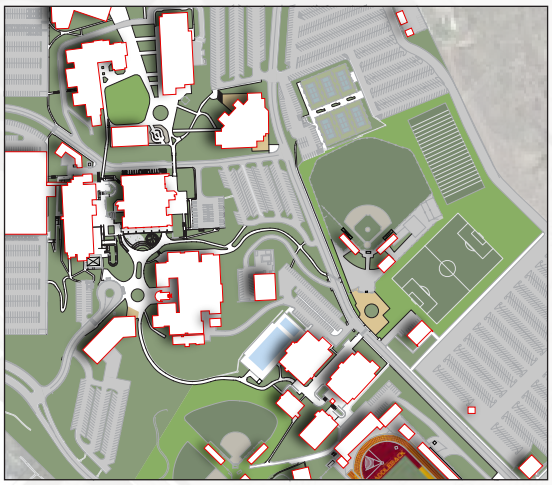


South Orange County Community College District

# 2011-2031 EDUCATION & FACILITIES MASTER PLAN

## VOLUME 4

# Saddleback College

## *2011 FACILITIES MASTER PLAN*

DECEMBER 2011

gkkworks

# SADDLEBACK COLLEGE

## 2011 Facilities Master Plan

South Orange County Community College District

DECEMBER 2011

gkkworks

SADDLEBACK COLLEGE

# 2011 FACILITIES MASTER PLAN

## SADDLEBACK COLLEGE

*South Orange County Community College District*

**Presented to:**

**Board of Trustees**

Nancy M. Padberg, President
T.J. Prendergast, III, Vice President
Marcia Milchiker, Clerk
Thomas A. Fuentes, Member
William O. Jay, Member
David B. Lang, Member
Frank M. Meldau, Member
Eve Shieh, Student Member
Jordan Larson, Student Member

Gary L. Poertner, Chancellor
Dr. Tod A. Burnett, Saddleback College President

# ACKNOWLEDGEMENTS


**Saddleback College Consultation Council**

| | |
|---|---|
| Dr. Tod Burnett | Saddleback College President |
| Dr. Don Busche | Vice President for Instruction |
| Dr. Juan Avalos | Vice President for Student Services |
| Dr. Carmen Dominguez | Academic Senate President |
| Dr. Bob Cosgrove | Academic Senate Representative |
| Dr. Norm Weston | Academic Senate Representative |
| Jo Ann Alford | Academic Senate Representative |
| Dan Walsh | Academic Senate Representative |
| Russell Hamilton | Classified Senate President |
| Donald Mineo | Classified Senate Representative |
| Catherine Ayad | California School Employee Association Representative |
| Santos Garcia | Police Officers Association Representative |
| Carol Hilton | Fiscal Director |
| Jennie McCue | External Affairs Representative |
| Gretchen Bender | Director of Planning, Research, and Grants |
| Melissa Fenerci | Associated Student Government President |
| Don Taylor | Dean Representative |
| Tamera Rice | Dean Representative |
| Jane Rosenkrans | Classified Manager Representative |

**President's Working Group**

| | |
|---|---|
| Dr. Tod Burnett | Saddleback College President |
| Dr. Don Busche | Vice President for Instruction |
| Dr. Juan Avalos | Vice President for Student Services |
| Carol Hilton | Fiscal Director |
| Gretchen Bender | Director of Planning, Research, and Grants |
| John Ozurovich | Director of Facilities |

**Other College Committees**

Planning and Budget Steering Committee
Facilities Committee
Strategic Planning Groups

**Governance Groups**

Academic Senate

Academic Senate Executive Board
Dan Walsh, President
Kim Stankovich, Vice President
Bruce Gilman, Secretary
Bob Cosgrove, President Elect
Alannah Rosenberg, Past President

# ACKNOWLEDGEMENTS


**Governance Groups (continued)**

Academic Senate (continued)

Academic Senators

Anthony Teng
April Cunningham
Arlene Thomas
Brad McReynolds
Brandee Craig
Carol Ziehm
Christina Russsell
Diane Pestolesi
Donald Bowman
Elizabeth Horan
Gary Luke
Georgina Guy
Heidi Ochoa
Howard Gensler
Jane Horlings
Jeanne Smith
Joshua Pryor
Karen Jacobsen
Karla Westphal
Kim d'Arcy
Larissa Roostee
Linda Call
Marlene Sais
Maureen Smith
Nicholas Trani
Patricial McGinley
Roni Lebauer
Sumaya McCleave
Suzanne Hewitt

Classified Senate

Russell, D Hamilton, Sr., President
Don Mineo, President Elect
Allen Cherry, Secretary
Mark Kruman, Treasurer
Lori Parra, At Large
Laura Toscano, At Large
Jan Mastrangelo, Webmaster

Associated Student Government

Management Team

**South Orange County Community College District**

| | |
|---|---|
| Gary Poertner | Chancellor |
| Dr. David Bugay | Vice Chancellor, Human Resources and Business Services |
| Dr. Robert Bramucci | Vice Chancellor, Technology and Learning Services |
| Dr. Randy Peebles | Associate Vice Chancellor |
| Beth Mueller | Director, Fiscal Services |
| Brandye K. D'Lena | Director, Facilities Planning and Purchasing |
| Teddi Lorch | Director, Human Resources |
| Tere Fluegeman | Director, Public Affairs and Intergovernmental Relations |

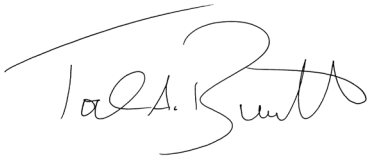
# LIST OF EXHIBITS

# LETTER FROM THE PRESIDENT

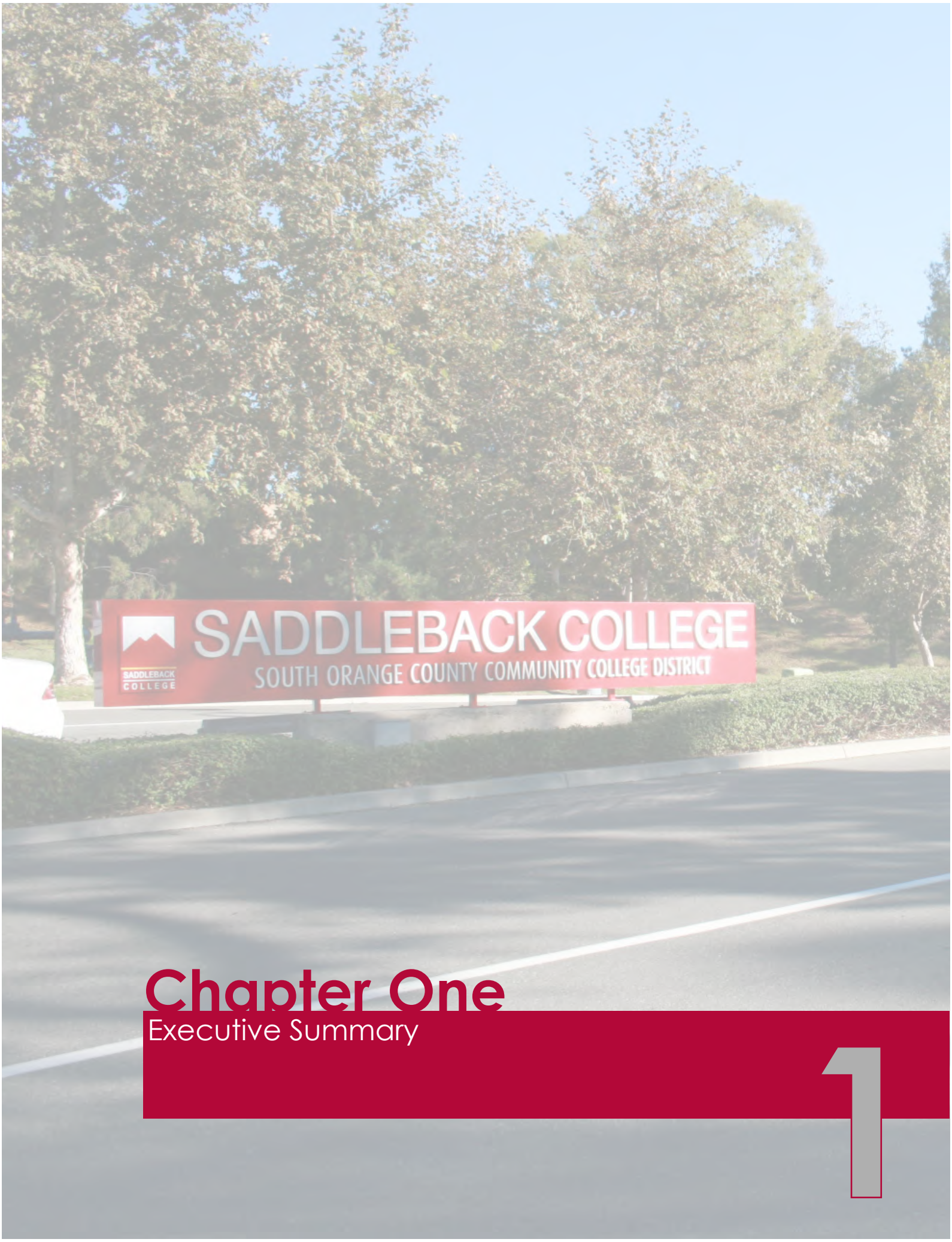
Saddleback College's 2011-2016 Education and Facilities Master Plan (EFMP) is the culmination of research and input from constituent groups throughout the college and the community. The EFMP is intended to provide a written and narrative description of how Saddleback College will address our long range academic and facilities challenges to fulfill the changing needs of the students we serve. Positioning the college to maximize state funding opportunities is also an important component of the plan.

The EFMP addresses current and projected needs through the year 2031. By linking long range academic and facilities planning, we will ensure that our facilities meet the educational goals of the college and that our campus spaces are utilized in a way that best serves students. From establishing our academic buildings in unified groupings, to landscaped pathways connecting the various departments and services, all features of the future campus have students' requirements at the forefront.

The planning process has been a collaborative effort. Indeed, faculty, administrators, and staff have worked tirelessly to plan ahead with the best interests of the College and our current and future students in mind. Many hours were spent listening, discussing, planning and re-planning the final document with an excitement characteristic of visionary activities. The planning process included a series of workshops and campus forums where key information was gathered from the entire college community. We thank all who participated for your hard work and invaluable contributions. This is a "living document," one that will continue to grow and change as we work to meet the needs of our students and our community. We are proud to share this guide with you today.



Tod A. Burnett, Ed.D.
President




# Chapter One

## Executive Summary

1


*Exhibit 1.1: 2031 Illustrative Campus Plan*

# Introduction

**Purpose of the Facilities Master Plan**

Saddleback College is nearing its 44th year as a certified community college serving the communities of South Orange County. The college's mission statement promotes student learning and success in the attainment of academic success and lifelong learning. To meet these complimentary objectives, the 2011 Education and Facilities Master Plan (EFMP) document outlines the collaborative twelve-month research, discussions, reviews and documentation process. The EFMP document provides insight to the process contributed to by many, and provides a long range planning framework for Saddleback College to strategize new construction and accommodate changes in existing conditions through the 2031 planning horizon. This document presents planning and operations considerations to the South Orange County Community College District (SOCCCD), providing the District an outline for a District Five Year Development Plan and the foundation of subsequent plans for the allocation of campus resources to meet college values and strategic directions. The Facilities Master Plan (FMP) builds upon the documented data of the Education Master Plan and incorporates an understanding of the Saddleback College campus, projects future growth and modernization potential, and outlines an approach to implementation. The FMP takes into account: history of Saddleback College and surrounding communities; core values of the institution as represented in its mission, vision, and strategic goals; data from within the college and from authoritative external sources; and the best thinking of all constituency groups regarding a vision of the Saddleback campus. This 2011 Facilities Master Plan document replaces the 2006 EFMP document as a vision and implementation resource.

The 2011 Facilities Master Plan incorporates a comprehensive review of existing, present, and proposed conditions, connecting historical reference with current need and projected outcome. The information and development strategies shown in this document reflect current forecasts for student and programmatic growth combined with facilities upgrades to meet growth within a determined capital outlay program. The 2011 FMP will be utilized as a resource for current and future project decisions and coordination, and will guide the 2011-2016 strategic planning timeline. The following narrative summarizes content of the FMP document and key objectives defined by the Saddleback College, the South Orange County Community College District and community participants.

**Methodology and Process**

This 2011 Facilities Master Plan examines the significant changes to Saddleback College and external conditions since the publication of the 2006 Education and Facilities Master Plan. The 2011 Education and Facilities Master Plan team followed a transparent process where college, district and community constituents were engaged to participate in an open dialogue, determining need and priority with intent to serve students and the community. The methodology of strategic visioning, planning development and documentation is founded upon this transparent process of participatory governance and communication. Concurrent with external and internal surveys and focus group interviews, the Facilities Master Plan team also engaged in an assessment and documentation of existing campus facilities. Information collected and strategies developed resulted in documentation of three development horizons: 2011-2016 Five Year Horizon, 2016-2021 Ten year Horizon, and 2021-2031 Twenty Year Horizon.

## Introduction

### College Background

Understanding the history of Saddleback College is an important step in understanding the college mission as it relates to future growth. Saddleback College is located in the community of Mission Viejo, California, approximately 55 miles southeast of Los Angeles. The college was dedicated by then Governor Ronald Reagan in 1968 and received accreditation in 1971; its name derived from the unique "saddleback" features of the nearby Cleveland National Forrest. The campus occupies a 200 acre site that incorporates a series of mesas and canyons, providing Saddleback College a distinctive character that blends contemporary architecture with traditional architecture.

Growth of the college has paralleled robust development of the South Orange County area from the 1970's through the 1990's. Today, the campus contains roughly 680,000 square feet of academic, student service and support building space, and currently serves a full-time student population of 26,000. Full time and part-time faculty total approximately 978 with a classified staff of 270. Saddleback College has evolved strong partnerships with many Southern California four-year institutions, and provides baccalaureate quality transfer education, career and technical education, basic skills courses and lifelong learning opportunities.

## Goals and Influences

### Guiding Principles and Existing Conditions

The 2011 Education and Facilities Master Plan is shaped by guiding principles established by Saddleback College (including vision, mission, values and college-wide goals), along with college strategic plans and other specific plans and working documents. Detailed description of the elements of guiding principles can be found in chapter three of this document. These key elements embody a commitment to provide highest quality education in partnership with the community and four-year institutions of the region. Combined with documents such as the 2006 Facilities Master Plan and Twenty-Year Facilities & Scheduled Maintenance Plan, the 2011 EMP document is consistent with the guiding principles of Saddleback College and the South Orange County Community College District.

Saddleback College existing academic conditions are fully documented in the Education Master Plan (EMP) and physical conditions documented in this FMP document. Chapter 4 provides an overview of facilities conditions. Noted in the appendix is access to a facilities assessment database where specific physical characteristics of each campus building are documented. This database is a combination of information gathered from the State Fusion database and individual building surveys performed by the FMP team.

# Development Strategies

### Project Prioritization Criteria

2006 EFMP information, current EMP forecasts and extensive campus group discussions provided a basis for a comprehensive Project Prioritization Criteria. The Criteria guided development of a comprehensive list of facilities construction projects, organized chronologically into five, ten and twenty year planning horizons. This process included campus focus group interviews, internal data assessment, physical improvement needs and external impacts such as the State of Chancellor's Office approval process and future student expectations. The Criteria provides a means to evaluate academic and student services need and identify dollar values for each campus project to be developed over the three development horizons. The result of planning discussions with the college is project list that addresses academic needs and alignments with WSCH forecasts. Individual projects were then strategically sequenced within the defined five year, ten year and twenty year horizons to strategize fiscal outlay consistent with revenue resources.

### Campus Organization

Developed in parallel with project prioritization campus organizational strategies were explored, creating a campus master plan that identifies how the campus will appear in the five, ten and twenty year development horizons. The campus master plan is based upon a concept of clustering related academic programs to create student and academic synergy, instructional efficiency and program identity, and provide clear access to student services. This concept embodies a theme of "Centers for Learning" that will promote a student-centered environment, and have a significant impact upon quality of instructional compatibility, provide opportunities for gathering and will facilitate pedestrian navigation throughout the campus. Facilities projects are identified by program, scope in terms of WSCH or non-WSCH provision and cost value. Complimenting new construction and modernization of buildings, the master plan integrates a network of external open spaces and landscapes to encourage a collegial environment, and address the value of social or instructional gathering and the importance of a sustainable, well maintained campus.

### Project Sequence and Space Inventory

Project sequence logistics is a critical element of the facilities master planning effort and fiscal planning. It is also vital to procurement of project planning, state approvals and construction work identified by each project scope. Included in discussions of projects and campus organization were strategies for development of a logical project sequence to manage growth, address construction impacts to campus function and facilitate capital outlay planning consistent with funding resources. The result of numerous meetings with college representatives, guided by the Project Prioritization Criteria, is defined by the five, ten and twenty year development plan horizons.

In tandem with projects identified in the Project Sequence a Campus Space Inventory summarizes the composite growth of all WSCH and non-WSCH space anticipated in the twenty year span of the EFMP document. The composite area is measured against projected WSCH need identified in the EMP to validate forecasted construction extent and capital outlay.

## Facilities Master Plan

### Campus Vision

Saddleback College's campus vision aims to achieve an active, welcoming student-centered "**Environment for Learning**", providing places that are both educational and inspirational. It also utilizes the college's vision to "be the first choice of students who seek a dynamic, innovative, and student-centered education". The College will be organized to enhance academic synergy and provide exterior landscape environments that are people friendly. Dynamics of these spaces will enhance the student experience, compelling students to extend their time on campus and take advantage of opportunities for academic, athletic and social activity. Many factors that played a vital role in the planning process contributed to a focus upon pedestrian circulation, way-finding and accessibility, a diverse open space network, and vehicular circulation and access.

### Planning Horizons

To implement a strategic "pattern for growth" the Facilities Master Plan is organized into three development horizons: five, ten and twenty year. Each development horizon includes a general overview of all design and construction projects to be performed by consultants, including new buildings, renovated/modernized existing buildings and site improvements. A Project Sequence Chart identifies each project numerically, correlates each project with a campus map, and provides project value in 2011 dollars and escalated value based upon projected time when a given project will occur.

### Five-Year Plan

Projects identified in the five-year development horizon (2011-2016) are those currently in stages of approval or design processes or directly impacted by projects in the approval processes. Projects in this five-year plan will have significant impacts upon the quality of instruction by providing state-of-the-art labs, classrooms and support program space. The addition of secondary effect improvements and site improvements will also play a vital role in this span and also address the criteria.

### Ten-Year Plan

Projects identified in the ten-year development horizon (2016-2021) continue to modernization of the Saddleback College Campus with some significant renovation and reorganization. Project focus is upon building modernization, safety and functional improvement and sitework/infrastructure development of campus grounds and athletics facilities.

### Twenty-Year Plan

Projects identified in the twenty-year development horizon (2021-2031) include a new athletics center, significant campus infrastructure enhancement and development of a new parking structure.

# Facilities Master Plan

**Landscape Considerations**

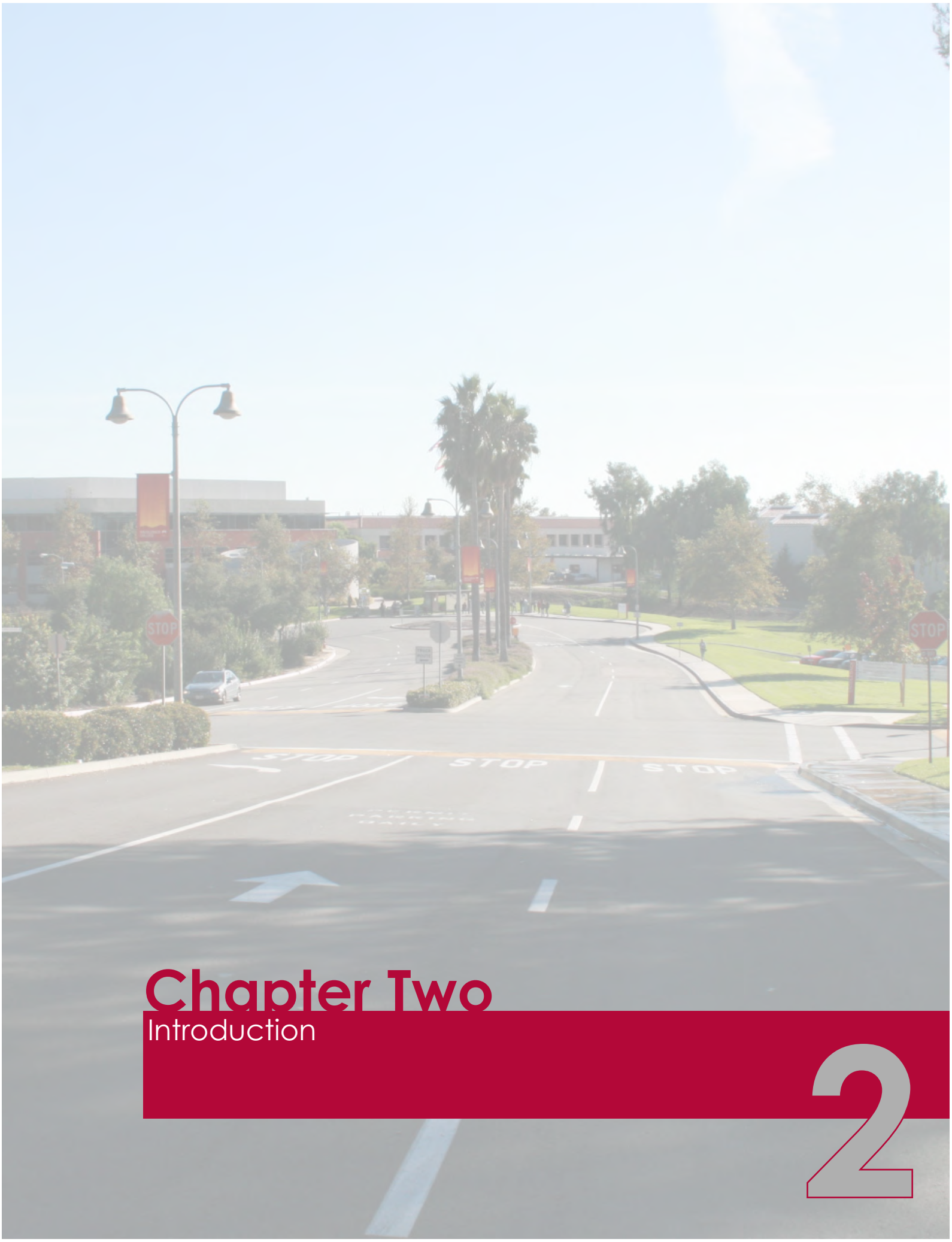
The landscape approach for Saddleback College follows the principle of providing healthy landscape to complement local climatic conditions and significantly benefit campus character, and remain respectful of the surrounding natural landscape terrains. This theme is intended to create character and order throughout the campus and be practical in terms of indigenous planting, reduced heat-island effects, reduced energy use and reduced water consumption.

**Sustainable Principles**

The South Orange County Community College District is committed utilizing sustainable principles for energy consumption, impact upon the natural environment and people friendly places. In order to address this commitment, new projects on the Saddleback College campus will meet established code energy requirements and seek to exceed requirements to achieve the benefits of a "Green Campus." The campus will utilize basic design principles defined by the current Leadership in Energy and Environmental Design – New Construction (LEED-NC) rating system for sustainable design and environmental sensitivity. These principles are as follows: Sustainable Sites; Water Efficiency; Energy and Atmosphere; Materials and Resources; Indoor Environmental Quality; and Innovation in Design.

# Advanced Technology & Education Park (ATEP)

The Advanced Education and Technology Park (ATEP), established in 2004, is located in Tustin, California on the former Marine Air Corps Station. It is a satellite campus serving both Saddleback College and Irvine Valley College. The purpose of ATEP is to provide "high performance, high impact" career-technical education and offer public-private partnerships as a mechanism of outreach to the professional community of South Orange County. The current facilities occupy five buildings totaling 15,000 GSF on a 1.5 acre space. Current planning for ATEP is Phase 3A of the ATEP Long-Range Plan. Phase 3A plans for a new 30,000 square foot multi-disciplinary facility for academics and represent a critical step in the future growth or ATEP and expanded services to the South Orange County community.




# Chapter Two

## Introduction

2

## Purpose of the Facilities Master Plan

Saddleback College is part of the South Orange County Community College District (SOCCCD). The Education & Facilities Master Plan (EFMP) is a "**blueprint for future development**" of Saddleback College from 2011 through the 2031 planning horizon, informing planning and operations of the SOCCCD. The Plan also serves as the outline for a District Five Year Development Plan and the foundation of subsequent plans for the allocation of campus resources and college goal setting. The Facilities Master Plan (FMP) takes into account: the history of the college; the core values of the institution as represented in its mission, vision, and strategic goals; data from within the college and from authoritative external sources; and the best thinking of all constituency groups regarding a vision of the Saddleback College campus. The FMP is intended to be a "living document" that is read and reviewed throughout its planned five-year lifetime. The previous Facilities Master Plan, released in 2006, will be replaced by this 2011 Facilities Master Plan. Currently, the Saddleback College Consultation Council coordinates the annual and long-range planning process for the college. The Committee is responsible for integrating program review and college-wide facilities development, and maintaining open dialogue with campus constituencies. At each organizational level, the process will draw on useful, relevant, and reliable information to take a critical look at itself, student needs, community requirements, and external imperatives.

