



2024 FACILITIES MASTER PLAN



# ALLAN HANCOCK JOINT COMMUNITY COLLEGE DISTRICT 2014-2024 FACILITIES MASTER PLAN

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# SPECIAL THANKS

The development of this document was made possible by the coordination and hard work of Kathy Buckey. The college is especially thankful to Kelly Underwood, Coordinator, Writing Center and Roanna Bennie, Academic Dean, for their role in developing the Educational Master Plan Implications for the Facilities Master Plan.

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The college is appreciative to **HMC Architects** for partnering with the college to develop the 2014-2024 Facilities Master Plan.

# **ALLAN HANCOCK COLLEGE**

# INTRODUCTION

# SANTA MARIA CAMPUS + SOUTH CAMPUS

# INTRODUCTION

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# VISION, MISSION, VALUES

# **VISION**

Allan Hancock College will be the recognized leader in student success through excellence in teaching, learning, and services in an environment of mutual respect.

# **MISSION**

Allan Hancock College provides quality educational opportunities that enhance student learning and the creative, intellectual, cultural, and economic vitality of our diverse community.

# **VALUES**

Student Success Innovation **Mutual Respect** Lifelong Learning Diversity Academic Freedom **Shared Governance Excellence** 

We at Allan Hancock College express our values in all that we do. Our commitment is to find innovative ways to enhance student achievement and to always put students first. We operate in a culture of mutual respect and lifelong learning, developing relationships among students and employees to enrich our collective appreciation for diverse ideas, thoughts, and experiences. Our culture is supported by a philosophy that shared governance and academic freedom are primary vehicles in promoting excellence in all teaching, learning, and services through open and honest communication.



# MESSAGE FROM THE SUPERINTENDENT/PRESIDENT





What a great time to be a part of Allan Hancock College! Thanks to the generous support of our neighbors within the District, Allan Hancock College has been transformed into a college with facilities that match the quality instruction that is the hallmark of our reputation. Sixty years ago, Santa Maria Junior College left its home adjacent to Santa Maria High School to establish what is now the main campus of Allan Hancock College. We cannot overstate the transformative nature of the Measure I bond - the past eight years have marked the most significant change in the history of the college. With new student services buildings, state-ofthe-art training centers for public safety and

industrial technology, and upgrades to athletic and performance space, our community's college is poised to build on its well-earned reputation as a place where students that "start here" can truly "go anywhere."

The Facilities Master Plan that follows provides a roadmap for the next decade. The planning that is shown here is the result of dedicated work from the taskforce comprised of faculty, staff, and students. They spent countless hours assessing options, asking questions, and meeting with constituent groups. The result is a thoughtful, expansive plan to guide the future.

The Facilities Master Plan will be a living document. Our intent is to ensure that the educational needs of students are properly met with state-of-the-art facilities and that our investments in infrastructure support the core mission of the college.

Thank you for taking time to peruse the plan. We hope you find it to be as inspirational as it is functional.

"

KEVIN G. WALTHERS, PH.D.

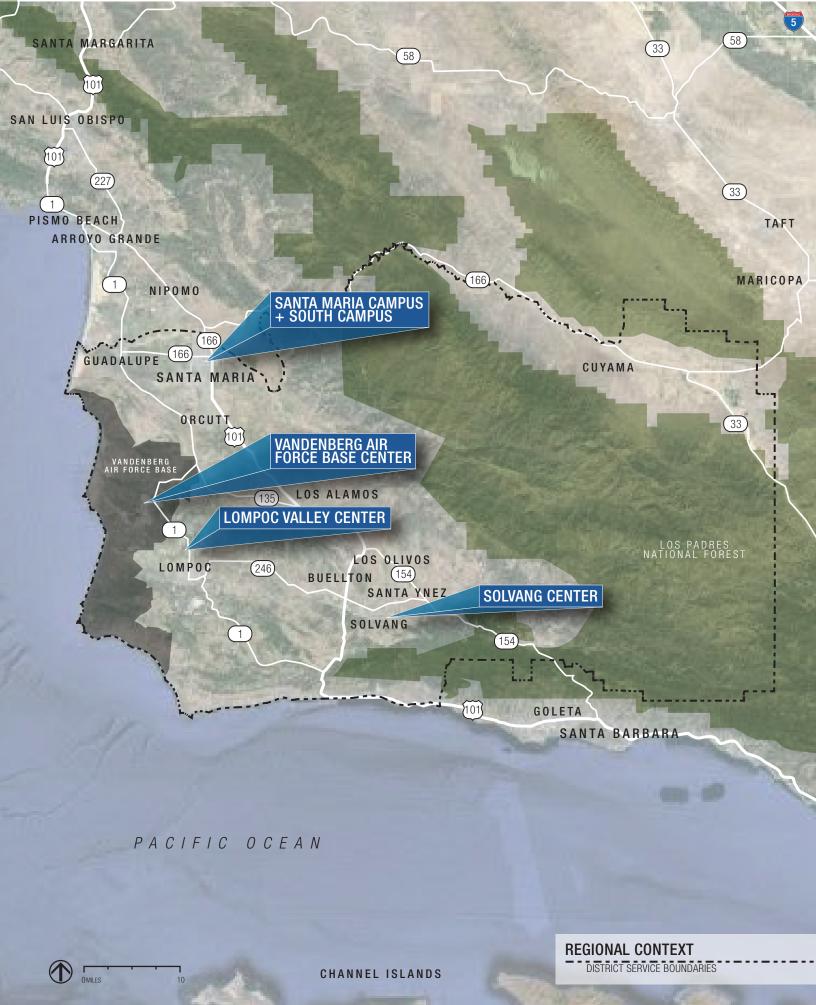
Superintendent/President

# THE DISTRICT

This region that is served by the Allan Hancock Joint Community College District lies at the transition between the highly urbanized Southern California metropolitan areas and the pastoral Central Coast. Extending from the Pacific Ocean to the Sierra Madre Range, this is a region of unparalleled natural beauty and diversity. It is rich in prime agricultural land and natural open space and is blessed with a moderate climate. The history of agriculture, including viticulture, is manifested throughout the region. Notable land holding include Vandenberg Air Force Base, the Los Padres National Forest, and the reservation of the Santa Ynez Band of the Chumash.

The Allan Hancock Joint Community College District service area boundary, outlined in the graphic on the opposing page, covers most of Santa Barbara County, except for the southern-most portion containing the cities of Santa Barbara, Goleta, and Carpinteria. This area is bounded by geographic barriers-the Pacific Ocean to the west and south and the Los Padres National Forest to the east. The transverse Santa Ynez Range is an additional barrier between the area and the city of Santa Barbara, as well as the Los Angeles metropolitan area. In contrast, the Santa Maria Campus and South Campus is easily accessed from communities to the north of the District's service area boundary and draws many students from San Luis Obispo County.

The main circulation routes are State Route-101 and State Route-1, providing connections to Santa Barbara and the Los Angeles Metro area to the south and to San Luis Obispo and the San Francisco Bay Area to the north. The population centers within the district service area boundary are the city of Santa Maria near the northern edge of the district; the city of Lompoc and Vandenberg Air Force Base in the southwest; and the cities of Solvang and Buellton and the towns Santa Inez and Los Olivos clustered in the southeast. The locations of the AHJCCD campuses—Santa Maria Campus. South Campus, Lompoc Valley Center, Vandenberg Air Force Base Center, and Solvang Center—are well matched with the District's population centers.



# THE DISTRICT (cont.)

Allan Hancock College was founded in 1920 when the Santa Maria High School District established Santa Maria Junior College. Classes were held in high school rooms until 1937 when the voters of the District approved a bond issue to build facilities on the high school campus. In 1954, the College opened its doors at the Allan Hancock College Santa Maria Campus, which was donated by Captain G. Allan Hancock.

