Chapter 1: Introduction

The Solano Community College District (SCCD) Educational Master Plan (EMP) establishes a framework to guide SCCD educational program development through the year 2025. This document will serve as a roadmap for programmatic directions, resource allocation and overall educational innovations.

The overarching purpose of the Educational Master Plan is to advance SCCD’s Strategic Plan goals and educational programs through a set of integrated strategies designed to achieve programmatic, resource and service-related goals. In addition, the EMP informs the Facility Master Plan, Technology Plan, Staffing Plan and budget priorities for the District. This plan was developed based on administration, faculty, staff and community input, analysis of student and business and community needs, and assessment of current programs and related student support services.

Background

The EMP is an important element of SCCD’s long range planning, joining the Facility Master Plan and Technology Plan to complete the SCCD’s strategic planning process. These key planning processes are critical to the District’s success in effectively serving its growing and changing communities.

SCCD’s service area includes the cities of Benicia, Dixon, Fairfield, Suisun City, Vacaville, Vallejo and unincorporated areas in Solano County, and Winters in Yolo County. The main Solano Community College campus is located in Fairfield, with three education centers in Vacaville, Vallejo and Travis Air Force Base.

Since the last EMP update in 2007, local population growth and growth in the regional and State economies have slowed. At the same time, the State has called on California’s community colleges to refocus its mission towards strengthening basic skills, transfer opportunities, and career and technical education. The policy and programmatic direction presented in this plan reflects these changes.
Plan Overview and Organization

The Educational Master Plan is organized in the following sections:

I. Introduction

The first section of the Plan provides an overview of the plan development process, plan components, and the context for strategic planning related to SCCD educational programs and services.

II. Organizational Focus

This section outlines SCCD’s four mission areas and the rationale for heightened focus on basic skills, career technical education/workforce training and academic transfer. SCCD’s organization of services and programs, and its organization by academic schools, are also summarized. Additionally, this section provides an overview of SCCD’s organizational and shared governance structures.

III. Planning Framework

SCCD’s vision for the future, its core values, and the goals, strategies and planning principles will guide the District’s programmatic and educational policy approach to fulfilling its mission. This section restates the framework in place at SCCD to contextualize the Education Master Plan.

IV. Planning Environment

This section presents key findings from the Environmental Scan conducted for this process, including service area population and demographics; enrollment trends and student success rates at SCCD and its feeder high schools; and local, regional and national economic, employment and industry trends.

V. Growth Projections

This section assesses current participation rates and historic enrollment, and projects the District’s potential growth through 2025 based on short and long-term trends.

VI. Educational Program Assessment

The results of a key point of faculty input on program-specific strategies, this section explains the process and the results of the updated program assessment.

VII. Educational Master Plan Goals and Strategies

This chapter describes the ten Educational Master Plan goals. For each goal listed, a series of key strategies is identified.
Chapter 1: Introduction

VIII. Plan Implementation

The implementation of this plan includes the refocusing of SCCD on the realities of basic skills, transfer and workforce needs. Implementation will also include recommendations for tracking progress toward the EMP goals. This chapter is not included in the preliminary review draft, as it will be developed based on faculty/staff input on April 24th.

Planning Process and Methods

Beginning in summer 2011, SCCD engaged in a comprehensive and interactive planning process to update the Educational Master Plan. The Superintendent/President’s Cabinet guided the process, with integral involvement from the deans, counseling and representatives of the Academic Senate. The Superintendent/President’s Cabinet provided oversight for Plan content and methodology. Students, faculty, staff and administrators, as well as community and business leaders, provided valuable input and feedback during the process. SCCD retained MIG, Inc., a Berkeley-based planning firm, to develop a comprehensive environmental scan, review and evaluate current programs and business and community needs, and identify goals and recommend strategies for future program development.

METHODS AND DATA SOURCES

The planning team used a variety of methods and information sources to develop the Educational Master Plan. These include:

- Analysis of population and demographic data gathered from the US Census, California Department of Finance, Association of Bay Area Governments (ABAG), and the Sacramento Area Council of Governments (SACOG).

- Review of current student enrollment trends from the California Community College Chancellor’s Office (CCCCO), California Postsecondary Education Commission and SCCD’s Office of Research and Planning.

- Assessment of local secondary enrollment trends and projections from the California Department of Education and the California Department of Finance.

- Review of the local economic and business landscape using data from the California Employment Development Department (EDD), Caltrans Office of Transportation Economics, U.S. Bureau of Labor Statistics, and reports and information gathered from Solano County, local cities and outside researchers.

- Evaluation of certificate and degree programs offered by the top competitive educational providers in the region, as presented in current course catalogues. Research included a comparison with the programs currently offered by SCCD.

- Review of existing SCCD plans, reports and data elements.
• Evaluation of current program needs and projected trends through use of a questionnaire completed by faculty, academic staff, and school deans.

• Qualitative information gathered through a comprehensive series of forums and meetings conducted with community and business leaders, faculty, staff and students.

PROCESS DESCRIPTION
In the summer of 2011, Solano Community College District (SCCD) initiated an update to the institution’s Education Master Plan. The planning process was launched with College leadership in May 2011 to discuss successes and challenges for SCCD since the last EMP process. As the project team developed summary materials about the planning environment, two parallel efforts included a broad range of community voices as well as targeted conversations with an interdisciplinary faculty and staff team.

SCCD Faculty, Staff and Student Input
Faculty and staff members were invited to attend all of the community forums, but particularly to those held at the Fairfield campus, Vacaville and Vallejo centers. The forums provided an important opportunity for faculty and staff to share their insight on key strengths, issues and planning opportunities for SCCD.

To ensure a broad and comprehensive engagement with the faculty, a series of three interdisciplinary faculty strategic conversations (IFSC) were held during fall and winter 2011/12 to provide input, direction and content for the plan. These meetings included representatives of faculty, including deans, counseling staff and the Academic Senate. In addition, IFSC forums focused on:

• Review and discussion of current internal and external trends and the plan environmental scan document;

• Brainstorming emerging opportunities and challenges facing SCCD;

• Identification and refinement of critical plan goals and strategies.

Community Input
As a part of the update process, seven community forums were conducted to gather ideas and information from SCCD’s service area, which includes Solano County and the City of Winters. These forums were held in each of the population centers served by SCCD. Over 200 community members, faculty, staff and students participated in the forums. A number of key themes and unique ideas emerged from the discussions, many of which are reflected in the updated document.
Environmental Scan
In the fall of 2011, the consultant team developed an Environmental Scan Report to update and analyze internal and external conditions impacting the District and provision of programs and services. The Scan assessed key data related to:

- Population and demographics;
- High school performance, enrollment and projections;
- SCCD enrollment and student success;
- Competing educational providers in the region; and
- Employment and workforce trends, locally, regionally and nationally.

The results of the Scan began to reveal the future direction for the County, which in turn provided a lens in which to review and evaluate existing SCCD programs and services.

Educational Program Review
The basis for the Plan is a stronger understanding of the current needs and projected trends for each of SCCD’s programs. Faculty members and school deans provided their expertise and knowledge to update the EMP through a program assessment questionnaire. The deans and faculty of each program were provided a set of enrollment and performance data and given an opportunity to identify strategies specific to the program and update a description of the role of the program and any factors influencing its success. The data collected through the questionnaire process highlights program specific needs that inform the broad directions for SCCD.

Plan Review
The Draft EMP will be reviewed by the Shared Governance Council on May 23rd with subsequent review by the campus community and the Governing Board. Following a review period the Final EMP will be presented to the Governing Board.
Chapter 2: Organizational Focus

Organizational History

SCCD was founded in 1945 as part of the Vallejo Unified School District. In 1965, Solano County voters approved the development of a community college district, and two years later approved a bond to build SCCD’s main Fairfield campus. Expansion of SCCD continued with the 2002 voter-approved bond, which funded construction of two permanent centers in Vacaville and Vallejo. At that time, Solano County voters approved Bond Measure G, which provided $124.5 million in bond funding to support the development of new facilities. The two permanent sites for the Vallejo and Vacaville Centers, whose locations were chosen based on projected population growth, opened in 2007 and 2010 respectively, and have since increased access to SCCD for students and community members.

Today, The Solano Community College District provides a comprehensive range of educational offerings, from Associates degrees and certificates to transfer preparation and lifelong learning. SCCD has recently expanded these offerings by partnering with Sonoma State University to offer a Bachelor of Arts in Liberal Studies.

In July of 2011, SCCD reorganized the academic programs from seven divisions into four schools. This reorganization allowed SCCD to streamline senior leadership and break down some organizational barriers between programs with similar purposes.

Mission Areas

The SCCD has a broad mission that includes offering academic programs designed to meet students’ academic, vocational, developmental, and continuing education needs. The following areas represent the four major mission areas of SCCD:

**Academic/Transfer**
Core to the mission of SCCD, academic programs provide students with a solid foundation to transfer successfully to a four-year institution and develop skills to gain employment. Academic programs work in conjunction with other SCCD programs, including occupational, developmental and continuing education.

**Career Technical Education/Workforce Training**
Linked to the mission of ensuring an educated and skilled workforce, the vocational component of SCCD’s mission emphasizes students developing skills targeted toward specific employment occupations. The educational experience includes meeting credential
standards; developing skills to attain a specific position, furthering a current career or building the foundation to embark on a new career; and attaining a certificate or an Associates degree.

**BASIC SKILLS**

Student success and attainment of educational and career goals must be supported by the development of a strong foundation of core skills. SCCD programs and support services are provided to prepare students for success in college-level work and the workforce. Students enrolling at SCCD have a range of preparation levels, and key to meeting all SCCD mission areas is ensuring that students have access to the resources and tools to develop proficiencies in English, reading and math. Support is provided both inside and outside of the individual classes in which students are enrolled.

**CONTINUING EDUCATION**

SCCD recognizes that education is a continuous process and community members will seek educational experiences and training throughout their careers and lifetimes. SCCD programs and courses are available to provide continuing education experiences for all members of the community.

**MANDATED FOCUS**

The continuing lack of adequate funding has resulted in a necessary refocusing of effort by the statewide community college system. Recognizing the impact of necessary cuts to the State budget for community college base funding, the California Legislature has called upon all colleges to prioritize three of the four mission areas: transfer, career technical education/workforce training and basic skills. The statement of intent by the Legislature indicates that the community college districts shall implement necessary workload reductions to course and programs that do not directly support students in their efforts to achieve basic skills, workforce training or transfer goals.

**Major SCCD Organizational Areas**

SCCD’s organizational structure is critical to the success of the three focus mission areas. The interconnected and interdependent services and programs provided by Academic and Student Affairs (led by an executive vice president), Finance and Administration (led by a vice president), and Technology Services and Support (led by a director) provide an environment conducive to meeting students’ academic and career goals.

Additionally, the Human Resources Department, Solano College Educational Foundation and Community Services all provide important services to ensure a strong workforce, additional funding sources and a strong public presence in the community.
SCCD Academic Organization

In July of 2011, SCCD reorganized its seven academic divisions to create four schools. SCCD schools fall under the organizational area of Academic & Student Affairs and include:

- School of Liberal Arts
- School of Sciences
- School of Career Technical Education and Business
- School of Human Performance and Development

Figure 2-1 SCCD Organization

Throughout this document, SCCD Counseling and Special Services will commonly be referenced as a fifth unit alongside the four schools.
**SHARED GOVERNANCE**

Shared Governance is defined in SCCD policies as the “collaborative participation of appropriate members of the College in planning for the future and in developing policies, procedures and recommendations under which the College is governed and administered.” This includes the Academic Senate, Associated Students of Solano College (ASSC), staff, faculty and District Administrators, as well as others.

**Figure 2-2 SCCD Shared Governance Structure**
Chapter 3: Planning Framework

The Educational Master Plan is built upon on the Solano Community College District’s Strategic Plan mission, vision, goals and values. District administrators, faculty, staff and students will use the EMP with the Strategic Plan to guide future decision-making.

For clarity and consistency, the following definitions of planning framework elements are offered:

**SCCD Mission.** The purpose and primary focus of Solano Community College District. This is a long-term component.

**Vision.** The preferred future for SCCD, based on a five-year outlook.

**Values.** Key principles that inform and guide implementation.

**EMP Goals.** Directions for long-range change. Goals reflect higher level, desired results that are often measurable.

**EMP Strategies.** Plan strategies (introduced in Chapter 7) take the form of programmatic and policy-level changes and actions. Many EMP strategies are cross-cutting and may have a beneficial effect that helps achieve multiple goals.

# Mission

The mission of Solano Community College is to prepare a diverse student population to participate successfully in today’s local and global communities. We accomplish our mission by providing:

- Quality teaching;
- Innovative programs;
- Effective transfer preparation;
- Economic and workforce development;
- Services that are responsive to the needs of our students;
- Life-long learning; and
- A broad curriculum.
Vision

Solano Community College will be a recognized leader in educational excellence – transforming students’ lives.

Core Values

Solano Community College is committed to excellence. We have adopted the following core values to guide our policies, procedures and daily practices:

- Integrity: Firm adherence to a code of ethical values in thought and behavior.
- Critical thinking: The use of intellectually disciplined, logically sound processes involving data driven decision-making.
- Mutual respect: Valuing the intrinsic worth of each person in an atmosphere of collegiality.
- Collaboration: Working together across areas of responsibility and interest to achieve common goals and objectives.
- Innovation: The search for and use of effective processes or procedures.
- Accountability: Individual and collective responsibility for achieving the highest level of performance.
- Student well-being: Considering and addressing the impact on students of any and all actions or inactions.

District Strategic Plan Goals

SCCD organizational management and change is driven by the following Strategic Plan goals.

Goal 1: Foster Excellence in Learning

Goal 2: Maximize Student Access and Success

Goal 3: Strengthen Community Connections

Goal 4: Optimize Resources
Educational Master Plan Goals

The following Educational Program Plan goals establish an overarching structure for SCCD Educational program development.

Goal A: Align program offerings, policies and communications with transfer goals.

Goal B: Develop workforce-ready career/technical graduates.

Goal C: Improve basic skills of all students.

Goal D: Reduce gaps in achievement.

Goal E: Create a district-wide policy framework for program development and management.

Goal F: Improve student access to courses and services.

Goal G: Engage as a partner in community efforts.

Goal H: Connect students to the Campus community.

Goal I: Build alternative funding and revenue sources.

Goal J: Optimize existing campus and centers.

The relationship between the Strategic Plan and the EMP is illustrated in the SCCD Education Master Plan Framework graphic presented on the following page.
Solano Community College prepares a diverse student population to participate successfully in today’s local and global communities. We accomplish our mission by providing:

- quality teaching
- innovative programs
- effective transfer preparation
- economic and workforce development
- services that are responsive to the needs of our students
- life-long learning
- a broad curriculum

A recognized leader in educational excellence - transforming students’ lives

mission ........................................

vision .........................................

values ...........................................

Integrity  Critical Thinking  Mutual Respect  Collaboration  Innovation  Accountability  Student Well-being

strategic plan goals .............

Foster Excellence in Learning  Maximize Student Access & Success  Strengthen Community Connections  Optimize Resources

education master plan goals .........

Develop workforce ready career/technical graduates  Improve basic skills of all students  Align program offerings for transfer achievement  Reduce gaps in achievement in all programs  Strengthen program development through research and assessment  Improve student access to courses and services  Strengthen community partnerships  Connect students to the campus community  Build alternative funding and revenue sources  Optimize existing campus and centers

key strategies .....................

Programs

Staffing

Facilities and Technology

implications .................
Chapter 4: The Planning Environment

The purpose of this chapter is to provide an overview of the current planning environment for the District. Developing a clear understanding of the present landscape, current trends and anticipated changes moving forward positions SCCD to make informed decisions about programs, resources and services. Specifically, the chapter covers trends for:

- Population and demographics;
- Enrollment;
- Student success rates;
- Educational competition; and
- The economic and business climate.

Service Area

The Solano Community College District includes four centers of education, including the main Fairfield campus, and Vacaville, Vallejo and Travis Air Force Base locations. The District’s service area accounts for approximately 95 percent of the total population in Solano County, and includes Winters in neighboring Yolo County. The service area is bordered by Napa County to the northwest, Yolo County to the northeast, Contra Costa County to the south and Sacramento County to the east.

Figure 4-1: SCCD Service Area
Population and Demographics

Changes and trends in population and demographics will shape potential SCCD students and influence the types of programs, courses and support services that will be required. In recent years, SCCD has responded to projected population growth through the development of new education center locations to increase community access. Through the District’s Educational Master Plan process, SCCD conducts regular assessment of changing demographics and explores how these changes influence future educational programs.

- Across all cities in the SCCD service area, population is expected to increase by approximately 21 percent from 2010 to 2035. At the county level, this could potentially result in an additional 83,886 residents. The cities of Vallejo, Fairfield and Vacaville are expected to contribute the greatest number of new residents, though Winters’ anticipated growth represents the largest percentage increase of new residents in any one service area community.

- Solano County will continue to become more ethnically diverse in the coming decades. By 2040, Hispanic/Latino residents are projected to account for approximately 35 percent of the county population; the Asian community is expected to comprise 24 percent of the population.

- The youth and adult populations of Solano County (defined as persons ages 1 to 14 and 15 to 54, respectively) are projected to remain fairly stable as a proportion of the entire population. However, by 2040 adults 55 years and older are expected to account for roughly 18 percent of all residents, compared to 11 percent in 2010.

- Nearly 20 percent of Solano County’s population is foreign born, and almost 30 percent (28.5) of county residents over the age of five speak a language other than English at home.

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1. Association of Bay Area Governments (ABAG) and California Department of Finance (see Table 1-1 in Environmental Scan developed for this plan effort).

2. California Department of Finance (Environmental Scan, Table 1-3)

3. California Department of Finance (Environmental Scan, Table 1-2)

### Table 4-1: Projected Population Growth for Solano Community College District Service Area (2000 – 2025)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Benicia</td>
<td>26,865</td>
<td>26,997</td>
<td>29,000</td>
<td>29,300</td>
<td>29,600</td>
<td>9.64%</td>
<td>2,603</td>
</tr>
<tr>
<td>Dixon</td>
<td>16,103</td>
<td>18,351</td>
<td>19,400</td>
<td>20,600</td>
<td>21,800</td>
<td>18.79%</td>
<td>3,449</td>
</tr>
<tr>
<td>Fairfield</td>
<td>96,178</td>
<td>105,321</td>
<td>115,800</td>
<td>118,900</td>
<td>121,900</td>
<td>15.74%</td>
<td>16,579</td>
</tr>
<tr>
<td>Suisun City</td>
<td>26,118</td>
<td>28,111</td>
<td>30,200</td>
<td>31,200</td>
<td>32,300</td>
<td>14.90%</td>
<td>4,189</td>
</tr>
<tr>
<td>Vacaville</td>
<td>88,625</td>
<td>92,428</td>
<td>102,600</td>
<td>105,000</td>
<td>107,300</td>
<td>16.09%</td>
<td>14,872</td>
</tr>
<tr>
<td>Vallejo</td>
<td>116,760</td>
<td>115,942</td>
<td>127,400</td>
<td>130,900</td>
<td>133,600</td>
<td>15.23%</td>
<td>17,658</td>
</tr>
<tr>
<td>Winters</td>
<td>6,125</td>
<td>6,624</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Service Area Cities Total</strong></td>
<td><strong>376,774</strong></td>
<td><strong>393,774</strong></td>
<td><strong>424,400</strong></td>
<td><strong>435,900</strong></td>
<td><strong>446,500</strong></td>
<td><strong>13.39%</strong></td>
<td><strong>52,726</strong></td>
</tr>
</tbody>
</table>

### Table 4-2: Solano County Population Growth by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>2010</th>
<th>%</th>
<th>2040</th>
<th>%</th>
<th>% Change 2010-2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 14</td>
<td>89,023</td>
<td>20%</td>
<td>140,489</td>
<td>20%</td>
<td>57.8%</td>
</tr>
<tr>
<td>15 to 24</td>
<td>67,074</td>
<td>15%</td>
<td>94,618</td>
<td>14%</td>
<td>41.1%</td>
</tr>
<tr>
<td>25 to 34</td>
<td>58,879</td>
<td>13%</td>
<td>91,375</td>
<td>13%</td>
<td>55.2%</td>
</tr>
<tr>
<td>35 to 44</td>
<td>57,980</td>
<td>13%</td>
<td>89,248</td>
<td>13%</td>
<td>53.9%</td>
</tr>
<tr>
<td>45 to 54</td>
<td>66,737</td>
<td>15%</td>
<td>88,285</td>
<td>13%</td>
<td>32.3%</td>
</tr>
<tr>
<td>55 to 64</td>
<td>53,170</td>
<td>12%</td>
<td>67,217</td>
<td>10%</td>
<td>26.4%</td>
</tr>
<tr>
<td>65 to 74</td>
<td>26,982</td>
<td>6%</td>
<td>54,478</td>
<td>8%</td>
<td>101.9%</td>
</tr>
<tr>
<td>75 and over</td>
<td>21,216</td>
<td>5%</td>
<td>71,496</td>
<td>10%</td>
<td>237.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>441,061</td>
<td>100%</td>
<td>697,206</td>
<td>100%</td>
<td>58.1%</td>
</tr>
</tbody>
</table>

*California Department of Finance Projections July 2007*

### Enrollment Trends

A close look at enrollment patterns at SCCD and local high schools, and the general educational level of the local population, can help anticipate trends in future District enrollment and demand. Enrollment trends are linked to population and demographics and inform how SCCD will approach serving the needs of future students.

- According to the U.S. Census American Community Survey estimates for 2005-2009, over 85 percent of Solano County residents aged 25 and over have a high school diploma or higher. Nearly 24 percent have a Bachelors degree or higher.
Approximately 24.5 percent of adults age 25 and over do not complete or pursue education above the high school level.\textsuperscript{5}

- Solano County’s population continues to grow, but the educational attainment of adults aged 25 years and older has worsened. In 2005, approximately 60 percent of adults age 25 years and older did not have a college degree (Associate, Bachelor, Graduate or Professional). According to the most recent census estimates, this proportion has grown to 67 percent. High numbers of county residents without a college degree may result in a workforce that lacks the knowledge and training to meet the needs of the changing job market.