The 2011 Facilities Master Plan includes a comprehensive review of existing environmental and built conditions, and department/school planning data, acquired through a series of interviews with the constituents of the college including students, staff and faculty. Information and development strategies shown in the 2011 Facilities Master Plan will reflect current forecasts for student and programmatic growth combined with strategic visions for campus modernization. The Facilities Master Plan is a resource to inform current and future project decisions and coordination, and will be reviewed and updated on the 2016 strategic planning timeline. The Facilities Master Plan is intended to serve the following specific purposes:

- Establish clear development/modernization direction for the college by strategizing future growth relative to changing internal and external trends and influences.
- Provide a foundation for implementation strategies and serve as a primary resource for the development of other college planning activities.
- Support accreditation reviews and demonstrate compliance with accreditation standards.
- Inform the community of the college's present needs and future plans, forging a closer relationship between the college and the community.
- Serve as the basis for facility decisions regarding expansion and modification of facilities and the implementation of all funding measures provided to improve college facilities.
- Identify how the campus can serve students by emphasizing the strengths and capabilities of the college, and offer an environment supportive of academic and cultural pursuits.
- Stimulate synergies between students and faculty, and promote effectiveness of college programs.
- Increase coordination between master plan development and ongoing facilities maintenance projects.

# Methodology and Process: Overview

Utilizing the updated data, 2011 Facilities Master Plan takes into account any significant changes to Saddleback College and external conditions since publication of the 2006 Education and Facilities Master Plan. These include changes in enrollment, academic priorities, age and condition of facilities, student and community expectations, sustainability initiatives, technology, incorporation of the Advanced Technology & Education Park (ATEP) campus and state of the economy. Within a continually evolving environment, long-range planning provides an important guideline for sequential growth, yet is flexible enough to incorporate adjustments throughout the course of its planning horizons. To achieve consensus on the 2011 Education and Facilities Master Plan the education and facilities master plan team followed a process where college, district and community constituents were engaged to participate in an open dialogue. The methodology of strategic visioning, planning development and documentation is founded upon this transparent process of participatory governance and communication. The process spanned a period of approximate twelve months, and included several means of information sharing, feedback and progress reporting. This process also enabled a continual process of definition and refinement that resulted in this 2011 Facilities Master Plan.

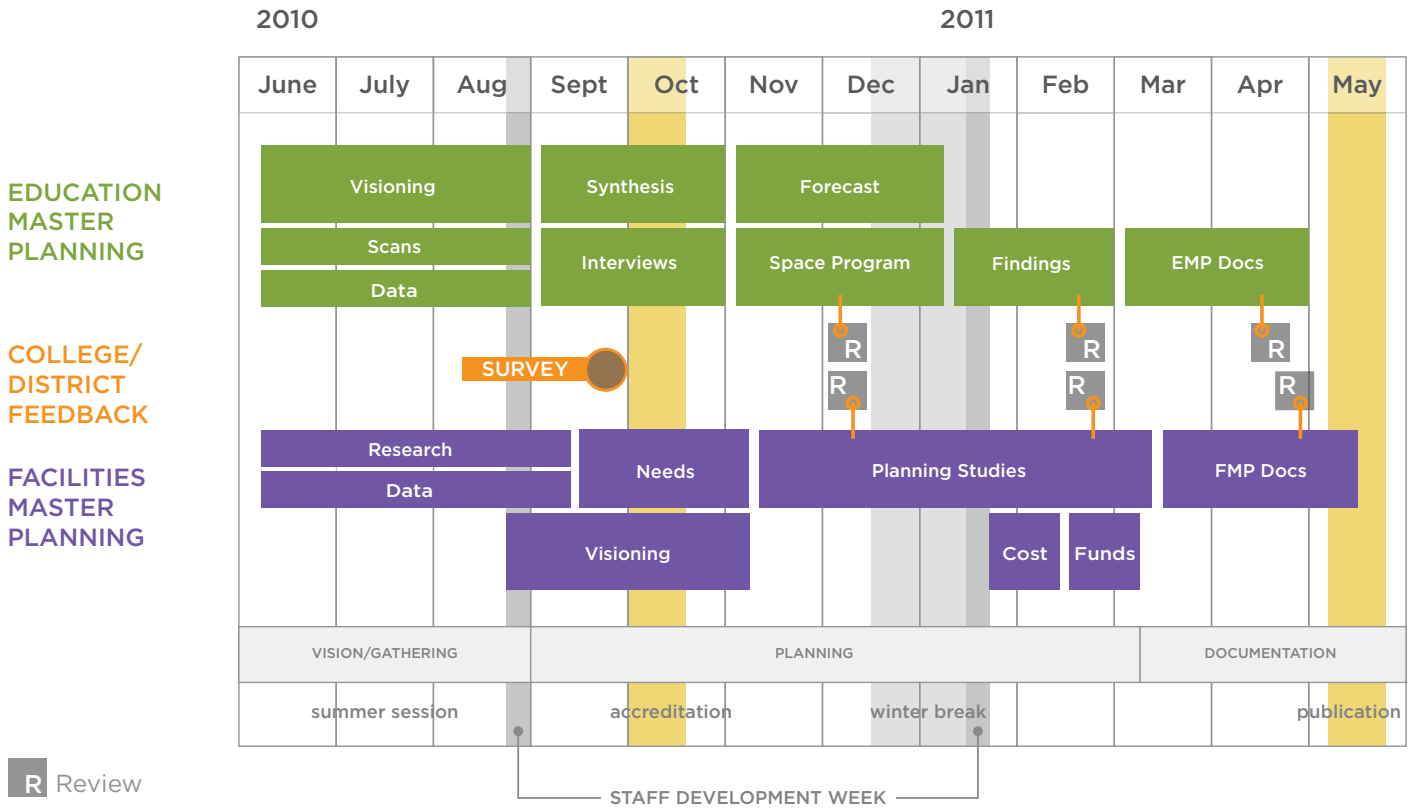



*Exhibit 2.1: 2010-2011 Master Plan Process Schedule*

## Methodology and Process: Communication

Transparency of communication with all constituencies and consistency between strategic facilities growth and the Saddleback College Mission Statement has been the core value of the 2011 Facilities Master Plan. To facilitate and coordinate the 12-month effort, Saddleback College involved several key groups representing students, faculty, classified staff, administration and the community. The groups provided a source of direction, guidance and feedback throughout the entire planning and documentation process, and the resultant Facilities Master Plan is a reflection of the many participants who have contributed. Listed below is a summary of methods utilized to communicate, share information and establish direction for the 2011 Facilities Master Plan:

- Saddleback College Consultation Council meetings
- Academic Senate Meetings
- Classified Senate Meetings
- Saddleback College Management Team meetings
- Facilities Maintenance and Operations Department meetings
- Campus / Community Presentations
- Focus Group (Student, Faculty, Staff and Management) Interviews
- External Community questionnaires
- Internal Faculty questionnaires
- Internal Student questionnaires
- Web based progress reporting and information sharing
- Web based surveys and comments
- SOCCCD Chancellor's Executive Team reviews

Combined meetings and presentations totaled 43 sessions spanning nine months. Key milestones included: internal and external surveys in September 2010, faculty/staff/student interviews in October 2010, campus wide presentations in September 2010 and January 2011, and community surveys in April 2011. The October 2010 Focus Group interviews occurred over a four day period. Notes of the interviews are located in a separate Reference Document along with existing facilities assessment materials.

# Methodology and Process: Facilities Assessment

Concurrent with the Surveys and Focus Group Interviews in September and October of 2010, the gkkworks Facilities Master Plan Team engaged in an assessment and documentation of existing campus facilities. The individual assessment process included research of State records, reviews with campus facilities staff, physical evaluation of facilities and photographic recording of the campus and facilities. Documentation of the assessment process may be found in the appendices or a separate publication listed under Reference Documents. For each building the facilities assessment information includes an individual summary page of building data, building plans, descriptive summaries of building conditions and systems, and program space outline. The Facilities Assessment is located in a separate Reference Document along with the Focus Group interview notes. A photographic record of the existing campus is located in Appendix B of the Facilities Master Plan. The photographic recording includes building interior and exterior images, and campus site conditions.

*Exhibit 2.2: Administration & Governance Building*

*Exhibit 2.3: Student Services Center*

## College Background

Saddleback College campus is located in the residential and commercial community of Mission Viejo, California, approximately 55 miles southeast of Los Angeles. The campus name was originally inspired by a "saddleback" geological feature located in the Cleveland National Forest. Originally surrounded by natural terrain and minimal residential development, the college has matured over 43 years and has evolved to serve a vibrant residential and commercially active area of Mission Viejo. The current campus is approximately 200 acres in land area with approximately 680,000 gross square feet of permanent academic, student service and support building space. The college currently serves a full-time student population of 26,000, with a combined full time and part-time faculty of 978 and classified staff of 270. Positioned as a sole community college in the immediate area, Saddleback College provides an important service to the residents of Mission Viejo and surrounding communities who seek higher education certificates and degrees, acquire career and basic skills, and pursue lifelong learning opportunities.

Saddleback College was named and dedicated in 1968, housed in interim facilities on Crown Valley Parkway, a short distance from today's campus location. The October 1968 ceremony was attended by then Governor Ronald Reagan who offered the following dedication remarks:

> *"We are here today to dedicate something more than just another college: We are here to dedicate an institution of opportunity and fulfillment. It is the function of education to help each individual grow to the maximum extent of his capabilities, to help him fulfill his great potential – and it is our job as responsible citizens to provide that opportunity. That this community has dedicated to move ahead in providing this opportunity is an action which I commend – and an action which will provide great rewards for the community."*

In 1971, Saddleback College received accreditation by the Western Association of Schools and Colleges. The college has grown and evolved in tandem with the development of Mission Viejo and adjacent communities, now offering 322 associate degrees, certificates and occupational skills awards in 190 programs. Saddleback College is a partner with other community colleges and nearby four year institutions of higher learning, fulfilling all four missions of the community college system, including baccalaureate quality transfer education, career and technical education, basic skills courses, and lifelong learning opportunities.

Saddleback College's Consultation Council, which is comprised of the Academic Senate, Classified Senate, Management Leadership Team, Associated Student Government and Classified School Employee Association have established procedures to identify roles of constituent groups in methods of the review and decision-making process. Selected representation on campus committees and decision-making bodies will guide campus facilities growth and existing building modernization as defined in the 2011 Facilities Master Plan and provide necessary updates or revisions to reflect internal and/or external influences.

*"Saddleback College will be the first choice of students who seek a dynamic, innovative, and student-centered postsecondary education."*

*Exhibit 2.4: Groundbreaking for the Saddleback College campus in July 1968, attended by then Board of Trustees members.*


*Exhibit 2.5: Governor Ronald Reagan giving a speech at the dedication ceremony in October 1968.*

*Exhibit 2.6: Dedication Ceremonies for Saddleback College in October 1968; attended by then Governor Ronald Reagan.*

## College Background

*Exhibit 2.7: Early construction for the Science and Math Building on the Saddleback College campus. One of the original permanent campus structures, the Science and Math Building is located on a plateau level, surrounded by lower areas to be developed for parking and sports facilities.*

*Exhibit 2.8: Satellite image taken in 1975 showing early development of the Saddleback College campus. Much of the surrounding area is undeveloped, with exception of a residential community south of the campus. Directly west of the campus is the Interstate 5 Freeway which connects San Diego to Los Angeles and beyond.*

*Exhibit 2.9: Satellite image taken in 2002 showing current development of the Saddleback College campus. Much of the surrounding area south, west and north of the campus is developed. East of the campus is open space with minimal development. The natural terrain patterns have substantial variations of hills, canyons and water courses. Directly west of the campus is the Interstate 5 Freeway and newly developed 73 Toll Road.*

## Existing Conditions: Community and Regional Context

Orange County is bounded by Los Angeles County to the north, Riverside County to the east and San Diego County to the west. It is the smallest county in Southern California in terms of land area, 948 sq mi (2,455.3 km2), and is the second largest in terms population (3,315,000 in 2010).

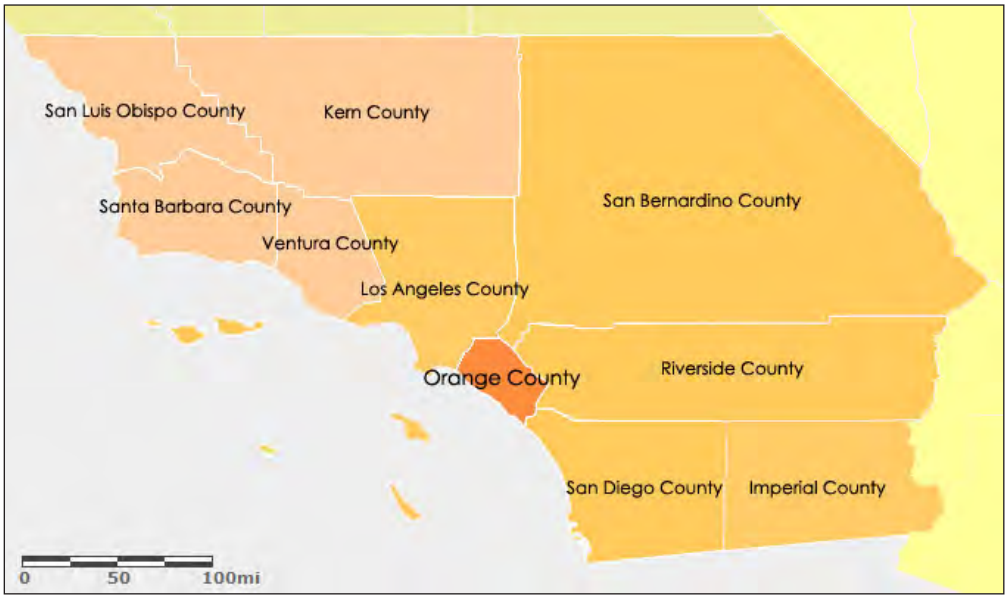



*Exhibit 2.10: Map of Southern California Counties*

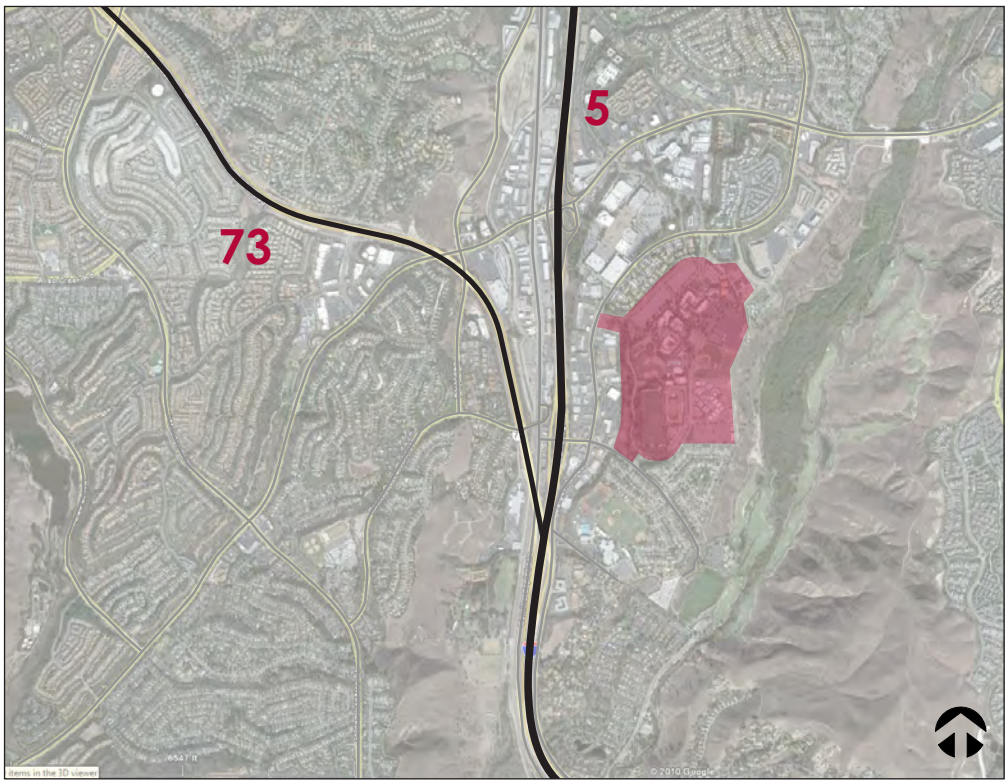



*Exhibit 2.11: Satellite Image of Saddleback College Vicinity*

## Existing Conditions: Campus Context


*Exhibit 2.12: Current aerial view of Saddleback College.*

## Existing Conditions: Site Assessment

The existing Saddleback College Campus is approximately 200 acres, bounded by residential development and a dedicated natural open space area. The geographic setting is a positive aspect of the campus relative to views and aesthetic enjoyment; however the setting also restricts campus access and impacts internal campus traffic and ingress/egress to and from the campus.

### *Topography*

The Saddleback College campus is located in an extremely challenging topographic setting. Terrain and vertical grade variations on the campus reach 80 feet in the central area of the campus (Lot #1 to the Quad). The campus academic core is positioned on a plateau surrounded by parking and athletic facilities at lower elevations. This extreme condition impacts pedestrian accessibility, vehicle circulation and site constructability. Currently there exists a campus accessibility route map for the Saddleback College campus. In addition, public transit operates a shuttle bus serevice with six stops on campus to facilitate pedestrian access. Future new project design and existing facility modernization must coordinate with defined accessibility routes and incorporate the following components to meet current code and construction standards:

- **Building Accessibility**: Each facility on the college campus must be equally accessible to all. New design and modernization projects must incorporate accessible paths to and from building entrances in addition to internal requirements. Placement of buildings should take into consideration existing slope conditions to mitigate grading and provisions for compliant access.

- **Site Accessibility**: New site related projects and site improvement projects must incorporate improvements to provide compliant accessibility between campus facilities, including parking and accessible parking spaces.

- **Soils Conditions**: Site assessment and soils analysis should pre-empt building placement and site design to confirm stability of subsurface conditions and/or determine soils mitigations necessary to support a new facility.

- **Drainage Control**: Building and site improvement projects should review campus surface water control to determine impacts and mitigations required by new construction. Findings should be documented and incorporated early into projects for design coordination and project cost validation.

# Existing Conditions: Site Assessment


*Exhibit 2.13: Existing Campus Plan with topography.*

## Existing Conditions: Building Assessment

### *Buildings*

The campus currently has 30 permanent structures for academic, administrative and facilities functions and 37 portable buildings identified as "The Village". Buildings range in age from older structures (38 years – James B. Utt Learning Resource Center / 37 years – Science and Math Building / Fine Arts Complex – 34 years) to modern structures (7 years – Health Sciences Building). The James B. Utt Learning Resource Center is currently undergoing substantial renovation and modernization. The Science and Math Building is challenged programmatically with systems issues, and often not meeting contemporary code standards. In addition the Technology and Applied Sciences Building and Fine Arts Complex require functional and systems upgrades to meet contemporary instructional standards. The Athletic facilities require stadium and bathroom upgrades. Campus topography demands improved infrastructure. Student Sciences facilities do not meet the current needs. These conditions of age and deterioration will influence future modernization projects as necessary upgrades of accessible facilities and infrastructure upgrades (structure or mechanical systems) will be incorporated as part of identified projects. These upgrades will improve facilities but also significantly impact project costs.

Current provisions for academic and student support programs are marginal and impact daily functions for students, faculty and classified staff. Instructional spaces in older facilities often compromise state-of-the-art teaching methods, including technology needs. Student services spaces compromise ease of accessibility and privacy concerns. Though the College has diligently worked to upgrade and improve conditions to meet new instructional trends and practical needs there is a definite need to incorporate facilities modernization into the Facilities Master Plan Development Strategy in addition to new facilities. In addition, some academic programs are located in multiple buildings. As new and modernization projects are planned and developed efforts to consolidate programs and services will foster academic synergy, enhance functional efficiency and improve identity of individual programs or related course of study.

The combined floors areas of all existing permanent buildings and "Village" portable buildings are summarized below. An itemized list of existing and future building areas is provided in Section 4, Development Strategies – Campus Space Inventory. All building areas are identified in ASF (assigned square feet) and GSF (gross square feet):

| | | |
|---|---|---|
| **Permanent Building** | | |
| | WSCH Function | 278,289 ASF |
| | Non-WSCH Function | 117,218 ASF |
| | Permanent Building Total | 395,507 ASF |
| **Portable Building** | | |
| | WSCH Function | 42,207 ASF |
| | Non-WSCH Function | 13,000 ASF |
| | Portable Building Total | 55,507 ASF |

# Existing Conditions: Campus Assessment

*Exhibit 2.14: Main Campus Entrance*

*Exhibit 2.15: Campus Loop Near Baseball Field*

*Exhibit 2.16: Parking Lot 10*

### *Parking/Vehicle Access*

The campus currently provides 4,436 permanent parking spaces spread across 17 surface lots. Currently there are three entrance/exit drives connected to existing signalized City intersections. The three entrance/exit drives are: College Drive, Marguerite Parkway and Avery Parkway. In addition, there is a bus transit stop and auto court located at the College Drive entrance. The existing campus parking ratios are approximately 6.2 students per space or 6.0 spaces per 1000 GSF. Integrating use of community transit systems these ratios are acceptable but marginal. This condition is emphasized as use of Surface Lot #1 is under-utilized due to remoteness to the campus core and extreme difficulties with topography. This assessment is validated by noting parking issues that occur in the first weeks of an academic term when a majority of students and faculty are on campus concurrently. These conditions ease as an academic term progresses and daily/weekly attendance patterns evolve based upon schedules. Impacts upon parking will increase commensurate with future growth and must be addressed as program space on campus increases.

In addition to necessary provisions for parking, access and egress to/from the campus must be considered. The provision of three entrance/exit drives is sufficient but will not likely change in the foreseeable future due to constraints of geography and surrounding development. As the campus grows, parking inventory will increase and traffic will increase. Mediation for bus and car traffic will be considered into the Master Plan Development Strategy, and validated by a formal traffic study.

## Existing Conditions: Campus Organization

### *Buildings*

The original campus buildings were developed on the mesa that defines the central portion of the campus. Building placement shared some orthogonal pattern relationship but as newer buildings were developed placement was influenced by topographic conditions. The resultant impact is a series of "building groupings" where each building group is rotated to conform to their specific site condition. The impact of the dynamic topography, undulating terrain and early planning defines the overall campus circulation network for Saddleback College, which is generally fluid and organic. Buildings vary in character, height and exterior materials and finishes, generally responsive to program requirements and architectural style preference of the particular time period. Original buildings, such as Math Science and the James B. Utt Library, would be classified as modern and geometric. Second generation buildings, such as Fine Arts, Student Services or Business/General Studies, maintain a geometric order but integrate elements of Mediterranean style, such as a tile roof or plaster wall finish. A unique second generation building is Technology and Applied Sciences, which reflects a very Mediterranean style of exterior finishes and building composition. Current buildings are larger in scale, responsive of program need and internal efficiency, and reflect contemporary architectural style with expressions of technology and modular building patterns. Open space between buildings is undefined in some cases and follows the organic nature of the campus.

### *Campus*

The Saddleback campus is dominated by its dynamic topographic setting. The current campus seeks to satisfy pedestrian and vehicular navigation with parking located at the campus periphery and the central campus plateaus primarily pedestrian centered. However, circulation for pedestrians is impaired by challenging topographic change, and issues of pedestrian-vehicular conflict are noted by speed bumps and graphics to raise awareness. Open space patterns follow the organic nature of building organization and are linked by both formal and informal networks of walkways and courtyards. Occasional geometric spaces occur relative to building groups, such as the PE Building complex. The Quad is the primary outdoor "Hub" of the campus. Group events and club activities are often occurring. The lawn is pleasant but under utilized. Opportunities for additional seating exist and the Facilities Master Plan process has identified a conscious intent by the college to improve the Quad character and elevate activities.