On July 1 1963, the Allan Hancock Joint Community College District was formed, expanding the district to include areas served by the Santa Ynez Valley High School District and the Lompoc Unified School District. The Vandenberg AFB Center was opened in 1957, and a center in Lompoc has been in operation in various locations since 1974. The permanent site of the Lompoc Valley Center opened in 1999 and, as of 2014, is the site of the Public Safety Training Complex. The Solvang Center was established in 2000 and occupies leased commercial space in downtown Solvang. The District also teaches at numerous off-campus sites throughout its service area.



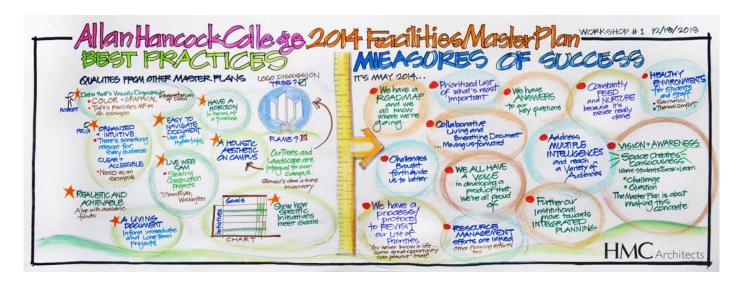








# INTRODUCTION **PURPOSES**

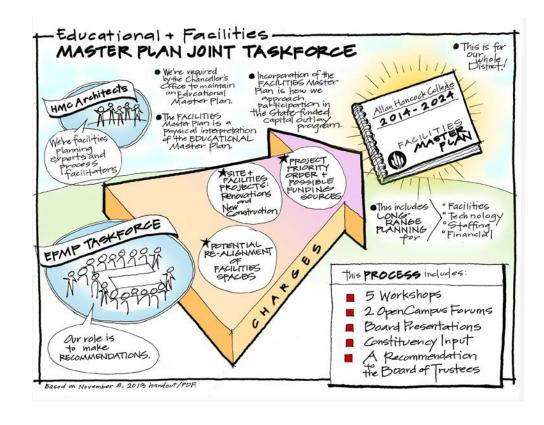


The 2014-2024 Allan Hancock Joint Community College District Facilities Master Plan is a longrange plan for the development of facilities to support the District's educational plan for student learning and success. It recommends site and facilities improvements that address the growth in enrollment anticipated over the next decade. It describes campus development strategies to support the Educational Directions of the 2014-2020 AHJCCD Educational Master Plan and positions the District to maximize funding and partnership opportunities. The Facilities Master Plan presents an integrated planning process that supports accreditation and demonstrates compliance with accreditation standards.

It is important to note, projects recommended in this Facilities Master Plan reflect the facility needs identified during the development of the plan and that the plan does not imply that all recommended projects will be constructed or implemented by 2024. Please refer to the Allan Hancock Joint Community College District's Five-Year Construction plan for major capital construction projects and funding and implementation strategies. In addition, minor construction projects identified in this Facilities Master Plan are not listed in the above-mentioned fiveyear construction plan. Funding and implementation of minor projects may be combined with a major construction project or included in the district's scheduled maintenance plan or parking lot project plan.

The Facilities Council's charge is to ensure the facilities master plan measures are being achieved, measured, and recalibrated. The plan will be evaluated annually by the Facilities Council, and the results will be presented at the annual planning retreat for dissemination and discussion.

# PROCESS



The process to develop the 2014-2024 Allan Hancock Joint Community College District Facilities Master Plan (FMP) has been highly participatory and designed to integrate several planning efforts. The many District constituencies, including students, staff, faculty, and administration, are represented in the Educational and Facilities Master Plan Joint Task Force, the body established by the Student Learning Council and the Facilities Council and charged with participating in the development of the FMP.

Educational and Facilities Master Plan Joint Task Force Charge:

- Recommend potential re-alignment of facilities spaces.
- Recommend site and facilities projects – renovations and new construction.
- Recommend project priority order and possible funding sources.

The Task Force participated in a series of five interactive workshops, during which they reviewed information, engaged in discussions, and made decisions that guided the planning process and outcomes. In addition, the Task Force members contributed many more hours of their time to engage their constituents and participate in campus and public forums and board meetings that were held to broaden participation and input.

The 2014-2024 AHJCCD Facilities Master Plan was developed through a five-step process that was facilitated by the Planning Team.

# INTRODUCTION PROCESS (cont.)

# **PREPARE**

During this phase, the planning process and timeline were developed. Consultations and coordination discussions took place with representatives of the Student Learning Council to define the linkages with the Educational Master Plan. The Task Force participated in the first of five workshops.

# **ANALYZE**

The planning team met with District staff, collected and reviewed facilities planning information, and toured the campuses. The analysis of existing site and facilities conditions was prepared.

# **FRAME**

The planning team tabulated the inventory of existing space, collected and analyzed the educational planning data, and prepared the master plan space program for facilities. Following Workshop Three, the Planning Team reported on progress to the Board of Trustees.

### Workshop One:

- Learn best practices and key elements
- Review AHJCCD educational initiatives
- Review the draft process and timeline
- **Define Measures of Success**

# Workshop Two:

- Review and discuss facilities information
- Review and discuss the analysis of existing conditions
- Define key planning issues to be addressed in the Facilities Master Plan

# Workshop Three:

- Describe the approach to developing a data-driven facilities master plan
- Review enrollment data and forecasts
- Review the existing space inventory
- Review facilities master plan space program for the campuses

# **EXPLORE**

Campus facilities options were developed. Following Workshop Four, the preferred options were presented to the Board of Trustees and at open forums to gather broader input. The Task Force met to consider this input and refine the preferred options.



# RECOMMEND

Draft facilities recommendations and project lists were developed. Following Workshop Five, the draft recommendations were presented to the Board of Trustees and at open college and public forums. The first draft of the FMP document was reviewed by the Task Force, who met to consider the broader input and align their review comments. The revised document was approved by the Task Force and recommended for adoption through the District's shared governance structure.

# Workshop Four:

- Develop facilities planning priorities
- Discuss campus development options
- Select "Preferred Options"

# Workshop Five:

Review the draft recommendations and project lists

# INTRODUCTION LINKAGES

The AHJCCD planning approach is designed to integrate the development of the 2014-2020 AHJCCD Educational Master Plan (EMP) with planning for facilities, technology, sustainability, and staffing, as well as long-range planning of finances. Progress on these parallel planning efforts were reported regularly among the governance groups that championed each plan, who then collaborated to coordinate timelines and forge linkages. The planning process emphasized integration with the Educational Master Plan, Technology Master Plan, and Energy and Sustainability Plan, and the linkages with these plans are described below.

# EDUCATIONAL MASTER PLAN LINKAGES

The Facilities Master Plan follows the Educational Master Plan and translates educational program needs into site and facilities recommendations through the quantification of planning data to forecast projected space needs and the alignment of facilities recommendations with the initiatives of the Educational Master Plan. Through the development of the EMP, the enrollment growth target of 2% per year for each year was established, starting with the baseline year of 2013 (fall) and projecting to 2024 (fall). The growth rate was applied according to the methodology described in the Planning Data section.

The Educational Master Plan establishes five Educational Directions to guide all District planning efforts. In addition, the Student Learning Council distilled the Educational Directions into Educational Master Plan Implications for the Facilities Master Plan, which describe general themes and department-specific facilities needs.

