the District.

However, for purposes of forecasting future growth, by making an assumption that all 29,943 PCC students in Fall 2009 lived within the PACCD, then the participation rate would be 107 students per 1,000 adults (or approximately 10.7 percent of the adult population), exceeding the participation rate of 89.9 persons per 1,000 adults for the overall California community college system. Assuming this participation rate remains constant, applying it to the projected PACCD population in 2015 generates a forecasted enrollment of 31,933. This enrollment figure is almost equivalent to the CCCC forecast of 31,940 in 2015, which was based on an annual growth rate of 0.75 percent.¹⁶

Program Recommendations

The annual 3.9 per cent growth rate in enrollments (i.e. student headcounts multiplied by number of sections enrolled) that PCC experienced between 2003 and 2009 greatly exceeds the 0.75 percent annual rate increase in both student headcount and WSCH recently prescribed by the CCCC in the coming decade for PCC. As a result, if enrollment at PCC continues to grow at the historic annual rate of 3.9 percent, by 2014/15 total enrollment would be over 237,000. At the 0.75 percent annual growth rate, however, PCC will, in 2014/15, be funded for only a little more than 200,000 enrollments resulting in a funding shortfall of nearly 37,000 enrollments, or over 15 percent of total enrollments (see Table 5-10).

Table 5-10: Total College Enrollment Trends and Forecast

Historic 3.9 % Annual Average Growth		
2003/2004	2006/2007	2008/2009
160,605	173,163	192,157

Note: “Enrollment” is the headcount of students multiplied by the number of sections in which students are registered.

Source: PCC Institutional Planning and Research Office

Projected 3.9% Annual Growth		CCCCO 0.75% Annual Average Growth	
2014/15	2019/20	2014/15	2019/20
237,122	274,592	200,804	208,010

¹⁶ Total population in 2015 of 467,000 multiplied by 64 percent (adults 18 through 65) equals 299,000

Filling the Gap

If nothing else changes, in the coming years resources available to PCC appear unlikely to meet the continuing rise in student enrollment. Without adequate growth in enrollment funding or other adjustments to resource allocation within the College, an increasing number of prospective students may be denied enrollment.

If PCC accepts the 0.75 per cent annual growth rate, several strategic options are available to help address this gap. PCC could implement a proportional reduction of all divisions and disciplines regardless of current or projected levels of demand for those disciplines. This would exacerbate the current situation in which PCC is already constrained in its capacity to effectively respond to the diverse and varying needs of all its students. In particular, this option would make it more difficult for PCC to address the critical needs identified in the areas of basic skills, counseling, and transfer programs.

If it is a priority to direct more resources to basic skills classes and counseling to effectively serve the growing number of underprepared students, as well as to offer a sufficient number of transfer classes, then a more strategic response is required. Instead of an across-the-board funding cut, it may be more strategic to discontinue disciplines showing signs of low or reduced demand from students as indicated by declining enrollment, negative labor market trends, or other indicators.

Opportunity Areas

There are also a number of opportunity areas to build on existing institutional strengths and market positions. This could include efforts to further develop the already strong mathematics and science disciplines to provide students with the engineering, scientific, and technical education needed to fill the growing technology skills gaps in the nation's labor market. PCC's core competencies in these areas could also serve as a solid platform for creating new disciplines in the areas of sustainable green technologies.

Other possible opportunity areas include health sciences, as well as some of the creative arts disciplines offered by the Performing and Communications Arts division and Visual Arts and Media Studies. Lacking additional funding to develop the resources to serve these opportunity areas, PCC may not only need to discontinue disciplines with declining enrollments, but also eliminate duplicative disciplines (e.g. Statistics is offered in three divisions) or disciplines that can be easily accessed at other nearby community colleges or educational institutions (e.g. Culinary Arts) that reflect the unique core strengths of those establishments.

In conjunction with these strategic options, there is also the potential to use new educational methodologies as a way to meet rising enrollment demand and still expand access to classes and disciplines in spite of funding constraints. PCC could commit to a large increase in distance education programs (e.g. on line instruction) as a way to increase student enrollment levels. With this option, PCC would build on the progress it has already made, which has seen a 47 percent annual rate increase in distance education over the past five years.



6. INSTRUCTIONAL / STUDENT SERVICES REVIEW

6. Instructional / Student Services Review

Introduction

This chapter presents a summary of key points compiled from the EMP Program Questionnaires completed by PCC Instructional and Student Learning Services Deans and Managers. It is organized around three areas:

- Instructional Divisions
- Office of Instruction
- Student and Learning Services

Information within each program summary is presented in three parts:

- The forecasted **growth trends**
- The **strategic direction** for the program over the next five to ten years
- The **rationale** for the estimated growth trend

In most instances, growth trend estimates reflect solely and primarily the level of perceived student demand and do not take into account funding, space, or staffing constraints that may limit this growth. Each bulleted point uses text as it was written in the Program Questionnaires, with as little change in the original wording as possible.

Forecasted Growth Trends

The following charts list current PCC programs sorted alphabetically into three categories: Strong Potential, Stable Potential, and Low Potential. These constitute a forecast that takes into account historic enrollment trends, labor market considerations, and the emerging educational directions and priorities of the PCC (e.g. a growing focus on STEM and other similar programs). This information is provided as a resource for further discussion and analysis.

Table 6-1: Strong Potential*blue highlight = historic growth trend exceeds overall PCC growth trend**tan highlights = programs with negative growth*

Discipline	Instructional Division	Comments
American Sign Language	Languages	High growth but small program and only moderate faculty assessment, labor market
Anthropology	Social Sciences	High growth rate indicates continuing strong student interest.
Architecture	Engineering and Technology	Highest growth rate in Engineering Division; labor market demand cyclical but long term potential good following economic recovery; potential link to sustainable development/green industry practices.
Business Information Technology	Business and Computer Technology	Strong labor market demand for computer/IT specialists.
Composition	English	Core program essential for all basic skills and transfer programs.
Communication	Visual Arts and Media Studies	
Counseling and Career Services	Student and Learning Services	Expansion of counseling services identified as a critical need for both basic skills and transfer programs.
Dance	Performing and Communication Arts	Very high growth rate.
Dental Assisting	Health Sciences	Low growth rate but strong labor potential.
Dental Hygiene	Health Sciences	Low growth rate but strong labor potential.
Dental Laboratory Technology	Health Sciences	Strong labor market potential and high growth rate.
Distance Education	Office of Instruction	Significant growth in recent years and essential method for expanding student access to PCC educational programs.
Engineering Design Technology	Engineering and Technology	

Discipline	Instructional Division	Comments
Electrical Technology	Engineering and Technology	Small program but high growth rate; link to sustainable/green energy jobs.
ESL	Languages	Moderate growth rate but long term stable demand.
Fashion	Business and Computer Technology	Highest growth rate in Business division; link to southern California fashion industry.
Foreign Languages	Languages	Strong growth in Chinese and Spanish, moderate growth in other languages.
Health	Kinesiology, Health, and Athletics	Strong labor market.
Health Information Technology (new/desired)	Health Sciences	Very strong labor market potential; similar program offered at East LA College.
Life Sciences	Natural Sciences	Core strength and opportunity area at PCC.
Linguistics	Languages	Foundation for other language programs, very competitive with other college programs.
Mathematics	Mathematics	Core strength and opportunity area at PCC.
Medical Assisting	Health Sciences	Strong labor market potential
Medical Laboratory Technologist (new/desired)	Health Sciences	Strong labor market potential.
Nursing	Health Sciences	Negative growth but very strong labor market.
Physical Sciences	Natural Sciences	Core strength and opportunity area at PCC.
Radiologic Technology	Health Sciences	Above average growth rate and strong labor market potential.
Reading	English	Core program essential for all basic skills and transfer programs.
Sociology	Social Sciences	Large program with high growth rate; complements Anthropology.
Statistics	Mathematics	Core strength and opportunity area at PCC.
Special Services	Student and Learning Services	Very high growth rate

Table 6-2: Stable Potential

Discipline	Instructional Division	Comments
Accounting/Bookkeeping	Business and Computer Technology	
Anesthesia Technician (new/desired)	Health Sciences	Health labor market very strong.
Art History	Visual Arts and Media Studies	
Athletics	Kinesiology, Health and Athletics	
Apparel Skills	Community Education Center	
Automotive Technology	Engineering and Technology	
Broadcast Media (new)	Community Education Center	
Building Construction and Inspection	Engineering and Technology	High growth, but small, current labor market poor, but good long term potential, especially sustainable building practices.
Business Administration and Marketing	Business and Computer Technology	Negative -2.55% growth but overall labor market need.
Business Law and Paralegal	Business and Computer Technology	
Child Development Center	Social Sciences	
Computer Information Systems/Computer Science	Business and Computer Technology	Negative growth but overall labor market need.
Cosmetology	Community Education Center	
Creative Writing	English	
Culinary Arts	Engineering and Technology	Program growth disrupted by facility closure and later re-opening.
Design	Visual Arts and Media Studies	
Economics	Social Sciences	
Education	Social Sciences	Small program at PCC, long term strong labor market
Emergency Medical Technician	Health Sciences	
Engineering	Engineering and Technology	
Entrepreneur Success (new)	Community Education Center	
ESL/Americanization/Civic Education/ABE	CEC	
Film	Visual Arts and Media Studies	

Discipline	Instructional Division	Comments
Fitness Lifestyle Trainer (new)	Community Education Center	
Graphic Communications Technology	Engineering and Technology	
Health Promotions (new)	Community Education Center	
History	Social Sciences	
High School Diploma	CEC	
Humanities, Philosophy and Religious Studies	Social Sciences	
Journalism	Visual Arts and Media Studies	
Kinesiology	Kinesiology, Health and Athletics	
Library	Library	
Literature	English	
Machine Shop	Engineering and Technology	
Media Studies	Visual Arts and Media Studies	
Music	Performing and Communication Arts	
Photography	Visual Arts and Media Studies	
Political Science/American Institutions	Social Sciences	
Speech Communication	Performing and Communication Arts	
Speech/Language Pathology Assistant	Performing and Communication Arts	
Statistics	Social Sciences	Small program but with very strong growth rate; opportunity to link with Statistics in Math division.
Studio Arts	Visual Arts and Media Studies	
Television and Radio	Performing and Communication Arts	Low growth but ideal proximity to broadcasting industry.
Theater Arts	Performing and Communication Arts	
Welding	Engineering and Technology	

Table 6-3: Low Potential (forecast)

Discipline	Instructional Division	Comments
Administration of Justice	Engineering and Technology	Negative 1.2% growth
Business Math/Statistics	Business and Computer Technology	Duplicative of other statistics programs.
Business Office Systems	CEC	Small program with negative growth.
Electronic Assembly	CEC	Low labor market potential.
Electronics	Engineering	Low labor market potential and low student interest.
Fire Technology	Engineering and Technology	Small program with negative growth.
Hospitality	Business and Computer Technology	Modest growth; little student interest.
Parent Education	CEC	Significant drop off in recent years.
Printing Technology	CEC	Declining labor market demand.
Special Ed Technology	Social Sciences	

Strategic Directions and Rationale

	FACULTY STRATEGIC DIRECTION	RATIONALE
INSTRUCTIONAL DIVISIONS		
<p>BUSINESS AND COMPUTER TECHNOLOGY DIVISION</p> <p>Each specialization in the Business and Computer Technology Division provides students with the knowledge and background necessary to progress in a business (vocational) career or toward an educational degree. A variety of programs are offered including: Accounting and Bookkeeping, Business Administration and Marketing, Business Information Technology, Business Law and Paralegal, Business Mathematics and Statistics, Computer Information Systems and Computer Science, Fashion, and Hospitality.</p>	<p>Accounting/Bookkeeping</p> <ul style="list-style-type: none"> Develop more on-line sections for the transferable sequence of accounting classes. Offer a combination of classroom instruction, hands-on-laboratory work and on-the-job training to meet different learning styles. Hire more full-time faculty. Continue the Scholars Program partnership with CSULA. 	<ul style="list-style-type: none"> The number of students enrolling in our courses, successfully completing our program, and obtaining gainful employment in the community or transferring to a four-year school has increased over the last few years.
	<p>Business Administration and Marketing</p> <ul style="list-style-type: none"> The Department will continue to develop classes within certificate programs to meet student needs, adding both new classes and sections to increase enrollments and FTES. The Department will continue the high standards of completion in the courses and continue to encourage students to complete their educational plans. 	<ul style="list-style-type: none"> Students possessing business-related skills are in high demand in today's business and industry job markets. Ability to offer training outside of the traditional classroom through on-line instruction increases access.
	<p>Business Information Technology</p> <ul style="list-style-type: none"> Incorporate collaborative technologies, such as shared document libraries, meeting management, and Web conferencing into BIT courses. The BIT program needs new energy and cooperation from the institution to offer courses in an open entry/open exit manner. 	<ul style="list-style-type: none"> Students will be able to demonstrate collaborative skills such as building a document or presentation when working from remote locations, and will be able to conduct meetings using Web conferencing. Students will be able to enter and leave courses on their own schedule, so they can get in, get out, and get working.
	<p>Business Law and Paralegal</p> <ul style="list-style-type: none"> Maintain rigorous standards as required to continue current approval by the American Bar Association. Survey graduates, employers of graduates and the legal community at large stay abreast of changes in the law and technology that affect courses offered at PCC. Assess the possibility of offering courses in an on-line learning environment. Add Administration of Justice courses as electives in the program Provide training in the skills necessary to work with new legal applications software. 	<ul style="list-style-type: none"> Paralegals are in high demand, and the demand is expected to increase over the next several years. The Business Law Department supports both the Program and Business Administration and Accounting Programs within the Division. The Business Law courses give students an overview of law in the business context and prepare students for both business and paralegal careers. Almost all sections are filled as of the first day of each semester/session. With the current crisis in the banking, investment, and finance industries, there will continue to be paralegal jobs related to litigation that grows out of regulatory violations as well as in corporate compliance with current and new regulations. Paralegals continue to incorporate technology into the work they perform.
	<p>Business Mathematics and Statistics</p> <ul style="list-style-type: none"> The Business Mathematics and Statistics Program will become familiar with PCC's online philosophy, Web-tutor and online pedagogy with the plan to expand online offerings in Business Mathematics and Statistics. Improve the quality and number of tutors available for students. Communicate with Counseling and Articulation regarding prerequisites, placement, articulation, transferability, and growth of business mathematics classes. Increase communication with transfer institutions and other institutions offering similar courses. 	<ul style="list-style-type: none"> Growth in student numbers would create a greater demand on classrooms, office supplies and services. Growth in student numbers would increase student interaction with Student and Learning Services. Upgrading office computer systems with internet access is necessary to be compatible with the technology that the publishers are using to host online courses. Additional tutors would be available to assist students with assignments, homework, etc.

	FACULTY STRATEGIC DIRECTION	RATIONALE
BUSINESS AND COMPUTER TECHNOLOGY DIVISION <i>(2nd of 2 pages)</i>	Computer Information Systems/Computer Science <ul style="list-style-type: none"> ▪ Upgrade the computers in R-409 to provide appropriate lab space for various classes. ▪ Provide the necessary funding resources that will allow the CIS/CS faculty to become industry trained and certified in the highly demanded areas of Computer Support Specialists, Network and Computer Administrators, Desktop Publishers and Data Communications Analysis and Database Administrators. ▪ Through academic and industry partnerships re-evaluate the existing curricula and programs for medication, creation, or termination, especially in relation to new Certificates of Achievement and Certificates of Completion. 	<ul style="list-style-type: none"> ▪ Larger computer lab space will provide a better instructional environment and equipment housing for various classes. It will provide a better environment for student learning which will improve student success. ▪ At the conclusion of training opportunities for the faculty, the faculty will then be better qualified and current in their area of expertise. Faculty will be able to advise students as to the various certification processes. ▪ It is extremely important for the faculty to obtain and maintain current technological information and industry certificates for successful course offerings.
	Fashion <ul style="list-style-type: none"> ▪ Emphasize apparel design, technical design, construction and patternmaking along with fashion merchandising and costume design. ▪ Integrate computer technology into all courses and at a level with current applications in the field. ▪ Open additional avenues of transfer by working with universities outside of the local region. ▪ Recruit full-time faculty to create more continuity. ▪ Expand online instruction/long distance learning opportunities to serve a working population that needs instruction available outside of traditional classroom schedules. 	<ul style="list-style-type: none"> ▪ Due in part to the shift in the U.S. apparel industry from New York to the West Coast, a continued increase in student enrollment is expected. ▪ There are off-shore employment and production opportunities in Asia and developing countries. ▪ Ability to offer training outside of the traditional classroom through on-line instruction increases access. ▪ Several Cal State universities view the department as a feeder school for their fashion programs; nearly half of students in the department expect to transfer.
	Hospitality <ul style="list-style-type: none"> ▪ Develop highly skilled entry-level employees to perform in any area of the hospitality and tourism industry, including: lodging, food service, resort operations, sports facility operation, tourism, marketing, special events and festivals, and meetings and conventions. ▪ Promote the Hospitality Management program to increase student awareness. ▪ Review and revise as necessary courses in the various certificate programs to make them more appealing and accessible ▪ Develop on-line and hybrid courses in response to student interest and need for greater flexibility ▪ Provide instructors with training in new emerging technologies to facilitate on-line delivery of courses. ▪ Upgrade computer technology and software for traditional courses to stay current with industry demand. ▪ Expand and improve hospitality advisory committees and business partnerships. 	<ul style="list-style-type: none"> ▪ The number of certificates awarded in this area has been low.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>COMMUNITY EDUCATION CENTER</p> <p>The Community Education Center (CEC) provides noncredit education, training, and services designed to continuously improve California's workforce. The Center offers vocational, technical, and academic courses including High School Diploma Program, GED, Business Office Systems, Printing Technology, Apparel Skills, Fashion Retail, ESL, Adult Basic Education, Parent Education, enrichment classes for Seniors and disabled students, and a wealth of support programs. The cosmetology credit program is offered at the Center.</p>	<p>Apparel Skills</p> <ul style="list-style-type: none"> ▪ Prepare students for entry level positions in the fashion and garment industries. ▪ Link the Apparel Skills program with new coursework being introduced for the Fashion Retail program and the Entrepreneur courses at the Center. ▪ Evaluate what changes need to be made to the curriculum to assure students can demonstrate their competence in the latest skill areas. ▪ Upgrade the technology and equipment being used that automates sewing and design functions of apparel skills. ▪ Market the program both internally and externally (e.g. connecting better with business, the community and community organizations) to increase enrollment. ▪ Consider combining the Apparel Skills program with the Fashion Retail Academy and re-write the curriculum to offer both the theory of Fashion with the hands-on of developing Apparel Skills. 	<ul style="list-style-type: none"> ▪ The program experienced a slight decline in enrollment over the past five years, but there has been a promising increase during the past year. ▪ The job outlook is very favorable for the embroidery and window covering areas. It is the area with the most growth and job potential and continues to grow with time.
	<p>Business Office Systems</p> <ul style="list-style-type: none"> ▪ Introduce the new Business Office Systems Integrated Program, with 12 new courses with an emphasis to transition into a college credit business program. ▪ Prepare students for entry/intermediate-level office careers. ▪ Create a strategic staff development program to assure that all staff can teach all subjects in the program. ▪ Offer additional complementary modules such as Notary Public and Medical Filing. ▪ Market the program both internally and externally (e.g. connecting better with business, the community and community organizations) to increase enrollment. ▪ Offer tutoring and support services that will better prepare students upon program entry. ▪ Continue to offer a hybrid program where students have the option to come to mini-lectures for each module they take. ▪ Offer lectures in more of the modules. ▪ Explore ways to more effectively address the challenging socio-economic status of many of the students in this program, including language barriers. 	<ul style="list-style-type: none"> ▪ There has been a significant increase in enrollment over the last four years, including a 57.4% increase over the last two years. ▪ According to employment trends and outlooks, the skills taught in this program are still in high demand. ▪ The Business Office Systems Program is a highly viable alternative for the adult population seeking employment skills.
	<p>Cosmetology</p> <ul style="list-style-type: none"> ▪ Prepare students to take a State Board test to become a licensed cosmetologist. ▪ Consider developing a curriculum for a new skin care program. ▪ Reopen the evening program ▪ Provide more learning opportunities about what students can expect upon getting their first job. 	<ul style="list-style-type: none"> ▪ The State Board testing to obtain licensing ensures steady enrollment and continued program need. ▪ Most of the graduates have jobs the minute they pass their board. There are waiting lists each eight weeks that the program starts. ▪ The program is healthy based on current year growth. ▪ The program experienced a decline in enrollment over the last four years, but a significant increase in the most recent years. ▪ The program maintains waiting lists for students who want to enroll but cannot because of space. ▪ Growth of the program is predicted with the addition of 17 new student cubicle stations
	<p>Electronic Assembly</p> <ul style="list-style-type: none"> ▪ Prepare students for entry/intermediate-level assembly skills. ▪ Consider program discontinuance, as previously recommended. ▪ Alternatively, pursue space for the program on the Colorado campus, as part of the Engineering and Technology program, so students have a greater incentive to transition into a viable credit education program. 	<ul style="list-style-type: none"> ▪ Enrollments have plateaued at a level that is about 40% below enrollment figures from three to four years ago. ▪ The California Labor Market Information for Occupations in Los Angeles County – Ten Year Projections indicated a loss of over 1,000 jobs in this industry in PCC's region. ▪ Given the declining labor market data locally, within the county and statewide, the positive aspects of the program are nullified by the inability of students to obtain gainful employment and build viable professions in this industry.

	FACULTY STRATEGIC DIRECTION	RATIONALE
COMMUNITY EDUCATION CENTER (2 nd of 3 pages)	ESL/Americanization/Civic Education/ABE <ul style="list-style-type: none"> ▪ Examine the viability of Managed Enrollment, which will support shorter courses, increased attendance and commitment to the program. ▪ Provide adult students with the necessary life/work skills competencies in language and culture to participate fully in life in the U.S. and to become or remain gainfully employed. ▪ Implement an on-going marketing strategy to stabilize and increase student enrollment. ▪ Implement more student-needs sensitive curriculum to increase enrollment, learner persistence and successful student outcomes. ▪ Revise the ESL curriculum to meet the needs of newer students from other countries who are better educated and/or have professional backgrounds. ▪ Develop a formalized system to make the ESL/ABE programs feeder programs for other programs at CEC. ▪ Provide a bridge to the ESL credit program and other academic programs on the Colorado campus. 	<ul style="list-style-type: none"> ▪ Following a slight decline between 2003 and 2005, enrollment has been on a steady climb in more recent years. ▪ The program maintains waiting lists for students who want to enroll but cannot because of space. ▪ We have expanded to offsite community locations to accommodate the continual growth of the program
	High School Diploma Program/GED <ul style="list-style-type: none"> ▪ Submit an Enhanced Funding Application to the Chancellor's Office to obtain additional funding for all courses in the program. ▪ Provide adult students with the necessary life/work skills competencies in language and culture to participate fully in life in the U.S., and to become or remain gainfully employed. ▪ Provide assessment testing for all students in the program to initiate student engagement, identify gaps in student performance, educate faculty on intervention techniques, and track student progress. ▪ Focus attention on graduating, completing the program and being part of a group that is transitioning to college. ▪ Encourage and provide incentives for student attendance and completion (e.g. connect the CEC Career Center more closely with student personal goals). ▪ Resume a basic skills project to improve the performance of high school students through an assessment and intervention activity. ▪ Seek ways to match the program closely with traditional high school requirements. ▪ Consider adding CAHSEE testing as the final requirement for obtaining a diploma to be in concert with traditional public schools in California. 	<ul style="list-style-type: none"> ▪ The program is reasonably healthy based on current year growth ▪ With other high school outreach programs being introduced at CEC (CAHSEE, Stepping Up), the opportunity exists for an increase in future enrollments.
	Parent Education, Seniors and Disabled Adults Programs <ul style="list-style-type: none"> ▪ Combine the Parent Education Program with the Seniors and Disabled Adults Program to have one 50% coordinator over all programs with better communication and alignment of services and faculty support. ▪ Teach families how to be successful in child rearing. This is the single most effective and cost effective technique for improving society. ▪ Continue to offer classes off campus in churches or community centers. ▪ Provide observation classes where parents learn by observing their children interacting in the environment. ▪ Provide discussion classes that parents attend without their children. ▪ Develop more effective marketing strategies for reaching target populations. ▪ Encourage parents to take more courses, especially credit at PCC. ▪ Provide life skills training to disabled adults and mentally stimulating classes to seniors. ▪ Adopt SLOs to provide measurable evidence of the value that both students and the community are receiving from this program. 	<ul style="list-style-type: none"> ▪ Continuing strong attendance verifies that the classes are meaningful to parents. ▪ The Parent Education Program began in 1933 and has offered classes continuously in the community since then. It has become a family tradition in some cases. ▪ There are currently 38 classes being offered with a total of nearly 1,000 students attending. ▪ Program growth based on meeting the needs of the changing demographics of disabled adults and seniors, which is contingent on the College budget.

	FACULTY STRATEGIC DIRECTION	RATIONALE
COMMUNITY EDUCATION CENTER (3 rd of 3 pages)	Broadcast Media * <ul style="list-style-type: none"> Expose students to careers in television studios, video production companies, and media enterprises with hands-on experience in radio and television studio production. Enable students to seek entry-level employment in broadcast operations and production and opportunities for high paying jobs for self sustaining employment Establish consistency in employing instructors in the program who commit to the program. Grow the program to a level of justifying an instructor/coordinator position. 	<ul style="list-style-type: none"> Broadcasting provided about 316,000 wage and salary jobs in 2008. Broadcasting establishments are found throughout the country, but jobs in larger stations are concentrated in large cities, particularly in Southern California. Technology in the broadcasting industry is rapidly changing and forcing workers to continually update their skills.
	Fitness Lifestyle Trainer * <ul style="list-style-type: none"> Students will receive practical knowledge in fitness assessment and counseling techniques for individuals/groups to prepare them to transition to credit programs. Provide students with opportunities for high paying jobs for self sustaining employment. Create networks of community-based approaches to fitness and health Develop a complementary credit/non-credit certificate of completion program that will provide national fitness trainer certification. Grow the program to a level of justifying an instructor/coordinator position. 	<ul style="list-style-type: none"> Employment of fitness workers is expected to increase 29% over the 2008–18 decade, which is much faster than the average for all occupations. These workers are expected to gain jobs because an increasing number of people are spending time and money on fitness and because more businesses are recognizing the benefits of health and fitness programs for their employees. As health clubs strive to provide more personalized service to keep their members motivated, they will continue to offer personal training and a wide variety of group exercise classes. Participation in yoga and Pilates is expected to continue to increase, driven partly by the aging population, which demands low-impact forms of exercise and seeks relief from arthritis and other ailments.
	Entrepreneur Success* <ul style="list-style-type: none"> Implement the State’s objective of including Entrepreneur courses as required courses for various other non-credit short course programs. Link courses with small business development activities (grant supported) to increase course enrollments. Align program objectives with high school academies programs (business-related) to create accessible pathways into the program for interested high school students. Develop community-based program resources and organizations with the entrepreneur students who take classes. Grow the program to a level of justifying an instructor/coordinator position. 	<ul style="list-style-type: none"> California has the highest rate of new business growth for all states, at +4.0%. Small businesses represent nearly 40% of all employers, employ half of all private-sector workers and 39% of workers in high-tech jobs, provide 60% to 80% of the net new jobs annually, pay 44.3% of total U.S. private payroll, and produce more than 50% of nonfarm private gross domestic product, or a GDP of roughly \$6 trillion. Small businesses account for 52.6% of all retail sales, 46.8% of all wholesale sales and 24.8% of all manufacturing sales.
	Health Promotions* <ul style="list-style-type: none"> Educate students about health science credit courses to interest them in career opportunities through a degree or certificate program. Provide students with opportunities for high paying jobs for self sustaining employment. Create networks of community-based approaches to health promotion. Grow the program to a level of justifying an instructor/coordinator position. 	<ul style="list-style-type: none"> Employment growth in healthcare is expected to account for about 3.6 million new wage and salary jobs, or 19% of all wage and salary jobs added to the economy over the 2004-14 period. Wage and salary employment in the health care industry is projected to increase 27% through 2014, compared with 14% for all industries combined. Many of the occupations projected to grow the fastest in the economy are concentrated in the health care industry. For example, from 2004-14, total employment of home health aides-including the self-employed-is projected to increase by 56%, medical assistants by 52%, physician assistants by 50%, and physical therapist assistants by 44%.
	Printing Technology* <ul style="list-style-type: none"> Prepare students for in-house, entry-level electronic printing jobs and/or transition to a credit program. Grow the program to a level of justifying an instructor/coordinator position. 	<ul style="list-style-type: none"> Digital printing has become the fastest growing industry segment as printers embrace this technology. Employment in printing is expected to decline rapidly, but the need to replace workers who retire or leave the occupation will create job opportunities, especially for persons with up-to-date printing skills. Changing technology and new business models that make greater use of digital equipment and shorter-run print jobs will stem the rate of decline and provide job opportunities in an evolving printing industry. Opportunities should be best for those with computer, graphic design, and communications skills.

**New Program Recently State Approved*

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>ENGINEERING AND TECHNOLOGY</p> <p>The Engineering and Technology Division is composed of a diverse group of career and technical education and professional disciplines. The Division curriculum focuses on technical certificates in the following disciplines: Administration of Justice, Automotive Technology, Building Construction and Inspection, Engineering Design Technology, Electrical Technology, Electronics, Engineering, Fire Technology, Culinary Arts, Graphic Communications Technology, Machine Shop Technology and Welding Technology. Transfer programs are also available in: Architecture, Engineering Design Technology, Electrical Technology, Electronics, Engineering, and Graphics Communications Technology.</p>	<p>Administration of Justice</p> <ul style="list-style-type: none"> ▪ Expand course offerings over the next 3 to 5 years to accommodate the expected increase in students interested in law enforcement and private security careers. ▪ Recruit more special population and women into the program. ▪ Expand instruction in critical thinking, and written and oral communication skills, which are essential for law enforcement. ▪ Add writing courses tailored to law enforcement. ▪ Continue to use e-assignments and on-line activities to meet the needs of today's web generation. ▪ Expand instruction on how to protect society (Homeland Security) while protecting the rights of innocent people and those suspected of committing crimes. ▪ Develop and add courses using current forensic science within the focus of the criminal justice field. ▪ Establish an Administration of Justice presence on the college's web site. 	<ul style="list-style-type: none"> ▪ The unit has been consistently expanding over the past ten years with the addition of several new gateway sections to accommodate the demand in this field. ▪ With the tragedy of September 11, 2001, the nation has focused on Homeland Security and the additional need for both public and private law enforcement officers.
	<p>Architecture</p> <ul style="list-style-type: none"> ▪ Continue to plan and update the curriculum of the program to parallel the first two years of an accredited university architecture program. ▪ Enhance transfer rates by removing redundancies in the curriculum, and improve articulation and transfer process. ▪ Strengthen Visual Communications through clear course standards and expected outcomes to support the courses' transfer to private and public programs. ▪ Focus program on sustainable job opportunities and LEEDS training concepts. ▪ Add more online and hybrid instructional features. ▪ Provide greater guidance counselor/support for first semester students who are interested in Architecture as a major. ▪ Acquire funding for a part-time Visual Communications coordinator and hire one additional full-time faculty member. ▪ Provide on-going training in Visual Communications to adjunct faculty to keep staff apprised of new technologies and tools. ▪ Update and expand facilities to remedy physical workspace problems and create a design studio environment. 	<ul style="list-style-type: none"> ▪ This program has seen steady growth over the last seven years in both enrollment and increased course offerings. ▪ Although the Architecture Program is seriously compromised by funding, space, and staff constraints, enrollments remain relatively strong. ▪ The Architectural Program's three- to five-year strategic direction is to expand. Adding more online and hybrid instructional features and administration of a comprehensive plan that would increase enrollments by 10 to 20%. ▪ The U.S. Department of Labor Statistics states the national job outlook for architecture is very good with continued growth paralleling other growth occupations through 2014. ▪ "Eureka 2006-7", a study specific to California Architecture, states that the architectural profession will increase 36% in size by 2012.
	<p>Automotive Technology</p> <ul style="list-style-type: none"> ▪ Offer a wide variety of automotive certificates, all of which can be applied to an Associate of Science degree. ▪ Expand curriculum offerings around hybrid and alternate fuel vehicles through increased staffing, facilities, equipment and technology. ▪ Expand curriculum offerings around electricity/electronics and engine performance through increased staffing and courses. ▪ Reestablish a local student database to provide feedback from current and former students employed in the automotive industry. ▪ Engage in outreach to employers, area dealerships and independent repair facilities to inform students of opportunities. ▪ Increase marketing for the program in the PACCD area high schools. ▪ Explore the potential for offering some automotive courses online. ▪ Maintain and update necessary equipment and tools. ▪ Schedule courses to be more user-friendly by accommodating students who have part-time jobs. 	<ul style="list-style-type: none"> ▪ The number of students completing the required courses to receive these certificates continues to grow steadily. ▪ The demand for technicians is increasing as alternate fuel technology, hybrid automotive technology, and more complex electronic systems become standard in the automotive industry. ▪ The California Employment Development Department projects growth in automotive career opportunities over the next few years. ▪ A national shortage of trained automotive technicians still exists, and will continue to exist far beyond this decade. This is one career that is in no danger of being "outsourced."

	FACULTY STRATEGIC DIRECTION	RATIONALE
ENGINEERING AND TECHNOLOGY (2 nd of 6 pages)	Building Construction <ul style="list-style-type: none"> ▪ Focus on building practices used in the construction of residential homes. ▪ Focus program on green collar and sustainable job opportunities. ▪ Increase contextual math and English/communications skills. ▪ Recommend the addition of a course or program designed specifically for the residential wiring of the Model Home. ▪ Maintain current efforts and strategies to update coursework and programs. 	<ul style="list-style-type: none"> ▪ There is a waiting list of 10-20 students wishing to enter the program each Fall. ▪ Demand for the program will increase with the re-opening of the cabinet and millworking programs. ▪ As more sustainable practices are incorporated into the program, many seasoned construction workers may return for updates and additional training.
	Building Inspection <ul style="list-style-type: none"> ▪ Prepare students to achieve a working knowledge of all forms of building inspection ▪ Focus on the responsibilities of construction inspection to verify that contractors and subcontractors comply with architect's approved plans. ▪ Update curriculum to cover changes in building codes and standards. ▪ Develop curriculum focusing on sustainable building methods and services. ▪ Develop more online and e-learning experiences. ▪ Develop a Project Scheduling and Lean Construction practices course and/or certificate program. ▪ Teach math and English/communications skills in a contextual manner for the trades. 	<ul style="list-style-type: none"> ▪ All Assistant Inspectors are required to complete this certificate within two years of initial hiring. ▪ The PCC program is the only one of three in southern California and the only one in Los Angeles County. ▪ There is a need to replace "graying" population of inspectors.
	Culinary Arts <ul style="list-style-type: none"> ▪ Continue to develop the program to meet the challenge of direct competition from the nearby California School of Culinary Arts. ▪ Explore introducing basic skills (math, writing and reading) requirements as electives on a trial basis, transitioning into a prerequisite format a few semesters later. ▪ Offer a full Culinary Arts curriculum with additional courses including Hospitality, Nutrition and Restaurant Management. ▪ Explore the option of teaching Management and other courses using hybrid or e-learning formats to fit the needs of the working individual. ▪ Maintain a high volume marketing and promotional program through "Career " "Open House" events, and Visitation Days for high school students who are interested in Culinary Arts as a profession. 	<ul style="list-style-type: none"> ▪ The need for culinary students in the Food Services market place is extremely strong. ▪ Employment status is continually growing at the local, state and national level. ▪ Slight increase in tourism activity in Southern California. ▪ The demand has been strong for both the day and evening program. ▪ With a new facility, a change in our program's name to Culinary Arts, a new curriculum and a return of a full-time instructor, we can expect an upswing in our enrollment.
	Electrical Technology <ul style="list-style-type: none"> ▪ Continue to update the program to address changing trends in alternative energy sources, green collar and sustainable job opportunities. ▪ Develop short-term specialty classes that could be completed in eight-week formats (similar to the Occupational Skills Certificate) to help in satisfying current conditions for employment and trends within the industry. ▪ Continue to explore and develop methods of program delivery to address the diversity of the student population and the community. ▪ Acquire the peripheral equipment and software that will monitor power quality in a de-regulated electrical environment. ▪ Provide additional training on state-of-the-art electrical testing and measurement instrumentation. ▪ Secure additional funding to support a smaller ratio of students to instructional aides to achieve more one-on-one support for the students. ▪ Continue to improve the program to meet the theory requirements for full approval by the California Electrician's Certification Program. ▪ Pursue opportunities to re-develop our career pathway connections with several of the local feeder high school programs. ▪ Purchase additional equipment, software and receive additional staff development training to complete program goals and to maintain currency in the requirements of business/industry. 	<ul style="list-style-type: none"> ▪ This program interacts with several other PCC programs: Building Construction, Building Inspection, Basic Electronics, Electronics, Mathematics, Physics, and Engineering Design Technology.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>ENGINEERING AND TECHNOLOGY</p> <p><i>(3rd of 6 pages)</i></p>	<p>Electronics</p> <ul style="list-style-type: none"> ▪ Continue to serve the needs of the Automotive and Electrical Technology programs at PCC. ▪ Continue to increase the use of circuit simulation and design software in courses in conjunction with hands-on experiences. ▪ Rewrite the CISCO courses (which continue to have excellent student enrollment) to reflect numerous curriculum changes imposed by CISCO. ▪ Offer shorter certificate programs to provide students, including those already employed in the industry, access to advanced courses and newer technology needed in their employment. ▪ Continue ongoing meetings with the Electrical Technology instructor and Automotive Technology instructors to determine ways to improve program offerings. 	<ul style="list-style-type: none"> ▪ The electronics manufacturing industry in the USA at the present time is undergoing severe changes, as manufacturing and design are outsourced to countries with lower labor costs, reducing job opportunities for electronics technicians here in the USA. ▪ The program is outdated and is in need of elimination or combination with the Electrical Technology program. ▪ Over the past five years only three courses have been offered and regularly filled. ▪ Faculty lacks knowledge of the electronics marketplace and/or where the present jobs exist in the community. ▪ The CISCO computer-networking program, which is an interdisciplinary approach to training with the PCC Business and Computer Technology Division, continues to have excellent student enrollment and will continue to be attractive for the foreseeable future.
	<p>Engineering</p> <ul style="list-style-type: none"> ▪ Provide a valuable bridge to successful completion of an engineering degree at a four-year institution. ▪ Assure relevance of the curriculum and classroom instruction to existing engineering technology and national STEM models. ▪ Keep pace with classroom instruction methodologies that are similar to those found in four-year institutions ▪ Continue to incorporate computer-aided analysis elements into instruction and outreach. ▪ Bolster e-learning and online activities in this discipline. ▪ Develop the Engineering Webpage and on-line contact with classroom instructors to improve communication with students. ▪ Develop and establish relationships with local engineering enterprises. ▪ Involve engineering colleagues from transfer four-year institutions in curriculum recommendations. ▪ Increase enrollment through outreach activities and marketing activities. ▪ Create a method to track former students and assess their success rates at four-year institutions. ▪ Develop new methods of instruction delivery and classroom management to take advantage of the improved student learning environment in the new Industrial Technology Building. 	<ul style="list-style-type: none"> ▪ Overall enrollments in the Engineering Program have been fairly uniform over the past several years with recent increases in overall enrollment. We believe this is partially due to students recognizing the cost advantages of completing the first two years of an engineering program at the community college level. ▪ The Engineering Program remains very healthy and enjoys increased student enrollment every year.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>ENGINEERING AND TECHNOLOGY</p> <p>(4th of 6 pages)</p>	<p>Engineering Design Technology</p> <ul style="list-style-type: none"> ▪ Continue the evolution to a more problem-solving, industry-specific and project-centric approach that will prepare students to employ industry specific skills that go beyond drawings. ▪ Strive to become ABET-certified, which requires the use of design theory within the context of mathematical problem solving using modern technologies. ▪ Create “dynamic problem solvers” instead of “transactional technologists,” requiring collaboration amongst many programs and team teaching. ▪ Integrate specific training and standards established and used by the industry into the curriculum to better prepare students for employment as practicing professionals for company implementation of emerging and expanding technologies. ▪ Implement a new certificate program for GIS and Urban Studies that includes a GIS Specialist certificate of completion. ▪ Prepare students through effective curricula to become critical thinkers in applying technological and mathematical knowledge as well as materials and production processes to innovate and create. ▪ Develop new programs by incorporating technology and courses from other programs. ▪ Update Computer-Aided Manufacturing (CAM) technologies and add an adjunct faculty member. ▪ Partner with large companies to organize internships or arrange fieldtrips. ▪ Partner with local high school developing pathways. 	<ul style="list-style-type: none"> ▪ Schedule has been modified to accommodate growing enrollment numbers in Fall 2009 and Spring 2010. ▪ The EDT program is a valuable program meeting the needs of the STEM education model at the national and state levels.
	<p>Fire Technology</p> <ul style="list-style-type: none"> ▪ Keep the program in pace with evolving technology, firefighting techniques, and laws/regulations that impact fire service operations. ▪ Maintain and improve the quality of the courses through curriculum review and by refining course content. ▪ Change the Fire Academy Preparation program from a locally approved certificate to a State of California approved Certificate of Achievement. ▪ Increase the number of State Fire Marshall Certifications issued by the Program, and explore the issuance of outside certificates for individual courses such as those from the National Fire Academy (NFA), Federal Emergency Management Agency (FEMA), Office of Domestic Preparedness and other institutions. ▪ Offer hybrid and on-line sections. ▪ Relocate classes to a larger and more modern classroom. 	<ul style="list-style-type: none"> ▪ Since the spring 2005 semester enrollment has remained constant at approximately 160 students per semester. ▪ It is predicted that enrollment will remain the same or possibly increase gradually over the next three to five years. ▪ Many Fire Departments are growing and adding stations/positions in order to keep pace with population growth within their communities. ▪ Training in the Fire service areas will also expand to support homeland security and hazardous disposal concerns of cities, states, and the nation.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>ENGINEERING AND TECHNOLOGY</p> <p>(5th of 6 pages)</p>	<p>Graphic Communications Technology</p> <ul style="list-style-type: none"> ▪ Continue to build curriculum and technologies to meet changing training and equipment needs of the Graphics Communications industry. ▪ Within two years, develop a course (or courses) concentrating on digital production procedures, which include both electro-photographic (Xerox) methods and wide-format inkjet technologies. ▪ Increase training for digital imaging, packaging, screen printing, textile production, small business management and ownership. ▪ Develop internships in the digital production section of PCC's Office Services in-plant operation. ▪ Cultivate additional Pathways and MOU agreements with interested high schools. Establish a regular, routine, shared schedule for visitations, high school tours of the PCC campus and other activities. ▪ Develop and improve communication and recruitment efforts with local educational institutions (such as FIDM, Art Center, and other community colleges) to recruit and train students at advanced levels and in specialty areas not offered at those institutions. ▪ Develop a stronger web presence including links to and from significant web locations inside and outside the PCC school site. ▪ Improve marketing efforts campus-wide (Community Education Center students, Counseling staff, open recruitment opportunities, etc.) regarding employment opportunities in the graphic communications field and specific training available in the program. ▪ Continue on-going efforts to maintain and expand relationships with major vendors in the graphic communications industry to obtain state-of-the-art equipment, computers and software to meet current and future employment demands. ▪ Focus on the development and improvement of programs reflecting the technology in the Digital Printing arenas to consider the advances of large-format and high volume printing systems, software, and equipment. 	<ul style="list-style-type: none"> ▪ New equipment in the lithographic industry has become highly automated reducing the need for entry-level personnel traditionally trained in community colleges. ▪ Training will continue to be issue for widely accepted software applications. ▪ The screen printing area continues to reflect national trends where employment opportunities in the specialty and digital-imaged marketplaces are emerging.
	<p>Manufacturing Technology/Machine Shop</p> <ul style="list-style-type: none"> ▪ Attract and retain interested students by more effectively demonstrating the link between the Manufacturing/Machine Shop program and the world of advanced manufacturing technology. ▪ Develop advanced level curriculum in the computer automation, robotics and green collar segments of the manufacturing industry. ▪ Design activities with open-ended problems incorporating technology, materials and modern production/manufacturing processes. ▪ Pursue active partnerships with the small manufacturing firms as well as the large companies seeking to establish internships and field-trip destinations to showcase job opportunities for the future. ▪ Develop a comprehensive equipment replacement plan suitable for funding and supporting by stimulus and job opportunities outlined by the California Employment Development Department and the Workforce Development Boards. ▪ Train and hire new faculty with the skills needed for future growth and development of the Manufacturing program. ▪ Develop new streamlined training to take advantage of the resources of the new Industrial Technology Building. 	<ul style="list-style-type: none"> ▪ In the past three semesters (F-08 to present) enrollment in the program has been steady and shown a trend of growth. ▪ The program has not had the demand to justify offering courses during the summer or winter intersession. ▪ Faculty's lack of planning, their lack of cooperation within the discipline and in curriculum development, will continue to greatly affect the programs performance. ▪ An annual job loss of 8.5% is forecast among employees in the regional manufacturing sector, which is partially offset by approximately 24,000 new opportunities in production created by retirement or transfer to other occupational areas.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>ENGINEERING AND TECHNOLOGY</p> <p>(6th of 6 pages)</p>	<p>Welding Technology</p> <ul style="list-style-type: none"> ▪ Use new facilities as incentive to develop a more compact and sound program. ▪ Develop more course offerings to meet specialized demand of the marketplace. ▪ Add new courses in gas metal and flux core wire feed welding. ▪ Prepare students for the job of Welding Inspector by adding course materials into lecture and class activities. Establish a library of inspection related manuals and sample welds on small steel plates. ▪ Better prepare and motivate students to take the “L.A. City Written Certification Test” through targeted homework and quizzes. ▪ Consider other alternative methods for delivering instruction: tele-course, online, and hybrid within this program. ▪ Follow the lead of other area welding programs by providing more courses with modified lab hours. ▪ Acquire an in-house American Welding Society approved welding test lab status to make program competitive with other welding programs. ▪ Add additional full time welding faculty position. ▪ Improve the marketing through updated brochures and a website. 	<ul style="list-style-type: none"> ▪ The Los Angeles Times reports, “there are jobs available for trained welders in many industries including the chemical, petroleum and defense industries, as well as in the military.” ▪ Above average growth is projected for all types of welding jobs. These include metal fabricating, machine setters or operators, welders and cutters, and solderers and brazers to support state and national infrastructure activities.” ▪ The California Employment Development Department “Labor Market Information” Occupational Employment for Los Angeles County projects an increase in annual job openings for several welding related occupations.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>ENGLISH</p> <p>The English Division provides the core reading, writing and literature programs for all certificate, degree, and transfer students at PCC. Courses range from basic reading and writing skills to advanced composition and critical thinking, from literature courses for the non-major to British and American literature survey courses for the English major, from how to read a poem to how to write a poem. The division encompasses four programs: Composition, Creative Writing, Literature, and Reading.</p>	<p>Composition</p> <ul style="list-style-type: none"> ▪ Provide the core writing curriculum for all certificate, degree, and transfer students at PCC. ▪ Ensure that all students will progress as readers, writers and thinkers. ▪ Ensure the Writing Center is fully staffed and equipped with the required technological infrastructure to provide one-on-one individualized instruction for all composition students that require added assistance or remediation. ▪ Move to hybrid course and distance learning. ▪ Train faculty in online pedagogy, and provide the technological infrastructure (smart classrooms, internet access in all classrooms, technical support) to support online learning. Less classroom space may be needed. 	<ul style="list-style-type: none"> ▪ Reading and writing skills are the basis for success in academia and in the workforce. The composition program is a core program at PCC and must be supported by the institution with funding for full-time faculty, adequate and appropriate classroom space, and a solid technological infrastructure for instruction. ▪ The demand for English 1A (transfer level) will continue to increase as students have more and more difficulty getting into the CSU and UC systems. In addition, more students will require basic skills level classes to qualify for English 1A. It is hoped that other divisions will institute reading and writing prerequisites for transfer level classes; however this would increase the demand for composition classes, which are already in high demand. ▪ Many composition students need added assistance and, in many cases, remediation to help them achieve success and ultimately pass their classes. ▪ Enrollment figures were up 4.1% for the Fall 2008 Semester, including a 1.8% enrollment rise in the Composition Program. Enrollment limits were exceeded in 1A classes by 14%, and in 100 by 15%. This growing demand for composition courses puts additional pressure on a program that is oversubscribed and understaffed.
	<p>Creative Writing</p> <ul style="list-style-type: none"> ▪ Forge an integrated creative writing community on campus and beyond the borders of the campus. ▪ Increase the number of Creative Writing sections offered each semester. ▪ Offer online sections of Creative Writing. ▪ Develop a certificate program within the Creative Writing program. ▪ Provide <i>Inscape</i>, PCC's literary magazine, with its own budget, making it self-sufficient. ▪ Develop programs of community and institutional interest such as a Writer-In-Residence program. ▪ Reestablish and expand previously successful programs, such as the Creative Writing Summer Academy. 	<ul style="list-style-type: none"> ▪ Student interest in the Creative Writing program remains strong. ▪ Each course (English 5A, 6 and 8) has shown the ability to attract strong numbers of students in the daytime and evening. ▪ The new Associate of Arts Degree in Writing is a major opportunity for growth, in the form of additional faculty and course sections. The creation of this degree will increase the already strong student interest in the program.
	<p>Literature</p> <ul style="list-style-type: none"> ▪ Provide English majors the specialized knowledge and skills they need to succeed at transfer institutions. ▪ Provide vocational students the opportunity to improve their literacy skills. ▪ Maintain program strength and continue to offer a broad spectrum of courses each semester. ▪ When demand warrants it, courses that are not taught on a regular basis can be offered more often. No courses should be deleted. ▪ Incorporate technology and multimedia in more courses; will require state of the art equipment and classrooms. ▪ Offer literature classes as part of distance education. 	<ul style="list-style-type: none"> ▪ The recently instituted AA degree in Literature provides an opportunity to boost enrollment in specific courses and to offer courses that have not been offered recently. ▪ The Literature Program plays a key role in the college's efforts to meet its mission. It contributes to the academic success PCC students achieve in courses that require them to read, write and/or argue about the human experience.
	<p>Reading</p> <ul style="list-style-type: none"> ▪ Provide a cohesive, sequential and comprehensive curriculum that helps students develop reading skills that contribute to their academic, intellectual, and professional/vocational goals. ▪ Offer additional sections and hire additional full-time faculty and tutors. ▪ Expand, modernize and upgrade the Reading Center to accommodate continuing high demand from basic skills students. ▪ Develop a full-time Reading Coordinator position to parallel the Math and Writing Center Coordinator Positions. ▪ Offer online reading classes. ▪ Examine the possibility of instituting a reading requirement for the AA/AS degrees. 	<ul style="list-style-type: none"> ▪ In the next five to ten years the Reading Program will need to meet the needs of more and more students who are not reading at college level. ▪ Students are coming to PCC with a greater need than ever for basic skills classes. ▪ The UC and CSU systems are returning students to the community colleges to strengthen their skills when their math, English, reading, and ESL skills are below college level. This affords us renewed opportunities to improve and expand the Reading Program. ▪ The Reading Program cannot now offer enough classes to meet the needs of Basic Skills students: 28 additional computers, and the space for them, are necessary to accommodate current demand.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>HEALTH SCIENCES</p> <p>The Health Sciences Division offers an array of programs for students interested in entering the health care provider workforce. Programs lead to a certificate and/or degree as a Certified Nursing Assistant, Dental Assistant, Dental Hygienist, Dental Laboratory Technologist, Emergency Medical Technician, Licensed Vocational Nurse, Medical Assistant, Radiologic Technologist and Registered Nurse. There is also a career ladder option from the Licensed Vocational Nurse program to the Registered Nurse program and from the Dental Assisting to the Dental Hygiene programs.</p>	<p>Dental Assisting</p> <ul style="list-style-type: none"> ▪ Develop a central inventory system for ordering and control of supplies. ▪ Increase the supply budget. The current budget has not been increased in over ten years, while the number of students and the cost of supplies have grown significantly. ▪ Provide courses online as well as in person to accommodate the non-traditional student and keep with college, state and national trends leaning towards alternative course options. ▪ Hire more faculty. 	<ul style="list-style-type: none"> ▪ According to the U.S. Department of Labor, statistics show an increasing demand for qualified dental assistants with a great outlook for jobs in the future.
	<p>Dental Hygiene</p> <ul style="list-style-type: none"> ▪ Program expansion will require funding for more faculty, space, equipment and supplies. ▪ Remodel the existing clinic area to more efficiently utilize the space available and to accommodate both right-handed and left-handed students. <ul style="list-style-type: none"> - The clinic was originally built in 1970. The average wear and tear time for the furnishings and cabinetry is approximately 10 years. There have also been many changes in the standards of infection control. - More left-handed students are being accepted into the program while the original design of the clinic remains for right-handed operators. ▪ Change the clerk contract from 11 to 12 months and upgrade the position to Clerk II. ▪ Hire a third full-time instructor for our program. If possible, the third full-time instructor should be a dentist. The original program plan and accreditation standards were designed for three full-time faculty. We have only two. ▪ Purchase 18 computers and needed software for the clinic. ▪ Purchase additional digital radiography equipment, including a digital panograph machine. The current industry trend is towards digital and paperless record keeping. ▪ Develop a plan for the college to be sure prescription drugs required for the medical emergency kit are always available. 	<ul style="list-style-type: none"> ▪ According to the website Career Planner (http://www.careerplanner.com/Job-Outlook/Dental-Hygienists.cfm) <ul style="list-style-type: none"> - dental hygienists rank among the fastest growing occupations, with job prospects expected to remain excellent, and with more than half of the hygienists working part-time with flexible schedules – described as a distinctive feature of the job. - Full-time, part-time, evening and weekend schedules were noted to be widely available, with dentists frequently hiring hygienists to work only two or three days a week. - Employment was expected to grow by 30% through 2016.
	<p>Dental Laboratory/Technology</p> <ul style="list-style-type: none"> ▪ Expand Dental programs. A comprehensive expansion will produce highly favorable results for the Dental programs and Division as a whole and is worthy of immediate implementation. ▪ Expand courses and increase/modify advanced level curriculum in order to respond to future industry needs effectively. ▪ Remodel, upgrade and expand program facilities, including additional labs. ▪ Increase in the DLT program budget to cover all of the above. ▪ Upgrade instructional materials to reflect current technology (i.e. digitized slides and teaching aids). 	<ul style="list-style-type: none"> ▪ It is expected that the industry will demand a highly educated, skilled and sophisticated dental technician in future years. It is expected that there will be industry pressure to increase the level of training in future years due to changes in training and education of dentists. ▪ The program has room for considerable growth based on a survey of industry demand. The program has shown strength and growth over the past five years. ▪ It is expected that demand for Dental Laboratory Education will increase over the next five years as evidenced by industry reports, letters received from industry representatives, industry surveys, and in-depth articles written by numerous authors in related trade and scientific journals. ▪ Over the next three to five years, the DLT Program expects to offer additional post-advanced level courses in all five core classes, dental computation and dental communication, instrumentation, and implantology.
	<p>Emergency Medical Technician</p> <ul style="list-style-type: none"> ▪ Explore developing a “for credit” recertification class. ▪ Create a full-time program director position (inferred). ▪ Add needed instructional facilities with dedicated audiovisual equipment for classroom and laboratory instruction. ▪ Acquire and incorporate available software programs into the EMT program to offer students additional opportunities for learning. This could be achieved with little additional cost to the program. A self-study EMT computer laboratory is the most obvious application. 	<ul style="list-style-type: none"> ▪ The demand for the EMT course has consistently increased. Population growth and the aging population (increased percentage of the population over 65 years of age) will dictate the need for more health care providers – including emergency medical technicians. ▪ The EMT Program has the opportunity to continue providing quality vocation health care training and possibly increase the number of sections offered annually.