**LEGEND**

| | |
|---|---|
| **AGB** | Administration & Governance Building |
| **AH** | Alumni House |
| **ATAS** | Advanced Technology & Applied Sciences |
| **BGS** | Business/General Studies |
| **CC** | Classroom Complex |
| **CDC** | Child Development Center |
| **CEC** | Community Education Center |
| **CP** | Campus Police |
| **CPT** | Central Plant |
| **CS** | Chemical Storage |
| **CUSTS** | Custodial Storage |
| **EP** | Electrical Plant |
| **FA** | Fine Arts Complex |
| **GC** | Grounds Complex |
| **GRNHS** | Horticulture Greenhouse |
| **HS** | Health Sciences |
| **LIB** | Library |
| **K** | K-Building |
| **PE-100** | Shower-Locker |
| **PE-200** | Gymnasium |
| **PE-300** | Activity Building |
| **PE-400** | Offices |
| **PE-500** | Golf |
| **PE-600** | Lifetime Fitness Center |
| **PG** | Public Golf |
| **SME** | Sciences/Mathematics/Engineering Building |
| **SS** | Saddleback Studios |
| **SSC** | Student Services Center |
| **T** | Transportation Yard |
| **VIL** | "Village" Classrooms (Multiple Buildings) |
| **WH** | Warehouse |

# Existing Conditions: Campus Organization


*Exhibit 2.17: Existing Campus Plan*

## Existing Conditions: Aerial Campus Views

*Exhibit 2.18: Aerial view of campus.*

*Exhibit 2.19: Main Quad with BGS, SSC, AGB and Classroom Complex.*

# Existing Conditions: Aerial Campus Views

*Exhibit 2.20: Library and SME Building.*

*Exhibit 2.21: ATAS Building and Health Sciences Building.*

## Existing Conditions: Aerial Campus Views

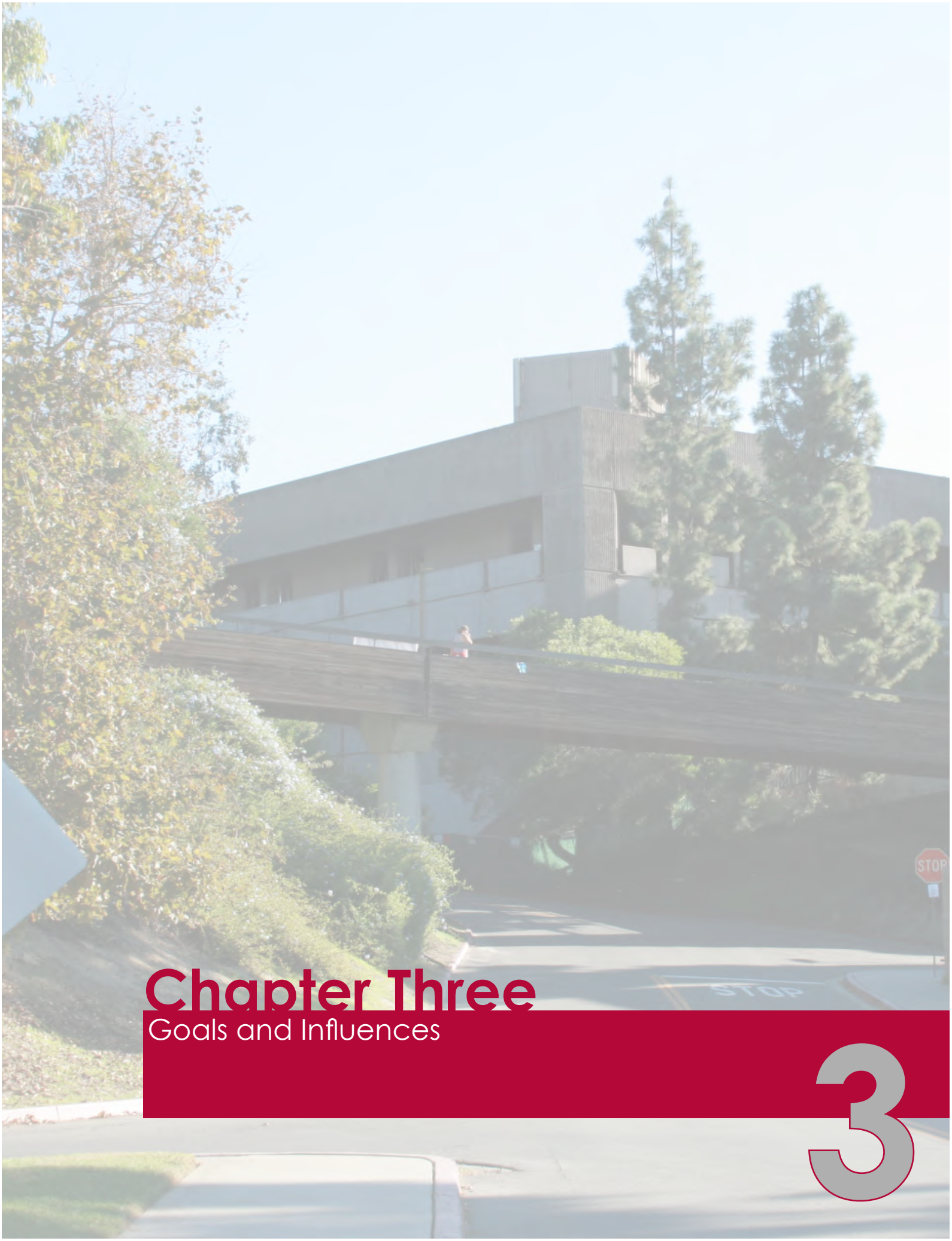
*Exhibit 2.22: Fine Arts Complex*

*Exhibit 2.23: The Village*

# Existing Conditions: Aerial Campus Views

*Exhibit 2.24: PE Buildings, Athletics Stadium, Softball Fields and Golf Driving Range.*

*Exhibit 2.25: Baseball Field, Practice Fields and Tennis Courts.*




# Chapter Three

## Goals and Influences

3

## Guiding Principles for the 2011 Facilities Master Plan

The South Orange County Community College District and the colleges that comprise it operate within the California Community College system. The vast system of 72 districts and 112 colleges educates approximately 2.5 million students in the state. Under the authority of the state legislature and the California Master Plan for Higher Education, the colleges offer lower division education and community education including lower division transfer, career and technical education, basic skills, and lifelong education. A state level Board of Governors oversees policy for the colleges as a whole.

Locally, elected members of boards of trustees are responsible for college districts. The South Orange County Community College District is the administrative arm of the seven-member board of the district and its colleges, Saddleback College and Irvine Valley College.

Within the context of its legal authority and the state and local boards, Saddleback College shapes its vision, mission, values and strategic directions. The aforesaid guiding principles, along with college strategic plans and other specific plans and working documents, have formed a written platform for the work of the 2011 EFMP. The 2011 EFMP is consistent with state, district, and college authority and guiding principles and was developed in accordance with existing college goals and objectives.

- Compliance with State System Parameters
- Consistent with College Strategic Plan
- Strategy for Short Term Development
- Awareness of a Long Term Campus Vision
- Academic/Instructional and Student Support Needs

| | |
|---|---|
| ***Vision Statement*** | Saddleback College will be the first choice of students who seek a dynamic, innovative, and student-centered postsecondary education. |
| ***Mission Statement*** | Saddleback College enriches its students and the south Orange County community by providing a comprehensive array of high-quality courses and programs that foster student learning and success in the attainment of academic degrees and career technical certificates, transfer to four-year institutions, improvement of basic skills, and lifelong learning. |

# Guiding Principles for the 2011 Facilities Master Plan

| | |
|---|---|
| ***Values*** | **Commitment** \| We commit to fulfilling our mission to serve the south Orange County community.<br><br>**Excellence** \| We dedicate ourselves to excellence in academics, student support, and community service.<br><br>**Collegiality** \| We foster a climate of integrity, honesty, and respect.<br><br>**Success** \|We place our highest priority on student learning and delivering comprehensive support for student success.<br><br>**Partnership** \| We strive to develop strong and lasting partnerships among students, faculty, staff, and the community.<br><br>**Innovation** \| We anticipate and welcome change by encouraging innovation and creativity.<br><br>**Academic Freedom** \| We endorse academic freedom and the open exchange of ideas.<br><br>**Sustainability** \| We promote environmental sustainability and use our resources responsibly to reduce our ecological impact.<br><br>**Inclusiveness** \| We cultivate equity and diversity by embracing all cultures, ideas, and perspectives.<br><br>**Global Awareness** \| We recognize the importance of global awareness and prepare our students to live and work in an increasingly interconnected world. |
| ***Strategic Directions*** | **Improve Student Preparedness** \| Saddleback College will ensure that students gain the foundational skills necessary to complete college level work and achieve career goals.<br><br>**Excel in College Transfers** \| Saddleback College will increase student transfers to four-year colleges and universities.<br><br>**Enhance Resources** \| Saddleback College will improve its ability to expand and develop alternative sources of revenue to support college priorities.<br><br>**Foster Innovation** \| Saddleback College will employ innovative ways to enhance programs and meet increasing student and workforce demands. |

## 2006 Facilities Master Plan

The 2006 Facilities Master Plan identified a list of 27 projects to occur in the 2006-2021 timeframe. Most projects identified in the 2006-2011 timeframe have been completed or in process. The 2006 project list, shown on the next page, was reviewed and discussed during this Facilities Master Plan process. The discussions resulted in several projects re-prioritized or re-defined by Saddleback College in addition to new projects being identified. Section 4 of this document, Development Strategies, identifies a Project Prioritization Criteria list that informed the current prioritization process and updated Project Sequence for 2011-2031.

## 20-Year Facilities & Scheduled Maintenance Plan

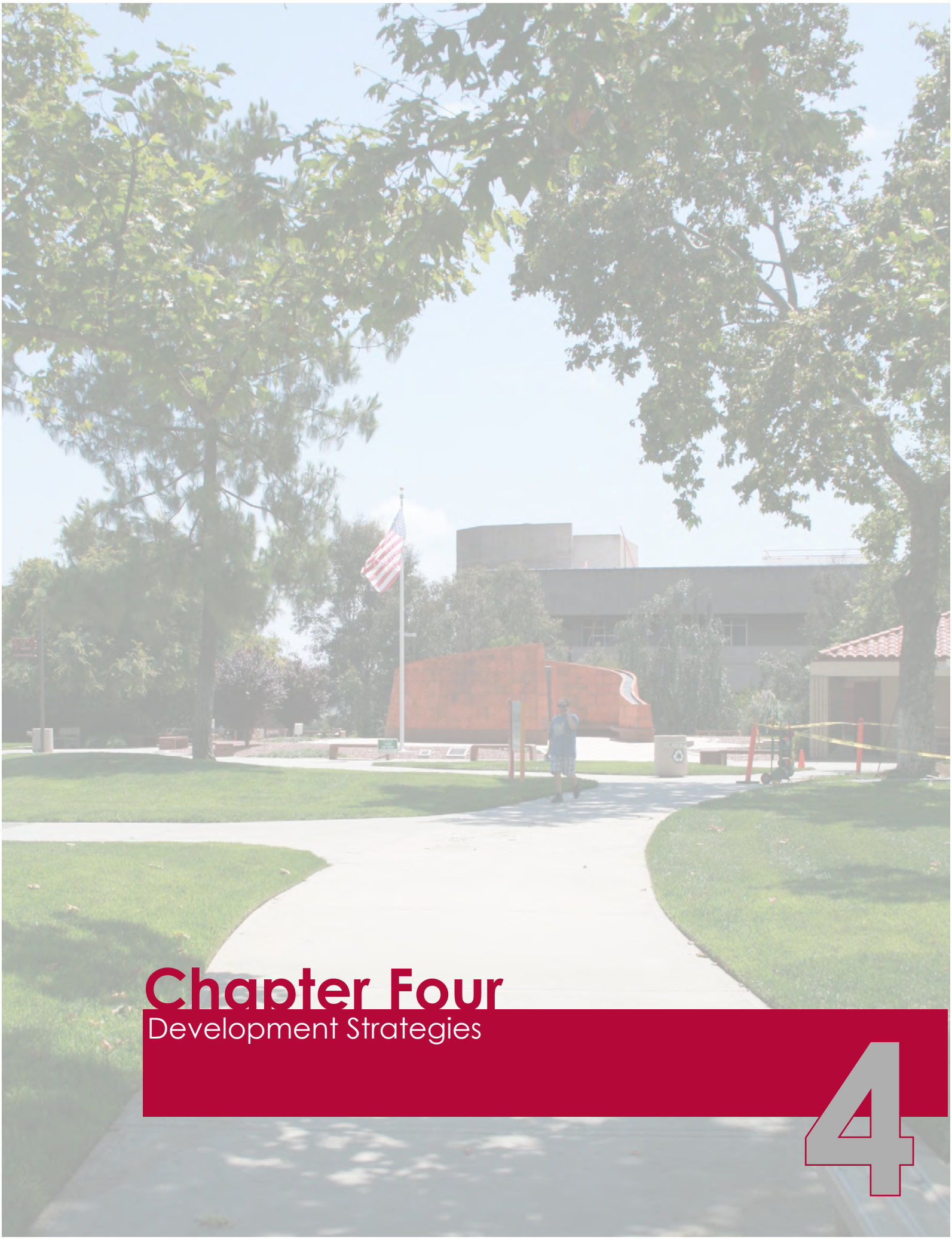
To identify and guide campus improvement concurrent with the 2011 Facilities Master Plan (FMP) Saddleback College has developed a 2011 20-year Scheduled Maintenance Plan (SMP). Similar to the FMP, the SMP is a living document, adjusted over time to address the aging infrastructure of the campus as new needs become apparent. Similar to the FMP, projects are identified and organized chronologically. Project scopes range from painting and minor repairs to accessibility upgrades, site repair and minor building remodels. Coordination between scheduled maintenance projects and master plan projects will be guided by College Maintenance, the South Orange County Community College District Facilities Committee and the College Strategic Planning and Development Process.

The current SMP project list has a scheduled maintenance list of 190 items to be addressed in the 2011-2031 timeframe, and is included in Appendix C for reference.

# 2006 Facilities Master Plan

***2006 Facilities Master Plan Project List***

| Horizon | Project Description | Status |
|---|---|---|
| **2006-2010** | | |
| 1. | New Lower Campus Portables | Completed |
| 2. | BGS Building Renovation | Completed |
| 3. | TAS Building Slab/Renovation | Programming |
| 4. | BGS Building Secondary Effects: Enlarge 2 Classrooms to 100+ Capacity; Enlarge Computer Lab Area; Relocate 2 Classrooms and 3 Offices to Adjacent Portables | Re-defined |
| 5. | Library/LRC Renovation | In construction |
| 6. | Remove SA and CC Portable Buildings; Renovate Quad | In construction |
| 7. | Renovate Performing Arts Restrooms | Completed |
| 8. | Renovate PE-100 Locker Rooms – Convert to Classrooms | Completed |
| 9. | Loop Road Re-route and College Drive Widening | Design |
| 10. | New Transportation Building; Demo Old Transportation and K Buildings | Re-prioritized |
| 11. | Close College Drive East and Provide Sidewalk to Village Portables | Re-defined |
| 12. | New Sciences Building; Demo Tennis Courts and Build in New Location | Design |
| **2011-2015** | | |
| 13. | MSE Building Slab/Renovation and Façade Removal | Re-defined |
| 14. | PE Gym and Central Plant Façade Removal/Repair | Re-defined |
| 15. | New Fine Arts Building/Amphitheatre/Site and Secondary Effects | Re-prioritized |
| 16. | New Admissions/Records/Counseling/Matriculation/Bursars Building with Classrooms | Re-prioritized |
| 17. | Student Services Secondary Effects | Re-defined |
| 18. | Renovate McKinney Theatre | Re-defined |
| 19. | Relocate Lower Campus Portables | Re-prioritized |
| 20. | Football Stadium Visitor Seating/Artificial Turf Field | Re-prioritized |
| 21. | New Soccer and Practice Field | Re-prioritized |
| 22. | New Soccer Field | Re-prioritized |
| 23. | New Off-site Center Lease Building | Eliminated |
| **2016-2030** | | |
| 24. | Widen Marguerite Parkway Entrance | Re-prioritized |
| 25. | New Parking Structure | Re-prioritized |
| 26. | New Classroom Building | Eliminated |
| 27. | Additional Surface Parking at Driving Range | Eliminated |



# Chapter Four

## Development Strategies

4

## Project Prioritization Criteria

Projects to be funded and completed under the guidance of this Facilities Master Plan must follow State established criteria for capital outlay projects and address specific categories utilized for State evaluation and approval. State defined criteria are defined as follows:

- Provide for safe facilities and activate existing space
- Increase instructional capacity
- Modernize instructional space
- Promote a completed campus concept
- Increase institutional support services capacity
- Modernize institutional support services space

To reflect State criteria and establish a development strategy for facilities projects, the following **Project Prioritization Criteria** were established to identify and prioritize new building, existing building modernization and site improvement projects for Saddleback College. These projects would be strategically sequenced within the defined 2011-2031 Facilities Master Plan Planning Horizons. The criteria consider global and specific influences, and incorporate input gathered during the 2011 Education and Facilities Master Plan Process, including campus focus group interviews, internal data assessment, physical improvement needs and external impacts such as the State Chancellor's Office approval process and future student expectations. Once projects were identified by the college, the criteria was utilized to assist the process to sequence project development and provide a basis to implement development strategy.

*Exhibit 4.1: Main Quad entrance to BGS*

*Exhibit 4.2: Walkway between ATAS & HS Buildings*

*Exhibit 4.3: View of HS building from transit stop*

# Project Prioritization Criteria

## Instructional Program Need

- **a.** Response to external factors (Labor Market Indicators)
- **b.** Inadequate facilities (performance, growth)
- **c.** Inefficient facilities (size, program need, functionality, technology)
- **d.** New student recruitment to specific programs
- **e.** Department/Division adjacencies
- **f.** Academic synergy

## Student Support Services

- **a.** Inadequate facilities (performance, growth)
- **b.** Inefficient facilities (size, program need, functionality, technology)
- **c.** New student recruitment
- **d.** Department/Division adjacencies
- **e.** Academic and/or Students Services synergy
- **f.** Response to external factors (economic and demographic)

## Facilities Condition: Safety and Compliance

- **a.** Conditions (building systems/infrastructure, campus lighting)
- **b.** Inefficient facilities (age deterioration, systems failure)
- **c.** Accessibility
- **d.** Parking availability
- **e.** Title IX
- **f.** Environmental sensitivity (water, natural preservation)
- **g.** Sustainability
- **h.** Life-cycle (energy cost, maintenance, durability)

## Campus Amenities: Benefit to a Student Centered Culture

- **a.** Pedestrian orientation (gathering, landscape)
- **b.** Services (food, entertainment, extra-curricular activities)
- **c.** Student gathering space (interior and exterior)
- **d.** Athletics and PE (local funding only)
- **e.** Other

## Funding Feasibility/Coordination

- **a.** State Funds
- **b.** Basic Aid Funds
- **c.** College Funds
- **d.** External Funds
- **e.** Other

## Facilities Organization: Centers for Learning

The **Facilities Organization** diagram acknowledges the value of clustering related academic programs to create student synergy, instructional efficiency and program identity. In addition, the college has identified ease of access to student services essential to the quality of student life. Though much of the campus already embraces the philosophy to meet these ideals, conscious organization of "**Centers for Learning**" will have a significant impact upon quality of instruction, synergy between programs and ease of pedestrian navigation. The adjacent Facilities Organization diagram suggests a guideline to influence project and program decisions over the life of the Facilities Master Plan and projects to be developed over the next 20 years. Though all programs and projects may not fit exactly within the defined diagram boundaries, their intent to place buildings and programs relative to academic relationships is intended to maintain emphasis on serving the student and maintaining rewarding collegiate experiences.

### LEGEND

| | |
|---|---|
| **AGB** | Administration & Governance Building |
| **AH** | Alumni House |
| **ATAS** | Advanced Technology & Applied Sciences |
| **BGS** | Business/General Studies |
| **CC** | Classroom Complex |
| **CDC** | Child Development Center |
| **CEC** | Community Education Center |
| **CP** | Campus Police |
| **CPT** | Central Plant |
| **CS** | Chemical Storage |
| **CUSTS** | Custodial Storage |
| **EP** | Electrical Plant |
| **FA** | Fine Arts Complex |
| **GC** | Grounds Complex |
| **GRNHS** | Horticulture Greenhouse |
| **HS** | Health Sciences |
| **LIB** | Library |
| **K** | K-Building |
| **PE-100** | Shower-Locker |
| **PE-200** | Gymnasium |
| **PE-300** | Activity Building |
| **PE-400** | Offices |
| **PE-500** | Golf |
| **PE-600** | Lifetime Fitness Center |
| **PG** | Public Golf |
| **SME** | Sciences/Mathematics/Engineering Building |
| **SS** | Saddleback Studios |
| **SSC** | Student Services Center |
| **T** | Transportation Yard |
| **VIL** | "Village" Classrooms (Multiple Buildings) |
| **WH** | Warehouse |

### CENTERS FOR LEARNING

| | |
|---|---|
| a | Arrival Zone |
| b | Academic/Student Services |
| c | Academic/Fine Arts Zone |
| d | Academic/Athletics Zone |

# Academic Organization: Centers for Learning

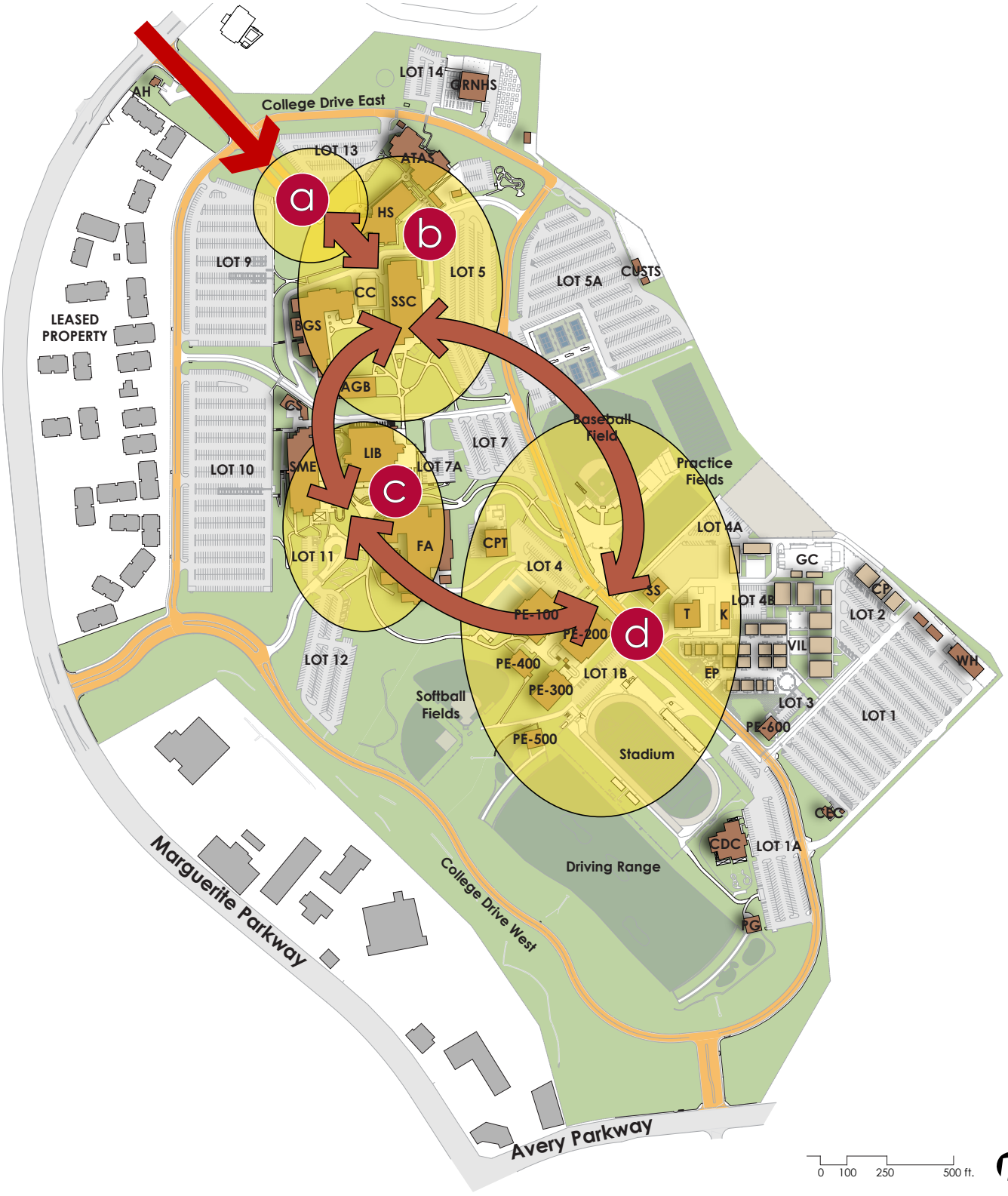



*Exhibit 4.4: Centers for Learning Diagram*

## Project Sequence: 2011-2031

The following Project Sequence for Saddleback College defines all projects anticipated to begin within the 20 year Facilities Master Plan Horizon. Projects and their respective sequence is the result of numerous meetings with college representatives to identify need or value, define project scope and forecast project cost. Definition of the final project sequence was established by the college and guided by the Project Prioritization Criteria. Projects listed include new buildings, renovated/modernized existing buildings and site improvements. For clarity of definition all projects are identified as "New" or "Renovate", and are listed sequentially in specific 5, 10 and 20 year planning horizons. Detailed specific planning horizon descriptions, found later in this section, define each project is briefly to define intent and scope of the project and guide project cost forecasts.

Though projects are identified sequentially it is likely some project developments may overlap and/or some projects may adjust in position, responsive to changing needs or as yet undefined funding opportunities. Projects 1, 2 and 3 in the 5 year planning horizon are already approved and moving forward. Projects 8 and 9 are currently in the State submittal and review process. Appendix E provides a complete Project Cost Summary, itemizing each individual project in terms of construction value, project costs (including management, fees and FF&E), and escalation.