- An average of 21 percent of all high school graduates from the District’s top 12 feeder schools attend SCCD. Between 2004-05 and 2009-10, the majority of top feeder high schools witnessed a decrease in enrollment. Nearly all feeder schools witnessed an increase in the percentage of non-white students, and an increase in the percentage of students enrolled in the free/reduced lunch program.

- Between 2004-05 and 2008-09, top feeder high school graduation rates have decreased nearly across the board. At the same time, the API base ranking of all feeder schools has increased, with one exception.\textsuperscript{6}

- In recent years, SCCD student enrollment as measured by headcount has ranged from a low of 10,983 in 2006, to a high of 12,261 in 2009. In Fall 2010, student enrollment was 11,836.\textsuperscript{7}

- Between 2005 and 2010, the proportion of full-time students (students enrolled in 12 or more units) fluctuated between a low of 29 percent (Fall 2008) and a high of 36 percent (Fall 2007). In Fall 2010, 34 percent of SCCD students were enrolled full-time.

- State and college statistics show that District enrollment is more or less representative of the service area population as far as racial/ethnic breakdown, with a slightly smaller percentage of white students (38% enrolled v. 45% of service area) and a

\textsuperscript{5} Environmental Scan p. 15.

\textsuperscript{6} California Department of Education (comparison of 2004-05 and 2008-09 as reported in SCCD EMP environmental scan documents for 2007 and 2012).

\textsuperscript{7} California Community Colleges Data Mart (Environmental Scan, p. 23)
Chapter 4: The Planning Environment

notably larger population of African-American students (21% enrolled v. 12% of the service area population).\(^8\)

- Almost one-half (47 percent) of the District’s Fall 2010 students indicated that their educational goal was to transfer to a four-year college or university. Another 15 percent were undecided; 13 percent wanted to earn a degree or certificate; and 10 percent were taking courses to prepare for or enhance their career.\(^9\)

**Figure 4-2: SCCD Enrollment by Age (Fall 2010)**

\(^8\) California Department of Finance and California Community College Data Mart (Environmental Scan, pp 11 and 13).

\(^9\) California Community Colleges MIS data, 2010.
Figure 4-3: Educational Attainment: Solano County, California

Table 4-3: Assessment Results for Top 5 Feeder Schools, Sorted by % Attending SCCD (2009-10)

<table>
<thead>
<tr>
<th>High School</th>
<th>Language Arts % Basic and Above</th>
<th>Math % Basic and Above</th>
<th>Science % Basic and Above</th>
<th>History Social Science % Basic and Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armijo High</td>
<td>71%</td>
<td>42%</td>
<td>66%</td>
<td>67%</td>
</tr>
<tr>
<td>Fairfield High</td>
<td>68%</td>
<td>42%</td>
<td>61%</td>
<td>56%</td>
</tr>
<tr>
<td>Vanden High</td>
<td>81%</td>
<td>66%</td>
<td>87%</td>
<td>79%</td>
</tr>
<tr>
<td>Will C. Wood High</td>
<td>72%</td>
<td>61%</td>
<td>72%</td>
<td>54%</td>
</tr>
<tr>
<td>Vacaville High</td>
<td>74%</td>
<td>41%</td>
<td>72%</td>
<td>70%</td>
</tr>
<tr>
<td>Solano County Total</td>
<td>79%</td>
<td>70%</td>
<td>73%</td>
<td>68%</td>
</tr>
<tr>
<td>State Total</td>
<td>79%</td>
<td>72%</td>
<td>74%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: California Department of Education.
Chapter 4: The Planning Environment

Figure 4-4: SCCD Enrollment by Ethnicity (Fall 2010)

- African American: 21%
- White: 37%
- Latino: 19%
- Filipino: 11%
- Asian/Pacific Islander: 7%
- American Indian: 1%
- Multi-Ethnicity: 4%

Figure 4-5: SCCD Duplicated Enrollment by Location (Fall 2008-2010)

<table>
<thead>
<tr>
<th>Location</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfield Campus</td>
<td>9,355</td>
<td>9,613</td>
<td>9,222</td>
</tr>
<tr>
<td>Vacaville Center</td>
<td>1,244</td>
<td>1,324</td>
<td>1,669</td>
</tr>
<tr>
<td>Vallejo Center</td>
<td>1,911</td>
<td>2,588</td>
<td>2,857</td>
</tr>
<tr>
<td>Distance Education</td>
<td>2,352</td>
<td>2,645</td>
<td>2,661</td>
</tr>
<tr>
<td>Other Location</td>
<td>707</td>
<td>382</td>
<td>279</td>
</tr>
</tbody>
</table>
Student Success, Retention and Transfer

Student success and retention rates$^{10}$ are important indicators to measure how well students are achieving their educational and career goals. Factors influencing student success include access to support services, student basic skills preparation, course curriculum and financial support, among others. Success and retention rate disparities among student population groups should inform how SCCD develops directions and goals to increase overall student success and successfully address gaps in achievement.

- Overall SCCD course success and retention rates have remained relatively steady since Fall 2005.$^{11}$ In Fall 2010, the District reported a success rate of 63 percent and a retention rate of 82 percent. Broken down by ethnicity, African American students had a lower success and retention rates than other subgroups (50 percent and 77 percent, respectively).

$^{10}$ Success rates are defined by the State as the percentage of students who complete a course with an A, B, C or Credit grade. Retention rate is the percentage of students who do not withdraw from a course.

$^{11}$ California Community Colleges Data Mart (Environmental Scan, p. 30)
Between academic years 2004-05 and 2009-10, the number of degrees awarded to SCCD graduates decreased to a low of 802 in 2006-07 before rising steadily to 1,023 in 2009-10. The number of certificates awarded fluctuated between a high of 298 in 2004-05 to a low of 190 in 2008-09 before increasing to 213 in 2009-10.

Twenty-one percent of the 2007 student cohort of first-time, full-time students graduated within three years, compared to 31 percent of the 2006 cohort and 22 percent the year previous.

During the most recent six-year period, the number of District students transferring to the California State University system fluctuated from a high of 374 in both 2006-07 and 2008-09 to a low of 289 in 2009-10. The number of students who transferred to the University of California system varied from a low of 111 in 2004-05 to a high of 159 in 2008-09.

Thirty-seven percent of first-time freshman in Fall 2004 (2004-05 cohort) who completed 12 units and attempted a transfer level math or English course successfully transferred to a four-year college or university within six years. The cohort’s Latino students transferred at the lowest rate (30%), while Asian/Pacific Islander students had the highest transfer rate by ethnic group (49%).

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12 This graduation rate is the percentage of first-time, full-time students in a fall semester who completed a degree or certificate or become “transfer prepared” by completing 60 transferable units with a 2.0 or better GPA. Source: Integrated Postsecondary Education Data System (Environmental Scan, p. 31).

13 California Community Colleges Data Mart (Environmental Scan, p. 33)
Figure 4-7: SCCD Transfers to CSU, UC, Private In-State Universities, and Out-of-State Universities (2004-05 to 2009-10)

Table 4-4: SCCD Retention and Success by Ethnicity (Fall 2010)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Retention Rate</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>77%</td>
<td>50%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>82%</td>
<td>63%</td>
</tr>
<tr>
<td>Asian</td>
<td>84%</td>
<td>69%</td>
</tr>
<tr>
<td>Filipino</td>
<td>81%</td>
<td>63%</td>
</tr>
<tr>
<td>Latino</td>
<td>83%</td>
<td>63%</td>
</tr>
<tr>
<td>Multi-Ethnicity</td>
<td>81%</td>
<td>57%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>86%</td>
<td>64%</td>
</tr>
<tr>
<td>Not Specified</td>
<td>84%</td>
<td>67%</td>
</tr>
<tr>
<td>White</td>
<td>82%</td>
<td>68%</td>
</tr>
<tr>
<td>Total</td>
<td>82%</td>
<td>63%</td>
</tr>
</tbody>
</table>
Assessing programs offered by competitive education providers is particularly important to identify market trends and potential gaps or underserved niches for future programs. Other education providers can also provide partnership opportunities and programmatic models.

- There are seven local competitors within 30 miles of Solano Community College offering a range of certificate and degree programs.

- SCCD’s Fall 2010 success rate of 62.9 percent is slightly lower than the success rate of community colleges statewide (68.4). Relative to other community colleges in the region, SCCD’s success rate is low.

- Solano’s distance education program accounts for a larger share of the District’s total FTES (12.2 percent) than any of the comparison community colleges.

- Within basic skills classes, Solano’s success rate is lower than all comparison colleges except Diablo Valley. The basic skills retention rate compares favorably to that of other community colleges in the region.

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14 Percentage of first-time freshmen who completed 12 units, attempted a transfer level math or English course, and transferred to a four-year university within 6 years. Source: California Community Colleges Data Mart.
SCCD has a number of degree programs that are not currently offered at other institutions. Examples of these programs include Banking Operations, Industrial Education, Interior Design and Life Management. These niche programs could potentially provide important growth opportunities, and market differentiation.

Table 4-5: Alternative Educational Providers

<table>
<thead>
<tr>
<th>College</th>
<th>Location</th>
<th>Distance from Solano Fairfield Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapman University</td>
<td>Fairfield/Travis AFB</td>
<td>2 miles/13 miles</td>
</tr>
<tr>
<td>Napa Valley College</td>
<td>Napa</td>
<td>13 miles</td>
</tr>
<tr>
<td>Cal Maritime (CSU)</td>
<td>Vallejo</td>
<td>15 miles</td>
</tr>
<tr>
<td>Touro University</td>
<td>Mare Island/online</td>
<td>16 miles</td>
</tr>
<tr>
<td>Diablo Valley College</td>
<td>Pleasant Hill</td>
<td>19 miles</td>
</tr>
<tr>
<td>Heald College</td>
<td>Concord</td>
<td>25 miles</td>
</tr>
<tr>
<td>Contra Costa College</td>
<td>San Pablo</td>
<td>26 miles</td>
</tr>
<tr>
<td>Woodland Community College</td>
<td>Woodland</td>
<td>41 miles</td>
</tr>
<tr>
<td>Sacramento City College</td>
<td>Sacramento</td>
<td>53 miles</td>
</tr>
<tr>
<td>Cosumnes River College</td>
<td>Sacramento</td>
<td>57 miles</td>
</tr>
<tr>
<td>American River College</td>
<td>Sacramento</td>
<td>58 miles</td>
</tr>
<tr>
<td>Devry University</td>
<td>Online</td>
<td>n/a</td>
</tr>
<tr>
<td>University of Phoenix</td>
<td>Online/multiple locations</td>
<td>n/a</td>
</tr>
<tr>
<td>National University</td>
<td>online</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Economic and Business Climate**

Community colleges play an important role in preparing students for employment, through skill development, attainment of a degree, transfer preparation and continued learning opportunities. Understanding the current and projected economic and business climates provides an important context in which to plan programs and understand the types of workers that will be needed in the future economy.

- Affordable and readily available housing will continue to draw residents from neighboring counties. By 2035, the number of households in Solano County is projected to increase by over 15 percent from 2010, representing a total increase of
23,130 households.\textsuperscript{15} Vallejo, Fairfield and Vacaville will achieve the greatest growth.\textsuperscript{16}

- Between 2010 and 2050, the Solano County job growth rate is forecast to average two percent each year, compared to a 1.6 annual average growth rate for California overall.\textsuperscript{17} California Department of Transportation forecasts that the county unemployment rate will decrease steadily, from 11.4 percent in 2011 to 7.4 percent by 2015, and 5.5 percent by 2035.

- Looking ahead, the ratio of jobs in the county to employed county residents will increase to as much as 0.80 in 2035. Both Fairfield and Benicia are projected to have more jobs than employed City residents. All other cities will experience a surplus of employed residents.\textsuperscript{18}

- Across all occupations, the number of jobs requiring as Associates degree is growing faster than occupations with other education and training requirements.\textsuperscript{19}

- According to the U.S. Bureau of Labor Statistics, half of the fastest growing occupations in the U.S. are related to health care. Within the health care field, demand has grown for physician/medical assistants, medical aides and dental hygienists. Registered nurses and home health aides are estimated to create the largest numbers of new jobs in the country.

- Biomedical engineering is the fastest growing occupation in the country.\textsuperscript{20} However, because the current number of jobs in this occupation is low, and the total number of jobs nationwide is expected to increase by only 11,600.

\textsuperscript{15} Current projections in growth in the number of households over the next 20 years represent a significant readjustment from 2005 projections looking towards 2025 (a nearly 48 percent decrease in total number of new households).


\textsuperscript{17} California Department of Transportation (CDOT). Long-Term Socio-Economic Forecasts by County. Solano County Economic Forecast. 2010.

\textsuperscript{18} Association of Bay Area Governments (ABAG). San Francisco Bay Area Population, Household and Job Forecasts: Projections and Priorities 2009.

\textsuperscript{19} U.S. Department of Labor Bureau of Labor Statistics Division of Occupational Outlook (Environmental Scan, p. 46)

- According to the Association of Bay Area Governments, health and educational service industries currently contribute the greatest number of jobs to Solano County’s economy (22.5 percent of the total), and will continue to do so through 2035. The proportion of total county jobs that these industries contribute is expected to remain steady.

- According to ABAG, Solano County’s information services field is expected to grow the most, with the total number of jobs increasing by over 78 percent between 2010 and 2035. In comparison, the California Employment Development Department projects no growth in employment in the information industry.

- Employment in life sciences has become more highly concentrated in Solano County relative to other parts of the San Francisco Bay Area. Core industries of the county’s life science cluster include biotechnology, pharmaceuticals, medical devices, and scientific research and development.

- The 2009 Solano Economic Development Corporation report, “Solano County’s Energy Cluster”, describes the emergence of a diverse local energy industry and its potential to generate economic momentum in Solano County. According to this same report, clean energy occupations require an Associates degree more frequently than do carbon-based energy occupations. Carbon-based energy remains the largest sector of the county’s energy industry cluster, but experienced only two years of annual growth between 1995 and 2007. In comparison, clean energy is a much smaller sector but is fast-growing.

- The number of households in Solano County is projected to increase as development and redevelopment projects continue. Affordable and readily available housing will continue to draw residents from neighboring counties. Between 2005 and 2025, the county is projected to increase by 44,310 households. The largest household growth is projected for the cities of Fairfield, Vacaville and Vallejo.

- Education levels of Solano County residents may affect industry growth. As jobs and vocations require more problem solving skills and interaction with technology, adult workers may need to seek additional education. SCCD can play a dual role of preparing the next generation of workers while simultaneously training and retraining current workers.

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22 Ibid.
### Table 4-6: Solano County Job and Employee Balance 2035

<table>
<thead>
<tr>
<th>City</th>
<th>Total Jobs</th>
<th>Employed Residents</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benicia</td>
<td>19,010</td>
<td>16,810</td>
<td>1.13</td>
</tr>
<tr>
<td>Dixon</td>
<td>10,650</td>
<td>14,420</td>
<td>0.74</td>
</tr>
<tr>
<td>Fairfield</td>
<td>71,640</td>
<td>66,600</td>
<td>1.08</td>
</tr>
<tr>
<td>Rio Vista</td>
<td>6,120</td>
<td>11,240</td>
<td>0.54</td>
</tr>
<tr>
<td>Suisun City</td>
<td>6,460</td>
<td>18,880</td>
<td>0.34</td>
</tr>
<tr>
<td>Vacaville</td>
<td>43,920</td>
<td>57,550</td>
<td>0.76</td>
</tr>
<tr>
<td>Vallejo</td>
<td>47,870</td>
<td>72,440</td>
<td>0.66</td>
</tr>
<tr>
<td>Remainder</td>
<td>6,210</td>
<td>6,760</td>
<td>0.92</td>
</tr>
</tbody>
</table>

### Table 4-7: Industry Employment Projections for Solano County (2008-2018)

<table>
<thead>
<tr>
<th>Industry Title</th>
<th>2008</th>
<th>2018</th>
<th>Jobs</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>26,900</td>
<td>27,600</td>
<td>700</td>
<td>2.6%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>17,700</td>
<td>17,600</td>
<td>-100</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Education Services, Health Care and Social Assistance</td>
<td>17,700</td>
<td>20,800</td>
<td>3,100</td>
<td>17.5%</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>13,400</td>
<td>14,500</td>
<td>1,100</td>
<td>8.2%</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>10,600</td>
<td>12,000</td>
<td>1,400</td>
<td>13.2%</td>
</tr>
<tr>
<td>Self Employment</td>
<td>10,400</td>
<td>10,200</td>
<td>-200</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9,400</td>
<td>9,300</td>
<td>-100</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Construction</td>
<td>9,200</td>
<td>9,600</td>
<td>400</td>
<td>4.3%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>5,000</td>
<td>4,900</td>
<td>-100</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Transportation, Warehousing and Utilities</td>
<td>4,800</td>
<td>5,000</td>
<td>200</td>
<td>4.2%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>4,100</td>
<td>4,200</td>
<td>100</td>
<td>2.4%</td>
</tr>
<tr>
<td>Private Household Workers</td>
<td>1,900</td>
<td>2,500</td>
<td>600</td>
<td>31.6%</td>
</tr>
<tr>
<td>Information</td>
<td>1,600</td>
<td>1,600</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total Farm Employment</td>
<td>1,600</td>
<td>1,600</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Mining and Logging</td>
<td>300</td>
<td>300</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Staff and Community Perspectives

INTERDISCIPLINARY FACULTY STRATEGIC CONVERSATIONS

Three Interdisciplinary Faculty Strategic Conversations (IFSC) were held over the course of the EMP development process (October 2011, November 2011 and January 2012). The three-meeting process was designed to build faculty awareness of and ownership in the Education Master Plan process through guiding the development of key ideas and opportunities explored during the process. The IFSC meetings also provided an opportunity to fact check data and guide the direction of the EMP goals and strategies. The following themes emerged from IFSC meetings:

- SCCD is experiencing a crisis in access: the enrollment cap limits capacity, but demand continues to grow.
- Look at various models provide students with the greater guidance they require as they move through programs. Implement a full first-year experience to channel students through skill improvement and services.
- Work with peer schools to facilitate access to programs. Engage with four-year institutions. Coordinate curriculum with high schools and university programs.
- Address challenges related to access, including transportation and child care availability. Expand hours that services are available.
- Consider establishing a learning resource center that includes a number of co-located student support and resource facilities, including an upgraded library.
- Increase basic skills instruction and integrate basic skills across curriculum. Increase staff development for basic skills support.
- Expand support services and the use of alternative learning modalities, particularly in support of basic skills instruction and support for special populations. Build in greater flexibility, including the use of shorter courses, mini or non-credit options, peer tutoring, and other approaches outside of the classroom. Expand online and hybrid educational opportunities.
- Understand student success and retention and the impact that various factors have on success and retention (i.e., program cost, online vs. traditional classes, counseling services, etc.). Obtain quality data on incoming students and their levels of skill. Track employment and success of graduates.
- Ensure consistency with Student Success Task Force findings.
COMMUNITY FORUMS

In the summer and fall of 2011, SCCD held a series of seven community forums. Participants included members of the K-12 community; parents of high school and community college students; local employers, leaders and officials; SCCD faculty, staff and students; and Travis Air Force Base personnel.

At each community forum, participants shared positive impressions of the role of SCCD, and identified challenges and opportunities to help SCCD focus the efforts of this Educational Master Plan. Several factors were the focus of discussions of why students choose Solano: most notably, affordability, proximity and course availability. Many past and present students mentioned the key role that SCCD plays in opening doors to four-year universities and achieving success in their academic careers.

The points below summarize other key themes that emerged from the community forums:

- Expand course offerings based on emerging career trends and majors in high demand.
- Strengthen outreach and ties to high schools by establishing partnerships that result in academic and counseling programs that bridge the strengths of the college and high school, such as college readiness, basic skills and industry-specific certifications.
- Strengthen focus on developing soft skills. Offer additional language courses to complement Spanish.
- Address limitations and barriers related to access and transportation to and from college campuses and centers, in part by sharing and maximizing the use of local facilities and supporting distance education.
Chapter 5: Growth Projections

Major changes in the forces that drive population and enrollment growth, along with constraints resulting from declining levels of funding from the State, make the planning for future potential growth of SCCD both more challenging and more important than ever. The projected and actual patterns of growth will impact the demand, the quantity of educational offerings and supporting services, as well as the facilities needed to accommodate them. The most challenging issue facing SCCD is the disconnect between this growth potential, which is substantial, and the available funding available to address that growth. In the short term, growth will be hampered due to lack of funding and the District will need to aggressively build alternative funding sources. This section assesses current SCCD participation rates and historical enrollment, and projects the District’s potential growth through 2025.

Growth projections for SCCD are based on a number of factors, including County demographic projections, historical student enrollment data, and regional growth projections. At a finer scale, projected growth is also impacted by the refocusing of the California Community Colleges on three of the core mission areas: transfer, basic skills and career technical education.

Community colleges measure enrollment in a number of ways, including overall headcount, full-time equivalent students (FTES), and weekly student contact hours (WSCH, measured in the fall term of each year). Facilities planners use growth in WSCH to determine the need for additional square footage. Projections made in FTES are backed up with WSCH numbers where available to facilitate the facilities planning process.

Population Projections
The SCCD service area includes Solano County and the adjacent city of Winters (in Yolo County). Some sources of information describe only Solano County, but the full service area is considered where ever information is available. The District’s location between two major metropolitan areas, the San Francisco Bay Area and Sacramento Area, linked by a major highway corridor, offers a strong and unique economic driver for growth over the next 25 years. The amount of available land for affordable residential development, in comparison to many of the more urban Bay Area cities that have reached or are close to reaching build out, will also contribute to growth in the long-term. While Solano County has been hard hit by the nation-wide housing crisis, with some communities losing population, in the long-term the geographic and economic positioning of the region assures growth. Based on projections from the Association of Bay Area Governments (ABAG), the County will experience overall growth of 18 percent, or approximately 1.1 percent annual growth from 2010 to 2025.