# **EDUCATIONAL DIRECTIONS**

- Student Success
- Professional Development
- Integrated Planning
- Community Outreach
- New Revenue Development

# EDUCATIONAL MASTER PLAN IMPLICATIONS FOR THE FACILITIES MASTER PLAN

# 1. Computerized classrooms and lab space

- Many areas point to the need for technology and the space to support and house it. While laptop carts and/or tablets are viable for some programs, others state the need for a designated space with computer stations.
- Facilities Planning Strategy: Build new or repurpose existing space to meet the need for computerized classrooms and lab space.

# 2. Available space for innovation

- Given the six year timeline of the plan, it is difficult, if not impossible, to project all of the facilities needs for new programs, courses, etc. Maintaining space for innovation allows for the opportunity for growth/change that is yet unspecified.
- Facilities Planning Strategy: Build new or repurpose existing space to house new programs in flexible labs outfitted with robust technology and utility infrastructures.

### 3. Facilities needs at the extended campuses

- With an eye to parity, departments and services state a need for facility development, especially at the Lompoc Valley Center, in order to ensure equal student access. In addition, Lompoc Valley Center and the Solvang Center have opportunities for growth or programs and services that do not have the capacity for growth at the Santa Maria campus.
- Facilities Planning Strategy: Realign space to house all services--academic services, student services, and administrative

services--across the District sites by building new space, repurposing existing space, and/ or expanding or relocating to a new site.

### 4. ADA accessibility

- Equal access is both a mandate and responsibility that the District takes very seriously.
- Facilities Planning Strategy: Remove architectural barriers in buildings and throughout the campus site through new construction, renovation, and site improvement projects.

### 5. Office space

- The District has experienced a dearth of office space for both faculty and staff. Innovation and expansion of programs will lead to hiring and an even greater need for office space across campus and at extended campuses.
- Facilities Planning Strategy: Build new or repurpose existing space to provide sufficient office space at all District sites.

# 6. Meeting space

- In support of student learning and innovation, employees need space in which to gather and share ideas.
- Facilities Planning Strategy: Build new or repurpose existing space to provide meeting spaces in sufficient numbers and diverse of capacity and type to address the need at all District sites.

# INTRODUCTION LINKAGES (cont.)

# TECHNOLOGY MASTER PLAN LINKAGES

The Facilities Master Plan follows the Technology Master Plan and the proponents of both plans collaborated on recommendations for initiatives that require an integrated planning approach. To facilitate the collaboration, the technology planning process developed Technology Master Plan Implications for the Facilities Master Plan. These initiatives call for the integration of technology infrastructure improvements in the recommended facilities and site improvement projects. These improvements are critical to meeting the technology needs of our students, faculty, and staff for online education, services, smart classrooms, and access to information securely and quickly.

# FACILITIES PLANNING STRATEGIES TO ADDRESS THE TECHNOLOGY MASTER PLAN IMPLICATIONS FOR THE FACILITIES MASTER PLAN

# 1. Data Networking Infrastructure:

The design of all new construction, renovation, and site improvement projects shall comply with the district's information technology design standards and shall include data networking infrastructure, fiber cabling, switches, and wall jacks. Adequately sized equipment rooms shall be provided for data and audio/visual technology systems.

# 2. Security System Infrastructure:

Data network infrastructure for campus security cameras shall be included in the design of all new construction, renovation, and site improvement projects and will be developed in coordination with Information Technology Services.

### 3. WiFi Network infrastructure:

A wireless networking plan will be prepared and coordinated with Information Technology Services for all new construction, renovation, and site improvement projects, with the ultimate goal of providing seamless wireless coverage throughout all facilities and site areas within the boundaries of the campuses.

# 4. Audio/Visual Systems:

The design of all new construction, renovation, and site improvement projects shall comply with the district's Audio Visual Systems Standard and shall specify cabling and audio/visual systems.

# (New) Emergency Preparedness:

Critical technology infrastructure will be protected with emergency generators, uninterrupted power supplies (UPS), redundancy, physical barriers, and emergency procedures.

# INTRODUCTION LINKAGES (cont.)

# ENERGY + SUSTAINABILITY PLAN LINKAGES

Development of the AHJCCD Energy and Sustainability Plan began in fall 2011. A Sustainability Task Force was convened to participate in a series of three workshops in spring 2012 and guide the development of the plan. The Energy and Sustainability Plan has undergone further development over the past two years. In accordance with Board Policy, it was adopted as an integral part of the 2014-2024 AHJCCD Facilities Master Plan. The Energy and Sustainability Plan establishes six dimensions, each with a stated goal and a number of objectives, which provide guidance to the Facilities Master Plan and other district plans. The Sustainability Plan is documented in Chapter 4 of the Facilities Master Plan.

# **ENERGY + SUSTAINABILITY PLAN DIMENSIONS**

# **Dimension 1: Leadership in Sustainability**

- Goal: Establish and promote campuswide sustainability awareness that supports Allan Hancock College students and employees to be global citizens and stewards of the environment.
- **Facilities Planning Strategies:** Recommend that the Allan Hancock College Office of Sustainability have a presence at all campuses. Recommend sustainability projects with community partners.

# **Dimension 2: Informed, Inclusive,** and Dynamic Planning

- Goal: Incorporate sustainability into the financial, facilities, and operational aspects of the master planning process.
- Facilities Planning Strategy: Recommend that facilities be designed to meet performance benchmarks and are capable of measuring and reporting outcomes.

# **Dimension 3: Sustainability in Education and Training**

- Goal: Promote informed citizenry and ecological literacy by incorporating and modeling sustainability practices in educational programs.
- Facilities Planning Strategy: Incorporate educational "Did you know...?" signage program throughout the campuses. Showcase sustainable features and highlight their potential to be educational resources.

### **Dimension 4: Sustainable Operations**

- Goal: Develop and employ sustainable operations, standards, and best practices at Allan Hancock College.
- Facilities Planning Strategy: Recommend facilities that support sustainable operations and best practices.

### **Dimension 5: Sustainable Facilities**

- Goal: Practice sustainable design and construction for existing and new facilities.
- **Facilities Planning Strategies:** Recommend that projects meet District and third-party standards for sustainable design.

# **Dimension 6: Transportation**

- Goal: Replace the existing district vehicle fleet with low and zero emission, high mileage vehicles with consideration for alternative fuels and electric vehicles.
- **Facilities Planning Strategies:** Recommend facilities that support the maintenance and operation of a sustainable district vehicle fleet.

# INTRODUCTION PLANNING DATA

This 2014-2024 Allan Hancock Joint Community College District Facilities Master Plan represents an integrated planning approach and links findings and implications described in the Educational Master Plan to recommendations for facilities. This Planning Data Chapter describes the methodology used to forecast the amount and type of space necessary to support the academic program of instruction and support services for the coming decade.

# CALCULATING SPACE NEEDS

The inventory of facilities is an important tool in planning and managing college campuses. FUSION (Facilities Utilization, Space Inventory Options Net) is a database of all the California community college facilities that includes descriptive data on buildings and rooms for each college and district within the state. This information is essential for developing the annual five-year construction plans, planning for capital outlay construction projects, projecting future facility needs, and analyzing space utilization.

The California Community Colleges Chancellor's Office (CCCCO) mandates annual updates of the inventory of all facilities in a district. By combining existing and future enrollment and program forecasts with appropriate space standards, space requirements for current and future needs are developed. Space cap/load is the direct relationship between the amount of space available, by type, which may be used to serve students, and the number of students participating in campus programs.

Space capacity/load analysis enables an institution to identify the types of space it needs and the types of space it holds in excess. The analysis of space forms the core of this 2014-2024 Allan Hancock Joint Community College District Facilities Master Plan.