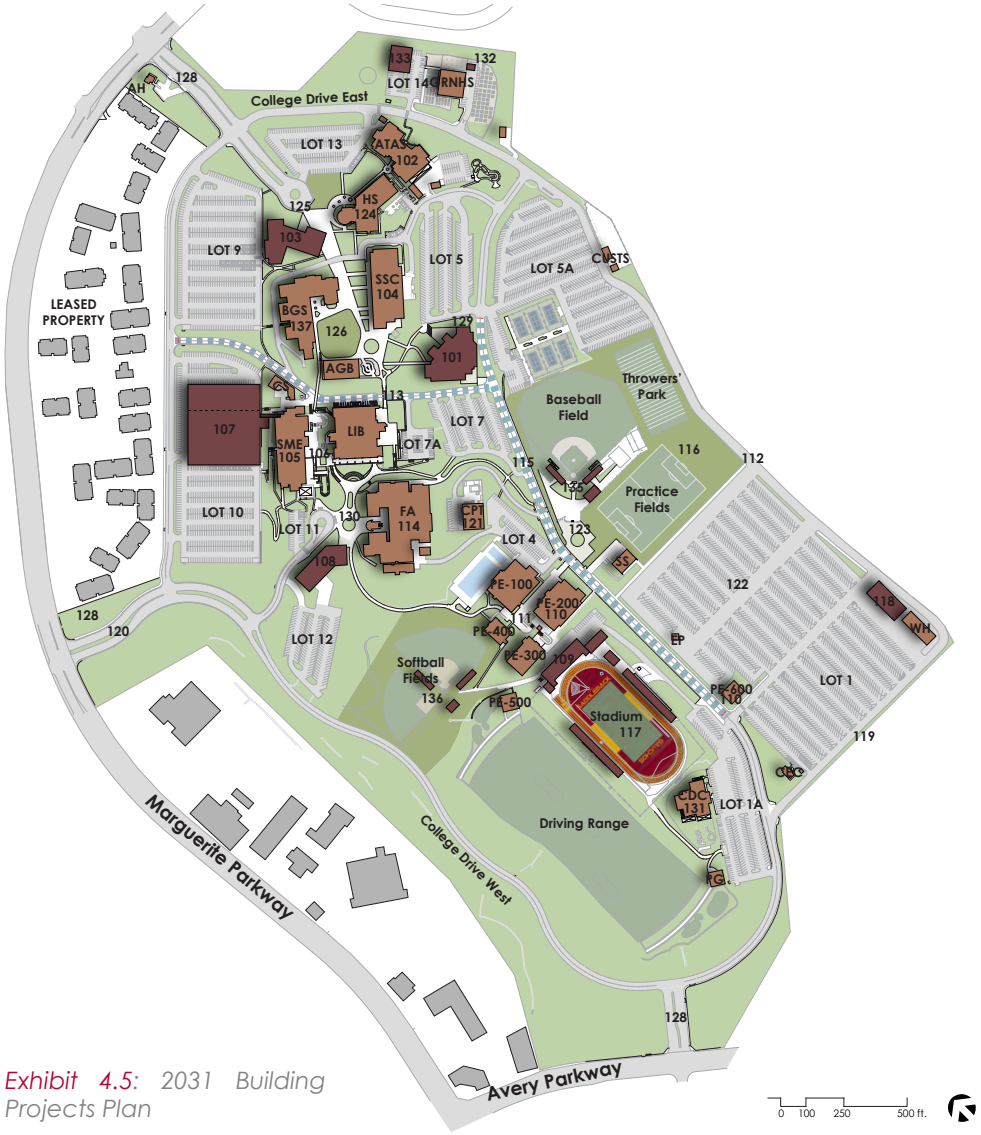



*Exhibit 4.5: 2031 Building Projects Plan*

*2011-2016 Planning Horizon*

| | Project Identification | Campus Plan Location |
|---|---|---|
| 1. | New Sciences Building and Utilities Service | 101 |
| 2. | Renovate Technology and Applied Sciences Building | 102 |
| 3. | New Loop Road Alignment, Sitework and Infrastructure | 112 |
| 4. | New Gateway Building | 103 |
| 5. | Renovate Gateway Building/Transit Entrance Plaza | 125 |
| 6. | Renovate Quad Landscape/Hardscape | 126 |

*2016-2021 Planning Horizon*

| | Project Identification | Campus Plan Location |
|---|---|---|
| 7. | Renovate Student Services Center Building | 104 |
| 8. | Renovate Fine Arts Building | 114 |
| 9. | Renovate Science Math Building and Science Math Plaza | 105 |
| 10. | Renovate Science Math Plaza | 106 |
| 11. | Renovate Health Sciences Building | 124 |
| 12. | Renovate Athletics Stadium | 117 |

*2021-2031 Planning Horizon*

| | Project Identification | Campus Plan Location |
|---|---|---|
| 13. | New Lifetime Fitness and Wellness Center | 109 |
| 14. | Renovate PE-100, PE-200, PE-300, PE-400, PE-500 and PE-600 Buildings | 110 |
| 15. | Renovate PE Plaza | 111 |
| 16. | Renovate Central Plant | 121 |
| 17. | New Parking Structure Phase I | 107 |
| 18. | Renovate Marguerite Parkway Entrance | 120 |
| 19. | Renovate Campus Pedestrian Pathways | 127 |
| 20. | Renovate College Entrances: College Drive; Marguerite Parkway; Avery Parkway | 128 |
| 21. | Renovate Library Drive: Pedestrian Improvement | 113 |
| 22. | Renovate East Campus Drive: Pedestrian Promenade | 115 |
| 23. | New Athletics Plaza | 123 |
| 24. | New Campus Warehouse, Maintenance Shops and Yard | 118 |
| 25. | Renovate Child Care Center (CDC) Building | 131 |
| 26. | New Horticulture Restrooms | 132 |
| 27. | New Central Plant and Power Generation Facility | 133 |
| 28. | New Fine Arts Building | 108 |
| 29. | Renovate Fine Arts Plaza | 130 |
| 30. | New Baseball Restrooms / Bleachers / Concessions | 135 |
| 31. | New Softball Restrooms / Bleachers | 136 |
| 32. | New Parking Structure Phase II (750 Spaces) | 107 |
| 33. | New Surface Parking Lot | 122 |
| 34. | Renovate Business General Studies (BGS) Building | 137 |

## Campus Space Inventory: Buildings

The following **Campus Space Inventory** itemizes each existing and proposed building in the 2011 Facilities Master Plan. Building identification for future buildings is based upon the Master Plan legend. Each existing and new building is described in terms of **instructional program space** (WSCH), **non instructional program space** (Non-WSCH) and **gross building space**. Identification of proposed instructional and non instructional reflects program growth projections established by the 2011 Educational Master Plan. Gross building space (GSF) for existing buildings is representative of existing conditions. Gross building space (GSF) for future buildings is based upon a standardized building efficiency factor 68%. Future building instructional, non instructional, gross and efficiency factors will be validated during subsequent programming processes.

Below the inventory tabulation a forecasted program space need is identified based upon the respective growth projects established by the Educational Master Plan. The variance shown compares the campus composite provided program area with forecast program need.

*Exhibit 4.6: Looking at SSC from Main Quad lawn*

*Exhibit 4.7: Saddleback Studios building*

*Exhibit 4.8: AGB & BGS buildings*

# Campus Space Inventory: Buildings

| Building Identification | ASF (WSCH) | ASF (Non-WSCH) | GSF |
|---|---|---|---|
| **EXISTING BUILDINGS** | | | |
| AGB | 5,387 ASF | | 7,920 GSF |
| AH | | 492 ASF | 900 GSF |
| ATAS | 2,942 ASF | | 36,601 GSF |
| BGS | 56,420 ASF | | 84,442 GSF |
| CDC | 419 ASF | 7,960 ASF | 12,817 GSF |
| CPLANT | | 4,558 ASF | 17,529 GSF |
| CHEMS | | 2,138 ASF | 2,378 GSF |
| CUSTS | | 1,247 ASF | 1,321 GSF |
| FA | 41,024 ASF | | 52,599 GSF |
| GRNHS | | 9,216 ASF | 9,216 GSF |
| GSC | 5,601 ASF | | 7,218 GSF |
| HS | 46,839 ASF | | 65,897 GSF |
| LIB | 20,888 ASF | 48,737 ASF | 101,664 GSF |
| PE-100 | | 13,531 ASF | 20,549 GSF |
| PE-200 | 322 ASF | 15,765 ASF | 20,318 GSF |
| PE-300 | 603 ASF | 5,424 ASF | 9,049 GSF |
| PE-400 | 2,002 ASF | 501 ASF | 4,944 GSF |
| PE-500 | 1,604 ASF | | 2,378 GSF |
| PE-600 | 3,334 ASF | | 4,214 GSF |
| PG | | 727 ASF | 1,525 GSF |
| SME | 52,377 ASF | | 81,420 GSF |
| SSC | 38,527 ASF | | 62,400 GSF |
| WH | | 6,922 ASF | 7,211 GSF |
| **SUBTOTAL** | **278,289 ASF** | **117,218 ASF** | **614,510 GSF** |
| **FUTURE BUILDINGS** | | | |
| 101 Sciences | 51,197 ASF | | 80,000 GSF |
| 103 Gateway | 53,850 ASF | | 79,500 GSF |
| 108 Fine Arts | 20,400 ASF | | 30,000 GSF |
| 109 | 816 ASF | 16,320 ASF | 24,500 GSF |
| 118 | | 10,000 ASF | 10,000 GSF |
| **SUBTOTAL** | **126,263 ASF** | **26,320 ASF** | **224,000 GSF** |
| **TOTAL PROVIDED** | **404,552 ASF** | **143,538 ASF** | **838,510 GSF** |
| **PROJECTED 2031 NEED (WSCH)** (Instructional/Office) | **416,901 ASF** | | |
| **VARIANCE** | **-12,349 ASF** | | |

## Campus Space Inventory: Portables

Below is the inventory tabulation of current program space provided in portable buildings. Most portable buildings are located in the area known as "**The Village**", with the exception of Building CC, located in the Quad. As new permanent buildings are constructed or existing buildings renovated the identified program space in all portable buildings will relocate into the new facilities. Portable buildings will be removed to allow re-purposing of site area.

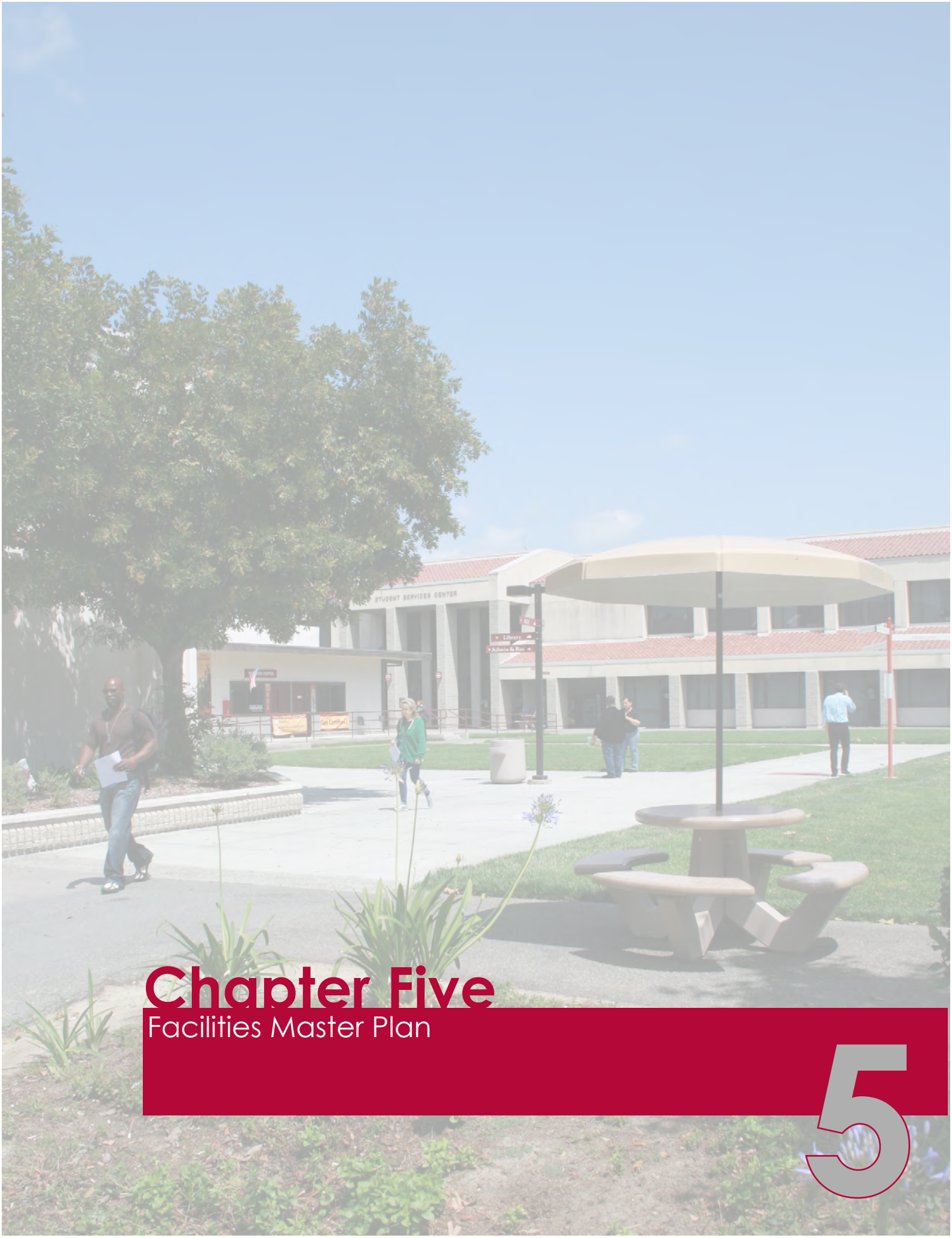
Some portable buildings will remain inactive on site during planning horizons, available to be utilized for interim housing of programs during periods of construction. The inventory below is based upon documented inventory with the State and additional measurements taken by the Master Plan team. All ASF and GSF tabulations must be re-measured during individual Master Plan projects to confirm areas.

Existing Portables

*Exhibit 4.9: Plan of "The Village"*

# Campus Space Inventory: Portables

| Portable Unit Identification | ASF (WSCH) | ASF (Non-WSCH) | GSF |
|---|---|---|---|
| Village 1 | | 2,503 ASF | 2,778 GSF |
| CP | 2,503 ASF | | 2,778 GSF |
| Village 2 | 3,923 ASF | | 4,355 GSF |
| Village 3 | 4,581 ASF | 895 ASF | 6,078 GSF |
| Village 4 | 4,622 ASF | 854 ASF | 6,078 GSF |
| Village 5 | 5,476 ASF | | 6,078 GSF |
| Village 6 | | 1,794 ASF | 1,991 GSF |
| Village 7 | 4,830 ASF | | 5,361 GSF |
| Village 8 | 4,782 ASF | | 5,361 GSF |
| Village 9 | 3,013 ASF | | 3,344 GSF |
| Village 10 | 3,013 ASF | | 3,344 GSF |
| Village 18 | | 1,516 ASF | 1,683 GSF |
| Village 19 | | 1,516 ASF | 1,683 GSF |
| Village 20 | 1,794 ASF | | 1,991 GSF |
| Village 21 | 1,794 ASF | | 1,991 GSF |
| Village 22 | 1,794 ASF | | 1,991 GSF |
| Village 23 | 852 ASF | | 1,991 GSF |
| Village 24 | 1,794 ASF | | 1,991 GSF |
| Village 25 | 1,794 ASF | | 1,991 GSF |
| Village 26 | 1,794 ASF | | 1,991 GSF |
| Village 27 | 1,794 ASF | | 1,991 GSF |
| Village 28 | 1,691 ASF | 103 ASF | 1,991 GSF |
| Village 29 | 1,794 ASF | | 1,991 GSF |
| Village 30 | 1,794 ASF | | 1,991 GSF |
| Village 31 | 1,794 ASF | | 1,991 GSF |
| Village 32 | 1,794 ASF | | 1,991 GSF |
| Village 33 | 1,784 ASF | | 1,991 GSF |
| **Village Total** | **60,804 ASF** | **10,123 ASF** | **78,786 GSF** |
| **Building CC (Quad)** | **4,130 ASF** | **1,355** | **5,760 GSF** |
| **Total** | **64,934 ASF** | **11,478 ASF** | **84,546 GSF** |




# Chapter Five

## Facilities Master Plan

5

## 2031 Illustrative Campus Vision

The 2031 Campus Vision defines the Saddleback College campus as an active, welcoming "**Environment for Learning**", celebrating the Saddleback College Vision....."to be the first choice for students who seek a dynamic, innovative, and student-centered postsecondary education." The campus will include several new and modernized instructional "Centers for Learning" united by diverse exterior landscape and plaza environments that are both educational and inspirational. As the campus continues to mature, students will be compelled to extend their time on campus and take advantage of opportunities for academic, athletic and social activity. Provisions for individual study and group gathering spaces will encourage Learning and synergy between students and faculty.

### *Campus Organization*

Organization of the Saddleback College Campus will respect the **organic patterns of terrain** prevalent throughout South Orange County and the namesake of the college. These patterns exist in the current orientation of buildings, and shaping of pedestrian paths and open spaces throughout the campus. The 2031 Campus Vision promotes a blending of **organic patterns** with subtle geometric compositions of individual buildings and building groupings. Combining natural and geometric patterns will emphasize the heritage of nature, and provide a diversity of people friendly, pedestrian oriented plazas, green spaces, gathering places and circulation paths.

### *Circulation Effectiveness*

Circulation effectiveness suggests **people friendly environments** that include awareness of pedestrian safety, ease of vehicular and pedestrian navigation around the campus and ample provisions for accessible parking. Emphasis of peripheral parking and a central pedestrian environment will limit interaction between people and vehicles, thus improving campus safety. Development of a parking structure in the future will provide more parking in proximity to the academic core areas. Final positioning of the structure near Library Drive will accommodate pedestrian needs and facilitate vehicular access and egress to and from the campus.

### *Centers for Learning*

Development of "Centers for Learning" will **increase student synergy** and interaction between related instructional programs, and **promote identity** of programs that share common buildings or are adjacent buildings. Identity of programs may be emphasized with design of exterior environments that reflect the nature of the instructional purposes of their surrounding buildings. Landscape and hardscape areas may incorporate signage, graphics, sculpture or student projects that characterize the nature of academic endeavors such as sciences and mathematics, humanities and languages, arts, media, business and athletics.


*Exhibit 5.1: 2031 Illustrative Campus Plan*

## Facilities Master Plan: 2031 Building Projects

The following campus plan graphic identifies all future building projects within the existing campus context. Placement of building projects in an appropriate order emphasizes the previously outlined Project Prioritization Criteria and several key features of the Campus Vision:

- **Proximity** of related instructional programs to increase academic synergy and instructional efficiency
- **State-of-the-art** instructional spaces
- **Welcoming** student services
- **Identity** of the College from the surrounding community
- Importance of a prominent **Campus "Front Door"** located on College Drive.
- **Placement** of parking and vehicular access for ease of navigation
- **Project sequence** to enable secondary effects and program move-management
- **Elimination of portables** for permanent instructional or support use

The combined impact of building projects on the Campus Vision is to maintain consolidation of building placement balanced with a diverse network of pedestrian open spaces and rich landscape. Following Development Horizon plan graphics and Project Sequence lists outline specific "**pattern of growth**" for the 5, 10 and 20 year planning horizons. The proposed pattern of growth was guided by the college and is based upon a practical sequence of expansion, minimal impact upon campus function during construction, and strict compliance with instructional and infrastructure needs defined by the Educational Master Plan forecasts.

### LEGEND | EXISTING

| | |
|---|---|
| **AGB** | Administration & Governance Building |
| **AH** | Alumni House |
| **ATAS** | Advanced Technology & Applied Sciences |
| **BGS** | Business/General Studies |
| **CDC** | Child Development Center |
| **CEC** | Community Education Center |
| **CPT** | Central Plant |
| **CS** | Chemical Storage |
| **CUSTS** | Custodial Storage |
| **EP** | Electrical Plant |
| **FA** | Fine Arts Complex |
| **GRNHS** | Horticulture Greenhouse |
| **HS** | Health Sciences |
| **LIB** | Library |
| **PE-100** | Shower-Locker |
| **PE-200** | Gymnasium |
| **PE-300** | Activity Building |
| **PE-400** | Offices |
| **PE-500** | Golf |
| **PE-600** | Lifetime Fitness Center |
| **PG** | Public Golf |
| **SME** | Sciences/Mathematics/Engineering Bldg. |
| **SS** | Saddleback Studios |
| **SSC** | Student Services Center |
| **WH** | Warehouse |

### LEGEND | PROPOSED

| | |
|---|---|
| **101** | New Sciences Building |
| **102** | Renovate ATAS Building |
| **103** | New Gateway Building |
| **104** | Renovate SSC Building |
| **105** | Renovate SME Building |
| **107** | New Parking Structure |
| **108** | New Fine Arts Building |
| **109** | New Lifetime Fitness & Wellness Center |
| **110** | Renovate PE Buildings |
| **117** | Renovate Athletics Stadium |
| **118** | New Campus Warehouse |
| **121** | Renovate Central Plant |
| **124** | Renovate HS Building |
| **131** | Renovate CDC Building |
| **132** | New Horticulture Restrooms |
| **133** | New Central Plant Facility |
| **135** | New Baseball Restrooms/Bleachers/ Concessions |
| **136** | New Softball Restrooms/Bleachers |
| **137** | Renovate BGS Building |

# Facilities Master Plan: 2031 Building Projects

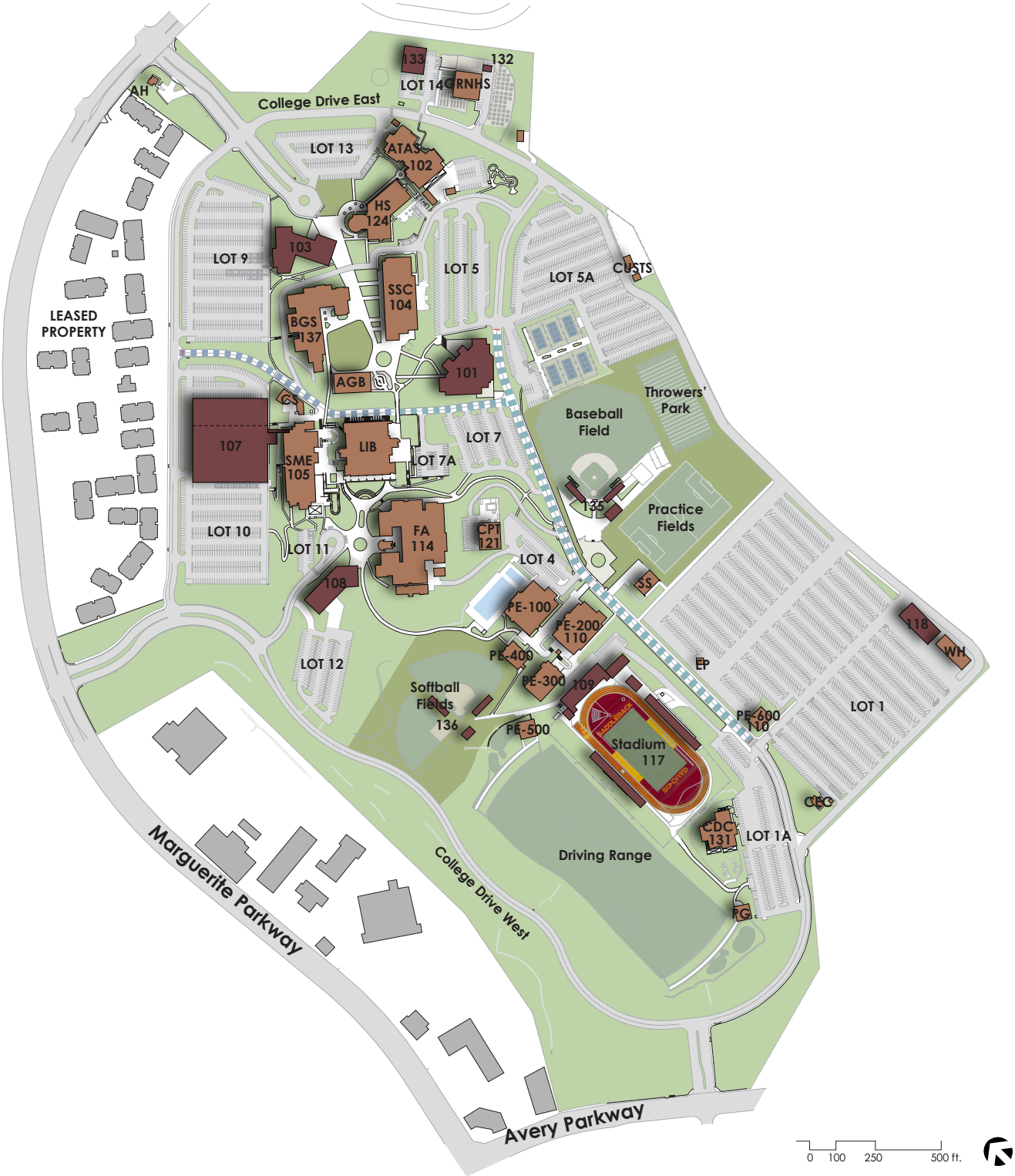



*Exhibit 5.2: 2031 Building Projects*

## Facilities Master Plan: 2031 Site Improvement Projects

The following campus plan graphic identifies all future site improvement projects within the existing campus context. Identification of site improvement projects emphasizes several key features of the Campus Vision:

- **Diversity** of open spaces for study or group gathering
- Emphasis of "**The Quad**" as the center of campus culture
- Re-designed College Drive to emphasize the **Campus "Front Door"**
- **Clarity** of pedestrian and vehicular circulation paths
- **Improve** pedestrian paths for accessibility and pedestrian safety
- Remodeled sports practice field for increased **athlete safety**
- **Project sequence** to correspond with adjacent building projects
- **Enable** campus circulation during and post construction

The combined impact of site improvement projects on the Campus Vision is to compliment building projects and enhance pedestrian activity throughout the campus. Following plan graphics identify specific 5, 10 and 20 year site improvement projects. The proposed project sequence addresses expansion of the campus open space and pedestrian network with minimal impact upon campus function.

### LEGEND | EXISTING

| | |
|---|---|
| **AGB** | Administration & Governance Building |
| **AH** | Alumni House |
| **ATAS** | Advanced Technology & Applied Sciences |
| **BGS** | Business/General Studies |
| **CDC** | Child Development Center |
| **CEC** | Community Education Center |
| **CPT** | Central Plant |
| **CS** | Chemical Storage |
| **CUSTS** | Custodial Storage |
| **EP** | Electrical Plant |
| **FA** | Fine Arts Complex |
| **GRNHS** | Horticulture Greenhouse |
| **HS** | Health Sciences |
| **LIB** | Library |
| **PE-100** | Shower-Locker |
| **PE-200** | Gymnasium |
| **PE-300** | Activity Building |
| **PE-400** | Offices |
| **PE-500** | Golf |
| **PE-600** | Lifetime Fitness Center |
| **PG** | Public Golf |
| **SME** | Sciences/Mathematics/Engineering Bldg. |
| **SS** | Saddleback Studios |
| **SSC** | Student Services Center |
| **WH** | Warehouse |

### LEGEND | PROPOSED

| | |
|---|---|
| **106** | Renovate SME Plaza |
| **111** | Renovate PE Plaza |
| **112** | New Loop Road Alignment |
| **113** | Renovate Library Drive |
| **115** | Renovate East Campus Drive: Pedestrian Promenade |
| **116** | New Throwers' Park and Practice Field |
| **119** | New Storm Water Remediation |
| **120** | Renovate Marguerite Parkway |
| **122** | New Surface Parking Lot |
| **123** | New Athletics Plaza |
| **125** | Renovate Gateway Building/Transit Entrance Plaza |
| **126** | Renovate Quad Landscape/Hardscape |
| **127** | Renovate Campus Pedestrian Pathways |
| **128** | Renovate College Entrances |
| **129** | New Sciences Building Demonstration Garden |
| **130** | Renovate Fine Arts Plaza |

# Facilities Master Plan: 2031 Site Improvement Projects


*Exhibit 5.3: 2031 Site Improvement Projects Plan*

## Master Plan: 2016 5-Year Development Horizon

Projects identified in the 2011-2016 development horizon are those currently in stages of approval processes, programming development for State approval or directly impacted by projects in the approval processes. Approval processes include South Orange County Community College District (SOCCCD) Board approval, State Chancellors office approval and compliance with Board of Governors criteria for approval. Projects and project sequence was prepared by the Master Planning team with guidance and direction from Saddleback College. The adjacent campus plan graphically identifies each project within this horizon and the following page provides itemization of projects in the order of intended sequence of development. Project itemization includes the following information:

- New or Renovation Project
- Plan Legend location
- Summary project description, status and secondary effects
- Project Value in 2011 dollars
- Project Value including cost escalation

Projects in the 5 year development horizon will have significant impacts upon the quality of instruction by providing state-of-the-art labs, classrooms and student services program space. Related site improvement projects will address previously noted criteria such as "benefit student-centered culture" and secondary effects projects will facilitate "academic organization". In addition, forecast budget availability over the 5 year planning and development process guided the extent of projects to be pursued in the defined timeline.