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1 FTES is a standardized value based on the total contact hours divided by 525. Data from CCCCO DataMart.

2 WSCH data provided by SCCD Office of Research and Planning
College-Wide Enrollment Projections

A number of factors contribute to the total SCCD enrollment. As population in the service area grows and as competition for entry-level positions increases, there will be a resulting increase in demand for post-secondary education. However, there are also factors that constrain the amount of instructional space available; primarily, the level of funding for course offerings and related services.

Historical trends in enrollment and student contact have not yet completely absorbed the development of the Vacaville (2007) and Vallejo (2010) Centers. The increased access to SCCD courses has both allowed existing students to take classes closer to home and create opportunities for students who could not have otherwise participated. The enrollment for each new center will form patterns relating to the offerings and student needs that have not yet been established. In addition, there is long-term potential for the expansion of the Vacaville Center to a full-size campus and for the Vallejo Center to add a second phase of development, thus attracting potential students and increasing local access to educational resources.

DEMAND: PARTICIPATION RATE

Statewide, participation rates for community colleges (measured in unduplicated headcount of students per 1,000 population) have averaged between 84 (2009-10) and nearly 90 (2008-2009) per 1,000 population over the past three years. However, this rate varies greatly based on gender and ethnicity.

Applying the statewide average participation rate to the service area population results in over 35,000 potential community college participants. Over the past ten years, the average participation rate for SCCD has remained just below 45 per 1,000, with the 2010 rate (at 44.3) resulting in a 2010 full-year headcount of 18,617. The difference between the statewide average participation rate and current enrollment at SCCD could be associated with a number of geographic and social conditions, including the number of alternative adult education providers in the County, the proximity to many community college and university alternatives, and the low educational attainment of the population relative to other counties. Participation rates can be raised through a variety of means, including: expanded community outreach, added schedule flexibility, new and enhanced programs, and increased physical access through the expansion of the two Centers in Vacaville and Vallejo. However, with participation rates measured in headcount and the funding levels determined by full-time equivalent students, simply increasing headcount, and the resulting participation rate, does not necessarily improve results for students. Each additional unique student reduces the number of hours each student has available to them (based on a set level of funding), which is counter to the trend of SCCD students taking more hours per student over time.

The participation rate for SCCD has stayed fairly consistent over the past ten years, ranging from 42 to 46 per 1,000 population. Using the average as a growth assumption and applying the projected population increases, student headcount can be projected to 2025. Figure 5-1 includes three scenarios for participation rate, including the ten-year trend of 45 per 1,000 and two slightly higher rates reflecting the recapture of additional students in the service area. Growth, looked at from this perspective, is driven by the increase in demand from a larger population. The range of 2025 projected headcounts resulting from this projection is between 22,000 and 27,500.

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3 Focus on Results: Accountability Reporting for the California Community Colleges. March 30, 2011.
Figure 5-1: Headcount Projections based on Participation Rates (2025)
DEMAND: ENROLLMENT AND STUDENT CONTACT HOUR TRENDS

Over the past ten years, student headcount growth at SCCD has increased at an average rate of 0.76 percent annually, faster than the annual average service area population average of 0.43 percent. Over the same ten years, the number of weekly student contact hours (WSCH) and the enrollment measured in Full Time Equivalent Students (FTES) have each increased by an average of about 2 percent per year. However, the combination of fee increases and reductions in the number of sections (described below) has reversed much of this growth over the past two years, returning WSCH to 2005 levels. Assuming a similar pattern of ups and downs into the future, tied to economic cycles, the 2 percent annual growth represents a conservative growth factor for overall enrollment. The resulting projection of growth to 2025 is presented in Figure 5-2 (FTES) and 5-3 (WSCH). This projection starts from data for the most recent fall term (Fall 2011).

Figure 5-2: Enrollment (FTES) History and Growth Projection (2000-2025)

Figure 5-3: Weekly Student Contact Hours History and Growth Projections (2000-2025)
Steady two percent growth would result in a 2025 fall term total of 152,486 weekly student contact hours and 5,318 full time equivalent students. Based on the current relationship between FTES, WSCH and student headcount, the number of FTES and WSCH is within the range of the headcount projected by a slightly increased participation rate (50-55) and population growth. Considering these two demand factors, a 2 percent average growth appears to be a reasonable estimate of the increasing demand for SCCD classes overall. However, the actual growth of SCCD is also constrained by other factors.

**SUPPLY: APPORTIONMENT FUNDING/ENROLLMENT CAP**

The primary constraint on growth at SCCD is the apportionment provided by the State of California, whereby the resources allocated based on a set number of full time equivalent students (FTES), also known as the enrollment cap. The apportionment is set by a formula that accounts for growth and the total funding level set in the State budget. Deep cuts in the 2009-10 and 2010-11 State budgets included reductions to base apportionment funding totaling over 8 percent. Statewide, this has resulted in cutting thousands of course sections. At SCCD the decline in the number of sections has been nearly 24 percent over the past three years. Figure 5-3 shows the reduction over the past three years by school. While all SCCD schools faced reduced sections, Career Technical Education/Business and counseling services experienced the largest percent reduction.

**Figure 5-4: Number of Sections by SCCD School (2008/9 - 2010/11)**
The funding situation continues to erode as the State struggles with the ongoing fiscal crisis. In advance of the 2011/12 academic year, the apportionment formula resulted in allocation of funding for 9,207.44 total FTES, however after the State’s revenue targets were not achieved, the revision reduced funding by an additional 572 FTES. Looking ahead, the current planning assumption is to expect another reduction of 473 FTES in the 2012/13 budget. While these apportionment numbers do not directly dictate how many students SCCD can enroll, each student beyond the enrollment cap spreads the resources thinner across the entire college. The relationship between the FTES number and WSCH can be generalized based on a standardized student week. With a 525 contact-hour academic year of 35 weeks, the anticipated apportionment for the full academic year 2012/13 of 8,162 FTES works out to 122,430 weekly student contact hours funded. Figure 5-5 illustrates the history of full-year FTES and the anticipated funding levels through 2012/13.

Figure 5-5 Full Year FTES History and Anticipated Funding

Mission Area and School-Specific Growth Trends

To inform the EMP and future program development, it is important to understand growth from a college-wide perspective, as well as by mission area and school. This section explores anticipated growth trends for SCCD’s mission areas and growth by school.

Mission Area Growth

Each of SCCD mission areas is impacted by different growth factors and informs overall school and program direction. Table 5-1 below summarizes some of the key factors that are anticipated to drive increases in demand. The focus on the first three of the four mission areas established by the Chancellor’s office will directly impact growth for each school. Tables 5-2 through 5-7 provide historical and projected Fall Full Time Equivalent Students
(FTES) for the District as a whole, and for each school. This information is provided to assist SCCD faculty and staff with future program and facilities planning.

**Table 5-1: Factors Influencing Growth by Mission Area**

<table>
<thead>
<tr>
<th>Mission Area</th>
<th>Growth Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic/Transfer</strong></td>
<td>Increased population growth, tied with students’ transfer goals will ensure this area will grow. Connections and partnerships with UC Davis, UC Berkeley as well as CSU campuses, including Sonoma State, will stimulate and maintain this growth.</td>
</tr>
<tr>
<td><strong>Basic Skills</strong></td>
<td>The state’s focus on basic skills as well as the overall need to better prepare incoming high school students for college level work and success in a more competitive workplace, especially in Math and English will make this one of the strongest growth areas.</td>
</tr>
<tr>
<td><strong>Career Technical Education</strong></td>
<td>Growth in key economic clusters in Solano County, including health, biotechnology and transportation, to name a few, will spur growth in Career Technical programs. Aging baby-boomers will also create opportunities for replacing an aging workforce in trades. SCCD needs to provide flexible and varied program delivery to meet this demand.</td>
</tr>
<tr>
<td><strong>Continuing Education</strong></td>
<td>The increased and sustained population growth of adults over 50 will increase demand of Continuing Education. However the priority of the community college system is to focus on the other three mission areas. Growth will rely on opportunities to combine this mission area with advancing the other three. Creating new resources will be critical to continuing efforts that support this role in the community.</td>
</tr>
</tbody>
</table>

Table 5-2 below presents a summary of the projected growth scenario for the total of SCCD offerings. The historical trend is represented by 10 years of Fall FTES and WSCH as reported by SCCD Research and Planning.

**Table 5-2: Historic and Projected Enrollment (FTES) and Contact Hours (WSCH) Solano Community College**

<table>
<thead>
<tr>
<th></th>
<th>Historical annual average school growth: 2.6%</th>
<th>Projection based on 2% SCCD Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 2000</td>
<td>Fall 2005</td>
</tr>
<tr>
<td>FTES</td>
<td>3,129</td>
<td>3,376</td>
</tr>
<tr>
<td>WSCH</td>
<td>101,568</td>
<td>117,987</td>
</tr>
</tbody>
</table>

**Methodology and Assumptions**

The overall growth will continue to be constrained by financial realities. However, historical trends have shown that as the economy recovers, and resources become available at the State level, growth in demand will lead to expansion of SCCD programs. The two percent growth projection is based on the past ten year’s growth which has absorbed both ups and downs in the financial picture and is a reasonable place to begin discussing likely future growth. At two percent annual growth, the return to 2010 student enrollment and contact hour levels will take about five years from current enrollment levels. As the contact hours begin to increase again, SCCD will face choices about adding back sections and expanding targeted programs.
GROWTH PROJECTIONS BY SCHOOL

Changes in the focus of California’s community college system will mean that the reductions in SCCD capacity will not simply be reversed by reinstating the programs that have been cut. Even as resources are restored, the demand for community college courses and services will far outweigh the supply, requiring focus on the essential elements needed to support student achievement and serve the needs of the local economy. Stabilization and a return to a growing level of funding will present opportunities to expand in new areas and new ways of offering programs that better serve student needs.

Breaking down the college level data allows for an analysis of the impact of the reductions of recent years. The individual school data presented below breaks away from the long-term growth scenario to examine the differences in impact over the past four years to the programs that make up the Career Technical Education and Business, Liberal Arts, Human Performance and Development Science schools, and counseling services. Data limitations connected to the reorganization of the college divisions into schools, effective Fall 2011, and the transition to the BANNER data system limit the reliable WSCH data organized by school. A more complete set of FTES data, as reported to the Chancellor’s office has been used to identify the historic growth of each of the four schools, as well as counseling. For projection purposes, the overall average growth assumption of 2% is projected out through the 15 year planning horizon. Recognizing that the schools have and will continue to grow in their own unique ways, the projection graphs also include trend lines that represent the rate of growth of the school during 2000-2009, when SCCD as a whole was growing quickly, and during 2009-2011 while enrollment has been declining. In each case the area between the highest and lowest trend lines represents the range of likely enrollment for the school. The difference between this path of decline and the recovery and growth projected for the District represents the opportunity to reshape SCCD offerings. Following the projection for each school is a discussion of factors that will impact these numbers.

Figure 5-6: Historic and Projected Fall FTES 2000-2025
School of Career Technical Education and Business

Chapter 5: Growth Projections

Table 5-3: Historic and Projected Enrollment (FTES) and Contact Hours (WSCH)
School of Career Technical Education and Business

<table>
<thead>
<tr>
<th>Historical annual average school growth: -1.2%</th>
<th>Projection based on 2% SCCD Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2000 Fall 2005 Fall 2010 Fall 2011 Fall 2015 Fall 2020 Fall 2025</td>
<td></td>
</tr>
<tr>
<td>FTES 888 691 886 774 838 925 1,021</td>
<td></td>
</tr>
<tr>
<td>WSCH N/A N/A 26,876 21,257 23,009 25,404 28,048</td>
<td></td>
</tr>
</tbody>
</table>

Factors that will have the most impact on reversing this decline in the School of Career Technical Education and Business include:

- Focusing on locally needed skills such as trades and medical professionals that are tied to the economic recovery and retirements;
- The ongoing need for basic workplace skills courses including the use of standard software;
- Expanding on occupational education and the small business center to support entrepreneurship; and
- Active development of emerging industries such as high-tech manufacturing, sustainable building technology, modern/hybrid automotive repair, green energy and biotechnology.

Figure 5-7: Historic and Projected Fall FTES 2000-2025
School of Human Development and Performance

Table 5-4: Historic and Projected Enrollment (FTES) and Contact Hours (WSCH)
School of Human Performance and Development

<table>
<thead>
<tr>
<th>Historical annual average school growth: 4.1%</th>
<th>Projection based on 2% SCCD Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2000 Fall 2005 Fall 2010 Fall 2011 Fall 2015 Fall 2020 Fall 2025</td>
<td></td>
</tr>
<tr>
<td>FTES 343 425 540 496 537 593 654</td>
<td></td>
</tr>
<tr>
<td>WSCH N/A N/A 16,579 14,522 15,719 17,355 19,161</td>
<td></td>
</tr>
</tbody>
</table>
Factors that will influence trends in the School of Human Development and Performance include:

- Resurgence of demand for early childhood education needs in the community as the economy recovers;
- Expansion of the nutrition program; and
- Reductions in athletics and physical education that are not expected to return to prior levels.

**Figure 5-8: Historic and Projected Fall FTES 2000-2025**

School of Liberal Arts

<table>
<thead>
<tr>
<th></th>
<th>Fall 2000</th>
<th>Fall 2005</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2015</th>
<th>Fall 2020</th>
<th>Fall 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTES</td>
<td>945</td>
<td>1,072</td>
<td>1,261</td>
<td>1,196</td>
<td>1,295</td>
<td>1,429</td>
<td>1,578</td>
</tr>
<tr>
<td>WSCH</td>
<td>N/A</td>
<td>N/A</td>
<td>37,218</td>
<td>33,913</td>
<td>36,709</td>
<td>40,530</td>
<td>44,748</td>
</tr>
</tbody>
</table>

The School of Liberal Arts will see a reversal of the current declines based on:

- Strong growth in English, ESL, Library Research and other skill-based programs that support success in SCCD courses, work environments and post-transfer;
- Increasing demand and efforts to strengthen basic skills education and integrate basic skills into and alongside other programs; and
- Slower growth in art, music and theater as these programs are modified to support core mission areas such as basic skills and transfer/academic skills.
Figure 5-9: Historic and Projected Fall FTES 2000-2025
School of Sciences

Table 5-6: Historic and Projected Enrollment (FTES) and Contact Hours (WSCH)
School of Sciences

<table>
<thead>
<tr>
<th></th>
<th>Historical annual average school growth: 5.9%</th>
<th>Projection based on 2% SCCD Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 2000</td>
<td>Fall 2005</td>
</tr>
<tr>
<td>FTES</td>
<td>895</td>
<td>1,143</td>
</tr>
<tr>
<td>WSCH</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Stabilizing factors impacting the School of Sciences include:

- Ongoing need for math and science classes that support academic transfer, including courses named in Transfer Model Curriculum and other identified pathways.

Growth in Sciences will be driven by:

- Increasing need for basic skills math across all student populations;
- Fast growth in allied health professions; and
- New approaches to integrating math into and alongside other programs.
Figure 5-10: Historic and Projected Fall FTES 2000-2025 Counseling

Table 5-6: Historic and Projected Enrollment (FTES) and Contact Hours (WSCH)

<table>
<thead>
<tr>
<th>Counseling</th>
<th>Historical annual average school growth: 4.9%</th>
<th>Projection based on 2% SCCD Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 2000</td>
<td>Fall 2005</td>
</tr>
<tr>
<td>FTES</td>
<td>58</td>
<td>45</td>
</tr>
<tr>
<td>WSCH</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Counseling (generally considered to be stable at a very low level of service) will grow rapidly in response to:

- Emphasis on first year services to design and implement a path for individual student success; and
- Institutional focus on soft-skill development and services that support success for all students.

Conclusion

While the growth potential exists for all schools and SCCD as a whole, the constraint remains the per-student funding provided by the State. As the long-term economic cycle moves back into an upswing, State resources will lag behind job growth creating even more pressure on community college level from the demand side. The growth of individual schools over the next five years will largely be determined by the choices that SCCD makes about how to allocate resources within the existing (declining) resources and the ability of the College to develop alternative funding sources.
Chapter 6: Education Program Assessment

An essential element of the EMP is the evaluation and assessment of existing programs and the exploration of potential new programs. This review helps provide an understanding of the strengths, opportunities and needs for programs currently in place, and helps set the foundation for developing new program areas. The review of programs began with the faculty and staff completing a questionnaire about each program and then reviewing during the faculty focused IFSC. Questionnaire results indicated potential program projections and opportunities, pedagogical shifts, existing strengths and challenges, and future enrollment growth. This information was then reviewed and evaluated in light of Environmental Scan data and overall EMP goals and objectives.

Existing Academic Program Analysis

Adjusting to New Realities
The global economic recession, national credit and housing collapse, and the ongoing State financial crisis have changed the environment within which SCCD operates. The refocus of college efforts on Basic Skills, Career Technical Education and Academic/Transfer mission areas has resulted in fewer, larger sections in nearly all classes. Further, in order to redirect resources, some programs and courses have been reduced or eliminated altogether. The end result is that programs can no longer grow based solely on demand. In order to support a more targeted set of priorities, SCCD as a whole must adjust program offerings, support services and, ultimately, facilities and operations.

Educational Program/Discipline Planning Update
The faculty and staff questionnaire served as the core of the educational program assessment, and was developed by the planning team based on the results of a similar assessment conducted for the 2007 EMP. For each program, participants were asked to suggest updates to the program level strategies, the expected growth trend and the rationale for the programmatic direction indicated.

A summary of this assessment, beginning on Page 6-3, presents the overall planned direction for each SCCD program and a general statement of rationale for that direction.

Interdisciplinary Planning
In addition to the self-reported update to program and discipline direction and rationale, the planning team designed a process for determining the strategic directions that SCCD should pursue to align program offerings with the mandated focus areas (CTE, transfer and basic skills) and the limited resources. The key to this process is the collaboration of all four schools as well as faculty and staff that represent the basic skills, counseling and special services. Building on the interdisciplinary faculty strategic conversations discussed in chapter 4, this process also included a half-day program workshop with the deans of each of the four schools to test potential program evaluation tools. Throughout this process, new ideas were generated that exemplify the benefits of this interdisciplinary approach. The following are examples of key summary information and ideas that were generated in this process.

- Most SCCD programs and services have experienced a period of contraction (many planned) in both the number of students and the number of sections. Much of the impact of these cuts has only been realized in the past year.
Demand for Basic Skills courses and support services will continue to increase, and will be a challenge across all programs and disciplines.

New resources will need to be identified to maintain much of the community and continuing education programming.

There is a need to create a forum for regular interdisciplinary faculty discussions to identify shared opportunities and best practices. A number of potential opportunities were identified during the planning process that would benefit from the sharing of knowledge, planning efforts and faculty, some examples of this include:

- Exploring Food Science as a joint venture of Sciences-Human Performance and Development;
- Enhancing the Dance curriculum by connecting the existing Kinesiology courses to the performing arts within the School of Liberal Arts;
- Developing a digital multi-media cluster that streamlines underachieving programs and connects Computer and Information Science to the visual arts, film and television within the School of Liberal Arts;
- Building upon the success of the nursing program to develop companion programs in home health care and senior care, for example.
- Creating rich, contextualized basic skills courses for students in the School of Career Technical Education and Business in partnership with the School of Liberal Arts and the School of Sciences.

The development of online courses should continue, with SCCD learning from internal and external best practices to focus these efforts where they can be most effective.

Support for online students such as library services and counseling should closely match those available to students on campus.

Staffing for instructional support, student services and administration will need to be aligned with enrollment and facilities growth.

Many additional concepts and directions were generated during the planning process. The ideas that applied broadly or universally across SCCD program offerings and services have been further developed and revised into the Education Master Plan Goals and Strategies, detailed in the next chapter.
Program: Aeronautics

Strategies:

- Expand outreach to share career opportunities in the aeronautics field
- Continue to provide hands-on, real world learning opportunities for students
- Incorporate technological advances into program curriculum
- Support competency in English and math

Rationale:
Declining trends in FTES and enrollment suggest the need to communicate with current and future students, potentially at the local, national and international level, about potential careers in the aeronautics industry. Lack of competitive educational providers suggests an opportunity for SCCD to expand into a "niche" market. Success for students in this field will rely heavily on the ability to train through hands-on experiences as well as incorporating the latest in industry technology into curriculum.

Program: Automotive Body & Repair

Strategies:

- Expand to include an evening and Saturday program/track
- Incorporate technology and industry standards, including environmental, health and safety concerns, into program courses

Rationale:
Growth in FTES and enrollment, projected industry trends and low competition from educational providers suggests the potential for program expansion. Providing additional training opportunities during the evening and the weekends will support continued enrollment growth and potentially increase access. Incorporating technology into courses, reflecting industry standards, and providing hands-on learning opportunities will support students success in future employment.

Program: Automotive Technician

Strategies:

- Complete a cost benefits assessment of reinvesting in this program
- Reinstate program, potentially hiring in 2012/13
- Update curriculum and instructional delivery system(s) based on industry trends
- Provide training and education in ten areas of Automotive Service Excellence (ASE)

Rationale:
Based on projected industry growth and low educational provider competition, it may be beneficial to students and the industry for SCCD to reinstate the Automotive Technician program. The program could also be updated to incorporate emerging industry trends, including electric and hybrid vehicle repair, which may increase interest in the program.
Program: Cosmetology

Strategies:
- Offer program year-round

Rationale:
Current high demand for this program and lack of competitive educational providers suggests the potential to expand current program course offerings, which could include providing year-round courses.

Program: Criminal Justice

Strategies:
- Expand course topics (gangs, terrorism, prison and jail operations, and technology)
- Increase use of technology in courses
- Expand career opportunities for students
- Increase online course offerings
- Expand course offerings in the City of Winters

Rationale:
Career opportunities have expanded in the State Corrections field due to the recent realignment of the California prison system and this is also affecting Sheriff's departments which have been hiring additional deputies for the county jails. The outlook for juvenile and adult probation officer careers also looks good because of the same realignment and several counties have already begun the hiring process for probation officers.