While the state provides standards for utilization for more than 60% of space types on campus, the capacity estimates for non-state standard spaces are based on a combination of factors, including the size of the institution, student enrollment headcounts, and/or a flat institutional rate.

Space capacity/load analysis typically includes the categories of space listed in *Table 1* on the opposing page. In the majority of cases, these categories represent a percentage of student enrollments, such as Assembly/Exhibition, Food Facilities, and Merchandising/Bookstore, a percentage of the total campus ASF (Physical Plant/Facilities), or they may reflect flat allowance totals (see Physical Education, Health Services, and Data Processing).

The line item in adjacent *Table 1* for space type "other" includes a number of spaces on campus that are considered to be in non-capacity load categories. These are spaces that are not analyzed by the CCCO in relation to utilization and efficiency, but are important as part of the college's inventory related to maintenance and operations. Types of spaces included in "other" include the following:

- / Physical Education (Teaching Gym)
- / Clinic/Demonstration
- / Assembly/Exhibition
- / Food Facilities
- / Lounge
- / Merchandise Facilities (Bookstore)
- / Recreation
- / Meeting Rooms
- / Locker Rooms
- / Data Processing
- / Physical Plant/Facilities
- / Health Services

**TABLE 1:** ROOM USE CATEGORIES

Space Type	Room Use Numbers	Description
Lecture	100s	Classrooms + support spaces
Lab	200s	Teaching Labs + support spaces
Offices/ Conference Room	300s	Offices + support spaces; all offices, including administrative and student services
Library/LRC Study/Tutorial	400s	Library + Learning Resources Center; including study, tutorial + support spaces
Instructional Media AV/TV	530s	AV/TV + Radio; Technology + support spaces
Other	520, 540 to 800s	Non-capacity load categories

Source: California Community Colleges Chancellor's Office (CCCCO) Space Inventory Handbook

# PLANNING DATA (cont.)

# SPACE UTILIZATION + PLANNING

To determine the amount of space required to support the programmatic needs for a college. the enrollment and program forecasts are applied to a set of standards for each type of space.

The required utilization and space standards for classroom, laboratory, office, library, and audio-visual are contained in the California Code of Regulations (CCR), Title 5, Chapter 8, Section 57020-57032. These standards refer to the Board of Governors of the California Community Colleges Policy on Utilization and Space Standards dated September 2010.

These space standards, when applied to the total weekly student contact hours (WSCH), produce total capacity requirements that are expressed in assignable square feet (allocated on a per student or per faculty member basis). The space standards and formulas used to determine both existing and future capacity requirements are summarized in Tables 2 and 3 on the following pages.

Table 2, on the following page, is applied to a campus with less than 140,000 WSCH, which is applicable when Allan Hancock College reaches master plan horizon 1 (12,000 headcount) and master plan horizon 2 (15,000 headcount).

The standards for teaching laboratories are measured in both ASF per student station and in ASF per 100 WSCH generated. Table 4, on a following page, summarizes these standards.

Each component of these standards is applied to projected enrollment to produce a total assignable square foot (ASF) capacity requirement for each category of space. The sum of these areas represents the total building area requirement for Allan Hancock College.

The space standards are based on the following assumptions:

- Utilization standards refer to the amount of time rooms and "stations" (such as a desk, laboratory bench, or computer terminal) should be in use. "Utilization" is the amount of time rooms and stations are actually in use. Utilization standards used address utilization on an "hours-per-week" basis.
- Classrooms are available 48 hours per 70-hour week for a campus with less than 140,000 WSCH and 53 hours per 70-hour week for a campus with 140,000, or more, WSCH and will be occupied, on average, two-thirds of the time. (That occupancy percentage might be achieved by having full classrooms twothirds of the time and empty classrooms the remaining time.) Thus, the classroom utilization standard is either 32 or 35 weekly hours of station use depending on amount of WSCH. The utilization standards for laboratories are lower than the classroom utilization standards.
- Office space includes academic offices, administrative offices, clerical offices, office service rooms, and conference rooms.

- / Library space includes stack, staff, and reader station space.
- Areas such as the main lobby (excluding card catalog area), elevators, stairs, walled corridors, restrooms, and areas accommodating building maintenance services are not deemed usable/assignable.

# PLANNING DATA (cont.)

# SPACE UTILIZATION + PLANNING (cont.)

# **TABLE 2: PRESCRIBED SPACE STANDARDS FOR** A CAMPUS WITH LESS THAN 140,000 WSCH

**TABLE 3: PRESCRIBED SPACE STANDARDS FOR** A CAMPUS WITH 140,000, OR MORE, WSCH

Category	Formula	Rates/ Allowances	Category	Formula	Rates/ Allowances
Lecture (Classroom)	ASF/Student Station Station Utilization Rate (occupancy) Average hours room/week Station use/week (hours)	15 66% <b>48</b> <b>31.68</b>	Lecture (Classroom)	ASF/Student Station Station Utilization Rate (occupancy) Average hours room/week Station use/week (hours)	15 66% <b>53</b> <b>34.98</b>
Laboratory (Teaching Labs)	ASF/Student Station Station Utilization Rate (occupancy) Average hours room/week Station use/work (hours)	see Table 4 85% 27.5 23.375	Laboratory (Teaching Labs)	ASF/Student Station Station Utilization Rate (occupancy) Average hours room/week Station use/work (hours)	see Table 4 85% 27.5 23.375
Offices/ Conference Room	ASF per FTE instructional staff member	140	Offices/ Conference Room	ASF per FTE instructional staff member	140
Library/ LRC/Study	Base ASF Allowance ASF/1st 3,000 DGE ASF/3001–9,000 DGE ASF/DGE>9,000 DGE	3,795 3.83 3.39 2.94	Library/ LRC/Study	Base ASF Allowance ASF/1st 3,000 DGE ASF/3001–9,000 DGE ASF/DGE>9,000 DGE	3,795 3.83 3.39 2.94
Instructional Media AV/TV + Radio	Base ASF Allowance ASF/1st 3,000 DGE ASF/3001–9,000 DGE ASF/DGE>9,000 DGE	3,500 1.50 0.75 0.25	Instructional Media AV/TV + Radio	Base ASF Allowance ASF/1st 3,000 DGE ASF/3001–9,000 DGE ASF/DGE>9,000 DGE	3,500 1.50 0.75 0.25

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010.

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010.

The following definitions pertain to the formulas listed in above Tables 2 and 3.

**ASF/Student Station:** Assignable square feet per student station.

Average hours room/week: Number of hours out of a 70-hour week, 8am to 10pm, a classroom or

class laboratory, on the average, should be in use.

Station Utilization Rate (occupancy): The percentage of expected student station occupancy when rooms are in use. Station use/week:

The number of hours per week (out of the 70-hour week for classrooms and class laboratories) which a student station, on average, should be in use.