	FACULTY STRATEGIC DIRECTION	RATIONALE
HEALTH SCIENCES (2nd of 3 pages)	Medical Assisting <ul style="list-style-type: none"> ▪ Implement a Certified Phlebotomy Technician course under Medical Assisting, utilizing adjunct faculty. There is a great demand for phlebotomy certification and this would draw more students for the college. ▪ Reconsider the limited permit to take radiographs in the ambulatory setting under the medical assisting program (Advisory Committee recommendation). ▪ Assign more staff to help increase enrollment, with greater attention paid to those applying (Advisory Committee recommendation). ▪ Explore those courses and content that lend themselves to multiple delivery methods, including online and distance learning. ▪ Increase funding and number of faculty. 	<ul style="list-style-type: none"> ▪ A major challenge for this program is the under-enrollment of students. Focus in the division has been on the nursing program and nursing shortages but no concerted efforts appear to be directed towards filling the Medical Assisting program. ▪ The medical assisting profession is projected to be one of the fastest-growing health care professions by the U.S. Department of Labor Statistics. More medical assistants will be needed in ambulatory settings to care for patients who leave acute care hospitalizations for follow-up care in the ambulatory setting.
	Nursing (RN, LVN, CNA) <ul style="list-style-type: none"> ▪ Increase retention. Currently, as per our RN program statistics, the retention rate is between 50 and 60%. Statewide retention rates are higher. Students have consistently come to the Nursing programs with poor basic learning skills, which is the primary contributing factor for low program retention rates. ▪ Continue to expand the nursing programs. We would like to explore adding capacity to address student needs, such as creating evening and weekend programs, additional certificate programs and target programs. ▪ Increase the number of clinical rotations offered in the evenings and on weekends. ▪ Hire faculty. One full-time and one part-time position in the lab still does not adequately meet the needs of the students in the nursing programs. ▪ Provide greater administrative support for adding sections to the programs. ▪ Explore content and courses amenable to alternate instructional delivery, such as interactive on-line video format, simulation technology, etc. 	<ul style="list-style-type: none"> ▪ The U.S. Department of Health and Human Services' Health Resources and Services Administration predicts a 12% shortage of nurses by 2010, growing to 20% by 2020. ▪ Community pressure to increase the number of nursing graduates is great. There are no signs that demand will decrease any time soon. ▪ The nursing programs are strong and productive. For the Fall 2008 semester, the RN program received just under 600 applications for 60 slots and the VN Program received 112 applications for 33 slots. ▪ The Registered Nursing Program awards one of the largest numbers of certificates of any program the college offers, with the Certified Nursing Assistant course closely following in the number of certificates.
	Radiologic Technology <ul style="list-style-type: none"> ▪ Shift focus from recruitment to providing tools that the student needs to thrive, perform, and progress in the learning process. ▪ Keep up with the technology. ▪ Revise curriculum. The program needs to maintain a curriculum that is relevant to industry skills and knowledge and that meets the needs of the students and their schedules. Further revise curriculum to meet didactic needs and remain in compliance with the national accrediting agency as well as the national and local assessment agents. ▪ Develop or adopt an assessment tool to evaluate the language and communication skills of students who are accepted into the program. ▪ Address the increasing challenge of developing language and communications skills. Healthcare delivery is about effective communication with peers, co-workers, physicians and patients. ▪ Meet the need for more educators. The need for educators will increase as the need for technologists continues to grow. ▪ Work with other educators to develop a curriculum that involves Digital and Computerized Radiography, as well as other modalities. ▪ Improve or reduce the attrition rate, which not only reflects the student's success but the success of the program. Increase the number of examinees who pass the national exam on the first attempt. ▪ Keep up and continue to be current with the technology that is out there. 	<ul style="list-style-type: none"> ▪ The demand for qualified professionals in Diagnostic Imaging has continued to increase. ▪ Over a period of five years, the PCC Radiologic Technology program has experienced an increase in applications. This growth is due to the demand for educated professionals in the radiology field. ▪ The strong interest in the program has been increasing. High participation in the bi-annual general orientation sessions indicates a strong interest in students wanting to get into the program. ▪ Labor market indicators predict a 15% increase in workforce needs by 2016.

	FACULTY STRATEGIC DIRECTION	RATIONALE
HEALTH SCIENCES <i>New Discipline</i>	Anesthesia Technician <ul style="list-style-type: none"> Prepare program graduates to assist the anesthesia care team in the surgical environment and become an integral member of the anesthesia patient care team. 	<ul style="list-style-type: none"> The American Society of Anesthesia Technologists and Technicians (ASATT) reports a national and statewide need for quality certified anesthesia technicians. Certification is becoming standard for new hires and, effective 2009, ASATT began requiring a minimum Associate of Science degree to be eligible for certification.
<i>Future Plans</i> <i>(3rd of 3 pages)</i>	Health Information Technology <ul style="list-style-type: none"> Expand opportunities and pathways for Medical Assistant positions. Electronic health record technology improves health outcomes and is positioned to develop rapidly as EMR is adopted and implemented state and nationwide. 	<ul style="list-style-type: none"> There is a California state-wide initiative to achieve electronic health record implementation in over 90% of health providers in the next five years. There is a strong and urgent need to develop the HIT workforce needed.
	Medical Laboratory Technician <ul style="list-style-type: none"> Expand opportunities and pathways for Medical Assistant positions, laboratory technicians and track for transfer for education in clinical laboratory scientist. 	<ul style="list-style-type: none"> Among the “hot jobs” in one of the fastest growing sectors of the economy (health care) is the medical and clinical laboratory technologist with an expected 15% growth by 2016. The education/training requirement is an associate degree.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>KINESIOLOGY, HEALTH AND ATHLETICS DIVISION</p> <p>The Kinesiology, Health and Athletics Division promotes the trichotomy development of the students through conceptual learning and active participation in health, kinesiology and athletics. The division believes that health, kinesiology and athletics are important components of the total educational process. Opportunities are provided for students' cognitive growth concerning healthy lifestyles, social skills, mental and emotional values and physical development through physical activity and competition.</p>	<p>Athletics</p> <ul style="list-style-type: none"> ▪ Re-examine the vision for this program and develop new courses that will help student athletes achieve success academically. ▪ Continue to examine ways to provide support services for those student athletes in Basic Skills classes: <ul style="list-style-type: none"> - Hire college interns to assist coaches with monitoring and holding study halls for each intercollegiate system. - Create a Summer Bridge Program, study skills workshops, and a Saturday tutoring service for student athletes. - Create a life skills class for student athletes who are enrolled in basic skills academic classes. - Establish on-going workshops on learning styles. ▪ Create more online and hybrid classes to interface with students. ▪ Create a "common" final for all intercollegiate classes to assess outcomes. ▪ Work with faculty in other disciplines to discuss pedagogical strategies that will help student athletes. ▪ Develop certificate programs in recreation and coaching. ▪ Maintain the upkeep of facilities in the Division for all programs. ▪ Build soccer, softball and baseball fields, or a multi-purpose field for softball and soccer, on campus. ▪ Develop new programs for women's tennis and golf. 	<ul style="list-style-type: none"> ▪ Our Athletic Program has for years offered excellent instruction, driven by the consistency of full-time faculty, both teaching and coaching. However, due to budget cuts, the following full-time coaching positions have not been replaced: softball, baseball, badminton, and track and field. ▪ Over the course of seven years, the Division has only hired four full-time coaching positions: women and men's basketball, women's volleyball, and men's football. We have not had a full-time baseball head coach in 15 years despite its rich history and tradition at our college. ▪ Many student athletes often enroll in college in order to pursue athletic competition; however, without the necessary academic support, they withdraw. This at-risk student population has specific needs, which the Athletic Zone meets. ▪ Based on research on student athletes' success, retention, and persistence levels in 1998, before the Athletic Zone was established, the rates were 65.65%, 83.72%, and 83.82% respectively. Since 1998, those statistics have improved for most of the sports. ▪ Based on data from Institutional Planning and Research Office, the Summer-Fall 2007 enrollment for the Intercollegiate Program was 392. We have shown significant increase in Summer-Fall 2009 to 674 student athletes in the Athletic Program. ▪ Employment of athletes, coaches, sports officials, umpires, and related workers is expected to increase by 15% from 2006-2016, which is faster than the average for all occupations. This growth will happen as the general public continues to participate in organized sports for entertainment, recreation, and physical conditioning. Careers will increase in this area with expansion of school and college athletic programs and the growing demand for private sports instruction. ▪ Among those employed in wage and salary jobs, 47% held jobs in public and private educational institutions. Another 13% worked in amusement, recreation, golf, tennis clubs, karate schools, swim clubs, etc. About one out of five workers in these occupations were self-employed, earning fees for lessons, scouting, or officiating assignments. ▪ Additional Women's programs to address Title IX compliance.
	<p>Health</p> <ul style="list-style-type: none"> ▪ Provide staff and student professional development workshops on health and wellness issues. ▪ Upgrade the technology in classes to create Smart classrooms and work on improving the use of technology for classroom instruction. ▪ Update and strengthen health curriculum to meet CSU and UC requirements. ▪ Collaborate with the Natural Sciences Division to incorporate their BioPAC Physiological systems into our Health classes. ▪ Collect data on retention rates and enrollment growth for the courses in this program. ▪ Develop a "common" final to assess program outcomes. ▪ Hire more full-time faculty members who can teach health classes. 	<ul style="list-style-type: none"> ▪ The Division's Health Program has grown in the last three years. Based on data from Institutional Planning and Research Office, in Summer-Fall 2007, there were 859 students enrolled in our Health classes. This total increased to 1,017 in Summer-Fall 2009. There has been a significant demand for Health classes. There are two primary reasons for this increase: <ul style="list-style-type: none"> - The inception and popularity of health magazines and a growing concern and interest in personal well-being; and - An increase in the number of students at the community college who are taking elementary and secondary education courses. Health classes are required for students interested in teaching at the elementary and secondary levels. ▪ Employment for health-related fields is expected to increase 30% over the 2006-2016 decade, much faster than the average for all occupations. Health-related occupations from physical therapists to physician assistants are always in demand. ▪ Health care should grow significantly as the result of advances in technology, increasing emphasis on preventative care, and an increasing number of older people who are more likely to need medical care.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>KINESIOLOGY, HEALTH AND ATHLETICS DIVISION</p> <p><i>(2nd of 2 pages)</i></p>	<p>Kinesiology</p> <ul style="list-style-type: none"> ▪ Establish a Wellness Center in the W Building. ▪ Develop a science lab that would test for body fat and conduct exercise physiology/biomechanics analysis. ▪ Develop certificate programs in personal training, first aid, and recreation in collaboration with the Community Education Center. ▪ Hire a Wellness Center Coordinator to oversee the facility. ▪ Create a common exit exam and collect data on retention rates and enrollment growth for the core Kinesiology classes. ▪ Collaborate with faculty in the Natural Sciences Division and introduce classes geared toward kinesiology majors. ▪ Implement an intramural program for students in the Division who are not athletes. ▪ Create professional development opportunities for instructors who are teaching kinesiology classes. 	<ul style="list-style-type: none"> ▪ Based on data from Institutional Planning and Research Office in Summer 2007 there has been a gradual increase in enrollment in Kinesiology classes. The total enrollment from Summer-Fall 2007 was 3,255 and that number increased in Summer-Fall2009 to 4,041. Majors in Kinesiology have grown from 190 in 2004 to 307 in 2009. ▪ Although there are fewer sections, enrollment has grown by 786 in the last two to three years. ▪ Employment is expected to increase for Kinesiology majors. Most of the job prospects can be found in physical fitness facilities, health clubs, and recreation centers. Approximately 8% of fitness workers are self-employed; many of these are personal trainers. Part-time jobs will be easier to find than full-time employment. Athletic Training jobs are projected to grow much faster than the average by 25% from 2006 to 2016. ▪ Health club membership has grown significantly driven by concern with physical fitness.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>LANGUAGES</p> <p>The Languages Division brings together 13 foreign languages, English as a Second Language (ESL), American Sign Language (ASL) and Linguistics. The foreign language program has a broad spectrum of classes ranging from language courses to courses in civilization, culture and literature. The ESL program builds the communication foundation for all students who need to master the language in order to successfully perform at the College.</p>	<p>American Sign Language</p> <ul style="list-style-type: none"> ▪ Provide communicative sign language skills for persons who wish to apply those skills in various lines of work or further study. ▪ Promote cultural awareness of the Deaf Community. ▪ Create spaces where ASL students can gather and learn from each other, increasing their skills in ASL and their knowledge of Deaf culture. ▪ Develop an ASL interpreting program as a means of preparing students for a possible career path involving video interpreting. 	<ul style="list-style-type: none"> ▪ An area of growth within the context of ASL is the field of video interpreting, already the largest employer of certified ASL interpreters. Over the next five to ten years, PCC should develop an ASL interpreting program as a means of preparing students for a possible career path involving this technology. ▪ Since ASL is a visual/gestural language, synchronous and/or asynchronous web-based delivery could become a key means of content delivery to a significant student body. This would require an institutional investment in the necessary classroom technology and server capacity. ▪ The ASL program consistently has grown in numbers of sections offered and enrollments. The program needs a full-time ASL instructor to add stability to the program and develop new curriculum. Currently, PCC loses ASL instructors to full-time positions at other institutions, leading to a turnover that disrupts program continuity.
	<p>English as a Foreign Language</p> <ul style="list-style-type: none"> ▪ Build the communicative foundation for all students who need to master the language in order to successfully perform at the College. ▪ Encompass both a transfer curriculum and learning activities designed to improve the economic condition and quality of life of the diverse communities within the College service area. ▪ Prepare our students for success both at the College and beyond. ▪ Expand the vocational component of the ESL curriculum to include additional sections of ESL 470 and the proposed ESL 172 individually focused in those vocational areas in which large numbers of ESL students enroll. ▪ Develop ESL 33A/B-GE-paired courses across many disciplines in the Social Sciences, Natural Sciences, and other language-heavy GE courses, beginning with those in which ESL students tend to enroll in the highest numbers and/or those facing acute language-related challenges. 	<ul style="list-style-type: none"> ▪ For non-native speakers of English, command of the language is the most fundamental aspect of all later student performance and future success in the workforce. Inadequately prepared students fare poorer in all actively produced examination measures (i.e. non-multiple choice). Moreover, for those students directly entering the workforce, command of English significantly influences career opportunities and advancement. ▪ The ESL Program continues to play a critical role in the education of foreign-born and second-language speakers of English at Pasadena City College. The credit ESL program's already large enrollments (3,697 enrollments; 2,552.55 FTEs; 2,337 unduplicated headcount in 2007-08) do not reflect the large number of students who continue to be turned away every semester due to limits on course offerings. ▪ According to the 2000 U.S. Census, the Western region of the U.S., with slightly more than 20% of the U.S. population aged 5 and over, has the highest proportion of individuals (37%) who speak a language other than English at home. An even greater proportion of individuals in California and Los Angeles County reported speaking a language other than English at home: 39.5% and 54.1% respectively, with the proportion of foreign-born individuals in California and Los Angeles County at 26.2% and 36.2% respectively.
	<p>Foreign Languages</p> <ul style="list-style-type: none"> ▪ Provide instruction in foreign languages, cultures, and civilizations. ▪ Prepare students to complete two years of satisfactory language requirements for transfer to a four-year institution, and/or receive an associate degree or certificate in a vocational or occupational field, including retraining for employment. ▪ Expand the program by offering a variety of language and culture courses in order to meet the demands of the diversified student body. ▪ Continue our efforts in the development of web-based materials. ▪ Hire a full-time technician to manage the foreign language lab and to provide assistance during our class session in the lab. ▪ Develop a semester program abroad, one semester in Spain and the next semester in an elected Latin American country. 	<ul style="list-style-type: none"> ▪ Teaching foreign languages embraces the goals and mission of Pasadena City College by providing students with the tools necessary to thrive in a culturally diverse society and by preparing them with rigorous and high quality instruction. ▪ We offer a wide array and variety of languages: 13 specific languages from six language groups, including Asian, Arabic, Germanic, Romance, and Slavic languages. ▪ As China continues to be one of the fastest growing economies in the world, many US companies are beginning to make significant investments in China. Consequently, more students in the US show interest in learning Mandarin Chinese and understanding Chinese culture. ▪ Recognizing the high frequency with which Spanish is employed in the Southern California area, we teach proficiency and eventual fluency to our students in Spanish. Also, since over one-third of our student population is of Hispanic/Latino origin, our program has particular relevance at Pasadena City College.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>LANGUAGES</p> <p><i>(2nd of 2 pages)</i></p>	<p>Linguistics</p> <ul style="list-style-type: none"> ▪ Foster an interest in learning about the various aspects of human languages. ▪ Provide opportunities for community college students to study linguistics in transfer-level courses and offers courses that will serve to encourage interested students to pursue a linguistics major, as well as other linguistics-based majors. ▪ Support other academic and professional career programs (e.g., speech-language pathology, communication, education). ▪ Develop synchronous and/or asynchronous web-based delivery as a means of content. 	<ul style="list-style-type: none"> ▪ Linguistics Program serves as an academic foundation for other Languages Division programs, as well as for many other courses and majors at the college. ▪ PCC has the strongest community-college linguistics course offerings in the Los Angeles metropolitan area. ▪ Other PCC programs supported by Linguistics – such as American Sign Language, English as a Second Language, foreign languages, speech-language pathology, and teacher education – are growing and expanding.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>LIBRARY DIVISION</p> <p>The Shatford Library is the College's gateway to a world of information resources. In this progressive library, students find a substantial collection of print and online resources that have been carefully selected to meet research needs. Reference and research help is available all the hours the library is open and questions may be asked by phone or from the library's website. The library has several large computer labs for student use with access to the Internet and a variety of software applications. The library offers workshops, credit classes in basic library and Internet research skills and a Library Technology Certificate vocational program.</p>	<p>Library</p> <ul style="list-style-type: none"> ▪ Plan for a continuing shift by academic programs of the college toward the use of e-books as well as online digital resources and the resulting greater reliance on library resources and services. ▪ Adapt library resources and services to the rapidly accelerating use of digital information for instruction regardless of place, time or format. ▪ Consider expansion of the Library as the College embarks on the 2020 Master Plan process. Collaborative student experiences need additional collaborative spaces. ▪ Maintain and improve hardware, software and infrastructure to better provide information resources to a diverse population within the Library and through remote access and through distance education. ▪ Streamline and automate staff processes with new technologies. ▪ Explore options and opportunities for delivering course reserve materials to students (i.e. reading room, RFID, digital textbooks, etc.) ▪ Expand collaboration with the Career Center, Transfer Center, New Media Center and other departments to provide greater access to campus resources for students via the Library catalog. 	<ul style="list-style-type: none"> ▪ Gate counts reveal almost a half million entrances into the library annually. ▪ The Library has become a center of student academic activity, but as a consequence demand is exceeding maximum seating capacity and the noise generated by increased use has become a significant problem. ▪ The shift to online registration and orientation has impacted staff and resources, and has adversely affected access to Library resources during peak registration period, as there are few other open access computers available on campus. ▪ Heavy demands on library resources and services are expected to continue over the next five to ten year period.
	<p>Library Technology Program</p> <ul style="list-style-type: none"> ▪ Continue work on refining assessment tools for course and program SLOs to provide feedback to instructors and administrators in order to make improvements. ▪ Consider electronic portfolios for students to track their progress in the program. Integrate the portfolio into the program curriculum. ▪ Consider adding a course in Metadata cataloging. ▪ Provide courses in new technologies, including digitization and preservation, to increase the marketability of program students. ▪ Consider participation in ALA's Library Support Staff Certification project. ▪ Promote more field practice, internships and volunteer opportunities in the field. ▪ Consider distance learning opportunities. 	<ul style="list-style-type: none"> ▪ The number of employment opportunities for library technicians and assistants is expected to grow by approximately 10% between 2008 and 2018.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>MATHEMATICS</p> <p>The Mathematics Division provides courses for students at all levels of computational ability, from pre-algebra to calculus to differential equations. The division offers 37 courses in mathematics for students who need review in basic math skills, who need to meet graduation or transfer requirements, and who have mathematical requirements related to their individual majors.</p> <p>The Division has a long history of excellence, many of its students winning awards in competitions with those from both two- and four-year institutions.</p>	<p>Mathematics</p> <ul style="list-style-type: none"> ▪ Increase offerings throughout the Math curriculum to meet very high and growing demand; especially in the Transfer area. ▪ Obtain additional general classroom space under the division’s “first call,” sufficient to accommodate current class offerings as well as potential growth. ▪ Increase ratio use of full-time to part-time faculty instructional hours. ▪ Increase the use of computers and enhanced media in the classroom. ▪ Provide classroom-based instruction for most Math courses, rather than shift to online courses. ▪ Increase faculty development opportunities, especially in the Basic Skills area, and most particularly for instructors in the new, lowest level math course offered (Math 450, Numerical Foundations). ▪ Explore use of modular learning blocks to offer remediation, perhaps in hybrid format, for those students unable to pass a basic skills course. ▪ Continue to offer the high-level math classes that have successfully attracted high quality students and given PCC a strong reputation among Math programs at the community college level. ▪ Provide additional space for a combined Basic Skills Lab, Transfer Lab, and enlarged Tutor space. ▪ Increase use of common assessments to evaluate student success and encourage use of more effective instructional techniques. 	<ul style="list-style-type: none"> ▪ Unable to meet current student demand by a significant margin at all levels of Math courses; virtually all Math classes have been over 100% subscribed for years, with 10 to 50 students wanting to add each class every semester. ▪ An additional 20 to 40 more sections per semester, and 10 to 20 more per intercession, for a total of 60 to 120 more sections per year, are needed just to meet current demand. ▪ Demand is expected to continue to grow significantly for the foreseeable future. ▪ Although demand exceeds supply in both the Transfer and Basic Skills areas; the gap between demand and supply is proportionally greater in the Transfer area. ▪ Current full-time to part-time instruction ratio is 65%/35%, well below the state standard of 75%/25%. ▪ Demand by instructors for enhanced media technology in the classroom is growing rapidly, especially due to online homework systems that are paired with textbooks, and which are widely regarded as enhancing student success.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>NATURAL SCIENCES</p> <p>The Natural Sciences Division serves a dual mission of educating students majoring in Science to meet the increasing demand for a well-trained scientific workforce as well as preparing general education students to be members of a scientifically literate citizenry. The Division encompasses two divisions, Life Sciences and Physical Sciences, consisting of 11 different disciplines: biology, chemistry, geography, geology, physics, physiology, anatomy, microbiology, astronomy, physical science, and biotechnology certificate program. Nearly all courses include hands-on laboratory experience and many include fieldwork.</p>	<p>Life Sciences</p> <ul style="list-style-type: none"> ▪ Provide collaborative, hands-on, experiential learning. ▪ Provide supplemental learning opportunities outside the classroom. ▪ Increase online delivery of lecture content where appropriate. ▪ Increase technology and computer-equipped classrooms. ▪ Seek additional classroom laboratory space, student study space, and faculty office space. ▪ Create a new discipline in Environmental Studies. ▪ Develop an off-site “field station” for field study and student research. ▪ Seek a new science facility that will consolidate all the sciences in a single area. ▪ Design a modern science facility to anticipate the ways science will be taught in 2020. 	<ul style="list-style-type: none"> ▪ Currently science classrooms, labs and faculty offices are scattered among eight different floors in four different buildings (U,E,R,P) that stretch from the east side of campus to the west side. ▪ The Life Sciences Program saw a 27.7% increase in enrollment over that past four years. Overall courses were 105% filled at the start of the Fall 2007 semester. ▪ Course offerings in the Life Science area have reached saturation because of space and resource limitations. ▪ The current pressure on the program to grow is largely driven by the desperate need for health science professionals across the country. ▪ The Bureau of Labor Statistics forecasts a much faster than average growth rate (21%) for all occupational sectors in the biological sciences over the next eight years.
	<p>Physical Sciences</p> <ul style="list-style-type: none"> ▪ Provide collaborative, hands-on, experiential learning. ▪ Provide supplemental learning opportunities outside the classroom. ▪ Increase online delivery of lecture content where appropriate. ▪ Increase technology and computer-equipped classrooms. ▪ Provide additional classroom laboratory space and student study space. ▪ Create a new discipline in Environmental Studies, which will occupy the space in the E building created when Photography moves into the new arts building. ▪ Establish a GIS program and training facility. ▪ Develop an off-site “field station” for field study and student research. ▪ Seek a new science facility that will consolidate all the sciences in a single area. ▪ Design a modern science facility to anticipate the ways science will be taught in 2020. 	<ul style="list-style-type: none"> ▪ Currently science classrooms, labs and faculty offices are scattered among eight different floors in four different buildings (U,E,R,P) that stretch from the east side of campus to the west side. ▪ The Physical Sciences Program saw a 16% increase in enrollment over the past four years. Overall courses were 107% filled at the start of the Fall 2007 semester. ▪ The program cannot meet current demand of students wishing to take physical science courses, especially in chemistry, which has reached saturation. ▪ Chemistry serves as a prerequisite for high-demand Career and Technical Education programs such as nursing. ▪ Demand is expected to rise at an even faster rate in the next few years as the technology sector of the marketplace scrambles to replace retiring “baby boomers.” ▪ A drastic shortage of educated and experienced physical scientists is expected in the near future. For example, the Bureau of Labor Statistics predicts an 18% growth rate for geoscientists and 28% growth rate for environmental scientists over the next 20 years.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>PERFORMING AND COMMUNICATION ARTS</p> <p>The Performing and Communications Arts Division provides courses that prepare students for professional and vocational careers in the performing arts and communication fields. The division provides transfer programs for majors in Music, Theater Arts and Dance. In addition, the Speech Communications program offers important core courses required for transfer, and the Speech-Language Pathology Assistant program prepares students to work as assistants to qualified Speech-Language Pathologists. The Television and Radio program prepares students for transfer to four-year schools or for entry-level positions in the television, video, radio, and media industries.</p>	<p>Dance</p> <ul style="list-style-type: none"> ▪ Offer additional courses in all areas of dance. ▪ Broaden offerings in world ethnic dance to include African and Asian Dance. ▪ Create new courses to offer dance instruction in Musical Theater. ▪ Provide dance techniques and production classes in studio; student participation and interaction with the instructor and fellow students are intrinsic. ▪ Explore the feasibility of offering Dance History classes online. ▪ Consider including new Dance studios in the remodel of the V Building. ▪ Partner with the Music and Theater Arts Departments to support performing arts productions. 	<ul style="list-style-type: none"> ▪ The Dance courses continually fill; the program could grow larger. ▪ The department needs to be able to offer more sections in order to increase enrollment.
	<p>Music</p> <ul style="list-style-type: none"> ▪ Revamp the commercial music curriculum to make a clearer path for students in that area and to bring it up to date. ▪ Expand the recording music curriculum when the new Center for the Arts, with its recording studio, is completed. ▪ Add new sections to the Jazz and Commercial Music areas, which are growing rapidly. ▪ Provide most music classes in rehearsal halls and classrooms; student participation and interaction, with the instructor and fellow students, are intrinsic. ▪ Offer sections of music history, appreciation, and world music courses online. ▪ Modify the music lab requirement for music appreciation courses in acknowledgement that lab materials are now available online. ▪ Continue to offer students a wide range of high quality performing ensembles and applied lessons so students can better improve their performance skills. 	<ul style="list-style-type: none"> ▪ Additional growth dependent on the ability to add more sections, a second audio lab, and the hiring of more staff — both full time and adjunct faculty.
	<p>Speech Communication</p> <ul style="list-style-type: none"> ▪ Promote the new A.A. degree in Speech Communication. ▪ Require in-class demonstrations and group work for most speech classes. ▪ Utilize the latest in classroom technology for speech communication demonstrations. ▪ Secure stable and adequate funding for the forensics courses and activities. 	<ul style="list-style-type: none"> ▪ Speech Communication courses that meet general education requirements are in great demand and fill before those in other departments. ▪ As a result of the newly approved A.A. degree in Speech Communication, more students will identify with this field as a major. There will be more demand for courses beyond those commonly offered courses which fulfill general education requirements.
	<p>Speech-Language Pathology Assistant</p> <ul style="list-style-type: none"> ▪ Require that students take the SLPA courses in a specific order, creating a more stable cohort of students as they move through the curriculum. ▪ Establish an application process that ensures entering students are prepared and have the highest potential for completing the program. ▪ Offer one additional section of each course in the program to increase enrollment. ▪ Utilize class-based instruction for most courses. ▪ Investigate the potential to utilize web-based technologies for some “hybrid” courses. ▪ Use webcams and superior encryption technologies to monitor students in their field practice assignments at a distance. 	<ul style="list-style-type: none"> ▪ There is an increased need for speech pathology services due to an aging population, family trends and advancements in medical technology. ▪ The discipline of speech pathology has expanded its scope of practice increasing the demands on professionals and expanding the role of the Speech-Language Pathology Assistant. ▪ The SLPA Program is increasingly popular. ▪ Growth in jobs for SLPAs in all sectors (schools, hospitals, private practice, etc.) is growing.

	FACULTY STRATEGIC DIRECTION	RATIONALE
PERFORMING AND COMMUNICATION ARTS <i>(2nd of 2 pages)</i>	Television and Radio <ul style="list-style-type: none"> ▪ Develop a new certificate of achievement program in Radio Operations. Align its curriculum to current industry trends. ▪ Maintain certificate of achievement programs in television production, television operations, television operations technology, broadcast journalism, and radio production. ▪ Maintain various occupational skills certificates. ▪ Modernize the television studio with high definition television equipment in order to update the curriculum and provide instruction in high definition television operations and production. ▪ Provide instruction in content, production and operations for new modes of delivery (i.e. multiple digital distribution platforms). ▪ Provide instruction in advanced production opportunities across media (studio/lab and field-based). ▪ Teach most television and radio courses in the labs; collaborative work and hands-on activities are intrinsic to instruction in this area. A few courses may be offered online. ▪ Expand internship opportunities. ▪ Explore inter-departmental and intra-department collaboration with Theater Arts, Business, Marketing, etc. to better prepare for students for real-world experience. ▪ Update facilities and upgrade and expand equipment. ▪ Develop industry partnerships. ▪ Strengthen and develop new articulation agreements with local high schools and four-year universities. 	<ul style="list-style-type: none"> ▪ The department now offers A.S. degrees providing students an academic goal that combines employment readiness with transfer preparation.
	Theater Arts <ul style="list-style-type: none"> ▪ Provide a comprehensive curriculum in all aspects of theater production. ▪ Enhance the musical theater area by offering both workshop and main stage musical theater productions. ▪ Expand television and film acting. ▪ Offer more classes in technical theater. ▪ Offer courses in theater production and management. ▪ Explore feasibility of offering History of Theater courses online. Most other theater courses are taught in the acting studios and on stage; student participation and interaction are intrinsic. 	<ul style="list-style-type: none"> ▪ The acting program continues to have strong enrollments. ▪ Enrollment in technical theater is growing.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>SOCIAL SCIENCES</p> <p>The Social Sciences Division is made up of three primary areas: the Social Sciences, consisting of American Institutions, anthropology, economics, political sciences, psychology, and sociology; the Humanities, consisting of philosophy and religious studies; and Education, consisting of education, child development, special education technology and the Child Development Center. In addition there are cross-discipline programs such as ethnic studies and statistics for the behavioral sciences.</p>	<p>Anthropology</p> <ul style="list-style-type: none"> ▪ Continue to offer a broad range of course offerings that incorporate the changing technologies and professional opportunities in the field of anthropology. ▪ Make sure that all current and new offerings are integrated into the program as a whole. There are no plans at this time to add or delete courses over the next five to ten years. ▪ Solidify and build upon the recent formalization of the certificate program in archaeology by adding a full-time archeologist. ▪ Increase the use of Large Group Instruction sections to help satisfy increasing student demand. ▪ Use Distance Education, such as Instructional Television and Online Instruction, more extensively. ▪ Add more smart classrooms. ▪ Work with other community colleges to share the expenses of field practice courses. ▪ Work with Counselors to ensure incoming students have acquired the necessary English comprehension, research and writing skills. 	<ul style="list-style-type: none"> ▪ The demand for anthropology courses is very high. For the current academic year 2009/10, the number of sections offered was 39 per semester, averaging 1,228 students (over 100% of limits). ▪ When compared with previous semesters, this data shows a continuing trend of increasing demand for anthropology courses. ▪ Anticipate a possible increase in anthropology majors as well as greater participation in the new archaeology certificate program.
	<p>Child Development Center</p> <ul style="list-style-type: none"> ▪ Provide student parents, faculty and community members of the PACCD a high-quality early education program for young children ▪ Provide teachers-in-training a model teacher training site. ▪ Include more technology in the delivery of services and the training of future workers in this field. ▪ Support staff with time away from direct instruction with children to meet the demand of documentation/observation, training and staff meetings as set forth by governing agencies. ▪ Continue to modify the classroom environments to meet changing theory and curriculum requirements ▪ Continue the support of the Outdoor Classroom Curriculum Project. 	<ul style="list-style-type: none"> ▪ Full-time enrollment is up as parents are requesting full-time care more than ever before. ▪ Given space limitations, there is no possibility of increasing the number of clients that the center serves.
	<p>History</p> <ul style="list-style-type: none"> ▪ No new courses will likely be added or deleted over the next five to ten years, given the current extensive curriculum. ▪ Increase the number of history sections offered to meet rising student demand. ▪ Offer a curriculum that reflects the increasing diversity of the student body. ▪ Increase the number of full-time instructors, including faculty whose background areas of expertise reflect the diversity of the student body. ▪ Expand the number of history sections paired with other divisions. ▪ Increase the use of Large Group Instruction sections to help satisfy increasing student demand. ▪ Use Distance Education, such as Instructional Television and Online Instruction, more extensively. ▪ Add more smart classrooms. ▪ Work with Counselors to ensure incoming students have acquired the necessary English comprehension, research and writing skills. 	<ul style="list-style-type: none"> ▪ The History Program has continued to be in high demand by our students. For the current academic year, 2009/2010, the number of sections offered was about 70 per semester, averaging 2,984 student (over 100% of limits). ▪ When compared with pervious semesters, this data shows a continuing trend of increasing demand for history courses. ▪ Given the history requirements for our internal degrees and for our transfer students, the demand in the future will certainly outstrip the program's ability to meet student demand.