Program: Drafting

Strategies:
- Continue to provide training on new software (CAD) systems—AutoCAD and AutoCAD related systems such as architectural desktop, civil 3D etc; and Solidworks.
- Provide courses online as well as in the classroom
- Support the retraining needs of current workers/professionals
- Develop links with high school students to support drafting as a career option
- Develop relationships with business to encourage student internships

Rationale:
Enrollment numbers and course offerings have become more limited because of state budget restrictions. The main challenge is to keep course offerings available to meet the needs of recent high school graduates and individuals who are retraining. Current drafting students and recent graduates are continuing to land jobs in the field despite the weak economy. Employers have been very happy with the knowledge of our graduates and their abilities.
Program: Electronics Technology

Strategies:
- Incorporate mechatronics (mechanics and electronics) curriculum
- Assess potential to support Automotive Technology program
- Offer hybrid online/onsite laboratory courses
- Develop a marketing plan/strategy for program and other Career Technical programs

Rationale:
General growth in FTES and enrollment and low competition from local educational providers suggest the potential for program expansion. Updates to the program are critical if SCCD wants to continue to support this program. Integration of a mechatronics program would keep the program on the forefront of the industry, potentially increase enrollment, and support the continuation of the program.

Program: Fire Technology

Strategies:
- Continue to develop an associate degree in wildland fire technology
- Assess feasibility to implement a pre-fire technician job direct program
- Consider job direct programs in wildland fire prevention/loss reduction/prescribed fire
- Consider Regional and International Fire Technology articulation and cohorts with not-for-credit course online/hybrid course agreements and exchanges of students.
- Consider three party articulation agreements between USDA-Forest Service, Solano Community College and specific Pacific Island in the US Commonwealth
- Reconsider co-location of fire academy at Dixon Fire and move to South County location such as Vallejo on a rotational basis.
- Minimize the college district’s vulnerability to “functional discriminatory practices” by establishing a permanent presence of fire technology courses in the southern portion of the college district, namely Vallejo and Benicia. This is necessary because of the fact that inner city fire technology students cannot utilize public transit buses to the Vacaville Center which is the centralized location of the fire technology program.
- Historically, the fire technology program was staffed with 2 full time faculty members. One coordinated the activities of the fire academy and the then functional “oil fire school.” Currently there is no longer an oil fire school but it is being replaced by a 720 hour firefighter I academy that promises to create an even greater workload to the fire technology program staff and its parent division/school dean. The other portion of the fire technology program centers around the state fire marshal/chancellor’s office mandated core courses and continuing education “certification tracks” to becoming a fire officer, a fire prevention specialist and ultimately a fire marshal. This portion continues to grow and place an equally heavy demand on the lone fire technology full time faculty in the program. Strong consideration should be made to have 2 full time fire technology program faculty.

Rationale:
Strong growth in enrollment and FTES, lack of competitive educational providers, the growing need for trained wildland/urban fire prevention in the Pacific Rim and Pacific Islands, and the potential retirement of current firefighters in the field all suggest the potential for program expansion. In addition, growing need of USDA-Forest Service to re-invent their fire prevention/loss reduction programs to assist in mitigating their growing threat of wildland fires to urban areas across the
United States. Additionally, the California State Fire Marshal’s Office State Fire Training through the efforts of the California Fire Technology Directors Association is embarking upon an expanded use of online/hybrid courses for certification of fire chiefs, fire prevention specialists and fire investigators. This college district would be very wise in joining this grass roots effort.

**Program:** Industrial Education, Industrial Management, Maintenance Technician/Mechatronics

**Strategies:**
- Increase course offerings
- Improve marketing of the program
- Support curriculum and program development with the use of grants

**Rationale:**
No rationale provided

**Program:** Occupational Education

**Strategies:**
- Provide short courses focused on developing employment skills ("soft skills")
- Increase capacity of program website, including an internship placement system
- Continue to develop student and employer databases
- Work with core faculty to determine placements for student internships.

**Rationale:**
With the high rate of unemployment and the increased competition for jobs, having an edge is a great advantage. Occupational Education helps provide students with the ability to leave school with an education, valuable on-the-job experience, and soft skills training. Any student who eventually plans to become part of the workforce can benefit from the type of training Occupational Education provides and employers are increasing requesting from successful graduates.

**Program:** Accounting

**Strategies:**
- Develop computer based transfer level courses
- Develop partnerships with local businesses to align courses with industry needs and provide opportunities for hands-on learning experiences
- Consider expanding course offerings to the new Centers in addition to the Fairfield campus

**Rationale:**
This program can continue to support the projected high growth in Business and Finance occupations by providing training in accounting and finance. Increased partnerships with business could help maintain the relevancy of program courses and provide opportunities to train current workers.
**Program: Banking & Finance**

**Strategies:**
- Provide additional sections of high demand courses
- Increase online course offerings

**Rationale:**
Projected growth in Business and Finance occupations, general increases in enrollment and FTES, and lack of competitive educational providers suggests the potential for program expansion. Providing additional sections of high demand courses as well as continuing to support educational needs of the Real Estate program could support continued growth in enrollment and FTES.

**Program: Business**

**Strategies:**
- Our Online courses enable students to complete the Business program without coming to the Campus.
- We need to develop better programs and situations for students to meet the Dean and faculty members.
- We need to Market and Publicize some of our courses that will interest and attract students who are not Business Majors: Business Communication; Introduction to Business.

**Rationale:**
General increases in enrollment and FTES as well as projected growth in Business and Financial occupations suggest the potential for program expansion. The program provides educational and training opportunities for SCCD students as well as current workers whose goals include enhancing and broadening their skill sets for career advancement.

**Program: Computer & Info Science**

**Strategies:**
- Continue to provide courses online
- Develop programs to respond to emerging technology needs (Mechatronics, Nanotechnology, etc.)
- Expand course offerings

**Rationale:**
Growth in the industry, increased use of technology in the workplace, and expansion into new areas (Mechatronics and Nanotechnology) could potentially increase program enrollment. Program expansion may require continued upgrades to learning equipment and facilities. Due to the high number of competitive educational providers (nine), SCCD should consider developing unique, cutting-edge programs to set the college apart from other competitors.
Program: Economics

Strategies:
- Expand the number of economics tutors available
- Continue to incorporate real-world events into the curriculum
- Continue and expand the number of online and campus course offerings
- Communicate to students the new international economics class

Rationale:
One of the primary reasons that students are not successful in economics is their lack of math skills. More economics tutors might increase the success rate in the course. Growth hasn’t changed too much over the last five years, but it may be starting an upward trend, if this increased enrollment continues then it would be beneficial to increase the number of course offerings both online and on the campus. If growth remains stagnant, then the same number of courses should be offered. Enrollment in the new international economics class is often lower than the other economics classes, but enrollment might increase if there was increased communication with students about the class. As business becomes more and more global over the years, the demand for an international economics course will also grow.

Program: Management

Strategies:
- Continue and expand online course offerings
- Provide regular opportunities for students to meet the Dean and faculty

Rationale:
Small increases in enrollment and projected growth in Business and Financial occupations suggest the potential for program expansion. General economic growth throughout the county will require trained managers for almost all industries. In addition, current workers could enroll in the program to enhance and broaden their skill sets to further their careers.

Program: Marketing

Strategies:
- Continue to look at the potential to offer online courses
- Respond to changing business needs through new course offerings (e-Marketing, Public Relations, etc.)
- Continue to develop internship program
- Continue guest speaker "program" for marketing classes
- Provide students with information on potential marketing careers
- Develop methods to market the program to students ("Meet the Deans" and "Meet the Faculty" events)

Rationale:
General economic growth supports the need for employees trained in the field of marketing. Expansion of the program to include emerging trends, such as those in marketing and public relations, and addressing issues around course transferability could support continued enrollment and FTES growth and increase student and current worker interest.
Program: Office Technology

Strategies:
- Expand Medical Specialist courses (advanced medical terminology and basic anatomy)
- Prepare students for the American Health Information Management Association (AHIMA) certification exam
- Expand Legal Specialist program
- Create short-term (12 month) training program for Medical Office Assistants
- Explore courses focused on the virtual office environment
- Provide courses and training for all skill levels (technical to personal skill building)
- Continue to provide courses online

Rationale:
Projected high growth needs in Office and Administrative occupations as well as general growth in the healthcare sector suggest the potential for program expansion. Enrollment and FTES could grow through aligning curriculum with current industry standards/trends, providing industry specific certification, and offering career pathway programs for students and current workers.

Program: Real Estate

Strategies:
- Develop new curriculum aligned to the state license exam requirements
- Explore providing additional courses online
- Consider developing courses (credit or non-credit) for homeowners/homebuyers

Rationale:
General enrollment and FTES growth and projected growth in residential and commercial development projects suggest the potential to expand the program and an increased demand for trained realtors. Continuing to provide courses that support students to pass the state license exam will be essential to maintaining and increasing enrollment in this program.

Program: Emergency Medical Technician

Strategies:
- Develop Paramedic training program
- Program has been updated and expanded to meet regulations
- A new curriculum was developed and approved by the college
- New program approval documents were written and delivered to Solano County EMS (approval is expected prior to Spring 2012 semester)
- New program prerequisites (Medical Terminology and Emergency Medical Responder) have been added to improve student success rate
- Add new sections 2012-2013 school year

Rationale:
EMTs are in demand for ambulance and medical transport companies. In addition, EMT is required for firefighters at a minimum. In the current financial climate, with funds being cut to essential services, some departments find hiring more EMTs to be cost effective. Some areas of the state use EMT services exclusively. There will continue to be a demand for EMTs.
Program: Nursing, Registered

Strategies:
- Offer approved Certified Nursing Associate (C.N.A.) program (based on additional program space)
- Home Health Aide Certification (post C.N.A.)
- Acute Care Certification (post C.N.A.)
- Onsite articulation with courses with CSU, PUC for BSN
- RN Refresher
- Nurse Residency Program
- Mortician Degree
- Paramedic/LPT to RN transition

Rationale:
Projected growth in Healthcare Practitioner occupations, an overall shortage of nurses, continued development of healthcare facilities within the county, and growth in enrollment and FTES all suggest the need to expand this program. Availability of grants to support nursing programs within the state could provide needed funding for program expansion.

Program: Welding

Growth Trend: Stable

Strategies:
- Add an additional ornamental class and maintenance program courses
- Schedule courses to maximize use of lab facilities
- Continue to integrate new techniques and technology into current courses
- Support growth in other CTE and Business programs

Rationale:
Projected housing and economic growth may increase the need for workers trained in welding technology. Maintenance of the program will rely on upgrading technology to meet industry standards, which will also provide an opportunity to train current workers.
Program: Child Development and Family Studies

Strategies:

- Consolidate Early Childhood Education and Human Development into one department, called Child Development and Family Studies
- Alter degree requirements to align with the statewide ECE 8 Curriculum Alignment Project to support student transfer
- Create a transfer degree in ECE in accordance with SB1440
- Connect students to support services/resources (financial aid information, information on ESL courses, etc.)
- Create an Early Childhood Education student study room to support collaboration and team building skills
- Continue to recruit well-qualified instructors to teach specialized courses in the field
- Provide basic math and English training in conjunction with program courses
- Partner with service providers to offer hands-on work experience opportunities
- Explore the potential to provide courses in Spanish
- Diversify course delivery methods (online, evenings and weekends)
- Seek additional methods to provide financial assistance to students
- Explore feasibility of offering a coaching or mentoring model for practicum courses
- Increase use of hands-on and "real life" experiences integrated into classroom based learning
- Ensure students are prepared for courses through use of English assessment
- Bring current and relevant presenters to the ECE annual conference to support professional development and currency in the field
- Build media and technological resources to aid student learning

Rationale: Due to economic decline in Solano County, there has been a slight decrease in employment opportunities for early childhood providers. However, the needs of young children and families are intensified during these stressful times, leading to a greater need for highly qualified early childhood educators and paraprofessionals who provide services to children and families. As the economy gets stronger, so will the need for well-qualified teachers. Program expansion could include increased childcare capacity, courses in Spanish, efforts to support family services, and specialized training in working with children with special needs and/or children and families under stress. Projected growth in the county population, particularly for children and youth between 0 to 14 years of age and older adults, suggests an increased need for early childhood care providers and educators as well as employees trained in Human Development. Program expansion could potentially focus on providing training targeted at serving the older adult population, expanding the courses focused on caring for young children and providing courses in Spanish.
Program: Nutrition

Strategies:
- Diversify the course topic offerings to capitalize on educational and personal interest in nutrition studies
- Develop curriculum with partner programs (Nursing, Human Development, etc.)
- Offer degree or certificate program targeted towards nutrition and dietary science
- Provide industry-relevant courses/training
- Adapt curriculum to online and hybrid format
- Provide students with resources that they can use to improve food preparation skills
- Provide skills necessary to prepare healthy foods in order to change unhealthy eating behavior
- Provide and develop a large teaching kitchen to teach basic food preparation skills
- Provide funding for teaching kitchen
- Provide funding for kitchen equipment and supplies
- Provide diet analysis software program on library computers that generate dietary reports

Rationale:
Increased interest and public awareness of health issues, projected growth in healthcare and foodservice occupations, low educational provider competition, and increases in enrollment and FTES all suggest the potential for program expansion. Developing a specific Nutrition major could support growing interest and trends in this area and further support training needs in related programs. Provide skills necessary to prepare healthy foods in order to change unhealthy eating behavior. Healthcare costs are growing because of medical issues caused by poor eating behaviors and nutrition.

Program: Intercollegiate Athletics

Strategies:
- Continue to provide opportunities for students of all abilities
- Increase academic support for students/athletes by providing increased Academic Success Center hours
- Increase academic support through hiring a full-time athletic counselor
- Maintain head coaches as full-time faculty
- Fully staff each athletics program
- Restore appropriate budgets for each athletics program
- Improve and maintain facilities
- Continue to focus on the whole student—providing athletics training, building leadership and communication skills and improving academic success
- Provide courses, as appropriate, online and hybrid
- Expand teams and programs into new sports areas
- Come into full compliance with Title IX

Rationale: Health, Kinesology and Athletics programs will continue to support students and community members in maintaining their fitness levels, learning about health issues, and participating in competitive sports. Expanded course offerings and upgrades to equipment will increase the ability of the program to meet growing demands for courses.
Program: Health Education

Strategies:
- Provide courses and opportunities focused on personal fitness and health
- Explore offering support classes for Health Occupations in offering Physical Therapy Assistant certification courses
- Develop curriculum targeted to personal health needs (weight loss, smoking cessation, aging, etc)
- Continue to provide curriculum addressing the growing health issues of our society and the growing health care costs associated with unhealthy behaviors
- Continue to provide opportunities for students of all abilities
- Develop curriculum to reflect current research and its application to the academic setting
- Provide courses, as appropriate, online and hybrid
- Provide courses on block scheduling at times generally under-enrolled

Rationale:
Health, Kinesiology and Athletics programs will continue to support students and community members in maintaining their fitness levels, learning about health. Expanded course offerings and upgrades to instructional equipment will increase the ability of the program to meet growing demands for courses. Providing community education programs in health would increase enrollment by community members.

Program: Kinesiology

Strategies:
- Provide courses and opportunities focused on personal fitness and individual fitness evaluation
- Continue to provide opportunities for students of all abilities
- Continue to focus on student academic success
- Develop curriculum to reflect industry and fitness trends
- Continue to provide Job-Direct certificate programs
- Explore offering support classes for Health Occupations in offering Physical Therapy Assistant certification courses
- Continue to offer popular dance classes such as Swing, Tap, Modern and Jazz
- Develop new curriculum of popular dance styles such as Country Line, Zumba, Salsa and student choreography
- Provide instructional equipment
- Improve and maintain facilities
- Provide courses, as appropriate, online and hybrid
- Provide courses on block scheduling at times generally under-enrolled

Rationale:
Health, Kinesiology and Athletics programs will continue to support students and community members in maintaining their fitness levels, learning about health issues, and participating in competitive sports. Expanded course offerings and upgrades to equipment will increase the ability of the program to meet growing demands for courses.
Program Name: Art

Strategies:
- Emphasize visual literacy across disciplines, focusing on critical thinking skills and higher-level creative problem-solving
- Emphasize reading and writing across disciplines, focusing on clarity, cohesive argument, and critical thinking
- Collaborate with local high school instructors, to create a cohesive instructional matrix bridging secondary and community college art education and increase enrollment
- Continue to work with local partners to enhance students' educational experience and training (internships, production work, exhibiting, etc.)
- Explore the feasibility of Learning Communities with courses in other programs
- Focus on student professional development (portfolios, presentations, studio development, private commissions, commercial assignments and exhibition strategies, etc.)
- Continue to promote cross-discipline/cross-media experiences
- Continue to prepare students for transfer to CSU, UC, and other colleges/universities
- Continue to ensure alignment between our program majors/course offerings and state standards and requirements
  - Example: After consultation with SCC art faculty, the UC Berkeley art department based their Foundation Arts program on the SCC model
  - Example: SCC faculty participation in the processes related to the new Course Identification Numbering System/ Transfer Model Curricula
- Continue to promote global awareness and cultural citizenship, through
  - Travel study/study abroad art courses and art history courses
  - Guest lecturers and studio visits
  - Increased multicultural course offerings
  - Regional field Trips and targeted course assignments

Rationale:
The program provides important opportunities for students and community members to develop skills and an appreciation of the creative arts as well as courses for transfer preparation. Growing enrollment and FTES suggest the potential to expand the program to meet increasing demand for courses; such courses may include digital printmaking, interactive design, web design, new media and animation—courses that would form the foundation for careers in animation, special effects, and production design. The art disciplines are popular with life-long learners, who bring real-world experience and expertise into the classroom environment, enriching discussion and challenging younger students. However, the program is primarily dedicated to preparing students for job placement and for transfer to four-year institutions. Our main focus is to build critical thinking skills to make our students competitive in the job market and prepared for the rigors of further education at UC, CSU, or other institutions of higher learning.
Program Name: Cinema and Television

Strategies:

- Expand current course offerings (Final Cut Pro, currently in draft in curricunet, Community Service Video Production, Contemporary American Film).
- Retain small cap production classes for majors balanced out by large lecture classes.
- Continue linking classroom experience with industry trends, standards and technological changes.
- Continue working with local partners to enhance students educational experiences and training (internships, production work, community service media projects, exhibitions in student film festivals, online, student film competitions).
- Focus on professional development (demo reel and building credits)
- Continue providing cross discipline film and tv production experience in collaboration with Theater Arts and Music and various content related depts.
- Continue working with students on international projects as student interest requires.
- Explore feasibility of study abroad film courses
- Replace Lab Tech
- Replace Full Time Faculty (retired in 2010) with 1 Full Time Professor in Film and adding a Full Time Professor in TV.

Rationale:
The Film/TV Program continues to be a strong growth program providing majors with a high transfer rate to four year universities/colleges, skills for employment, supporting general education and cross cultural requirements to all students as well as life long learning. The Film/TV Production courses have all been updated to digital in keeping with our commitment to offer courses aligned with current industry and technological trends.

The Film/TV Dept has exceptionally high retention rates and good success rates. With the addition of large GE online and satellite campus offerings like Cinema 10 and 11, success rates which generally are good to average (75 to 81% over the 4 years) dipped to a 68% in '09-'10 while success rates in production classes are consistently high and TV in general at 81% in '09-'10.
Program: English
School: Liberal Arts

Strategies:

- Develop and propose a new design for section architecture for the 2011-12 academic year.
- Continue to design and evaluate curriculum for the lab for the 2011-12 academic year.
- Develop new degree patterns which conform to the TMC (currently in its near-final iteration for English) as well as the development of degree emphases.
- Analyze courses in English in regards to consistent catalogue language and matriculation and to reduce redundancies.
- Create a drop-in Tutoring Center
- Expand lab staffing and to develop and support alternate pathways through English 1
- Develop materials for English 348G
- Refine a three-course series in creative writing
- Solicit manuscripts, arrange for judging and award the Quinton Duval Award in Creative Writing.
- Solicit readers and manage the Creative Writing Reading Series.
- Create, distribute and evaluate prompts for the Composition Mastery Examination (CME) as diagnostics in English 1
- Score and build norming packets in preparation for the reading of the CMEs.
- Recognize the continuity and integrity of our literature major and program offerings

Rationale:
The program will continue to be at the core of SCCD's curriculum and support educational training for all other programs. The continued lack of preparation of incoming students will require additional courses and support to help students attain their educational and career goals. Overall increases in enrollment and FTES reflect the need for continued program expansion.

Program: Reading

Strategies:

- Build understanding and support throughout the College for the Reading program
- Extend course availability to include Centers
- Enlarge English 320 to serve all students (campus Wide), i.e., independent instruction in Reading in all disciplines
- Strengthen Reading requirement awareness
- Rationale: The reading program will continue to be a core part of SCCD’s curriculum and meet the current and projected need for skill development for students who are not prepared academically to enroll in college level courses. Enrollment in the program is expected to increase based on low reading comprehension trends at the high school level locally and nationwide and CSU/UC demand for critical reading competency.

Rationale:
The program will continue to be at a core part of SCCD's curriculum and meet the current and projected need for skill development for students who are not prepared to enroll in college level courses. Enrollment in the program is expected to increase based on English comprehension trends at the high school level.
Program: English as a Second Language

Strategies:
- Continue to participate in programs and efforts that target specific community groups (e.g., Adult School students, foreign-born healthcare workers, and students with other vocational ambitions)
- Provide courses and services at Centers to meet community needs
- Align ESL curriculum to English curriculum to support student success and preparation
- Create integrated / accelerated course(s) to fast-track progress of transfer-bound students to English Reading/Comp sequence
- Develop ESL web page with student-friendly course descriptions and video “mini-lectures” to assist students in course selections

Rationale:
The program fills an important need to provide students from diverse backgrounds with training and skill development in English. Projected increases in county population diversity as well as the approximately 27 percent of residents who speak English "less than very well" suggest an increased need for courses in this program. Increased alignment of program courses with English courses will help students succeed in meeting their educational and career goals. Economic trends as well as the shifting mission of the CA Community College system to increase focus on CTE suggests an increasing need to develop VESL programs and/or to partner with vocational disciplines in cohort-model programs. Expanding / diversifying our offerings in these ways will require increased interest and participation from faculty in other content areas.