Full-time equivalent DGE: Day-graded enrollment DGS: Day-graded student

FTE:

TABLE 4: ASSIGNABLE SQUARE FEET (ASF) FOR LABORATORY SPACE

Top Code	Top Code Division	ASF per 100 WSCH	ASF per Station
0100	Agriculture and Natural Resources	492	115
0115	Agricultural & Forestry Power/Machinery	856	200
0200	Architecture and Environmental Design	257	60
0400	Biological Sciences	235	55
0500	Business and Management	128	30
0600	Communications	214	50
0700	Computer and Information Science	171	40
0800	Education	321	75
0936	Printing and Lithography	342	80
0937	Tool and Machine	385	90
0945	Mechanical Technology	556	130
0947	Diesel Technology	856	200
0948	Automotive Technology	856	200
0950	Aeronautical and Aviation Technology	749	175
0952	Construction Crafts/ Trades Technology	749	175
0954	Chemical Technology	556	130

Top Code	Top Code Division	ASF per 100 WSCH	ASF per Station
0956	Industrial Technology	385	90
All other 900s	(Engineering)	321	75
1000	Foreign Language	150	35
1200	Health Services	214	50
1300	Consumer Education/ Home Economics	257	60
1400	Law	150	35
1500	Humanities	150	35
1600	Library Science	150	35
1700	Mathematics	150	35
1800	Military Studies	214	50
1900	Physical Sciences	257	60
2000	Psychology	150	35
2100	Public Affairs and Service	214	50
2200	Social Sciences	150	35
3000	Commercial Services	214	50
4900	Interdisciplinary	257	60

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010.



# MARIA CAMPUS L







The planning process began with the collection of facilities information. The Planning Team listened to the insights of multiple stakeholders regarding the condition and functionality of the existing facilities and sites and overlaid this with their own research and observations. The resulting analysis examines existing conditions that shape the use of the Allan Hancock College campuses. It was presented to the Educational and Facilities Master Plan Joint Task

Force, who validated its findings and helped to identify key issues. The analysis and findings are presented with a series of graphic plates that illustrate patterns and characteristics to be considered in the planning of future development. Please refer to Chapter 4 for the environmental analysis of the Santa Maria Campus, South Campus, and Lompoc Valley Center campuses.

### SANTA MARIA CAMPUS + SOUTH CAMPUS

- / Local Context
- / Neighborhood Context
- / Campus Plan
- / Campus Development History
- / Facilities Condition
  - + Adequacy
- / Vehicular Circulation
  - + Parking
- / Pedestrian Circulation
- / Campus Zoning
- / Open Space Typology
  - + Programming
- / Summary of Findings
  - Demolitions and Removals

### LOCAL CONTEXT

The graphic on the opposing page illustrates the location of the Santa Maria and South Campuses in the City of Santa Maria. The College is situated on a flat coastal plain bordered by natural hillsides to the north, east, and south and the Pacific Ocean, which lies approximately thirteen miles to the west. The Santa Maria River flows towards the northwest along the base of the hillsides about two miles from the campus. Agricultural land surrounds much of the city and includes the land to the east of State Route 101 near the campus. The graphic shows the urban and suburban development around the campus to the north, west, and south, including the city center at South Broadway (SR-135) and East Main Street (SR-166).

- / The campus is adjacent to and visible from SR-101.
- / The campus is located at the eastern edge of the city, near agricultural land.
- / The campus is near the Santa Maria Town Center.
- / The regional rail transportation center and Amtrak service is located nine miles westward of Guadalupe.









### NEIGHBORHOOD CONTEXT

Allan Hancock College consists of two non-contiguous land areasthe Santa Maria Campus and the South Campus. Both campuses, the nearby land uses, and main roadways are shown in the graphic on the opposing page. Freeway interchanges at East Main Street and East Stowell Road provide access to State Route 101. South College Drive passes through the Santa Maria Campus and links it to the South Campus. South Broadway (SR-135), shown to the west of the campuses, is the main commercial corridor. The District leases commercial space in the Columbia Business Center, which is adjacent to the South Campus.

The graphic illustrates the land uses found in the neighborhood. Residential uses surround much of the Santa Maria Campus. Commercial uses are to be found along East Stowell Road. The Santa Maria Cemetery lies to the west of the South Campus across South College Drive. The Santa Maria Civic Center and library are located nearby. Retail uses including the Santa Maria Town Center regional shopping mall, are located on East Main Street and South Broadway.

- / Space in the Columbia Business Center (CBC) is leased and not owned by the District.
- / The former railroad rightof-way parallels East Jones Street. The Railroad Loft District mixed-use development is planned for a nearby site along this former right-of-way.
- A bicycle path is currently planned in the former right-of-way along the northern property line of the Santa Maria Campus.









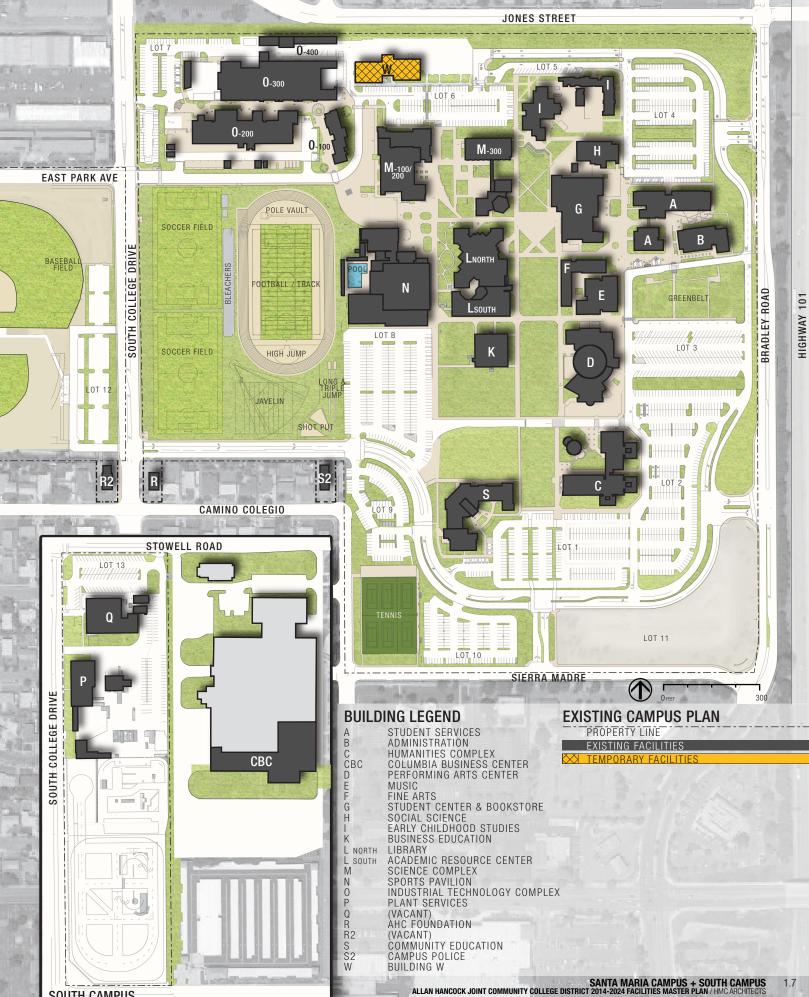
### **CAMPUS PLAN**

The graphic on the opposing page shows the Santa Maria Campus and South Campus, as well as the location of space that the District leases in the Columbia Business Center. Permanent facilities, temporary facilities, and facilities under construction are distinguished by color.

- Many temporary buildings were removed recently.
- Most of the existing buildings are permanent facilities.