	FACULTY STRATEGIC DIRECTION	RATIONALE
SOCIAL SCIENCES (2 nd of 2 pages)	Psychology <ul style="list-style-type: none"> ▪ Maintain the current extensive range and number of courses. Over the next five to ten years no new courses are expected to be added or current courses deleted. ▪ Increase the number of full time faculty to reduce overreliance on adjunct faculty. ▪ Expand the number of psychology sections paired with other divisions. ▪ Increase the use of Large Group Instruction sections to help satisfy increasing student demand. ▪ Use Distance Education, such as Instructional Television and Online Instruction, more extensively. ▪ Add more instructional equipment, smart classrooms, and a computer lab. ▪ Work with Counselors to ensure incoming students have acquired the necessary English comprehension, research, and writing skills. 	<ul style="list-style-type: none"> ▪ The demand for psychology courses is very high. For the current academic year, 2009/10, the number of sections offered was about 51 per semester, averaging 2,523 students per semester (over 100% of limits) ▪ When compared with previous semesters, this data shows a continuing trend of increasing demand for psychology courses that should continue into the future. ▪ The limitation on the number of classrooms available make meeting this increased demand problematic. ▪ Of greater concern is the percentage of sections being taught by adjunct faculty, averaging 57%. The addition of at least two full-time faculty is essential for the continued high quality of the Psychology program.
	Sociology <ul style="list-style-type: none"> ▪ Conduct a curriculum review to determine if it is appropriate to add new courses or to drop any current courses. ▪ Utilize scheduling to optimize limited classroom space. ▪ Add a full-time faculty member. ▪ Expand the number of sociology sections paired with other divisions. ▪ Increase the use of Large Group Instruction sections to help satisfy increasing student demand. ▪ Use Distance Education, such as Instructional Television and Online Instruction, more extensively. ▪ Add more instructional equipment, smart classrooms, and a computer lab. ▪ Work with Counselors to ensure incoming students have acquired the necessary English comprehension, research and writing skills. 	<ul style="list-style-type: none"> ▪ For the current academic year, 2009/10, the number of sociology sections offered was 40 per semester, averaging 1,759 student enrollments per semester (over 100% of limits). ▪ Compared with previous semesters, this data shows an increase in student demand for sociology courses. ▪ Given student interests and diversity, this trend will probably continue in the future. ▪ Meeting this increased demand will require a great deal of creativity in scheduling given the limitation of classroom space available. Also the addition of a full-time faculty member in sociology will be vital to meet this increase in student demand and preserve the integrity of the Sociology program.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>VISUAL ARTS AND MEDIA STUDIES</p> <p>The Visual Arts and Media Studies Division offers more than 140 courses through programs in Art History, Cinema, Design, Journalism, Media Studies, Photography, and Studio Arts. The Studio Arts program offers a breadth of courses in the Fine Applied Arts of drawing, painting, printmaking, sculpture, and ceramics. In addition, an Art Gallery presents eight exhibitions per year consisting of professional work representing the disciplines taught by the division.</p>	<p>Art Gallery</p> <ul style="list-style-type: none"> ▪ Serves as a vital extension of the classroom/studio practice of the Division and the centerpiece of all its programs. ▪ Expand student programs for the installation of exhibits ▪ Develop courses in conjunction with the art history and studio programs. ▪ Develop further connections between PCC and other cultural institutions, including jointly organized exhibitions. 	<ul style="list-style-type: none"> ▪ The Gallery projects future growth due to positive feedback from various community supporters and other audiences. ▪ The Art Gallery is trending towards growth and toward greater recognition and an enhanced reputation, both on campus and the broader community. ▪ Attendance records show an increase from year to year. ▪ The exhibition program will significantly expand when, in Summer 2012, a new and up-to-date gallery in the new Center for the Arts becomes available. ▪ Functions as the most public “face” of the Division. Serves students from throughout the campus, not merely students of the Division, and provides a link between the campus and the off-campus community.
	<p>Art History</p> <ul style="list-style-type: none"> ▪ Develop a fully online History of Western Art 1A survey to serve a growing population of technologically savvy students. ▪ Build a diverse online curriculum of art history classes within the existing curriculum. ▪ Create a digital image archive/resource center in place of the current, obsolete division Slide Library. ▪ Modernize the art history lecture hall with a technology and equipment upgrade. ▪ Provide another dedicated smart classroom to serve the rising demand for art history sections. ▪ Review and revise History of American Art, History of Women in Visual Arts, and Art since 1945, as part of a thorough curriculum review. ▪ Provide faculty training and support in technology implementation, classroom management strategies, and opportunities for continuing education ▪ Hire an additional full-time art historian, with strength as a non-Western specialist. 	<ul style="list-style-type: none"> ▪ Art history survey courses have the highest enrollment in the college. ▪ The art history area serves a large student population, with over 1,300 students enrolled in classes each year.
	<p>Design</p> <ul style="list-style-type: none"> ▪ Continue to develop and offer curriculum to address the changes in the design professions. Design education is experiencing growth in enrollment and in direct relationship to changes in the professions they serve and the technologies they depend on. ▪ Develop and maintain facilities and technologies appropriate for the tasks associated with offering the design curriculum. ▪ Adopt course curriculum technology-based learning into the Design area in general and the Digital Media area in particular. ▪ Develop a new course of study in Interior Design. ▪ Investigate development of a new course of study in Environmental Design. 	<ul style="list-style-type: none"> ▪ There is no space for offering additional sections ▪ A healthy and growing enrollment in all area classes is expected to continue. ▪ The program has been in good standing for decades. Its enrollment is at 100%. Growth will take place gradually as the Division transitions to the new Center for the Arts.

	FACULTY STRATEGIC DIRECTION	RATIONALE
VISUAL ARTS AND MEDIA STUDIES <i>(2nd of 3 pages)</i>	Cinema/Film <ul style="list-style-type: none"> ▪ Rename as the Cinema program to encompass all the technologies for making motion pictures (film, video and digital). ▪ Expand course offerings and certificate/degree programs in cinema production. ▪ Emphasize in equal measures artful as well as professional approaches to cinema creation. ▪ Update and expand camera equipment to keep pace with rapid changes in camera technology and postproduction software. ▪ Expand outreach to underrepresented people as students and teachers. ▪ Explore the possibilities of creating Cinema Program cohort groups of Cinema students. ▪ Explore the possibilities of partnerships with industry and industry labor unions. ▪ Investigate the requirements, implications and feasibilities of moving toward High Definition image capture. ▪ Consider the creation of a regional or community center at PCC for studying cinema. 	<ul style="list-style-type: none"> ▪ A significant increase in enrollment in recent years has led to a 70% increase in the number of sections offered. ▪ Interest among students is high as evidenced by the influx of television students into the Cinema courses and students coming from far-flung locales to study filmmaking here.
	Journalism <ul style="list-style-type: none"> ▪ Teach foundation journalism skills by continuing to offer students solid training and hands-on experience in writing, reporting, and editing. ▪ Teach the digital media skills that are reshaping the journalism field. ▪ Create a new Web Design and Production class. ▪ Provide journalism students with “smart classrooms” that have the capability to present audio/visual content and provide Internet access. ▪ Continue to offer students hands-on experience gained from publishing the campus newspaper and its online platform. ▪ Partner with radio and television production classes that focus on news gathering, and with the digital media department for web design and production. 	<ul style="list-style-type: none"> ▪ Enrollment increases put the department at more than full capacity, with many sections over-enrolled. ▪ A significant number of students have been turned away from journalism classes due to lack of space.
	Media Studies <ul style="list-style-type: none"> ▪ Plan for greater use of the internet and the elimination of most paper-based course work. ▪ Introduce online testing, which will free up time to add further instruction and activities. ▪ Anticipate the use of e-books, High Definition and 3-D production technologies to enhance the classroom. ▪ Change course materials and texts to accommodate these technological innovations. ▪ Assign projects and assignments to virtual groups of students. Virtual office hours will allow for continuous dialogue between faculty and students. ▪ Increase large group instruction as a more efficient and productive teaching method while using chat rooms and virtual communities to restore whatever intimacy is lost. ▪ Exploit proximity to the many media industries to incorporate a greater degree of “real world” experience into the program. 	<ul style="list-style-type: none"> ▪ This area could develop substantially. The demand is great and the only conditions holding it back are space availability and budget considerations. ▪ There is a high degree of student interest. ▪ Significant employment opportunities given proximity to the media community.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>VISUAL ARTS AND MEDIA STUDIES</p> <p><i>(3rd of 3 pages)</i></p>	<p>Photography</p> <ul style="list-style-type: none"> ▪ Implement more digital technology options into current classes and create new digital technology classes to keep up with changing standards. ▪ Maintain current analog, film-based black and white classes as an introduction to, and supplement to the digital aspect of the program. ▪ Continue to replace and upgrade still photography and digital equipment to keep programs viable. ▪ Furnish the new digital labs in the future (2012) Center for the Arts building with computers, printers and necessary software to conduct digital photography classes and digital manipulation classes. ▪ Modify the certificate program to reflect changes in technology and to enhance ease of completion for studies. 	<ul style="list-style-type: none"> ▪ More than almost any other area of the Visual Arts and Media Division, the Photography program draws students from all areas of the college and the outside community. ▪ Serves 650 to 700 students each semester with 100% + fill rate in all photography classes.
	<p>Studio</p> <ul style="list-style-type: none"> ▪ Offer a breadth of courses in the Fine Applied Arts of drawing, painting, printmaking, sculpture and ceramics. ▪ Provide strong foundation skills in each of these disciplines; build visual literacy and technical proficiency to a level competitive with art programs at four-year institutions. ▪ Serve as the training ground for students interested in the visual arts; continue to be core to the Division's operations. ▪ Support the five core foundation courses that bridge all areas of Art and Design. ▪ Accommodate the movement toward interdisciplinary work. ▪ Build a division-wide shop. ▪ Continue to update and equip Studio Arts faculty with technology and computing needs. ▪ Develop stronger partnerships with local area four-year institutions such as CSULB, UCLA, Otis College of Art and Design, and The Art Center. 	<ul style="list-style-type: none"> ▪ The Studio Arts area is poised to grow significantly in the next five years. ▪ It is the most established area of the division with the minor impacts of digital medium on its curriculum. ▪ Serves as the foundation area for all the other programs in the division.

	FACULTY STRATEGIC DIRECTION	RATIONALE
OFFICE OF INSTRUCTION		
ACADEMIC SUPPORT The two primary programs within the Office of Academic Support are the Teaching and Learning Center (TLC) and Distance Education. <ul style="list-style-type: none"> The TLC helps under-prepared, first-generation college students move successfully from basic skills to transfer and career/technical education courses. The TLC does this by piloting, evaluating, and supporting innovative teaching and learning practices that encourage collaboration and community-building, and increase the retention, success, and persistence rates of PCC students. The Distance Education program and staff work closely with the college's Curriculum and Instruction program area and staff, as well as with the college's Academic Senate, to assist and train faculty in the development and use of Distance Education tools and curricula design. 	Teaching and Learning Communities/Center (TLC) <ul style="list-style-type: none"> Help under-prepared first-generation college students move successfully from basic skills to transfer and career/technical education classes. Expand the existing TLC to serve more first-year students and their instructors. Infuse the expanded center with state-of-the-art technologies to serve the TLC community more efficiently and effectively. Develop a permanent home in the TLC for the Basic Skills Initiative (BSI) and professional development programs for new and returning faculty. Integrate TLC into the structure of the college and adapt TLC programs and approaches to serve many more students. Institutionalize collaboration across divisions, departments and disciplines. Serve as the Research and Development arm for the college, creating, piloting, and evaluating new programs and practices for first year basic skills students and their teachers. Find new ways to communicate with students and go where they are – on cell phones and laptops. Encourage professional development by providing faculty across the college the time and incentives to conduct active research, experiment in the classroom, document their work, and share effective practices. 	<ul style="list-style-type: none"> The TLC can serve as a model for the college as it attempts to adopt and adapt effective student success practices targeted at the new “typical” student (young, right out of high school, first-generation college attendee, and under-prepared socially and academically). Our desire is to be institutionalized (integrated within the structure of the college) and scalable (adapt our programs and approaches to serve many more students). We are actively working on ways to demonstrate our value to the college as an innovator, incubator, and integrator of effective practices, policies, and programs.
	Distance Education <ul style="list-style-type: none"> Assist and train faculty in the development and use of Distance Education tools and curricula design. Develop a clearly articulated plan to facilitate improved use of existing college distance learning staff and resources in support of faculty and student success. Ensure all college distance education and web-enhanced content is Section 508 ADA compliant. Emphasize compliance with all Western Association of Schools and Colleges (WASC) distance education standards and practices. Increase awareness among all faculty, staff and administrators that online distance learning requires new ways of thinking about learning and teaching and cannot be molded into the image of traditional campus-based practices. Explore the potential for creating a primarily online Associate's Degree, or an online “Weekend College.” 	<ul style="list-style-type: none"> Academic Support believes it is very likely that the number and types of courses to be delivered either fully online or as a hybrid (partially online/partially on campus) through Distance Education will see an increase of at least 10 to 20% in the next five to ten years. Online Distance Education assists the college in bringing costs down by reducing the need for physical facility (classroom) resources. Also, the program, by its nature, provides greater time and place flexibility and access to students who otherwise might not be able to travel to a college campus in order to pursue an education.
ENROLLMENT MANAGEMENT The office of Enrollment Management works closely with the instructional divisions in preparation of each semester's schedule of classes. The Office advises and recommends to the Vice President of Instruction, and other college officers, a strategic direction for enrollment that is responsive to state-mandated student and faculty load obligations. Enrollment Management assists in assuring the accuracy of college data, collects and analyzes data, and prepares reports as requested or required.	Scheduling <ul style="list-style-type: none"> Continue to play a key role in assisting the instructional Divisions in more effective and efficient scheduling of classes, facility utilization and in proposing innovative ways to make greater use of existing resources. Anticipate a shift in the delivery of enrollment management due to the growth of online distance education and Schedule25, a classroom scheduling application. Evaluate a potential move over the next 3 to years to an Enterprise Resource Planning (ERP) tool. Prepare and train staff to use the new technologies that will be playing an increasingly large role in how Enrollment Management delivers services. 	<ul style="list-style-type: none"> Classroom utilization efficiency will be significantly improved beginning in Spring 2011 as result of the recent application of Schedule25. Should the college continue to move in the direction of increased delivery of online distance education, it is likely that space utilization, technology needs and support services for these technologies, and management of this area, will be impacted. Instructional divisions have in the past been used to treating classroom and other learning spaces as being “owned” by that Division. As the college transitions to technologies that collect, evaluate, and analyze facility efficiency utilization, instructional divisions will very likely need to surrender to a greater degree rights of scheduling or perceived “ownership”.

	FACULTY STRATEGIC DIRECTION	RATIONALE
STUDENT AND LEARNING SERVICES		
ADMISSIONS AND RECORDS Admissions and Records provides successful student and learning services in the areas of admission to the college, registration for classes, records evaluation for degree completion and records maintenance for verification and transcript issuance. To accomplish this mission, the Admissions and Records Office provides support services to faculty, other college staff and constituencies, and members of the public.	Admissions <ul style="list-style-type: none"> ▪ Help applicants understand all the steps they need to take to prepare to register for classes, the fees they are required to pay, and to increase their understanding of policies and procedures. ▪ Streamline the application process. ▪ Expand online services and the means for students to conduct business online, enhancing student self-sufficiency. 	<ul style="list-style-type: none"> ▪ Admissions has been in a constant state of change for the past several years. The online application through CCCapply and the procedures for processing have continuously improved.
	Records <ul style="list-style-type: none"> ▪ Find more efficient ways of accomplishing tasks without sacrificing quality of service. ▪ Increase and enhance technological means by which students become their own service providers. ▪ Increase automation of internal office processes and procedures. ▪ Maintain a high level of customer service through technological developments and more automated office processes and procedures. ▪ Implement an integrated administrative computer system to allow for more efficiency. 	<ul style="list-style-type: none"> ▪ The changes and technology we have implemented over the past year have improved our productivity and processing time. This will continue in the future. ▪ A major probable shift will be the implementation of an integrated administrative computer system. This will have a major impact on how internal offices will relate to each other as well as on the way we deliver services to meet student needs.
	Registration <ul style="list-style-type: none"> ▪ Use technology and computer programs to develop faster and more efficient delivery of services to staff and faculty. ▪ Develop processes and procedures by implementing technological means so that students become their own service providers. ▪ Increase automation of internal processes and procedures. ▪ Maintain a high level of customer service through technological developments. ▪ Expand service delivery methods so that students will not be required to come in for service. ▪ Discuss a “one-stop shop” concept for various student services with registration as part of those services. 	<ul style="list-style-type: none"> ▪ The changes and technology we have implemented over the past few years have provided a more efficient method for students to register for classes. This will continue in the future. ▪ The number of staff members is adequate to help accomplish our mission. Increased use of technology will be employed to provide services and the compressed calendar will continue to force adjustments for students, faculty and staff.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>COUNSELING/CAREER SERVICES</p> <p>Counseling and Career Services consists of advisement and empowerment programs designed to ensure successful student learning:</p> <ul style="list-style-type: none"> ▪ The Stan Gray Academic Athletic Zone is a comprehensive tutorial and counseling program designed to meet the specific needs of student athletes at PCC. ▪ Assessment Services administers tests, inventories, surveys, and other assessment instruments to provide information that is used in the advisement process and for student selection of courses and programs. Assessment Services also conducts testing to determine skill competencies for math and English. ▪ The Counseling Program advises students regarding educational plans, career goals and personal problems. ▪ The mission of the Puente Program is to increase the rates at which Chicano/Latino students transfer to four-year institutions. ▪ The Ujima Program is dedicated to the success of African-American students in higher education. ▪ The Veterans Program ensures that student veterans make a successful transition from the military to the college environment. 	<p>Academic Athletic Zone (AAZ) Program</p> <ul style="list-style-type: none"> ▪ Provide student athletes at PCC with a comprehensive learning center. ▪ Revamp the curriculum to meet the distinct needs of this particular basic skills population. ▪ Develop a mentor program that pairs incoming freshman student athletes with sophomore students. ▪ Expand evening and weekend counseling and other student support services. ▪ Consider providing student athletes with priority registration so that basic skills students in mathematics and English can begin the sequence in their first semester and so later transfer in a timely manner. 	<ul style="list-style-type: none"> ▪ Student athletes are subject not only to the standard transfer requirements, but unlike other populations, they have specific academic eligibility requirements as stipulated by the National Collegiate Athletic Association (NCAA). ▪ The AAZ is the only program on campus that comprehensively serves this population. ▪ Student enrollment is swelling at an alarming rate, in part as a response to new NCAA bylaws that make it nearly impossible for student athletes to transfer and be immediately eligible to compete.
	<p>Assessment Services Office</p> <ul style="list-style-type: none"> ▪ Provide placement testing services that assess student abilities and skills. ▪ Use assessment findings for student selection of courses and programs. ▪ Communicate to students the importance of taking the placement exams. ▪ Expand outreach to local high schools in the PACCD through the Early Assessment Program to test 11th grade students on their level of college readiness in English and math. ▪ Provide placement testing at local businesses, community centers and alternative high schools to increase student access to services. ▪ Provide updated technology to avoid testing delays and disruptions caused by computer breakdowns. 	<ul style="list-style-type: none"> ▪ Provides testing services to over 17,000 students annually. ▪ An increase in the number of courses offered online may increase the number of exams that are proctored by the Assessment program. ▪ The Early Testing Program has grown from providing testing at one high school in the Pasadena Unified School District (PUSD) in the Spring 2007 semester to currently providing testing to 11 high schools in the Pasadena Area Community College District. The project has excellent growth potential. ▪ Early Assessment Program (EAP) Exam results will be accepted by PCC beginning in the Fall 2011 semester. Students in the Pasadena Unified School District (PUSD) who are identified as college ready will be exempt from taking the PCC placement exam and will be able to enroll in college level English and math classes. ▪ Mandatory online orientation screening is now taking place at the Assessment Services Office. Students will need to complete their orientation before they can take the placement exam. ▪ A new process for the delivery of assessment results will be implemented during the Summer 2010 semester at the Assessment Services Office to include providing students with exam results, course placements and automatic clearance for course registration. Assessment results will also be available online through Lancer Link and in person. ▪ The Assessment Services Office has expanded testing services during peak times to not only test at the main testing lab, but also at two additional labs on campus. Over 250 students are tested per day during the months of July and August.
	<p>Career Center</p> <ul style="list-style-type: none"> ▪ Provide resources and assistance for students exploring career goals or looking for employment or internships in part by filling a current vacancy in the Job Development area, increasing 10 month employee's appointment as well as hiring permanent floor supervisors for the center. ▪ Teach career research, decision making, job search, and job retention skills. ▪ Support the integration of these skills into personal career and educational goals. ▪ Negotiate with Symplicity Corp., the technical/job posting partner of the National Association of Colleges and Employers, about a new contract that would allow us to charge for local job postings on LANCERJobs. ▪ Expand the use of online career assistance resources where feasible. 	<ul style="list-style-type: none"> ▪ Data over the last few years has consistently indicated that one third of incoming students choose "undecided" as their major, and one third say that they need help with career planning or employment. This need is not going to decrease. ▪ A continuing decrease in basic operating funding is limiting the ability to deliver career and employment planning services despite the ongoing demand for assistance from students.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>COUNSELING/CAREER SERVICES</p> <p><i>(2nd of 3 pages)</i></p>	<p>Counseling</p> <ul style="list-style-type: none"> ▪ Implement Mandatory Assessment and Orientation for all new students in order to increase the success of Basic Skills Students. ▪ Explore ways that students can connect with a counselor more easily. ▪ Enhance online counseling services. ▪ Implement a “Chat with Counselor” feature so students can Instant Message questions to a counselor. ▪ Place counselors in more key locations throughout the campus including all tutoring labs. ▪ Offer more group counseling for probation students and new students at hours that are convenient to them. ▪ Pair counseling with academic divisions to address student success in English, ESL, and Math. ▪ Explore ways to maximize student access to counseling services during their first month in college. 	<ul style="list-style-type: none"> ▪ Currently there is the equivalent of 16 full-time counselors for 30,000 students — a ratio of 1,875 students per counselor. ▪ The student population is growing and student needs are expanding, increasing the need for more full-time counselors.
	<p>Counseling Curriculum</p> <ul style="list-style-type: none"> ▪ Increase the number of offerings in the entire counseling curriculum. ▪ Recommend that all new students take Counseling 10 – Introduction to College. In the long term, make it required. ▪ Continue to be watchful for opportunities to participate in learning communities with other departments on campus. ▪ Explore offering courses such as Counseling 10 for high school students coming to the PCC campus. ▪ Investigate how to transform or create a Counseling course for UC-transferability. 	<ul style="list-style-type: none"> ▪ There is continued awareness that counselors teach learning and self-management skills that increase student retention and successful program completion.
	<p>Empowerment Program – Puente Project</p> <ul style="list-style-type: none"> ▪ Increase the rates at which Chicano/Latino students transfer to four-year institutions. ▪ Expand the size of the Puente Project from one cohort of 30 students each year to 60 students with two cohorts. ▪ Enhance the Mentoring and Peer Mentoring services ▪ Expand the mentor pool and improve mentor recruitment ▪ Strengthen online resources. ▪ Develop a textbook loan program. ▪ Establish a permanent Puente Center. 	<ul style="list-style-type: none"> ▪ Expansion of the Puente Project is recommended because of the at-risk nature of the students served by this specialized program. ▪ To meet the needs of our largest ethnic group (Hispanic) these support services require solid institutional support.

	FACULTY STRATEGIC DIRECTION	RATIONALE
COUNSELING/CAREER SERVICES <i>(3rd of 3 pages)</i>	International Students <ul style="list-style-type: none"> ▪ Coordinate with the Extended Opportunity Programs and Services to develop an intensive English program. ▪ Hire a full-time administrative assistant for the Intensive English Program. ▪ Implement fsaATLAS batch system to effectively comply with federal immigration regulations and improve the management of international student data. ▪ Implement the online admissions application (CCCApply) to keep up with the increase of international students. ▪ Hire a full-time academic counselor to specifically serve F-1 students at the International Student Office. ▪ Hire a full-time receptionist to provide professional customer service to international students. ▪ Increase staffing levels to ensure passing Student and Exchange Visitor Information System (SEVIS) certification. ▪ Provide a larger area to serve international students enrolled in the college program and IEP. ▪ Use Express Mail to mail visa documents to ensure new international students can make timely visa appointments and arrive at PCC in time for orientation, counseling, testing and registration. 	<ul style="list-style-type: none"> ▪ The program increased international student enrollment from 763 to over 1075 from Spring 2005 to Spring 2010.
	Ujima Program <ul style="list-style-type: none"> ▪ Address the epidemic of underachievement among African American students in higher education by providing a comprehensive set of academic and support services. ▪ Expand and develop high quality, rigorous academic, personal and social curriculum to meet the distinct needs of PCC's African American basic skills population. ▪ Include science in the core block sequence of Ujima classes. ▪ Design and implement an Ujima specific Career and Technical Education (OCTE) Cohort. ▪ Design and implement an Ujima specific cohort for dually enrolled PUSD high school students. ▪ Design and develop an Ujima specific evening and weekend cohort. ▪ Expand evening and weekend counseling and other student services, staff and faculty. ▪ Create an Ujima community outreach program. ▪ Foster a career and college-ready, college-going, college-completing culture on campus and within the greater Pasadena/Altadena community. 	<ul style="list-style-type: none"> ▪ There are more students in need of Ujima services than we can accommodate each academic year.
	Veterans Program <ul style="list-style-type: none"> ▪ Ensure that student veterans make a successful transition from the military to the college environment. ▪ Foster the development of a veteran-friendly campus environment. ▪ Provide appropriate referrals to various on-campus services as well as outside veterans service providers. ▪ Provide one-on-one sessions to counsel veterans about educational benefits. ▪ Promote awareness of veterans' issues on campus. ▪ Provide free PTSD counseling. ▪ Assist veterans in identifying and developing coping skills to manage Military Readjustment Transition issues. ▪ Implement a mentor program to create a deeper connection between faculty/staff and student veterans. ▪ Establish a Veterans Resource Center to provide a range of essential services, including: <ul style="list-style-type: none"> - Access to computers and assistance in the use of assistive technologies, including specialized software for nontraditional learners. - Dedicate a full-time veterans counselor for academic counseling and program development. 	<ul style="list-style-type: none"> ▪ Demand for services can be expected to grow dramatically as increased numbers of veterans re-enter civilian society due to two wars winding down, in addition to significant monetary increases in Veterans Educational Benefits. ▪ Subsequent entering veterans are likely to have greater need for support services since their cohort is apt to be less prepared than veterans currently being served because of lowered military standards for later recruits. Additional basic skills classes will be needed.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>LEARNING ASSISTANCE CENTER</p> <p>The mission of the Learning Assistance Center is to extend and enhance classroom learning for all students at Pasadena City College by providing instructional technologies and services effective for a variety of learning styles, considerate of diverse social conditions and cultural backgrounds, resulting in retention, persistence, and student success.</p>	<p>Learning Assistance Center</p> <ul style="list-style-type: none"> ▪ Extend and enhance classroom learning for all students by providing instructional technologies and services effective for a variety of learning styles, considerate of diverse social conditions and cultural backgrounds. ▪ Develop a stronger link with other areas of Student and Learning Services, especially Counseling and Assessment. ▪ Assess students for diagnostic learning needs (i.e. basic skills, gaps in knowledge base). ▪ Utilize diagnostic results to prescribe effective learning activities. ▪ Increase the use of technology to connect assessment with software or online learning packages. ▪ Direct students on academic probation, and other at-risk students, to the learning center for assessment of their multiple intelligences. ▪ Grow the learning community through the promotion of peer tutoring. ▪ Establish credit course options through which students would be trained to work as peer tutors (especially in the fields of their majors). ▪ Centralize aspects of campus-wide tutoring including training, job descriptions and pay rates, and the dissemination of information. 	<ul style="list-style-type: none"> ▪ An increasingly high numbers of students are coming to the college with basic skills needs. ▪ An increasing number of students are utilizing learning assistance services at PCC. ▪ The challenge is to determine what students need and to address those needs while keeping them on pace towards successful completion of their goals. ▪ Students with a history of failure in school lack the confidence to succeed. Empowerment comes from understanding their learning preferences and how to approach personal learning. ▪ It is more cost effective for the college to retain students through building their learning foundations and confidence than it is to process new students.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>OUTREACH, DEGREE AND TRANSFER SERVICES</p> <p>The mission of the Office of Community and School Relations is to increase college enrollment by offering comprehensive outreach services to the diverse population within and outside of the college's district. The office utilizes a variety of strategies to inform local schools, businesses, and community groups of programs and services offered by the campus.</p> <p>The Degree and Transfer Center serves as the focal point of degree and transfer information for the college, K-12, and baccalaureate-granting institutions. It serves a diverse student population, on and off campus, and provides information about transfer requirements and procedures through a variety of programs, services and activities.</p>	<p>Degree and Transfer Center</p> <ul style="list-style-type: none"> ▪ Serve as the focal point of degree and transfer information for the college, K-12, and baccalaureate-granting institutions. ▪ Advocate early degree and transfer preparedness through the development, implementation and evaluation of strategies designed to increase transfer, heighten awareness of the value of degrees, and the improve the number of degrees awarded. ▪ Employ practices to increase knowledge about degree and transfer requirements. ▪ Enhance procedures to consolidate and streamline the degree and transfer process and the practice in which requirements and information are disseminated. ▪ Develop and utilize multiple methods to teach students critical thinking skills to help them understand their degree and transfer status, including electronic tools that screen, identify, and notify students about their degree and transfer eligibility. ▪ Consistently build relationships with public and independent baccalaureate-granting institutions to ensure transfer opportunities and facilitate the transition between K-12, PCC and the university. ▪ Partner with four-year institutions in sharing resources to advise students about the transfer process. ▪ Utilize cross-training to maximize service throughout the campus to better serve a larger number of students. ▪ Develop strategies to improve retention among underrepresented populations, including learning communities such as Chicanos/Latinos Advancing in the Value of Education (CLAVE) and the African American project Rights of Passage in Education (ROPE). ▪ Continuously explore and develop “educational goal tracks” into which students are recommended in order to efficiently achieve their goals. 	<ul style="list-style-type: none"> ▪ Demand for degree and transfer information is expected to increase because an increasing number of students admitted to the college is declaring transfer as an educational goal and is creating a system directive to increase degrees awarded. ▪ Cyclical enrollment trends require that students be informed early in their academic career about degree and transfer options, as well as the processes for completing their goals in a timely manner. ▪ Early preparation will be the key to successful student transfers and degree completion. The Degree and Transfer Center has begun to implement such practices. These include various modes of communication used to relay vital degree and transfer information to assist students become transfer-ready and transfer-prepared, such as a multicultural task force, electronic and online tools, and a multimedia campaign. ▪ The Degree and Transfer Center’s role in preparing students and keeping them on track supports steps to align educational policies at K-12, the community colleges, CSU, UC, and independent institutions. ▪ The Degree and Transfer Center serves as a model to other community colleges and college departments for increasing degree and transfer awareness and has created a college-going culture among PCC’s demographically diverse population. ▪ The program should be continued based on the data collected from the Annual Student Survey and Degree and Transfer Center satisfaction surveys, which rate program satisfaction in the mid-90th percentile
	<p>Outreach (Community and School Relations)</p> <ul style="list-style-type: none"> ▪ Provide comprehensive outreach services on behalf of the entire college, including the recruitment of vocational and transfer programs. ▪ Encourage a college-going culture to diverse populations in K-12 and community-wide. ▪ Increase college enrollment by developing and initiating outreach activities that provide information about PCC programs, services, and resources. ▪ Design and implement outreach services specifically to increase enrollment of in-district students. ▪ Target the types and number of activities designed to reach the audiences who are critical to the development of California’s future workforce. ▪ Expand avenues of outreach through contacts with K-12 students, staff, parent groups, libraries, businesses, civic groups, and community organizations. ▪ Collaborate intra-institutionally and inter-segmentally to effectively and efficiently assess student preparedness, course placement, and promote financial aid opportunities. 	<ul style="list-style-type: none"> ▪ California’s demographic changes require strong outreach to ensure that its population is appropriately educated to support the State’s future economy and remain globally competitive. ▪ Outreach ensures access to a college education, encourages early college-going awareness, and advocates the importance of academic preparation in K-12. ▪ PCC will continue to serve a diverse population, including an increased number of students who in past years would have gone directly from high school to the university, as well as an increasing student population that has historically been underrepresented in higher education. ▪ Evidence: <ul style="list-style-type: none"> – MIG Environmental Scan Educational Master Plan – Community College Chancellor’s Office, May 2009 news release – California Postsecondary Education Commission: Ready or Not Here They Come: Community College Enrollment Demand Projections 2009-2019, September and December 2009 – California Community Colleges Strategic Plan – 2009-10 Unit Plan Data

	<i>FACULTY STRATEGIC DIRECTION</i>	<i>RATIONALE</i>
<p>SCHOLARSHIPS AND FINANCIAL AID</p> <p>The Scholarships and Financial Aid program supports successful student learning by creating a student financial aid process that helps students achieve their education goal through financial assistance in the form of federal and state grants, scholarships, loans, and work programs.</p>	<p>Scholarships and Financial Aid</p> <ul style="list-style-type: none"> ▪ Create a student financial aid process that helps students achieve their education goal through financial assistance in the form of federal and state grants, scholarships, loans, and work programs. ▪ Develop program capability to interface applicant information with multiple federal agencies (e.g., IRS), reducing the need for student and/or parent application verification and thus allowing for more time for professional staff interaction with students and the campus community. ▪ Work with Fiscal Services to increase our product (financial aid checks) from the current twice per month delivery to same day service. ▪ Implement a document imaging system to reduce dependence on paper file copies. ▪ Collaborate with other departments to comingle outreach and in-reach services to potential financial aid applicants. 	<ul style="list-style-type: none"> ▪ In five to ten years, the program will see an increase in the number of financial aid applicants without additional human resources to meet the demand. ▪ In the last four years, the program has seen an increase in the number of student applicants as well as an increase in the total dollars disbursed. The 2nd quarter 2009/10 applicant pool is near the total for 2007/08 and has exceeded the total applicants for 2006/07. Also, this increase in applicants amplifies the college's compliance requirements for the dollars disbursed. ▪ The increase in financial aid applicants and dollars disbursed has not translated to the program's staffing levels. The program is budgeted for 14.8 full-time staff. Presently, there are 2.8 vacant positions, and more students will apply for financial aid in 2010/11 with the expectation of the same level of service. Based on the number of financial aid applicants as well as the amount of federal funding disbursed, the National Association of Student Financial Aid Administrators (NASFAA) recommends a staff size of 25.7. ▪ The program will rely heavily on technological communication (email, portals, social networks, etc.) with the student. This program has a high number of repeat student visits (at least three visits per semester. More than 50% of the student population receives some form of financial aid per year and this office has the smallest counter (less than 8 ft. wide) width in the building. The capacity for staff workspace is 13 seats and because it is in a corner space, there is no room for growth. Therefore, given the limited number of staff and the available space, the use of technology to communicate is imperative for this program. ▪ This program must be able to communicate with students through portals (for status checks) and most students come in twice per semester to find out if they will receive a check. The program spent nearly \$20,000 in postage in 2008/09. The program is charged for all checks mailed to financial aid applicants. The program also sends multiple types of mailings (e.g., tracking and award letters) to over 20,000 applicants per year. Since there are numerous technological advances in electronic communication, and the costs associated with postage are increasing, the college should prioritize the program's use of technology.

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>SPECIAL SERVICES</p> <p>Special Services consists of three student support programs:</p> <ul style="list-style-type: none"> ▪ The mission of the Disabled Student Programs and Services is to create a learning environment where students with disabilities have equal access to the educational offerings of the college, and to promote students' self-awareness and self-reliance necessary for success in education and other life activities. ▪ Psychological services are provided by the counseling psychology staff in order to provide more specialized help than can be made available through regular counseling channels. Services include individual counseling, crisis intervention, information, and when appropriate, referrals to community agencies. ▪ Student Health Services includes first aid and emergency services, treatment of short-term illnesses, sexual health counseling and treatment, and education in health promotion and disease prevention. 	<p>Disabled Students Programs and Services</p> <ul style="list-style-type: none"> ▪ Respond to the large increase in the numbers of students with special education histories enrolling in college classes, especially students with multiple and severe disabilities. ▪ Focus less on testing those students requesting learning disability assessment and more time on providing appropriate educational (prescriptive) services to help them with significant special education histories. ▪ Increase the role of DSP&S professionals to serve as educational consultants and outreach specialists for faculty who are teaching increasing numbers of students with complex cognitive, achievement, physical, visual, health, psychological, and other disabilities. ▪ Develop strategies to encourage greater student independence through increased personal responsibility. Ensure access throughout the campus by making sure all classrooms, meeting rooms, laboratories, and other places are accessible. Keep current on assistive technologies. ▪ Provide students who have complex disabilities, and who require multiple test accommodations, a permanent space with consistent test accommodations procedures. <p>Psychological Services</p> <ul style="list-style-type: none"> ▪ Strive to meet the needs of students who require psychotropic medication. ▪ Develop an electronic record system to store student psychological records. ▪ Acquire a social service specialist to help students who are presenting bio-psycho-social problems that interfere with their academic progress. ▪ Use outside consultants to address the multiple and complex psychological problems of returning Afghan and Iraqi military veterans. ▪ Provide consultation services to faculty and staff to address student discipline matters. ▪ Develop strategies for effective responses to threats of violence, including improved coordination among local and campus police and psychological services. 	<ul style="list-style-type: none"> ▪ The sharp decline in the state's economy, coupled with high unemployment, has sent people, including those with disabilities, to the community colleges to gain new job skills and for life activities. ▪ A shortage of community-based alternatives to college studies for students with severe disabilities may create problems with codes of conduct. ▪ Students with ADD/ADHD and autism spectrum disorders (ASD), a broad classification that includes autism, Asperger's syndrome and pervasive developmental disabilities, will continue to attend colleges for many years to come. ▪ Special education students at high schools are encouraged to attend college as part of their transition (exit) plans. ▪ War veterans with serious disabilities are attending community colleges and will continue to do so as military campaigns continue around the world. ▪ The revisions to the Americans with Disabilities Act have reaffirmed that colleges must provide access to all of its educational offerings. ▪ Students, and their parents, are becoming better advocates and are demanding access to college programs. <ul style="list-style-type: none"> ▪ Nationally, an estimated 10 to 12% of the nation's 2.6 million students seek help for psychological problems, with more presenting serious conditions such as bi-polar disorder, schizophrenia, severe depression, and problematic personality disorders. ▪ The Virginia Tech massacre in Aril 2007 has caused college campuses to be more aware and increasingly alert to problem students. Also, the recent rash of suicides at Cornell University in the Fall 2009 and Spring 2010 terms has created alarm among student service providers. ▪ There are increasing numbers of students with complex and difficult behavioral and cognitive conditions because high school transition specialists will direct them to attend community colleges. This will require greater collaboration with on-campus services (e.g., DSP&S) and community-based agencies. ▪ Reduced funding of mental health centers in the community means that some students may have to forgo needed medications for their psychological conditions. ▪ Advocacy groups encourage their clients to attend college for personal enrichment, even though they may be ill-prepared or inexperienced in dealing with the academic and social demands of college life. ▪ Even with the increase in alternative instruction, e.g., online courses, many people who lack the executive skills to manage the demands of such courses, or who, because of their behavioral and cognitive limitations, prefer more traditional on-campus courses, may need psychological counseling services. ▪ The most acute challenge is serving our returning Afghan and Iraqi military veterans. These students will present multiple and complex psychological problems

	FACULTY STRATEGIC DIRECTION	RATIONALE
<p>SPECIAL SERVICES</p> <p>(2nd of 3 pages)</p>	<p>Student Health Services</p> <ul style="list-style-type: none"> ▪ Provide quality health and education services that empower students to be well-informed and self-directed participants in their own health care. ▪ Identify “at risk” behaviors through various assessment tools. ▪ Look for avenues, including cooperation with other agencies, that provide medical services at no or low cost to students ▪ Consider a District policy change that would permit an “automatic” change in the health fee program. ▪ Provide SHS staff with updated training in clinical practices, upgraded medical equipment and electronic management systems. ▪ Partner with other campus divisions and constituents, higher education institutions and community health-based organizations. ▪ Find a way to increase the number of Registered Nurses despite the shortage of RNs. 	<ul style="list-style-type: none"> ▪ Given the economic downturn, it is anticipated that more students will want to attend community colleges and students may rely more heavily on campus health services to meet their health needs, particularly if they are uninsured or underinsured. ▪ SHS has already seen a significant increase in the number of visits in September and October 2008 as compared to the previous year (43% and 9% respectively). In addition, website hits are significantly up from 4,800 monthly hits to 6,500 monthly hits, demonstrating interest in finding available health care resources. ▪ Staffing will be the most important resource in sustaining or increasing enrollment. The SHS Program provides quality health services for broad-based needs for uninsured and underinsured students. Access to no and low cost health care can keep students well and in school. ▪ With anticipated increases in enrollment and the state of inadequate health care insurance or coverage, more staff will be needed to provide services. ▪ There has been an increase in the number of high-risk students on campus (e.g. students who have been assaulted, use alcohol or other drugs, have heart conditions such as heart attacks, have seizures disorders, and have psychiatric disorders).
<p>STUDENT AFFAIRS</p> <p>The Office of Student Affairs offers a wide variety of activities, programs and services to assist students in achieving a balanced educational experience. The Office includes Student Activities, the Cross-Cultural Center, the Volunteer Center, Service Learning, Commencement, Athletic Eligibility, Project LEAP, the Pep Squad, the PCC Flea Market, and the Campus Connections.</p>	<p>Associated Student Activities and Organizations</p> <ul style="list-style-type: none"> ▪ Offer a wide variety of activities, programs and services to assist students in achieving a balanced educational experience. ▪ Integrate technology into programs and services, including social media (Facebook, a PCC blog) to interact with students, and an announcement “hot line.” ▪ Establish a predictable and consistent source of revenue to support student development and leadership on campus. 	<ul style="list-style-type: none"> ▪ Participation in student organizations has risen steadily the past five years, bringing with it a rise in administrative tasks. ▪ Completion of the new campus center has provided students with the opportunity to congregate, organize, create community and collaborate with other students and student groups. ▪ The Associated Students and student organizations have become more visible and accessible; there has been a substantial increase in the number of students who are currently involved in ASPCC committees. ▪ The increased engagement and involvement of the students on campus has created a challenge for the Student Affairs staff.



7. PROGRAM SERVICE DELIVERY

7. Program Service Delivery

The purpose of this chapter is to assess and consider implications for program service delivery as they relate to facilities, faculty and staff, information technology, institutional research, and revenue enhancement. Findings from this assessment will help determine how best to re-allocate resources among programs now offered by the college. This may be particularly difficult as the overall demand for community college services is rising while public funding for such services is declining.

Facilities

Effective facility planning requires anticipating the educational requirements of PCC as determined by the nature and mix of programs that the College will offer in coming years and the space utilization requirements of those programs. By answering the key question of which programs will PCC emphasize, the EMP provides the foundation for how to plan and gradually reshape the campus to reflect that focus.

The next PCC Facility Master Plan will identify new and redesigned facilities that reflect programming decisions to implement the EMP and the need to improve the overall efficient use of existing facilities and other vital resources on campus.

Re-Use of Existing Facilities

Given the downward trend in funding for California community colleges, future expansion of PCC through new building construction is not expected to continue, at least in the short term. However, replacement of failing buildings, and the reconfiguration and improved optimized use of existing facilities on campus, is a viable option. As PCC focuses more of its resources on particular high demand/high value disciplines it will need to reconfigure the existing campus to better meet the facility and space requirements of these programs. To help better serve the entire District, certain disciplines may be able to be located in satellite locations that are identified with partners, and similar institutions.

Opportunities to consolidate related programs and disciplines into single buildings should be pursued as they are now scattered across campus in numerous different buildings. This is particularly evident for the math and science programs as well as the health sciences. Such integration and consolidation of related programs into specific buildings for each “school” will realize educational benefits by creating more interaction and synergy between students and faculty.

A first step in developing a new comprehensive Facility Master Plan is to inventory existing buildings and their condition, along with an understanding of existing programmatic utilization patterns. Table 7-1, Existing Facility Academic Square Footage and Condition, provides an overview of facilities located on the 53-acre main campus, including their current conditions and recommended future action for each building. In general the buildings are in excellent condition. However, several need to be either replaced or substantially remodeled.