Program: Foreign Language

Strategies:
- Increase fill rates in FL program by creative scheduling
- Continue to expand language courses at Centers
- Continue gradual implementation of online component to FL classes
- Continue to promote cultural diversity events
- Advocate for continuance of German program in wake of retirement
- Promote importance of completing AA degrees in FL with annual recognition

Rationale:
This program will continue to support the general education program as well as provide students with opportunities to master foreign languages. The FL emphasis will be to promote the core courses of the program while developing the online components. In order to increase enrollments, the faculty will promote the pursuit of AA degrees and student involvement in related cultural events. The foreign language faculty strongly advocate for the full complement of languages offered.

Program: History
School: Liberal Arts

Program: Humanities
School: Liberal Arts

Program: Interior Design
School: Liberal Arts
SCCD Educational Master Plan
May 2012 Revised Draft
Program Name: Journalism

Strategies:
- Explore the potential to provide hybrid and online courses as well as courses at the new Centers
- Continue to connect basic newsgathering skills to online/digital media outlets
- Add a full-time faculty member to support the administrative needs of the department

Rationale:
The program will continue to provide courses and training in the field of journalism, as well as support educational needs of students in related fields, including the arts, film and television, and media/communication. Enrollment and FTES could continue to increase through including courses that focus on online and digital communication, which would also support the development of student information literacy. Low competition from other educational providers presents an opportunity to strengthen and expand the program.

Program: Learning Resources

Strategies:
- Continue focus on information competency programs for students, in particular increase non-credit offerings.
- Increase library capacity at Vacaville and Vallejo Centers
- Increase library services for Distance Education
- Increase presence and service via the web

Rationale:
Students will continue to rely on the Library to support and complete their educational experience in the classroom. As the Centers fully develop and more students access SCCD through online courses, services will need to expand to fully serve students participating in all parts of the District. The Library will need to grow in resources, equipment and staff in order to meet increased student needs.

Program: Music

Strategies:
- Continue online course offerings
- Develop new curriculum (Survey of Music History and Introduction to Film Music)
- Provide on campus performance opportunities each semester
- Provide master class opportunities each semester
- Develop Commercial Music major
- Increase high school outreach through joint performances
- Increase community outreach through performances
- Develop community sponsorship to help pay for equipment transportation to community performances
- Develop scholarship endowment/funding sources

Rationale:
Increases in enrollment and FTES as well as a small number of competitive educational providers suggest the potential for program expansion. The program provides an important opportunity for students and
community members to develop skills in and a knowledge about music. This program provides unique opportunities for joint performances with local middle school, high school and community programs, potentially leading to future college training at SCCD. The program also provides opportunities for community outreach and marketing through performances and audience engagement.

Program: Philosophy

Strategies:
- Continue to develop curriculum to reflect emerging trends (e.g., bioethics)
- Continue to widely publicize Philosophy program.

Rationale:
General increases in enrollment and FTES as well as low competition from other educational providers suggests the potential for program expansion.

Program: Professional Photography

Strategies:
- Continue to develop and modify curriculum to reflect industry standards
- Seek outside funding sources to supplement current District funding
- Continue to provide sufficient lab time outside of main courses for one on one growth and support
- Increase community support via public exhibitions
- Further align curriculum to provide consistency in developing visual literacy
- Increase equipment availability

Rationale:
Current pedagogical shifts, renovations to facilities and equipment, and the incorporation of digital technology are expected to support increased enrollment in the program. The program could potentially focus more on preparing students for transfer to colleges in the Bay Area and Sacramento. It is anticipated that this program will continue to be popular with life long learners and working artists/professional interested in improving their skills as well as the Internet Generation. The program could do more to attract artist from other mediums as media based art continues to merge and support one another. A greater emphasis could be placed on visual media and its role in enhancing a global view and understanding.

The Photography Department acts as an important liaison for many students struggling to be successful in a traditional academic setting. All lab classes rely on an individual’s ability to work well with others and develop acceptable social skills. Students learn to articulate themselves visually via photography and hence enhance verbal and written skills via critique, exhibition, and written assignments. Technical skills rely on mathematical knowledge at a level students find both practical and meaningful. As the Internet and visual media have increasingly become the mode for learning and communicating, we anticipate the importance our courses play in education will increase. In an economic climate that seeks to limit the educational funding and hence availability of artist as societal shapers, the photography program becomes all the more valuable to our community as an educational program that allows students to develop meaningful skills and ultimately give back to society.

Program: Political Science

School: Liberal Arts
Program: Communication Studies

Strategies:
- Provide forums and opportunities for students to practice speech and communication skills
- Develop more opportunities for community outreach through speaking & sports broadcasting
- Expand course offerings to reflect emerging trends and interests with course offerings in Group Communication and Intercultural Communication
- Consider offering courses that include visual communication elements
- Further develop student opportunities to implement and perfect delivery techniques and strategies by using video technology in the classroom

Rationale:
The program will continue to support general education requirements and provide an opportunity for all students to develop and strengthen their public speaking skills. Strong skills in speech and public speaking supports success in any career/profession. Broadening the current curriculum to incorporate emerging trends and interests as well as include visual communication will help better prepare all students for future careers.

Program: Theatre Arts

Strategies:
- Develop theatre technology and design program component
- Expand course offerings as access to additional classroom and lab space increases
- Reflect current industry changes in curriculum and program design
- Develop Theatre Technology and Design major
- Realign curriculum to create 3 coherent and achievable “tracks” within AA degree.
- Revise curriculum to place emphasis on transfer and career prep.
- Work with other arts/media programs to create “Center for Communicative Arts” with jointly-offered courses and shared resources.
- Work with Facilities Master Plan & bond planning team to improve and expand facilities, especially multi-use rehearsal/performance labs.
- Work with local/regional funders to provide low/no cost transportation for K-12 students to attend matinee performances.
- Partner with local/regional community arts organizations to share resources and promote the arts in a more effective way.

Rationale:
Growth in enrollment and the lack of competitive educational providers presents an opportunity for SCCD to continue to meet the needs of students and the community as well as potential program expansion. This program provides natural opportunities to partner with elementary, middle and high school students to develop skills in theatre arts, and potentially pursue additional training at SCCD. The program also provides important outreach and marketing opportunities through community engagement as audience members and students.
**Program:** Biology

**Strategies:**
- Continue to support educational needs of related programs like allied health
- Continue to provide online courses, and expand offerings (including online labs)
- Expand the number of sections of impacted courses to meet demand as appropriate based on expansion of facilities
- Expand offerings on the Vacaville and Vallejo campuses
- Continue to update laboratory equipment and techniques to reflect new knowledge and developments in this rapidly progressing field
- Create safer working environment by improving ventilation in laboratories and prep areas
- New laboratories must be added: (1) to meet student demand; (2) to provide a more safe environment for students, staff, and faculty; and (3) to upgrade equipment/facilities to meet technological and academic changes occurring in biology in the 21st century.
- Install new Audio visual teaching equipment in the anatomy lab in order to teach cadaver anatomy to 30 students.

**Rationale:**
The program will continue to support the general education program as well as prepare students for degree completion and transfer. Increases in the need for general education courses, overall growth in enrollment and FTES, decrease of lower division resources and cut-backs at 4 year institutions, and educational needs in related programs suggest the potential for dramatic program expansion. If expansion is to occur in the biology program, new facilities (lecture and laboratory space) must be built, especially for pre-allied health courses. In addition, the program will expand, albeit more slowly, non-majors and majors biology classes in support of the general education plan of the college. To the extent possible this increase in offerings will allow for the development of more specialty courses.
**Program Name:** Biotechnology

**Strategies:**
- Expand course offerings to meet industry trends and needs (training for maintenance workers, stem cells, biofuel production, synthetic life, etc.)
- Examine the demand for workers and the potential for developing course offerings in imaging (electron microscopy, atomic force microscopy)
- Diversify course delivery modes (online courses, short-term specialty courses, accelerated courses or accelerated program)
- Introduce a Contract Research Organization into the program – this generates in-house internships and adds an entrepreneurship training component to the biotech program
- Add a basic skills introductory component to the program (modeled on the highly successful Bridge to Biotechnology)
- Continue and expand workforce training partnerships with local high schools
- Increase recruitment strategies for discharged veterans
- Increase recruitment of disenfranchised populations using a program like CCSF’s Bridge to Biotechnology
- Outreach to students from fields with comparable prerequisite requirements like nursing or water/wastewater
- Develop new instruction tools like computer simulations
- Prepare for a dramatic expansion of the program by planning for additional facilities like the planned biomanufacturing training facility on the Vacaville campus
- Increase the web presence of the program
- Explore founding a company incubator that could use biotechnology program equipment and facilities, generate some revenue, and use students as interns

**Rationale:**
General growth in enrollment and FTES, low competition from other educational providers, and projected industry growth in the county and greater Bay Area and Sacramento regions suggest the potential for program expansion. Providing a short-term program component to "fast track" students who have a degree could increase interest in the program and respond to the need for trained workers. The delivery of short courses could be designed to meet the particular needs of job seekers. Expansion in emerging areas like synthetic biology, biofuels, stem cell science, and imaging (used in nanotechnology) would lead to career possibilities for program graduates. A dedicated training facility on the Vacaville campus would increase the capacity for training students and would dramatically increase the potential to strengthen the partnership with the nearby biotech companies Genentech and Novartis. The introduction of a Bridge to Biotech (basic skills) program would expand the outreach of the program to economically disadvantaged populations within our county. The strategy of providing in-house internships and entrepreneurial training using a Contract Research Organization has been used successfully in other parts of the country and would increase the workforce readiness of our students.
Program: Chemistry

Strategies:

- Increase lab and classroom space for chemistry growth
- Acquire funding for purchasing instruments to support the Inorganic and Organic Chemistry programs; ex., IR, GC, HPLC, NMR
- Provide funding and technical support for maintenance of all instruments
- Increase lab space to accommodate a new instrument room for new equipment
- Provide general education chemistry course with a lab with Math 330 as prerequisite
- Offer more courses online as hybrid courses
- Develop science preparatory course (Basic Skills for science)
- Hire one or more full time faculty
- Additional lecture classrooms and laboratories are needed so that it no longer will be necessary to run classes late in the evening.
- Hire a Chemical Hygiene officer.
- Provide regular training in Chemical safety Protocols, proper use of equipment and waste management for all technical staff members, including part-time and student help.
- Hire a part-time (20 hours minimum) assistant to help the chemistry lab technician.
- Investigate the need for a Chemistry Technician program.
- Offer open and reliable access to technology such as computers including all the Chemistry software available outside the Chemistry lab.
- Add a GE Liberal Arts Chemistry course for non-majors.

Rationale:
The Chemistry program will continue to be foundational for other programs as well as support the general education program. Growth in programs that rely on chemistry courses, such as Biology, Engineering, Computer Science, Physics, Nursing, Biotechnology, Pre-Med, Pre-Pharmacy, Pre-Dental, Pre-Veterinary Science, will need to be monitored to ensure that the program can accommodate future demand.
Program: Horticulture & Plant Science

Strategies:

- Continue with curriculum updates and develop curriculum geared toward sustainable agriculture
- Assess potential to develop joint urban wildland program with the Fire Technology program
- Develop distance education courses for theory based courses
- Support increased transfer to 4-year programs
- Develop marketing strategy for current and potential students
- Hire two full-time instructors: one for Adaptive Horticulture and one for Horticulture Science.
- Increase the number of aides for Adaptive Horticulture as student needs are greater than can be met by one instructor. Members of the Horticulture Club have been volunteering as aides.
- Increase funding for remodeling/updating facilities, including construction of a botanical garden and event/museum facility.
- Expand the Adaptive gardens and community gardens
- Create a small Farmer’s Market to distribute produce
- Incorporate sustainable practices (going “green”) into the program and coordinate such efforts with local businesses
- Develop “Gardening Day” at SCC.

Rationale:
Declining trends in FTES and enrollment and low projected job growth suggest the need to shift the focus of the program and increasing marketing efforts. There is only one competitive educational providers, which could offer the potential to develop a strong program in a niche market. Focusing on a marketing strategy, increasing the availability of online courses, developing a joint program in urban wildland fire protection, and focuses on preparing students for transfer to 4-year colleges could all support revitalization of the program and increase enrollment.
Program: Mathematics

Strategies:
- Provide fundamental and advanced course offerings
- Explore combination of basis skills and learning studies classes
- Continue to offer and expand online courses
- Update technology in classrooms
- Provide larger classrooms for better learning and ability to accommodate needs of more students.
- Expand the MAC and provide more computers to accommodate the increased use of online Math activities (MyMathLab, CourseCompass, Maple…)
- Hire more full-time faculty, including instructors with experience and interest in Basic Skills:
- Increase support for basic skills by adding supplemental instructors, imbedding tutors, integrating a first-year experience component.

Rationale:
The program will continue to offer courses that support the general education program and the educational needs of almost every SCC program. It is important that the program continue to meet the needs of all students from basic skills to transfer level. Overall increases in enrollment and FTES reflect the potential for continued program expansion with corresponding need for more classrooms and technology resources. Demand for qualified adjuncts for the courses offered in math is outstripping current availability requiring hiring of additional full-time faculty or increased incentives in the form of higher salaries and or benefits for adjuncts.

Program Name: Human Services

Strategies:
- Hire a full-time HS Instructor
- Consolidate program into one division
- Offer smaller courses for more student interaction and support
- Partner with 4-year college to provide upper-division courses
- Continue partnerships with local agencies
- Develop more specialized course offering

Rationale:
Continued growth in the county population is estimated to require additional employees trained in human/social services. Expansion of course offerings, training on current initiatives and practice trends, partnerships with local human services agencies, and offering specialized course topics could provide an opportunity to increase enrollment and FTES as well as potentially train current workers.
Program: Physical Science

Strategies:
- Provide additional courses directed to introductory science and liberal arts students
- Continue to provide courses to support other District programs

Rationale:
This program will continue to support the general education program. Overall increases in SCCD enrollment as well as enrollment in related programs is anticipated to support program expansion.

Program: Astronomy

Strategies:
- Develop Cosmology course
- Continue developing online sky-observing websites
- Work toward the approval for construction of a planetarium
- Construct entirely new Power Point presentations for Astronomy 40
- Hire a new full-time instructor for Astronomy
- Construct a laboratory with space dedicated to Astronomy

Rationale:
High growth in enrollment and FTES, and the lack of competitive educational providers suggests the potential to expand course offerings. The program will continue to support students who are preparing to transfer to a 4-year college.

Program: Anthropology

Strategies:
- Explore potential to provide hybrid and online courses
- Expand curriculum (develop archeology course, comparative religion, pre-Columbian cultures)
- Create laboratory course
- Hire a new full-time instructor for Anthropology.

Rationale:
The program will continue to support the general education program. General increases in enrollment and FTES as well as low competition from other educational providers suggest the potential for program expansion. Continued increases in enrollment could be supported through the development of archeology, comparative religion, or pre-Columbian cultures courses.
Program: Engineering

Strategies:
- Continue to provide all courses needed for transfer to CSU and UC programs
- Promote the completion of lower division transfer courses at the District
- Continue to provide hands-on learning environment (i.e., lab component of ENGR 17 and ENGR 45)
- All three transferable engineering classes must be offered once per year in order to maintain program viability

Rationale:
The program will continue to prepare students for transfer to 4-year colleges, and to support the national mandate for STEM education. Enrollment and FTES could potentially increase through promoting more of our students to complete all of their lower division engineering courses at SCC before transferring.

Program: Geology

Strategies:
- Incorporate new technology into curriculum (GIS, GPS, Google Earth, etc.)
- Coordinate courses with Geography/GIS program
- Develop additional laboratory field study opportunities
- Provide students with opportunities for advanced learning/study
- Teach GEOL 005 California Geology on a yearly basis
- Improve laboratory space, including the prep and storage area

Rationale:
High growth in enrollment and FTES, growing interests in natural and man-made systems, and the possible development of a GIS degree and program suggest the potential for program expansion.

Program: Geography

Strategies:
- Develop GIS certificate program
- Expand courses offerings in Geography (GIS)
- Work with related programs to develop curriculum and meet certificate requirements
- Hire Full-time Geography/GIS instructor
- Improve laboratory space, including the prep and storage area

Rationale:
High growth in enrollment and FTES suggests the potential for program expansion. The development of a formal GIS certification or degree program could meet the projected growth in the GIS industry and support continued growth in enrollment and FTES.
**Program**: Physics

**Strategies**:
- Continue to provide all courses needed for transfer to CSU and UC programs
- Promote the completion of lower division transfer courses at SCCD
- Continue to provide hands-on learning environment (i.e., lab component of PHYS 2, PHYS 4, PHYS 6, PHYS 7, PHYS 8; PHYS 8 (modern physics) needs new lab equipment
- Improve and update laboratory space, including the prep and storage area
- Update laboratory equipment

**Rationale**:
Moderate increases in enrollment and FTES as well as low competition from other educational providers suggest the potential for program expansion. Offerings could continue to increase enrollment and FTES through promoting more of our students to complete all of their lower division physics courses at SCCD before transferring. The program will continue to support the national mandate for STEM education.

**Program Name**: Psychology

**Strategies**:
- Expand course offerings including on-line and learning communities courses
- Increase use of technology in course delivery and assessment
- Articulate courses with 4-year colleges and universities
- Develop program within Psychology department to address basic skills needs

**Rationale**:
The program will continue to prepare students for transfer and degree completion. Program expansion and continued enrollment and FTES growth could be supported through articulation of courses with local 4-year colleges and universities. Expanding course offerings (including distance learning/learning communities) will better prepare students for transfer and provide more options for students. Increasing the use of technology in course delivery and assessment will engage students with tools that they are familiar with and motivated to use. Developing a cohort based program to support psychology majors as they enter SCC may help improve retention and success rates.

**Program**: Social Sciences; Sociology

**Growth Trend**: Sufficient increase in all courses offered.

**Strategies**:
- Add addition FULL TIME Sociology instructors to the department
- Diversify course offering and assess demand for current courses
- Develop partnerships to provide hands-on learning experiences
- Articulate courses with 4-year colleges and universities
- Develop program within Sociology department to address basic skills needs

**Rationale**:
The program will continue to be an important part of the general education curriculum as well as support educational needs for related programs. Faculty and program expansion along with, continued increasing enrollment and FTES growth could be supported through articulation of courses with local 4-year colleges and universities.
Program: Water & Wastewater Technology

Strategies:
- Continue to expand course offerings per year
- Integrate industry standards into program
- Develop marketing strategy for current and potential students as well as local industry/employment groups
- Assess the potential to develop a "fast-track" program (two years or three semesters)
- Recruit industry Advisory Group for curriculum and equipment review
- Secure supply budget for program expansion
- Work with related programs to ensure students have needed math and science skills
- Create new courses to address changing trends in the industry

Rationale:
Recent increases in faculty and expanded course offerings will likely increase FTES and enrollment, which have been declining over the past five academic years. Retirement of many current employees as well as overall population growth will likely increase the need for trained professionals. Developing a marketing strategy for the program will support increases in student enrollment. Expanded or enhanced partnerships with treatment plants could help students connect to employment options and fill vacant positions.
Program: Counseling; Learning Skills

Strategies:

Goal 1: Quality Teaching and Learning: Improve student success while maintaining academic quality

- Enhance attainment of educational goals by students
- Develop new and expand existing curricular offerings
- Validation and improvement of student learning
- Improve student success while maintaining academic quality

Goal 2: Student Access: Provide a college environment that attracts and supports students from our diverse community to increase enrollment and success via access and retention

- The number of students served
- Access and success of under-served populations
- Participation rate from feeder schools
- Student retention and persistence
- Provide a college environment that attracts and supports students from our diverse community to increase enrollment and success via access and retention

Goal 3: Institutional Diversity: Foster a college environment and strong connection to the community that will attract and support a diverse and excellent faculty, staff and student body.

- Diversity profile of college workforce and student body
- Sensitivity to and appreciation of diversity
- Foster a college environment and strong connection to the community that will attract and support a diverse and excellent faculty, staff and student body

Rationale:
Providing counseling services to students is key to supporting student access and success, degree and certificate completion, and transfer preparation. Lack of student preparation for college level courses, projected demographic shifts in the county and student population, and a commitment to supporting students in the pursuit of their educational goals all require a strong and comprehensive counseling program, which includes expanded access to online and face to face services.
Chapter 7: Goals and Strategies

The planning framework outlined in Chapter 2 of this document provides the overarching guidance for all SCCD plans and actions. This chapter describes ten goals for the Education Master Plan. Each of these EMP goals is informed by the four District Strategic Plan goals, with some more directly aligned and others drawing from multiple goals. For each goal listed, a series of key strategies has been identified to direct action as the plan moves forward. These EMP goals and strategies represent the consolidation of a broad range of faculty, staff and community input along with the understanding of the broader context within which SCCD operates.

Figure 7-1 EMP Framework

A. Develop workforce-ready career/technical graduates

A.1. Evaluate and strengthen existing workforce programs (including all career-technical, business, nursing and early childhood development) to foster work-force ready and entrepreneurial graduates, focusing on the service area and regional clusters, industries and occupations that exhibit strong potential.

A.2. Establish active curriculum advisory committees aligned with SCCD targeted industry and occupational clusters.
A.3. Integrate contextualized developmental education and soft skills into CTE curriculum/programs to ensure student success and “career readiness”.

A.4. Work with service area high schools to coordinate CTE standards and programs where feasible to provide clear pathways for student advancement.

A.5. Recruit and support highly skilled teachers for CTE education based on program and workforce development priorities.

A.6. Promote programs and partnerships with business, industry and government agencies that build CTE capacity and improve CTE delivery.

A.7. Develop systematic mechanism(s) to track student employment and success of graduates.

A.8. Develop Career ESL programs focused on workplace technical terms and processes.

A.9. Establish Associate of Science Transfer (AS-T) degree programs aligned with transfer model curriculum, to assist and encourage CTE students to pursue baccalaureate degrees, particularly where continuing education is most likely to advance individual careers and strengthen the regional workforce.