**SOUTH CAMPUS** 

# CAMPUS DEVELOPMENT HISTORY

The graphic on the opposing page illustrates campus development by decade:

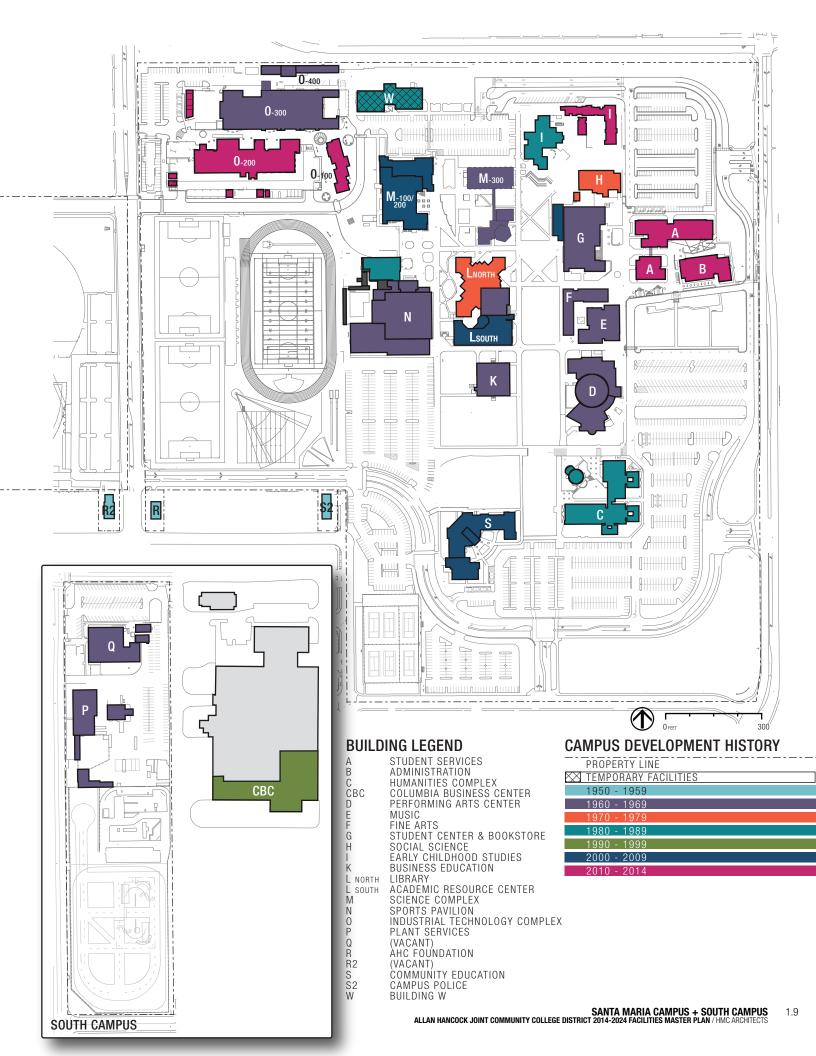
- / Facilities built in the 1950s
- / Facilities built in the 1960s
- / Facilities built in the 1970s
- / Facilities built in the 1980s
- / Facilities built in the 1990s
- / Facilities built in the 2000s
- / Facilities built from 2010 to 2014

- / Many new facilities were built recently.
- / There is a need to repurpose the space that will be soon vacated by programs moving to the O-100 and O-200 Industrial Technology Buildings.
- / Many aging buildings remain, including a number built in the 1960s.









### FACILITIES CONDITION + ADEQUACY

The graphic on the opposing page indicates the findings of the assessment conducted in late 2013 by a team from the California Community College Foundation. The team assessed each facility and determined its FCI value, which indicates the cost of all needed repairs as a percentage of the replacement cost of the facility. The graphic illustrates the following categories:

- / Facilities Condition Index 0% to 20% GOOD
- / Facilities Condition Index >20% to 50% FAIR
- / Facilities Condition Index > 50% POOR

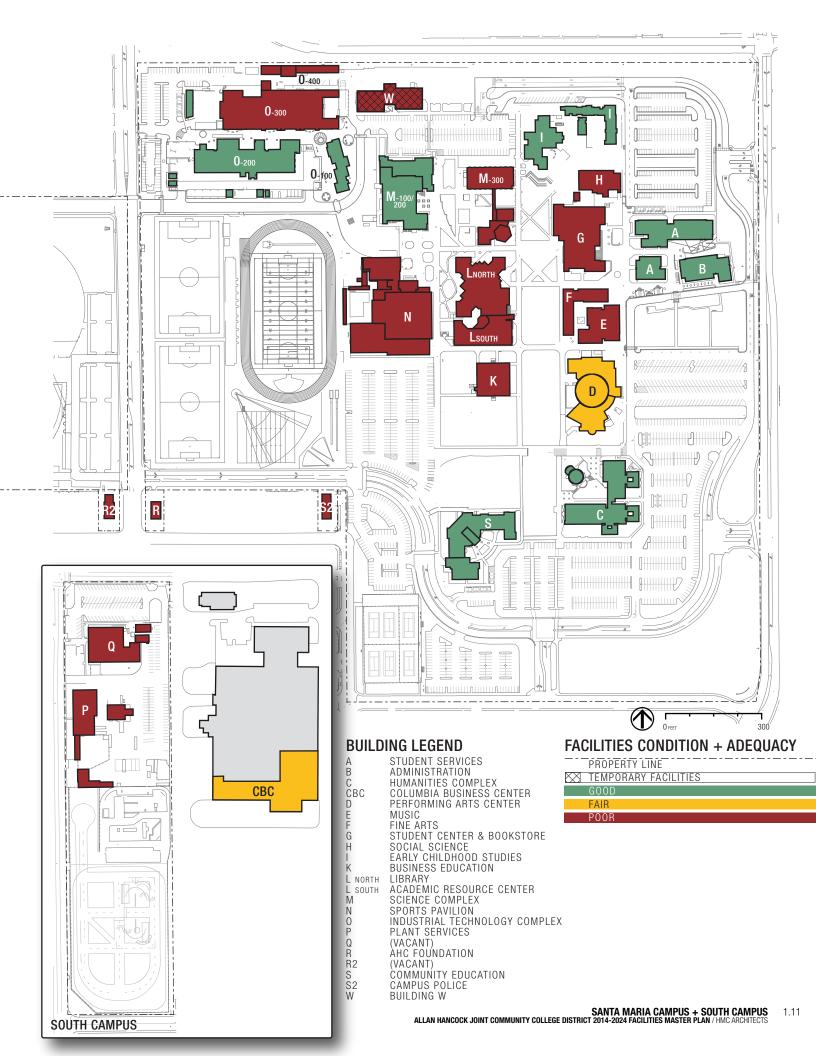
The review of facilities needs gathered from program review and from the educational planning program development tool indicates that certain buildings were the focus of issues and needs. These buildings are noted on the graphic.

- / Buildings C and D received minor remodeling work after the facilities condition assessment was conducted.
- / Many buildings were assessed to be in "poor condition."
- / The summary of facilities needs from program review indicate a high number of significant issues with Buildings E, F, H, K, M-400, N, O-300, and W.
- / The South Campus facilities, Buildings Q and P, are not certified as school facilities by the Division of the State Architect.