Table 7-1: Existing Facility Square Footage and Condition

Building	Year Built	Update/ Addition	Condition	Recommended Action	Total Assignable Sq. Ft.	Total Gross Sq. Ft.	
2	C- Horrace Mann	1937		Good	Minimal	101,475	160,700
3	LP - Lancers Pass	2000		Excellent	None	2,376	2,620
4	CC-Campus Center	1962	2000	Excellent	None	34,455	47,065
8	FC - Chiller Plant	1971		Excellent	None	6,197	6,996
9	AC Pool Building	1999		Excellent	None	2,813	3,242
10	HH - Harberson Hall	1950		Good	None	3,902	5,040
11	L - Student Services	1950		Good	Cosmetic Repairs & Window Replacement	16,788	32,738
12	D - Jane Adams	1936	1975	Moderate	Seismic, Reconfiguration & Refurbish	23,945	33,800
13	GM - Gym	1999		Excellent	None	61,208	84,172
15	O- Observatory	1931		Good	Cosmetic Repairs & Window Replacement	1,985	2,923
16	E - Louis Agassiz	1936	1975	Moderate	Seismic, Reconfiguration & Refurbish	22,650	33,800
18	FS - Facilities Service	1999		Excellent	None	22,597	25,072
19	Boiler House	1930		Moderate	Reconfiguration Into Modern Mechanical Bldg	6,524	6,990
21	LL - Shatford Laboratory	1993		Excellent	None	57,097	89,829
24	W - Women's Gymnasium	1963		Poor	Demolish--Replace With New Building	31,634	43,000
25	R - Robbins	1966		Poor	Remove Asbestos, Complete Remodel/Reconfig.	65,373	134,107
26	V - Howard Martin	1965		Poor	Complete Remodel Into Part Of Center For Arts	31,531	45,992
27	P - Planetarium	1965		Good	Cosmetic Repairs	1,223	1,309
30	Z - Ceramics	1969		Good	Complete Remodel For New Use	3,859	4,770
31	G - Art Gallery	1969		Good	Complete Remodel For New Use	1,078	1,400
32	U - Armen Sarafian	1973		Poor	Demolish--Replace With New Building	52,903	81,205
33	UU- Forum	1973		Good	Cosmetic	6,250	10,000
34	WH 2268 E. Foothill - Temp	1988		Rental-- Poor	Rental	10,450	10,750
35	CDC - Child Development Center	1996		Excellent	None	17,364	22,302
36	IT - Industrial Tech	2009		Excellent	None	42,773	66,558
37	B - Bookstore	2009		Excellent	None	15,851	19,970
Total						644,301	976,350
772	Community Education Center	1996		Excellent	NONE	47,498	69,670

Source: PCC Department of Facilities Services

The PCC main campus is a mix of old and new facilities and their current conditions vary from excellent to poor. New buildings constructed since the early 1990s are in “excellent” condition and do not require any remedial action. Many of the older buildings on campus remain in “good” or “moderate” condition, even those constructed in the 1930s, some of which have already undergone relatively recent updates or additions. Some of these older buildings, however, have also been identified for reconfiguration and refurbishment, along with the need to undergo seismic repairs.

It is critical that existing facilities meet seismic infrastructure, as well as other safety and usability standards. This includes asbestos removal from one building identified as being in “poor” condition (The R Building-Robbins) and the demolishment of both the W Building (Womens’ Gymnasium), and the U Building. The latter two facilities are possible sites for new buildings. In addition, all new and refurbished buildings must meet the highest level possible of the American and Disabilities Act (ADA) accessibility standards.

These efforts to meet safety and usability standards will also provide an opportunity to upgrade and update facilities with the latest educational tools and technologies. The facility re-use and reconfiguration program will necessarily focus on construction needed to remedy the current shortage of “smart” classrooms. There is also a reported shortage of laboratory space and many of these lab facilities are outdated even though lab space represents the highest amount of square footage on campus. Equipping these labs with more modern technology will require that the underlying infrastructure in these buildings (electrical power, sewage, and water) be strengthened and updated to support the performance requirements of this technology.

In addition, it is important that PCC provide the right mix of facilities with the correct amenities for their stated purpose. As part of the Facility Master Planning process, proposed enrollment and WSCH calculations will be used to determine the overall square footage required and the appropriate mix to meet the educational program needs. Table 7-2 breaks down current uses of the square footage on campus.

Table 7-2: Existing Facility Types

Classroom	Lab	Office	Library	AV/TV/ Radio	PE	Assembly	Inactive	Other
98,496	163,128	121,109	49,344	5,610	69,965	21,583	64	115,002
15.3%	25.3%	18.8%	7.7%	0.9%	10.9%	3.3%	0.0%	17.8%

Source: PCC Department of Facilities Services

Rescheduling

Funding for new or even reconfigured buildings cannot be justified without substantive evidence that current facilities are truly maxed out. Rescheduling should take into account space utilization needs of students and faculty, and scheduling needs of students.

Space Utilization Needs. Space utilization should be evaluated to determine how well existing classroom and laboratory space is being used and scheduled. Faculty and staff have observed times when there is excess capacity on the campus that could be filled, such as Fridays and weekends when the campus is operating at reduced capacity. This suggests course schedules could be expanded to use facilities to their full capacity while

also providing an effective way of responding to high student demand for some divisions and disciplines. However, the desire to use the physical resources of the campus around the clock should be tempered by the recognition that there are pedagogical reasons to maintain a balanced rhythm to campus life, conducive to the learning process.

Scheduling Needs. Current scheduling practices sometimes appear irrational and often result in overly complicated daily and weekly course schedules that conflict with the educational needs of students. Simplification should be a guiding principle when scheduling classes.

Sustainability

PCC has long been a leader in developing and implementing sustainability programs, but often has not been recognized for its success in this area. Over the years PCC has developed a wide range of sustainability initiatives from recycling to water saving devices. For instance, PCC started its campus recycling program in 1995 and now diverts 87 percent of its waste away from landfills. There are, however, a number of sustainability projects that have not been fully implemented such as installing solar panels on the parking garages and developing a more sustainable landscape among other measures.

Building upon its past successes, sustainability principles should be integrated into all future facility developments and operations. To help implement this initiative, a sustainability program and a sustainability committee should be put into place, if not already active, to help manage and oversee the process.

A goal of this program is to develop a sustainable landscape to reduce water use and maintenance. The current PCC campus consists of approximately seven acres of grass and 500 trees. By creating an aesthetically appealing and relaxing environment for learning, this lush green campus is considered by many to be an important asset for both the college and the community. An important element to a true sustainable landscape will be to also evaluate the tremendous amount of hardscape, asphalt, pavement, and other pathways, which provide an important function but also impede storm water recapture and recharging of water.

In order to retain a sustainable landscape the infrastructure that supports and nourishes this green (and the hardscape) campus can be retrofitted to more effectively capture and recycle storm water, using permeable paving, bioswales, native planting, and soils remediation to create a more environmentally friendly and sustainable campus.

Faculty and Staff

Faculty and staff will be directly impacted by changes in the mix of programs offered at PCC. This includes not only existing College personnel but also new recruits to the organization. For this reason, before any of these program changes can be undertaken, PCC will consider plans for:

- Professional Development and Training
- Faculty and Staff Recruitment
- Enhanced Collaboration Across Divisions

Professional Development and Training

A series of interrelated trends driving organizational and programmatic changes at all community colleges has created a need to rethink the pedagogical approaches used in the past. As academic and career programs change and evolve, in concert with the emergence of new teaching approaches, faculty and staff will need professional development training and tools to effectively integrate and support new teaching methods.

Such fundamental change at the institutional and individual level cannot happen overnight. It may take three to four years for all faculty and staff to make the transition to new teaching approaches or to attain the qualifications required to teach in these new academic programs.

Underprepared Students. PCC is managing an increase of underprepared students not yet college-ready and confronting the certain prospect of even greater numbers of such students in future years. At the same time there are fewer resources to deal with this growing trend.

There is an increasing recognition that basic skills training can no longer be the exclusive domain of a relatively small cadre of educational specialists. Departments need to be provided with training and tools required to work effectively with underprepared students. Without this, faculty will be ill equipped to help students develop their basic English and math skills to the educational level required to benefit from the college-level courses and programs PCC offers.

Limited Resources and New Technological Approaches. Along with shifts in student and labor market demand, which together underlie changes in the mix of academic and career programs provided by PCC, there is a growing acknowledgement among faculty and staff that change is coming. The decline and growing competition for limited resources, not just for basic skills training, is compelling faculty and staff to review its fundamental teaching approach. The advent of digital media and related social technologies has become the locus for rethinking how best to transmit knowledge and skills to a generation familiar with this technology. On-line learning programs, distance education, hybrid courses, and other teaching tools using these new digital technologies provide a way to cope with scarce resources, and expand the outreach and scope of each classroom.

As new pedagogical approaches use digital platforms, however, current and future faculty and staff will need to understand how to successfully integrate and deploy these technologies. Faculty cannot simply transfer information as it exists in traditional teaching tools to the new digital platforms. They will require assistance and support, and the time and opportunity to pursue these retraining opportunities.

Faculty and Staff Recruitment

The addition of faculty and staff will be a factor in coming years and a critical means for reinforcing changes identified in the EMP. Even if the overall PCC student population remains at or near current levels (requiring no increase in the number of faculty and staff), gradual attrition through promotions, retirement, transfers, and other factors dictates a continuing need to recruit and select replacements. New recruitment criteria should focus on faculty and staff:

- Supportive of change and innovation expected in the PCC educational environment;
- Dedicated to serving the educational needs of underperforming students; and
- Committed to the challenge of working to develop basic skills students as they are to working with college-ready students.

New and current faculty can model for other faculty the teaching approach and attitude required to work effectively with such students. By doing so they can help address any resistance that may exist in some current faculty whose professional training and aspirations remain understandably focused on teaching college-level material, not educational remedial training. In addition, recruitment efforts will need to focus on leadership positions, in both academic and support areas, who understand the need for basic skills and technological focus.

New faculty and staff can also be an effective vehicle for introducing and integrating new innovative teaching methods to fully capture the educational benefits of using digital media. Revised hiring practices for new faculty and staff should emphasize prior digital media training and experience as an essential qualification, especially in those disciplines most directly impacted by this educational tool. Faculty and staff possessing these qualifications will not only be more effective in their classrooms, but they can also serve as one way to share this knowledge to professional colleagues at PCC.

Enhanced Collaboration Across Divisions

Like almost all other colleges and universities, PCC is organized around traditional academic disciplines and divisions. Just as knowledge thought of in terms of these separate academic units, faculty and staff tend to be segregated as well. Given the challenges of transforming post-secondary education, this traditional educational structure may no longer be viable. Effective organizational and programmatic solutions require that faculty and staff work across their respective professional areas. It will be necessary to engage in a more systems-oriented approach, recognizing the inter-connections between the different disciplines and divisions.

Both faculty and staff need to see themselves and be regarded as members of the entire PCC community, not just of their own academic silos. This represents a significant organizational cultural change for PCC. Shared responsibility for developing basic skills students across all academic disciplines and divisions can be the short-term catalyst for bringing about change.

Information Technology

The emergence of new technologies which deliver educational content, both within and outside the classroom, poses a significant challenge and an opportunity for all other educational institutions. Many of today's college students are among the first to grow up immersed in a digital environment, with expectations that their college educational experience will engage these technologies. Equally, many faculty and staff want to integrate digital technologies into their teaching methods and curriculums, but need assistance doing so.

The effective delivery of online educational capabilities throughout PCC will require a significant investment in the required information technology infrastructure. To ensure the appropriate hardware, software, and training are acquired and effectively integrated, a unified and consistent management approach is essential and will require an understanding of the appropriate use of technology and in-person/hands-on teaching methods. A unified management approach for enhancing the delivery of information services will address several current issues.

Smart Classrooms. A small number of “smart” classrooms are currently equipped with media and other educational technology tools, but the demand far exceeds the current supply. In addition, these smart classrooms are maintained by a number of different divisions, creating confusion and gaps in maintenance and operations. There is also a wide variety of different administrative information systems and programs operating campus wide. As a result not only are many current software and database programs, from registration to program review, outdated, but they do not interface with each other. This requires duplicative work and constrains PCC’s ability to deliver a unified set of web services for students, faculty, and staff.

Organization. The current organizational structure at PCC splits technology services among several vice presidents and managers. To remedy this situation, a unified technology services organization for PCC, led by a Chief Technology Officer (CTO) has been recommended.¹ The new CTO will provide the leadership required to move forward in developing and implementing an Integrated Technology Plan. This plan is intended to eliminate duplication and redundancy among competing digital information silos, ensuring the development of a single comprehensive, fully integrated college-wide IT system. Assisting the CTO will be:

- An advisory committee for academic/instructional computing to provide recommendations concerning distance education, faculty support, help desk operations, classroom technology, and computing labs; and
- An advisory committee to focus on policies and priorities related to the selection, implementation, and operation of administrative information systems. Both committees will facilitate planning and accountability by providing critical direction regarding institutional priorities, procedures and practices.

To encourage and support faculty members who need to apply on-line educational technologies in their coursework, PCC should establish a manager/director responsible for academic/instructional technology. This manager, along with instructional support staff, would assist faculty in rethinking how information is organized and deployed to best realize the educational potential of the digital technologies.

Much of this assistance could be provided in a Center for Innovation and Student Success (previously Teaching and Learning Center), where faculty would receive training in and work directly with instructional support staff in the development and application IT-based educational tools. Through these interactions, the academic/instructional technology manager and staff would develop an informed understanding of faculty needs. Working collaboratively with the IT Department, they would use that experiential knowledge to develop and implement programs, and services tailored to meet the educational goals of faculty and the expectations of their students.

¹ Information Technology at Pasadena City College: Technology Report, Strata Information Group, June 16, 2009.

Institutional Research

PCC is currently in the process of transforming the current Institutional Effectiveness department into The Office of Institutional Effectiveness (OIE). The OIE is intended to encourage communication, foster collaboration, and leverage existing and new resources between four interrelated PCC Departments, programs, and functions:

- Planning, Program Review, and Accreditation
- Institutional Research and Evaluation
- Organizational and Professional Development
- Center for Innovation and Student Success (currently the Teaching and Learning Center)

Providing a coordinated and supportive “home base,” the Office of Institutional Effectiveness will strengthen each area and help to significantly and positively transform PCC.

Vision and Goals

OIE’s vision is of a vibrant learning community dedicated to innovation, inquiry, evidence, and, most importantly, increased student success. Supporting this vision are the following goals:

- Place student learning at the core of its mission.
- Coordinate, support, and facilitate the college’s overall strategy of achieving institutional effectiveness in support of student success and ongoing learning for everyone at the college.
- Foster a culture of inquiry and evidence among all stakeholders on campus to drive decision-making and promote institutional transformation.
- Facilitate and support the work of the Institutional Effectiveness Committee, which “examines program reviews in the context of the college’s mission, EMP, and strategic directions and makes recommendations that support student access, learning, and success.”
- Engage in an annual and systematic evaluation of PCC’s planning and resource allocation procedures.
- Support individual and collective learning through a comprehensive, sustained, and effective professional development process.

Below are the roles and responsibilities of each of the four Departments in supporting the OIE’s vision and goals.

Planning, Program Review, and Accreditation

- Create Institutional Effectiveness Committee (IEC) to:
 - provide a forum for college representatives to participate in the coordination and evaluation of evidence-based institutional program review to determine effectiveness;

—examine program reviews in the context of PCC’s mission, EMP, and priorities; and

—make recommendations that support student access, learning, and success.

- Collaborate with the Accreditation Liaison Officer and the IEC to facilitate and support PCC’s annual and ongoing accreditation activities; oversee program review and outcomes evaluation; and support all aspects of the WASC/ACCJC accreditation and self-study process, including reporting requirements.
- Coordinate and support PCC’s annual strategic and action (program) planning processes to create “an effective and integrated system of program review, planning, and resource allocation.”
- Coordinate and support the Educational, Facilities, and Technology Master Plan processes.

Institutional Research and Evaluation

- Collaborate with the Center for Innovation and Student Success to support and facilitate program design, management, evaluation, and integration processes.
- Collaborate with Organizational and Professional Development to drive learning outcomes assessment, faculty inquiry, action research, evaluation, and transformation processes.
- Engage in providing student, classroom, course, program, and institution-level data to relevant stakeholders on campus (e.g., faculty and deans) and off campus (e.g., state agencies, the private sector, and accreditation agencies).
- Provide administrative and staff support for the IEC, working closely with the IEC to facilitate an ongoing integrated planning and review process.
- Ensure completion of external compliance reports for PCC.
- Maintain and update District policies and procedures.

Organizational and Professional Development

- Use a structured, evidence-based change management approach to transition the college (or a department or individuals within it) to a future desired state.
- Collaborate with the proposed Organizational and Professional Development Coordinating Committee (made up of members of the Office of Human Resources, Academic and Classified Senates, Management Association and the Center for Innovation and Student Success) to plan, budget, implement, and evaluate a cohesive college-wide faculty, administrator, and classified staff professional development program, tied to measureable outcomes.
- Provide diverse and effective learning opportunities for faculty, administrators, and staff on and off campus by fostering relationships with institutional, regional, and state-wide professional development networks.
- Collaborate with the Grants Office and the Center for Innovation and Student Success to identify and acquire external funds to develop and sustain innovative programs, resources, and services for students and faculty.

Center for Innovation and Student Success

- Act as practitioner-driven and practitioner-run.
- Develop, pilots, and evaluates new and innovative programs, resources, and services that support the needs of our under-prepared students and the campus community that serves them.
- Ensure that new and effective programs align with the college’s mission and strategic goals.
- Engage in ongoing inquiry and action research.
- Use evidence to identify effective programs and determine whether they can and should be scaled up and sustained.
- Provide support to instructional and student and learning services deans and managers and to their faculty and staff to ensure the successful transition of effective programs from “incubation” to “integration.”
- Collaborate with the Office of College Advancement (PCC Foundation) and other departments within the college to identify and acquire public and private grants to develop new and innovative programs and resources that align with the college’s strategic goals and objectives.
- Collaborate with Organizational and Professional Development Coordinating Committee, Institutional Research and Evaluation, the IEC, Offices of Instruction, Student and Learning Services, and Information and Technology.

Revenue Enhancement

The current economic and funding environment for Community Colleges in California creates the necessity to identify and develop additional funding sources and mechanisms to sustain, grow and enhance PCC. In order to meet its mission and to fulfill its vision, the College has determined it must substantially increase revenues from alternative sources.

There are four broad areas that can be developed to contribute to revenue enhancement for the college:

- PCC Foundation
- Extension
- International Students
- Business Revenue

PCC Foundation

The PCC Foundation has been an independent auxiliary organization of the college for 32 years. It has an active board, and an advisory board comprised of past Foundation board members. Over the years it has taken on the charge several times of overseeing capital campaigns, most recently in support of the Center for the Arts. The vision and mission of the Foundation going forward, under the new designation of Institutional Advancement, is to seek ways to develop alumni and community giving campaigns.

- Develop annual and planned giving campaigns.
- Pursue through relationship building grants awarded by private foundations.

Extension

The term “Extension” is designed to be broad-based. While programs do exist that could come under the Extension heading, decisions as to organizational structure are still pending. This area, in a leadership role for revenue enhancement, naturally aligns with Instruction; and a partnership between Extension and Instruction would promote the fluid delivery of programs.

Extended Learning is the college title given to Community Education (fee-based classes). Extended Learning offers a wide array of classes both traditional and online addressing career, test preparation, and personal interest. To raise revenues in this area, PCC should:

- Expand certificate-based programs.
- Develop online course for corporate training.
- Design industry-specific test preparation courses.
- Partner with local public and private high schools to provide fee based co-enrollment opportunities for advanced coursework.
- Explore offering Basic Skill or refresher coursework through extension.
- Re-instate the PCC Contract education program and offer to area businesses.
- Develop Continuing Education Units (CEUs) Program that is responsive to the needs of professionals requiring ongoing training for license renewal.
- Expand PCC’s partnership with the California Corporate College to offer contract education statewide.
- Actively search for federal, state, and local grant opportunities to fund ongoing and innovative instructional and operational needs.
- Expand the current selection of personal enrichment course offered by the Extended Learning Program.

International Students

PCC currently has about 1,200 International students. International students generate significant non-resident fees that remain with the college. These fees are additional funds for the college’s general operating budget. Through the development of a fully integrated online platform for credit courses, the opportunity exists to offer International students the ability to take PCC classes from their countries of residence at the International non-resident fee. **To enhance revenue PCC should:**

- Expand outreach to international students by offering online courses.
- Increase the international student population on the PCC campus.

Business Revenue

The Community Business Center (CBC) generates revenue for the college through Live Scan, Child ID, and notary services. The CBC now has its own facility on the grounds of the PCC Community Education Center (CEC). Currently the CBC is self-supporting but its services could be expanded to generate even more revenue for the college.

Additionally, the college has revenue-generating capabilities from other sources, e.g., civic center rentals, bookstore licensed goods, and the flea market. These other sources need to be developed and maximized to their full potential. PCC should:

- Construct college policy and procedures that address rental of college facilities.
- Utilize college resources such as cosmetology services and the dental hygiene clinic to generate revenue.
- Explore all avenues of revenue generation available to the college.



APPENDIX A. ENVIRONMENTAL SCAN



Pasadena Area Community College District

Educational Master Plan

Environmental Scan
April 3, 2010

Prepared by



Table of Contents

Executive Summary..... Page 1

Methodology and Data Sources..... Page 5

I. Service Area and District Demographics..... Page 7

II. High School Enrollment Trends..... Page 23

III. Pasadena City College Enrollment Trends..... Page 29

IV. Regional Educational Choices..... Page 47

V. Employment and Workforce Needs and Trends..... Page 57

Sources..... Page 75

Appendix A. Regional Providers Program Comparison Page A.1

Executive Summary

Community Colleges, in comparison to other institutions of higher learning, are uniquely flexible with the capacity to more quickly adapt to changing conditions and new economic trends. This capability, along with general accessibility to the broad community, enables community colleges to play an important role preparing students for the workforce. Given current economic conditions, coupled with long term trends transforming the economy, such as globalization, the advance of new technologies, aging of the workforce, and climate change, the role of community colleges in our society has become more important and vital than ever before.

The Pasadena Area Community College District (PACCD) has developed this Environmental Scan document to highlight the major trends to address during the development and ongoing implementation of the PACCD Educational Master Plan (EMP). These trends include regional and local demographic shifts, high school and Pasadena City College (PCC) enrollment trends and projections, and instructional productivity and efficiency of PCC compared to regional benchmark community colleges. In addition, careful consideration of PCC's position in the greater education system and community will be important as the national and global economy continues to evolve.

Primary Findings

The Environmental Scan in conjunction with the Campus and Community Outreach process will provide context for the Pasadena Community College Educational Master Plan, highlighting the primary indicators that need to be addressed as the institution plans for the next ten years of programs, services, and facilities.

Specifically, the Environmental Scan provides a foundation of information and a number of findings that will most dramatically impact future planning, including:

1. **Anticipated population growth in the San Gabriel Valley and Los Angeles County.** This growth will create an increased need for post-secondary school education and challenge existing providers to serve a growing student demand for higher education. As PCC is at its funded “full time equivalent student” (FTES) capacity, if not over capacity, it needs to consider several related questions to determine how best to serve the needs of this growing population; including how to optimally allocate its constrained resources among the many different programs offered by the divisions at PCC, determine what type and amount of facilities will be required to support any program changes, as well as how to develop the staff and faculty in alignment with these possible shifts in program offerings and facilities.
2. **Continued increase in English Language Learners (ELL).** Through its already extensive experience with ELL students, PCC is accustomed to the needs of a very diverse population. Embracing and serving this diversity will be a major goal for the college in the coming years.

Executive Summary

3. **Shifting age patterns.** Although the current student population is relatively young, the region's population is aging. This means that PCC must expand programs for older individuals who are more interested in developing new skill sets, changing careers or building upon an existing career to be better positioned for future jobs.
4. **Participation Rate Out of District.** The fact that PCC draws two-thirds of its students from out of district indicates that potential students within the District may not be as well served as they should be. The lack of in-District participation should be addressed with better communication, outreach and understanding of the choices potential students are making about PCC and why.
5. **Increased need for Basic Skills programs.** The need to provide remedial training for poorly prepared K-12 students and returning students lacking basic skills is anticipated to continue even with more rigid academic standards in place in the K-12 system. Bringing students up to par to effectively learn the critical skills needed to succeed is a major challenge that every community college will face. Adequate Yearly Progress scores indicate there are wide variations among PCC feeder schools in both language and math proficiency. PCC will need to address this issue by continuing programs with local feeder high schools, developing curriculum to help students tackle their basic skills as effectively as possible, ensuring the faculty is well prepared to teach these students and providing critical student support services from financial aide to counseling.
6. **Increased need for highly skilled professionals.** The careers of today and the next ten years will require increasingly highly trained and skilled people with technical degrees in the sciences, mathematics, and technology as well as critical thinking and analytical capabilities. PCC can both provide this training and create a bridge between the community of students it serves, 4-year institutions to which PCC students transfer and businesses that will hire PCC graduates with an AA or AS degree.
7. **Declining degree award rates.** In recent years the number of Associate Science degrees awarded at PCC has declined. This is at a time when the economy is demanding even more educated workers. The reasons for this decline will need to be further investigated during the course of the EMP process.
8. **Creating niche programs.** The comparison of PCC program offerings to other benchmarked colleges in the region indicates an opportunity to identify and strengthen unique programs to PCC. By looking at the economic climate, community need, faculty interest/capabilities and the PCC mission, new programs may be identified and developed that set PCC apart from its counterparts in the area. Programs focusing on alternative energy, sustainability, health care and other high growth areas are potential opportunities for PCC program expansion.
9. **The need for organizational agility.** The opportunities and anticipated changes in the global, national and local economy will require that PCC become as flexible and adaptable as possible in creating new programs and services to meet their changing needs. Industries and occupations that include green infrastructure and sustainability, health care, water, energy and transportation infrastructure will be evolving as new technologies and approaches are invented. PCC has both a

need and a chance to capture this new wave of innovation by developing and delivering cutting-edge programs.

10. **Address new ways of learning.** Current studies indicate a shift in how students will learn in the future with an increased reliance on technology as well as more informal learning environments. With these changing habits and learning modalities, PCC needs to consider how to best deliver high quality academic programs while adapting to the way students want to learn. PCC currently has very limited but growing online program offerings. Online programs as well as facilities with the technology systems to support online learning, interactive lectures and the like will be increasingly important. In addition, more hands-on, discussion and collegial oriented learning spaces and approaches will need to be built into the PCC offerings.
11. **Leverage partnerships and opportunities with similar institutions.** The Scan indicates that there are already a number of students who are benefiting from the tremendous number of educational providers in the area. PCC can consciously develop relationships, programs and partnerships with other Community Colleges, 4-year universities and other providers to expand what it can offer to its students via more facilities, programs, faculty and specialty training.

The following information provide extensive details about these trends and will be used to focus and direct the development of the Educational Master Plan in regards to programs, facilities, faculty and staff, communications and outreach, support services and financial resources.

Executive Summary

Methodology and Data Sources

Data for this report have been culled from a variety of sources, including U.S. Census, the California Department of Finance, the Southern California Association of Governments (SCAG), the California Community College Chancellor's Office, the California Department of Education, the California Employment Development Department (EDD), the Legislative Analyst's Office (LAO), the Los Angeles County Economic Development Corporation, the Postsecondary Education Commission and reports generated by Pasadena City College. Additional information and reports have been gathered from local county, city and private organizations. When possible, data have been compiled specifically for the Pasadena Area City College District. In order to look at projected trends, data for Los Angeles County has also been presented.

This report provides information related to trends at the national, state and regional and service area levels, typically beginning with national-level trends and following with data specific to California, Los Angeles County and the PACCD.

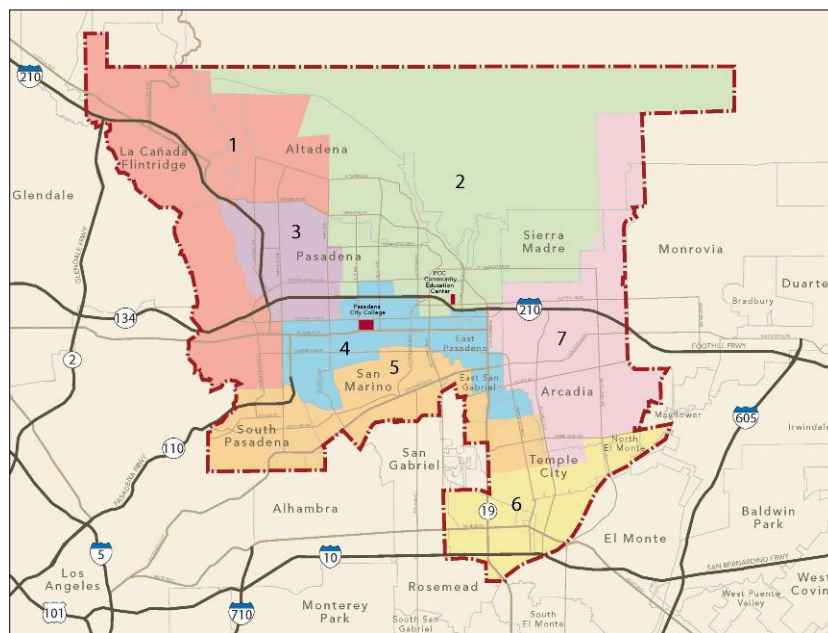
It is important to note that the identified anticipated population growth projections, enrollment projections and employment trends will be impacted by ongoing changes in the economy and the reaction that businesses, the public and the government have over time to those changes. This information provides good directional and order of magnitude planning information and will need to be updated on an ongoing basis to keep up with the evolving trends.

I. Service Area and District Demographics

The Pasadena Area Community College District (PACCD) is one of several community college districts within Los Angeles County. Located in the western portion of the San Gabriel Valley, the PACCD (Figure 1-1) encompasses the unincorporated community of Altadena, and the cities of Arcadia, La Canada Flintridge, Pasadena, San Marino, Sierra Madre, South Pasadena and Temple City, as well as portions of El Monte and Rosemead. PCC, however, draws the majority (63 percent) of its credit students from outside of the District in the surrounding San Gabriel Valley and Los Angeles County (see Figures 1-2 and 1-3)¹. For the purposes of this study, the PACCD service area includes the District itself, as well as the surrounding areas that are home to PACCD’s diverse student body. The main campus on Colorado Boulevard, the separate Community Education Center on Foothill Boulevard, and the Child Development Center on Green Street are all located within the city of Pasadena. PCC is easily accessed by a number of transportation corridors, including I-10, I-110 and I-210 freeways, as well as the Metropolitan Transportation Authority’s (MTA) Gold Line light rail, which has a station within walking distance of the PCC main campus.

Community colleges and PCC serve a wide spectrum of the population, and by understanding regional, local and student demographics, PACCD can better position itself to maintain and develop the best programs to serve the needs of the community. This chapter provides a summary of demographics within the PACCD service area and the greater Los Angeles County, including current and projected populations, student residency, age, ethnicity, language and nationality and gender.

Figure 1-1. Pasadena Area Community College District (PACCD) and Trustee Areas 1 - 7



¹ Source: PCC Observations: 2008-2009

I. Service Area and District Demographics

Figure 1-2. Residence of Non-Credit Students at Pasadena City College (2005)

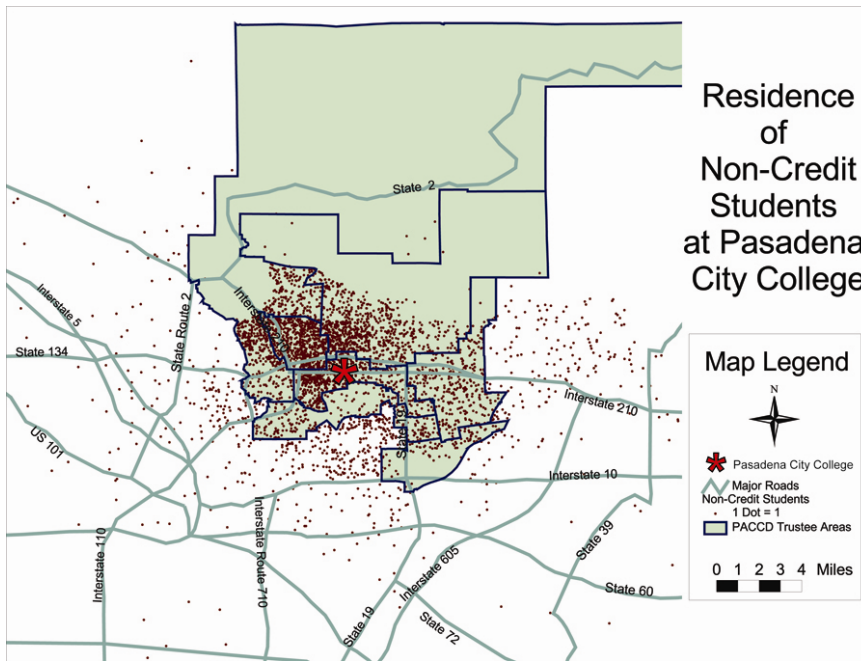
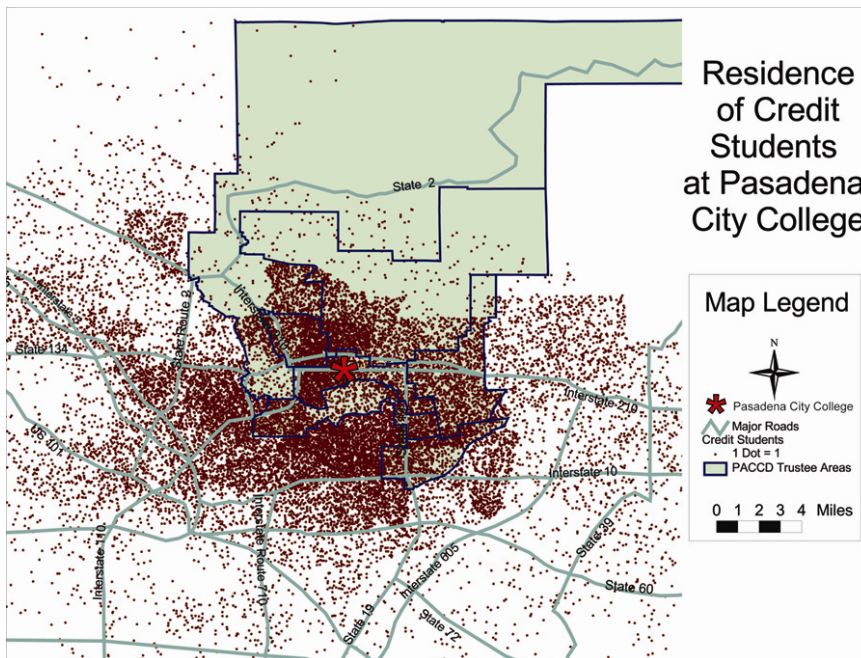


Figure 1-3. Residence of Credit Students at Pasadena City College (2005)



Source: PCC Institutional Planning and Research Office

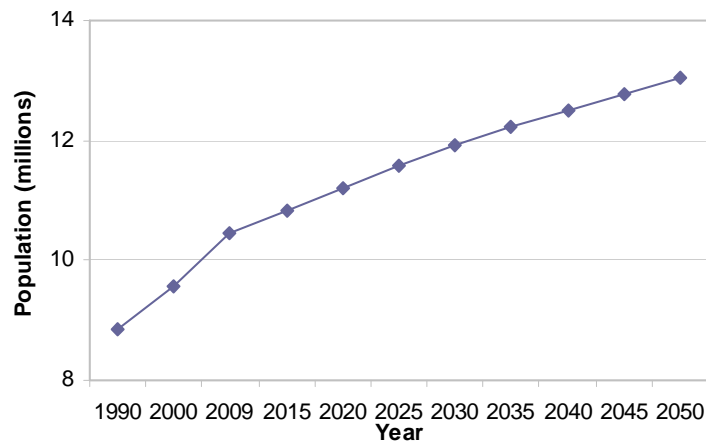
Population

Population Trends in the Greater Region

With nearly two-thirds of PCC’s student population residing outside of the District, student enrollments will necessarily be impacted by changes taking place in the population beyond the formal boundaries of the PACCD. For this reason evaluating the population and demographic trends in the surrounding San Gabriel Valley and Los Angeles County are critical to understanding PCC’s future.

- Figure 1-4 illustrates projected population growth in Los Angeles County from 2000 to 2050. Los Angeles County grew by approximately 890,000 individuals, or 9.3 percent, between 2000 and 2009, outpacing the 7.4 percent growth rate between 1990 and 2000. The population of Los Angeles County is expected to grow from over 10.5 million in 2010 to over 11.9 million in 2030. By 2050, the County will be home to over 13 million people.
- The Southern California Association of Governments (SCAG) forecasts that between 2000 and 2030 the San Gabriel Valley will grow by over 30 percent and will add 620,000 residents to its current population of approximately 1.6 million. ²

Figure 1-4. Population Projections for Los Angeles County



Source: L.A. Stats, Los Angeles County Economic Development Corp., April 1, 2009; State of California, Dept. of Finance, May 2008.

- Population density will increase in both the PCC District and the rest of the San Gabriel Valley, as projected growth will be taking place in an area that is already 99 percent built out.
- Maintaining the quality of life in the face of significant population growth will be a challenge in coming decades. A planned extension of the MTA light rail system, which now serves

² Source: San Gabriel Valley Council of Governments

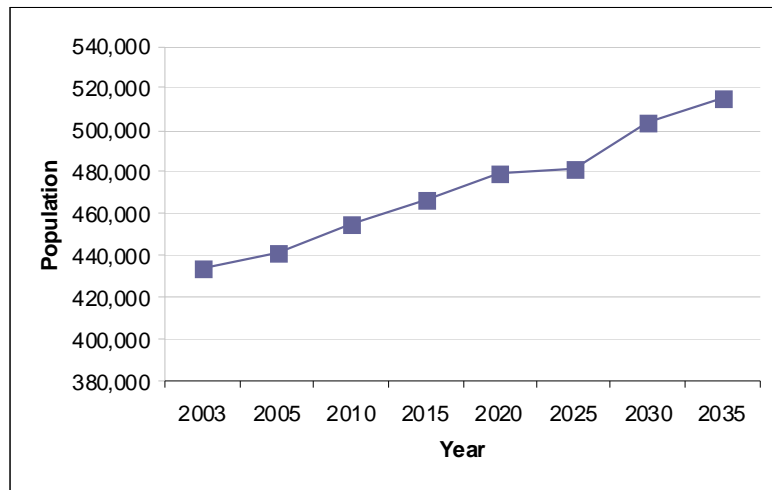
I. Service Area and District Demographics

Pasadena, to communities in the eastern portion of the San Gabriel Valley, will help maintain access to PCC, despite increased congestion on nearby freeways.³

Population of Pasadena Area Community College District

- In 2009 there are an estimated 436,000 residents living within PACCD.⁴ As shown in figure 1-5, the Southern California Association of Governments (SCAG) has projected that the population within the PACCD will increase at a rate of approximately 8.0 percent to nearly 480,000 by 2020 and by 7.0 percent to 515,000 by 2035⁵.

Figure 1-5. Projected Population Growth in Pasadena Area Community College District



Source: Southern California Association of Governments, Adopted 2008 Regional Transportation Plan Growth Forecast, by Census Tract

³ The Foothill Extension will continue the Metro Gold Line for an additional 24 miles beyond its current terminus in East Pasadena. The new route will include 12 cities from Arcadia to Montclair. A trip from Montclair to downtown Pasadena would take a little over 40 minutes

⁴ Source: California Department of Finance, Population Estimates for Cities, Counties and State, 2001-2009

⁵ Source: Southern California Association of Governments, Adopted 2008 Regional Transportation Plan Growth Forecast, by Census Tract

- Table 1-1, illustrates the estimated current population for the primary communities within the PACCD. The City of Pasadena is the largest city in the District, representing approximately 30 percent of the District population.

Table 1-1. PACCD Communities

Incorporated Jurisdictions	Population (2000)⁶	Population (2009)⁷
Arcadia	53,054	56,547
La Cañada/Flintridge	20,318	21,218
Pasadena	133,936	150,185
San Marino	12,945	13,393
Sierra Madre	10,578	11,083
South Pasadena	24,339	25,832
Temple City	33,377	35,747
Unincorporated Communities⁸	Population (2000)	Est. Population (2009)
Altadena	42,610	44,600
East Pasadena	6,045	6,777
North El Monte	3,703	4033
Cities & Unincorporated Communities Partially Within PACCD⁹	Population (2000)	Est. Population (2009)¹⁰
East San Gabriel	13,136	14,134
El Monte	20,223	22,023
Rosemead	27,610	29,708
Total Population in PACCD	401,827	436,280

Source: 2000 U.S. Census and California Department of Finance

⁶ Source: 2000 U.S. Census

⁷ Source: California Department of Finance

⁸ Growth rates of adjacent cities applied to 2000 population data of unincorporated communities to estimate approximate 2009 population.

⁹ The jurisdiction of these cities and communities extends beyond the PACCD; the total population of these communities is not reported here; only that segment of the population residing within the PACCD.

¹⁰ The growth rates for these entire jurisdictions as reported by the California Department of Finance were applied to the 2000 data to estimate approximate 2009 populations.

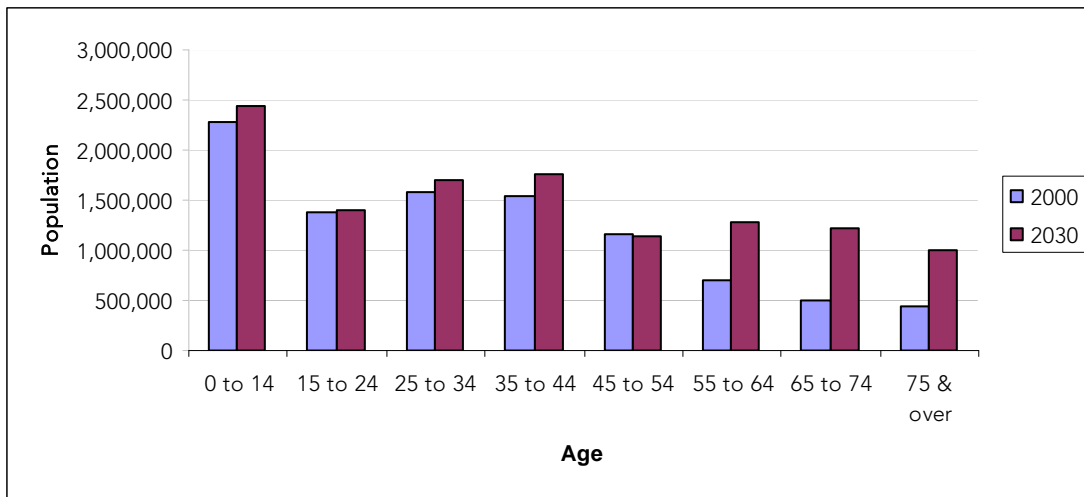
I. Service Area and District Demographics

Age

Age of PACCD Service Area, San Gabriel Valley and Los Angeles County

- People attend community college for a wide variety of reasons at all different ages. Identifying trends and general characteristics of the different age cohorts can improve understanding of program and support service needs.
- Typically, people in the 17 to 25 year age group are high school graduates interested in securing a two-year degree, earning units in preparation for transfer to a four-year institution, or building vocational and basic skills for the workforce. Students younger than 17 who are attending high school enroll concurrently in courses to complement high school work. Those in the age group of 25 and older often attend community college to learn new skills to better compete in the workforce, to earn a certificate applicable to a specialized field of practice, or earn credits to transfer to a four-year school. People in the 60 + age group who have retired often come to community college to continue learning, to develop new skills to support new hobbies and activities, and to build their social network or community.
- As the overall population increases over the next few decades, the age breakdown of the Los Angeles County population will gradually shift, with the older age groups gaining a slight majority. Figure 1-6 and table 1-2 provides illustration of this shift.

Figure 1-6 Los Angeles County Population by Age, 2000 and 2030



Source: California Department of Finance

Table 1-2. Los Angeles County Population by Age, 2000 and 2030

<i>Age</i>	<i>2000</i>		<i>2030</i>	
	Pop.	%	Pop.	%
0 to 14	2,287,266	23.8%	2,433,107	20.4%
15 to 24	1,370,970	14.3%	1,393,567	11.7%
25 to 34	1,574,224	16.4%	1,690,325	14.2%
35 to 44	1,534,249	16.0%	1,762,587	14.8%
45 to 54	1,168,108	12.2%	1,141,285	9.6%
55 to 64	706,701	7.4%	1,272,353	10.7%
65 to 74	496,879	5.2%	1,221,634	10.3%
75 & over	440,563	4.6%	1,005,431	8.4%
Total	9,578,960		11,920,289	

Source: California Department of Finance

- In 2000, a majority of residents (54.5 percent) in the County were less than 35 years of age. By 2030, this age group will account for less than 50 percent of the overall population, and approximately 46 percent of the County population by 2030.
- The population overall is expected to increase by 20 percent from 2000 to 2030. However, the population of the 15 to 24 age group will decline as a proportion of the overall population, from 14.3 percent in 2000 to 11.7 percent in 2030.
- During the same period, the number of residents in the 55 and older age group will increase substantially from 1.64 million in 2000 to 3.5 million in 2030, growing from 17.2 percent to 29.4 percent of the County population.
- As evidenced by the figures provided in Table 1-2, the 75+ age group is projected to grow by 3.8 percentage points relative to the entire county population, while the 65 to 74 age group will grow by over 5 percentage points, representing approximately 10.3 percent of the entire county population by 2030.

Gender

Gender Breakdown of Los Angeles County

- The gender breakdown of Los Angeles County is approximately 51 percent female and 49 percent male. This split is expected to continue through 2030 and beyond.