A.10. Incorporate relevant national certifications into curriculum to ensure employability of career technical graduates.

B. **Improve basic skills of all students**

B.1. Establish clearly specified, outcome-oriented goals and objectives for developmental courses and programs.

B.2. Enhance language, math and communication skills by integrating basic skills across programs and curriculum.

B.3. Increase basic skills instruction/class availability through innovative learning modalities such as fast track and intensive courses. *Examples that are known to show promise include the use of learning communities; modularized instruction; intensive instruction; supplemental instruction; contextualized learning; and team teaching*

B.4. Refine assessment and placement practices and tools to target basic skills interventions that will better meet individual needs and enable students to more effectively move to transfer and degree/certificate level courses. *The Student Success Task Force recommends balancing use of diagnostic results with*
incoming student G.P.A. and other available information to determine student placement.

B.5. Implement “First Year Experience” program to channel students through skill improvement and services for all need levels.

B.6. Apply culturally responsive teaching theory and practices to all aspects of basic skills instructional programs and services.

B.7. Actively recruit and provide professional development for existing faculty that value and excel in teaching basic skills.

B.8. Improve coordination of K-12 and SCCD basic skills programs.

B.9. Collect data/advocate for a system-wide approach to collect data about English learners and use data effectively to strengthen ESL programs and pedagogy.

B.10. Provide ESL training and resources for all English language faculty.

B.11. Institute systematic means to share and adopt best practices from both internal and external sources.

C. Align program offerings for transfer achievement

C.1. Ensure adequate capacity in core courses to support efficient progress through transfer series.

C.2. Coordinate with high schools to integrate development of college and career readiness skills into high school curriculum.

C.3. Expand on coordinated curriculum with university programs and developing/implementing innovative transfer routes (such as the Transfer Model Curriculum).

C.4. Encourage transfer students to choose a major area of study early, require a declaration by the third term and facilitate the most efficient and effective path to meet requirements.

C.5. Increase counseling and mentoring at all stages (orientation to graduation) to increase student awareness about transfer opportunities and support students as they work towards transfer.

C.6. Communicate information more effectively to students related to the various transfer paths and opportunities (i.e. TMC, TAG, IGETC).
C.7. Make transfer related, user-friendly resources (online and other) readily available to students of all campus locations.

C.8. Create clear efficient learning and transfer pathways specific to SCCD centers.

D. Reduce gaps in achievement in all programs

D.1. Report progress on closing identified achievement gaps by disaggregating success, retention and other critical metrics by demographics such as race/ethnicity and gender.

D.2. Ensure that all learning modalities and program offerings are culturally appropriate and relevant.

Adapt SCCD curriculum to increase relevance to current achievement gap demographics and address the diversity of needs within these groups. For example addressing the different needs of subgroups of English learners including new immigrants, the 1.5 generation (those who speak English but have difficulty reading and writing) and 2nd and 3rd generations who will have different cultural and educational requirements.

D.3. Hire staff and faculty that reflect student demographics.

D.4. Create staff development opportunities that are flexible, varied and responsive to diverse student populations and the developmental needs of individual faculty.

D.5. Encourage all students to declare a program of study upon admission and require declaration by the end of their third term.

D.6. Assess the benefits of English 350, 355 and 370 to identify their impact on student motivation and degree/certificate completion and transfer rates.

D.7. Coordinate with the K-12 education system to align high school curriculum to SCCD’s curriculum, streamline assessment and improve matriculation.

D.8. Identify financial aid opportunities that apply specifically to identified “gap” populations and relay this information to incoming and prospective students.
E. **Strengthen program development through research and assessment.**

   E.1. Strengthen program viability across all offerings and revise policy for program discontinuance.

   E.2. Develop consistent standards for assessment of program outcomes.

   E.3. Link resource allocation to solutions that address SCCD priorities and goals.

   E.4. Provide recognition and other support for faculty redesign of curriculum and innovations in basic skills instruction.

   E.5. Create model educational pathways for students as a starting point for meeting individual needs.

   E.6. Modify course scheduling policies to better address student needs and to better utilize facilities.

F. **Improve student access to courses and services**

   F.1. Prioritize registration for students who have declared an educational objective or maintain an education plan for transfer (i.e. incentivize individual planning or efforts to follow a structured pathway).

   F.2. Use technology and existing public facilities (schools, libraries) to provide close to home courses, especially in Winters, Dixon and Benicia as demand and resources allow.

   F.3. Expand hours and mix of available student services and resources using technology and supplemental resources as available.

   F.4. Advocate for, coordinate and advertise public transit alternatives.

   F.5. Develop partnership agreements with nearby community colleges and universities to expand offerings, leverage strengths and pool resources.

   F.6. Provide counseling support that is substantial, accessible and integrated with academic courses/programs.

   F.7. Provide information critical to student success and access in easy-to-reach and culturally appropriate forms.

   *For example information on the benefits of full-time enrollment; “I Can Afford College” financial aid awareness program; childcare options; orientation information for students*
and parents could be provided as high school students complete their senior year and in easy to find packages online.

G. Strengthen community partnerships

G.1. Engage in County-wide and local economic development planning and integrate economic development goals into educational program planning.

G.2. Advertise and market SCCD to strengthen local awareness of the college’s locations and offerings.

G.3. Utilize students in academic and co-curricular programs as ambassadors to the community.

G.4. Host conferences and community events on campus and at centers.

G.5. Create a path from high school to college through a middle college program located at multiple SCCD locations.

G.6. Consider additional uses of campus space and facilities to increase use and community awareness of SCCD facilities.

G.7. Explore joint-use agreements and coordinated marketing to make efficient use of facilities and programming resources for sports, recreation, fitness and physical education.

G.8. Expand institutional partnerships with 4-year colleges and universities to create additional 4-year degree options located at SCCD. *Existing partnerships and discussions include Sonoma State, CSU Maritime Academy, Sacramento State College and UC Davis.*

H. Connect students to the campus community

H.1. Create commons or “third places” where students will feel comfortable studying and working in groups and spending non-classroom time on-campus.

H.2. Encourage and create cultural exchange to broaden campus diversity and strengthen cultural competencies and understanding among different campus groups.

H.3. Expand events held on campus to match the variety of student schedules, including mid-day, mid-week events that can capture students between classes.
One idea to explore is a student-focused academic forum for sharing projects, passions and successes.

H.4. Strengthen connections between students using learning communities, peer learning and cohorts.

H.5. Set facility operations policies that support student life, reflect hours and patterns of facilities use and maximize the use of the facilities.

H.6. Develop a faculty that is more culturally and ethnically reflective of the student population.

H.7. Provide resources and services that reflect the educational, financial and social needs of SCCD students.

H.8. Develop better awareness of Solano strengths and a sense of ownership: “this is my Solano.”

I. Build alternative funding and revenue sources

I.1. Create a professional, corporate and government training center to facilitate contract education and innovative for fee education programs.

With no large meeting spaces available in Solano County, a training center represent an opportunity for generating revenue to support other SCCD programs.

I.2. Evaluate ways to leverage land holdings by considering land development opportunities and partnerships with government and businesses.

I.3. Develop targeted promotions to attract additional international students.

I.4. Establish and deepen partnerships with businesses, other education providers and municipalities to leverage strengths and increase possible funding sources.

I.5. Enhance foundations’ growth and maintenance with additional staffing, resources and promotions.

J. **Optimize existing campus and centers**

J.1. Maximize the use of existing facilities, including scheduling to increase use of campus and centers at off-peak times. Uses could include:

- Program alignment
- Middle College programs
- High demand courses
- Trainings and community events

J.2. Create a physical home for SCCD’s basic skills and student support services by concentrating resources around an Academic Success Center that builds on the concept of a library to include a wide range of learning resources and services.

J.3. Create new or redeveloped spaces to support new funding streams, such as corporate and government training, conference center and business incubator spaces.

J.4. Integrate sustainable design, building and operational policies and practices for facilities and landscapes; use these features as resources for instruction.

J.5. Redevelop existing classrooms to create specialized spaces including:

- Studio education classrooms to support distance learning
- Larger classrooms to accommodate increase section sizes
- Group project spaces
Chapter 8: Implementation Plan

The EMP creates the framework, direction and tools needed to engage in the discussions to shape the future of Solano Community College. This final chapter of the EMP provides guidance for how to use the components of this plan to leverage the knowledge and expertise of SCCD’s faculty and administration to adapt to the changing economic environment. The implementation of this plan depends on effective decision-making by the diverse group of interests across the SCCD community. In uncertain times, these decisions must be made based on the best available information both to have the best chance of success and to defend the resulting decisions. This implementation plan is designed to create a collection of tools, using the collected data, and a process to guide these critical decisions.

Identified Planning Tools

The best tools for guiding complex decisions are those that present the key information in the simplest way possible. The tools created during the Educational Master Plan process collect a wide variety of internal and external data in a summarized form along with the details of where the information was sourced. The Environmental Scan, completed early in this process, brought all of this information together into one reference document. While key points are included in the Planning Environment chapter of this document, additional detail can be useful in many discussions.

The following list includes some of the most useful of these planning tools, identified by the planning team and tested in the program workshop held in May 2012. More detailed source information is provided in the linked bibliography of this document.

Table 8-1: Planning Tools and Information Sources

<table>
<thead>
<tr>
<th>Planning Tool</th>
<th>Information Source</th>
<th>Use and Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison of Degrees and Certificates Offered at Comparable Community Colleges</td>
<td>Course catalog information for the six colleges (Napa Valley, Diablo Valley, Contra Costa, Woodland, American River, Cosumnes River and Sacramento City College)</td>
<td>Provides insights into niche and duplicate programs. Update annually.</td>
</tr>
<tr>
<td>Comparison of Demographics and Success for Comparable Community Colleges</td>
<td>CCCCQ DataMart</td>
<td>Informs SCCD position, effectiveness and benchmarking. Update every 3 to 5 years.</td>
</tr>
<tr>
<td>Demographics, Assessment Results and Graduation Rates for Area High Schools</td>
<td>California Department of Education DataQuest</td>
<td>Increases understanding about potential student population and student needs. Could be updated annually, ok if every other year.</td>
</tr>
<tr>
<td>PLANNING TOOL</td>
<td>INFORMATION SOURCE</td>
<td>USE AND UPDATES</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SCCD Program Data</td>
<td>SCCD Research and Planning</td>
<td>Tracks SCCD effectiveness. Should be updated regularly and shared with faculty and deans in a clear way.</td>
</tr>
<tr>
<td>• Enrollment</td>
<td></td>
<td></td>
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<tr>
<td>• Success and Retention Rates</td>
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<tr>
<td>• Educational Goals</td>
<td></td>
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<tr>
<td>• Transfer Rates</td>
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<tr>
<td>• Degrees and Certificates Awarded</td>
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<tr>
<td>• Contact Hours</td>
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<td>• Fill Rate</td>
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<tr>
<td>• Full Time Equivalent Faculty</td>
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<td></td>
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<td>• Number of Sections</td>
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<td>• Students by geography</td>
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<tr>
<td>• Placement results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional and National Industry and Employment Trends</td>
<td>US Bureau of Labor and Industries, California Employment Development Department, Association of Bay Area Governments, Solano Economic Development Corporation</td>
<td>Provides connection to economic drivers that influences CTE programs. Should be updated every other year.</td>
</tr>
<tr>
<td>Service Area Demographics</td>
<td>US Census Bureau, California Department of Finance, Association of Bay Area Governments, Sacramento Council of Governments</td>
<td>Informs growth projections, demand and potential student needs. Should be updated annually as part of program review process.</td>
</tr>
<tr>
<td>Transfer General Education Requirements</td>
<td>Solano Community College published transfer information</td>
<td>Relates to program series and connections to 4-year transfers. Should be updated annually and provided in a clear format to Deans and Counseling.</td>
</tr>
<tr>
<td>• CSU General Education requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• IGETC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Transfer Model Curriculum Courses</td>
<td></td>
<td></td>
</tr>
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</table>

Individual information sheet presented as part of the program workshop are included with this document as Appendix A. By creating a package of useful and updatable planning tools, SCCD can engage in strategic conversations at all levels backed by solid information that is available to all participants.
**Engaging Faculty**

The faculty at SCCD will be the leaders of change at the program and school level. Therefore, engaging and developing the support of the faculty members will be critical to the success of this plan and the College. A number of principles should guide the engagement of faculty members in program decisions.

- Interdisciplinary: discussions should include faculty from multiple disciplines to identify new solutions and to further a shared awareness of best practices, challenges and objectives.

- Self-Directed: to build ownership over the results of the decision making process the process should be led by the faculty members, using tools refined based on their input.

- Goal Specific: all decisions should be guided by the Education Master Plan goals and the overarching Strategic Plan Mission, Vision and Goals.

This EMP process included the development a discussion tool, called the Program/Discipline Matrix, that combines a limited set of key data points in a worksheet for discussion about prioritizing which program opportunities should be pursued. The Program/Discipline Matrix (page 8-5) includes data and worksheet elements (to be filled in by faculty participants) to facilitate discussion and decisions about program opportunities, demand and timeline.

**Program/Discipline Matrix Data Points**

The following data points are provided for each program/discipline. The program data was supplied by SCCD Research and Planning.

**Faculty Reported Growth Trend 2012:** As a part of the Program Assessment Update form, each program was given the opportunity to comment and make changes to the information included in the 2007 Education Master Plan about program growth trends, strategies and rationale. There were three growth trend categories Strong, Stable and No Growth reported in 2007. The growth trend here is the updated category as provided by faculty on the Program Assessment Update.

**Fall 2011 FTES:** To provide a representation of the size of the program/discipline.

**FTES Change 2008-2011:** Recent trend in program enrollment calculated based on FTES provided by SCCD Research and Planning. At a glance indications ▼ = Declining, ▲ = Increasing □ = Flat (within +/- 1%)

**% FTES Change Fall 2008 – Fall 2011:** Magnitude of change in enrollment, total % change between Fall 2008 and Fall 2011.

**% Number of Sections Change Fall 2008 – Fall 2011:** Change in the total number of sections offered, % change between Fall 2008 and Fall 2011.

**% FTE Faculty Change Fall 2008 – Fall 2011:** Change in the number of full time equivalent faculty members, % change between Fall 2008 and Fall 2011.
Chapter 8: Implementation Plan

Program/Discipline Matrix Worksheet Elements
The following are information points that can only be partially completed by the planning team as they rely on a level of understanding that only the faculty can provide.

Opportunities: In very short form this column includes a summary of the opportunities that have been raised by the environmental scan, the community input and conversations with faculty. This is not intended to be a comprehensive list but to spark discussion and bring forward ideas from the process.

Demand: This column is intentionally left blank to gather input from the participants about the factors that are influencing demand program-by-program.

Categorization: A series of check boxes for a group exercise in sorting programs into categories to clarify the discussion of program emphasis.

- **Essential to Meet Requirements** = This space is to indicate that the program fulfills an essential requirement in support of CTE, Basic Skills and Transfer paths. A limited number of programs have been filled in due to their unique role in basic skills or CSU/IGETC transfer paths.
- **Core to Solano** = To be used to identify programs that make up the unique advantages and values Solano Community College brings to students and the community.
- **Discretionary** = To be used to identify programs that are choices that SCCD makes to offer variety, richness and other opportunities to the community.

Timeline: A series of check boxes for the group discussion around the urgency of action.

- **Immediate Action** = 0-2 years
- **Building** = 3-5 years
- **Future Vision** = 5+ years

Using the Program/Discipline Matrix
The Program/Discipline Matrix should be usable at a variety of levels. The first application during the planning process was a test run at the College level, with the deans of each school sharing their knowledge of opportunities, demand, categorization and timeline. This resulted in a set of potential collaborations between schools to explore new opportunities. At the next level of detail a matrix for the course offerings within each school should be analyzed by an interdisciplinary group of faculty. At this level it should be possible to identify course offerings that are in need of reconsideration, whether that be refreshing the course, developing/expanding it or dropping it from the program. Framing each of these discussions with the current and projected resource levels will help to keep the decisions within the constraints of the current funding reality.
## Chapter 8: Implementation Plan

### Career Technical Education and Business

<table>
<thead>
<tr>
<th>Program/Discipline</th>
<th>Faculty Reported Growth Trend 2012</th>
<th>2011 Fall FTES</th>
<th>FTES Change Fall 2008 - Fall 2011</th>
<th>% FTES Change Fall 2008 - Fall 2011</th>
<th>% No. of Sections Change Fall 2008 - Fall 2011</th>
<th>% FTE Faculty Change Fall 2008 - Fall 2011</th>
<th>Opportunities</th>
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<tbody>
<tr>
<td>Accounting</td>
<td>No Growth</td>
<td>49.1 ▼</td>
<td>-12%</td>
<td>-31%</td>
<td>-37%</td>
<td></td>
<td>• Support business and finance</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Computer-based transfer level courses</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>Strong</td>
<td>108.1 ▼</td>
<td>-9%</td>
<td>-28%</td>
<td>-25%</td>
<td></td>
<td>• Realignment of prison system opens new jobs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Juvenile and adult probation officers needed</td>
</tr>
<tr>
<td>Aeronautics</td>
<td>No Growth</td>
<td>27.3 ▲</td>
<td>36%</td>
<td>-60%</td>
<td>-35%</td>
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<td>• Resurgent interest from students</td>
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<tr>
<td>Automotive Body &amp; Repair; Technology</td>
<td>Strong</td>
<td>22.7 ▲</td>
<td>2%</td>
<td>0%</td>
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<td></td>
<td>• Reinvest to address technology changes</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Restart auto technology focused on alternative fuels</td>
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<td>Banking &amp; Finance</td>
<td>Strong</td>
<td>(1) (1)</td>
<td>(1)</td>
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<td>Stable</td>
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<td>-39%</td>
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<td>• Business and financial operations occupation growth</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Spread business knowledge to other disciplines</td>
</tr>
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<td>Computer &amp; Info Science</td>
<td>No Growth</td>
<td>136.8 ▼</td>
<td>-14%</td>
<td>-33%</td>
<td>-33%</td>
<td></td>
<td>• Integration with engineering, manufacturing</td>
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<td>Cosmetology Science</td>
<td>Strong</td>
<td>77.3 ▼</td>
<td>-23%</td>
<td>-20%</td>
<td>63%</td>
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<td>• Limited competition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Offer program year-round</td>
</tr>
<tr>
<td>Drafting</td>
<td>No Growth</td>
<td>25.7 ▼</td>
<td>-4%</td>
<td>-22%</td>
<td>-23%</td>
<td></td>
<td>• Support replacement of trades employees</td>
</tr>
<tr>
<td>Economics</td>
<td>N/A</td>
<td>36.6 ▼</td>
<td>-18%</td>
<td>-23%</td>
<td>-23%</td>
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<td>• Business and financial operations occupation growth</td>
</tr>
<tr>
<td>Electronics Technology</td>
<td>No Growth</td>
<td>7.8 ▼</td>
<td>-39%</td>
<td>-33%</td>
<td>-42%</td>
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<td>• Support mechatronics and auto technology</td>
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<td>Emergency Medical Technician</td>
<td>Strong</td>
<td>0.7 ▼</td>
<td>-97%</td>
<td>-14%</td>
<td>-16%</td>
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<td>Fire Technology</td>
<td>Strong</td>
<td>18.5 ▼</td>
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<td>-11%</td>
<td>-6%</td>
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<td>• Potential to host fire academy</td>
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<td>Industrial Education, Industrial Management, Maintenance Technician/Mechatronics</td>
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<td>11 ▼</td>
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<td>Management</td>
<td>No Growth</td>
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<td>-10%</td>
<td>-60%</td>
<td>-33%</td>
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<td>• Business and financial operations occupation growth</td>
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<td>Marketing</td>
<td>Strong</td>
<td>5.0 (2)</td>
<td>(2)</td>
<td>(2) (2)</td>
<td>(2)</td>
<td></td>
<td>• Skills gap in sales representatives</td>
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<table>
<thead>
<tr>
<th>Categorization</th>
<th>Essential to Meet Requirements</th>
<th>Core to Solano</th>
<th>Discretionary</th>
<th>Immediate Action</th>
<th>Building</th>
<th>Future Vision</th>
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<td>Accounting</td>
<td>No Growth</td>
<td>Strong</td>
<td>▼</td>
<td>-31%</td>
<td>-37%</td>
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<td>Administration of Justice</td>
<td>Strong</td>
<td>108.1 ▼</td>
<td>-28%</td>
<td>-25%</td>
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<td>• Realignment of prison system opens new jobs</td>
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<tr>
<td>Aeronautics</td>
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<td>27.3 ▲</td>
<td>36%</td>
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<tr>
<td>Automotive Body &amp; Repair; Technology</td>
<td>Strong</td>
<td>22.7 ▲</td>
<td>2%</td>
<td>0%</td>
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<tr>
<td>Banking &amp; Finance</td>
<td>Strong</td>
<td>(1) (1)</td>
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<tr>
<td>Business</td>
<td>Stable</td>
<td>59.3 ▼</td>
<td>-39%</td>
<td>-33%</td>
<td></td>
<td>• Business and financial operations occupation growth</td>
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<tr>
<td>Computer &amp; Info Science</td>
<td>No Growth</td>
<td>136.8 ▼</td>
<td>-33%</td>
<td>-33%</td>
<td></td>
<td>• Integration with engineering, manufacturing</td>
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<td>Cosmetology Science</td>
<td>Strong</td>
<td>77.3 ▼</td>
<td>-20%</td>
<td>63%</td>
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<td>• Limited competition</td>
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<td>Drafting</td>
<td>No Growth</td>
<td>25.7 ▼</td>
<td>-22%</td>
<td>-23%</td>
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<td>• Support replacement of trades employees</td>
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<td>Economics</td>
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<td>36.6 ▼</td>
<td>-23%</td>
<td>-23%</td>
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<td>• Business and financial operations occupation growth</td>
</tr>
<tr>
<td>Electronics Technology</td>
<td>No Growth</td>
<td>7.8 ▼</td>
<td>-33%</td>
<td>-42%</td>
<td></td>
<td>• Support mechatronics and auto technology</td>
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<tr>
<td>Emergency Medical Technician</td>
<td>Strong</td>
<td>0.7 ▼</td>
<td>-14%</td>
<td>-16%</td>
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<td>• Connection to fire technology, EMT is a requirement to be a firefighter</td>
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<tr>
<td>Fire Technology</td>
<td>Strong</td>
<td>18.5 ▼</td>
<td>-11%</td>
<td>-6%</td>
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<td>• Potential to host fire academy</td>
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<tr>
<td>Industrial Education, Industrial Management, Maintenance Technician/Mechatronics</td>
<td>Strong</td>
<td>11 ▼</td>
<td>-25%</td>
<td>-25%</td>
<td></td>
<td>• Reinvent to address 21st century manufacturing</td>
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<tr>
<td>Management</td>
<td>No Growth</td>
<td>6.6 ▼</td>
<td>-60%</td>
<td>-33%</td>
<td></td>
<td>• Business and financial operations occupation growth</td>
</tr>
<tr>
<td>Marketing</td>
<td>Strong</td>
<td>5.0 (2)</td>
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## Chapter 8: Implementation Plan