### LEGEND | EXISTING

| | |
|---|---|
| **AGB** | Administration & Governance Building |
| **AH** | Alumni House |
| **ATAS** | Advanced Technology & Applied Sciences |
| **BGS** | Business/General Studies |
| **CDC** | Child Development Center |
| **CEC** | Community Education Center |
| **CP** | Campus Police |
| **CPT** | Central Plant |
| **CS** | Chemical Storage |
| **CUSTS** | Custodial Storage |
| **EP** | Electrical Plant |
| **FA** | Fine Arts Complex |
| **GC** | Grounds Complex |
| **GRNHS** | Horticulture Greenhouse |
| **HS** | Health Sciences |
| **K** | K-Building |
| **LIB** | Library |
| **PE-100** | Shower-Locker |
| **PE-200** | Gymnasium |
| **PE-300** | Activity Building |
| **PE-400** | Offices |
| **PE-500** | Golf |
| **PE-600** | Lifetime Fitness Center |
| **PG** | Public Golf |
| **SME** | Sciences/Mathematics/Engineering Bldg. |
| **SS** | Saddleback Studios |
| **SSC** | Student Services Center |
| **T** | Transportation Yard |
| **VIL** | "Village" Classrooms (Multiple Buildings) |
| **WH** | Warehouse |

### LEGEND | PROPOSED

| | |
|---|---|
| **101** | New Sciences Building & Utilities Service |
| **102** | Renovate Technology and Applied Sciences Building |
| **103** | New Gateway Building |
| **112** | New Loop Road Alignment, Sitework and Infrastructure |
| **116** | Throwers' Park and Practice Field |
| **119** | Southeast Campus Perimeter Storm Water Remediation |
| **125** | Renovate Gateway Building/Transit Entrance Plaza |
| **126** | Renovate Quad Landscape/Hardscape |
| **129** | New Sciences Building Demonstration Garden |

# Master Plan: 2016 5-Year Development Horizon


*Exhibit 5.4: 2016 - 5-Year Development Plan*

## Master Plan: 2016 5-Year Development Horizon

**Project Sequence**

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 1. | **New Sciences Building and Utilities Service**<br>80,000 GSF Building Approved and in design | **101** | **55,010,912** | **58,311,566** |
| | a. **New Sciences Building Demonstration Garden**<br>Integrated with New Sciences Building Design – 9,000 SF area | **129** | | |
| 2. | **Renovate Technology and Applied Sciences Building**<br>40,000 GSF Building Approved and in planning | **102** | **14,732,409** | **15,616,352** |
| | a. Secondary Effects – Relocate ATAS Programs to Village portable classrooms<br>b. Secondary Effects – Relocate ATAS Programs to Renovated TAS Building | | | |
| 3. | **New Loop Road Alignment, Sitework and Infrastructure**<br>Approved and in planning | **112** | **8,997,583** | **9,537,438** |
| | a. **Remediate Southeast Campus Perimeter Storm Water Control**<br>Renovate southeast campus perimeter for drainage control | **119** | | |
| | **b. Relocate Throwers' Park and Renovate Practice Field**<br>Renovate existing practice fields and lot 4A – new DG surface for Thrower's Park; 20-foot high fence along Loop Road; runway for javelin and cage for discuss, hammer throw and shot put; Artificial surface and perimeter fence for Practice Field | **116** | | |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

# Master Plan: 2016 5-Year Development Horizon

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 4. | **New Gateway Building**<br>Multi-story 79,500 GSF Building for Student Services and Instructional Labs, Classrooms and support<br><br>a. Secondary Effects – Relocate Student Services Programs to Gateway Building<br>b. Secondary Effects – Relocate Interdisciplinary Instructional Lecture/Labs into Gateway Building | **103** | **46,007,774** | **51,528,705** |
| 5. | **Renovate Gateway Building/Transit Entrance Plaza**<br>86,000 SF area, demolition and new construction – 20% paved, 80% landscape | **125** | **4,052,653** | **4,660,551** |
| 6. | **Renovate Quad Landscape/Hardscape**<br>104,000 SF area, multi-phase demolition and new construction – 50% paved, 50% landscape | **126** | **4,243,964** | **4,880,559** |
| | **Total Project Values** | | | **144,535,171** |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

## Master Plan: 2021 10-Year Development Horizon

Projects identified in the 2016-2021 development horizon focuses on large scale modernization of efficiency and function issues. Project scopes focus upon building modernization, safety, functional improvement of the stadium and site development to improve pedestrian accessibility. Projects and project sequence was prepared by the Master Planning team with guidance and direction from Saddleback College. The adjacent campus plan graphically identifies each project within this horizon and the following page provides itemization of projects in the order of intended sequence of development. Project itemization includes the following information:

- New or Renovation Project
- Plan Legend location
- Summary project description, status and secondary effects
- Project Value in 2011 dollars
- Project Value including cost escalation

Projects in the 10 year development horizon will have significant impacts upon the quality of building facilities and state-of-the-art instructional needs, site improvement for athletic participation, and campus infrastructure to support student activities and pedestrian navigation. Projects identified will significantly address previously noted criteria such as "**benefit student-centered culture**" and support the stated goal of "**academic organization**". In addition, forecast budget availability over the 2016-2021 planning and development process guided the extent of projects to be pursued in the defined timeline.

### LEGEND | EXISTING

| | |
|---|---|
| **AGB** | Administration & Governance Building |
| **AH** | Alumni House |
| **ATAS** | Advanced Technology & Applied Sciences |
| **BGS** | Business/General Studies |
| **CDC** | Child Development Center |
| **CEC** | Community Education Center |
| **CP** | Campus Police |
| **CPT** | Central Plant |
| **CS** | Chemical Storage |
| **CUSTS** | Custodial Storage |
| **EP** | Electrical Plant |
| **FA** | Fine Arts Complex |
| **GC** | Grounds Complex |
| **GRNHS** | Horticulture Greenhouse |
| **HS** | Health Sciences |
| **K** | K-Building |
| **LIB** | Library |
| **PE-100** | Shower-Locker |
| **PE-200** | Gymnasium |
| **PE-300** | Activity Building |
| **PE-400** | Offices |
| **PE-500** | Golf |
| **PE-600** | Lifetime Fitness Center |
| **PG** | Public Golf |
| **SME** | Sciences/Mathematics/Engineering Bldg. |
| **SS** | Saddleback Studios |
| **SSC** | Student Services Center |
| **T** | Transportation Yard |
| **VIL** | "Village" Classrooms (Multiple Buildings) |
| **WH** | Warehouse |
| **101** | Sciences Building & Utilities Service |
| **103** | Gateway Building |

### LEGEND | PROPOSED

| | |
|---|---|
| **104** | Renovate Student Services Center (SSC) Building |
| **105** | Renovate Sciences/Mathematics/ Engineering Building |
| **106** | Renovate SME Plaza |
| **114** | Renovate Fine Arts Building |
| **117** | Renovate Athletics Stadium |
| **124** | Renovate Health Sciences Building |

# Master Plan: 2021 10-Year Development Horizon


*Exhibit 5.5: 2021 - 10-Year Development Plan*

## Master Plan: 2021 10-Year Development Horizon

**Project Sequence**

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 7. | **Renovate Student Services Center (SSC) Building**<br>Remodel existing two story 62,400 GSF building; update mechanical, replace 50% of interior partitions, 100% lighting and finishes; renovate and modify exterior finishes; include 9,500 SF Food Service<br><br>a. Secondary Effects – Relocate Food Services and Bookstore to temporary facility; provide three Portable classrooms for temporary food service and three Portable classrooms for Bookstore<br>b. Secondary Effects – Relocate Food Services, Bookstore, Culinary Arts, Hospitality Management into SSC Building | **104** | **21,544,701** | **25,422,747** |
| 8. | **Renovate Fine Arts Building**<br>Remodel existing 52,599 GSF building; update mechanical, 100% lighting and finishes; renovate 404 seat theatre and 75 seat studio theatre; renovate exterior finishes | **114** | **23,916,974** | **28,939,538** |
| 9. | **Renovate Science Math Building**<br>Remodel existing three story 81,420 GSF building; update mechanical and structural, replace 70% of interior partitions, 100% lighting and finishes; renovate and modify exterior finishes<br><br>a. Secondary Effects – Relocate Math and Computer Science Programs into Village portables<br>b. Secondary Effects – Relocate Math and Computer Science Programs into Renovated/Replaced MSE Building | **105** | **30,290,724** | **38,469,220** |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

# Master Plan: 2021 10-Year Development Horizon

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 10. | **Renovate Science Math Plaza**<br>35,500 SF area, demolition and new construction – 90% paved, 10% landscape; new accessibility ramping | **106** | **2,179,685** | **2,833,591** |
| 11. | **Renovate Health Sciences Building**<br>Remodel half second and full third floor of existing three story building - 32,950 GSF project area; convert office space to Health Sciences instructional space (classrooms and labs); replace 80% of interior partitions, 100% lighting and finishes | **124** | **6,810,225** | **8,853,293** |
| 12. | **Renovate Athletics Stadium**<br>New regulation artificial turf field; modify existing bleachers for 2,000 seats, ADA and seismic compliance; New ADA compliant bleachers 3,000 seats and accessible pressbox; New 1,000 GSF Building for restrooms, concessions and team room | **117** | **5,787,141** | **7,523,283** |
| | **Total Project Values** | | | **112,041,672** |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

## Master Plan: 2031 20-Year Development Horizon

Projects identified in the 2021-2031 development horizon incorporate instructional growth and enhancement, development of athletic facilities and significant infrastructure developments relative to parking provisions, traffic control and campus identity. Projects and project sequence was prepared by the Master Planning team with guidance and direction from Saddleback College. The adjacent campus plan graphically identifies each project within this horizon and the following page provides itemization of projects in the order of intended sequence of development. Project itemization includes the following information:

- New or Renovation Project
- Plan Legend location
- Summary project description, status and secondary effects
- Project Value in 2011 dollars
- Project Value including cost escalation

Projects in the 20 year development horizon will have significant impacts upon the quality of academic instruction, student service and campus infrastructure. Projects identified will significantly address previously noted criteria such as "benefit student-centered culture" and support the stated goal of "**academic organization**". In addition, forecast budget availability over the 2016-2021 planning and development process guided the extent of projects to be pursued in the defined timeline.

### LEGEND | EXISTING

| | |
|---|---|
| **AGB** | Administration & Governance Building |
| **AH** | Alumni House |
| **ATAS** | Advanced Technology & Applied Sciences |
| **BGS** | Business/General Studies |
| **CDC** | Child Development Center |
| **CEC** | Community Education Center |
| **CPT** | Central Plant |
| **CS** | Chemical Storage |
| **CUSTS** | Custodial Storage |
| **EP** | Electrical Plant |
| **FA** | Fine Arts Complex |
| **GRNHS** | Horticulture Greenhouse |
| **HS** | Health Sciences |
| **LIB** | Library |
| **PE-100** | Shower-Locker |
| **PE-200** | Gymnasium |
| **PE-300** | Activity Building |
| **PE-400** | Offices |
| **PE-500** | Golf |
| **PE-600** | Lifetime Fitness Center |
| **PG** | Public Golf |
| **SME** | Sciences/Mathematics/Engineering Bldg. |
| **SS** | Saddleback Studios |
| **SSC** | Student Services Center |
| **WH** | Warehouse |
| **101** | Sciences Building & Utilities Service |
| **103** | Gateway Building |
| **109** | Lifetime Fitness and Wellness Center |

### LEGEND | PROPOSED

| | |
|---|---|
| **107** | New Parking Structure Phase I & II |
| **108** | New Fine Arts Building |
| **109** | New Lifetime Fitness and Wellness Center |
| **110** | Renovate PE-100, PE-200, PE-300, PE-400, |
| **111** | PE-500 and PE-600 Buildings<br>Renovate PE Plaza |
| **113** | Renovate Library Drive: Pedestrian Improvement |
| **115** | Renovate East Campus Drive: Pedestrian Promenade |
| **118** | New Campus Warehouse, Maintenance Shops and Yard |
| **120** | Renovate Marguerite Parkway Entrance |
| **121** | Renovate Central Plant |
| **122** | New Surface Parking Lot |
| **123** | New Athletics Plaza |
| **127** | Renovate Campus Pedestrian Pathways |
| **128** | Renovate College Entrances |
| **130** | Renovate Fine Arts Plaza |
| **131** | Renovate CDC |
| **132** | New Horticulture Restrooms |
| **133** | New Central Plant & Power Generation Facility |
| **135** | New Baseball Restrooms/Bleachers/ Concessions |
| **136** | New Softball Restrooms/Bleachers |
| **137** | Renovate BGS |

# Master Plan: 2031 20-Year Development Horizon


*Exhibit 5.6: 2031 - 20-Year Development Plan*

## Master Plan: 2031 20-Year Development Horizon

**Project Sequence**

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 13. | **New Lifetime Fitness and Wellness Center**<br>Multi-story 24,500 GSF Building with locker rooms, Restrooms, wellness and fitness areas | **109** | **13,368,297** | **17,779,833** |
| 14. | **Renovate PE-100, PE-200, PE-300, PE-400, PE-500 and PE-600 Buildings**<br>Remodel existing one story buildings totaling 61,452 GSF (20,549+20,318+9,049+4,944+2,378+4,214); update mechanical, replace 50% of interior partitions, 100% lighting and finishes; remodel restrooms<br><br>a. Secondary Effects – Relocate CED to PE-600 Building | **110** | **20,321,795** | **27,637,641** |
| 15. | **Renovate PE Plaza**<br>29,000 GSF area, demolition and new construction – 80% paved, 20% landscape; new accessibility ramping | **111** | **1,486,469** | **2,066,191** |
| 16. | **Renovate Central Plant**<br>Replace existing Chillers (2,000 Ton capacity) and Cooling Towers (2); Replace Eutectic Thermal Storage System (4,600 Ton/Hrs capacity) and equipment;<br>Remodel existing one story 17,529 GSF building; update mechanical, lighting and finishes; renovate and modify exterior finishes | **121** | **24,350,687** | **34,577,975** |
| 17. | **New Parking Structure Phase I**<br>750 space, multi story concrete parking structure; include pedestrian bridge connection ( approximately 60 LF; 600 SF) to SME Building and Plaza; incorporate; Campus police facility to be located at the ground level | **107** | **24,570,549** | **35,627,295** |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

# Master Plan: 2031 20-Year Development Horizon

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 18. | **Renovate Marguerite Parkway Entrance**<br>Widen entrance for increased vehicle capacity | 120 | 744,062 | 1,101,211 |
| 19. | **Renovate Campus Pedestrian Pathways**<br>15,000 SF area; provide re-grading for ADA accessibility, lighting and 800 LF of pedestrian walkways | 127 | 1,041,685 | 1,541,694 |
| 20. | **Renovate College Entrances: College Drive; Marguerite Parkway; Avery Parkway**<br>New digital marquee signage, sidewalks, landscape and irrigation<br><br>a. College Drive: 29,000 SF area<br>b. Marguerite Parkway: 57,000 SF area<br>c. Avery Parkway: 23,000 SF area | 128 | 4,341,183 | 6,424,949 |
| 21. | **Renovate Library Drive: Pedestrian Improvement**<br>36,000 SF area, demolition and new construction – 90% paved, 10% landscape | 113 | 1,577,409 | 2,381,889 |
| 22. | **Renovate East Campus Drive: Pedestrian Promenade**<br>73,000 SF area, demolition and new construction – 90% paved, 10% landscape | 115 | 4,050,172 | 6,115,760 |
| 23. | **New Athletics Plaza**<br>50,000 SF area, paving renovation(50%) and new l andscape – 80% paved, 20% landscape | 123 | 1,281,438 | 1,934,972 |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

## Master Plan: 2031 20-Year Development Horizon

**Project Sequence**

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 24. | **New Campus Warehouse, Maintenance Shops and Yard**<br>10,000 GSF Building for facilities shops and storage, 20,000 SF area yard | 118 | 3,968,326 | 5,992,171 |
| 25. | **Renovate Child Care Center (CDC) Building**<br>Remodel existing one story 12,817 GSF building; update mechanical, lighting and finishes; remodel restrooms | 131 | 3,178,877 | 4,800,104 |
| 26. | **New Horticulture Restrooms**<br>400 GSF building for restrooms | 132 | 396,833 | 611,123 |
| 27. | **New Central Plant and Power Generation Facility**<br>Facility equal to 50% of existing Central Plant capacity | 133 | 14,881,221 | 22,917,078 |
| 28. | **New Fine Arts Building (Pending WSCH Verification)**<br>Multiple-story 30,000 GSF Building for Fine Arts Instructional Labs and support, music, radio station, cinema editing, TV Studio and support | 108 | 19,014,893 | 29,624,584 |
| 29. | **Renovate Fine Arts Plaza**<br>28,500 SF area, demolition and new construction – 80% paved, 20% landscape | 130 | 1,460,840 | 2,337,344 |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

# Master Plan: 2031 20-Year Development Horizon

| | Project Identification | Plan Legend | Project Value | Escalated Value |
|---|---|---|---|---|
| 30. | **New Baseball Restrooms / Bleachers / Concessions**<br>900 GSF building for restrooms and concessions; bleacher seating for 500 seats | 135 | 781,264 | 1,250,022 |
| 31. | **New Softball Restrooms / Bleachers**<br>300 GSF building for restrooms; bleacher seating for 300 seats | 136 | 349,709 | 559,535 |
| 32. | **New Parking Structure Phase II (750 Spaces)**<br>750 space, multi story concrete parking structure – connected to Phase I Parking Structure | 107 | 23,334,581 | 37,335,328 |
| 33. | **New Surface Parking Lot**<br>459,000 SF area, new construction with lighting; removal of K Building and T Building | 122 | 9,140,376 | 14,624,602 |
| 34. | **Renovate Business General Studies (BGS) Building**<br>Remodel existing two story 84,442 GSF building; update mechanical, replace 50% of interior partitions, 100% lighting and finishes; renovate and modify exterior finishes; modify structure as required<br>a. Secondary Effects – Relocate Programs into Village portable classrooms<br>b. Secondary Effects – Relocate Programs into BGS Building | 137 | 20,943,334 | 33,509,334 |
| | **Total Project Values** | | | 290,750,635 |

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

## Topography

Topography is a significant physical influence on the identity, planning, building design and daily operation of the Saddleback College Campus. Noted in the introduction, Section 2 of this document, are several components of topographic concern that impact current function and will influence future development:

- Building Accessibility: Each facility on the college campus must be equally accessible to all. New design and modernization projects must incorporate accessible paths to and from building entrances in addition to internal requirements. Placement of buildings should take into consideration existing slope conditions to mitigate grading and provisions for compliant access.

- Site Accessibility: New site related projects and site improvement projects must incorporate improvements to provide compliant accessibility between campus facilities, including parking and accessible parking spaces.

- Soils Conditions: Site assessment and soils analysis should pre-empt building placement and site design to confirm stability of subsurface conditions and/or determine soils mitigations necessary to support a new facility.

- Drainage Control: Building and site improvement projects should review campus surface water control to determine impacts and mitigations required by new construction. Findings should be documented and incorporated early into projects for design coordination and project cost validation.

The Campus Plan shown on the following page displays the 2031 vision for all campus buildings with an overlay of topographic elevation lines across the campus. Each topographic line represents a two foot vertical grade change. The lowest portion of the campus is the Avery Parkway entrance, and climbs to the campus high point at the College Drive entrance. Noted on the plan in red are "spot elevations" above sea level. Observation of the spot elevations provides a clear description of topographic change across the campus, notably an 80 foot vertical rise between the athletic facilities and the Quad. This dramatic vertical change impacts pedestrian circulation and campus accessible paths, and promotes inclusion of vertical circulation to be incorporated into several new building projects.

Difficulties for pedestrian circulation are impacted by vehicle traffic in addition to topography. During focus group interviews and field observations the master plan team noted several distinct areas of pedestrian difficulty due to vehicle conflict, vertical climb or inadequate and indirect pathways. The most notable areas are identified on the plan with anticipation all or most will be addressed during project design and development over the next 20 years.

**LEGEND**

| | |
|---|---|
| +400 | Elevation Above Sea Level |
| 1 | Accessibility issue - Mitigated with signage or traffic countrol |
| 2 | No direct path of travel - Gateway Bldg. & Plaza will help create pedestrian friendly access |
| 3 | Topography creates ADA issues - New Science Bldg. can help with accessibility |
| 4 | Topography creates accessibility issues to Main Quad - New Gateway Bldg. can help with vertical circulation |
| 5 | Topography creates ADA issues between lower campus and upper campus - New Science Bldg. creates vertical access |
| 6 | Topography creates accessibility problems - New parking structure can help with vertical circulation |
| 7 | Pedestrian Promenade with limited vehicular access - Mitigate traffic accidents |

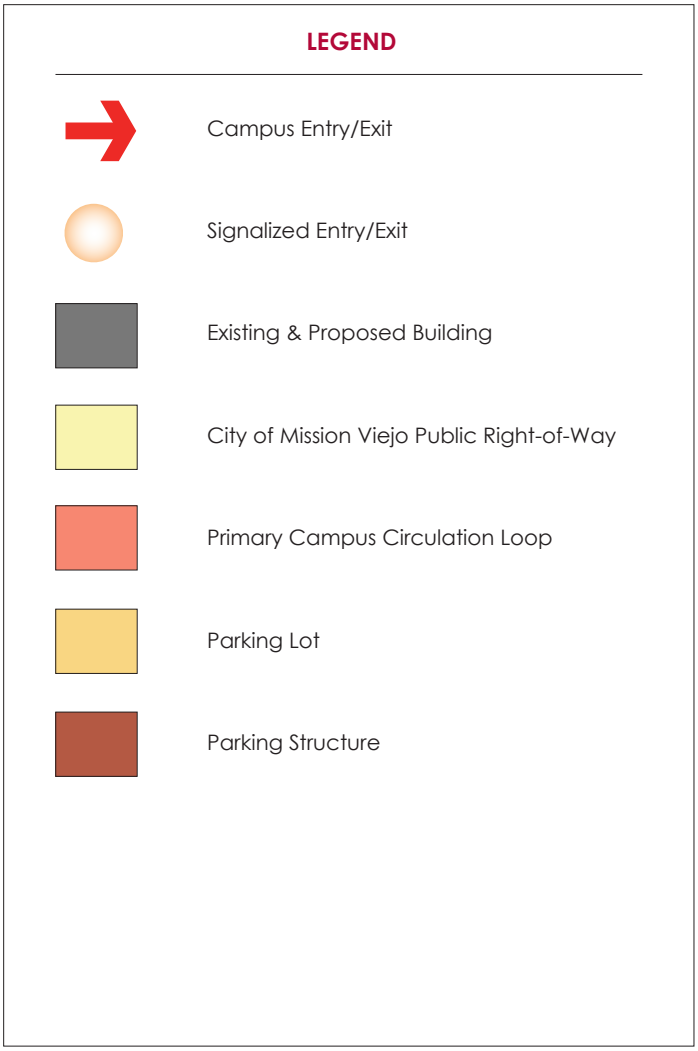
# Topography


*Exhibit 5.7*: Topography Plan

## Master Plan: Vehicle Access Diagram

The adjacent diagram describes the proposed concept for vehicular access and egress to the Saddleback College Campus and projected parking provisions necessary for the forecasted 2031 student, faculty and staff population. Incorporated into the diagram is the reconfigured campus loop road and large parking structure to be located near the academic core. Included will be modifications to the Marguerite Parkway entrance to improve traffic flow and upgrades to campus signage at each entrance. Intent of the Facilities Master Plan is to improve campus identity and navigation, promote use of transit systems and provide necessary parking inventory to meet the needs of a commuter-based institution. Reconfiguration of the campus loop road and emphasis on peripheral parking will reduce pedestrian-vehicle interaction and result in higher levels of pedestrian safety. Positioning of the parking structure on the west side of the campus core, near College Drive West, will facilitate daily campus access for many students and faculty, and provide more direct ingress and egress of vehicular traffic and reduce vehicle flow around the east periphery of the campus.

On-campus emergency vehicle and campus service vehicle access will be accommodated, in addition to meeting accessibility needs. Placement of a new surface parking in place of the current Village portables will accommodate large group events that will take place at the athletic fields, and specifically the Athletics Stadium.