I. Service Area and District Demographics

Race and Ethnicity

Ethnicity of San Gabriel Valley and Los Angeles County

- According to U.S. Census data, both Los Angeles County and the PACCD service area are among the most ethnically diverse areas in the country, although there are some differences. According to the 2000 U.S. Census, the largest ethnic group in the PACCD is White, accounting for approximately 40 percent of the population. Hispanic/Latino residents represented the next largest group at 24.7 percent of the PACCD population. In Los Angeles County the reverse is true, with Hispanics accounting for 44.6 percent of the population and White, Non-Hispanic residents comprising 31.1 percent.
- During the first decade of the 21st century, the population characteristics of Los Angeles County have continued to change, with the percentage of Hispanic and Asian/Pacific Islander population increasing and the percentage of Whites and African Americans decreasing (see table 1-3).

Table 1-3 Los Angeles County Population by Ethnicity 2000 to 2008

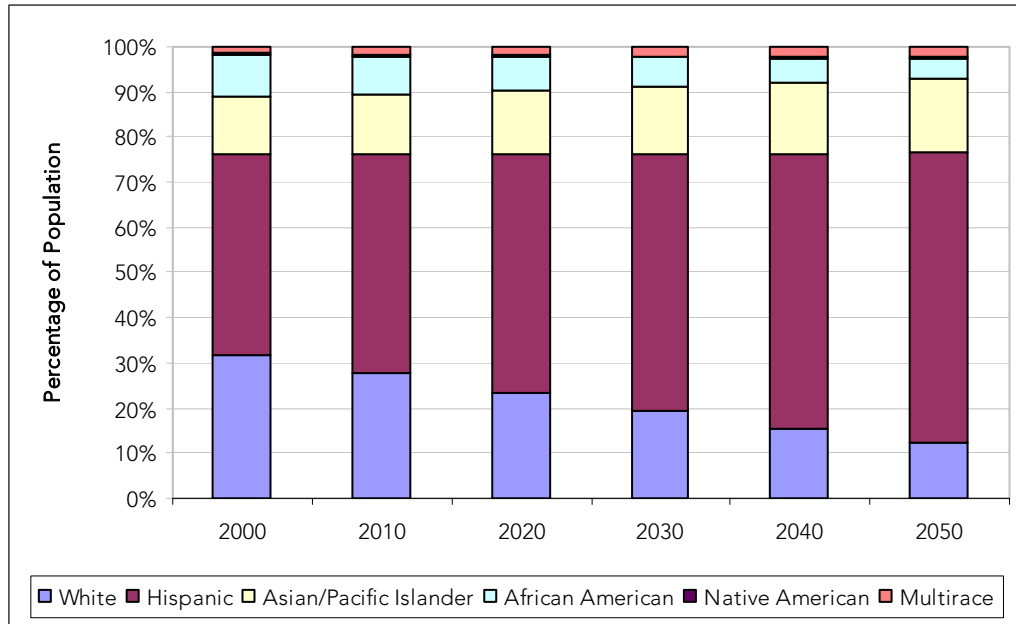
Ethnicity	Population	
	2000	2008
Hispanic	44.6%	47.6%
White Non-Hispanic	31.7%	28.5%
African American	9.8%	8.5%
Asian/Pacific Islander	12.2%	13.4%
Native American	0.3%	0.3%
Multi-Race	1.3%	1.7%

Source: California Department of Finance, May 2008; L.A. Stats 2008; Los Angeles County Economic Development Corporation, April 1, 2009.

- Over the next four decades, the ethnic makeup of Los Angeles County will continue to be shaped by the same trends (see figure 1-7 on next page). The Hispanic population is expected to increase to 5.9 million by 2020, when it will constitute the majority population.
- The number of White residents in Los Angeles County will continue to decrease and will account for only 23 percent of the county population by 2020. By 2050, it is estimated that Hispanics will account for 64 percent of the population and Whites only 12.1 percent.
- The number of African Americans is also predicted to decrease, making up 7.3 percent of the total population in 2020 and only 4.5 percent in 2050.
- The Asian and Pacific Islander populations in Los Angeles County will gradually increase to 14.4 percent of the population in 2020 and 16.5 percent in 2050.
- The Native American population will remain relatively stable at 0.3 percent of the population.

- The percentage of those who classify themselves as multi-race is expected to grow slightly to 1.9 percent by 2020 and 2.2 percent in 2050¹¹. This number may be misleading as individuals can choose to be considered mixed race or classify themselves under one particular race. Other trends and surveys indicate that the actual number of individuals who are mixed race is considerably higher.

Figure 1-7. Los Angeles County Population Estimates by Ethnicity, 2000 to 2050



Source: California Department of Finance, and PCC Institutional Planning and Research Office, Trends to Watch, 2006.

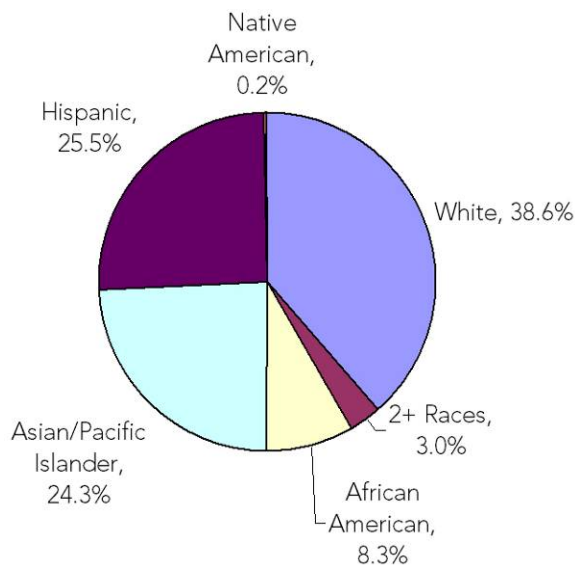
¹¹ Source: California Department of Finance; PCC Institutional Planning and Research Office, Trends to Watch, 2006.

I. Service Area and District Demographics

Ethnicity of the PACCD Service Area

As in the rest of Los Angeles County, the PACCD area is ethnically diverse. No single ethnic group constitutes a majority. The three largest ethnic groups are in descending order: White (38.6%), Hispanic (25.6%) and Asian/Pacific Islander (24.3%). The fourth largest group, African Americans, represent nearly 9% of residents. Multi-racial residents make up 3% of the area population.

Figure 1-8. Total PACCD Population by Ethnicity



Source: U.S. Census 2000

Although the PACCD is ethnically diverse, many of these populations tend to cluster in particular cities and communities (see Table 1-4 on next page). Many Asian residents are concentrated in the eastern and southern portion of the PACCD in cities such as Arcadia, San Marino and Temple City, where they represent the majority. In addition, a significant number of Asians also reside in the City of La Canada/Flintridge; located in the northwest part of the PACCD. The White population resides primarily along the western and northern edge of PACCD in the communities of Altadena, La Canada/Flintridge, Pasadena, Sierra Madre and South Pasadena. The relatively small African American population is centered in Altadena and parts of Pasadena. The Hispanic community represents a significant minority in Pasadena and East Pasadena, and is in the minority in all other cities located entirely within the PACCD service area. Hispanic residents do, however, represent the majority population in El Monte, a portion of which is within the PACCD, as well as many other San Gabriel Valley communities to the east and south of the PACCD that the District serves. Figures 1-2 and 1-3 appearing on page 8 previously showed that the majority of PCC students (63%) come from communities located outside the PACCD, including many of the Hispanic students among other ethnic groups.

Table 1-4. Race/Ethnicity in the PACCD, by Community

City/Community (2008)	Hispanic	White, Non Hispanic	African American	Asian/Pacific Islander	Native American	All Other Non-Hispanic
Altadena	23.5%	41.4%	27.0%	5.0%	0.1%	2.9%
Arcadia ¹²	10.2%	31.1%	1.2%	54.6%	0.1%	2.8%
East Pasadena ¹³	35.2%	38.1%	2.5%	22.2%	0.8%	1.2%
East San Gabriel ¹⁴	23.5%	31.1%	1.9%	40.6%	0.6%	2.3%
El Monte ¹⁵	71%	5.6%	0.5%	21.7%	0.4%	0.8%
La Canada/Flintridge	4.9%	66.7%	0.3%	25.0%	0.1%	3.0%
North El Monte ¹⁶	25.3%	46.1%	0.8%	26.3%	0.8%	0.7%
Pasadena	36.7%	36.9%	11.5%	11.4%	0.3%	3.2%
Rosemead ¹⁷	35.9%	6.2%	0.5%	55.8%	0.2%	1.4%
San Marino	3.9%	37.2%	0.2%	56.4%	0.0%	2.3%
Sierra Madre	9.6%	79.5%	1.1%	6.1%	0.2%	3.5%
South Pasadena	17.2%	46.8%	2.8%	29.6%	0.1%	3.5%
Temple City ¹⁸	17.3%	29.5%	0.6%	51.7%	0.2%	0.7%

Note: (1) The largest ethnic group within each community is highlighted in bold. (2) El Monte and Rosemead fall partially within the PACCD Service Area.

Immigration and Language

The two largest factors driving population growth in Los Angeles County have been natural increase, i.e. the number of births exceeding deaths, and immigration to Los Angeles County from other parts of the world.

- Between 2000 and 2004, natural increase added 374,000 new residents, while immigration accounted for 366,000 additional residents. At the same time, Los Angeles County experienced a net loss of 139,000 people due to domestic migration (i.e. more people were leaving Los Angeles County for other parts of California or other states than were arriving).¹⁹
- Given these high immigration rates, in 2003 over one third of Los Angeles County residents were foreign-born. The majority of the county’s residents (56 percent) spoke a language other

¹² Source: Southern California Association of Governments, City Profiles, May 2009

¹³ Source: 2000 U.S. Census

¹⁴ Ibid.

¹⁵Source: Southern California Association of Governments, City Profiles, May 2009 (2008 population); ethnic makeup is for the entire city and may not be representative for the area of the city within the PACCD.

¹⁶ Ibid.

¹⁷ Source: Southern California Association of Governments, City Profiles, May 2009 (2008 Population); ethnic makeup is for the entire city and may not be representative of the city within the PACCD.

¹⁸ Source: U.S. Census Bureau, 2005-2007 American Community Survey, 3-Year Estimates

¹⁹ Source: Public Policy Institute of California, March 2005

I. Service Area and District Demographics

than English at home. Only 41 percent of foreign-born County residents have become naturalized citizens.^{20 21}

- 224 different languages have been identified in Los Angeles County, including 92 different languages among students of the Los Angeles Unified School District. Spanish, Asian/Pacific Island languages, and Armenian are the leading languages other than English that are spoken at home in Los Angeles County.²²

PCC Student Characteristics

The students at PCC are in many ways a reflection of the surrounding community and region. However, there are differences which should be examined to evaluate if the College is effectively serving the community and to better understand if there are particular populations that are more or less attracted to the offerings at PCC.

Student Population

Several methods are used to calculate and evaluate different dimensions of student population including headcount, full time equivalent students (FTES), enrollment and weekly student contact hours (WSCH). Collectively, these statistics provide a comprehensive look at the number of students who attend PCC and their level of involvement in PCC programs.

Headcount represents the number of actual students attending at a given time. Full Time Equivalent Students (FTES) is a calculation used by the State to determine funding levels per student. Enrollment provides a look at the total number of class sessions taken by all students in a given semester or academic year. Weekly Student Contact Hours (WSCH) refers to hours of scheduled contact with instructors by enrolled students in a course section.

- For the Fall 2008 term, the number of students at PCC, calculated as “headcount” including credit and non-credit students, is reported as 29,943.²³ For that same term, the number of Full Time Equivalent Students (FTES) is reported as 11,127 (including both credit and non-credit).²⁴

²⁰ Ibid.

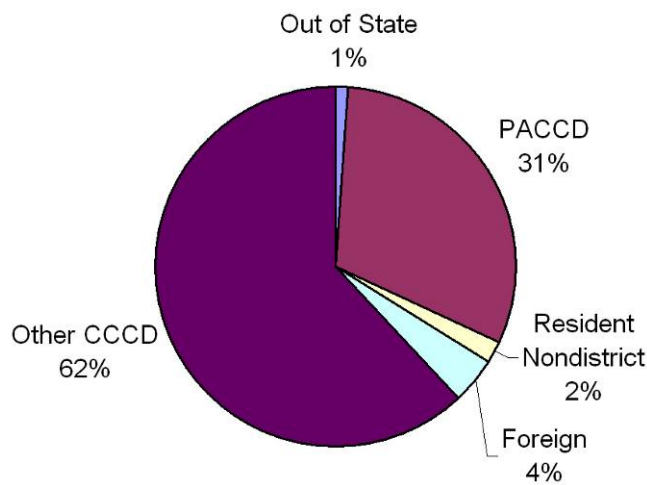
²¹ These immigration rates cover a period preceding the current recession. According to a U.S. Census report released on September 21, 2009 there was small dip in the foreign-born U.S population which in 2008 dropped below 38 million after reaching an all time-high in 2007.

²² Source: Los Angeles Almanac website

²³ Source: California Community Colleges Chancellor’s Office – Student Total Headcount

²⁴ Source: California Community Colleges Chancellor’s Office – Full- Time Equivalent Students.

Figure 1-9. PCC Credit Student Residency, Fall 2008



Source: PCC Observations 2008-2009

- As illustrated in Figure 1-9, less than one third, or 31 percent, of students enrolled in PCC in Fall 2007 lived within the PCC District. Sixty-two percent of PCC’s credit students reside in other community college districts located in Los Angeles County. The remaining 7 percent of students have out-of-state, foreign, or non-district residency. The latter category refers to undocumented students who per AB 540 are able to establish California residency.
- Over the past three years, the average annual student population at PCC has been approximately 55 percent female, compared to 44 percent male.²⁵ This follows current trends in other higher education institutions.

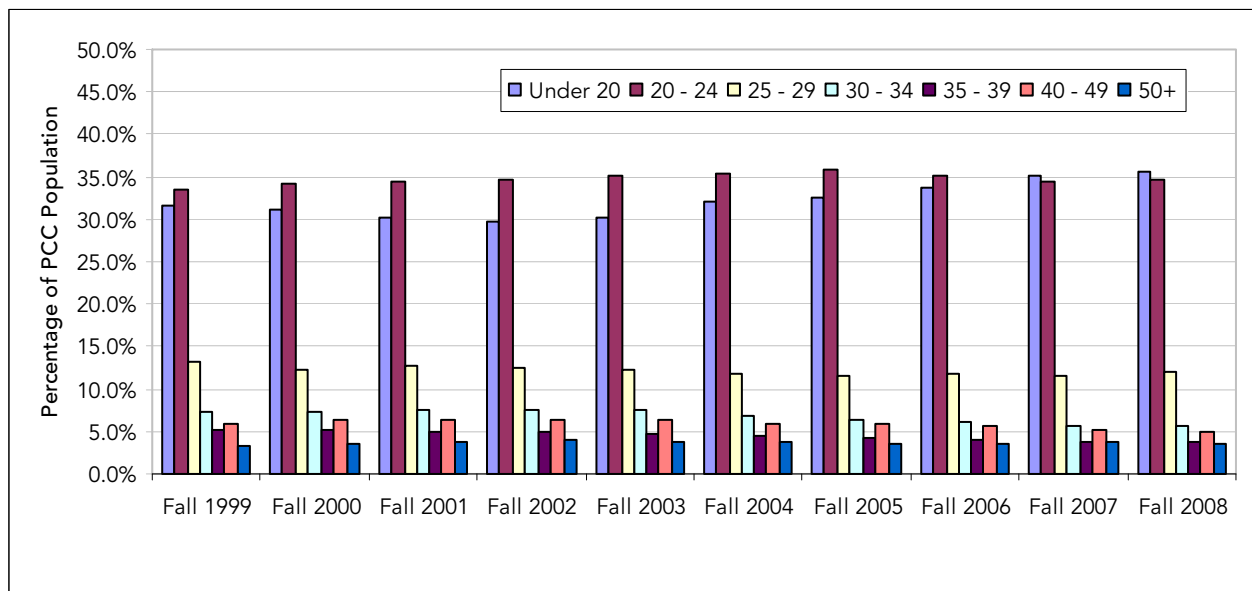
²⁵ Source: ARCC 2009 Report: College Level Indicators – in 2007/2008 the gender breakdown was female (55.1%), male (44.5%) and unknown (0.4%).

I. Service Area and District Demographics

Age of Student Population

- Over the past decade (1999 to 2008), the overall average age of the PCC student population has gradually become younger.
- In Fall 2003, nearly 6000 students (22.9 percent) were over 30. As of Fall 2008, the number of students over 30 declined to 4,775 students (17.8 percent).
- During the same time period, the percentage of PCC students under the age of 25 increased from a low of 29.8 percent in Fall 2002 to 35.5 percent in 2008.

Figure 1-10. Age of PCC Students at Headcount/Enrollment



Source: 2009 Accountability Reporting on Community Colleges (ARCC) Report: College Level Indicators.

Ethnicity of PCC Students

The ethnicity of the overall population residing within the PACDD was presented previously in this chapter. In contrast, this section focuses only on the ethnicity of PCC students.

- The ethnic distribution of the PCC student population is being shaped by the same demographic trends that have changed the population in Los Angeles County and the PACCD service area.
- In Fall 2008, the largest ethnic groups at PCC were Hispanic and Asian/Pacific Islander, representing 34.5 percent and 30.3 percent.²⁶ The third largest group was White at 17.6 percent (see table 1-5 on next page).

²⁶ Including Asians at 25.8 percent, Filipinos at 4 percent and Pacific Islanders at 0.46 percent

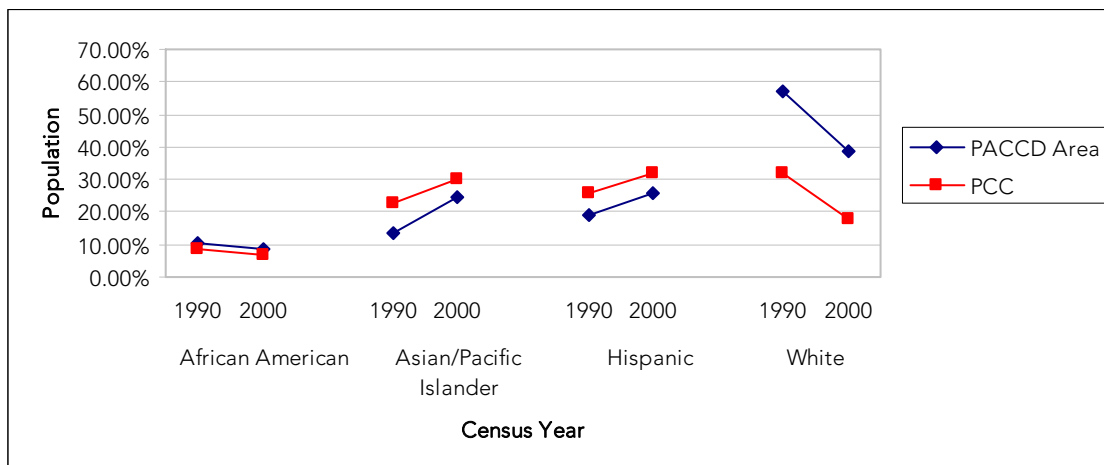
Table 1-5. Fall 2008 Student Enrollment by Ethnicity

Ethnicity	Enrollment	
	Headcount	% of Total
Hispanic	10,316	34.5%
Asian/Pacific Islanders	9074	30.3%
White Non-Hispanic	5,254	17.6%
Unknown	2,346	7.8%
African American	1,648	5.5%
Other Non-White	1,150	3.8%
American Indian/Alaskan Native	155	0.50%
Total	29,943	100.0%

Source: California Community Colleges, Chancellor's Office

- Between 1990 and 2000, as shown in Figure 1-11, the proportion of Whites at PCC decreased, while the proportions of Asians/Pacific Islanders and Hispanics rose. The proportion of African Americans showed a slight decrease.
- Although the ethnic mix of the PCC student population mirrors the diversity of the larger environment, the proportions are not equivalent. As further indicated by Figure 1-11, there are more Asians/Pacific Islanders (30.3 percent) and Hispanics (34.5 percent) at PCC than in the PACCD (24.3 percent and 25.6 percent respectively), while Whites at PCC (17.6 percent) are underrepresented (38.6 percent in the PACCD). Only the African American student population (5.5 percent) is comparable to the PACCD area population (8.3 percent).

Figure 1-11. PACCD Area Population and PCC Credit Students by Ethnicity



Source: PCC Observations 2008-2009

- On a regional basis, the proportion of Hispanics at PCC is smaller than that in Los Angeles County as a whole (34.5 percent vs. 47.5 percent), while the Asian/Pacific Islander student population exceeds their proportion in Los Angeles County (30.3 percent at PCC vs. 13.4

I. Service Area and District Demographics

percent in Los Angeles County). Whites also remain underrepresented compared to the county population (17.6 percent vs. 28.5 percent).

- As shown in table 1-6, despite the continued changes in population distribution in the larger environment, the percentage distribution of ethnic groups at PCC has been relatively stable over the past three academic years.
- The African-American population may be the one exception. From the perspective of the fall semester, there has been a relatively modest decline from 5.94 percent to 5.5 percent between fall 2005 and the fall 2008 semesters. The decline seems more significant when measured in terms of a full academic year as the percentage distribution of African-American students declined from 6.3 percent to 5.6 percent between the 2005-2006 and 2002-2008 academic years²⁷.

Table 1-6. Ethnicity of PCC Students, Fall 2005 through Fall 2008

Ethnicity	Fall Semester			
	2005	2006	2007	2008
Hispanic	32.65%	33.45%	33.73%	34.5%
Asian/Pacific Islander	30.67%	31.67%	31.43%	30.3%
White Non-Hispanic	17.92%	17.80%	18.03%	17.6%
Unknown/Non-Resp.	6.69%	6.80%	7.32%	7.8%
African American	5.94%	5.48%	5.08%	5.5
Other Non-White	4.57%	4.26%	3.94%	3.8%
American Indian/ Alaskan Native	0.62%	0.54%	0.47%	0.5

Source: California Community Colleges, Chancellor's Office

²⁷ ARCC 2009 Report College Level Indicators

II. High School Enrollment Trends

The below average achievement levels of students in the California State education system, kindergarten through high school, critically impacts the Community College System and the level of services and programs required to prepare students for success.

The No Child Left Behind (NCLB) Act requires that individual schools and school districts demonstrate adequate yearly progress (AYP) in academic proficiency. Federal minimum proficiency requirements under NCLB increased in 2008, resulting in a significant decrease in the percentage of California schools and school districts making AYP. Given current trends, the Public Policy Institute of California (PPIC) predicts that approximately three out of four schools and nine out of ten districts in California will fail to make AYP in 2010.

Despite the downward AYP trend, the PPIC report also states there have been some positive developments among California students. This included an increase from 35 to 46 percent between 2003 and 2008 in the share of California's students proficient in English language arts. During the same period, students proficient in mathematics increased from 35 to 43 percent²⁵. Despite these signs of progress and although California's academic standards are among the highest in the country, California students continue to score below the national average in English and math on the National Assessment of Educational Progress.²⁶ This low level of proficiency will continue to be a major issue for the state and the education system, particularly the Community College System which has been identified as a primary strategy for addressing the educational shortfall.^{27 28}

Educational performance trends at the local schools, especially high schools, will directly impact PCC and the programs and services required. Student graduation and drop out rates along with demographics at local PCC feeder schools are highlighted below. The level of preparation that students attain in high school determines what kinds of courses, programs and support services students need both before and once they reach college. In addition, projected demographic shifts, historical enrollments and success trends, and the impacts of the California High School Exit Exam (CAHSEE) will all be important factors for the College to monitor.

²⁵ Source: Public Policy Institute of California (PPIC). California 2025: Planning for a Better Future: "California Education." July 2009.

²⁶ Source: Public Policy Institute of California (PPIC). California 2025: Planning for a Better Future: "California Education." July 2009.

²⁷ A key goal of the California Community Colleges Strategic Plan: "Ensure that basic skills development is a major focus and an adequately funded activity of the Community Colleges."

²⁸ Source: Faculty Association of California Community College; Basic Skills and the New Millennium: A Post "3Rs" Brave New World?" Suzanne Crawford, Spring 2007 Newsletter.

II. High School Enrollment Trends

PCC Feeder School Characteristics

- In Fall 2008, the five top feeder schools²⁹ for PCC were Arcadia High, Pasadena High, Alhambra High, Temple City High and San Gabriel High. Two of these schools, Alhambra High and San Gabriel High, are located outside the PACCD service area. Another feeder school, Mark Keppel High, typically among the top five feeder schools, is also located outside of the PACCD. Table 2-1 below provides an overview of key characteristics of PCC's top feeder schools.³⁰ The high schools are ranked by the number of their 2008 high school graduates from each school who enrolled at PCC in the two academic years following graduation. As this is a one time snapshot, the ranking of the top feeder schools will shift from year to year.

Table 2-1. Statistics and Demographics of Top Feeder Schools for Pasadena City College*

High School ³¹	Enrollment	Percent Non-White	Graduation Rate ³²	English Language Learners	Percent Free Lunch	API Base Rank	Percent Language Arts Proficient	Percent Math Proficient
Arcadia	3657	80.6%	99.8	7.7%	11.0%	859	63%	51%
Pasadena	2214	80.8%	85.4	8.6%	40.8%	713	29%	10%
Alhambra	3218	96.2%	87.9	29.7%	66.3%	730		
Temple City	1979	83.2%	96.8	11.7%	33.1%	822	54%	47%
San Gabriel	2431	98.8%	85.5	27.6%	82.4%	722		
Mark Keppel	2401	97.8%	95.8	25.0%	61.3%	806		
Rosemead	2059	96.6%	92.3	18.5%	73.1%	708	32%	26%
South Pasadena	1508	66.4%	95.8	4.6%	8.8%	857	70%	52%
Gabrielino	1794	92.9%	96.6	23.7%	50.1%	787	50%	31%
Eagle Rock	3067	91.9%	90.9	12.6%	64.1%	717	38%	16%
Franklin	2645	98.4%	72.0	23.2%	72.2%	604	19%	4%
Marshall High	1827	81.6%	91.2	9.4%	52.4%	732	27%	11%
Arroyo	2231	93.9%	93.0	20.3%	73.4%	709	31%	20%

*Schools are listed in order of the number of 2008 graduates from each high school that enrolled at PCC within two academic years following graduation.

Source: California Department of Education. Enrollment, ethnicity rates, English Learners, Free Lunch Program, API Base Rank are for the 2008-09 academic year; graduation rates for 2007-08; and proficiency statistics are for academic year 2003-04.

²⁹ PCC feeder schools are the high schools that provide a significant number of graduates who intend to continue their studies at PCC.

³⁰ Source: Postsecondary Education Commission, Guide to California Colleges and Universities.

³¹ Source: PCC Institutional Planning and Research Office; schools listed in order of number of students from each high school enrolled at PCC in 2006

³² Source: California Dept of Education, Graduation Rates Based on NCES Definition (2007-08)

- A large majority of students in nine of the top 13 feeder schools participate in the free lunch program, in some instances exceeding 80 percent of the student population. In only one of these schools is the rate of participation below 10 percent. As participation in this program is based on income this suggests students enrolled in this program could potentially have a higher need for financial assistance and/or will seek employment while enrolled in college.
- The percentage of students who are English Language Learners (ELL) in these schools ranges from 4.6 percent to 29.7 percent. Five of these schools have more than 20 percent ELL students. At nearly 30 percent, Alhambra High has the highest percentage of ELL students. South Pasadena High has the lowest percentage at 4.6 percent. A probable increase in ELL students at PCC suggests the growing importance of comprehensive assessment to determine educational and linguistic ability and ensure appropriate placement in college level courses.
- The Academic Performance Index (API)³³ scores for the top feeder schools range from the low 700's to the mid 800's. The state has set a target score of 800. Four of the top 13 feeder schools, Arcadia, Temple City, Mark Keppel and South Pasadena, exceed this score.
- Adequate Yearly Progress (AYP) scores indicate wide variations among feeder schools in both language and math proficiency. Arcadia and South Pasadena High have the highest proficiency levels, but at most of the other feeder schools, proficiency levels in both language arts and math are below 50 percent or significantly less. All schools in California are required to meet a target of 100 percent proficiency by academic year 2013-14.
- The top feeder schools have a higher level of ethnic diversity than the overall student population of PCC. During the academic year 2007-08, over 90 percent of the student population in seven of these schools were students of color.
- Table 2-2 provides a summary glance of the top three racial/ethnic groups³⁴ represented at each of PCC's top 13 feeder schools. Asian or Hispanic/Latino students represent the majority of the feeder school student population. Asian students represent the majority in five of the top 13 feeder schools and Hispanic/Latinos in six of the schools. Whites are a minority and represent just 15 percent of the total student body, in three of the schools.

³³ The Academic Performance Index is the central element of California's *Public Schools Accountability Act of 1999*. The API measures the academic performance and growth of schools on a variety of academic measures.

³⁴ As defined by the U.S. Census Bureau race and ethnicity are two separate and distinct identities. There are two minimum categories for ethnicity: *Hispanic or Latino* and *Not Hispanic or Latino*. Hispanics and Latinos may be of any race.

II. High School Enrollment Trends

Table 2-2. Top Feeder High Schools by Ethnicity for 2008-09 Academic Year

High School	Largest	Second	Third
Arcadia	Asian: 65.9%	White: 19.4%	Hispanic/Latino: 10.3%
Pasadena	Hispanic/Latino: 51.4%	African American: 23.0%	White: 19.2%
Alhambra	Asian: 47.8%	Hispanic/Latino: 44.3%	White: 3.8%
Temple City	Asian: 64.2%	White: 16.8%	Hispanic/Latino: 15.1%
San Gabriel	Asian: 56.6%	Hispanic/Latino: 39.3%	Multiple/ No Response: 1.9%
Mark Keppel	Asian: 70.3%	Hispanic/Latino: 22.5%	Multiple/ No Response: 3.4%
Rosemead	Hispanic/Latino: 51.7%	Asian: 42.7%	White: 3.4%
So. Pasadena	Asian: 38.1%	White: 33.6%	Hispanic/Latino: 17.4%
Gabrielino	Asian: 53.2%	Hispanic/Latino: 34.7%	White: 7.1%
Eagle Rock	Hispanic/Latino: 65.5%	Filipino: 18.3%	White: 8.1%
Franklin	Hispanic/Latino: 89.5%	Asian: 3.3%	Filipino: 3.0%
Marshall High	Hispanic/Latino: 60.8%	White: 18.4%	African American: 14.6%
Arroyo	Hispanic/Latino: 69.7%	Asian: 27.2%	White: 6.1%

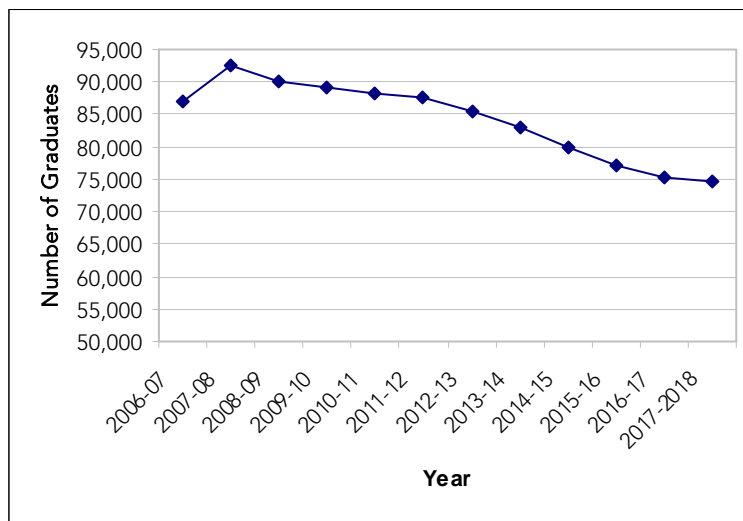
*Schools are listed in order of the number of 2008 graduates from each high school that enrolled at PCC within two academic years following graduation.

Source: California Department of Education, Educational Demographics Unit

High School Graduation and Dropout Rates

- The high school graduation rate in Los Angeles County is 76.9 percent, compared to the state average of 79.8 percent.
- Similar to statewide trends, for academic years 2006-07 to 2017-18, the number of high school graduates in Los Angeles County is projected to have peaked in academic year 2007-08. The number of high school graduates in Los Angeles County is expected to decline from a high of over 92,000 in that academic year to less than 75,000 by 2018 (Figure 2-1).

Figure 2-1. Los Angeles County High School Graduates



Source: California Department of Finance

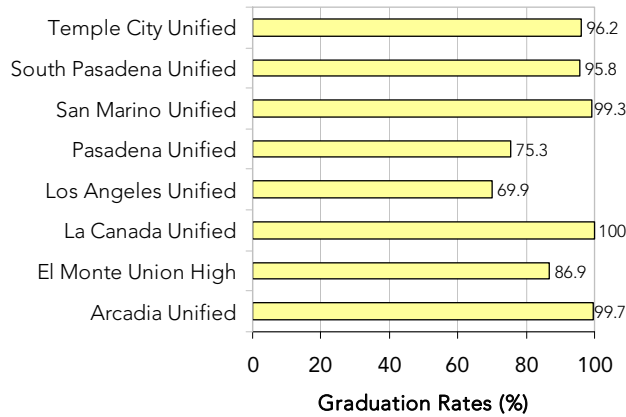
- The high school dropout rate in Los Angeles County for the 2007-08 academic year was 24.7 percent, exceeding the statewide rate of 20.2 percent. A majority of students dropped out of high school prior to the 12th grade. The Los Angeles Unified School District is a major contributor to the problem with a drop out rate of over 35 percent.³⁵
- Most of the school districts within the PACCD service area have dropout rates significantly below the County and State average. The exception is the Pasadena Unified School District, which has a dropout rate of 24.7 percent.
- Graduation rates for school districts in the PACCD service area are shown in Figure 2-2. Several of the school districts located within the PACCD service area have graduation rates far above both the County and State averages of 76.9 and 79.8 percent. At the same time the high school graduation rate for Pasadena Unified School District, a key feeder school district for PCC, is below average, and the graduation rate for Los Angeles Unified School District is significantly below average.

³⁵ Dropouts by County with District data: California Department of Education

II. High School Enrollment Trends

Figure 2-2. Graduation Rates For School District

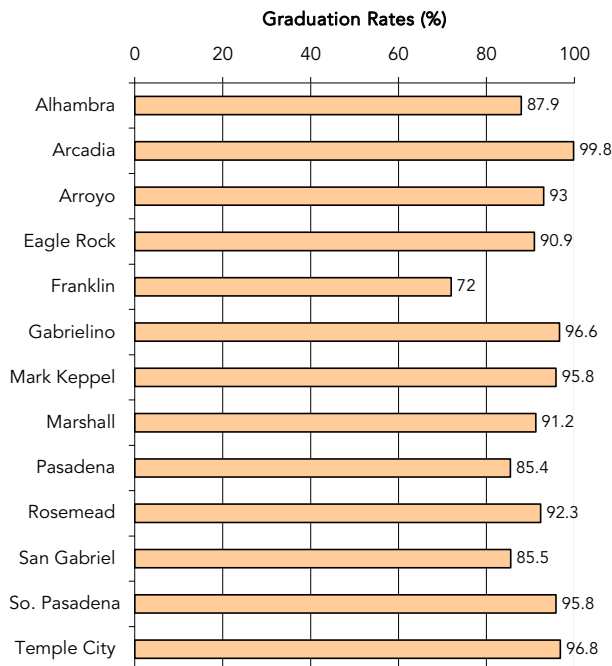
(Based on National Center for Education Statistics (NCES) Definition)



Source: CA Dept. of Education, County Report (2007-08)

- Graduation rates from the 13 top feeder schools, as shown in Figure 2-3, are typically much higher than the County and State graduation rate. With one exception³⁶ graduation rates from these schools range from 85 percent to nearly 97 percent.

Figure 2-3. High School Graduation Rates, 2007 – 08



Source: Source: California Department of Education, County Report (2007-08).

³⁶ Franklin High School in Los Angeles Unified School District

III. Pasadena City College Enrollment Trends

Current and historical PCC enrollment trends will help guide the planning process and assess how effective the College has been in achieving its mission to ensure successful student learning. In order to gain an understanding of PACCD progress towards achieving its related goals, the following data have been collected for enrollment, course success and retention, methods of instruction, degree and certificate completion, and transfers to public 4-year institutions.

Projected Enrollment Growth for California Community Colleges

- Enrollment at California’s community colleges has increased in response to a declining economy and rising unemployment. In 2009, enrollments have increased over the previous year by 6.4 percent, or nearly 150,000 additional students.³⁴
- Even before the recent surge in enrollments following the economic turmoil of the past year, it was anticipated that community colleges would experience substantial enrollment growth and play an even larger role in the California three-tiered public post-secondary system, consisting of the University of California, the California State University, along with the California Community Colleges system³⁵.
- Over the coming decade, California community colleges are projected to experience the greatest increase in the number of student enrollments when compared to the CSU and UC systems. A recent report projects that community college enrollment in California will surge from 1.81 million in 2008 to 2.03 million in 2019, or 222,000 additional students. It also reports that as a result of state funding shortages over the next two years that enrollment demand will significantly exceed capacity resulting in more than 400,000 prospective students being denied access.³⁶
- The California State University System is projected to increase an additional 57,346 students from 362,226 students in 2008 to 419,572 in 2015. However, between 2015 and 2019 undergraduate demand is expected to remain relatively flat.³⁷
- A separate report prepared in 2008 projects the UC system will increase by about 48,000 enrollments from 216,000 in 2007/08 to 264,000 in 2020/21^{38 39}.

³⁴ Source: California Community Colleges Chancellor’s Office, May 2009 news release.

³⁵ Under the California Master Plan for Higher Education, the three-tiered public higher education system is composed of the University of California, California State University and the California Community Colleges system.

³⁶ Source: California Postsecondary Education Commission: Ready or Not Here They Come: Community College Enrollment Demand Projections, 2009-2019, September 2009.

³⁷ Source: California Postsecondary Education Commission Ready or Not Here They Come: California State University Undergraduate Demand Projections, 2009-2019, December 2009.

³⁸ Source: Long Range Enrollment Planning, University of California: University of California Systemwide Enrollment Projections: Undergraduate and Graduate Enrollment Through 2020-21, March 2008.

III. Pasadena City College Enrollment Trends

- The projections for enrollment at community colleges statewide will closely follow the projections for high school graduation rates.
- Finally, the need for basic skills education, defined as skills required to pass the California High School Exit Exam and to be prepared for college-level work, for these entering students is fairly high. An estimated 70 percent of high school graduates will require basic skills education in math, and 42 percent will require basic skills education in English.⁴⁰

Participation Rates

A recent report by the Education Commission of the States examined the need to increase adult participation in postsecondary education based on the shifts in the economy and related educational requirements. A more global, technology driven economy will require higher levels of education and strong problem solving skills.

- According to a 2010 report from the State Chancellor's Office, the adult participation rate for California's community college system was 85.5 adults per 1,000 adults.
- As shown in Table 3-1, among the top 20 cities that sent students to PCC in 2008, the City of Los Angeles contributed the largest proportion of the student population.

Table 3-1. Top 20 Cities for Fall 2008 PCC Credit Students

³⁹ A third report from the California Postsecondary Education Commission in the Ready or Not Here They Come series which will provide enrollment projections for the UC system is under development at this time.

⁴⁰ Source: California Department of Finance, 2005 Series California Public Postsecondary Enrollment Projections.

	City	Students	% of Student Population	District	Participation Rate ⁴¹
1.	Los Angeles	4888	18.2%	LA	0.2
2.	Pasadena	4294	16.0%	PCC	3.9
3.	Alhambra	1710	6.4%	LA	2.6
4.	San Gabriel	1530	5.7%	LA	4.9
5.	Arcadia	1486	5.5%	PCC	3.6
6.	Glendale	1157	4.3%	Glendale	0.8
7.	Rosemead	1034	3.8%	PCC/LA	2.6
8.	Altadena	910	3.4%	PCC	3.2
9.	Temple City	907	3.4%	PCC	2.8
10.	El Monte	905	3.4%	PCC/Rio Hondo	1.1
11.	South Pasadena	709	2.6%	PCC	1.4
12.	Monterey Park	672	2.5%	LA	0.8
13.	Burbank	656	2.4%	LA	3.5
14.	Monrovia	545	2.0%	Citrus	1.9
15.	La Crescenta	395	1.5%	Glendale	3.5
16.	Duarte	260	1.0%	Citrus	2.2
17.	Baldwin Park	236	0.9%	Mt. SAC	1.7
18.	San Marino	231	0.9%	PCC	0.5
19.	Tujunga	224	0.8%	LA	2.3
20.	Montebello	210	0.8%	LA	0.5

Source: PCC Observations 2008-2009

- The participation rate at PCC is approximately 33 students per 1,000 adults in the PACCD.⁴² This participation rate is based on the number of PCC students who actually live within the District compared to the total number of adults 18 years and older living within the District.
- The majority (63 percent) of PCC’s credit students reside outside the PACCD. Less than one third (31 percent) of PCC students live in the District itself. ⁴³ Figures 1-2 and 1-3 found in Chapter I illustrate the broad geographic distribution of PCC credit and non-credit students.
- Table 3-1 also indicates participation rates for communities throughout the PACCD service area. Among the many cities in which PCC students reside, San Gabriel has the highest participation rate, even though most of the city lies outside the PACCD. The City of Pasadena has the second highest participation rate.

⁴¹ Participation rates equal the ratio of PCC students originating from each city to the total adult population of the city.

⁴² This is an approximation based on the following factors: (1) in 2009 an estimated 279,040 of the total PACCD area population was between 18 and 65 years of age; (2) PCC enrollment of 29,943 students in fall 2009; and (3) 31 percent are residents of the PACDD area or 9,282

⁴³ PCC Observations 2008-2009.

III. Pasadena City College Enrollment Trends

- Enrollment numbers suggest that PCC is continuing to serve traditional aged students, but could potentially expand to serve more adults and older adults. As shown in table 3-2, when comparing the population to enrollments, it is apparent that adults over the age of 35 are underrepresented in the student population, as might be expected. In comparison, youth and adults between the ages of 0 to 19 and 20 to 24 are well represented in the PCC student population.

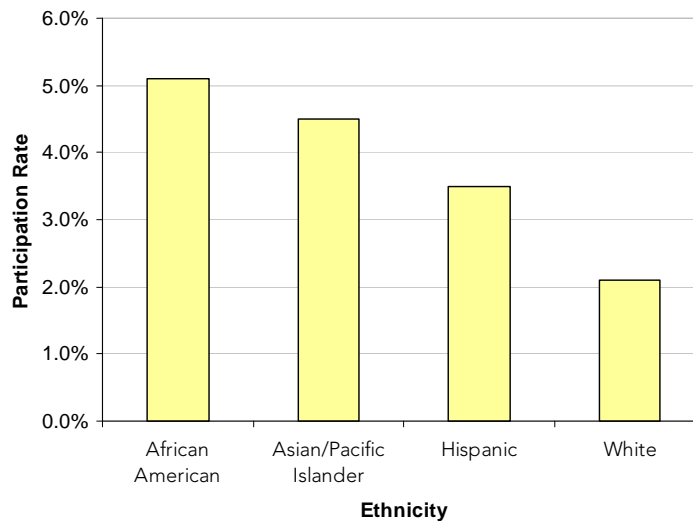
Table 3-2. Population Comparisons⁴⁴

Age	Los Angeles County Population (2010 est.)		PACCD Population (2000 Census)		Fall 2008 Students Enrolled	
	Count	Percentage	Count	Percentage	Count	Percentage
0 to 19	3,073,570	29.2%	108,281	26.9%	9549	35.5%
20 to 24	762,648	7.2%	23,543	5.9%	9315	34.7%
25 to 34	1,339,404	12.7%	58,505	14.6%	4721	17.6%
35 to 49	2,323,437	22.1%	97,265	24.2%	2314	8.6%
50+	3,018,604	28.7%	114,233	28.4%	963	3.6%
Total	10,517,663		401,827		26,863	

Source: California Department of Finance, U.S. Census 2000; PCC Observations 2008-2009

- Participation rates for different ethnic groups vary. As shown in figure 3-1, although African Americans are a relatively small minority (less than 9 percent) in the PACCD, and represent less than 6 percent of the PCC student population, they have the highest participation rate.

Figure 3-1. Fall 2008 and Spring 2009 PACCD Participation Rate by Ethnicity*



*Participation rate is the percentage of PCC credit students who reside within the PACCD area and the population of adults 18 years or older who reside within the PACCD area. Source: PCC Observations 2008-2009

⁴⁴ The analysis derived from this table is necessarily an approximation given the different time frames for the three data sets, and the assumption that any changes in the age distribution over this time frame are relatively minor.

- The participation rate for Asians/Pacific Islanders is comparable to that of African Americans, even though they constitute a significantly larger proportion (23.2% percent) of the PACCD population. Hispanics have the third highest participation rate. Although Whites are the largest ethnic group in the PACCD (nearly 39 percent, according to the U.S. Census 2000), they are under-represented in the PCC student population and so have the lowest participation rate.