### Categorization Timeline

<table>
<thead>
<tr>
<th>Program/Discipline</th>
<th>Faculty Reported Growth Trend 2012</th>
<th>2011 Fall FTES</th>
<th>FTES Change Fall 2008 - Fall 2011</th>
<th>% FTES Change Fall 2008 - Fall 2011</th>
<th>% No. of Sections Change Fall 2008 - Fall 2011</th>
<th>% FTE Faculty Change Fall 2008 - Fall 2011</th>
<th>Opportunities</th>
<th>Demand</th>
<th>Essential to Meet Requirements</th>
<th>Core to Solano</th>
<th>Discretionary</th>
<th>Immediate Action</th>
<th>Building</th>
<th>Future Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing, Registered</td>
<td>Strong</td>
<td>48.4</td>
<td>▼ -51%</td>
<td>-71%</td>
<td>-39%</td>
<td>• Limited by capacity</td>
<td>• Also supports other health care opportunities</td>
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<td>Occupational Education</td>
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<td>▼ -4%</td>
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<tr>
<td>Office Technology</td>
<td>No Growth</td>
<td>11.9</td>
<td>▼ -57%</td>
<td>-70%</td>
<td>49%</td>
<td>• Update for modern medical practices</td>
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<td>Real Estate</td>
<td>Strong</td>
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<td>-88%</td>
<td>• Create alternatives to regularly scheduled classes to address variable demand with economic cycles</td>
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<td>▲ 3%</td>
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<td>-32%</td>
<td>• Refreshing and replenishing trades people</td>
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<td>Counseling and Special Services</td>
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<td>Counseling</td>
<td>Strong</td>
<td>82</td>
<td>▲ 23%</td>
<td>-</td>
<td>-</td>
<td>• Create more guided paths to student goals</td>
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<td>Human Performance and Development</td>
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<td>• Anticipated demand surge as economy recovers</td>
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<td>• Building connection to campus community</td>
<td>• Connect dance PE courses to performing arts</td>
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<td>Program/Discipline</td>
<td>Faculty Growth Trend 2012</td>
<td>2011 Fall FTES</td>
<td>FTES Change Fall 2008-Fall 2011</td>
<td>% FTES Change Fall 2008-Fall 2011</td>
<td>% No. of Sections Change Fall 2008-Fall 2011</td>
<td>% FTE Faculty Change Fall 2008-Fall 2011</td>
<td>Opportunities</td>
<td>Categorization</td>
<td>Timeline</td>
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<td>-63%</td>
<td>+ Community connections, partnerships</td>
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<tr>
<td>Program/Discipline</td>
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<td>% FTE Faculty Change Fall 2008-Fall 2011</td>
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<td>Demand</td>
<td>Categorization</td>
<td>Timeline</td>
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<td>Behavioral Sciences: Social Sciences, Sociology, Psychology, Anthropology</td>
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<td>Biotechnology</td>
<td>Strong</td>
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<td>-54%</td>
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<td>-53%</td>
<td>• Growth occupation locally and nationally</td>
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<td>Discretionary</td>
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<td>• Supporting transfer paths</td>
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<td>Immediate Action:</td>
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<td>4.7</td>
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<td>Building</td>
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<tr>
<td>Horticulture &amp; Plant Science</td>
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<td>• Build connection to food systems and agriculture</td>
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<td>Future Vision</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>Stable</td>
<td>28.5</td>
<td>▲</td>
<td>14%</td>
<td>0%</td>
<td>-7%</td>
<td>• Supporting transfer paths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water &amp; Wastewater Technology</td>
<td>Strong</td>
<td>11.8</td>
<td>▲</td>
<td>6%</td>
<td>11%</td>
<td>11%</td>
<td>• Water management is a huge regional and national issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ongoing Process

This is meant to be a tool that becomes part of all long-term discussions about programs and SCCD offerings. The discussion of program opportunities, course offering focus and the timeline for development can precede or become a part of the program review process. Planning tool information will need to be updated on a regular basis. Some of this information collected and reported by Research and Planning, is updated regularly as a matter of course. The contextual information about service area demographics, competitive environment and regional economic activities will need to be scheduled for review and updating at least every five years.

First Year Action Plan

The following first year action plan is recommended to set this plan into motion. Each of the action items is matched to the relevant EMP Strategies. At the end of the next academic year (in May 2013) SCCD should reconvene the deans of each school and center along with counseling and senior administration to identify the subsequent steps in implementation based on the EMP framework and the current financial realities.

Table 8-2: First Year Action Plan

<table>
<thead>
<tr>
<th>ACTION ITEM</th>
<th>RELEVANT EMP STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create Course-level program/discipline matrix and evaluate offerings with</td>
<td>A.1, B.2, B.3, C.1, C.3, C.8, E.1</td>
</tr>
<tr>
<td>interdisciplinary groups from each of the four schools. Use outcomes to</td>
<td></td>
</tr>
<tr>
<td>focus SCCD offerings and create paths to student success.</td>
<td></td>
</tr>
<tr>
<td>2. Refine facility implications of the EMP and integrate them into the</td>
<td>J.1, J.2, J.3, J.5</td>
</tr>
<tr>
<td>Facilities Master Plan (preliminary implications provided in Appendix B).</td>
<td></td>
</tr>
<tr>
<td>3. Establish regular reporting of key success and retention data</td>
<td>D.1</td>
</tr>
<tr>
<td>disaggregated by identified populations experiencing achievement gaps.</td>
<td></td>
</tr>
<tr>
<td>4. Enhance communication of opportunities, programs and successes to</td>
<td>C.6, C.7, D.8, F.7, G.2, H.7, I.6</td>
</tr>
<tr>
<td>students and the broader community through improved website and targeted</td>
<td></td>
</tr>
<tr>
<td>printed materials.</td>
<td></td>
</tr>
<tr>
<td>5. Identify existing models and opportunities to enhance culturally</td>
<td>A.3, B2, B6</td>
</tr>
<tr>
<td>responsive and contextualized basic skills courses.</td>
<td></td>
</tr>
</tbody>
</table>
Appendices

REVISED DRAFT: MAY 2012
Appendix A: Program Planning Tools

The following is a reference list of program planning tools developed during the Education Master Plan process or available from Research and Planning.

Included in the Environmental Scan (October 2011)

- Service Area and SCCD Demographics
  - Age
  - Gender
  - Race and Ethnicity
  - Educational Attainment
  - Employment and Income

- Area High School Student Data
  - Top Feeder High Schools
  - Graduation Rates
  - English Learners
  - Free Lunch (Poverty Level)
  - Assessment Results

- SCCD Enrollment Trends
  - Part-time, Full-Time Status
  - Success and Retention Rates
  - Placement Results
  - Educational Goals
  - Degrees and Certificates Awarded
  - Transfer Rates

- Regional Education Options
  - Comparison to six similar regional Community Colleges
  - Demographics
  - Degrees and Certificates offered

- Industry and Employment Trends
  - Growth occupations
  - Hot Jobs (fastest growing sectors paying above average wages)
  - Education and Training Requirements
  - Skills Gap (jobs going unfilled due to lack of qualified applicants)

Available from Research and Planning for 2008-current

- Detailed enrollment, student contact hour, retention, and fill rate data summarize by:
  - School
  - Subject
  - TOPS Code
  - Course
Table 2-1: Performance and Demographics for Top 12 Feeder Schools for SCCD
Sorted by % Attending SCCD

<table>
<thead>
<tr>
<th>High School</th>
<th>Enrollment</th>
<th>% Non-White</th>
<th>Graduation Rate</th>
<th>English Learners</th>
<th>% Free Lunch</th>
<th>API Base Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armijo High</td>
<td>2,357</td>
<td>85.8%</td>
<td>79.1%</td>
<td>12.0%</td>
<td>32.9%</td>
<td>697</td>
</tr>
<tr>
<td>Fairfield High</td>
<td>1,710</td>
<td>90.6%</td>
<td>83.0%</td>
<td>9.6%</td>
<td>36.6%</td>
<td>671</td>
</tr>
<tr>
<td>Vanden High</td>
<td>1,527</td>
<td>60.1%</td>
<td>98.4%</td>
<td>1.0%</td>
<td>18.8%</td>
<td>795</td>
</tr>
<tr>
<td>Will C. Wood High</td>
<td>1,852</td>
<td>46.0%</td>
<td>84.4%</td>
<td>5.8%</td>
<td>31.2%</td>
<td>710</td>
</tr>
<tr>
<td>Vacaville High</td>
<td>2,142</td>
<td>42.3%</td>
<td>85.3%</td>
<td>7.6%</td>
<td>24.1%</td>
<td>722</td>
</tr>
<tr>
<td>Jesse M. Bethel High</td>
<td>1,494</td>
<td>93.0%</td>
<td>66.0%</td>
<td>6.9%</td>
<td>40.2%</td>
<td>738</td>
</tr>
<tr>
<td>Hogan High</td>
<td>1,361</td>
<td>86.2%</td>
<td>61.6%</td>
<td>11.5%</td>
<td>49.3%</td>
<td>705</td>
</tr>
<tr>
<td>Vallejo High</td>
<td>1,666</td>
<td>89.6%</td>
<td>57.8%</td>
<td>11.5%</td>
<td>55.1%</td>
<td>654</td>
</tr>
<tr>
<td>Benicia</td>
<td>1,671</td>
<td>42.0%</td>
<td>89.4%</td>
<td>1.0%</td>
<td>10.2%</td>
<td>814</td>
</tr>
<tr>
<td>Dixon High</td>
<td>1,249</td>
<td>53.8%</td>
<td>87.1%</td>
<td>11.1%</td>
<td>36.1%</td>
<td>749</td>
</tr>
<tr>
<td>Winters High (Yolo County)</td>
<td>562</td>
<td>57.1%</td>
<td>89.6%</td>
<td>15.7%</td>
<td>44.8%</td>
<td>752</td>
</tr>
<tr>
<td>Angelo Rodriguez</td>
<td>2,297</td>
<td>82.6%</td>
<td>90.7%</td>
<td>4.7%</td>
<td>17.5%</td>
<td>751</td>
</tr>
<tr>
<td>Solano County Totals</td>
<td>65,674</td>
<td>73%</td>
<td>74.0%</td>
<td>14.9%</td>
<td>38.6%</td>
<td>NA</td>
</tr>
<tr>
<td>State Totals</td>
<td>6,190,425</td>
<td>73%</td>
<td>78.6%</td>
<td>23.7%</td>
<td>55.9%</td>
<td>729</td>
</tr>
</tbody>
</table>

Source: California Department of Education. Most current available data used: API Base Rankings are for 2011; enrollment and ethnicity, English Learners, free lunch program statistics are for academic year 2009/10; Graduation rates are 2008/09.

- Many of the top feeder schools are predominately non-white (further ethnic breakdown presented below).
- The portion of the high school student population classified as English learners is lower at all schools than the county or state average.
- The percentage of students receiving free lunch (based on federal low-income measurements) varies greatly among this set of schools, with the lowest being 10.2% (Benecia) and the highest at 55% (Vallejo).
- The portion of students qualifying for the free lunch program has increased at nearly every school relative to trends shown by the 2004-05 data in the prior environmental scan.
- Only one feeder school, Benecia, is above the statewide base academic performance index (API) target of 800. Five are above the current statewide base rank for high schools of 729.
- Nearly all of the top feeder schools have graduation rates above county and state averages, with the exception of Jesse M. Bethel, Hogan and Vallejo high schools.
- The four schools with the highest percentage of graduates attending Solano Community College (Armijo, Fairfield, Vanden and Will C. Wood) fall near the middle of the range for graduation rates and API base scores.
## Table 2-2: Assessment Results Sorted by % Attending SCCD (2009-10)

<table>
<thead>
<tr>
<th>High School</th>
<th>Language Arts % Basic and Above</th>
<th>Math % Basic and Above</th>
<th>Science % Basic and Above</th>
<th>History Social Science % Basic and Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armijo High</td>
<td>71%</td>
<td>42%</td>
<td>66%</td>
<td>67%</td>
</tr>
<tr>
<td>Fairfield High</td>
<td>68%</td>
<td>42%</td>
<td>61%</td>
<td>56%</td>
</tr>
<tr>
<td>Vanden High</td>
<td>81%</td>
<td>66%</td>
<td>87%</td>
<td>79%</td>
</tr>
<tr>
<td>Will C. Wood High</td>
<td>72%</td>
<td>61%</td>
<td>72%</td>
<td>54%</td>
</tr>
<tr>
<td>Vacaville High</td>
<td>74%</td>
<td>41%</td>
<td>72%</td>
<td>70%</td>
</tr>
<tr>
<td>Jesse M. Bethel High</td>
<td>75%</td>
<td>60%</td>
<td>70%</td>
<td>64%</td>
</tr>
<tr>
<td>Hogan High</td>
<td>69%</td>
<td>43%</td>
<td>74%</td>
<td>60%</td>
</tr>
<tr>
<td>Vallejo High</td>
<td>64%</td>
<td>30%</td>
<td>62%</td>
<td>47%</td>
</tr>
<tr>
<td>Benicia High</td>
<td>89%</td>
<td>79%</td>
<td>86%</td>
<td>83%</td>
</tr>
<tr>
<td>Dixon High</td>
<td>80%</td>
<td>51%</td>
<td>71%</td>
<td>65%</td>
</tr>
<tr>
<td>Winters High (Yolo County)</td>
<td>76%</td>
<td>45%</td>
<td>83%</td>
<td>79%</td>
</tr>
<tr>
<td>Angelo Rodriguez</td>
<td>79%</td>
<td>44%</td>
<td>77%</td>
<td>73%</td>
</tr>
<tr>
<td>Solano County Total</td>
<td>79%</td>
<td>70%</td>
<td>73%</td>
<td>68%</td>
</tr>
<tr>
<td>State Total</td>
<td>79%</td>
<td>72%</td>
<td>74%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: California Department of Education.

- Most of the top feeder schools are near or above the Solano County average for reaching the basic language arts, science and history/social science assessment level.
- The percentage of students testing “basic” and above for math is lower than state and Solano County averages. This percentage has declined in the past five years, with the exception of Benicia, and Jesse M. Bethel high schools.
- The notable exception in assessment results is Vallejo High School, which is underperforming compared to the county averages in all areas.
Assessment/Placement Results

All new, non-exempt students enrolling in six or more units of non-exempt courses are expected to participate in the matriculation process prior to registering for classes. This matriculation process includes the College Board Accuplacer assessment to determine incoming student skills in mathematics, English, reading and English as a Second Language skills.

Table 3-2: SCCD Accuplacer Assessment Results (2009-10)

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Transfer Level</th>
<th>Levels below Transfer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>One</td>
</tr>
<tr>
<td>Mathematics</td>
<td>104</td>
<td>3%</td>
<td>594</td>
</tr>
<tr>
<td>English</td>
<td>955</td>
<td>19%</td>
<td>2,542</td>
</tr>
<tr>
<td>Reading</td>
<td>2,604</td>
<td>52%</td>
<td>1,607</td>
</tr>
<tr>
<td>ESL Reading Skills</td>
<td>NA</td>
<td>NA</td>
<td>69</td>
</tr>
<tr>
<td>ESL Language Use</td>
<td>NA</td>
<td>NA</td>
<td>78</td>
</tr>
<tr>
<td>ESL Sentence Meaning</td>
<td>NA</td>
<td>NA</td>
<td>97</td>
</tr>
<tr>
<td>Total</td>
<td>3,667</td>
<td>25%</td>
<td>4,990</td>
</tr>
</tbody>
</table>

Source: Solano College Assessment Program

Table 3-3: SCCD Accuplacer Assessment Results (2010-11)

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Transfer Level</th>
<th>Levels below Transfer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>One</td>
</tr>
<tr>
<td>Mathematics</td>
<td>101</td>
<td>3%</td>
<td>557</td>
</tr>
<tr>
<td>English</td>
<td>480</td>
<td>18%</td>
<td>2,364</td>
</tr>
<tr>
<td>Reading</td>
<td>2,479</td>
<td>52%</td>
<td>1,536</td>
</tr>
<tr>
<td>ESL Reading Skills</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
</tr>
<tr>
<td>ESL Language Use</td>
<td>NA</td>
<td>NA</td>
<td>87</td>
</tr>
<tr>
<td>ESL Sentence Meaning</td>
<td>NA</td>
<td>NA</td>
<td>102</td>
</tr>
<tr>
<td>Total</td>
<td>3,420</td>
<td>25%</td>
<td>4,731</td>
</tr>
</tbody>
</table>

Source: Solano College Assessment Program

- In 2009-10 and 2010-11, new student reading skills have been the strongest of the three basic skills tested.
- Both 2009-10 and 2010-11 results reflect the low performance in feeder high schools for math, with an increasing number of students placing below the level necessary to transfer to a four-year program.
- These results show consistency over the two years in all areas. Matriculating students are arriving with a similar distribution of strengths and challenges.
Economic Opportunities

County/Regional: Economic Clusters Targeted

- Life Sciences
- Food Chain Industry
- Energy


County: Occupations Projected to Grow the Most through 2018

- Health care Support
- Health care Practitioners and Technical Occupations
- Personal Care and Service
- Computer and Mathematical Occupations
- Architecture and Engineering
- Business and Financial Operations
- Life, Physical and Social Science
- Food Preparation and Serving
- Arts, Design, Entertainment, Sports and Media
- Community and Social Services


National: Skills Gap, Jobs that are difficult for employers to fill

- Engineers
- Nurses
- Skilled Trades (e.g. electricians, bricklayers, carpenters, plumbers, etc.)
- Teachers
- Sales Representatives
- Technicians
- Drivers
- IT Staff
- Laborers
- Machinists/Machine Operators

*Manpower, Inc., 2009 Talent Shortage Survey Results*
Economic Opportunities

Nationally: Hot Jobs in Health Requiring Community College Level Education

- 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

## Regional Program Comparison

<table>
<thead>
<tr>
<th>Solano Community College Degrees and Certificates</th>
<th>Number of SCCD Degrees or Certificates</th>
<th>Degree or Certificate Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>1 1 1</td>
<td></td>
</tr>
<tr>
<td>Aeronautics</td>
<td>4 4</td>
<td></td>
</tr>
<tr>
<td>Art and Graphic Design</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>Banking and Finance, Bank Operation</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Biotechnology</td>
<td>1 2</td>
<td></td>
</tr>
<tr>
<td>Business/Management</td>
<td>5 5 1</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Communication Studies</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Computer and Information Science</td>
<td>3 3 7</td>
<td></td>
</tr>
<tr>
<td>Cosmetology</td>
<td>1 1 1</td>
<td></td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>3 3</td>
<td></td>
</tr>
<tr>
<td>Drafting</td>
<td>2 2</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Electronics</td>
<td>1 1 4</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ethnic Studies (Various)</td>
<td>5</td>
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</tr>
<tr>
<td>Film and Television</td>
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<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Technology</td>
<td>1 2 3</td>
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<tr>
<td>Foreign Languages</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Horticulture/Plant Science</td>
<td>1 1 1</td>
<td></td>
</tr>
<tr>
<td>Human Services</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Industrial Education/Management</td>
<td>3 3 1</td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary/University Studies</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>International Relations/Political Science</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Life Management</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>1 1*</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Nursing (Registered)/EMT</td>
<td>1 2</td>
<td></td>
</tr>
<tr>
<td>Office Technology</td>
<td>4 5 3</td>
<td></td>
</tr>
<tr>
<td>Physical Education/Sports Medicine</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Photography</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Sciences (General)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Social Science/Sociology</td>
<td>3*</td>
<td></td>
</tr>
<tr>
<td>Theatre Arts</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Waste and Waste Water Technology</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
<td>Welding</td>
<td>2 1 1</td>
<td></td>
</tr>
</tbody>
</table>

*Includes a Transfer Model Curriculum Degree

Total: 42 49 45 25
## Regional Program Comparison

### Degrees and Certificates not offered at SCCD (not an inclusive list)

<table>
<thead>
<tr>
<th>Degree or Certificate Offered</th>
<th>Napa Valley College</th>
<th>Diablo Valley College</th>
<th>Contra Costa Community College</th>
<th>Woodland Community College</th>
<th>American River College</th>
<th>Cosumnes River College</th>
<th>Sacramento City College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/Agriculture Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental (Assisting, Hygiene, Lab Technology)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Economics [Courses offered at SCCD]</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Energy Systems (Photovoltaic and Solar)</td>
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<td>☐</td>
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<tr>
<td>Engineering [Courses offered at SCCD]</td>
<td>☐</td>
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<tr>
<td>Environmental Studies and Sustainability</td>
<td>☐</td>
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<tr>
<td>Fashion Design</td>
<td>☐</td>
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<tr>
<td>Geographic Information Systems</td>
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<td>☐</td>
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<tr>
<td>Geography [Courses offered at SCCD]</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Home Economics</td>
<td>☐</td>
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<tr>
<td>Hospitality and Tourism Management</td>
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<tr>
<td>Radiological Science</td>
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<tr>
<td>Respiratory Therapy</td>
<td>☐</td>
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<tr>
<td>Special Education Paraprofessional</td>
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<tr>
<td>Viticulture and Winery Technology</td>
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</tr>
</tbody>
</table>

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Appendix A: Program Planning Tools A-8
### Appendix A: Program Planning Tools

#### CSU General Education Course List 2010 - 2011

The CSU GE pattern is a set of courses approved to meet lower division general education requirements at the California State University system. For full certification, a student must complete 39 units and each subject area (A-E) minimum. Partial certification is also available for students missing one or more courses. Students should request certification from the Office of Admissions and Records prior to transfer. Please see a counselor for additional information and guidance.