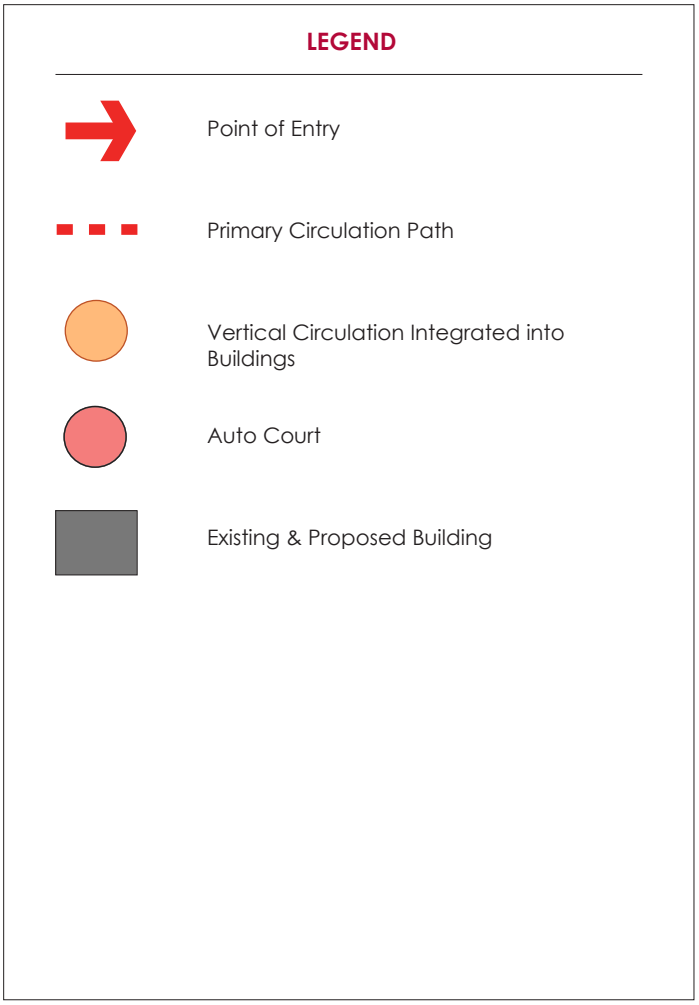
# Master Plan: Vehicle Access Diagram


*Exhibit 5.8: Vehicle Access Diagram*

## Master Plan: Pedestrian Circulation Diagram

The adjacent diagram describes the proposed concept for **pedestrian navigation** throughout the Saddleback College Campus. Intent of the Facilities Master Plan is to identity primary circulation paths between parking and the academic core and between buildings located across the campus and at varied topographic elevations. Secondary means of circulation are also suggested to allow for alternate routes and anticipated "short-cuts". Clearly defined pedestrian paths will facilitate access and way-finding, while primary paths may also accommodate emergency access and service vehicle access routes.

The most significant challenge for pedestrian movement on the Saddleback Campus is topography. An accessibility network for the campus is identified and maintained; however future building and site improvement projects may extend the network of accessible routes and ease pedestrian movement for all campus users. Proposed building projects which may incorporate accessible circulation are the Gateway Building, Sciences Building and Parking Structure. Each building will be positioned at the periphery of the campus academic core, becoming a vertical connector from parking lots 5, 5A, 7, 9, and 10 to the academic buildings located on the plateau. In addition, design upgrades of the Quad, Science Math Plaza and Fine Arts to PE Buildings pathway will improve accessible routes and provide for improved emergency and campus service access.



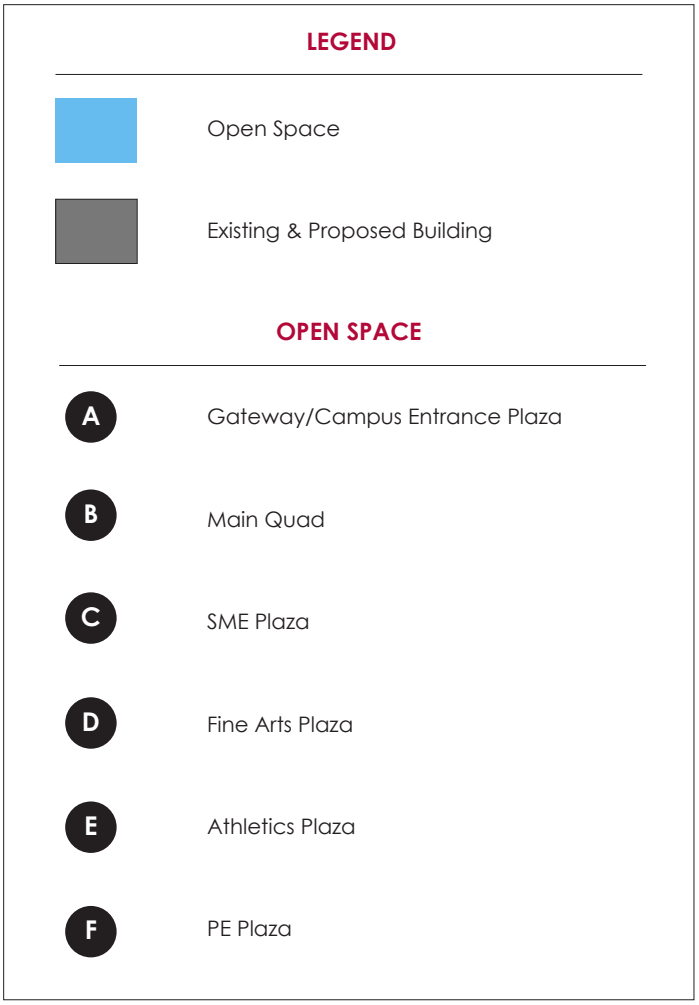
# Master Plan: Pedestrian Circulation Diagram


*Exhibit 5.9: Pedestrian Circulation Diagram*

## Master Plan: Open Space Network

The adjacent diagram describes a series of primary open spaces to accommodate varieties of places for large group gathering, circulation and individual use. Combined with previously identified proposals for campus circulation, the identified open space network will extend existing plaza or garden spaces and enhance student-centered culture. The Gateway Building/Transit Entrance Plaza and redesigned Quad will become a vital center for outdoor campus events. In addition, the Quad will become an important circulation conduit, connecting the Gateway Building (student services), BGS and SSC Buildings, and Sciences Building with a pedestrian routes leading to other locations on campus.

Upgrade of the Quad and provision for other pedestrian centered outdoor environments will support academic purpose and encourage on-campus synergy. In addition to projects identified in the 5, 10 and 20 year development horizons, this Facilities Master Plan promotes selected landscape augmentation opportunities to be incorporated into the 20-Year Maintenance Master Plan. Such augmentations will further unify the campus by completing landscape themes and impact sustainability.



# Master Plan: Open Space Network


*Exhibit 5.10: Open Space Network Diagram*

# Landscape Considerations

### *Existing Campus Conditions*

The Saddleback College Campus is built on the varied landform of a ridge top and terraces on the steep slopes. To the east of the site is Trabuco Creek, part of the Ladera Open Space Reserve. Residential and commercial development encloses the campus on the south, west and north sides. The climate is a combination of Temperate and Mediterranean with annual average rainfall of 14.03 inches. Campus topography is dramatic, with vertical variations exceeding 80 feet. Vegetation on campus is a combination of native and non-native planting. The understory is a combination of turf lawn near some building areas with extensive areas of indigenous shrubs that meander through many topographic undulations, both man-made and natural. A horticultural garden and greenhouse is located near the Advanced Technology Building. The athletic fields, including baseball, softball, practice fields, golf range and stadium are natural turf, and highly water reliant. The campus supports a variety of shrub and tree species. Pedestrian pavement is standard concrete with minimal areas of special pavement. Roads and parking areas are asphalt.

### *Landscape Approach*

Healthy landscape, selected to complement local climatic conditions may significantly benefit campus character, reduce heat-island effects and reduce energy use and carbon footprints.

**Building and Paving Treatment**: New pavement and planting areas should be designed to collect, cleanse and reuse stormwater. Deciduous trees should be cultivated on the south and west sides of buildings to reduce heat gain and energy use while allowing for filtered sunlight.

**People Centered Concept:** The campus landscape is an important resource for achieving a healthy social and educational environment. As the campus develops, diversity of outdoor places encourages students to spend more time on campus for study, gathering, instruction and athletic activity.

**Educational Focus**: The composition of plant materials offers opportunities for multi-disciplinary study including ethnobotany, agriculture, biology, climate, ecology, and ecosystems. New and infill planting on the campus could be designed and cultivated to serve as a botanical garden or arboretum.

All areas of the campus should have an intentional purpose – i.e. aesthetic, recreation, research, circulation. Areas defined for the use of outdoor research equipment could include signage informing the campus community of the work.

**Sustainable Strategy:** The campus landscape can set and achieve goals of minimizing waste and cultivating long-term value. The campus can be the community leader with the adjustment of the aesthetic from large areas of open lawn to open native groundcover which will save irrigation water, and minimize the use of fertilizers, pesticides and maintenance. Each new building's roof drainage, associate pavement, grading and planting areas should be designed to collect, cleanse and reuse stormwater.

**Maintainability**: Saddleback College can be a model for efficient maintenance through the use of properly sited and installed durable and low maintenance materials.


*Exhibit 5.11: 2031 Illustrative Campus Plan*

## Landscape Considerations

### *Context and Micro-climate Influences*

Included in this narrative is a reference to sustainable landscape guidelines similar to those used for surrounding city development. The guidelines promote a sustainable program, sustainable development and may be referenced for future projects on the Saddleback College Campus. The stated goal of a sustainable program is:

"It is the goal of a sustainable landscaping program to assure that environmental impacts and benefits of landscaping are considered throughout the planning and design process, in conjunction with aesthetic and functional goals, and decisions will result in increased benefits, decreased impacts to the environment and reduced consumption of resources."

The referenced Guideline Manual outlines objectives and design considerations to maintain and improve a healthy micro-climate.

**Objectives include:**

- Incorporate passive solar design principles which allow plants to optimize the conditions of sun and wind.
- Use landscape plants to manage solar incidence up to two stories in height on structures and to provide for optimum levels of summer cooling and winter heating.
- Use landscape plants to reduce heat gain from paved surfaces and provide pleasant, shaded pedestrian areas.

**Guidelines include:**

- Locate trees and/or shrubs to shade west facing windows, walls and outdoor living spaces to provide heat reduction benefits.
- Locate trees and/or shrubs to shade east facing windows, walls and living spaces during summer months.
- Trees and/or shrubs which provide shade on south facing windows, walls and outdoor living spaces are also encouraged.
- Locate trees with open canopies or deciduous habits along south and east facing walls to provide winter sun exposure on wall surfaces and shade during the summer months.
- Provide within parking areas, at a minimum, canopy trees necessary in a manner which, during the summer months, achieves maximum levels of shading from each tree canopy.

*Exhibit 5.12: Sketch of Main Quad Walkway*

*Exhibit 5.13: Sketch of Pedestrian Promenade near baseball field and Athletics Plaza*

*Exhibit 5.14: Sketch of Main Quad lawn*

## Sustainable Principles

Making a Campus **GREEN**

The South Orange County Community College District is committed to an inventory of buildings and grounds that optimize sustainable principles for energy consumption, impact upon the natural environment and people friendly places. To address this commitment, new projects on Saddleback College campus will meet at a minimum established code requirements and seek to exceed requirements to achieve the benefits of a "Green Campus". Currently, projects in the State of California must meet energy efficiency code compliance as describe by Title 24, and the CalGreen Building Code. In addition, optional measure of sustainable design measurement, such as LEED, is an expected objective for any new building of campus infrastructure project. Current standards of design should exceed Title 24 by 15% minimum, divert 75% of construction waste and meet USGBC LEED Silver compliance; and incorporate utility provider incentive programs such as "Savings by Design".

During the projected lifespan of this Facilities Master Plan document numerous modifications and upgrades to building code compliance and energy standards will occur, and it is impossible to set specific criteria for projects to be accomplished in a long range planning context. However, an outline of Sustainability Principles can define a commitment for sustainable development, and reference to current standards may establish expectations that evolve as codes compliance changes and technology advances. The following outline of basic design principles offer criteria for initial projects within the Master Plan, and offer a basis for future evolution of criteria over time. These principles utilize current LEED-NC definitions for sustainable design and environmental sensitivity.

**Sustainable Sites**: This guideline defines the importance of site design and impacts of construction on water treatment, heat gain and pollution. Elements to be considered include:

- Orientation of building form to reduce heat gain and energy consumption
- Access to mass transit options to reduce vehicle use impacts
- Provisions for bicycle access and storage
- Enhancement of open space to improve environmental quality
- Storm water reduction and construction pollution
- Landscape and paving design to minimize heat island effects
- Landscape design to enhance passive cooling
- Lighting design to reduce energy consumption and light pollution

**Water Efficiency**: This guideline defines the importance of site and building design to reduce water use and wastewater production. Elements to be considered include:

- Native and adaptive landscape planting to minimize water requirements
- Irrigation system minimization and efficiency
- Captured rainwater when possible
- Reclaimed water for non-potable uses
- Water conserving plumbing fixtures
- Incorporation of bioswales to reduce water run-off
- Sensors to control fixture operation

**Energy and Atmosphere**: This guideline defines the importance of site and building design to energy consumption and air pollutants. Elements to be considered include:

- Building commissioning to ensure systems efficiency
- Energy Star certified high efficiency equipment specifications
- High efficiency lighting
- Occupancy sensors to minimize artificial lighting use
- Incorporation of appropriate natural day-lighting
- Use of natural refrigerants
- Roof surfaces to reflect solar radiation; such as "cool roofs"
- High efficiency building insulation
- High efficiency glazing and glazing systems
- Incorporation of renewable energy and/or "green power"

# Sustainable Principles

**Materials and Resources**: This guideline defines the importance of recycled materials use and local materials use. Elements to be considered include:

- Re-utilization of existing building or site materials and construction waste
- Regional materials specification
- Rapidly renewable materials specification
- Operation of a materials recycling program
- Utilization of low maintenance, durable materials
- Specification of materials and systems to minimize life-cycle cost impacts
- Utilization of products free of unsafe chemicals or resins
- Design of flexible environments to minimize secondary construction

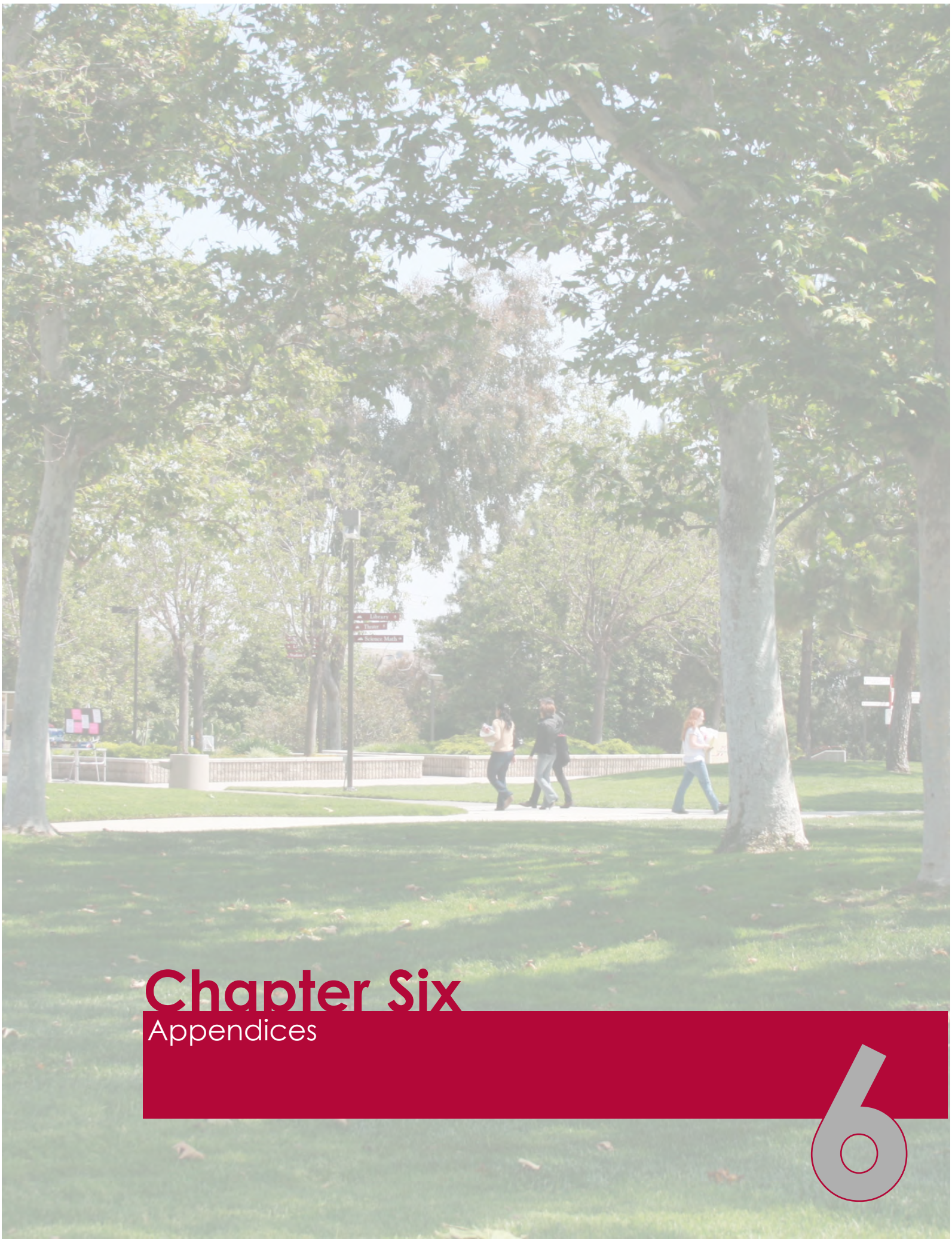
**Indoor Environmental Quality**: This guideline defines the importance of materials use and space design to ensure occupant health and well-being. Elements to be considered include:

- Provision for adequate ventilation
- Provision for optimal day-lighting
- Specification of materials, products and adhesives with low levels of contaminants
- Individual lighting controls and task lighting
- Glazing or interior shading to reduce glare
- Individual space thermal comfort control
- Construction controls to minimize contamination

**Innovation in Design**: This guideline defines the importance of research and best practices beyond direct impacts of a given project. Elements to be considered include:

- Design consultant commitment to materials and methods research
- Construction professionals on-site methods to reduce energy consumption and waste
- Consultants business model to work efficiently and demonstrate environmental awareness
- Innovative uses of energy savings, waste control and environmental impact
- Utilization of Building Information Modeling to improve process efficiency and reduce waste
- Utilization of integrated delivery methods to reduce schedules and delivery
- Utilization of energy modeling technology to anticipate design impacts
- Inclusion of building performance management systems

Sustainable principles defined in the Facilities Master Plan should be reviewed and updated in each 5 year Master Plan cycle to address new parameters for energy efficient and environmentally sensitive design. The result with reduce negative impacts of building construction and use upon nature and provide effective results for optimized campus energy and maintenance costs and operational expenses.



# Chapter Six

## Appendices

6

# Appendices

A. Glossary of Terms

B. Campus Photographic Record

C. 2011 20 Year Scheduled Maintenance Plan

D. Project Cost Summary

E. Advanced Technology & Education Park (ATEP)

F. Reference Documents

# A. Glossary of Terms

**Bioswale**
A landscape area utilized for water run-off collection and natural filtration back into the ecosystem

**Ecosystem**
A natural system of organisms, such as air, water and earth, working in harmony within their environment

**Full Time Equivalent Faculty (FTEF)**
One full time faculty member teaching the equivalent of a full load of classes

**Full Time Equivalent Student (FTES)**
A full time equivalent student is one student taking 15 hours of instruction per week for two semesters of 17.5 weeks

**Heat Island Effect**
Impact of reflective heat from radiant sources (sunlight) on people, buildings and the environment.

**Midpoint of Construction (MOC)**
Construction estimating standard when applying escalation of costs for future projects; Standard for this document is 3% per year

**Photovoltaic Panels**
A technology to produce electricity through exposure to radiant energy sources, such as sunlight

**Secondary Effects**
Secondary work performed in response to construction projects, such as program relocation, minor repair or replacement of finishes

**Weekly Student Contact Hours (WSCH)**
A measure of the number of students enrolled in a course multiplied by the number of hours the course meets per week. If a class meets for three hours a week and has 30 students enrolled, the WSCH is 90

**WSCH per FTEF**
This calculation, sometimes called 'productivity,' is the number of weekly student contact hours (WSCH) per Full Time Equivalent Faculty (FTEF)

# Acronyms

| | |
|---|---|
| **ASF** | Program assignable building area in square feet |
| **ATEP** | Advanced Technology & Education Park |
| **CEQA** | California Environmental Quality Act |
| **DSA** | Department of the State Architect |
| **EIR** | Environmental Impact Report |
| **EMP** | Education Master Plan |
| **FMP** | Facilities Master Plan |
| **GSF** | Gross building area in square feet |
| **LEED** | Leadership in Energy and Environmental |
| **LEED-NC** | LEED for New Construction |
| **MCAS** | Marine Corps Air Station |
| **MMP** | Maintenance Master Plan |
| **MOC** | Midpoint of Construction |
| **SCE** | Southern California Edison |
| **SOCCCD** | South Orange County Community College District |

## B. Campus Photographic Record | Campus Loop

## Campus Loop


View looking at primary entrance from West.


Intersection of campus loop and primary entrance from West.


Road leading to turnabout for Sciences & Mathematics, Fine Arts Complex, and Library.


Primary entrance from South leading into campus.


Looking at the campus loop going clockwise.


Campus loop towards the lower part of the campus.

## B. Campus Photographic Record | Campus Loop

## Campus Loop


Intersection between lower campus and athletic fields.


Campus loop road leading to northern part of campus.


Looking west onto Library Drive.


Arriving at the "T" intersection, left continues with the campus loop while a right takes you to parking lot 5A.

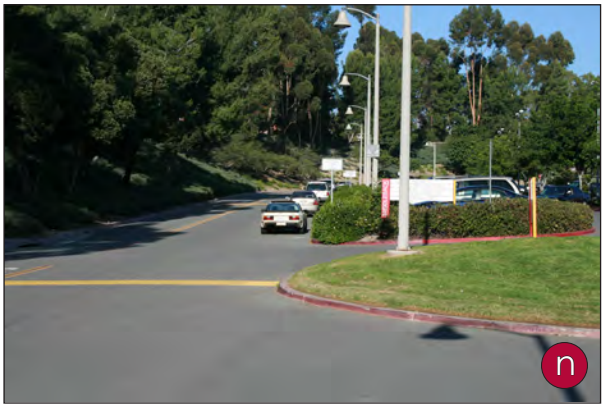

Road between the Horticulture department and the northern part of campus.


Primary entrance from the North.

## B. Campus Photographic Record | Campus Loop

## Campus Loop


View into campus from the northern entrance.




Campus loop road along parking lots 9 & 10.


Western entrance of LIbrary Drive.

## B. Campus Photographic Record | Existing Buildings

## Existing Buildings


PE-100 | Shower-Lockers


PE-200 | Gymnasium


PE-300 | Activity Building


PE-400 | Offices


PE-500 | Golf


PE-600 | Lifetime Fitness Center

## B. Campus Photographic Record | Existing Buildings

## Existing Buildings


SS | Saddleback Studios


T | Transportation Yard


EP | Electrical Plant


K | K Building


VIL | Village Classrooms


CDC | Child Development Center

## B. Campus Photographic Record | Existing Buildings

## Existing Buildings


PG | Public Golf


CEC | Community Education Center


WH | Warehouse


FA | Fine Arts Complex

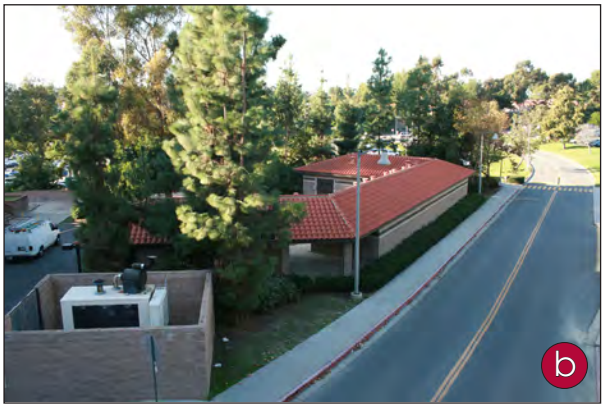

CPLANT | Central Plant


SME | Science/Mathematics/Engineering

## B. Campus Photographic Record | Existing Buildings

## Existing Buildings


LIB | Library




CHEMS | Chemical Storage


AGB | Administration & Governance Building


BGS | Business/General Studies


CC | Classroom Complex


SSC | Student Services Center

## B. Campus Photographic Record | Existing Buildings

## Existing Buildings


HS | Health Sciences


TAS | Technology & Applied Sciences


CUSTS | Custodial Storage


Utility Building


GRNHS | Horitculture Greenhouse


AH | Alumni House

## B. Campus Photographic Record | Campus Parking

## Campus Parking


Parking Lot 1


Parking Lot 1A


Parking Lot 1B


Parking Lot 2


Parking Lot 3


Parking Lot 4

## B. Campus Photographic Record | Campus Parking

## Campus Parking


Parking Lot 4A


Parking Lot 4B


Electrical Plant Parking


Central Plant Parking


Parking Lot 5


Parking Lot 5A


AH
College Drive East
LOT 14
GRNHS
LOT 13
ATAS
HS
LOT 9
LOT 5
LOT 5A
CUSTS
LEASED PROPERTY
CC
SSC
BGS
AGB
LOT 7
LOT 7A
LIB
SME
LOT 10
Baseball Field
Practice Fields
LOT 4A
GC
FA
CPT
LOT 4
LOT 4B
LOT 2
PE-100
PE-200
PE-400
PE-300
PE-500
LOT 12
LOT 1B
Softball Fields
Stadium
LOT 3
LOT 1
PE-600
Driving Range
CDC
LOT 1A
Marguerite Parkway
College Drive West
Avery Parkway
0 100 250 500 ft.

## Campus Parking


Parking Lot 7


Parking Lot 7A


Health Sciences Parking


Automotive Yard Parking


Parking Lot 9


Parking Lot 10


AH
College Drive East
LOT 14
GRNHS
LOT 13
ATAS
HS
LOT 9
LOT 5
LOT 5A
CUSTS
LEASED PROPERTY
CC
SSC
BGS
AGB
LOT 7
LOT 7A
LIB
SME
LOT 10
Baseball Field
Practice Fields
LOT 4A
GC
FA
CPT
LOT 4
LOT 4B
LOT 2
PE-100
PE-200
PE-400
PE-300
LOT 12
LOT 1B
Softball Fields
PE-500
Stadium
LOT 3
LOT 1
PE-600
CEC
CDC
LOT 1A
Driving Range
College Drive West
Marguerite Parkway
Avery Parkway
0 100 250 500 ft.