PCC Student Enrollment

The level of student enrollment is measured in a number of different ways including: (1) the actual number of physical student bodies (**headcount**), (2) the number of course sections in which these students are registered (**enrollment**) and (3) a calculation used by the State to determine funding levels per student (**Full Time Equivalent Student, or FTES**). One FTES represents 525 class hours of student instruction/activity in credit and non-credit courses based on the number of days of instruction required each year (175 days) and a student attending 3 hours per day for 175 days will be in attendance for 525 hours.⁴⁵

- California community college enrollment peaked at approximately 1.7 million in 2002, followed by an 8 percent decline in 2004. Subsequent California community college enrollment figures remained relatively flat for several years but by Fall 2006 began to recover.⁴⁶ Among factors that may have contributed to this trend are prospective students choosing employment instead of further education during a period of economic growth (2002 to 2006) and opting for continued education during a period of economic decline (2007 to present).
- Table 3-3 on the following page illustrates changes in headcount and FTES between 2000-01 and 2007-08. Headcount increased by over 9 percent during this eight-year period, fluctuating somewhat with an increase in 2001-02, a decline to 2005-06, and a new peak in 2007-08.
- During the same eight-year time span, the number of Full-Time Equivalent Students (FTES) increased by 16 percent. Most of this growth occurred at the start and end of this period, with the number of FTES remaining relatively stable during the six intervening years (2001/02 to 2006/07).
- The most dramatic change in enrollment occurred in 2006-07, when total enrollment increased by over 8 percent or 14,831 students. Academic year 2007-08 witnessed an additional increase in enrollment of roughly 2.5 percent.

⁴⁵ Source: California Postsecondary Education Commission – Glossary of Terms

⁴⁶ Source: Legislative Analyst's Office 2008 Budget Analysis: California Community Colleges

III. Pasadena City College Enrollment Trends

Table 3-3. PCC Student Enrollment, 2000-01 to 2007-08

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Annual Headcount	40,371	44,091	43,204	42,133	41,508	41,934	43,0981	44,091
Total Enrollment (credit/non-credit)	176,585	183,754	186,129	181,625	180,272	183,151	197,982	202,898
Full-Time Equivalent Students	21,294	23,467	23,199	23,457	23,124	23,107	23,226	24,782

Source: California Community Colleges Chancellor's Office

- Table 3-4, on the following page, provides PCC enrollment figures by academic division for the years 2004-05 through 2007-08. Between 2004-05 and 2007-08 eight divisions experienced growth in enrollments, while seven experienced modest declines. Over the past four academic years, the Social Sciences Division consistently contributed the highest number of enrollments. The largest decrease in enrollments was experienced by the Kinesiology, Health and Athletics Division, which declined by 7.5 percent during this period. Table 3-4. Annual Enrollments by Division⁴⁷

⁴⁷ Table 3-1 (Annual Enrollments by Division) includes credit students only.

Division	2004-05	2005-06	2006-07	2007-08
Business & Computer Technology	13,823	13,510	13,722	14,217
Credit C1s at CEC	328	315	302	334
English ⁴⁸	14,256	14,210	23,475	24,479
Engineering and Technology	6,093	5,622	5,633	5,947
Guidance	1,649	1,604	1,736	2,095
Health Sciences	4,626	4,001	4,374	4,493
Kinesiology, Health and Athletics	10,809	10,297	10,295	10,285
Languages	12,477	12,726	13,222	13,766
Library	455	391	376	399
Mathematics	15,745	16,364	17,108	17,672
Natural Sciences	13,493	14,567	15,507	16,091
Performing/Communications Arts	16,801	16,653	16,756	17,746
Social Sciences	37,844	37,603	37,591	39,199
Disabled Students Programs Services	318	267	137	19 ⁴⁹
Visual Arts/Media	12,628	12,414	12,929	13,772
College Total	161,345	160,544	173,163	180,514

Source: Pasadena City College, Enrollment by Division

Instructional Productivity and Efficiency (see Table 3-5)

- Table 3-5 provides an overview of various measurements related to instructional productivity and efficiency for the years 2004-05 through 2007-08. The number of course sections offered and then cancelled have declined over the past four academic years, indicating increasing success in aligning academic program offerings to student interests and needs.
- The overall load (Full Time Equivalent Faculty/Weekly Student Contact Hours) has slightly increased over the past four academic years from 666.67 to 688.31. During this same time period, the student to faculty ratio (FTES divided by FTTEF) has averaged 21:1.
- During the time period from 2005-06 to 2008-09, the average load of 662 FTES was approximately 26 percent above the state benchmark of 525.⁵⁰

⁴⁸ In Fall 2006, the English Composition Program instituted co-requisite credit courses. This, in part, explains the increase in enrollment for this and subsequent terms, as 4,700 seats were added. The Program includes English 900,901, and 902 which are co-requisite for English 1A, 100 and 400 respectively

⁴⁹ The decrease in Disabled Student Program Services (DSPS) enrollments was due to successful integration of DSPS programs into general college curriculum

⁵⁰ Load is calculated by dividing Weekly Student Contact Hours (WSCH) by Full-Time Equivalent Faculty (FTTEF).

III. Pasadena City College Enrollment Trends

Table 3-5. Instructional Productivity and Efficiency

Academic Year	Enrollment	FTEF	FTEs	Student/ Faculty Ratio	WSCH	Load	Sections Offered ⁵¹	Sections Cancelled
2004-05	161,345	1076	23,124	21.49	717,332.18	666.67	7232	1670
2005-06	160,544	1121	23,107	20.61	712,694.59	635.77	6598	974
2006-07	173,163	1115	23,226	20.83	732,825.64	657.24	6826	1013
2007-08	180,514	1107	24,782	22.39	761,964.53	688.31	6818	846

Source for Sections: PCC Institutional Planning and Research Office, Program Review – Summary by Division.

Educational Attainment in Los Angeles County and the PACCD

The 2006 California Community Colleges System Strategic Plan recognized the importance of educational levels in relation to earning potential. As the state economy requires a more educated workforce, future earning potential will be increasingly influenced by an individual’s level of education. Table 3-6, derived from 2000 U.S. census data, provides a comparative overview of educational attainment in the PACCD and in Los Angeles County.

Table 3-6. Educational Attainment, PACCD and Los Angeles County

Educational Attainment	PACCD	LA County
Graduate or professional degree	17%	9%
Bachelor degree	23%	18%
Associate degree	7%	7%
Some college, or no degree	5%	18%
High school diploma or equivalency	25%	23%
Less than high school diploma	23%	25%

Note: Educational Attainment for Adults 25 years and older.

Source: 2000 U.S. Census

- Approximately 48 percent of the adults, 25 years and older, living in the PACCD, do not complete or pursue education above the high school level. This includes the nearly one in four who do not even obtain a high school degree. The statistics for all of Los Angeles County are largely the same.
- 47 percent of adults who live within the PACCD obtain an associate, bachelors, graduate, or professional degree. This percentage is significantly higher than that for Los Angeles County overall, where only 34 percent of residents have obtained a post-secondary degree.

⁵¹ Sections Offered = total number of sections offered before cancellations

- Within the PACCD only 5 percent attend college, but do not obtain a degree, compared to 18 percent in Los Angeles County.

Table 3-7. Self-Reported Student Educational Goals, Fall 2008

<u>Educational Goal</u>	<u>Percentage of Students</u>
Transfer with or without Associate degree	60.3%
Terminal Associate degree	9.4%
Certificate/Job Skills	8.6%
Interest Development	6.4%
Basic Skills/High School Credits	2.6%
Other/Unknown	12.5%

Source: PCC Observations 2008-2009

- Based on self-reported goals by student enrolled in Fall 2007 (see table 3-7), the majority of PCC students, approximately 60 percent, planned to transfer to a 4-year college with or without an associate degree. The percentage wishing to transfer increased over the past five years from 52.8 percent in 2003 to 60.3 percent in 2008, while the percentage planning to simply obtain an associate degree declined, from 17.5 percent to 9.4 percent. During the same time period, the number of students wishing to improve basic skills increased from 2.3 percent in 2003 to 2.6 percent in 2008.⁵²

⁵² As this information is self-reported, it does not always accurately reflect what the student may ultimately do in the pursuit of their academic and professional goals.

III. Pasadena City College Enrollment Trends

Degrees and Certificates

As shown in table 3-8, PCC has seen in recent years a gradual decrease in both Associate in Arts (AA) degrees and Associate in Science (AS) degrees awarded to its students. As shown in table 3-8, the number of certificates awarded has declined slightly, as well.

Table 3-8. Degrees Awarded, 2004-05 to 2008-09

	2004-05	2005-06	2006-07	2007-08	2008-09
Number					
AA Degree	1,137	1,129	1,074	1,078	1,116
AS Degree	715	603	560	544	571
Total Degrees Awarded	1,852	1,732	1,634	1,622	1,687
Percent					
AA Degree	61.4%	65.2%	65.7%	66.5%	66.2%
AS Degree	38.6%	34.8%	34.3%	33.5%	33.8%
Recipients					
Total Degree Recipients	1,489	1,456	1,387	1,399	1,468
Percent with Both Degrees	24.4%	19.0%	17.8%	15.9%	14.9%

Note: The total number of degrees awarded exceeds the total number of degree recipients, as a percentage of students (e.g. 14.9% in 2008-09) receive two degrees.

Source: PCC Observations 2008-2009

- A total of 1,852 degrees (AA and AS) were awarded in the 2003-04 academic year, compared to 1,687 degrees in 2008-09. Most of this decrease in associate degrees can be attributed to a 25 percent decline in the number of AS degrees awarded. Consequently, AA degrees constituted 66 percent of all degrees awarded in the 2008-09 academic year, up from 61 percent in 2004-05.
- Although the number and percentage of AS degrees awarded has declined, the percentage of AS degrees awarded at PCC has been consistently higher (33.8 percent in 2008/09) than the overall percentage of AS degrees awarded throughout the state which has remained relatively flat around 26 percent during the past four academic years.
- Among all degree recipients, the percent receiving both degrees declined from 24.4 percent in 2004-05 to less than 15 percent in 2008-09.
- It is important to note that some students who attend PCC may want to transfer without obtaining a degree. Thus, there may be students who are fulfilling degree requirements, but not going through the formal process of obtaining a degree before they transfer to a 4- year institution.
- During the same period, as shown in table 3-9, the total number of certificates awarded fluctuated, peaking in the 2004-05 academic year and then gradually declining, but not to the same extent as the decrease in associate degrees. The proportion of certificates awarded compared to the total for all awards (certificates and degrees) declined from 33 percent in the 2004-05 academic year to 26 percent in 2008-09.

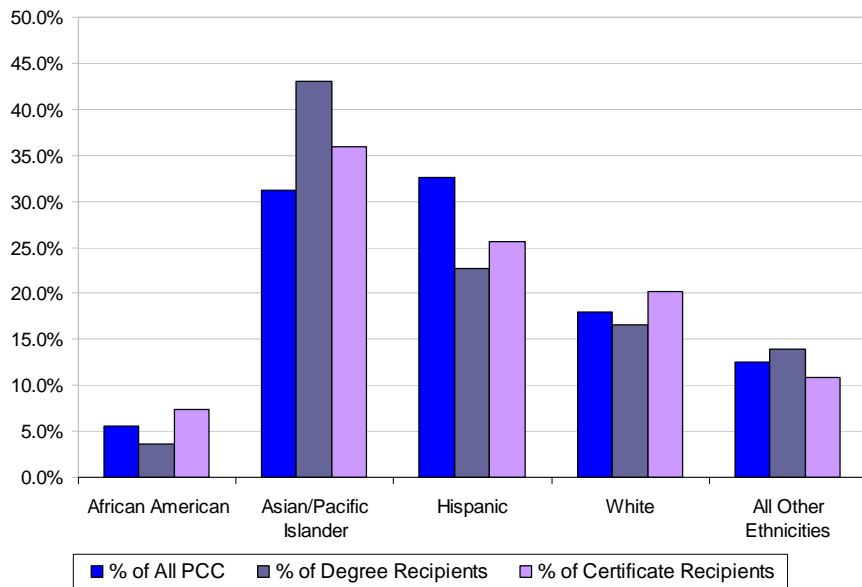
Table 3-9. Total Certificates and Recipients, 2004-05 to 2008-09

	2004-05	2005-06	2006-07	2007-08	2008-09
Total Certificates Awarded	735	699	665	635	606
Total Certificate Recipients	600	560	571	546	524
Percent with more than one Certificate	14.0%	14.3%	8.2%	9.3%	9.7%

Source: PCC Observations 2008-09

- There were 60 different types of certificates awarded by PCC in 2007-08. The Registered Nursing program awarded the most certificates. Paralegal Studies was second, followed by Child Development and Cosmetology.
- Female students typically earn more degrees and certificates than male students. Although females represent a slight majority of the credit student body (53 percent in Fall 2008), an even greater proportion are degree and certificate recipients. In the 2008-09 academic year, 60 percent of the degree recipients were female, as well as 68 percent of certificate recipients.

Figure 3-2. Credit Students and Graduates by Ethnicity (2008-09)



Source: PCC Observations 2008-09

- As shown above in figure 3-2, Asian/Pacific Islanders are overrepresented in the degree recipient population compared to their proportion in the overall credit student population (43 percent vs. 31 percent). All other major ethnic groups - African American, Hispanic and White - are underrepresented in degrees attainment compared to their relative proportion the student population.

III. Pasadena City College Enrollment Trends

- The same figure shows that African Americans and those in the “All Other Ethnicities” category are overrepresented in the certificates awarded.
- Figures 3-3 and 3-4 on the next page show the five year trend for percentage of degree and certificate recipients by ethnicity. The percentage of Asian/Pacific Islander declined slightly in the last year after increasing for three years. White degree recipients have gradually increased over the last four years, while the percentage of Hispanics remained relatively stable for three years until declining in 2008-09. However, the percentage of African American receiving degrees declined each year over the past five years. The number of degrees earned by African Americans in 2008-09 is over 25 percent less than the number earned in 2004-05. All Other Ethnicities category experienced a decline for three years but saw an increase during the last year.

Figure 3-3. Degree Recipients by Ethnicity

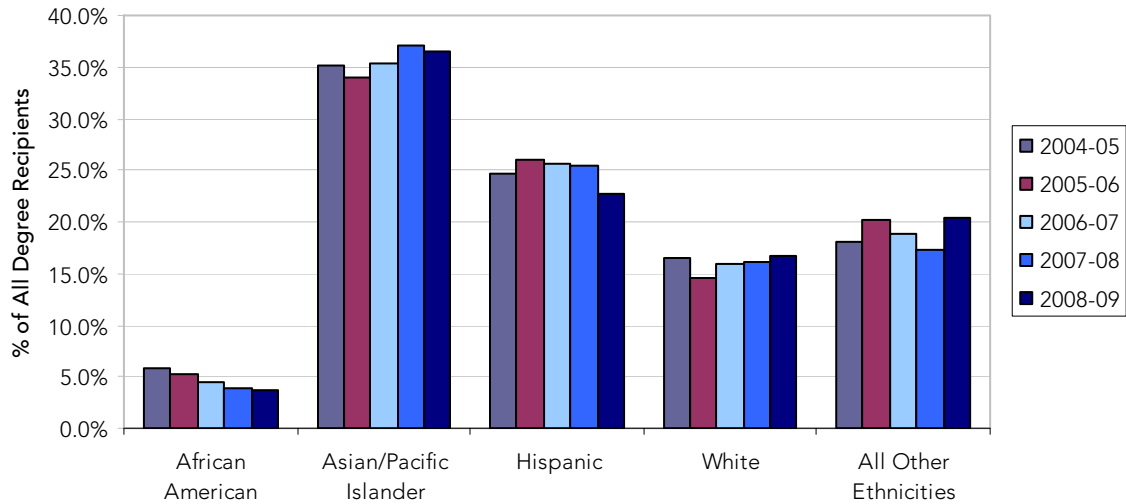
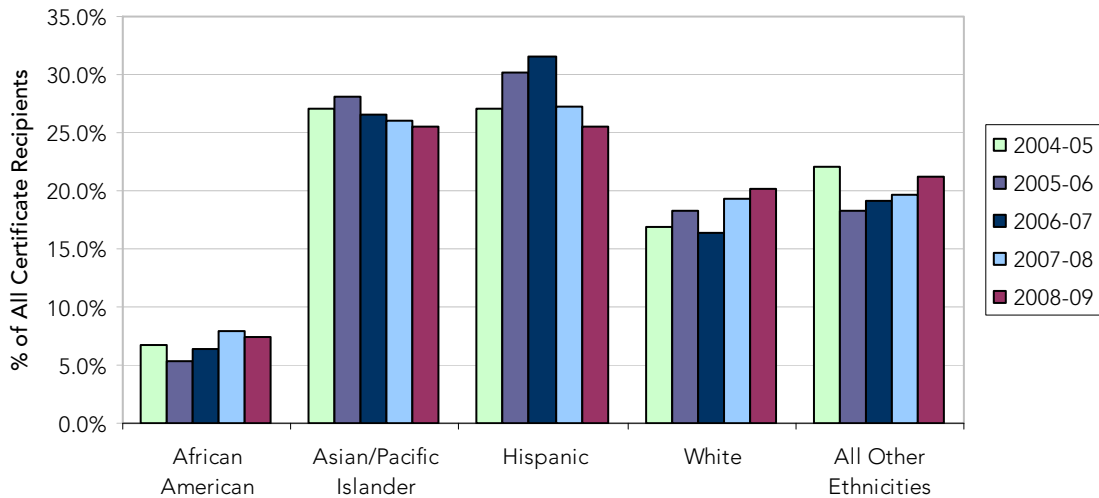


Figure 3-4 Certificate Recipients by Ethnicity



Source: PCC Institutional Planning and Research Office

III. Pasadena City College Enrollment Trends

PCC Course Success and Retention

- Success rates at PCC, the percentage of students receiving an A, B, C, or credit (CR) upon completion of the term, have ranged between 65 percent and 68 percent over the past six fall terms. These success rates are in line with statewide success rates for all community colleges, which range from mid- to high- 60 percent for all courses taken during the fall semester.⁵³
- Retention rates, based on the percentage of students who have not received a “withdrawal”, have also been fairly steady over the same time period, ranging approximately between 82 percent and 84 percent each fall term. Retention rates have historically been higher than success rates, suggesting that many students are being retained in courses but they are not always succeeding in their academic pursuits.⁵⁴ However, this is in line with statewide retention rates, which have held steady between 82 percent and 83 percent over the past several years.

Table 3-10. Course Success and Retention Rates

Semester	Course Success Rates	Course Retention Rates
Fall 2003	68.15%	83.80%
Fall 2004	66.81%	83.28%
Fall 2005	66.22%	83.16%
Fall 2006	65.31%	82.37%
Fall 2007	65.09%	82.30%
Fall 2008	67.66%	84.09%

Source: California Community Colleges Chancellor’s Office

- The success rate for basic skills courses at PCC, averaging 62.6 percent, is slightly less than that for all PCC courses, but exceeds the statewide rate of 60.5 percent.

Table 3-11. PCC Basic Skills Courses Success Rates

Academic Year	Rate
2005-2006	63.0%
2006-2007	61.0%
2007-2008	63.8%

Source: ARCC 2009 Report: College Level Indicators

⁵³ California Community Colleges System Strategic Plan

⁵⁴ Course retention rates are measured by the following formula: # of enrollments at census resulting in any grade other than W/ All grades of record.

- The success rate for PCC students who completed an initial English as a Second Language (ESL) course is 69.2 percent, significantly higher than the statewide rate of 50.1 percent. The Basic Skills Improvement Rate focuses on those students who have successfully completed an initial Basic Skills English or Mathematics course and within two years completed a higher level course in the same discipline. The PCC Basic Skills Improvement rate has declined over the past three academic years, and is currently 51.7 percent, close to the statewide rate of 51.2 percent.

Table 3-12. PCC Basic Skills and ESL Improvement Rates

	ESL Improvement Rate	Basic Skills Improvement Rate
2003-04 to 2005-06	67.7%	55.7%
2004-05 to 2006-07	67.4%	55.3%
2005-06 to 2007-08	69.2%	51.7%

Source: ARCC 2009 Report: College Level Indicators

- As shown in table 3-13, course success rates (separate from basic skills) vary among ethnic groups. Asians/Pacific Islanders have the highest success rates, closely followed by Whites. African American students typically have the lowest success rate, just below those of Hispanics.
- Retention rates (table 3-14) also vary among ethnic groups, but to a much less extent than success rates.

Table 3-13. PCC Success Rates by Ethnicity

Ethnicity	Fall 2005	Fall 2006	Fall 2007	Fall 2008
Asian/Pacific Islander	72.3%	71.5%	71.22%	73.06%
White	71.03%	69.38%	68.72%	71.64%
Native American	60.73%	55.89%	57.66%	58.98%
Hispanic	59.13%	57.48%	56.43%	60.03%
African American	53.45%	54.30%	54.14%	55.70%

Source: California Community Colleges Chancellor's Office

Table 3-14. PCC Retention Rates by Ethnicity

Ethnicity	Fall 2005	Fall 2006	Fall 2007	Fall 2008
Asian/Pacific Islander	85.8%	84.8%	84.7%	85.9%
White	83.96%	83.43%	82.96%	85.03%
Native American	76.18%	73.97%	80.78%	82.04%
Hispanic	80.34%	79.56%	78.90%	80.88%
African American	79.69%	78.01%	77.41%	80.23%

Source: California Community Colleges Chancellor's Office

III. Pasadena City College Enrollment Trends

PCC Methods of Instruction

PCC students are able to take classes on campus as well as through a distance learning program. In addition, day and evening classes are available. Understanding the trends in when and how students will learn will impact both program development as well as facilities.

- The percentage of PCC students enrolled in daytime compared to evening classes has remained relatively stable, with approximately 73 percent of enrollments in the daytime over the past several academic years⁵⁵.

Table 3-15. Day and Evening Credit Enrollments

	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
<i>Number</i>					
Day	50,119	49,849	52,897	54,799	57,640
Evening	18,304	17,611	19,506	20,506	20,791
Total	68,423	67,460	72,403	75,305	78,431
<i>Percent</i>					
Day	73.2%	73.9%	73.1%	72.8%	73.5%
Evening	26.8%	26.1%	26.9%	27.2%	26.5%

Source: PCC Observations 2008-09

- During this same period, there has been a gradual increase in the percentage of credit students taking both day and evening classes, and a lower percentage taking only day classes.

Table 3-16. Day and Evening Credit Students

	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
<i>Number</i>					
Day	12,049	12,088	11,552	11,652	12,401
Evening	5,325	5,249	5,329	5,534	5,403
Both	7,788	7,485	8,251	8,715	9,059
Total	68,423	67,460	72,403	75,305	26,863
<i>Percent</i>					
Day	47.9%	48.7%	46.0%	45.0%	46.2%
Evening	21.2%	21.1%	21.2%	33.6%	20.1%
Both	31.0%	30.2%	32.8%	33.6%	33.7%

Source: PCC Observations 2008-09

⁵⁵ The number of enrollments is greater than the number of students. Each class taken by a student counts as an enrollment, so a single student taking three classes is three enrollments.

Over the preceding two academic years at PCC, an increase in the use of distance education technologies (DVD and online) occurred primarily due to growth in internet-based, on-line instruction. In 2008-09, however, distance education still accounted for less than 6 percent of all courses at PCC, and online education represented less than 4 percent. This compares to a statewide rate of over 9 percent for all forms of distance education instruction.

Table 3-17. Distance Education Courses/FTES by Distance Education Status

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Credit FTES in all courses	21,483.11	21,237.41	21,497.46	21,998.67	23,476.92	25,184.62
Credit FTES Participation in Distance Education	247.53	273.59	250.18	223.31	1331.71	1404.10
Percent of Distance Education Courses	1.15%	1.29%	1.16%	1.02%	5.67%	5.60%

Source: California Community Colleges, Chancellor's Office

Recent studies⁵⁶ have explored how new technologies and the people who grown up with those technologies, the Millennials, will shape they way people learn in the future. Several key concepts have been identified that should be considered as PCC moves forward:

- The coming Millennial boom, which is estimated to peak in 2020, will reshape the college experience dramatically seamlessly integrating technology, learning and social interaction.
- Learning will become less of a delivered product in a formal setting and more of a social process utilizing more individualized instructional models that requires students and faculty to work in an interactive, close manner. The result will be the need for a less structured and more student-centered teaching approach and facilities that reflect small-group intimate learning.
- Facilities will need to be rethought and provide informal social hubs that encourage students to learn and to interact. Equally, there will be a transformation of the Library from a quiet individual study place to a diverse, social learning space. In addition, there will be the need to create information centers with banks of computers to allow easy access to online research and resources.

⁵⁶SCUP, Planning Journal (January – March 2009), “Make Way for Millennials! How Today’s Students are Shaping Higher Education Space”, pages 7-17 and “The Serious Matter of Informal Learning”, pages 18 – 25.

IV. Regional Educational Choices

PCC is one of twenty community colleges in Los Angeles County. Seven of these are located within 22 miles of the PCC main campus, including two within less than 10 miles. In addition to the seven community colleges that are geographic neighbors of PCC, (including Glendale, Citrus and Mt. SAC, which have traditionally been viewed as comparable benchmark colleges) four other colleges that are located in the southern and western areas of Los Angeles County are comparable benchmarks for PCC: Cerritos, El Camino, Long Beach City College and Santa Monica. These eleven benchmark community colleges are listed in Table 4-1 below.

Table 4-1. Alternative Educational Providers: Benchmark Community Colleges

College	Location	Distance from PCC
Glendale Community College	Glendale	9 miles
East Los Angeles College	Monterey Park	10 miles
Los Angeles City College	Los Angeles	15 miles
Citrus College	Glendora	16 miles
Los Angeles Trade-Technical College	Los Angeles	18 miles
Rio Hondo College	Whittier	20 miles
Mt. San Antonio College (Mt. SAC)	Walnut	22 miles
Santa Monica College	Santa Monica	29 miles
Cerritos College	Norwalk	30 miles
El Camino College	Torrance	30 miles
Long Beach City College	Long Beach (2 campuses)	37 and 42 miles

IV. Regional Educational Choices

As shown in Table 4-2 on the following page, there are in addition to the many community colleges over 40 other colleges and universities in Los Angeles County. The San Gabriel Valley alone includes over 30 colleges, universities and graduate schools (including five of the benchmarked community colleges noted above). Given the nearby presence of a large number of other academic institutions, PCC operates in an environment that offers prospective students a wide range of post secondary educational options while also potentially influencing their perception of PCC.

The relationships between PCC and these other schools are varied and complex. Many PCC graduates will transfer to these nearby CSU or UC schools to complete a four year degree. In addition, however, in response to rising tuition costs, some 1st year students who might otherwise have gone directly to CSU or UC will choose instead to attend a community college⁵². In the past some have also transferred to a private university and this is likely to continue in the future. The list also includes some nearby private technical schools as some prospective students who might otherwise have attended a community college may opt instead to attend a for-profit school.^{53 54}

⁵² CPEC: Ready or Not Here They Come: Community College Enrollment Demand Projections, 2009-2019. September 2009.

⁵³ The Chronicle for Higher Education: For-Profit Colleges Have Advantages, but Community Colleges Have Some, Too, April 7, 2008.

⁵⁴ The Chronicle for Higher Education: How For-Profit Institutions Chase Community-College Students. December 8, 2000.

4-2. 4-Year College and Universities in Pasadena, San Gabriel Valley, Los Angeles and Nearby Communities⁵⁵

4-Year College/University (alphabetical order)	Location
Alliant International University	Alhambra
Art Center College of Design	Pasadena
Azusa Pacific University	Azusa
California Institute of Technology	Pasadena
Cal Poly Pomona	Pomona
California State University, Los Angeles	Los Angeles
Claremont McKenna College	Claremont
Claremont School of Theology	Claremont
Fuller Theological Seminary	Pasadena
Harvey Mudd College	Claremont
ITT Technical Institute	West Covina
University of La Verne	La Verne
Mt. Sierra College	Monrovia
Occidental College	Los Angeles (Eagle Rock)
Pacific Oaks College	Pasadena
Pitzer College	Claremont
University of Phoenix	Pasadena
Pomona College	Claremont
Scripps College	Claremont
University of Southern California	Los Angeles
University of the West	Rosemead
Whittier College	Whittier
William Carey International University	Pasadena
Woodbury University	Burbank

Source: Various sources, including the Postsecondary Education Commission.

⁵⁵ This is not a comprehensive list of post-secondary educational institutions in Los Angeles County, but rather a subset of the colleges and universities in geographic proximity to PCC.

IV. Regional Educational Choices

Tables 4-4 and 4-5 located at the end of this chapter provide a comparative overview among the benchmark community colleges. Highlights include the following:

- Based on enrollment numbers, FTES and headcount, the community colleges that most closely resemble PCC include Long Beach, Mt. San Antonio, and Santa Monica (see Table 4-5).
- In the 2008-09 academic year, PCC awarded 1,687 associate degrees, the second highest number among all twelve community colleges. It was exceeded by only Mt. San Antonio which awarded 2,109 associate degrees (see Table 4-4).
- Mt. San Antonio closely resembles PCC in terms of success and retention rates. The proportion of Associates Degrees awarded compared to all awards is also very similar, respectively 65 and 64 percent.
- Among all twelve community colleges, PCC is the third largest in terms of both total enrollment and FTES, and the fourth largest by headcount. Santa Monica City College is the largest by enrollment and FTES, while Mt. SAC has the largest headcount.
- In comparison to all twelve community colleges, PCC has the third highest success rate (67.7 percent) and the fifth lowest retention rate (84.1 percent). The success and retention rates at PCC are very similar to those of the entire statewide community college system (66.54 percent and 83.54 percent, respectively).
- The success rates among most of these community colleges fall within the relatively narrow range between 63 and 69 percent. The retention rate at Citrus College (94 percent) is significantly higher than the other eleven colleges, including PCC.
- At over 30 percent, PCC has the highest proportion of Asian, Filipino and Pacific Islander students. This is nearly double the statewide percentage of 15.72 percent for the entire community college system. Only Mt. SAC has a comparable percentage (25.13 percent). Given a larger overall student body, however, the total number of Asian, Filipino and Pacific Islander students at Mt. SAC (9,261) is slightly greater than that at PCC (9,074).
- With just under 35 percent, the proportion of Hispanic students at PCC is greater than that of all but three of the comparable community colleges and exceeds the 30.4 percent average of community colleges in the state. The percentage of Hispanic students at nearby East Los Angeles College is over 60 percent.
- The percentage of White students at PCC, 17.6 percent, is significantly less than the statewide percentage of 34.1 percent. The percentage of White students at nearby Glendale Community College (56.5 percent) is over three times greater than that at PCC⁵⁶.
- A significant amount of “swirl”; i.e. students being traded between community colleges, has been reported between PCC and these other nearby community colleges. During the 2004-2005 academic year, five of the six schools most attended by former PCC students were community

⁵⁶ In the 2000 U.S. Census more than one in four Glendale residents reported Armenian ancestry. The presence of this ethnic group, the third largest Armenian community in the world outside of Armenia, helps to contribute to the high percentage of White students at Glendale Community College.

colleges – East Los Angeles, Glendale, Citrus, Mt. San Antonio and Rio Hondo. Only one four year institution, Cal State Los Angeles, was attended by more former PCC students.⁵⁷

- During the 2004-05 academic year, 8,373 former PCC students continued their education at 53 different community colleges, while another 7,195 students previously enrolled at PCC continued studies at 60 different four-year colleges.
- In fall 1999, the top transfer sources for PCC were Glendale, East LA, Mt. San Antonio, Citrus, and LA City College⁵⁸.
- As shown in table 4-3, over two times as many PCC students transfer to the California State University system than to the University of California (UC) system.
- Each year over the past six years, between 1,117 and 1,292 students transferred to the CSU system. The largest proportion of students transfer to CSU Los Angeles, followed by Northridge, Pomona, Long Beach and Fullerton.
- During this same time period, between 465 and 551 students annually transferred to the UC system. Each year, between 30 and 40 percent of those transferring to the UC system will attend UCLA. The second most popular UC for transfer is San Diego, followed by Irvine, Berkeley and Riverside.

Table 4-3. Transfers to California State University and University of California Campuses

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
CSU	1,160	1,117	1,320	1,154	1,292	1,274
UC	465	480	496	491	532	551
Total	1,625	1,597	1,816	1,645	1,824	1,825

Source: California Post Secondary Education Commission

Course and Program Offerings

To better understand PCC’s program offerings in comparison to the other benchmarked California community colleges identified in Table 4-1, information from these colleges’ websites and online catalogs as well as information from the California Community Colleges Chancellor’s Office have been compiled and evaluated. All California community colleges offer a full range of programs in math, language arts, natural sciences, humanities, fine arts and social sciences. Differences arise with the depth of programs in certain specialty areas, the provision of tailored vocational and transfer programs as well as extent of degree and certificate programs offered.

In this review, many similar programs are offered at all of the colleges. However, programs are often listed with different names or divisions, college to college, making it difficult to definitely indicate the relative level of program strength. Equally, program categories listed by the State in the California

⁵⁷ Source: PCC Research Findings, Institutional Planning and Research Office, Issue #14, September 2005.

⁵⁸ Source: California Postsecondary Education Commission, Guide to California Colleges and Universities.

IV. Regional Educational Choices

Community Colleges Chancellor's Office Taxonomy of Programs will sometimes differ from actual offerings. For instance, the State does not list PCC as having an approved Architecture Program. Yet PCC does offer an architecture program in the Engineering and Technology Division that prepares students for transfer to four- and five-year professional architecture degree programs. Although the State does not list Carpentry as a program at PCC, it is actually provided at PCC but under the different name of Building Construction. Nor is Environmental Studies listed as a PCC program by the State even though PCC does offer Environmental Studies as a transfer program. Therefore, for purposes of this scan, this section provides an order of magnitude evaluation of program gaps indicating where other colleges have significantly different programs compared to PCC. A summary of State approved programs for the benchmarked colleges is provided in Appendix A.

Pasadena City College offers a comprehensive range of programs and classes, making it highly competitive with other community colleges in the region. Pasadena City College offers 65 academic; and 76 career and technical programs.⁵⁹ In addition, PCC has a number of strong program areas that distinguish it from the benchmarked California community colleges in table 4-1. The following programs available at PCC are offered by less than half of the benchmarked community colleges. These programs include, but are not limited to:

- Administrative Medical Assisting
- Biotechnology and Biomedical Technology
- Construction Crafts Technology and Construction Inspection
- Cosmetology and Barbering
- Culinary Arts
- Dental Assistant, Hygienist and Laboratory Technician
- Engineering Technology (general)
- Fashion
- Hospitality
- Multimedia
- Public Relations
- Radio and Broadcast Journalism
- Restaurant and Food Services Management
- Speech-Language Pathology and Audiology

⁵⁹ California Community Colleges Chancellor's Office Data Bank, PCC Fact Sheet and Website

According to the Chancellor’s office inventory of approved programs and review of PCC catalog, community colleges in the region offer more comprehensive degree and certificate programs⁶⁰ that are limited or not available at PCC. A sampling of these programs is listed below.⁶¹ Based on the Chancellor’s Office Taxonomy of Programs, a more comprehensive comparative listing of programs offered by the eleven benchmarked California community colleges listed in Table 4-1 is found in Appendix A.

Program	Colleges Offering Program
▪ Agriculture	Mt. SAC
▪ Animal Science	Mt. SAC
▪ Aviation Technology	Long Beach, Mt. SAC
▪ Desktop Publishing	East LA, Glendale, Long Beach City, Mt. SAC
▪ Environmental Control Technology	Citrus, El Camino, LA Trade-Tech, Long Beach City, Mt. SAC
▪ Health Information Technology	East LA
▪ Logistics & Material Transportation	Cerritos
▪ Parks & Outdoor Recreation	Mt. SAC
▪ Pharmacy Technology	Cerritos
▪ Real Estate	Cerritos, East LA, El Camino, Glendale, LA City, LA Trade-Tech, Long Beach City, Mt. SAC
▪ Water & Waste Water Technology	Citrus, LA Trade-Tech, Mt. SAC

PCC has the opportunity to develop educational and vocational programs that few of its peers currently offer, but that are highly relevant to today’s economy. Specific vocational training opportunities for the health-related fields and professions fall into this category, including pharmacy and health information technology, physical therapy assistants and sports medicine. Additional opportunities include alternative energy and sustainability, water infrastructure and engineering, animal science, agriculture sciences, bilingual education and educational aide and recreation and park management.

In addition, to program offerings, PCC should evaluate the type and number of awards for Associate Degrees and Certificates. Table 4-4 summarizes the offerings from the regional Community Colleges and illustrates a substantial difference in the number of degrees and certificates awarded. PCC awards more AA and AS degrees than the statewide average, as well as more Certificates in the 30-59 units category than any other school listed. A number of the comparable schools offer a broader range of certificates with awards for 6 to 18 units.

⁶⁰ The California Community Colleges Chancellor’s Office approved program awards are Associate of Arts, Associate of Science, Certificate requiring 18 to fewer than 30 semester units, Certificate requiring 30 to fewer than 60 semester units and Certificate requiring 60 or more semester units.

⁶¹ Post Secondary Education Commission; Institutional Comparisons

IV. Regional Educational Choices

Table 4-4. 2008-09 Degrees and Certificates Awarded, by Community College (Credit Only)

	Cerritos	Citrus	East LA	El Camino	Glendale	LA CC	LA Trade- Technical	Long Beach	Mt. San Antonio	Rio Hondo	Santa Monica	PCC	Statewide Average (72 Districts)
AA Degrees	1,068	571	1,088	643	476	576	263	709	1,467	438	1,329	<i>1,116</i>	838
AS Degrees		380	127	497	204	80	123	259	642	395		<i>571</i>	318
Certificates: 18-29 units	76	189	31	177	122	40	52	114	681	126	158	<i>64</i>	124
Certificates: 30-59 units	180	259	541	251	108	85	452	240	452	73		799	215
Certificates: 60+ units	16			17				162	1	1		<i>95</i>	23
Total Awards	1,340	1,399	1,787	1,585	910	781	890	1,484	3,243	1,032	1,487	2,645	1,518

Source: California Community Colleges Chancellor's Office

Table 4-5. Local Community College Statistics and Demographics, Fall 2008

Student Population	Cerritos	Citrus	East LA	El Camino	Glendale	LA CC	LA Trade-Technical	Long Beach	Mt. San Antonio	Rio Hondo	Santa Monica	PCC	Statewide
Total Enrollment	65,139	38,640	70,087	71,584	45,691	44,047	36,219	72,424	85,469	51,114	87,907	79,295	4,271,004
Credit FTES	8,686	5359.5	8401.1	9,281.56	5903.3	5248.9	5,046.8	9401.46	10,710.7	6354.2	11,108.96	10,632.6	521,731.66
Success Rate	63.21%	67.43%	68.7%	63.88%	68.10%	64.94	63.23%	63.36%	66.07%	61.67%	64.81%	67.7%	66.54%
Retention Rate	79.70%	94.1%	87.0%	80.82%	85.6%	85.9%	85.6%	76.22%	83.2%	80.8%	81.24%	84.1%	83.45%
Ethnicity													
African- American	7.56% 1996	5.05% 742	3.3% 1,157	18.33% 4,998	2.2% 511	10.4% 2,015	24.6% 4,640	13.9% 4,009	4.8% 1,839	2.5% 555	9.80% 3378	5.5% 1,648	7.28% 132,617
Native American	0.51% 134	0.75% 110	0.26% 91	0.44% 120	0.25% 57	0.36% 69	0.34% 65	0.75% 215	0.46% 176	0.50% 108	0.44% 153	0.52% 155	0.84% 15,354
Asian	8.95% 2360	6.21% 913	14.5% 5,010	13.44% 3,664	9.4% 2,140	14.8% 2,864	4.5% 854	11.0% 3,182	19.44% 7,436	5.9% 1,283	15.99% 5,511	25.8% 7,734	11.56% 210,802
Filipino	3.16% 833	2.87% 422	1.3% 442	4.12% 1,124	4.6% 1,056	5.4% 1,042	1.7% 311	4.36% 1,258	5.0% 1,923	1.4% 308	2.13% 735	4.0% 1,202	3.38% 61,556
Hispanic/Latino	54.23% 14,308	39.52% 5,807	60.7% 20,994	32.34% 8,816	22.9% 5,227	40.0% 7,775	53.6% 10,099	35.76% 10,313	42.3% 16,186	55.5% 12,015	23.98% 8,263	34.5% 10,316	30.35% 553,384
Other Non-White	0.73% 182	1.46% 215	0.52% 179	1.89% 515	0.91% 207	1.9% 363	1.0% 191	3.3 952	3.4% 1,280	1.1% 238	3.07% 1,059	3.8% 1,150	1.8% 32,850
Pacific Islander	0.65% 171	0.67% 98	0.28% 96	0.96% 262	0.35% 79	0.23% 45	0.26% 49	1.04% 300	0.69% 262	0.31% 66	0.60% 207	0.48% 138	0.78% 14,286
Unknown	10.99% 2897	15.28% 2,245	11.3% 3,915	8.28% 2,257	2.9% 649	8.8% 1,706	8.5% 1,600	3.09% 894	6.4% 2,450	22.6% 4,891	9.08% 3,131	7.8% 2,346	9.87% 180,100
White Non-Hispanic	13.27% 3502	28.17% 4,138	7.9% 2,728	20.18% 5,502	56.5% 12,889	18.3% 3,550	5.6% 1,049	26.76% 7,718	17.5% 6,693	10.0% 2,170	34.86% 12,009	17.6% 5,254	34.14% 622,566
Total- Headcount	26,833	14,690	34,612	27,258	22,815	19,429	18,858	28,841	38,245	21,634	34,446	29,943	1,823,515

Source: California Community Colleges, Chancellor's Office

V. Employment and Workforce Needs and Trends

The following is an overview of future workforce trends and opportunities based on projections provided by the Bureau of Labor Statistics and other sources. This overview begins with a national perspective for the period between 2006 and 2016, followed by an examination of the same workforce trends in California and Los Angeles County. To supplement this information additional data is provided concerning what has been described as a growing gap between the skills required to thrive in a high tech economy and the limited supply of workers with the necessary communication, technical and thinking skills. Given this challenge, information from a new report by the New Democratic Leadership Council and other sources describe the key role community colleges can play filling the skills gaps by developing the high skill workers needed for the high paying occupations of the future. Finally, the chapter concludes with additional economic information specific to Los Angeles County.

National Industry and Employment Trends and Projections

The U.S. Department of Labor Bureau of Labor Statistics (BLS) has identified what it estimates will be the 20 fastest growing occupations in the nation between 2006 and 2016 (Table 5-1), as well as the 20 occupations that it projects will have the largest numerical job growth during that ten year period (Table 5-2)⁵⁸.

⁵⁸ These employment trends and projections were developed by the BLS prior to the severe economic recession and financial crisis that began in 2008. In the next few years, these trends and projections will undoubtedly be impacted by this crisis. Undoubtedly, the growth of some occupations identified here may not be as great as first projected, but on a longer term basis these trends should still provide a useful guide for the future.

V. Employment and Workforce Needs and Trends

Table 5-1. U.S. Occupations Projected to Grow Fastest, 2006 to 2016

	Percent
Network systems and data communication analysts	53.4%
Personal and home care aides	50.6
Home health aides	48.7
Computer software engineers, applications	44.6
Veterinary technologists and technicians	41.0
Personal financial advisors	41.0
Makeup artists, theatrical and performance	39.8
Medical assistants	35.4
Veterinarians	35.0
Substance abuse and behavioral disorder counselors	34.4
Skin care specialists	34.3
Financial analysts	33.8
Social and human service assistants	33.6
Gaming surveillance officers and gaming investigators	33.6
Physical therapy assistants	32.4
Pharmacy technicians	32.0
Forensic science technicians	30.7
Dental hygienists	30.1
Mental health counselors	30.0
Mental health and substance abuse social workers	29.9

Source: U.S. Department of Labor Bureau of Labor Statistics

Over one-third of the fastest growing occupations (7 out of 20) are in the health care field, more than any other occupational group. Not only are they predicted to be among the fastest growing occupations between 2006 and 2016, it is anticipated they will also add close to 750,000 new jobs during that ten-year period.

The computer technology, personal care and service, and business and financial industries also have multiple occupations in the top 20 fastest growing. This correlates with anticipated high growth in both the health care and social assistance industries, which together are expected to grow by 25.4 percent and add 4 million new jobs, and the professional and, scientific and technical services industries, which by 2016 will have grown by 28.8 percent, adding 2.1 million new jobs.

The BLS also identified the top 20 occupations in terms of the number of new jobs predicted to be created between 2006 and 2016. Many of these “large growth” occupations (as opposed to “fast growth” occupations) are in more traditional, established industries or economic sectors that may not be among the fastest growing but where the number of new jobs produced is very significant because of the already large size of the existing employment base. For this reason only three of the 20 fastest growing occupations – home health care aides, personal and home care aides, and computer software application engineers – are also among the top 20 with the largest growth in new jobs.