### VEHICULAR CIRCULATION + PARKING

The graphic on the opposing page illustrates the following:

- / Campus entry points
- / Primary and secondary vehicular routes
- / Service vehicle routes
- / Parking lots + capacity
- / Bicycle parking
- / Bicycle lanes
- / Parking permit dispensers
- / Passenger loading zones
- / Bus stops
- / Crosswalks
- / Traffic signals

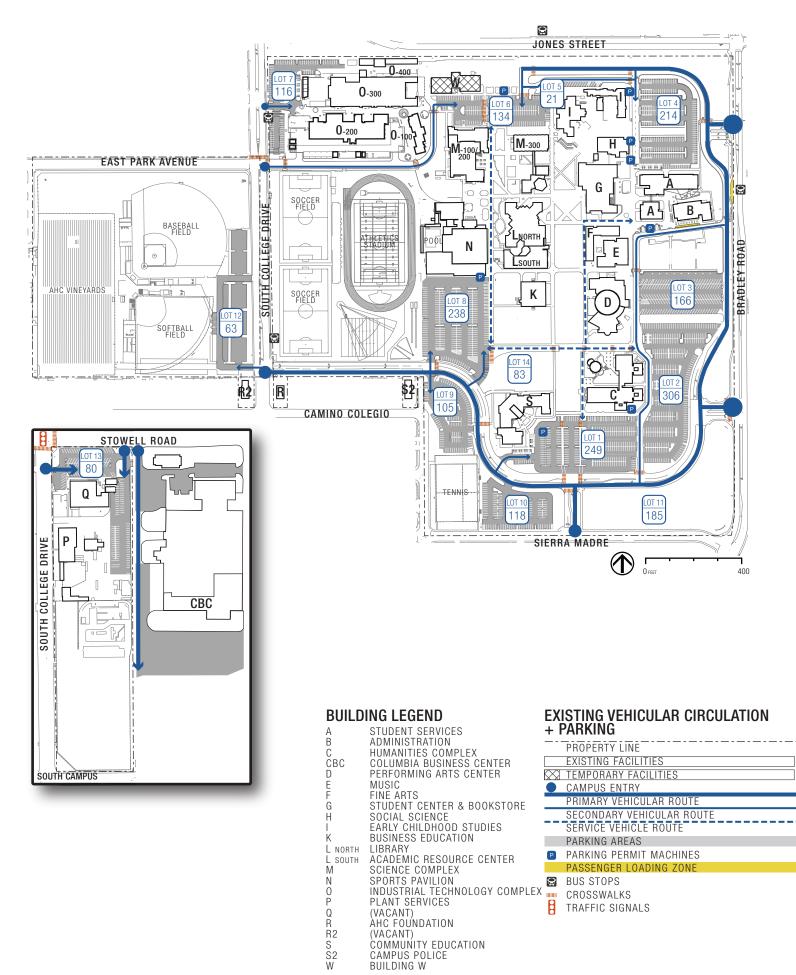
#### EXISTING PARKING CAPACITY

The graphic highlights the existing parking areas at the Santa Maria Campus and South Campus. Shared parking is provided for tenants of the Columbia Business Center where Allan Hancock College leases space. The existing parking capacity for the Santa Maria Campus and South Campus provides for a ratio of 5.91 full-time equivalent

students (FTES) per each parking space, based on the enrollment of 11,500 FTES in fall 2013 and the existing parking capacity of 1,945 space (1,599 permanent and 346 temporary spaces). This ratio most closely reflects the current experience of students, faculty, and staff, who have expressed that parking utilization is near or at full capacity during periods of peak demand. This results in more time needed for drivers to find an empty stall. Input from stakeholders also indicates that drivers have been able to find on-campus parking when an inconvenient, though not unreasonable, length of time is spent searching.

The parking capacity is scheduled to increase to 1,995 permanent and temporary parking spaces by July 2014 when parking areas associated with on-going campus construction projects will become available for use. This number serves as the baseline existing parking capacity for purposes of this plan.

- / The Santa Maria Campus' vehicular circulation is well organized around the Loop Road.
- / Five vehicular entries provide alternate means of entry and egress.
- / The Loop Road has yet to be completed around the northwest part of campus.
- / The opportunity to establish campus bike lanes that connect to existing and planned city bike lanes should be considered.
- / The north-bound Santa
  Maria Area Transit buses
  stop on Jones Street,
  encouraging jay-walking
  across this narrow street,
  which is often lined with
  parallel parked vehicles. The
  stop for south-bound Santa
  Maria Area Transit buses is
  located on Bradley Road
  to the east of Building A.
- / During periods of peak attendance, the Santa Maria Campus parking lots are filled to capacity, including the temporary lots.
- / Parking permit dispensers need to be relocated to improve access and traffic flow.



# PEDESTRIAN + BICYCLE CIRCULATION

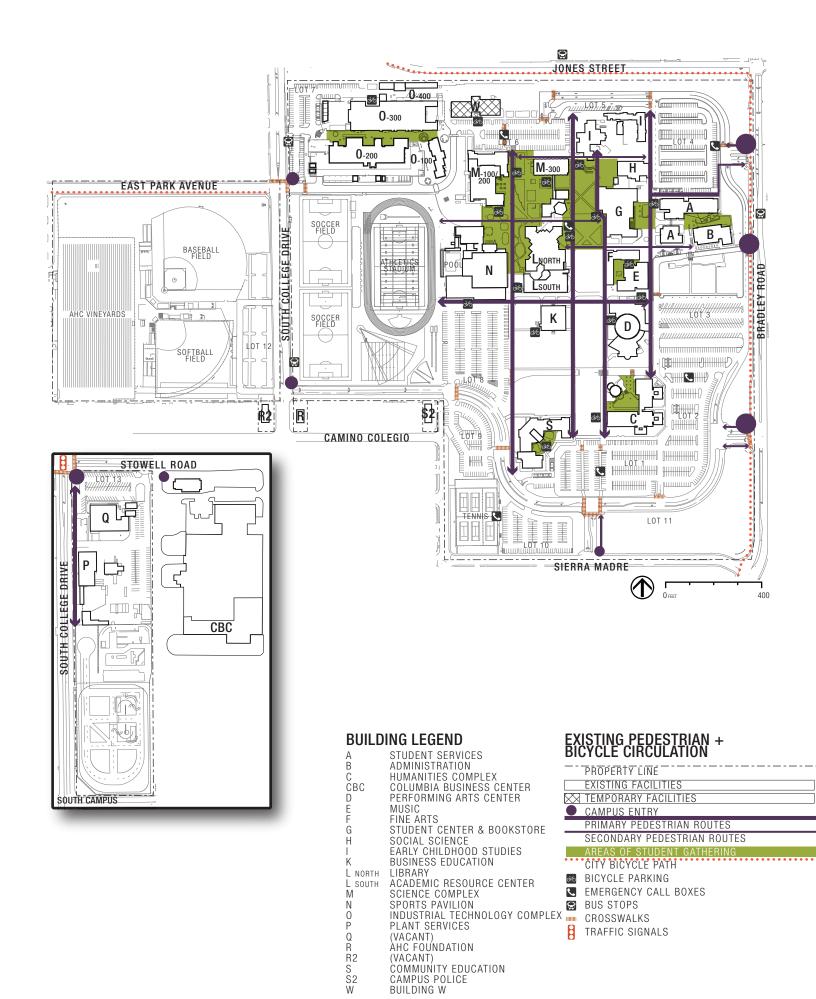
The graphic on the opposing page illustrates the following:

- / Campus entry points
- / Primary and secondary pedestrian routes
- / Outdoor gathering spaces
- / Bicycle parking
- / Emergency call boxes
- / Bus stops
- / Crosswalks
- / Traffic signals

- / The walkways are well organized and align with the placement of buildings and The Commons.
- / Gathering spaces are linked across the center of campus, activating the open spaces between the buildings that support student life: the One Stop Student Services Center (Buildings A and B), the Student Center, the Library/ Academic Resources Center, and the Sports Pavilion.
- Uncontrolled pedestrian crossing occurs along Jones Street. The campus lacks accessible pedestrian entry points along its northern edge.
- / Stronger pedestrian linkages are needed between the edges and the core of the campus.