## Campus Parking


Parking Lot 11

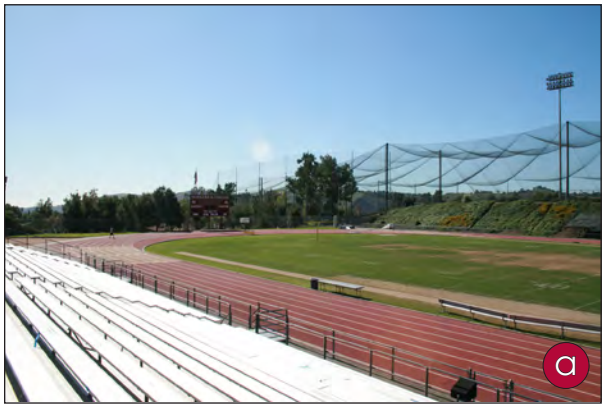

Parking Lot 12


Parking Lot 13


Parking Lot 14

## B. Campus Photographic Record | Athletic Field Facilities

# Athletic Field Facilities




Football Field and Running Track


Driving Range


Swimming Pool


Softball Field


Practice Softball Field & Throwers' Park


Baseball Field

## B. Campus Photographic Record | Athletic Field Facilities

## Athletic Field Facilities


Practice Field 1


Practice Field 2


Tennis Courts

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 1 | SM ventilation upgrade. | M/E | 10 |
| 2 | Replacement of pool deck. | S | 10 |
| 3 | Repair roofs. | R | 10 |
| 4 | Structural Repair of Roof | St | 11 |
| 5 | Replace flooring. | I | 11 |
| 6 | Repair the planter on the 3rd floor & numerous leaks from the 3rd floor onto the 2nd & 1st floors. | R | 11 |
| 7 | Remodel Sign Language classroom to Medical Laboratory Technician (MLT) classroom. A permanent wall to replace the folding door, electricity, and a sink are needed. In addition, the carpet needs to be removed and replaced with vinyl flooring. | | |
| 8 | Interior painting of space. | I | 11 |
| 9 | Paint building exteriors. | E | 11 |
| 10 | Repair Bridges | S | 11 |
| 11 | Renovate outdoor play yards. | S | 11 |
| 12 | Surface drainage. | S | 11 |
| 13 | Upgrade all restrooms to meet ADA requirements | I | 12 |
| 14 | Re-Stucco Village buildings and elastomeric coat. | R | 11 |
| 15 | Renovate upper quad. | M/E | 12 |
| 16 | Complete resurfacing and re-landscape of Fine | | |
| 17 | Arts entrance plaza leading from Theatre Circle through walkway entrances to existing studio art patio/kiln area. | S | 12 |
| 18 | Relocate the Student Payment and Veterans Offices to SSC (1,256 square feet required). | I | 12 |
| 19 | One Stop Veterans Services Office. | I | 12 |
| 20 | Replace fan coil unit in its entirety, including drives and dampers. Upsize chilled water piping to unit. | M/E | 12 |
| 21 | Install new air conditioning and heating coil units on roof and remove existing heating coils and piping inside the gym. Replace the old fan coil unit in the mechanical room and re-pipe hot and chilled water lines. | M/E | 12 |
| 22 | SM facade removal. | St | 12 |
| 23 | Improve hardscape and landscape at all college entrances. | S | 12 |
| 24 | Exterior Door Replacement | E | 12 |
| 25 | Replace Utility Infrastructure | U | 13 |

**E –** Exterior Improvements
**I –** Interior Improvements
**M/E –** Mechanical/Electrical
**R –** Roof
**S –** Site
**St –** Structural
**U –** Utility Infrastructure

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 26 | Improve hardscape and landscape. | S | 13 |
| 27 | Install artificial turf on fields. | | |
| 28 | Replace window coverings. | I | 13 |
| 29 | Eliminate tripping hazards. | S | 13 |
| 30 | Replace sink sediment traps. | M/E | 13 |
| 31 | Update dust and particulate removal system. | M/E | 13 |
| 32 | Replace elevators | M/E | 14 |
| 33 | Replace all asphalt roadways paving throughout the campus. | S | 14 |
| 34 | Replace all asphalt walkway paving throughout the campus and replace with concrete. | S | 14 |
| 35 | Install and/or upgrade AC to all IDF and network rooms. | M/E | 14 |
| 36 | Repair, replacement and painting of the current walls, iron fence and gates that enclosed the auto tech lab area. | E | 14 |
| 37 | Repair, seal and stripe the auto tech lab parking lot. | S | 14 |
| 38 | Renovate grounds yard & Bldg. | E | 14 |
| 39 | Construct a concrete wall & sidewall between parking lot 1 and the residents. | S | 14 |
| 40 | Renovate bleachers, HVAC, and goals. | I | 14 |
| 41 | Renovate showers, lockers and drainage. | M/E | 14 |
| 42 | Retaining wall behind studio art building. | S | 14 |
| 43 | Replace/renovate kiln patio roof. | R | 14 |
| 44 | Clean HVAC ducts. | M/E | 14 |
| 45 | Thrower's Park. | S | 14 |
| 46 | Replace HVAC package units with new energy efficient units. | M/E | 14 |
| 47 | Add whiteboard that can be viewed at front of room with A/V screen pulled down. | | |
| 48 | Renovation of Phlebotomy classroom to a high fidelity Simulation Lab for Nursing, Paramedic, and EMT programs. | I | 14 |
| 49 | Renovation of SM Building. | | |
| 50 | Place mirrors at the stairways for 3rd, 2nd and 1st floors of SM. | I | 14 |
| 51 | Maintenance for air handling systems. Continued dirt/debris noted on 3rd, 2nd and 1st floors and table counters. | | |
| 52 | Hood and exhaust needs. | | |
| 53 | Emergency shut off values for natural gas and deionizer water. | M/E | 14 |
| 54 | Shut off switches for mini hoods. | M/E | 14 |
| 55 | SM process piping replacement. | M/E | 14 |

**E –** Exterior Improvements **I –** Interior Improvements **M/E –** Mechanical/Electrical
**R –** Roof **S –** Site **St –** Structural
**U –** Utility Infrastructure

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 56 | Replace/repair "popcorn" ceiling in hallway. | I | 14 |
| 57 | Replace/repair the ceiling tiles in a number of rooms in SM. | I | |
| 58 | Water Quality Management Plan | S | 15 |
| 59 | Waterproof exterior wall | R | 15 |
| 60 | Fix the water leaks from the windows. | R | 15 |
| 61 | Handicapped ramp needed. | S | 15 |
| 62 | Sound proof walls between SM 309A & SM 309B. | I | 15 |
| 63 | Sound proof wall between SM 122 & SM 123. | I | 15 |
| 64 | Install false ceiling. | I | 15 |
| 65 | Seal floor in Biology prep area. | R | 15 |
| 66 | Re-carpet hallway. | I | 15 |
| 67 | Upgrade Men's & Women's restrooms. | | |
| 68 | Replace "popcorn" ceilings in faculty office areas. Replace carpet in many faculty offices. | I | 15 |
| 69 | Thorough cleaning of the outside floors and stairways of SM. Lots of gum on the floors. | | |
| 70 | Beautification of SM - lots of weeds and dead plants. | | |
| 71 | Repair sprinklers around SM Bldg. | | |
| 72 | Provide automatic door closure in office areas. | I | 15 |
| 73 | Re-key and/or re-do the locks in SM Bldg. | | |
| 74 | Place floor number signs in front of elevators. | | |
| 75 | This roof has been repaired many times and still leaks water. This presents a major safety hazard to our students and equipment. Vehicle hoists are in this covered area that is used by students during lab assignments. | | |
| 76 | The roof needs to be replaced. This roof has leaked for many years and presents a safety hazard for our students and equipment. | | |
| 77 | Remodel of 3-01 for Culinary Arts Expansion into 3-02, 3-03 and 3-04. | M/E | 15 |
| 78 | Renovate toddler rooms and outdoor toddler play yard using funds already allocated in CTE Grant. | I | 15 |
| 79 | Replace all carpeting throughout the CDC. | I | 15 |
| 80 | All SSC wallpaper either needs to be replaced or painted over. | | |

**E –** Exterior Improvements
**I –** Interior Improvements
**M/E –** Mechanical/Electrical
**R –** Roof
**S –** Site
**St –** Structural
**U –** Utility Infrastructure

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 81 | ALL SSC shared areas (hallways, cafeteria, SSC 212, 208, etc.) need new carpeting and/or tiles. | | |
| 82 | Replace carpeting and/or tiles. | | |
| 83 | Paint all. | | |
| 84 | Create a Stand Alone Transfer Center. | | |
| 85 | New flooring. Remove wall paper and paint all of SSC-224 and SSC-224A (Darkroom). Removal of cabinets and sink in SSC-224. Removal of whiteboard. New vertical blinds for windows. | | |
| 86 | Better lighting in Darkroom, SSC-224A. Removal of ½ of the wall shelving. New flooring, painting – Light color. | | |
| 87 | Office entries closed and new entries relocated to corridor in SSC 111. | | |
| 88 | Move projection screen and LCD projection and whiteboard to room SSC 113B (New conference room). | | |
| 89 | Add wall and create another office space (SSC 127 B). | | |
| 90 | Storage rooms: Need renovation. | | |
| 91 | Need for additional counseling offices provided with the sectioning off of the Articulation Office. | | |
| 92 | Create addition workroom with scanner station. | | |
| 93 | Dedicated testing center for Matriculation. Additional electrical and data lines. | | |
| 94 | Exterior Window replacement | E | 15 |
| 95 | Space vacated by the Transfer Center modified into additional computer classroom space and counseling offices for career counseling. | | |
| 96 | Replace Ceiling Grid | | 15 |
| 97 | Replace Ceiling Grid | | 16 |
| 98 | Install new heating and air conditioning heating and cooling coil units with new energy efficient units. | M/E | 15 |
| 99 | Replace cooling towers and chillers with new. Expand and repair thermal storage tank. | M/E | 16 |
| 100 | Install third engine for cogeneration. | M/E | 16 |
| 101 | Replace underground utility systems including chilled water, hot water, network, gas, electrical and controls conduits. | U | 14,15,16+17 |

**E –** Exterior Improvements **I –** Interior Improvements **M/E –** Mechanical/Electrical
**R –** Roof **S –** Site **St –** Structural
**U –** Utility Infrastructure

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 102 | Replace package units | M/E | 17 |
| 103 | Install stairs on the grass slope. | S | 17 |
| 104 | Replace all existing parking lot lighting with new energy efficient LED or induction lighting. | U | 17 |
| 105 | Install Photo Voltaic Solar Power Panels. | U | 17 |
| 106 | Construct a parking structure. | | |
| 107 | Replace HVAC Controls | M/E | 18 |
| 108 | Repair Stud Walls | St | 18 |
| 109 | Replace Roof | R | 18 |
| 110 | Structural Repairs | St | 18 |
| 111 | Pool equipment replacement | | 18 |
| 112 | Install a natural gas or propane fueling station. | U | 19 |
| 113 | Replace all existing lighting and light poles. | U | 19 |
| 114 | Replace all existing lighting with new energy efficient lighting. | U | 19 |
| 115 | Replace all existing lighting with new energy efficient lighting. | U | 19 |
| 116 | Replace all existing lighting with new energy efficient lighting. | U | 19 |
| 117 | Replace all existing lighting with new energy efficient lighting. | U | 19 |
| 118 | Replace and/or retrofit all interior lighting with new energy efficient, perfect power factor lighting. | M/E | 19 |
| 119 | Replace and/or retrofit all exterior lighting with new energy efficient, perfect power factor lighting. | U | 19 |
| 120 | Playground renovation. | S | 19 |
| 121 | Exterior Classroom | S | 19 |
| 122 | Upgrade irrigation system. | U | 19 |
| 123 | Upgrade 12,000 volt electrical distribution system. | M/E | 19 |
| 124 | Renovate existing Stadium. | | |
| 125 | Replace fire alarm System | M/E | 20 |
| 126 | Replace sewer system | U | 20 |
| 127 | Replace roof | R | 20 |
| 128 | Replace HVAC package units with new energy efficient units. | | 20 |
| 129 | Paint and welding area. | M/E | 20 |
| 130 | Storage racks. | I | 20 |
| 131 | Interior modifications to accommodate, Veterans | | |
| 132 | Office, Student Payments and Transfer Center | | |

**E –** Exterior Improvements
**I –** Interior Improvements
**M/E –** Mechanical/Electrical
**R –** Roof
**S –** Site
**St –** Structural
**U –** Utility Infrastructure

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 133 | Bookstore and Copy Center. | | |
| 134 | Modify A&R to accommodate International Students Office. | | |
| 135 | Building Access Control. | M/E | 21 |
| 136 | Paint Exterior | E | 21 |
| 137 | Modify doors for Access Controls | I | 21 |
| 138 | Structural Repairs | St | 21 |
| 139 | Photography Digital Lab (Apple Mac computers and peripherals). | | |
| 140 | Two Fine Arts Digital Computer Labs (Apple Mac). | | |
| 141 | Photo Shooting Studio. | | |
| 142 | The Speech Department as a whole needs to have at least one more (in addition to LIB 132) classroom to provide instruction for students. | | |
| 143 | Theatre Arts Rehearsal Space (Accomplished possibly as result of secondary effects of Division Priority #1). | | |
| 144 | TA Lecture Classroom | | |
| 145 | Replace these two classrooms with comparable assigned square footage as a result of secondary effects of Division Priority #1.<br>OR<br>A permanent wall needs to be constructed between FA 311 and FA 312. The rooms also need to be sound proofed. | | |
| 146 | Theatre Arts Design Studio/Class Room (Accomplished possibly as result of secondary effects of Division Priority #1). | | |
| 147 | Forensics Squad Room. The ideal situation would be to have a space that is 800 square feet and within that space to have a smaller practice room that is 200 square feet. We would also request that the space have at least 2 computers, a phone, two desks and a wall with mirrors. | | |
| 148 | Replace roof | R | 22 |
| 149 | Renovate Men's and Women's restrooms attached to Theatre dressing rooms. Replace counters, fixtures, stalls. Install automatic flushers and faucet controls to conserve water. | M/E | 22 |
| 150 | Rixson-Firemark Fire Alarm Activated Door Holders and Closers. | M/E | 22 |

**E –** Exterior Improvements
**I –** Interior Improvements
**M/E –** Mechanical/Electrical
**R –** Roof
**S –** Site
**St –** Structural
**U –** Utility Infrastructure

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 151 | Replace drapes. | I | 22 |
| 152 | Theatre Arts Costume Shop/Lab classroom (Accomplished possibly as result of secondary effects of Division Priority #1). | | |
| 153 | Replace sink and countertop. | M/E | 22 |
| 154 | 99-seat Black Box Theatre/Flexible space to replace | | |
| 155 | FA 308 with dedicated dressing rooms and control booth, modern lighting, sound and video systems. | | |
| 156 | TA Light Laboratory (Accomplished possibly as result of secondary effects of Division Priority #1). | | |
| 157 | TA Scene Shop enlargement or new scene shop with adequate materials storage facility. | | |
| 158 | Replace outfield grass on main diamond with turf. | S | 22 |
| 159 | Scoreboard. | U | 22 |
| 160 | Bleachers. | S | 22 |
| 161 | Outfield Fence – Field 2. | S | 22 |
| 162 | Covered dugouts – Field 2. | S | 22 |
| 163 | Upgrade Baseball Stadium. | S | 22 |
| 164 | Replace roof | R | 23 |
| 165 | Replace Switchgear | R | 23 |
| 166 | Replace Chiller | M/E | 23 |
| 167 | Replace/repair Walls | St | 23 |
| 168 | Quality | S | 24 |
| 169 | Repair roofs. | R | 24 |
| 170 | Replace | M/E | 24 |
| 171 | Replace walls & drainage | I | 24 |
| 172 | Repair | S | 24 |
| 173 | Replace/repair | U | 25 |
| 174 | Replace | M/E | 25 |
| 175 | Replace | E | 25 |
| 176 | Repair | I | 25 |
| 177 | Replace | R | 26 |
| 178 | Replace/repair | M/E | 26 |
| 179 | Replace/repair | S | 26 |
| 180 | Repair Plaster walls | R | 27 |
| 181 | Replace Switchgear | U | 27 |
| 182 | Replace piping | M/E | 27 |

**E –** Exterior Improvements
**I –** Interior Improvements
**M/E –** Mechanical/Electrical
**R –** Roof
**S –** Site
**St –** Structural
**U –** Utility Infrastructure

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

| Priority | Project Description | Category | Year |
|---|---|---|---|
| 183 | Interior painting of space. | I | 28 |
| 184 | Slurry Coat | S | 28 |
| 185 | Reroof | R | 29 |
| 186 | Repair HVAC | M/E | 29 |
| 187 | Replace doors | E | 29 |
| 188 | Paint/repair | I | 30 |
| 189 | Repairs | S | 30 |
| 190 | Replace | R | 31 |
| 191 | Repairs | M/E | 31 |

**E –** Exterior Improvements
**I –** Interior Improvements
**M/E –** Mechanical/Electrical
**R –** Roof
**S –** Site
**St –** Structural
**U –** Utility Infrastructure

## D. Project Cost Summary

| Element | Construction Cost Excluding Markups | Construction Cost Including Markups | Total Cost Including Markups + 30% |
|---|---|---|---|
| 1. Saddleback College New Science Building and Utilities Services | $33,270,000 | $42,316,086 | $55,010,912 |
| 2. Full Renovation To Technology and Applied Sciences (ATAS) Building | $8,910,000 | $11,332,622 | $14,732,408 |
| 3. New Loop Road Alignment, Sitework, and Infrastructure | $5,441,640 | $6,921,218 | $8,997,583 |
| 4. New Gateway Building | $27,825,000 | $35,390,595 | $46,007,774 |
| 5. Renovate Gateway Building / Transit Entrance Plaza | $2,451,000 | $3,117,425 | $4,052,652 |
| 6. Renovate Quad Landscape / Hardscape | $2,566,500 | $3,264,329 | $4,243,628 |
| **TOTAL FOR 2016 5-YEAR DEVELOPMENT HORIZON** | **$80,464,140** | **$102,342,275** | **$133,044,957** |
| 7. Full Renovation to Student Services Center (SCC) Building | $13,030,000 | $16,572,847 | $21,544,701 |
| 8. Full Renovation To Fine Arts Building | $14,464,725 | $18,397,672 | $23,916,974 |
| 9. Full Renovation To Science Math (SME) Building | $18,319,500 | $23,300,557 | $30,290,725 |
| 10. Renovation To Science Math (SME) Building Plaza | $1,318,250 | $1,676,681 | $2,179,685 |
| 11. Full Renovation To Portions Of Health Sciences Building | $4,118,750 | $5,238,635 | $6,810,225 |
| 12. Renovate Athletics Stadium | $3,500,000 | $4,451,647 | $5,787,141 |
| **TOTAL FOR 2021 10-YEAR DEVELOPMENT HORIZON** | **$54,751,225** | **$69,638,039** | **$90,529,451** |
| 13. New Lifetime Fitness and Wellness Center | $8,085,000 | $10,283,305 | $13,368,297 |
| 14. Full Renovation To PE-100, PE-200, PE-300, PE-400, PE-500, and PE-600 Buildings | $12,290,400 | $15,632,150 | $20,321,795 |
| 15. Renovate PE Plaza | $899,000 | $1,143,437 | $1,486,469 |
| 16. Renovate Central Plant | $14,727,030 | $18,731,298 | $24,350,687 |
| 17. New Parking Structure Phase 1 | $14,860,000 | $18,900,422 | $24,570,549 |
| 18. Renovate Marguerite Parkway Entrance | $450,000 | $572,355 | $744,062 |
| 19. Renovate Campus Pedestrian Pathways | $630,000 | $801,296 | $1,041,685 |
| 20. Renovate College Entrances: College Drive, Marguerite Parkway, and Avery Parkway | $2,625,500 | $3,339,371 | $4,341,183 |
| 21. Renovate Library Drive: Pedestrian Improvement | $954,000 | $1,213,392 | $1,577,409 |
| 22. Renovate East Campus Drive: Pedestrian Promenade | $2,449,500 | $3,115,517 | $4,050,172 |
| 23. New Athletics Plaza | $775,000 | $985,722 | $1,281,438 |
| 24. New Campus Warehouse, Maintenance Shops, and Yard | $2,400,000 | $3,052,558 | $3,968,326 |