**Items to Note**

1. For admission purposes, students must complete the "Golden Four" courses (AREA A1, A2, A3, and B4) with a "C" or better.
2. To meet the Solano Community College GE requirement under option C, at least one of the following cross-cultural courses must be included: ART 012, CHIN 011, COLIN 055, ENGL 012, 036, HIST 037, HUMN 003, MUSC 013, PLSC 005, SPCH 012, SOCS 022 or THEA 013.

#### Area A - English Language Communication and Critical Thinking

(Minimum of 9 units)

<table>
<thead>
<tr>
<th>A1 - Oral Communication</th>
<th>C</th>
<th>I/P</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course from other college</td>
<td>Advanced Placement Exam</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A2 - Written Communication</th>
<th>C</th>
<th>I/P</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 001</td>
<td></td>
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<tr>
<td>Course from other college</td>
<td>Advanced Placement Exam</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>A3 - Critical Thinking</th>
<th>C</th>
<th>I/P</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 002, 004</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PHIL 001, 005</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SPCH 006</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Course from other college</td>
<td>Advanced Placement Exam</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Area B - Scientific Inquiry and Quantitative Reasoning

(Minimum of 12 units, 9 at SCC)

Select one physical science and one life science (one lab required) and one mathematics course.

<table>
<thead>
<tr>
<th>B1 - Physical Science</th>
<th>C</th>
<th>I/P</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 010, 030, 040</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 001(L), 002(L), 003(L), 004(L), 010(L), 011(L), 015(L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>METR 010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 002(L), 004(L), 006(L), 007(L), 008(L), 010(L), PHSC 012(L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 030</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>GEG 001</td>
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</tr>
<tr>
<td>Course from other college</td>
<td>Advanced Placement Exam</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>B2 - Life Science</th>
<th>C</th>
<th>I/P</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 001(L), 002(L), 003(L) Pending approval for 2011-12, 004(L), 005(L), 012, 014(L), 015(L), 016, 019(L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course from other college</td>
<td>Advanced Placement Exam</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>B3 - Lab Courses</th>
<th>C</th>
<th>I/P</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 020(L)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 002(L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 012(L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 001(L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>And any course in B1 or B2 with a lab indicated by (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course from other college</td>
<td>Advanced Placement Exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B4 - Mathematics</th>
<th>C</th>
<th>I/P</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 002, 004, 011, 012, 020, 021, 022, 023, 030, 031, 040, 051</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course from other college</td>
<td>Advanced Placement Exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(L) Lab Course  + May be used in only one area  # Meets American Institutions requirement.

**Legend:**

- **C** = Completed
- **I/P** = In Progress
- **P** = Planned
## Appendix A: Program Planning Tools

### Area C - Arts and Humanities

(Minimum of 12 units, 9 at SCC)

Select at least one course in each of the two categories, arts and humanities.

<table>
<thead>
<tr>
<th>C</th>
<th>IP</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C-1 - Arts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 001, 002, 003, 010, 011, 012</td>
<td>PHOT 035</td>
<td></td>
</tr>
<tr>
<td>CINA 010, 011</td>
<td>THEA 001, 002, 005, 006, 010, 011, 013, 048A</td>
<td></td>
</tr>
<tr>
<td>MUSC 005, 007, 008, 013</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Course(s) from other college</strong></td>
<td>Advanced Placement Exam</td>
<td></td>
</tr>
</tbody>
</table>

| **C-2 - Humanities** | | |
| AMST +001#, +002# | GRMN 001, 002, 003, 004, 011, 012, 031, 032, 033, 034 |
| ENGL 006, 007, 012, 013, 014, 016, 018, 021, 023, 024, 025, 030, 031, | HIST +002, +003, +004, +005, +010, +017#, +018# |
| 032, 033, 034, 035, 036, 037, 038 | +028#, +029#, +030, +031, +032, +037# |
| 040, 041, 044, 048, 047, 058 | HUMN 001, 002, 003, 010, 011, 012, 031, 032, 033, 034 |
| FREN 001, 002, 003, 004, 011, 012, 031, 032, 033, 034 | ITAL 031, 032, 033, 034 |
| **Course(s) from other college** | Advanced Placement Exam |

### Area D - Social Sciences

(Minimum of 12 units, 9 at SCC)

Select courses from at least two different course disciplines.

<table>
<thead>
<tr>
<th>C</th>
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<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D-0 - Sociology &amp; Criminology</strong></td>
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<tr>
<td>SOC 001, 002, 023, 040, 045, 075</td>
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<tr>
<td><strong>D-1 - Anthropology &amp; Archaeology</strong></td>
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</tr>
<tr>
<td>ANTH 002, 007</td>
<td>HIST +037#</td>
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</tr>
<tr>
<td><strong>D-2 - Economics</strong></td>
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<tr>
<td>ECON 001, 002, 010</td>
<td>PLSC 019</td>
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<tr>
<td><strong>D-3 - Ethnic Studies</strong></td>
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<tr>
<td>COUN 056</td>
<td>PSYC 010</td>
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<tr>
<td><strong>D-4 - Gender Studies</strong></td>
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<td></td>
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<tr>
<td>HIST +002, +003, +004, +005, +010, +017#, +018#, +028#</td>
<td>PLSC 019</td>
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<tr>
<td>PSYC 024</td>
<td>+029#, +030, +031, +032,</td>
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</tr>
<tr>
<td>SOC 023</td>
<td>+037#</td>
<td></td>
</tr>
<tr>
<td>SOCS 022, 023, 025, 026, 027, 053</td>
<td>GEOG 002, 004</td>
<td></td>
</tr>
<tr>
<td>SPCH 012</td>
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<tr>
<td><strong>D-5 - Geography</strong></td>
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<tr>
<td><strong>D-6 - History</strong></td>
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<tr>
<td><strong>D-7 - Interdisciplinary, Social &amp; Behavioral Sciences</strong></td>
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<td></td>
</tr>
<tr>
<td>AMST +001#, +002#</td>
<td>HIST +002, +003, +004, +005, +010, +017#, +018#</td>
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<tr>
<td>HUVD 038, 039</td>
<td>+028#, +029#, +030, +031, +032, +037#</td>
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<tr>
<td>JOUR 011</td>
<td>HUMN 001, 002, 003, 010, 011, 012, 031, 032, 033, 034</td>
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<tr>
<td>PLSC 048G, PSYC 030</td>
<td>ITAL 031, 032, 033, 034</td>
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<tr>
<td>SOCS 028, 030, 053</td>
<td>LATN 001, 002, 003</td>
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<tr>
<td>SOC 030</td>
<td>PHIL 003, 004, 031, 032</td>
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<tr>
<td>SPCH 012</td>
<td>SPAN 001, 001S, 002, 002S, 003, 004, 011, 012, 025,</td>
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<tr>
<td>TV 050</td>
<td>031, 032, 033, 034, 048A</td>
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<tr>
<td><strong>D-8 - Political Science, Government &amp; Legal Institutions</strong></td>
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<tr>
<td>CJ 001, IR 001</td>
<td>SOCS 030, 053</td>
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<tr>
<td>PLSC 017, 018, 026, 029, 037</td>
<td>SOC 030</td>
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<td><strong>D-9 - Psychology</strong></td>
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<tr>
<td>HUVD 38, 39</td>
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<td></td>
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<tr>
<td>PSYC 001, 002, 004, 006, 006, 010, 024</td>
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<tr>
<td><strong>Course(s) from other college</strong></td>
<td>Advanced Placement Exam</td>
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### Area E - Lifelong Learning and Self-Development

(Minimum 3 units)

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<tbody>
<tr>
<td><strong>BIO 018</strong></td>
<td>HED 002, 003</td>
<td>PSYC 006, 020, 034</td>
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<tr>
<td>BUS 058</td>
<td>HUVD 036, 040, 050, 070</td>
<td>PE 005O&quot;, &quot;008R&quot;, &quot;008G&quot;</td>
</tr>
<tr>
<td>COUN 007, 050, 058, 083, 086</td>
<td>NUTR 010</td>
<td><em>(Limitation on Area Credit)</em></td>
</tr>
<tr>
<td><strong>Course(s) from other college</strong></td>
<td>Advanced Placement Exam</td>
<td></td>
</tr>
</tbody>
</table>

### CSU Graduation Requirement

CSU requires two American Institutions courses for graduation; one must be from Group 1 and one from Group 2. Courses used to meet this requirement may also be used in area C or D.

**American Institutions (Group 1)**
- PLSC 001, 005

**American Institutions (Group 2)**
- AMST 001, 002
- HIST 017, 018, 028, 029, 037

+ May be used in only one area.
# Meets American Institutions requirement.

C = Completed  IP = In Progress  P = Planned
### Intersegmental General Education Transfer Curriculum (IGETC)
**2010 - 2011**

IGETC (Intersegmental General Education Transfer Curriculum) is a pattern of courses that allows community college transfer students to fulfill lower-division general education requirements either at the UC or the CSU system. The IGETC pattern is most useful for students who want to keep their options open before making a final decision about transferring to a particular UC or CSU campus. Completion of IGETC does NOT guarantee admission, nor is it required for admission. IGETC is not appropriate for some majors. Please see a counselor for additional information and guidance.

#### Items to Note
1. All courses used for IGETC must be completed with a "C" grade or better and be IGETC approved at the time the course is completed.
2. To meet the Solano Community College GE requirement under option B, at least one of the following cross-cultural courses must be included: ART 012, CINA 011, ENGL 012, 036, HIST 037, HUMN 003, MUSC 013, PLSC 002, SPCH 012, SOCS 022 or THEA 013.
3. Students must see a counselor to initiate IGETC certification prior to transfer.

#### Area 1 - English Composition
- **CSU** - 3 courses required, one each from Group A, B, and C.
- **UC** - 2 courses required, one each from Group A and B.

**Group A - English Composition** (1 course, 3 semester/4-5 quarter units)
- ENGL 001
- Course from other college
- Advanced Placement Exam

**Group B - Critical Thinking - English Composition** (1 course, 3 semester/4-5 quarter units)
- ENGL 002, 004
- PHIL 005
- Course from other college

**Group C - Oral Communication (CSU Requirement Only)** (1 course, 3 semester/4-5 quarter units)
- SPCH 001*, 002, 006
- Course(s) from other college
- Advanced Placement Exam

#### Area 2 - Mathematical Concepts and Quantitative Reasoning
- 1 course, 3 semester/4-6 quarter units
- MATH 002*, 004*, 011, 012, 020*, 021*, 022*, 023, 030*, 031*, 040
- Course from other college
- Advanced Placement Exam

#### Area 3 - Arts and Humanities
At least 3 courses, with at least one course from the Arts and one course from the Humanities.
- 3 semester/12-16 quarter units

**3A - Arts**
- ART 001, 002, 003, 010, 011, 012
- PHOT 035
- CINA 010, 011
- THEA 006, 010, 011, 013, 048A
- MUSC 005*, 007, 008, 013
- Course(s) from other college
- Advanced Placement Exam

**3B - Humanities**
- AMST +001, +002
- HIST +002, +003, +004
- ENGL 012, 013, 014, 016, 018, 021*
- +023, +024, +025, +030, +032, +033, +034*
- +035, +036, +037, +039, +040
- +041, +044
- PHIL 003, 004, 031, 032
- FREN 002*, 003, 004, 033*, 034*
- SPAN 002*, 003, 004, 025, 033*, 034*, 048A
- GRMN 002*, 003, 004, 011, 033*, 034*
- Course(s) from other college
- Advanced Placement Exam

---

C = Completed  IP = In Progress  P = Planned
### Appendix A: Program Planning Tools

#### Area 4 - Social and Behavioral Sciences

At least 3 courses from at least 2 disciplines or an interdisciplinary sequence.
9 semester/12-15 quarter units

<table>
<thead>
<tr>
<th>4A - Anthropology and Archaeology</th>
<th>4F - HISTORY</th>
<th>4J - Sociology &amp; Criminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 002, 007</td>
<td>HIST +002, +003, +004, +005, +010, +017</td>
<td>SOC 001, 002, 023, +018, +028, +029, +030, +031, +032, +037</td>
</tr>
<tr>
<td></td>
<td>+002, 003</td>
<td>030, 040, 45</td>
</tr>
<tr>
<td>4B - Economics</td>
<td>4G - Interdisciplinary, Social &amp; Behavioral Sciences</td>
<td></td>
</tr>
<tr>
<td>ECON 001, 002, 010</td>
<td>HUDV 038, 039</td>
<td>SOCS 025, 026, 027, 028, 030</td>
</tr>
<tr>
<td>4C - Ethnic Studies</td>
<td>JOUR 011</td>
<td>SPCH 012</td>
</tr>
<tr>
<td>HIST +028, +029, +031</td>
<td>PLSC 048G</td>
<td></td>
</tr>
<tr>
<td>PLSC 005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCS 022, 023, 025, 026</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4D - Gender Studies</td>
<td>4H - Political Science, Government &amp; Legal Institutions</td>
<td></td>
</tr>
<tr>
<td>PLSC 019</td>
<td>IR 001</td>
<td></td>
</tr>
<tr>
<td>HIST +037</td>
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<td></td>
</tr>
<tr>
<td>4E - Geography</td>
<td>4I - Psychology</td>
<td></td>
</tr>
<tr>
<td>GEO 002, 004</td>
<td>PSYC 001+, 002, 004, 005, 006, 010, 020, 024, 030, 034</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>PSYC 038, Hudyv 039</td>
</tr>
<tr>
<td>Course(s) from other college</td>
<td>Advanced Placement Exam</td>
<td></td>
</tr>
</tbody>
</table>

#### Area 5 - Physical and Biological Sciences

At least 2 courses, one Physical Science course and one Biological Science course; at least one must include a laboratory.
7-9 semester/9-12 quarter units

Courses marked with an *L* in parentheses - (L), contain a laboratory component.

| 5A - Physical Science            | METR 010 |
| ASTR 010, 020(L), 30*, 40*       |          |
| CHEM 001(L), 002(L), 003(L)*, 004(L)* | PHYS 002(L)*, 004(L)*, 006(L)*, 007(L)*, 008(L)* |
| 010(L)*, 0011(L)*                | 010*     |
| GEOG 001, 001(L)                 | Phisc 012(L)* |
| GEOL 001, 002(L), 005            |          |
| Course(s) from other college     | Advanced Placement Exam |

| 5B - Biological Science          | ANTH 001 |
| BIO 001(L), 002(L)*, 003(L) Pending approval for 2011-12, 004(L), 005(L)*, 012, 012(L)*, 014(L), 015(L)*, 016*, 018, 019(L), |
| ANTH 001                         |          |
| Course(s) from other college     | Advanced Placement Exam |

#### Area 6 - Language Other Than English (UC Requirement Only)

Proficiency equivalent to two years of high school study in the same language.
Solano College courses that fulfill this requirement are:

<table>
<thead>
<tr>
<th>ENGL 046</th>
<th>ITAL 032</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 001, 032*</td>
<td>LATN 002</td>
</tr>
<tr>
<td>GRMN 001, 032*</td>
<td>SPAN 001, 032*</td>
</tr>
</tbody>
</table>

Completed at high school:
Course(s) from other college

#### CSU Graduation Requirement

CSU requires two American Institutions courses for graduation; one must be from Group 1 and one from Group 2. Courses used to meet the American Institutions requirement may also be used to satisfy any other area.

| American Institutions (Group 1) | American Institutions (Group 2) |
| PLSC 001, 005                   | AMST 001, 002                    |
|                                  | HIST 017, 018, 028, 029, 037    |

* Indicates that transfer credit may be limited by either UC or CSU or both. Consult a counselor for details.
+ May be used in only one area.

(L) Indicates course has a lab.

C = Completed  IP = In Progress  P = Planned
Appendix B: Preliminary Facility Implications

1. Vocational Career Center

Concept:
Develop a state-of-the-art Career technical facility to house a new career tech school at Solano. The facility would offer the ability to build career-centric programs oriented to the “new” approach to manufacturing, engineering and technology-oriented businesses. The facility would attract students who want to learn technical skills to get them high paying, quality career but may not be interested in transfer BA degree programs.

Connection to mission:
This would rehabilitate Solano CCD’s career technical program, which is oriented to more 20th century skills, with limited appropriate facilities. This audience is generally underserved.

Trend:
United States is still the leading country in the world for the development of manufactured goods with each person in the industry producing three times what they did in the 70s. This increased productivity is directly related to increase in automated, highly technical manufacturing plants and technologies. The US needs more educated and skilled workers who can help operate, maintain and innovate to maintain and grow this sector.

Currently, there is a bias to encourage students to get a bachelor’s degree and develop white-collar careers. This path is not appropriate for everyone and results in a substantial population under-utilized and under-employed.
2. Corporate Training and Innovation Center

Concept:
Develop a corporate center for Contract Education. The facility would serve all of Solano County and beyond, providing high quality contract education programs for on-going educational needs of adults and to foster innovation and entrepreneurs for all ages. The center would be design to be self-sustaining at a minimum and ideally to generate revenues to support other programs in the District. The facility would be designed with corporate business needs in mind.

Connection to the mission:
This facility would provide a needed service to the community by offering customized programs to employers and businesses in the county. It would fulfill the Lifelong learning mission in a different way than previously considered. These not for credit programs would be directly tied to the economic demands and needs of the community.

Trend:
Many businesses have employees that have degrees, but that require ongoing education. This includes regulatory issues, new technology learning, management and professional development just to name a few. The businesses need these classes but do not have the ability to design and develop a curriculum or have the facilities to hold the classes.

Small businesses are one of the largest economic engines in the country. However, many do not succeed because of a lack of practical knowledge from marketing to accounting. This facility can cater to this growing population.
3. Learning Resources Center

Concept:
A new facility (or remodeled) to replace the outdated existing library that reshapes how students access, get support and participate in learning, studying and interacting on campus. The facility would house the classic library functions but expand to allow for more social learning spaces, counselor and mentoring spaces, computer access and resources as well as other learning support facilities.

Connection to Mission:
The facility will serve the Basic Skills and Transfer missions most specifically, with particular focus on creating programs, and spaces that encourage students to improve retention and success.

Trend
Students learn differently than when Solano was built. There is a higher value and need for small group interactions, group projects and spaces where students can talk comfortably without being shushed. Additionally, technology and access to computers is critical to student’s success. Providing facilities and the tools for students who may not be able to afford these is important. In addition, the substantial number of basic skills students requires a increased focus on learning support and counseling to help them navigate to a successful completion of their academic work.
Proposed Facility Actions

The following list of facility actions is intended to translate the EMP findings to the Facilities Master Plan team. Each facility action is matched to at least one EMP Objective and, where appropriate, new programs and those identified for high growth.

F-1. **Renovate or replace before building additional capacity**  
Objective: Optimize existing campus and centers

F-2. **Utilize existing public facilities in communities without a campus or center**  
Objective: Improve student access to courses and services

F-3. **Update, add and repurpose labs and shops to reflect targeted workplaces**  
Objective: Develop workforce-ready career/technical graduates  
High Growth and New Program Areas:  
- Alternative energy,  
- Automotive collision repair,  
- Biotechnology/biomedical,  
- High-tech manufacturing,  
- Hybrid/electric vehicle repair, and  
- Water and wastewater technology.

F-4. **Develop an efficient, flexible meeting space for corporate training**  
Objective: Build alternative funding and revenue sources

F-5. **Create a centralized home for library, group study, meeting rooms and learning support services**  
Objective: Improve basic skills of all students  
High Growth and New Program Areas:  
- English as a Second Language  
- Reading  
- Learning Resources

F-6. **Add or reconfigure for larger classrooms to accommodate flexibility in the size of sections**  
Objective: Optimize existing campus and centers

F-7. **Locate classrooms near labs and shops to support supplementary education within CTE courses**  
Objectives: Improve basic skills of all students; Develop workforce-ready career/technical graduates  
High Growth and New Program Areas:  
- Welding Technology  
- English as a Second Language  
- Automotive Collision Repair  
- Aeronautical and Aviation Technology

F-8. **Create informal group meeting and group study spaces throughout the campus and centers**  
Objective: Connect students to the Campus community
F-9. Adapt scheduling model to allow for fast-track and other alternative modalities
Objective: Create a district-wide policy framework for program development and management
High Growth and New Program Areas:
- English as a Second Language
- Reading
- Learning Resources

F-10. Establish a Creative Arts and Events center (with substantial partnership from an outside organization)
Objective: Engage as a partner in community efforts

F-11. Develop incubator space for entrepreneurial efforts by students, faculty, outside businesses
Objectives: Engage as a partner in community efforts; Build alternative funding and revenue sources; Develop workforce-ready career/technical graduates

Potential Facility Actions for Discussion
The following potential facility actions have also been considered during this process and are put forth for discussion by the group.

P-1. Locate a County Courthouse on SCCD property, connected to Administration of Justice and other SCCD offerings
Objective: Engage as a partner in community efforts; Develop workforce-ready career/technical graduates
High Growth and New Program Areas:
- Occupational Education

P-2. Add solar panels to parking facilities
Objective: Build alternative funding and revenue sources; Optimize existing campus and centers;

P-3. Host fire academy at SCCD, need a burn tower as well as associated facilities
Objective: Engage as a partner in community efforts; Develop workforce-ready career/technical graduates

P-4. Create spaces that can be open 24 hours for studying with minimal/no supervision
Objective: Optimize existing campus and centers; Connect students to the Campus community