Table 5-2. Occupations with the Largest Numerical Job Growth, 2006-16

	Increase in new
Registered nurses	587,349
Retail salespersons	556,824
Customer service representatives	545,161
Combined food preparation and serving workers including	451,919
Office clerks, general	403,557
Personal and home care aides	388,538
Home health aides	383,620
Postsecondary teachers	382,248
Janitors and cleaners, except maids and housekeeping cleaners	344,936
Nursing aides, orderlies and attendants	263,643
Bookkeeping, accounting, and auditing clerks	263,535
Waiters and waitresses	254,678
Child care workers	247,779
Executive secretaries and administrative assistants	239,053
Computer software engineers, applications	225,759
Accountants and auditors	225,575
Landscaping and groundskeeping workers	221,272
Business operation specialists, all other	218,243
Elementary school teachers, except special education	209,173
Receptionists and information clerks	202,000

Source: U.S. Department of Labor Bureau of Labor Statistics

V. Employment and Workforce Needs and Trends

The BLS has also identified those occupations that are expected to see the largest decrease in employment during the 2006-2016 period. Those most likely to decline are those occupations where job functions can be easily automated or outsourced such as administrative support, office and production.

Table 5-3. Occupations with the Largest Numerical Decrease, 2006-16

	Decrease in # of
Stock clerks and order fillers	-131,000
Cashiers, except gaming	-118,000
Packers and packagers, hand	-104,000
File clerks	-97,000
Farmers and ranchers	-90,000
Order clerks	-66,000
Sewing machine operators	-63,000
Electrical and electronic equipment assemblers	-57,000
Cutting, punching and press machine setters, operators, and	-40,000
Telemarketers	-39,000
Inspectors, testers, sorters, samplers, and weighers	-35,000
First line supervisors/managers of production and operating	-34,000
Computer operators	-32,000
Photographic processing machine operators	-25,000
Driver/sales workers	-24,000
Machine feeders and offbearers	-22,000
Packaging and filling machine operators and tenders	-21,000
Word processors and typists	-21,000
Paper goods machine setters, operators and tenders	-21,000
Farmworkers and laborers, crop, nursery and greenhouse	-20,000

Source: U.S. Department of Labor Bureau of Labor Statistics

Educational and Training Requirements

According to the BLS, a majority of the top 20 fastest growing occupations require some form of postsecondary education. In contrast, postsecondary education is needed for only a minority of the top 20 occupations projected to generate the most new jobs. Specifically, postsecondary education or training will be required for 14 of the top 20 fastest growing occupations, while only 6 of the 20 occupations with the largest numerical increase in jobs have that same need.⁵⁹

⁵⁹ U.S. Department of Labor Bureau of Labor Statistics, 2008-2009 Occupational Outlook

Among the fast-growing occupations that require formal postsecondary education, two require a postsecondary vocational award, or certificate, three require an associate degree, six require a bachelor degree, and three a masters or professional degree.

Out of the 20 occupations expected to have the most new jobs, one requires a post-secondary vocational award, one requires an associate degree, and four a bachelor degree.

To get a more complete picture, the BLS also looked beyond the top 20 occupations in both the high growth and large numerical increase categories to identify the top five occupations within each educational/training level requirement. Tables 5-4 and 5-5 are a subset of that analysis, focusing on the three educational levels served by community colleges: postsecondary vocational training, associate degrees and bachelor degrees, given that many students attend community colleges to prepare for a four-year degree.

Table 5-4. Fastest Growing Occupations, By Education/Training Level Requirements (Top Five)

Postsecondary Vocational Award	Associate Degree	Bachelor Degree
<ul style="list-style-type: none"> ▪ Makeup artists, theatrical and performance* ▪ Skin care specialists* ▪ Manicurists and pedicurists ▪ Fitness trainers and aerobics instructors ▪ Preschool teachers, except special education 	<ul style="list-style-type: none"> ▪ Veterinary technologists and technicians* ▪ Physical therapy assistant* ▪ Dental hygienists* ▪ Environmental science and protection technicians, including health ▪ Cardiovascular technologists and technicians 	<ul style="list-style-type: none"> ▪ Network systems and data communications analysts* ▪ Computer software engineers, applications* ▪ Personal financial advisors* ▪ Substance abuse and behavioral disorder counselors* ▪ Financial analysts

Table 5-5. Occupations Having the Largest Numerical Job Growth, by Education/Training Level Requirement (Top Five)

Postsecondary Vocational Award	Associate Degree	Bachelor Degree
<ul style="list-style-type: none"> ▪ Nursing aides, orderlies, and attendants* ▪ Preschool teachers, except special education ▪ Automotive service technicians and mechanics ▪ Licensed practical and licensed vocational nurses ▪ Hairdressers, hairstylists, and cosmetologists 	<ul style="list-style-type: none"> ▪ Registered nurse* ▪ Computer support specialists ▪ Paralegals and legal assistants ▪ Dental hygienists ▪ Legal secretaries 	<ul style="list-style-type: none"> ▪ Computer software engineers, applications* ▪ Accountants and auditors* ▪ Business operations specialists, all other* ▪ Elementary schoolteachers, except special education* ▪ Computer systems analysts

Source: U.S. Department of Labor Bureau of Labor Statistics

*Indicates occupations in the top 20 fastest growing (Table 5-4) and top 20 projected to have the largest numerical job growth (Table 5-5).

V. Employment and Workforce Needs and Trends

Among the fast growing occupations, occupations in both the health care field and business, professional and technical services, including environmental sciences and information technology, predominate among those requiring an associate or bachelor degree. Similarly, the healthcare sector is also a major factor among the large growth occupations, primarily because registered nurses, requiring an associate degree, are anticipated to have the largest increase in employment compared to all other occupations.

Industry and Employment Trends and Projections for California and Los Angeles County

The California Employment Development Department (EDD) has utilized data from the BLS to develop employment projections for the 2006 to 2016 period specific to California and individual counties, including Los Angeles County. This data is used to identify those industry sectors and occupations that are expected to have the most growth during those ten years.

Fastest Growing Occupations

In California, the fastest growing sector will be professional, scientific and technical services, which is expected to have an annual growth rate of 2.9 percent per year, or 293,000 new jobs over ten years. Anticipating an annual growth rate of 2.3 percent, health care and social assistance is expected to be the second fastest growing sector. By 2016, local government is expected to add 323,000 new jobs, the most of any sector. This growth is due primarily to growth in public education.

In contrast, manufacturing, which with 1.5 million jobs is still one the state's largest industry sectors, is expected to continue a decline that began over the past decade.

In Los Angeles County, three out of four new jobs are expected to occur in the following industry sectors: education services, health care and social assistance (116,300), professional and business services (90,200), retail trade (54,000) and government (40,100). Similar to the statewide trend, manufacturing is expected to decline by 41,500 jobs during the same ten year period.

Many of the occupations projected to be the fastest growing at the national level are also anticipated to be key to the California and Los Angeles County economies. There are, however, some differences. The growth rate for some computer occupations projected to be the fastest growing in the nation, such as network systems and data communications analysts, is even greater in California (58.8 percent vs. 53.4 percent). In California, and especially Los Angeles County, many more of the fastest growing occupations are in special education and postsecondary education. Other fast growing occupations include multi-media artists, animators, and theatrical and performance makeup artists, reflecting the importance of film, television and related industries to California's economy.

Table 5-6. Fastest Growing Occupations – California and Los Angeles County (2006 -16)

California		Los Angeles County	
Occupation	% growth (2006 to 2016)	Occupation	% growth (2006 to 2016)
Network Systems and Data Communications Analysts	58.8 %	Network Systems and Data Communications Analysts	47.3 %
Computer Software Engineers, Applications	47.1 %	Makeup Artists, Theatrical and Performance	46.7 %
Veterinary Technologists and Technicians	40.2 %	Skin Care Specialists	41.0 %
Home Health Aides	39.0 %	Veterinary Technologists and Technicians	40.9 %
Pharmacy Technicians	36.1 %	Dental Assistants	39.1 %
Dental Hygienists	35.7 %	Medical Assistants	38.8 %
Substance Abuse and Behavioral Disorder Counselors	35.4 %	Veterinarians	34.4 %
Dental Assistants	34.9 %	Pharmacy Technicians	33.2 %
Veterinarians	34.0 %	Manicurists and Pedicurists	32.3 %
Graduate Teaching Assistants	32.8 %	Physical Therapy Assistants	32.2 %
Special Education Teachers, Preschool, Kindergarten, Elem. School	32.3 %	Law Teachers, Postsecondary	30.0 %
Multi-Media Artists and Animators	31.9 %	Foreign Language and Literature Teachers, Postsecondary	29.9 %
Health Specialties Teachers, Postsecondary	31.8 %	Art, Drama, and Music Teachers, Postsecondary	29.9 %
Physical Therapist Aides	31.4 %	Education Teachers, Postsecondary	29.4 %
Medical Assistants	30.8 %	Recreation and Fitness Studies Teachers, Postsecondary	28.8 %
Database Administrators	30.7 %	Nursing Instructors and Teachers, Postsecondary	28.7 %
Vocational Education Teachers, Postsecondary	30.5 %	Biological Science Teachers, Postsecondary	28.7 %
Special Education Teachers, Middle School	30.3 %	Surgical Technologists	28.6 %
Network and Computer Systems Administrators	30.2 %	Physician Assistants	28.6 %
Biological Technicians	29.8 %	Communications Teachers, Postsecondary	28.6 %

Source: U.S. Department of Labor Bureau of Labor Statistics

V. Employment and Workforce Needs and Trends

Three of the fastest growing occupations in California require an associate degree – veterinary technologists and technicians, dental hygienists, and biological technicians. This is similar to the national profile with the exception of biological technicians. Beyond the top 20, other high growth occupations in California requiring an associate degree include paralegals and legal assistants, registered nurses, and industrial engineering technicians.

Among high growth occupations in California requiring postsecondary vocational awards are vocational educational teachers (postsecondary), surgical technologists and massage therapists.

Many more high growth occupations in California will require a bachelor degree, including network systems and data communications analysts, computer software engineers/applications; graduate teaching assistants, special education teachers, multi-media artists and animators, among the top twenty. The following table includes all jobs identified as the fastest growing within the state that require postsecondary vocational awards, associate degrees and bachelors degrees.

Table 5-7. California Fastest Growing Occupations By Education/Training Level Requirements

Postsecondary Vocational Awards	Associate Degree	Bachelors Degree
Vocational Education Teachers, Postsecondary	Veterinary Technologists and Technicians	Network Systems and Data Communications Analysts
Surgical Technologists	Dental Hygienists	Computer Software Engineer, Applications
Massage Therapists	Biological Technicians	Graduate Teaching Assistants
	Paralegal and Legal Assistants	Special Education Teachers – Preschool, Kindergarten & Elem.
	Registered Nurses	Multi-Media Artists and Animators
	Industrial Engineering Technicians	Kindergarten Teachers, Except Special Education
		Computer Software Engineers, Systems Software
		Computer Systems Analysts
		Occupational Therapists
		Industrial Engineers
		Elementary School Teachers, Except Special Education
		Financial Analysts
		Environmental Scientists and Specialists, including Health
		Physician Assistants
		Middle School Teachers, Except Special and Vocational Educ.

Source: U.S. Department of Labor Bureau of Labor Statistics

In Los Angeles County only two of the fastest growing occupations – veterinary technologists and technicians, and physical therapist assistants, are among the top twenty identified at the national level. However, there are more high growth occupations that will require only a postsecondary vocational award – makeup artists/theatrical and performance, skin care specialists, manicurist and pedicurists, and surgical technologists. The following table includes those jobs projected to grow the fastest in Los Angeles County that require postsecondary vocational awards, associate degrees and bachelors degrees.

Table 5-8. Los Angeles County Fast Growing Occupations (Among Top 50) By Education /Training Level Requirements

Postsecondary Vocational Awards	Associate Degree	Bachelors Degree
Makeup Artists, Theatrical and Performance	Veterinary Technologists and Technicians	Network Systems and Data Communications Analysts
Skin Care Specialists	Physical Therapist Assistants	Physician Assistants
Manicurists and Pedicurists	Cardiovascular Technologists and Technicians	Computer Software Engineers, Applications
Surgical Technologists	Biological Technicians	Graduate Teaching Assistants
Preschool Teachers, except Special Education	Respiratory Therapists	Multi-Media Artists and Animators
Security and Fire Alarm Systems Installers	Diagnostic Medical Sonographers	Special Education Teachers – Preschool, Kindergarten & Elem.
Emergency Medical Technicians and Paramedics	Registered Nurses	
Vocational Education Teachers, Postsecondary		
Sound Engineering Technicians		

Source: U.S. Department of Labor Bureau of Labor Statistics

Occupations with the Greatest Job Growth – California and Los Angeles County

In both California and Los Angeles County most of the occupations projected to have the greatest number of new jobs are more traditional ones requiring only on-the-job training. Retail sales persons leads all other occupations with nearly 262,000 new job openings in California, and over 63,000 in Los Angeles County between 2006 and 2016.

In California, there are only two occupations among the top 50 in job growth requiring an associate degree: registered nurses and computer support specialists. One of these – registered nurses – is also among the fastest growing occupations.

There are also a few occupations anticipated to have the most job openings that require a bachelor’s degree. In California these include elementary school teachers (except special education which requires more advanced training), accountants and auditors, secondary school teachers, computer software engineers (applications), and computer systems analysts. The pattern in Los Angeles County is almost identical but with the addition of multi-media artists and animators, also an occupation identified among the top 20 fastest growing.

V. Employment and Workforce Needs and Trends

There are also in Los Angeles County a few occupations with the most job openings that will require some postsecondary vocational education. These include medical secretaries, licensed practical and licensed vocational nurses, and preschool teachers (with the exception of special education).

High Skill/High Paying Occupations

The occupational projections provided by the BLS are the primary and most reliable set of employment projections data available. There is a view, however, that these projections do not provide a complete picture. As the BLS admits, it does not develop projections for the number of unfilled jobs. There is concern that many of the most attractive jobs in the future may go unfilled or disappear altogether because of a lack of qualified candidates with the skills and training required to fill those positions. Over the long term, a mismatch between the demands of the employment market and the supply of available labor could reshape the national economy as industries requiring high skilled workers would develop elsewhere rather than in the U.S.

There are signs this may already be occurring. Beginning in 2000 the BLS began issuing a relatively new report called the Job Openings & Labor Turnover Survey (JOLTS). It contains a statistic called the job openings rate, which is the percentage of all jobs in the U.S. that are unfilled.⁶⁰ In February 2009, this rate was 2.2 percent, which is equivalent to 3 million unfilled positions; despite the highest rate of unemployment experienced in decades. As reported in *Business Week*, one of the factors behind this surprising development is that, “people thrown out of shrinking sectors such as construction, finance and retail lack the skills and training for openings in growing fields including education, accounting, health care, and government.”⁶¹

A survey of 39,000 employers around the world conducted by Manpower, Inc. in 2009 corroborates that, even in the midst of the current recession, employers are having trouble finding qualified job candidates to fill many positions. It reports that 30 percent of employers surveyed around the world (19 percent in the United States) are having difficulty filling jobs. The report contends “these results indicate that while more people are looking for jobs, they don’t generally have the skills organizations are looking for.”⁶² The top ten types of positions cited in the Manpower study that employers in the United States reported having difficulty filling included:

- Engineers⁶³
- Nurses
- Skilled Trades (e.g. electricians, bricklayers, carpenters, plumbers, etc.)
- Teachers
- Sales Representatives
- Technicians
- Drivers
- IT Staff
- Laborers

⁶⁰ Source: Peter Coy, “Help Wanted: Why That Sign’s Bad”, *Business Week*, April 30, 2009

⁶¹ Ibid.

⁶² Source: Manpower, Inc., 2009 Talent Shortage Survey Results

⁶³ The source did not indicate specific engineering fields, only the general category of engineer.

- Machinists/Machine Operators

The percentage of U.S. employers surveyed in 2009 who reported having difficulty filling jobs is significantly lower than what a similar study revealed in 2006, when it was reported that 44 percent of employers in this country were having difficulty finding qualified workers, showing the recession has had an impact. Still, it points to a problem that is likely to grow worse once the economy does improve.

Although the current economic downturn is the most severe since World War II, the economic recovery is expected to be well underway by 2010. More important are long term trends such as globalization of the economy and changes in technology that have already begun re-shaping the labor market and that are expected to accelerate in coming years. Not all people will benefit equally from the anticipated changes to the economy. As already indicated, highly skilled technical workers will be in high demand, far exceeding the supply of qualified workers with the necessary training and skills. At the same time, relatively low-skilled workers, including even those with degrees, will be competing for a shrinking number of low paying jobs.

Some believe the current skills or talent gap is even more severe than the numbers above suggest, and will grow worse in coming decades. This growing gap is documented in a recent study which reports that 62 percent of all current U.S. jobs are high skilled technical positions characterized as science, technology, engineering or mathematically based.⁶⁴ According to this report, this percentage of the employment market is equivalent to 97 million high paying positions, but only 45 million Americans are currently qualified for those jobs. By 2020 it is predicted that 74 percent of all jobs in the labor market will be high pay/high skill, requiring 123 million people to fill them, but there will be only 50 million Americans with the training and expertise needed for this work.

The reasons for this gap are many but three are cited in the study, “The Global Talent Crisis” by Edward Gordon, an international workforce development consultant. First, in the developed world, low birth rates coupled with the shift of baby boomers to retirement means there will be a shortage of replacement workers, especially in some technology-based industries.⁶⁵ Second, the problem is made worse because most students and current employees are not receiving the kind of education and training needed for these technology driven positions. Specifically, an alarmingly high drop out rate among high school students (30 percent nationally and 24.7 percent in Los Angeles County) and, according to reports by many employers, poor preparation among those high school students who did graduate means a significant portion of the population will lack the communication, technical and thinking skills required for most high paying jobs in the future. In addition, only one in four Americans who begin a postsecondary education ultimately get a full college degree. Making the problem worse, many of the best students (at least until recently) went into high paying finance related careers rather than engineering, science and technology careers that are the foundation of the 21st century economy. Third, although deficiencies in the educational system contribute to this growing skills gap, a “cultural bias” is also reported as a significant factor. People love the technology but not the mental discipline required to successfully pursue the education and training essential to sustain the technological basis of the modern world.

⁶⁴ Source: Edward Gordon, “The Global Talent Crisis,” *The Futurist*, September-October 2009.

⁶⁵ Ibid.

V. Employment and Workforce Needs and Trends

In recent years, U.S. companies have attempted to address the growing shortage of skilled, technical workers through outsourcing and the use of H-1B visas to import talent with the required technical training. In the near future, this strategy will become increasingly less effective as the demand for high skilled talent grows in the very same countries that the U.S. has in the past turned to make up for the shortage of home-grown, qualified workers.⁶⁶

Reforming the educational system to provide more of the high skilled, technical workers in demand by employers is seen as the most viable long term method to close the skills gap. A recent study from The New Democratic Leadership Council (DLC) highlights the key role community colleges are expected to play in this strategy.⁶⁷ Analyzing the same BLS projections for the period 2006 to 2016 that were discussed above, the report states there will be over 2 million new jobs requiring “at least an associate degree or some post-secondary training, much of which is done at community colleges.” Nearly two-thirds of these new jobs (1.3 million) are identified by the study as tomorrow’s “hot jobs,” defined as positions paying above average wages (those above the 2006 median wage of \$32,000) and projected to grow by more than 10 percent. The study identifies 230 such jobs. As shown in Table 5-9, 37 of these (nearly one in six) require associate degrees or post secondary vocational awards. For this reason, job growth for associate degree holders is predicted to be nearly twice the national average (18.7% vs. 10.4%) during this ten year period.

Many of these “hot jobs” are found in four of the fastest growing sectors of the economy identified in the DLC report: education, health care, information technology, and energy and environment. According to the BLS, education and health services is an industry supersector that will create more than 3 out of every 10 new jobs in the U.S. economy between 2006 and 2016, more than any other part of the economy.⁶⁸ Forty-one of the 230 “hot jobs” are in the health care/education sector, and the education/training requirement for 11 of these jobs, listed below, is an associate degree:

- Physical therapist assistants
- Dental hygienists*
- Cardiovascular technologists
- Occupational therapist assistants
- Radiation therapists
- Registered nurses*
- Respiratory therapists*
- Diagnostic medical sonographers*
- Radiologic technologists and technicians*
- Medical and clinical laboratory technologists
- Nuclear medicine technologists

⁶⁶ Source: Edward Gordon, “The Global Talent Crisis,” *The Futurist*, September-October 2009.

⁶⁷ Source: Jessica Milano, Bruce Reed, Paul Weinstein, Jr. The New Democratic Leadership Council. “A Matter of Degrees: Tomorrow’s Fastest Growing Jobs and Why Community College Graduates Will Get Them,” September 2009.

⁶⁸ Source: U.S. Bureau of Labor Statistics Tomorrow’s Jobs, Occupational Outlook Handbook, 2008-09 Edition.

Table 5-9. Associate Degree and Postsecondary Vocational Hot Jobs (Numbers in Thousands)

Occupational Title	Employment		Numeric Change	% Change	2006 Median Annual Wages	Education or Training Required
	2006	2016				
Physical therapist assistants	60	80	20	32.4%	41,360	Associate degree
Dental hygienists	167	217	50	30.1	62,800	Associate degree
Environmental science and protection technicians, including health	36	47	10	28.0	38,090	Associate degree
Cardiovascular technologists and technicians	45	57	12	25.5	42,300	Associate degree
Occupational therapist assistants	25	31	6	25.4	42,060	Associate degree
Radiation therapists	15	18	4	24.8	66,170	Associate degree
Environmental engineering technicians	21	26	5	24.8	40,580	Associate degree
Court reporters	19	24	5	24.5	45,160	Post secondary vocational award
Surgical technologists	86	107	21	24.5	36,080	Post secondary vocational award
Registered nurses	2,505	3,092	587	23.5	57,280	Associate degree
Respiratory therapists	102	126	23	22.6	47,420	Associate degree
Paralegals and legal assistants	238	291	53	22.2	43,040	Associate degree
Medical equipment repairers	38	46	8	21.7	40,580	Associate degree
Massage therapists	118	142	24	20.3	33,400	Post secondary vocational award
Security and fire alarm systems installers	57	68	11	20.2	34,180	Post secondary vocational award
Interior designers	72	86	14	19.5	42,260	Associate degree
Diagnostic medical sonographers	46	54	9	19.1	57,160	Associate degree
Commercial divers	3	4	1	17.7	39,950-	Post secondary vocational award
Computer specialists, all other	136	157	21	15.1	68,570	Associate degree

V. Employment and Workforce Needs and Trends

Radiologic technologists and technicians	196	226	30	15.1	48,170	Associate degree
Health care technologists and technician, all other	79	91	12	15.0	35,140	Post secondary vocational award
Medical clinical laboratory technicians	151	174	23	15.0	32,840	Associate degree
Nuclear medicine technologists	20	23	3	14.8	62,300	Associate degree
Embalmers	9	10	1	14.3	37,840	Post secondary vocational award
Automotive service technicians and mechanics	773	883	110	14.3	33,780	Post secondary vocational award
Licensed practical and licensed vocational nurses	749	854	105	14.0	36,550	Post secondary vocational award
Computer support specialists	552	624	71	12.9	41,470	Associate degree
Funeral directors	29	32	4	12.5	49,620	Associate degree
Insurance appraisers, auto damage	13	15	2	12.5	49,180	Post secondary vocational award
Social science research assistants	18	20	2	12.4	33,860	Associate degree
Legal secretaries	275	308	32	11.7	38,190	Associate degree
Camera operators, television, video, and motion picture	27	30	3	11.5	40,060	Post secondary vocational award
Bus and truck mechanics and diesel engine specialists	275	306	32	11.5	37,660	Post secondary vocational award
Drafters, all other	25	27	3	11.0	43,060	Post secondary vocational award
Aircraft mechanics and service technicians	122	135	13	10.6	47,740	Post secondary vocational award
Real Estate sales agents	432	478	46	10.6	39,760	Post secondary vocational award
Aerospace engineering and operations technicians	9	9	1	10.4	53,300	Associate degree

Source: The New Democratic Leadership Council (September 2009); Bureau of Labor Statistics, Occupational Outlook Handbook, 2008-09 Edition

The median pay for seven of these health care jobs requiring an associate degree (as noted by the asterisk) is above \$45,000. As a result, the health care field is among the highest paying for associate degree holders. The demand for new nurses is particularly strong, with a current shortage of nearly 200,000 nurses. Unfortunately, due to a shortage of nursing faculty, schools of nursing are not able to train enough new nurses to close this gap.

The energy and environmental sector is also seen as a good source of high paying new jobs for those with associate degrees. A report prepared by Global Insight, Inc. for the United States Conference of Mayors states there are currently 750,000 “green jobs” in the United States and that this number could triple in the next 10 years.⁶⁹ These jobs are found in a wide range of different categories, including renewable power generation, agriculture, construction, manufacturing, research, consulting and engineering. The National Council for Workforce Development and the Academy for Educational Development reports the move toward a low-carbon sustainable economy offers great potential for new job growth, “and perhaps the greatest workforce development opportunity on the horizon for community colleges.”⁷⁰

Taking into account incentives included in the 2009 economic stimulus bill as well as other factors, the DLC study identified four areas it saw as particularly promising for new, green jobs: wind energy, solar energy, biofuels and building retrofitting. Among these, the wind energy field is projected to grow the fastest, adding 285,000 new jobs by the end of 2010. Solar energy is expected to add 110,000 new jobs by 2010, and biofuels is predicted to create 94,000 new jobs by 2016. Retrofitting buildings to reduce energy usage and pollution could add 81,000 new jobs by 2018. Many of these new green jobs require more than a high school education but less than a four year degree. As a result demand for training and certification has been rising but currently exceeds what is currently available through community colleges.

The highest paying new jobs are and will be in the information technology sector. Most of these high skilled jobs require a bachelor’s degree or higher, but computer specialists and computer support specialists, still require only an associate degree. In 2006, the median salary for computer specialists with an associate degree was \$68,750.

The trends indicated by these reports suggest where the opportunities exist for community college like PCC to enhance and expand their programs and course offerings to prepare their students for tomorrow’s jobs. According to recent articles in “The Chronicle of Higher Education,” many community colleges around the nation are already engaged in creating new certificate and degree programs either in response to local work force needs or opportunities emerging from national economic trends⁷¹. These developments are tied to a growing desire among both students and employers to see a stronger and more direct linkage between course work and what it will take for recent graduates to succeed in the real economy. As a result there will be changes within existing academic and vocational programs, a proliferation of more interdisciplinary courses of study, as well as the creation of new programs that better reflect the needs of a rapidly changing economy. Some examples cited in the articles include:

⁶⁹ Source: The United States Conference of Mayors, “Green Jobs in U.S. Metro Areas,” Global Insight, Inc., October 2008.

⁷⁰ Source: National Council for Workforce Education, and the Academy for Educational Development “Going Green – The Vital Role of Community Colleges in Building a Sustainable Future and Green Workforce.”

⁷¹ Source: Karen Fischer and David Glenn, “5 College Majors On the Rise”, “Students and Businesses Demand More Training in Job Skills,” “It Pays to Be Nimble: New Majors at Community Colleges,” The Chronicle of Higher Education, August 31, 2009.

V. Employment and Workforce Needs and Trends

- *Service science, management and engineering* – interdisciplinary programs to improve the performance of complex systems consisting of people, technology and businesses.
- *Health informatics* – the “digitization of medical information” requires information technology workers who can analyze and make sense of the data.
- *Computational science* – the application of computer modeling, simulation and other related techniques to solve extremely complex problems in a variety of different fields.
- *Sustainability* – driven by climate change a wide range of programs integrating environmental science, economics, design, technology and other disciplines.
- *Public health* - an interdisciplinary field combining a liberal education with the knowledge and skills required for careers in public health and medicine.

The information presented here constitutes a projection of future possibilities which should be frequently updated through ongoing monitoring of these trends if it is to remain useful for program review and planning purposes. To assist this process, additional economic data specific to Los Angeles County is summarized below.

Los Angeles County – Economic Profile⁷²

The local economy of Los Angeles County is currently in the midst of the worst recession seen in decades. In the short term, this downturn will necessarily have an impact on new college graduates looking forward to their new careers, as well as those expecting to graduate in the near future. As a large, diverse economy directly tied to the global economy, however, the long term fundamentals for economic recovery in Los Angeles County remain strong, and with them the prospects for upcoming graduates of the community college system. The following is a brief snapshot of the current Los Angeles economy which highlights some of the many challenges and opportunities that should be considered when planning for the future.

- The leading industries in Los Angeles County (based on 2007 employment data) are tourism and hospitality (456,000 workers); business and professional services (288,000 workers); direct international trade (281,000 workers); entertainment (244,000 workers); and wholesale trade and logistics (199,000 workers).
- International trade is considered fundamental to the current and future health of the regional economy. Together, the Port of Long Beach, the Port of Los Angeles, Port Hueneme, and Los Angeles International Airport (LAX) make up the largest customs district in the nation. The value of two-way trade passing through Los Angeles totaled \$357.3 billion in 2008, compared to the second-place New York at \$353.4 billion. Activity has declined due to the slowdown in the national and global economies, but this trend is expected to reverse with the revival of the global economy. In anticipation of future growth, major investments are underway to expand and “green” the ports of Long Beach and Los Angeles, modernize LAX, create a high speed rail line

⁷² Unless otherwise noted, Los Angeles County statistics are from Los Angeles County Economic Development Corporation, Los Angeles County Profile; San Gabriel Valley details are from 2008 San Gabriel Valley Forecast, LAEDC Kyser Center for Economic Research, Nov. 2008.

linking LA to the rest of California, and improve other related transportation facilities in Los Angeles County. The logistics industry, which is key to future growth, however, is challenged by a diminishing supply of land on which to build new facilities.

- Technology is a growing industry cluster in the County, including bio-medical technology, digital information technology and environmental technology, all supported by the County's technological research capabilities. The San Gabriel Valley enjoys a significant portion of this growth with institutions such as The California Institute of Technology (Cal Tech), NASA's Jet Propulsion Laboratory (JPL) and the City of Hope Medical Center contributing to research and development in various technological fields. There is also a growing synergy in Los Angeles County between technology and the creative industry, such as in video games and film production.
- Health care is one of the fastest growing industries in the San Gabriel Valley, with demand rising due to population growth and the aging trend in the overall population. The bio-medical industry is also growing, with significant amounts of research coming from Cal Tech and the City of Hope. However, the health care industry continues to struggle with cost issues and a shortage of nurses, as well as with meeting state seismic retrofitting requirements for hospitals.
- Los Angeles County is the largest manufacturing center in the country, with the manufacturing industry employing 376,500 workers in 2007. The most significant manufacturing sectors are apparel (56,700 workers); fabricated metals (49,100 workers); food products (43,000 workers); aerospace parts and products (38,100 workers); and search, detection, and navigation products (26,987 workers). Although the manufacturing sector remains healthy, Los Angeles County and the San Gabriel Valley have seen, and will continue to see, a loss of manufacturing jobs because many manufacturers are outsourcing more functions and using more temporary help.
- Construction jobs in Los Angeles County decreased by almost 8 percent between 2006 and 2008, due to problems experienced in the housing market. This follows a 1.2 percent decrease in construction jobs between 2003 and 2006.⁷³
- The San Gabriel Valley has a mixed outlook for professional and business services. Accounting and legal services should continue to grow following the subprime and financial industry debacles of 2008. The Valley also expects a share of the continued growth in scientific research and development. Architecture and engineering have a stronghold in Pasadena with a significant amount of infrastructure and sustainability work in the pipeline. However there is a slowdown in privately financed projects due to funding issues.
- Following the economic fallout of 2008, health services, government, leisure/hospitality and private education were the only sectors adding workers to their payrolls in the San Gabriel Valley as of November 2008. Over the same period, employment levels fell in retail trade, construction, finance/insurance, international trade, and manufacturing.

⁷³ Source: California Employment Development Department and SCAG

V. Employment and Workforce Needs and Trends

- During the severe economic downturn experienced by the Los Angeles economy in 2009 the unemployment rate averaged 11.7%. Very modest economic improvement is anticipated in 2010 and 2011, but the jobless rate is expected to be near the peak level of 12.4% through most of 2010 and only declining to 12% later in 2011.⁷⁴
- Healthcare services and private education remain positive forces in the Los Angeles County economy, and international trade, tourism and retail sales are expected to see improvement. Areas of the economy expected to continue to struggle include nonresidential real estate, apartment and condominium construction, local government finance, and manufacturing.

As an essential component of the nation's educational system, community colleges are expected to play a crucial role preparing workers with the necessary skills and knowledge to succeed in a rapidly changing economy. The critical need, however, of trying to anticipate which specific academic and technical skills will be most needed by employers in the future will be a never ending challenge facing both colleges preparing their students for this work world and by the individuals themselves as they plan their future careers. Utilizing the best information currently available, this chapter has attempted to identify the career opportunities that are most likely to be available for community college graduates in coming years. This summary can hopefully serve as an initial guide for reforming academic and career programs where needed.

Given the uncertainty inherent in planning for the future in an inter-connected global economy, the only firm prediction is that there will be an ongoing need for community colleges to carefully monitor work force trends and developments, while retaining the institutional flexibility required to adapt and thrive in this evolving environment. This entire document, along with this chapter, have been developed to provide PCC with a better understanding of both its external and internal environments, with the hope this will provide a firm foundation for the college as it prepares to meet present day challenges and the opportunities of the future.

⁷⁴ Los Angeles County Economic Development Corporation, 2010-2011 Economic Forecast and Industry Outlook, The Kyser Center for Economic Research

SOURCES

California Community Colleges Chancellor's Office. "Accountability Reporting on Community Colleges (ARCC) Report: College Level Indicators." 2009.

California Community Colleges Chancellor's Office. Data Mart and Reports. September 2009.

<http://www.cccco.edu/ChancellorsOffice/Divisions/TechResearchInfo/MIS/DataMartandReports/tabid/282/Default.aspx>.

California Community Colleges Chancellor's Office. "California Community Colleges Chancellor Jack Scott Encouraged by Obama's Initiative to Raise Awareness for Community Colleges." Press Release, May 9 2009.

California Community Colleges. System Strategic Plan. <http://strategicplan.cccco.edu/>

California Department of Education. Data and Statistics, DataQuest. <http://dq.cde.ca.gov/dataquest/>

California Department of Education. 2008 Series California K-12 Public Enrollment and High School Graduate – Projections by County.

California Department of Finance. 2005 Series California Public Postsecondary Enrollment Projections.

California Department of Finance. E-4 Population Estimates for Cities, Counties and the State, 2001-2009.

California Employment Development Department. Projections by Industry and Occupation. <http://www.labormarketinfo.edd.ca.gov/?pageid=145>

California Legislative Analyst's Office (LAO). Analysis of the 2008-09 Budget Bill: Education – California Community Colleges (6870). http://www.lao.ca.gov/analysis_2008/education/ed_anl08023.aspx

California Postsecondary Education Commission. Guide to California Colleges and Universities.

California Postsecondary Education Commission. College Guide: Compare California Institutions. <http://www.cpec.ca.gov/CollegeGuide/CompareInst.asp>.

California Postsecondary Education Commission. "Ready or Not Here They Come: Community College Enrollment Demand Projections, 2009-2019". September 2009.

California Postsecondary Education Commission. "Ready or Not Here They Come: California State University Undergraduate Demand Projections, 2009-2019". December 2009.

Chronicle for Higher Education. "For-Profit Colleges Have Advantages, but Community Colleges Have Some Too". April 7, 2008.

Chronicle for Higher Education. "How For-Profit Institutions Chase Community College Students." December 8, 2000.

Sources

Crawford, Suzanne. "Basic Skills and the New Millennium: A Post-'3Rs' Brave New World?" Faculty Association of California Community Colleges, Spring 2007 newsletter.

Coy, Peter. "Help Wanted: Why That Sign's Bad." *Business Week*, April 30, 2009. Feldbaum, Mindy and Hollys States. National Council for Workforce Education and the Academy for Educational Development "Going Green – The Vital Role of Community Colleges in Building a Sustainable Future and Green Workforce." <http://www.aed.org/Publications/upload/GoingGreen.pdf>

Fischer, Karen and David Glenn. "5 College Majors on the Rise." *The Chronicle of Higher Education*, August 31, 2009.

Fischer, Karen and David Glenn. "It Pays to Be Nimble: New Majors at Community Colleges." *The Chronicle of Higher Education*, August 31, 2009.

Fischer, Karen and David Glenn, "Students and Businesses Demand More Training in Job Skills." *The Chronicle of Higher Education*, August 31, 2009.

Global Insight. "U.S. Metro Economies: Current and Potential Green Jobs in the U.S. Economy." Prepared for The United States Conference of Mayors and the Mayors Climate Protection Center. October 2008. <http://www.usmayors.org/pressreleases/uploads/GreenJobsReport.pdf>

Gordon, Edward. "The Global Talent Crisis." *The Futurist*, September-October 2009.

U.S. Census Bureau, Los Angeles County Quick Facts, <http://quickfacts.census.gov/qfd/states/06/06037.html>

Los Angeles County Economic Development Corporation (LAEDC) Kyser Center for Economic Research. "2008-2009 Economic Overview and Forecast – San Gabriel Valley." Prepared for San Gabriel Valley Economic Partnership. November 2008.

LAEDC Kyser Center for Economic Research. "L.A. Stats." April 1, 2009. <http://laedc.org/reports/LAStats-2008.pdf>

LAEDC Kyser Center for Economic Research. "Los Angeles County Profile." 2008. <http://www.laedc.org/reports/LA%20County%20Profile.pdf>.

LAEDC Kyser Center for Economic Research, "2010-2011 Economic Forecast and Industry Outlook" February 2010.

Manpower, Inc., 2009 Talent Shortage Survey Results Report. May 2009. <http://www.manpower.com/research/research.cfm>

Milano, Jessica, Bruce Reed, Paul Weinstein, Jr. The New Democratic Leadership Council. "A Matter of Degrees: Tomorrow's Fastest Growing Jobs and Why Community College Graduates Will Get Them." September 2009.

Pasadena City College (PCC). 2009 Fact Sheet. <http://www.pasadena.edu/about/factsheet.cfm>.

PCC Institutional Planning and Research Office (IPRO). "Observations 2007-2008: A Compendium of Information for and about Pasadena City College." October 2008.

PCC IPRO. Residence of Credit and Non-Credit Students. 2005.

PCC IRPO. Summary of Data. <http://www.pasadena.edu/IPRO/Planning/Summaryofdata.cfm>

PCC IPRO. Research Findings, Issue #14. September 2005.

PCC IPRO. "Trends to Watch." 2006.

Public Policy Institute of California (PPIC). "Just the Facts – Los Angeles County." March 2005.

PPIC. California 2025: Planning for a Better Future: "California Education." July 2009.

PPIC. California 2025: Planning for a Better Future: "California Workforce." July 2009.

Southern California Association of Governments (SCAG). City Profiles, May 2009.

SCAG. Adopted 2008 Regional Transportation Plan Growth Forecast, by Census Tract. The Society for College and University Planning. "Trends to Watch in Education" volume 6 n1. *Planning For Higher Education*, Volume 37, Number 4 (July-September 2009).

U.S. Census Bureau. United States Census 2000. <http://www.census.gov/main/www/cen2000.html>

U.S. Census Bureau, 2005-2007 American Community Survey, 3-Year Estimates.

U.S. Department of Labor Bureau of Labor Statistics (BLS). Occupational Outlook Handbook, 2008-09 Edition. "Tomorrow's Jobs." <http://www.bls.gov/OCO/>

University of California, Long Range Enrollment Planning. University of California Systemwide Enrollment Projections: Undergraduate and Graduate Enrollment Through 2020-21. March 2008.

Appendix A

This comparison of programs offered by community colleges in the Pasadena region is based on the California Community Colleges Chancellor's Office inventory of programs. This inventory lists credit degrees and certificates offered by California community colleges which are approved by the Chancellor's Office. Programs are categorized using the Chancellor's Office Taxonomy of Programs (TOP), a system of nomenclature for designating programs in the California Community College system.

Types of programs not included here are:

- credit certificates that require fewer than 18 semester units or 27 quarter units;
- inactive programs; and
- noncredit programs.

TOP codes and titles serve a variety of purposes at the state level. However, as noted in the introduction to the TOP, "Because it is a convenient and uniform system of classification, the Taxonomy of Programs has been used within districts and colleges for various local purposes. None of these uses is mandated by law or suggested by the Chancellor's Office." (Sixth edition, corrected November 2007).

At the college level, local program titles often differ substantially from college to college, presenting a challenge in consistent classification. All California community colleges offer a full range of university-level coursework in the natural sciences, mathematics, social sciences, humanities, language arts, and fine arts, irrespective of the findings presented here.