## D. Project Cost Summary

| Element | | Construction Cost Excluding Markups | Construction Cost Including Markups | Total Cost Including Markups + 30% |
|---|---|---|---|---|
| 25. Intermediate Level Renovation Child Care Center (CDC) Building | | $1,922,550 | $2,445,290 | $3,178,877 |
| 26. New Horticulture Restrooms | | $240,000 | $305,256 | $396,833 |
| 27. New Central Plant and Power Generation Facility | | $9,000,000 | $11,447,093 | $14,881,221 |
| 28. New Fine Arts Building | | $11,500,00 | $14,626,841 | $19,014,893 |
| 29. Renovate Fine Arts Plaza | | $883,500 | $1,123,723 | $1,460,840 |
| 30. New Baseball Restrooms / Bleachers / Concessions | | $472,500 | $600,972 | $781,264 |
| 31. New Softball Restrooms / Bleachers | | $211,500 | $269,007 | $349,709 |
| 32. New Parking Structure Phase 2 (750 Spaces) | | $14,112,500 | $17,949,677 | $23,334,581 |
| 33. New Surface Parking Lot | | $5,528,000 | $7,031,059 | $9,140,376 |
| 34. Intermediate Level Renovation Business General Studies (BGS) Building | | $12,666,300 | $16,110,257 | $20,943,334 |
| **TOTAL FOR 2031 20-YEAR DEVELOPMENT HORIZON** | | **$117,682,280** | **$149,679,998** | **$194,584,000** |
| Subtotal | | $252,897,645 | $321,660,312 | |
| General Conditions | 9.0% | $22,760,789 | Incl Above | |
| Subtotal | | $275,658,434 | $321,660,312 | |
| Fee | 4.0% | $11,026,337 | Incl Above | |
| Subtotal | | $286,684,771 | $321,660,312 | |
| Bonds & Insurance | 2.0% | $5,733,695 | Incl Above | |
| Subtotal | | $292,418,466 | $321,660,312 | |
| Design Contingency | 10.0% | $29,241,746 | Incl Above | |
| Subtotal | | $321,660,312 | $321,660,312 | |
| Escalation to MOC, Excluded | | Excluded | Excluded | |
| **TOTAL ESTIMATED CONSTRUCTION COST** | | **$321,660,312** | **$321,660,312** | |
| **TOTAL ESTIMATED PROJECT COST** | | | | **$418,158,408** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **1. Saddleback College New Science Building and Utilities Services** | | | | |
| -New science building | 80,000 | sf | $400.00 | $32,000,000 |
| -Utility upgrades to Science Bldg | 1 | ls | $1,000,000.00 | $1,000,000 |
| -Demonstration garden | 9,000 | sf | $30.00 | $270,000 |
| **-Construction Cost Excluding Markups** | | | | **$33,270,000** |
| **-Construction Cost Including Markups** | | | | **$42,316,086** |
| **-Total Cost Including Markups + 30%** | | | | **$55,010,912** |
| **2. Full Renovation To Technology and Applied Sciences (ATAS) Building** | | | | |
| -Full renovation to ATAS Building | 40,000 | sf | $171.50 | $6,860,000 |
| -Structural upgrades | 40,000 | sf | $25.00 | $1,000,000 |
| -Relocate ATAS Program to Village Portables | 1 | ls | $1,000,000.00 | $1,000,000 |
| -Relocate ATAS program to renovated ATAS Bldg | 1 | ls | $50,000.00 | $50,000 |
| **-Construction Cost Excluding Markups** | | | | **$8,910,000** |
| **-Construction Cost Including Markups** | | | | **$11,332,622** |
| **-Total Cost Including Markups + 30%** | | | | **$14,732,408** |
| **3. New Loop Road Alignment, Sitework, and Infrastructure** | | | | |
| -New loop road | 140,082 | sf | $20.00 | $2,801,640 |
| -Modifications to existing parking lot | 280,000 | sf | $5.00 | $1,400,000 |
| -Thrower's park | 90,000 | sf | $7.00 | $630,000 |
| -20' tall fence | 4,670 | lf | $100.00 | $467,000 |
| -Fence for practice field | 2,400 | lf | $45.00 | $108,000 |
| -Runway and cage for discuss, hammer throw, and shot put | 1 | ls | $35,000.00 | $35,000 |
| **-Construction Cost Excluding Markups** | | | | **$5,441,640** |
| **-Construction Cost Including Markups** | | | | **$6,921,218** |
| **-Total Cost Including Markups + 30%** | | | | **$8,997,583** |
| **4. New Gateway Building** | | | | |
| -Gateway bldg for student services, instructional labs, classrooms, and support space | 79,500 | sf | $350.00 | $27,825,000 |
| **-Construction Cost Excluding Markups** | | | | **$27,825,000** |
| **-Construction Cost Including Markups** | | | | **$35,390,595** |
| **-Total Cost Including Markups + 30%** | | | | **$46,007,774** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **5. Renovate Gateway Building / Transit Entrance Plaza** | | | | |
| -Site clearance | 86,000 | sf | $2.00 | $172,000 |
| -Hardscape | 25,800 | sf | $20.00 | $516,000 |
| -Landscaping | 60,200 | sf | $15.00 | $903,000 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 86,000 | sf | $10.00 | $860,000 |
| **-Construction Cost Excluding Markups** | | | | **$2,451,000** |
| **-Construction Cost Including Markups** | | | | **$3,117,425** |
| **-Total Cost Including Markups + 30%** | | | | **$4,052,652** |
| **6. Renovate Quad Landscape / Hardscape** | | | | |
| -Site clearance | 87,000 | sf | $2.00 | $174,000 |
| -Hardscape | 43,500 | sf | $20.00 | $870,000 |
| -Landscaping | 43,500 | sf | $15.00 | $652,500 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 87,000 | sf | $10.00 | $870,000 |
| **-Construction Cost Excluding Markups** | | | | **$2,556,500** |
| **-Construction Cost Including Markups** | | | | **$3,264,329** |
| **-Total Cost Including Markups + 30%** | | | | **$4,243,628** |
| **7. Full Renovation to Student Services Center (SCC) Building** | | | | |
| -Full renovation to Student Services Bldg | 62,400 | sf | $200.00 | $12,480,000 |
| -Kitchen equipment | 1 | ls | $500,000.00 | $500,000 |
| -Interim housing of food service | 1 | ls | $50,000.00 | $50,000 |
| **-Construction Cost Excluding Markups** | | | | **$13,030,000** |
| **-Construction Cost Including Markups** | | | | **$16,572,847** |
| **-Total Cost Including Markups + 30%** | | | | **$21,544,701** |
| **8. Full Renovation To Fine Arts Building** | | | | |
| -Full renovation to Fine Arts Building including exterior improvements, and upgrades to theater space | 52,599 | sf | $275.00 | $14,464,725 |
| **-Construction Cost Excluding Markups** | | | | **$14,464,725** |
| **-Construction Cost Including Markups** | | | | **$18,397,672** |
| **-Total Cost Including Markups + 30%** | | | | **$23,916,974** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **9. Full Renovation To Science Math (SME) Building** | | | | |
| -Full renovation to SME Building | 81,420 | sf | $200.00 | $16,284,000 |
| -Structural upgrades | 81,420 | sf | $25.00 | $2,035,500 |
| **-Construction Cost Excluding Markups** | | | | **$18,319,500** |
| **-Construction Cost Including Markups** | | | | **$23,300,557** |
| **-Total Cost Including Markups + 30%** | | | | **$30,290,725** |
| **10. Renovation To Science Math (SME) Building Plaza** | | | | |
| -MSE Plaza | | | | |
| -Site clearance | 35,500 | sf | $2.00 | $71,000 |
| -Hardscape | 31,950 | sf | $20.00 | $639,000 |
| -Landscaping | 3,550 | sf | $15.00 | $53,250 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 35,500 | sf | $10.00 | $355,000 |
| -Ramping / waterproofing | 1 | ls | $200,000.00 | $200,000 |
| **-Construction Cost Excluding Markups** | | | | **$1,318,250** |
| **-Construction Cost Including Markups** | | | | **$1,676,681** |
| **-Total Cost Including Markups + 30%** | | | | **$2,179,685** |
| **11. Full Renovation To Portions Of Health Sciences Building** | | | | |
| -Full renovation to 50% of second floor | 5,492 | sf | $250.00 | $1,372,917 |
| -Full renovation to 100% of third floor | 10,983 | sf | $250.00 | $2,745,833 |
| **-Construction Cost Excluding Markups** | | | | **$4,118,750** |
| **-Construction Cost Including Markups** | | | | **$5,238,635** |
| **-Total Cost Including Markups + 30%** | | | | **$6,810,225** |
| **12. Renovate Athletics Stadium** | | | | |
| -Remove field and provide new artificial turf | 1 | ls | $1,000,000.00 | $1,000,000 |
| -New bleachers | 3,000 | seat | $500.00 | $1,500,000 |
| -Renovate seats | 2,000 | seat | $100.00 | $200,000 |
| -Concession / Restroom bldg | 1,000 | sf | $800.00 | $800,000 |
| **-Construction Cost Excluding Markups** | | | | **$3,500,000** |
| **-Construction Cost Including Markups** | | | | **$4,451,647** |
| **-Total Cost Including Markups + 30%** | | | | **$5,787,141** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **13. New Lifetime Fitness and Wellness Center** | | | | |
| -New Lifetime Fitness and Wellness Center including locker rooms, rest rooms, and fitness areas | 24,500 | sf | $330.00 | $8,085,000 |
| **-Construction Cost Excluding Markups** | | | | **$8,085,000** |
| **-Construction Cost Including Markups** | | | | **$10,283,305** |
| **-Total Cost Including Markups + 30%** | | | | **$13,368,297** |
| **14. Full Renovation To PE-100, PE-200, PE-300, PE-400, PE-500, and PE-600 Buildings** | | | | |
| -Intermediate level renovation to PE-100, PE-200, PE-300, PE-400, PE-500, and PE-600 Buildings | 61,452 | sf | $200.00 | $12,290,400 |
| **-Construction Cost Excluding Markups** | | | | **$12,290,400** |
| **-Construction Cost Including Markups** | | | | **$15,632,150** |
| **-Total Cost Including Markups + 30%** | | | | **$20,321,795** |
| **15. Renovate PE Plaza** | | | | |
| -Site clearance | 29,000 | sf | $2.00 | $58,000 |
| -Hardscape | 23,200 | sf | $20.00 | $464,000 |
| -Landscaping | 5,800 | sf | $15.00 | $87,000 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 29,000 | sf | $10.00 | $290,000 |
| **-Construction Cost Excluding Markups** | | | | **$899,000** |
| **-Construction Cost Including Markups** | | | | **$1,143,437** |
| **-Total Cost Including Markups + 30%** | | | | **$1,486,469** |
| **16. Renovate Central Plant** | | | | |
| -Replace chillers, 2000 ton capacity | 1 | ea | $1,000,000.00 | $1,000,000 |
| -Replace cooling towers | 2 | ea | $250,000.00 | $500,000 |
| -Replace eutectic thermal storage system (4,600 ton per hour) | 1 | ls | $2,000,000.00 | $2,000,000 |
| -Replace Equipment | 1 | ls | $5,000,000.00 | $5,000,000 |
| -Remodel central plant enclosure | 17,529 | sf | $70.00 | $1,227,030 |
| -Electrical and mechanical infrastructure upgrades | 1 | ls | $5,000,000.00 | $5,000,000 |
| **-Construction Cost Excluding Markups** | | | | **$14,727,030** |
| **-Construction Cost Including Markups** | | | | **$18,900,422** |
| **-Total Cost Including Markups + 30%** | | | | **$24,350687** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **17. New Parking Structure Phase 1** | | | | |
| -Provide new parking structure with 750 stalls | 750 | ea | $18,000.00 | $13,500,000 |
| -Provide bridge to MSE building | 600 | sf | $600.00 | $360,000 |
| -Campus police station TI | 4,000 | sf | $250.00 | $1,000,000 |
| **-Construction Cost Excluding Markups** | | | | **$14,860,000** |
| **-Construction Cost Including Markups** | | | | **$18,900,422** |
| **-Total Cost Including Markups + 30%** | | | | **$24,570,549** |
| **18. Renovate Marguerite Parkway Entrance** | | | | |
| -Widen entrance for increased vehicle capacity | 6,000 | sf | $75.00 | $450,000 |
| **-Construction Cost Excluding Markups** | | | | **$450,000** |
| **-Construction Cost Including Markups** | | | | **$572,355** |
| **-Total Cost Including Markups + 30%** | | | | **$744,062** |
| **19. Renovate Campus Pedestrian Pathways** | | | | |
| -Site clearance | 15,000 | sf | $2.00 | $30,000 |
| -Hardscape (premium included for high percentage of ramping) | 15,000 | sf | $30.00 | $450,000 |
| -Pole mounted light fixtures including foundation | 30 | ea | $5,000.00 | $150,000 |
| **-Construction Cost Excluding Markups** | | | | **$630,000** |
| **-Construction Cost Including Markups** | | | | **$801,296** |
| **-Total Cost Including Markups + 30%** | | | | **$1,041,685** |
| **20. Renovate College Entrances: College Drive, Marguerite Parkway, and Avery Parkway** | | | | |
| -Site clearance | 109,000 | sf | $2.00 | $218,000 |
| -Hardscape | 54,500 | sf | $20.00 | $1,090,000 |
| -Landscaping | 54,500 | sf | $15.00 | $817,500 |
| -Digital marquee signage | 3 | ea | $166,666.67 | $500,000 |
| **-Construction Cost Excluding Markups** | | | | **$2,625,500** |
| **-Construction Cost Including Markups** | | | | **$3,339,371** |
| **-Total Cost Including Markups + 30%** | | | | **$4,341,183** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **21. Renovate Library Drive: Pedestrian Improvement** | | | | |
| -Site clearance | 36,000 | sf | $2.00 | $72,000 |
| -Hardscape | 32,400 | sf | $20.00 | $648,000 |
| -Landscaping | 3,600 | sf | $15.00 | $54,000 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 36,000 | sf | $5.00 | $180,000 |
| **-Construction Cost Excluding Markups** | | | | **$954,000** |
| **-Construction Cost Including Markups** | | | | **$1,213,392** |
| **-Total Cost Including Markups + 30%** | | | | **$1,577,409** |
| **22. Renovate East Campus Drive: Pedestrian Promenade** | | | | |
| -Site clearance | 73,000 | sf | $2.00 | $146,000 |
| -Hardscape | 65,700 | sf | $20.00 | $1,314,000 |
| -Landscaping | 7,300 | sf | $15.00 | $109,500 |
| -Premium for trees | 60 | ea | $2,500.00 | $150,000 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 73,000 | sf | $10.00 | $730,000 |
| **-Construction Cost Excluding Markups** | | | | **$2,449,500** |
| **-Construction Cost Including Markups** | | | | **$3,115,517** |
| **-Total Cost Including Markups + 30%** | | | | **$4,050,172** |
| **23. New Athletics Plaza** | | | | |
| -Site clearance | 25,000 | sf | $2.00 | $50,000 |
| -Hardscape | 20,000 | sf | $20.00 | $400,000 |
| -Landscaping | 5,000 | sf | $15.00 | $75,000 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 25,000 | sf | $10.00 | $250,000 |
| **-Construction Cost Excluding Markups** | | | | **$775,000** |
| **-Construction Cost Including Markups** | | | | **$985,722** |
| **-Total Cost Including Markups + 30%** | | | | **$1,281,438** |
| **24. New Campus Warehouse, Maintenance Shops, and Yard** | | | | |
| -New campus warehouse building | 10,000 | sf | $200.00 | $2,000,000 |
| -Site yard | 20,000 | sf | $20.00 | $400,000 |
| **-Construction Cost Excluding Markups** | | | | **$2,400,000** |
| **-Construction Cost Including Markups** | | | | **$3,052,558** |
| **-Total Cost Including Markups + 30%** | | | | **$3,968,326** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **25. Intermediate Level Renovation Child Care Center (CDC) Building** | | | | |
| -Intermediate level renovation to child care center | 12,817 | sf | $150.00 | $1,922,550 |
| **-Construction Cost Excluding Markups** | | | | **$1,922,550** |
| **-Construction Cost Including Markups** | | | | **$2,445,290** |
| **-Total Cost Including Markups + 30%** | | | | **$3,178,877** |
| **26. New Horticulture Restrooms** | | | | |
| -New horticulture restrooms | 400 | sf | $600.00 | $240,000 |
| **-Construction Cost Excluding Markups** | | | | **$240,000** |
| **-Construction Cost Including Markups** | | | | **$305,256** |
| **-Total Cost Including Markups + 30%** | | | | **$396,833** |
| **27. New Central Plant and Power Generation Facility** | | | | |
| -Facility equal to 50% of existing Central Plant | 1 | ls | $4,000,000.00 | $4,000,000 |
| -Electrical and mechanical infrastructure upgrades | 1 | ls | $5,000,000.00 | $5,000,000 |
| **-Construction Cost Excluding Markups** | | | | **$9,000,000** |
| **-Construction Cost Including Markups** | | | | **$11,447,093** |
| **-Total Cost Including Markups + 30%** | | | | **$14,881,221** |
| **28. New Fine Arts Building** | | | | |
| -New Fine Arts Bldg | 30,000 | sf | $350.00 | $10,500,000 |
| -Equipment | 1 | ls | $1,000,000.00 | $1,000,000 |
| **-Construction Cost Excluding Markups** | | | | **$11,500,000** |
| **-Construction Cost Including Markups** | | | | **$14,626,841** |
| **-Total Cost Including Markups + 30%** | | | | **$19,014,893** |
| **29. Renovate Fine Arts Plaza** | | | | |
| -Site clearance | 28,500 | sf | $2.00 | $57,000 |
| -Hardscape | 22,800 | sf | $20.00 | $456,000 |
| -Landscaping | 5,700 | sf | $15.00 | $85,500 |
| -General site upgrades (Site specialties, amenities, walls and fences, lighting, etc) | 28,500 | sf | $10.00 | $285,000 |
| **-Construction Cost Excluding Markups** | | | | **$883,500** |
| **-Construction Cost Including Markups** | | | | **$1,123,723** |
| **-Total Cost Including Markups + 30%** | | | | **$1,460,840** |

## D. Project Cost Detail

| Element | Quantity | | Unit Cost | Total |
|---|---|---|---|---|
| **30. New Baseball Restrooms / Bleachers / Concessions** | | | | |
| -New bleachers | 750 | lf | $70.00 | $52,500 |
| -Concession / Restroom bldg | 700 | sf | $600.00 | $420,000 |
| **-Construction Cost Excluding Markups** | | | | **$472,500** |
| **-Construction Cost Including Markups** | | | | **$600,972** |
| **-Total Cost Including Markups + 30%** | | | | **$781,264** |
| **31. New Softball Restrooms / Bleachers** | | | | |
| -New bleachers | 450 | lf | $70.00 | $31,500 |
| -Concession / Restroom bldg | 300 | sf | $600.00 | $180,000 |
| **-Construction Cost Excluding Markups** | | | | **$211,500** |
| **-Construction Cost Including Markups** | | | | **$269,007** |
| **-Total Cost Including Markups + 30%** | | | | **$349,709** |
| **32. New Parking Structure Phase 2 (750 Spaces)** | | | | |
| -Provide new parking structure with 750 stalls | 750 | ea | $18,000.00 | $13,500,000 |
| -Campus police facility | 3,500 | sf | $175.00 | $612,500 |
| **-Construction Cost Excluding Markups** | | | | **$14,112,500** |
| **-Construction Cost Including Markups** | | | | **$17,949,677** |
| **-Total Cost Including Markups + 30%** | | | | **$23,334,581** |
| **33. New Surface Parking Lot** | | | | |
| -Provide new parking lot | 459,000 | sf | $12.00 | $5,508,000 |
| -Removal of existing buildings | 1 | ls | $20,000.00 | $20,000 |
| **-Construction Cost Excluding Markups** | | | | **$5,528,000** |
| **-Construction Cost Including Markups** | | | | **$7,031,059** |
| **-Total Cost Including Markups + 30%** | | | | **$9,140,376** |
| **34. Intermediate Level Renovation Business General Studies (BGS) Building** | | | | |
| -Intermediate level renovation to BGS building | 84,442 | sf | $150.00 | $12,666,300 |
| **-Construction Cost Excluding Markups** | | | | **$12,666,300** |
| **-Construction Cost Including Markups** | | | | **$16,110,257** |
| **-Total Cost Including Markups + 30%** | | | | **$20,943,334** |
| **TOTAL - CONSTRUCTION COST EXCLUDING MARKUPS** | | | | **$252,897,645** |
| **TOTAL - CONSTRUCTION COST INCLUDING MARKUPS** | | | | **$321,660,312** |
| **TOTAL COST INCLUDING MARKUPS + 30%** | | | | **$418,158,408** |

## E. ATEP

ATEP is currently supervised by Irvine Valley College. Discussions are underway including Saddleback College participating in joint use of the new facility. Included in this appendix is a section from the Irvine Valley College Facilities Master Plan Document describing the current status of ATEP.

## Background

The South Orange County Community College District, in agreement with the City of Tustin, established in 2004 the Advanced Technology & Education Park (ATEP) as a satellite campus in a coordinated effort with Irvine Valley College and Saddleback College. The purpose of ATEP is to provide "high performance, high impact" career-technical education and offer public-private partnerships as a mechanism of outreach to the professional community of South Orange County. The ATEP Campus is located on a portion of the former Marine Corps Air Station in the City of Tustin, now known as "Tustin Legacy". In 2007, ATEP opened as a 1.5 acre transitional campus in five buildings totaling 15,000 GSF, and currently serves a student population of 540. The current facilities are located at the intersection of Red Hill Avenue and Valencia Avenue, at the northernmost portion of the proposed campus.

*Current ATEP facility*

ATEP was conceived as an education-oriented development as described in the District Conveyance Agreement. The program uses proposed for ATEP Concept Plan area support the education-oriented concept and an initial permanent building development has been approved by The South Orange County Community College District (SOCCCD). This first building has been defined as a multi-story facility of 30,000 GSF and approximately 21,000 ASF, and will be placed in the area designated as Phase 3A. The building site plan will be developed based upon a Master Campus Plan Concept, providing for logical facilities growth that will incorporate instructional and support space, public-private partnership development, peripheral areas of parking and a centralized network of pedestrian centered open space.

*Aerial view of current ATEP facility*

# ATEP Campus Context


*This map identifies location of the ATEP campus relative to its community context. The campus is approximately 4.4 miles northwest of Irvine Valley College.*

## Phase 3A Development

As an education-oriented development design of ATEP facilities will combine traditional and timeless campus elements such as pedestrian paths, courtyards and landscape. However, building and site design will provide distinctive expressions of architecture, influenced by contemporary ideals of technology, sustainability and 21st century cultures.

The 68-acre ATEP Site poses unique challenges in development, most notably the odd configuration of the campus boundary and unusual land area shapes. A primary challenge will be to envision a Campus organization that is consolidated and systematic for ease of pedestrian navigation but also effectively planned to accommodate vehicular flow, function and synergy between buildings as they are developed.

To serve the needs of Campus users and create an attractive and Site-unifying element, development of the central pedestrian network of open spaces will connect all phases of the project. Creation of a main plaza can eventually become a central organizing feature where all buildings and pedestrian paths collect, and a unifying theme for building development that occurs over a long time period. The initial education building will be located near Valencia Avenue, creating a strong Campus identity and ease of access for daily traffic. Future growth will ultimately generate a physical presence on Valencia Avenue and Red Hill Avenue.

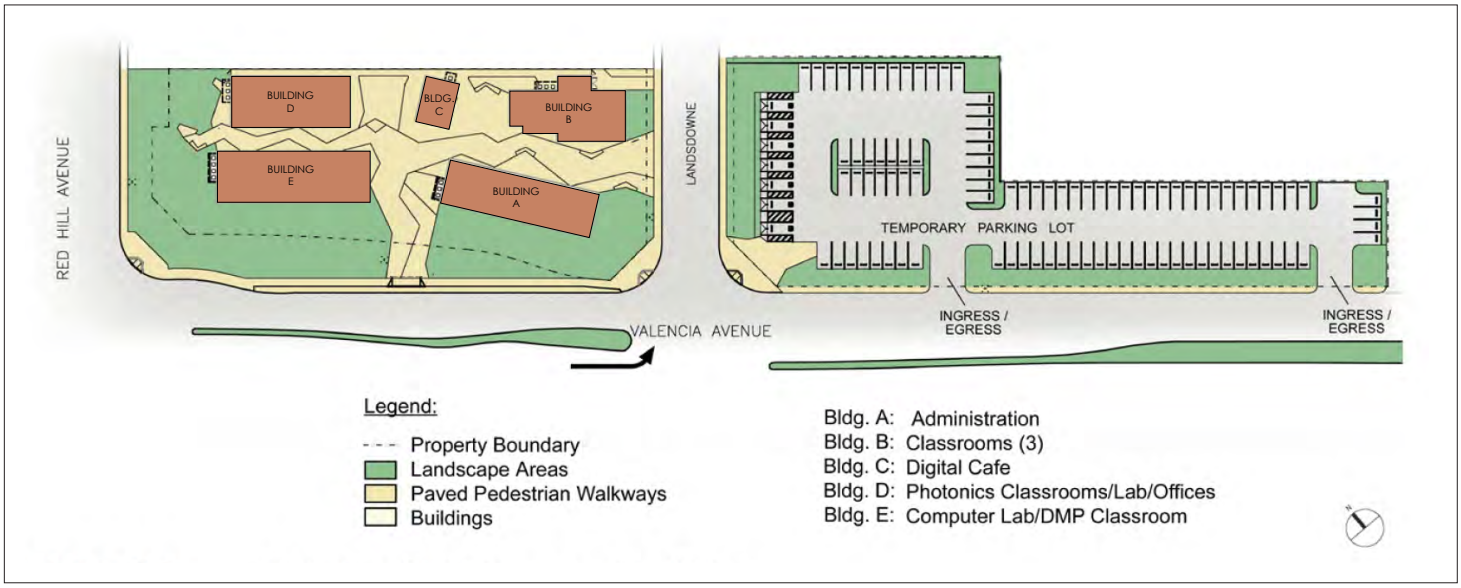
*Aerial view of ATEP site*

## Phase 3A Development


*This site diagram depicts the current boundary for the ATEP camps as a portion of the Tustin Legacy development area. Highlighted in green is the area approved by the South Orange County Community College District as Phase 3A and location of a new 30,000 GSF instructional building.*

## Instructional Program

Program definition for the new building to be developed on the Phase 3A area is still under determination at the time of this Facilities Master Plan Document publication.



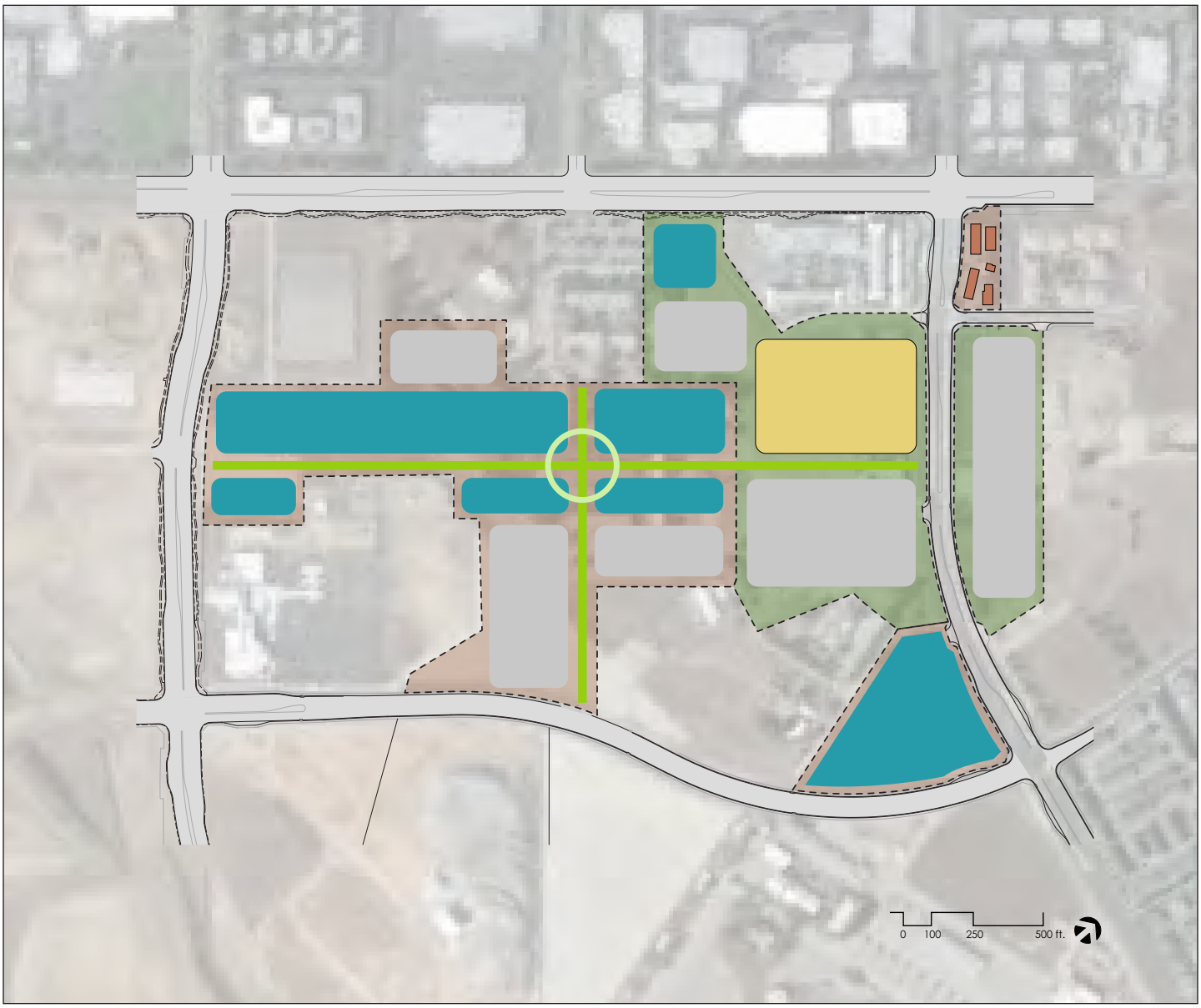

*This plan depicts the Phase 1 development of ATEP. Opened in 2007, the five building campus provides 15,000 GSF of instructional and support space.*

The existing ATEP Campus facilities will be designed as state-of-the-art instructional facilities, and to demonstrate the District's strong commitment to environmental stewardship. The permanent ATEP Campus will incorporate sustainable design and construction measures to meet current the State of California Green Building Code and standards for LEED certification. Design will incorporate LEED-NC program measures including the following areas of environmental action:

- Sustainable Sites,
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Innovation in Design

Further definition of LEED-NC standards may be found in the Sustainable Principles section in this Master Plan Document.

# ATEP Land Use Plan




Phase 3A Development

Existing District Bldgs.

Future Development

Parking

*This site diagram depicts the Phase 3A Development and Long Range Land Use for the ATEP site. A 30,000 SF building will be developed in the yellow area.*

## F. Reference Documents

The following documents can be downloaded for further review on the South Orange County Community College District website:

- 2011 Saddleback College Education Master Plan
- Focus Group Interview Notes
- Existing Facilities Physical Assessment
- 2008 Advanced Technology & EducationPark (ATEP) Long Range Plan
- 2009 Advanced Technology & Education Park (ATEP) Phase 3A Concept Plan

gkkworks | 1775 Hancock Street | Suite 150 | SAN DIEGO | CA 92110 | 619.398.0215