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
101	Agriculture Technology and Sciences, General										<input checked="" type="checkbox"/>		
102	Animal Science										<input checked="" type="checkbox"/>		
102.1	Veterinary Technician (Licensed)										<input checked="" type="checkbox"/>		
102.4	Equine Science										<input checked="" type="checkbox"/>		
109	Horticulture					<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
109.1	Landscape Design and Maintenance										<input checked="" type="checkbox"/>		
109.2	Floriculture/Floristry									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
109.3	Nursery Technology										<input checked="" type="checkbox"/>		
109.4	Turfgrass Technology										<input checked="" type="checkbox"/>		
112	Agriculture Business, Sales, and Service										<input checked="" type="checkbox"/>		
114	Forestry			<input checked="" type="checkbox"/>									
115.1	Parks and Outdoor Recreation										<input checked="" type="checkbox"/>		
116	Agricultural Power Equipment Technology										<input checked="" type="checkbox"/>		
201	Architecture and Architectural Technology		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
301	Environmental Technology												<input checked="" type="checkbox"/>
302	Environmental Studies											<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
303	Environmental Technology				<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	
401	Biology, General		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
402	Botany, General		<input checked="" type="checkbox"/>										
403	Microbiology		<input checked="" type="checkbox"/>										
407	Zoology, General		<input checked="" type="checkbox"/>										
430	Biotechnology and Biomedical Technology	<input checked="" type="checkbox"/>											
501	Business and Commerce General		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
502	Accounting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
504	Banking and Finance	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
505	Business Administration		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
506	Business Management		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
506.3	Management Development and Supervision	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
506.4	Small Business and Entrepreneurship	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
506.5	Retail Store Operations and Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
508	International Business and Trade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
509	Marketing and Distribution	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
509.1	Advertising							<input checked="" type="checkbox"/>					
509.4	Sales and Salesmanship		<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>
510	Logistics and Materials Transportation		<input checked="" type="checkbox"/>										
511	Real Estate		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
511.1	Escrow										<input checked="" type="checkbox"/>		
512	Insurance		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>
514.2	Medical Office Technology				<input checked="" type="checkbox"/>								
514	Office Technology/Office Computer Applications	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
514.1	Legal Office Technology		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
514.2	Medical Office Technology						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
514.3	Court Reporting		<input checked="" type="checkbox"/>										
514.4	Office Management			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
516	Labor and Industrial Relations												
518	Customer Service									<input checked="" type="checkbox"/>			
601	Media and Communications, General											<input checked="" type="checkbox"/>	
602	Journalism	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
604	Radio and Television		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
604.1	Radio	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>		
604.2	Television (including combined TV/film/video)	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
604.3	Broadcast Journalism	<input checked="" type="checkbox"/>								<input checked="" type="checkbox"/>			
606	Public Relations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>			
610	Mass Communications						<input checked="" type="checkbox"/>						
612	Film Studies (including combined film/video)									<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
612.2	Film Production							<input checked="" type="checkbox"/>					
614.1	Multimedia	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
614.3	Website Design and Development					<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		
614.4	Animation		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
614.5	Desktop Publishing				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
614.6	Computer Graphics and Digital Imagery			<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
701	Information Technology, General										<input checked="" type="checkbox"/>		
702	Computer Information Systems	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
702.1	Software Applications	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
706	Computer Science (transfer)		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>
707.1	Computer Programming	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
707.2	Database Design and Administration										<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
707.3	Computer Systems Analysis		<input checked="" type="checkbox"/>										
708	Computer Infrastructure and Support			<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>		
708.1	Computer Networking		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
708.2	Computer Support	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
709	World Wide Web Administration						<input checked="" type="checkbox"/>						
802	Educational Aide (Teacher Assistant)		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>		
802.1	Educational Aide (Teacher Assistant), Bilingual				<input checked="" type="checkbox"/>								
809	Special Education					<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
835	Physical Education		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
835.2	Fitness Trainer		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
836	Recreation					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
839	Industrial Arts (Transfer)		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
850.1	Sign Language Interpreting					<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		
860	Educational Technology												
899	Other Education _ Bilingual Education		<input checked="" type="checkbox"/>										
901	Engineering, General (requires Calculus) (Transfer)		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
924	Engineering Technology, General	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					
934	Electronics and Electric Technology	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
934.1	Computer Electronics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
934.2	Industrial Electronics		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		
934.3	Telecommunications Technology		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
934.4	Electrical Systems and Power Transmission								<input checked="" type="checkbox"/>				
934.6	Biomedical Instrumentation							<input checked="" type="checkbox"/>					
934.7	Electron Microscopy				<input checked="" type="checkbox"/>								
936	Printing and Lithography	<input checked="" type="checkbox"/>											
945	Industrial Systems Technology and Maintenance									<input checked="" type="checkbox"/>			
946	Environmental Control Technology (HVAC)			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
947	Diesel Technology			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
947.3	Heavy Equipment Operation											<input checked="" type="checkbox"/>	
948	Automotive Technology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
948.3	Motorcycle, Outboard, and Small Engine Repair			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				
948.4	Alternative Fuels and Advanced Transportation Technology									<input checked="" type="checkbox"/>			
949	Automotive Collision Repair		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
950	Aeronautical and Aviation Technology									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
950.1	Aviation Airframe Mechanics										<input checked="" type="checkbox"/>		
950.2	Aviation Powerplant Mechanics										<input checked="" type="checkbox"/>		
952	Construction Crafts Technology	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>							
952.1	Carpentry								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
952.2	Electrical								<input checked="" type="checkbox"/>				
952.3	Plumbing, Pipefitting, and Steamfitting								<input checked="" type="checkbox"/>				
952.5	Mill and Cabinet Work		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
953	Drafting Technology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
953.1	Architectural Drafting			<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>			
953.2	Civil Drafting											<input checked="" type="checkbox"/>	
953.3	Electrical, Electronic, and Electro-Mechanical Drafting						<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
953.4	Mechanical Drafting									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
954.2	Plastics and Composites		<input checked="" type="checkbox"/>										
955	Laboratory Science Technology								<input checked="" type="checkbox"/>				
956	Manufacturing and Industrial Technology		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
956.3	Machining and Machine Tools	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
956.4	Sheet Metal and Structural Metal								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
956.5	Welding Technology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
956.7	Industrial and Occupational Safety and Health					<input checked="" type="checkbox"/>							
956.8	Industrial Quality Control		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
957.2	Construction Inspection	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>		
958	Water and Wastewater Technology			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
999	Other Engineering and Industrial Technologies								<input checked="" type="checkbox"/>				
1001	Fine Arts, General		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1002	Art (Painting, Drawing, and Sculpture)		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
1002.1	Painting and Drawing		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>			
1002.2	Sculpture		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>			
1002.3	Ceramics			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						
1004	Music	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1005	Commercial Music		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
1006	Technical Theater	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1007	Dramatic Arts		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1008	Dance		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
1008.1	Commercial Dance			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						
1009	Applied Design									<input checked="" type="checkbox"/>			
1009.1	Jewelry		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
1011	Photography		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
1012	Applied Photography	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
1013	Commercial Art	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1030	Graphic Art and Design	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
1099	Other Fine and Applied Arts					<input checked="" type="checkbox"/>							
1101	Foreign Languages, General						<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
1102	French		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
1103	German		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
1104	Italian							<input checked="" type="checkbox"/>					
1105	Spanish		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
1107	Chinese							<input checked="" type="checkbox"/>					
1108	Japanese					<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
1117.3	Korean							<input checked="" type="checkbox"/>					
1205	Medical Laboratory Technology					<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
1208	Medical Assisting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			
1208.1	Clinical Medical Assisting									<input checked="" type="checkbox"/>			
1208.2	Administrative Medical Assisting	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
1210	Respiratory Care/Therapy				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
1220	Speech-Language Pathology and Audiology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
1221	Pharmacy Technology		<input checked="" type="checkbox"/>										
1222	Physical Therapist Assistant		<input checked="" type="checkbox"/>										
1223	Health Information Technology				<input checked="" type="checkbox"/>								
1223.1	Health Information Coding				<input checked="" type="checkbox"/>								
1224	School Health Clerk					<input checked="" type="checkbox"/>							
1225	Radiologic Technology	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1228	Athletic Training and Sports Medicine		<input checked="" type="checkbox"/>										
1230.1	Registered Nursing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1230.2	Licensed Vocational Nursing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
1239	Psychiatric Technician										<input checked="" type="checkbox"/>		
1240.1	Dental Assistant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
1240.2	Dental Hygienist	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
1240.3	Dental Laboratory Technician	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>					
1251	Paramedic					<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		
1260	Health Professions, Transfer Core Curriculum					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
1261	Community Health Care Worker				<input checked="" type="checkbox"/>								
1301	Family and Consumer Sciences, General				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1301.1	Consumer Services										<input checked="" type="checkbox"/>		
1302	Interior Design and Merchandising									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
1303	Fashion	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>							

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
1303.1	Fashion Design					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
1303.2	Fashion Merchandising					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
1303.3	Fashion Production								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
1305	Child Development/Early Care and Education	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1305.2	Children with Special Needs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>
1305.4	Preschool Age Children	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>				
1305.5	The School Age Child	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1305.8	Child Development Administration and Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
1305.9	Infants and Toddlers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
1306.2	Dietetic Services and Management						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
1306.3	Culinary Arts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
1306.6	Dietetic Technology									<input checked="" type="checkbox"/>			
1307	Hospitality	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
1307.1	Restaurant and Food Services Management								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1307.2	Lodging Management									<input checked="" type="checkbox"/>			
1309	Gerontology				<input checked="" type="checkbox"/>								
1401	Law, General		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>					
1402	Paralegal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
1501	English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
1502	Language Arts			<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>		
1506	Speech Communication	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
1507	Creative Writing									<input checked="" type="checkbox"/>			
1509	Philosophy		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	
1601	Library Science, General			<input checked="" type="checkbox"/>									
1602	Library Technician (Aide)	<input checked="" type="checkbox"/>								<input checked="" type="checkbox"/>			

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
1701	Mathematics, General		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
1901	Physical Sciences, General					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
1902	Physics, General		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
1905	Chemistry, General		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
1911	Astronomy					<input checked="" type="checkbox"/>							
1914	Geology		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
2001	Psychology, General		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
2102.1	Public Works			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				
2104	Human Services		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
2104.4	Alcohol and Controlled Substances				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2105	Administration of Justice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2105.1	Corrections										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2105.3	Security Management		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
2133	Fire Technology	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2133.1	Wildland Fire Technology											<input checked="" type="checkbox"/>	
2133.5	Fire Academy					<input checked="" type="checkbox"/>							
2199	Other Public and Protective Services								<input checked="" type="checkbox"/>				
2201	Social Sciences, General			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
2201.1	Women's Studies		<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>
2201.2	American Studies					<input checked="" type="checkbox"/>							
2202	Anthropology		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
2203	Ethnic Studies		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2204	Economics		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
2205	History		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
2206	Geography		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>				

Appendix A. Regional Provider Program Comparison

T.O.P. Programs		Pasadena City College	Cerritos College	Citrus College	East Los Angeles College	El Camino College	Glendale College	Los Angeles City College	Los Angeles Trade-Technical	Long Beach City College	Mount San Antonio College	Rio Hondo College	Santa Monica City College
2207	Political Science		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
2208	Sociology		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
2210	International Studies		<input checked="" type="checkbox"/>										
3007	Cosmetology and Barbering	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
3009	Travel Services and Tourism									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
3020.1	Aviation and Airport Management						<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
3020.2	Piloting						<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
3020.3	Air Traffic Control										<input checked="" type="checkbox"/>		
3020.4	Flight Attendant						<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
4901	Liberal Arts and Sciences, General	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4901.1	Transfer Studies		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4901.2	Liberal Studies (teaching preparation)				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>				
4902	Biological and Physical Sciences (and Mathematics)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4903	Humanities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
4903.1	Humanities and Fine Arts		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
4903.3	Humanities and Social Sciences						<input checked="" type="checkbox"/>						



APPENDIX B. TOWN HALL MEETING OVERALL SUMMARY



Town Hall Meetings Overall Summary

The Pasadena Area Community College District (PACCD) Educational Master Plan (EMP) is an important part of PACCD's long-range planning, designed to align the Community College District's efforts with the needs of its students and the greater community that it serves. The Educational Master Plan (EMP) will help outline a strategy for how PCC can best leverage the resources at its disposal to meet high standards and accommodate its projected enrollment by the year 2020.

As part of the PACCD Educational Master Plan (EMP) development process, PACCD hosted 12 Town Hall Meetings and three Presidents Advisory Council meetings. Over 200 community members and 21 City Council and Board of Education members participated in this round of outreach. Meetings were held over the course of September and October at multiple locations throughout the District, as follows:

- Saturday, September 12th (*Pasadena, CA*)
- Tuesday, September 15th (*Arvadia, CA*)
- Monday, September 21st (*Sierra Madre, CA*)
- Tuesday, September 22nd (*South Pasadena, CA*)
- Wednesday, September 23rd (*Altadena, CA*)
- Wednesday, September 30th (*Temple City, CA*)
- Thursday, October 1st (*Pasadena, CA*)
- Thursday, October 8th (*Pasadena, CA*)
- Saturday, October 10th (*Pasadena, CA*)

Outreach meetings served to educate participants about the EMP and identify desired process outcomes. Additionally, these meetings helped facilitate important discussion about participants' visions and values related to PACCD's programs; facilities; faculty and staff; outreach and communications; and other resources. The following key themes emerged over the course of the EMP community outreach process. Readers are also encouraged to read the full-array of comments and thoughts provided by the Town Hall Meeting participants. The individual meeting notes are extensive and indicative of the impressions, concerns, and hopes expressed in support of the college's future.

Strengths and Assets

- **A beautiful and well-located campus.** Many Town Hall meeting participants noted the beauty and cleanliness of PCC's campus. PCC's geographic location and resulting accessibility to students throughout the Los Angeles region helps to position the college as an important local resource.
- **A high transfer rate.** PCC enjoys a high transfer rate to the University of California and California State University systems, consistently ranking among the State's community colleges with the highest transfer rates to four-year colleges and universities. PCC's Transfer Alliance Program (TAP) is a very strong existing alliance with UCLA.
- **Highly qualified faculty.** Meeting participants praised college faculty for the experience and expertise they bring to PCC, and consider the quality of faculty central to the quality of PCC's academic and career and technical education programs.
- **Diverse student body.** PCC's student body is incredibly diverse in terms of ethnicity, age and student ability. Town Hall meeting participants encouraged PCC to continue to nurture difference and diversity and to take advantage of opportunities created by this diversity.
- **Strong academic and extra-curricular programs.** PCC boasts excellent and innovative programs and activities that bring strong disciplinary focus to the campus and help provide students an identity within the college. Biotechnology and stem cell research and communications media are just two examples of exceptional academic and career and technical education programs. PCC's excellent extra-curricular programs include award-winning debate and math competition teams, and the Puente and Ujima programs.
- **Cost-effective educational opportunity.** PCC and community colleges throughout California provide students the opportunity to pursue their academic and professional goals at a low cost relative to the cost of attending four-year institutions and private vocational schools. The importance of this role in the education system cannot be understated, particularly given the current economic recession.

Issues and Challenges

- **Limited campus accessibility.** Campus accessibility remains a concern with respect to transportation and parking access to the main campus. Some meeting participants noted an improvement to the parking situation with the new parking areas now available.
- **Limited access to core courses.** Meeting participants pointed to the clear need to improve access to classes, especially core, required classes and basic skills classes such as English and math. Completing associate level coursework is contingent upon the ability of students to access core courses when needed. Many individuals described a frustrating and onerous registration process as one barrier to entry. Others recommend creating more course sections in the disciplines needed to progress to help resolve this problem.

- **Low basic skills performance.** Many PCC students enter the college lacking basic English and math skills and are unprepared to excel or be successful in their classes. Among other serious repercussions, this results in the disproportionate use of college resources to teach basic skills.
- **Gaps in student achievement and representation.** Overall, PCC's Latino students do not perform as well as other groups in terms of basic skills. Town Hall meeting participants also noted the steady decline in the size of PCC's African American student body and its disproportionate size relative to that of the District's African American population. In addition, a relatively small number of District residents choose to study at PCC.
- **Lack of a consistent professional development program.** Participants commented on the need to provide faculty, staff, and managers with on-going professional development opportunities to support the needs of the diverse student population and to assist with economic, cultural, and organizational challenges going forward.
- **Lack of classroom space and laboratory facilities.** Meeting participants noted the lack of classroom space and science laboratory facilities available at PCC during peak class times and the need to optimize the use of existing space during all established hours of instruction, including non-peak hours and weekends, to increase eligibility for state funds.
- **Antiquated and inefficient database management system.** The college's current, antiquated online systems are often duplicative and individual systems such as registration, accounting, human resources and student accounts are managed separately, and often at the expense of efficiency and ease of use for faculty and staff as well as students.
- **Limited resources and inadequate State funding model.** The current State funding model does not provide sufficient resources for PCC.

Opportunities

- **Strengthen and target community outreach.** Town Hall Meeting participants called on PCC to improve communications and outreach to local communities within the District and to reach out to students early in their education. Future outreach should target middle-school aged students and the PACCD's African American community. Involving PCC student ambassadors and greater faculty participation in PACCD communities are two strategies proposed by the community.
- **Build a culturally and linguistically representative faculty and staff.** Town Hall Meeting participants noted how important it will be to build a more diverse faculty and staff that better represent PCC's student body population both culturally and linguistically.
- **Streamline the registration process.** Many participants called on PCC to improve the registration process so that students can complete their degree and certificate programs,

and/or transfer to a four-year school, in a timely manner. The topic of priority registration for in-district students was also raised by many Town Hall Meeting participants.

- **Offer programs that align with the changing economy and are tailored to meet student needs.** As PCC student demographics continue to change and evolve, PCC must design and implement appropriate responses to meet student needs. In other words, PCC must provide specialized services rather than a “one size fits all” approach in order to meet the diverse needs of its students. Meeting participants frequently noted the importance of adapting and developing programs and facilities to meet the many needs of the changing economy.
- **Pursue contract education opportunities.** To provide the community with the support it needs, PCC must provide greater workplace-oriented and vocational training. Meeting participants encouraged PCC to pursue contract education opportunities.
- **Focus on student development of “soft skills.”** Many called for a more strategic focus on the development of the soft skills that all employers seek, including communications, time management and analytic problem-solving skills. Currently, many students demonstrate a lack of soft skills. By encouraging all faculty and programs to emphasize the development soft skills, PCC can help prepare students for success in the work force, irrespective of their career goals.
- **Develop sustainability curriculum.** Participants called on PCC to develop sustainability curriculum to prepare students to compete in the growing green collar economy. Community members also expressed interest in courses that will support individuals in their efforts to become more active and adept stewards of the region’s limited resources.
- **Update technology to keep pace with 21st century demands.** Town Hall meeting participants expressed the need for PCC to conduct a complete “information technology overhaul.” Suggested needs include an integrated database management system and a consistently reliable internet service with adequate capacity to meet campus needs. Meeting participants also called for additional science and laboratory facilities to accommodate science-based programs critical to developing skills in industries with anticipated future demand.
- **Explore the possibility of establishing a satellite campus and/or offering additional course sections at other locations in the District.** Some argued that establishing a satellite campus in one of the lesser served, more remote areas of the District would help alleviate problems with access to programs and services, and would also help resolve transportation-related sustainability concerns. Others cautioned that a satellite campus would need to provide the full range of student services in order to adequately serve students and meet State standards. All seemed to agree that it was important to find ways to provide course opportunities at locales other than the main and Community Education Center campuses to satisfy the needs of District students.

- **Build strategic partnerships and tap underutilized resources.** PCC can bolster student achievement and strengthen its academic and community-based programs by cultivating relationships with Pasadena's and the surrounding communities' rich array of resources and facilities. Participants frequently noted the need to build strategic partnerships with the K-8 and K-12 systems, California Institute of Technology (Caltech), the Jet Propulsion Laboratory (JPL) and the Art Center College of Design. Currently, PCC does not have an official alumni organization, indicating that existing PCC alumni remain an untapped resource for the college. In addition, the Pasadena City College Foundation could do more to secure resources for PCC and its students.

- **Advocate for changes to the current State funding model.** Town Hall participants called on PACCDC to advocate for changes to the current State funding model in order to improve the availability of resources for community colleges.



APPENDIX C. EMP WEB SURVEY SUMMARY REPORT



MEMORANDUM

to Robert Miller
from Mindy Craig
re **Educational Master Plan Survey**
date 3/9/10

Introduction

The Pasadena Area Community College District (PACCD) conducted a web-based survey as part of its Educational Master Plan (EMP) data collection and outreach efforts. A total of 1,020 respondents completed a series of questions designed to gauge the relative importance of a number of issues impacting students, staff and faculty, and the broader PCC community. The survey was developed from the list of emerging issues presented to the College previously and identified from the Town Hall Meetings, Environmental Scan and internal PCC meetings. The intent of the survey is to validate and prioritize those issues to inform the development of the Educational Master Plan

The survey was provided online on the Pasadena Community College website, as well as the EMP website, from January 28, 2010 to March 1, 2010. PACCD conducted extensive outreach in an effort to encourage community members and the PCC community to participate in the survey. PACCD worked closely with local government agencies, school districts, chambers of commerce, neighborhood associations and other community groups to spread the word through a variety of media, including email, print newsletters, and local blogs. The District also worked with its Board of Trustees and college faculty and staff to promote the survey via their networks. The survey was also advertised in the PCC college bulletin.

Survey questions and responses are included as Attachment A. A summary of survey results by subgroup is included as Attachment B. Attachment C includes a sample of open-ended survey responses.

Summary of Survey Responses

The following is a summary of survey findings. Overall, respondents overwhelmingly indicated that all of the issues identified were at least somewhat important to them. Therefore, the following findings focus on the priorities indicated by the results.

Survey Respondents

Over 73 percent of respondents identified themselves as current or former PCC students. 34 percent of respondents identified themselves as PCC faculty, administration, or staff, and 29 percent as students. 16 percent of respondents were community members, 2.8 percent identified themselves as business owners and 16 percent indicated “other”.

Although survey respondents were not reflective of the PACCD area population, the sampling of responses, in both quantity and respondent type, is reasonable for a web-based survey of this kind. There were a disproportionate number of respondents 51 to 64 years of age (46 percent). The survey did have a relatively good proportion of respondents ages 15 to 24 (15.7 percent) in comparison to the population as a whole. The age groups least represented were those under 18 and between the ages of 25 and 30.

Priority Themes

Substantive survey questions were presented according to six overarching categories, or themes. Respondents ranked these themes by assigning a level of relative importance to each (“1” being most important and “6” being least important). These themes are listed in order of priority below. Student success was by far the most important, with 65.6 percent of respondents ranking it as the number one priority theme for PACCD.

1. Student success
2. An efficient education
3. A 21st century learning institution
4. Building and maintaining a sense of community
5. Facility needs
6. Diversifying funding

Priority Actions

Survey participants were asked to assign a level of importance to a series of issues corresponding to each of the six themes addressed in the survey. Answer options included: “extremely important”, “somewhat important”, “neutral”, “not very important”, “not important at all”, and “unsure/no opinion”. The survey included one series of questions designed to gather feedback exclusively from faculty, staff and administration.

Survey results indicate that ten issues were considered extremely important by at least 60 percent of respondents. Several trends emerged from these findings, including the need to improve technology tools and management; to better connect and communicate with four-year institutions; and the need to increase basic skills and transfer classes. Specifically, the following issues were rated high.

1. Connect and build relationships to 4-year colleges and universities
2. Update technology hardware
3. Increase availability of prerequisite courses
4. Update database and campus software
5. Provide extensive basic skills courses (fundamentals in writing, math, etc.)
6. Improve transition from high school to PCC and from PCC to 4-year
7. Increase the availability and number of transfer courses
8. Outline clear expectations and requirements for new students
9. Improve access to academic counselors and tutors
10. Build local and community support for PCC

The following table compares the proportion of faculty, staff and administration; students; and community members¹ that ranked each of the priority actions as extremely important. Of the ten top-ranking issues identified above, updating technology and improving technology management was ranked the highest among PCC faculty, staff and administration. PCC students identified building relationships with 4-year universities and increasing the availability of transfer and prerequisite courses as the most important issues. Priority issues among members of the community include providing basic skills courses, building relationships with 4-year colleges and universities, and building local community support for PCC. Additional details by question are provided in Attachment B.

	Issue	Faculty, Staff, Admin. (344)	Students (299)	Community (213)	Other (169)
1.	Connecting and building relationships to 4-year colleges and universities	58.2%	86.7%	73.4%	76.4%
2.	Update technology hardware	69.2%	N/A*	N/A	N/A
3.	Increasing availability of prerequisite courses	64.5%	74.9%	71.7%	66.9%
4.	Update database and campus software	67.5%	N/A	N/A	N/A
5.	Providing extensive basic skills courses	56.4%	68.4%	74.2%	77.9%
6.	Improving transition from high school to PCC and from PCC to 4-year	61.3%	68.4%	67.9%	65.7%
7.	Increasing the availability and number of transfer courses	56.9%	76.7%	59.3%	66.2%
8.	Outlining clear expectations and requirements for new students	63.3%	65.0%	56.8%	72.4%
9.	Improving access to academic counselors and tutors	55.3%	72.8%	52.4%	61.1%
10.	Building local community support for PCC	60.4%	53.2%	65.1%	64.2%

*Certain questions were only asked of the PCC faculty and staff.

In the rest of the survey, there are several areas of substantive differences between the groups in ranking of issues of importance. The following are the most notable:

1. 72.8 percent of students ranked “improving access to academic counselors and tutors” as extremely important in comparison approximately 55 percent of all other respondents.
2. Only 45.3 percent of faculty/staff indicated that “increasing programs in mathematics, science, and engineering” was extremely important compared to 66.4 percent of students.
3. 41.7 percent of students ranked “coordinating programs and services with nearby community colleges” as extremely important compared to 28 percent of faculty/staff respondents.
4. Just 11 percent of community respondents indicated that “adding new facilities to the existing campus” was extremely important compared to 31.4 percent of students.

¹ Members of the “community” subgroup include those who identified themselves as a community member or resident, business owner, K-12 school administrator or faculty, or elected official.

5. 42.1 percent of students ranked “enhancing alternative transportation options for students” as extremely important compared to faculty and staff.

Important Issues

The following section presents an overview of the top issues identified as “extremely important” by at least 40 percent of the respondents.² This analysis suggests that the following issues are also very important to address in the Educational Master Plan.

Student Success

1. Increasing programs in mathematics, science and engineering (57.4%)
2. Enhancing curriculum to improve communication, collaboration, analytical thinking and time management (54.2%)
3. Adding capacity to maxed-out programs such as nursing (52.6%)
4. Creating programs that support returning veterans (40.6%)

Efficient Education

1. Providing a faster, smoother registration process (49.1%)
2. Improving access and processing of financial aid (48.1%)
3. Using facilities more efficiently (47.2%)
4. Making first-time enrollment easier (46.2%)

21st Century Learning

1. Offering faculty and staff training to develop and support new ways of teaching (52.2%)
2. Increasing and enhancing health, science and math interactive laboratory facilities (48.6%)
3. Developing more on-campus technology-rich and interactive courses (44.0%)

Building and Maintaining a Sense of Community

1. Enhancing a sense of community among students and faculty (43.1%)

Facility Needs

1. Completing building upgrades for seismic safety (57.6%)
2. Adding "wired" technology classrooms (52.8%)
3. Designing facilities with universal access (for all ages and physical abilities) (47.7%)
4. Filling buildings in underutilized time periods, such as Fridays and weekends (44.4%)
5. Upgrading sewer, water and other infrastructure systems (43.4%)
6. Build new/updated science and math lab facilities (41.6%)

Diversifying Funding

1. Utilizing programs that can be supported by grant funding (53.2%)
2. Exploring programs that can be supported by grant funding (52.3%)
3. Contracting with major employers and industry groups for specialized programs (48.1%)
4. Utilizing the PCC Foundation and alumni to diversify funding (46.4%)

² Issues listed here are those that fall between the 40th and 60th percentile.

Non-Priority Issues

The following topics were rated as “extremely important” by 25 percent or less of survey participants. Overall, these issues are important to consider, but they do not rank as top priorities.

- Increasing the number of distance education courses (25.0%)
- Adding new facilities to the existing campus (24.3%)
- Providing off-campus facilities to bring programs closer to students (21.1%)
- Increasing study abroad opportunities (14.4%)

Conclusion

Survey findings suggest that strategies to improve student access to essential classes, information, services and programs should be considered a priority in the EMP. These include:

- Providing extensive basic skills courses, including fundamentals in writing and math;
- Outlining clear expectations and requirements for new students;
- Improving access to academic counselors and tutors;
- Improve technology and computer systems District-wide;
- Increasing the availability and number of transfer courses; and
- Prioritize registration for students with program completion goals.

Further, survey results suggest that PACCD should work to strengthen community at the College and foster collaboration with other institutions to achieve District goals, including improving the transition from high school to PCC and from PCC to 4-year institutions. Identified strategies include connecting and building relationships to 4-year colleges and universities; building local and community support for PCC; and building a collaborative culture between staff, administration and faculty.

In terms of facilities, seismic upgrades and the provision of new wireless technology ranked the highest in this category. Respondents generally thought it was more important to upgrade or better utilize existing facilities than to build new facilities elsewhere. Developing a new health science and math lab facilities did register as important.

In closing, this survey assists in validating that the issues identified are the critical ones to be included in the Educational Master Plan and that there are a number of critical items that should be given priority by the College.

Attachment A: Summary of Web-Based Survey Responses

Respondent Information

Have you ever been a student at PCC?		
Answer Options	Response Percent	Response Count
Yes	73.1%	715
No	26.9%	263
<i>answered question</i>		978
<i>skipped question</i>		20

Are you interested in taking classes at PCC in the future?		
Answer Options	Response Percent	Response Count
Yes	65.6%	637
No	34.4%	334
<i>answered question</i>		971
<i>skipped question</i>		27

Please tell us your age:		
Answer Options	Response Percent	Response Count
Under 15	0.2%	2
16 - 18	2.6%	25
19 - 24	13.1%	128
25 - 30	8.1%	79
31 - 50	29.1%	283
51 - 64	32.2%	314
65 or older	14.7%	143
<i>answered question</i>		974
<i>skipped question</i>		24

Respondent Information (continued)

Please indicate your affiliation to the Pasadena Area Community College District (select one).		
Answer Options	Response Percent	Response Count
PCC Student	28.2%	280
PCC Faculty, Administration or Staff	34.5%	342
Community Member/Resident	16.0%	159
Business Owner	2.8%	28
K-12 School Administrator or Faculty	0.9%	9
Elected Official	0.9%	9
Other	16.6%	165
<i>answered question</i>		992
<i>skipped question</i>		6

For Faculty, Staff and Administration

Please indicate how important you think the following themes are by checking the appropriate box.							
Answer Options	Extremely Important	Somewhat Important	Neutral	Not Very Important	Not At All Important	Unsure/ No Opinion	Response Count
Increasing staffing for counselors, translators, maintenance staff and aides	38.3%	30.8%	21.8%	3.4%	2.2%	3.4%	321
Ensuring consistent, relevant staff evaluations	36.0%	38.5%	18.6%	5.0%	0.6%	1.3%	317
Providing better management of technology in classrooms	57.5%	28.4%	10.3%	1.6%	0.0%	2.2%	320
Making maintenance of facilities faster and more efficient	34.0%	40.6%	21.1%	3.1%	0.3%	0.9%	318
Prioritizing registration for students with program completion goals	46.6%	32.6%	14.3%	2.5%	0.9%	3.1%	322
Adjusting the add/drop policy to prioritize goal-oriented students	33.2%	33.9%	22.3%	5.0%	1.3%	4.4%	319
Making more use of existing staff by expanding classifications	25.6%	30.6%	25.3%	4.7%	4.7%	9.1%	320
Improving communication between disciplines/divisions	48.3%	37.9%	11.6%	1.9%	0.0%	0.3%	319
Making better use of email and electronic media in communications with students	42.5%	41.0%	13.7%	1.2%	0.0%	1.6%	322
Improved orientation and mentoring for staff and faculty	39.4%	40.9%	16.6%	2.2%	0.9%	0.0%	320
Building a collaborative culture between staff, administration and faculty	57.3%	32.7%	7.8%	2.2%	0.0%	0.0%	321
Integrating adjunct faculty to build ownership and commitment	41.1%	34.5%	17.9%	2.5%	0.3%	3.8%	319
Updating technology hardware	69.2%	25.5%	4.7%	0.3%	0.0%	0.3%	318
Updating Database and Campus Software	67.5%	25.3%	5.9%	0.6%	0.0%	0.6%	320
Improving the connection between the Community Education Center and Pasadena Campus	29.2%	33.9%	24.2%	7.5%	1.2%	4.0%	322
Are there any other issues or concerns that you feel should be a priority for the Educational Master Planning effort?							71
<i>answered question</i>							322
<i>skipped question</i>							676

Student Success

How can PCC meet its primary mission to help students achieve their academic and career goals? (Please indicate how important you think the following themes are by checking the appropriate box.)							
Answer Options	Extremely Important	Somewhat Important	Neutral	Not Very Important	Not At All Important	Unsure/ No Opinion	Response Count
Providing extensive basic skills courses (fundamentals in writing, math, etc.)	67.0%	21.2%	7.8%	2.3%	0.6%	1.1%	886
Expanding English as a second language programs and services	32.8%	33.4%	19.5%	7.3%	4.4%	2.6%	881
Improving relationships and connections with K-12 schools	35.0%	35.5%	20.5%	5.2%	1.8%	2.0%	884
Connecting and building relationships to 4-year colleges and universities	72.3%	22.6%	4.3%	0.3%	0.1%	0.3%	882
Improving access to academic counselors and tutors	60.5%	28.4%	8.7%	1.0%	0.3%	1.0%	884
Increasing programs in mathematics, science, and engineering	57.4%	28.2%	11.2%	0.8%	0.3%	2.0%	885
Enhancing curriculum to improve communication, collaboration, analytical thinking and time management	54.2%	31.0%	10.9%	2.3%	0.2%	1.4%	886
Creating programs supporting returning veterans	40.6%	36.0%	17.9%	2.7%	1.1%	1.7%	885
Adding capacity to maxed-out programs such as nursing	52.6%	29.5%	13.4%	1.8%	0.7%	2.0%	881
Increasing the availability and number of transfer courses	64.4%	27.2%	6.6%	0.7%	0.0%	1.1%	885
Outlining clear expectations and requirements for new students	64.1%	26.5%	7.9%	0.6%	0.2%	0.7%	884
Are there any other student successes or concerns that you feel should be a priority for this Educational Master Planning effort?							213
<i>answered question</i>							887
<i>skipped question</i>							111

Efficient Education

How can PCC ensure that students achieve their academic and career goals efficiently and effectively? (Please indicate how important you think the following themes are by checking the appropriate box.)							
Answer Options	Extremely Important	Somewhat Important	Neutral	Not Very Important	Not At All Important	Unsure/ No Opinion	Response Count
Improving transition from high school to PCC and from PCC to 4-year	65.6%	25.2%	7.5%	0.8%	0.0%	0.9%	868
Increasing availability of prerequisite courses	69.1%	25.1%	4.6%	0.5%	0.0%	0.7%	862
Using facilities more efficiently	47.2%	35.2%	14.0%	1.2%	0.0%	2.5%	867
Providing a faster, smoother registration process	49.1%	30.1%	15.3%	1.7%	0.7%	3.0%	867
Making first-time enrollment easier	46.2%	28.5%	18.4%	3.0%	0.9%	3.0%	866
Improving access and processing of financial aid	48.1%	29.7%	16.1%	1.4%	0.3%	4.4%	863
Coordinating programs and services with nearby community colleges	33.5%	37.0%	20.8%	4.7%	1.3%	2.7%	865
Are there any other efficiency issues that you feel should be priority for the Educational Master Planning effort?							126
<i>answered question</i>							869
<i>skipped question</i>							129

21st Century Learning

How can PCC provide and sustain state-of-the-art academics and support services? (Please indicate how important you think the following themes are by checking the appropriate box.)							
Answer Options	Extremely Important	Somewhat Important	Neutral	Not Very Important	Not At All Important	Unsure/ No Opinion	Response Count
Developing more on-campus technology-rich and interactive courses	44.0%	39.1%	12.7%	1.8%	0.6%	1.9%	844
Increasing the number of distance education courses	25.0%	36.1%	24.3%	7.1%	2.7%	4.8%	840
Increasing study abroad opportunities	14.4%	27.5%	36.0%	13.9%	5.2%	3.0%	840
Training professionals for "green" jobs and industries	39.5%	33.9%	19.3%	3.6%	2.8%	0.8%	843
Developing one-of-a-kind programs that make PCC stand out	36.8%	36.7%	18.9%	4.6%	2.1%	0.8%	845
Offering faculty and staff training to develop and support new ways of teaching	52.2%	32.3%	11.2%	2.5%	1.1%	0.7%	845
Enhancing sustainability practices on the campus	37.9%	33.5%	16.7%	4.4%	2.1%	5.3%	842
Increasing and enhancing health, science and math interactive laboratory facilities	48.6%	32.0%	15.3%	1.2%	0.7%	2.3%	844
Enhancing alternative transportation options for students	30.6%	33.9%	23.3%	7.1%	2.5%	2.6%	841
Are there any other issues or concerns about the future of education that you feel should be a priority for the Educational Master Planning effort?							116
<i>answered question</i>							846
<i>skipped question</i>							152

Sense of Community

How can PCC increase the feeling of ownership and loyalty to the College?							
Answer Options	Extremely Important	Somewhat Important	Neutral	Not Very Important	Not At All Important	Unsure/ No Opinion	Response Count
Enhancing a sense of community among students and faculty	43.1%	39.3%	13.6%	2.1%	1.3%	0.6%	840
Broadening the diversity of faculty and staff to better match student body	26.8%	28.8%	27.2%	8.9%	6.4%	1.8%	839
Creating programs and services to bring students together	32.6%	37.6%	21.6%	5.2%	1.8%	1.2%	841
Building facilities that encourage gathering and interaction	31.2%	35.4%	22.3%	6.4%	3.3%	1.3%	839
Creating small work group spaces for studying and collaboration	39.2%	36.7%	17.1%	4.2%	1.9%	1.0%	837
Are there any other issues or concerns about the College community that you feel should be a priority for the Educational Master Planning effort?							108
<i>answered question</i>							841

Facility Needs

What kind of facilities does PCC need to support students, programs and services? (Please indicate how important you think the following themes are by checking the appropriate box.)							
Answer Options	Extremely Important	Somewhat Important	Neutral	Not Very Important	Not Important At All	Unsure/ No Opinion	Response Count
Adding new facilities to the existing campus	24.3%	38.5%	23.5%	6.4%	2.2%	5.1%	826
Providing off-campus facilities to bring programs closer to students	21.1%	30.6%	29.9%	11.5%	3.6%	3.2%	823
Building new/updated health science and math lab facilities	41.6%	31.6%	19.0%	2.0%	1.2%	4.5%	819
Filling buildings in underutilized time periods, such as Fridays and weekends	44.4%	31.7%	16.7%	3.4%	1.1%	2.7%	824
Completing building upgrades for seismic safety	57.6%	26.3%	11.2%	1.8%	0.8%	2.2%	824
Upgrading sewer, water and other infrastructure systems	43.4%	31.9%	17.6%	1.9%	1.0%	4.1%	822
Designing facilities with universal access (for all ages and physical abilities)	47.7%	31.2%	15.0%	3.4%	0.9%	1.8%	821
Improving maintenance of facilities	34.6%	37.7%	19.9%	2.9%	1.3%	3.5%	823
Creating small group work areas	27.2%	36.8%	23.9%	7.5%	2.0%	2.7%	817
Adding "wired" technology classrooms	52.8%	29.1%	11.4%	2.7%	1.6%	2.3%	814
Are there any other issues or concerns about facilities that you feel should be a priority for the Educational Master Planning effort?							106
<i>answered question</i>							828
<i>skipped question</i>							170

Diversifying Funding

How can PCC effectively fund facilities improvements, program enhancements and services? (Please indicate how important you think the following themes are by checking the appropriate box.)							
Answer Options	Extremely Important	Somewhat Important	Neutral	Not Very Important	Not Important At All	Unsure/ No Opinion	Response Count
Decreasing reliance on State funding	31.3%	37.6%	18.5%	4.1%	2.5%	6.1%	809
Contracting with major employers and industry groups for specialized programs	48.1%	32.7%	12.6%	1.9%	1.0%	3.7%	810
Partnering with cities or other public agencies for specialized instruction	43.9%	37.7%	13.0%	1.5%	1.0%	3.0%	809
Building local community support for PCC	60.1%	28.1%	9.8%	1.1%	0.2%	0.6%	808
Developing a bond measure to fund capital improvements	32.4%	31.9%	23.5%	4.1%	2.7%	5.4%	809
Exploring programs that can be supported by grant funding	52.3%	33.8%	10.7%	1.0%	0.4%	1.8%	813
Utilizing programs that can be supported by grant funding	53.2%	32.3%	11.0%	1.1%	0.6%	1.7%	810
Utilizing the PCC Foundation and alumni to diversify funding	46.4%	34.6%	14.7%	1.2%	0.4%	2.7%	810
Are there any other issues or concerns about funding that you feel should be a priority for the Educational Master Planning effort?							81
<i>answered question</i>							814
<i>skipped question</i>							184

Priority Themes

The key issues identified in the previous questions are grouped into six themes. Which of these themes is most important to you? Please rank each theme 1-6 from most important (1) to least important (6).							
Answer Options	1	2	3	4	5	6	Response Count
Student Success	65.6%	17.2%	7.3%	2.8%	2.2%	4.9%	715
An Efficient Education	13.7%	39.0%	21.5%	10.7%	9.0%	6.1%	692
A 21st Century Learning Institution	14.9%	19.9%	30.7%	18.2%	9.2%	7.0%	697
Building and Maintaining a Sense of Community	3.6%	9.5%	13.5%	28.1%	21.5%	23.7%	687
Facility Needs	3.4%	9.8%	15.6%	23.7%	31.2%	16.3%	705
Diversifying Funding	7.8%	8.2%	12.6%	13.5%	22.6%	35.3%	733
<i>answered question</i>							791
<i>skipped question</i>							207

Attachment B: Web-Based Survey Results by Sub-Group

The following tables provide a comparison of the proportion of respondent sub-groups who identified each issue as “extremely important.”

Student Success

	Faculty, Staff, Administration (344)	Students (299)	Community (213)	Other (169)
Providing extensive basic skills courses (fundamentals in writing, math, etc.)	56.4%	68.4%	74.2%	77.9%
Expanding English as a second language programs and services	28.4%	35.4%	36.5%	33.1%
Improving relationships and connections with K-12 schools	34.0%	28.5%	44.1%	35.9%
Connecting and building relationships to 4-year colleges and universities	58.2%	86.7%	73.4%	76.4%
Improving access to academic counselors and tutors	55.3%	72.8%	52.4%	61.1%
Increasing programs in mathematics, science, and engineering	45.3%	66.4%	61.6%	62.1%
Enhancing curriculum to improve communication, collaboration, analytical thinking and time management	50.3%	52.5%	54.2%	62.8%
Creating programs supporting returning veterans	39.2%	38.9%	39.5%	48.3%
Adding capacity to maxed-out programs such as nursing	47.9%	53.7%	58.2%	54.9%
Increasing the availability and number of transfer courses	56.9%	76.7%	59.3%	66.2%
Outlining clear expectations and requirements for new students	63.3%	65.0%	56.8%	72.4%

Efficient Education

	Faculty, Staff, Administration (344)	Students (299)	Community (213)	Other (169)
Improving transition from high school to PCC and from PCC to 4-year	61.3%	68.4%	67.9%	65.7%
Increasing availability of prerequisite courses	64.5%	74.9%	71.7%	66.9%
Using facilities more efficiently	51.0%	49.8%	40.3%	45.5%
Providing a faster, smoother registration process	54.8%	51.2%	43.0%	39.2%
Making first-time enrollment easier	51.1%	44.1%	44.9%	41.3%
Improving access and processing of financial aid	46.2%	54.7%	43.9%	45.4%
Coordinating programs and services with nearby community colleges	28.0%	41.7%	28.5%	37.3%

21st Century Learning

	Faculty, Staff, Administration (344)	Students (299)	Community (213)	Other (169)
Developing more on-campus technology-rich and interactive courses	40.1%	48.5%	43.5%	45.7%
Increasing the number of distance education courses	22.0%	28.3%	25.5%	28.4%
Increasing study abroad opportunities	9.0%	24.1%	10.4%	15.7%
Training professionals for "green" jobs and industries	40.0%	41.9%	36.3%	36.2%
Developing one-of-a-kind programs that make PCC stand out	35.6%	44.7%	28.8%	36.9%
Offering faculty and staff training to develop and support new ways of teaching	55.5%	51.5%	48.9%	49.3%
Enhancing sustainability practices on the campus	38.0%	44.4%	31.5%	34.0%
Increasing and enhancing health, science and math interactive laboratory facilities	39.8%	56.8%	45.1%	57.4%
Enhancing alternative transportation options for students	26.5%	42.1%	23.6%	31.4%

Building and Maintaining a Sense of Community

	Faculty, Staff, Administration (344)	Students (299)	Community (213)	Other (169)
Enhancing a sense of community among students and faculty	45.8%	44.0%	39.7%	39.3%
Broadening the diversity of faculty and staff to better match student body	23.8%	36.2%	25.0%	21.4%
Creating programs and services to bring students together	32.8%	40.8%	24.5%	29.3%
Building facilities that encourage gathering and interaction	31.9%	37.9%	20.7%	31.4%
Creating small work group spaces for studying and collaboration	37.7%	50.4%	28.8%	36.4%

Facility Needs

	Faculty, Staff, Administration (344)	Students (299)	Community (213)	Other (169)
Adding new facilities to the existing campus	28.2%	31.4%	11.1%	20.7%
Providing off-campus facilities to bring programs closer to students	15.1%	26.3%	23.3%	23.9%
Building new/updated health science and math lab facilities	37.5%	47.3%	44.1%	37.8%
Filling buildings in underutilized time periods, such as Fridays and weekends	40.0%	48.5%	50.0%	40.0%
Completing building upgrades for seismic safety	60.0%	57.0%	53.1%	57.8%
Upgrading sewer, water and other infrastructure systems	44.2%	44.9%	37.8%	45.2%
Designing facilities with universal access (for all ages and physical abilities)	49.0%	51.5%	40.2%	47.0%
Improving maintenance of facilities	36.8%	38.8%	28.9%	31.9%
Creating small group work areas	22.3%	37.2%	19.6%	31.6%
Adding "wired" technology classrooms	57.0%	50.0%	49.4%	53.7%

Diversifying Funding

	Faculty, Staff, Administration (344)	Students (299)	Community (213)	Other (169)
Decreasing reliance on State funding	29.4%	35.6%	30.3%	30.1%
Contracting with major employers and industry groups for specialized programs	38.3%	48.9%	57.1%	57.5%
Partnering with cities or other public agencies for specialized instruction	37.4%	45.6%	48.3%	51.1%
Building local community support for PCC	60.4%	53.2%	65.1%	64.2%
Developing a bond measure to fund capital improvements	34.4%	35.6%	27.4%	28.4%
Exploring programs that can be supported by grant funding	48.8%	54.3%	54.5%	53.7%
Utilizing programs that can be supported by grant funding	50.0%	56.4%	53.7%	54.5%
Utilizing the PCC Foundation and alumni to diversify funding	44.4%	45.7%	52.8%	46.3%

Attachment C: Example Open-Ended Responses

Survey respondents provided over 1000 open-ended responses addressing the six themes identified. The following represents a random sample of these comments.

Student Success

- “Embed fundamental skills in all courses.”
- “Students entering college should already have basic skills.”
- “Expand Vocational Education Programs.”
- “What about the disabled? Both curriculum and physical access!”
- “Don't forget Art.”
- “Encourage students to join clubs and do volunteer work.”

Efficient Education

- “Revise the waiting list procedures to maintain limits on class size.”
- “Mandatory new student orientation, mandatory assessment for new students, clear explanation of college expectations.”
- “Make all available financial assistance easier to find, via internet or other means. Include any local scholarships.”
- “Increase counseling and assistance with goal setting.
- These statements, in my opinion, are almost impossible to rate lower than ‘extremely important.’ The question may be “As opposed to what?”

21st Century Learning

- “The quality of professors and the abundance of learning resources provided should be prioritize before any other aspects. It's the fundamental of what ‘schools’ are for.”
- “Bring science facilities into the 21st century!”
- “Create more staff development opportunities for faculty around new ways of teaching.”
- “Since over half of PCC student population resides out of PACCD, meet with the transit authorities to improve services. Some students I know take 2 or 3 busses to come to PCC!”

Sense of Community

- “Stronger top-down leadership; don't get paralyzed by shared governance.”
- “Latino students lack role models as teachers. This Master Plan should not only try to have a diverse faculty body but do whatever it takes to accomplish it.”
- “We need to hire the best faculty we can hire, not necessarily the most diverse.”
- “There need to be places on campus for college life.”

Facility Needs

- “Wireless, not wired!”
- “Schools need to keep up with the evolving learning styles of their students. Today's students expect the latest technology, simulation labs, streamed media, etc.”

- “Smart physical placement of related learning facilities will help bring people with similar interests of study closer together.”
- “Keep your standards high; without them you'll be just another undistinguished community college.”
- “Facilities should be functional. Avoid spending resources for ‘pretty’.”

Diversifying Funding

- “Work to generate popular support for adequate public funding of education in California.”
- “Partner with cities, public agencies and community based organizations to offer services and intern opportunities to current and prospective students.”
- “Contracting with corporations and other special interest groups is dangerous in that it could detract from pure learning and create a sense of marketing and branding, as we've seen with lobbyists in Washington.”
- “The less you rely on the state, the fewer problems you will have.”