### **CAMPUS ZONING**

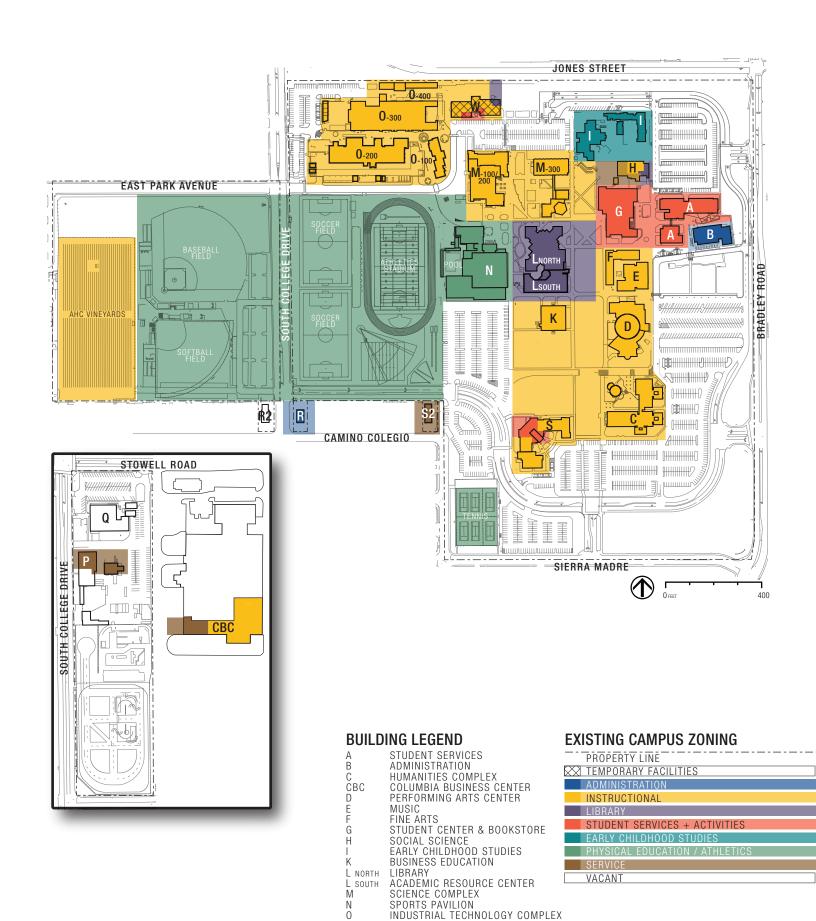
The graphic on the opposing page illustrates the location of the following functional zones:

- / Administration
- / Instruction
- / Library
- / Student Services and Activities
- / Early Childhood Studies
- Physical Education and Athletics
- / Services

- / The campus is well zoned. Administration and Student Services and Activities are located centrally and near the Santa Maria Campus entry points.
- / The Library functions are consolidated for the most part and located centrally.
- / A permanent home is needed for Health Services and the STEM Center, which are located in temporary building W.
- / The student services offices in Building S support the Community Education programs that are offered there.







P

Q

R2

PLANT SERVICES

COMMUNITY EDUCATION CAMPUS POLICE BUILDING W

(VACANT) AHC FOUNDATION

(VACANT)

### OPEN SPACE TYPOLOGY + PROGRAMMING

The graphic on the opposing page categorizes open space design and use by the following types:

- / Outdoor Instructional Facilities
  - The Vineyard
  - Industrial Technology yards next to Building O-300
  - Ceramics yard between Buildings E and F
  - Early Childhood
     Education Studies
     play yards
  - Public Safety Training Complex on the South Campus (recently vacated)
- / Outdoor AthleticInstructional Space
  - Track and field facilities
  - > Football field
  - Soccer fields
  - Softball fields
  - Baseball field
  - > Tennis courts
- / Hardscape/Plazas
  - Linked plazas and courtyards span across the campus at Buildings A, B, and G; the Campus Commons; the M complex; and Athletic Pavilion N.

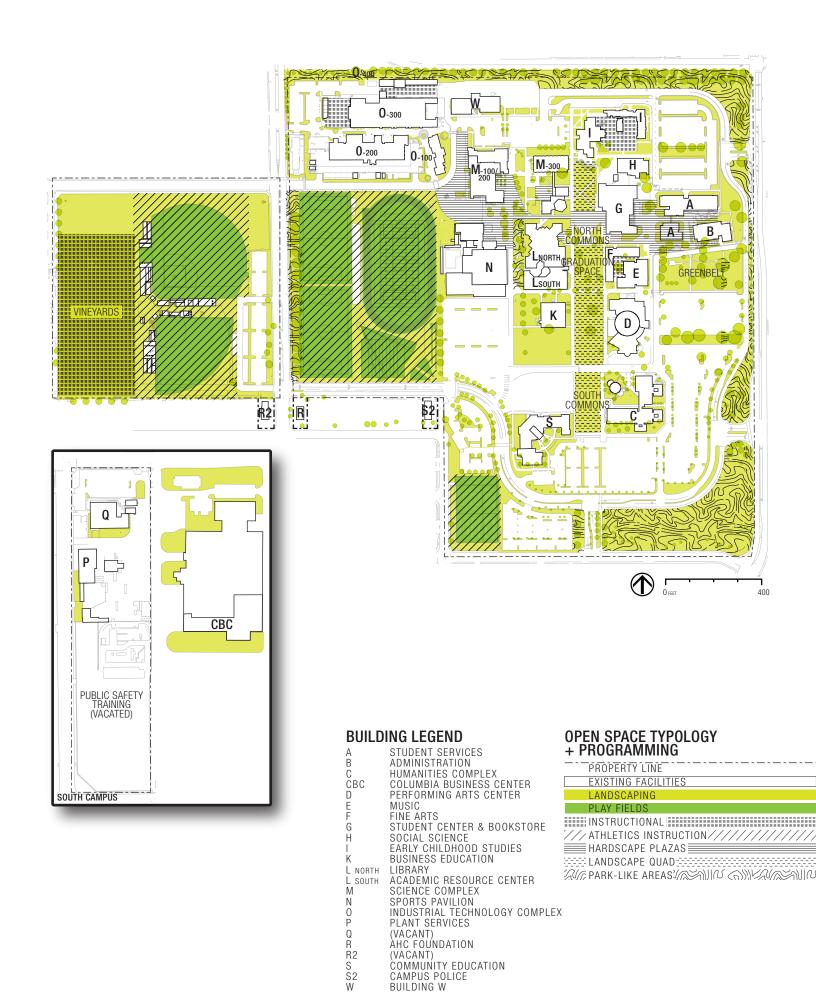
#### Landscape Quads

- Campus Commons
- Green Belt

#### Park-like Areas

- Informal landscaping occurs along portions of the northern, eastern, and southern edges of the Santa Maria Campus and the eastern side of College Avenue.
- Trees and meandering paths fill the space to the west of the Library/Academic Resource Center.

- / Park-like green spaces around the edges of campus present an attractive image to the community. The opportunity to complete and enhance these landscaped edges should be considered.
- / The development of the southern portion of campus is unfinished.
- / The southern part of the Campus Commons has the potential to support large gatherings, including commencement ceremonies.





### SUMMARY OF FINDINGS

The Allan Hancock College facilities have been transformed over the last decade by the construction of new facilities and site improvements. The challenge for the future is to continue the development of the campus in a manner that aligns with the *Educational Master Plan*, addressing the projected enrollment, and taking advantage of every opportunity to build a vibrant, welcoming, and sustainable learning environment.

### SANTA MARIA CAMPUS

The challenges and opportunities for the Santa Maria Campus relate to providing for new and existing programs and services that currently lack permanent facilities, renovating or replacing aging facilities, and improving and completing the development of the campus site.

### **SOUTH CAMPUS**

Much of the South Campus is vacated, and its future use is in question. The challenges and opportunities for the South Campus relate to the exploration of options and to identify the uses that align most closely with the District's mission, vision, and values. The existing conditions must be considered in the search for suitable district uses. The non-contiguous land area presents a challenge. The closest point of the South Campus is approximately 1000 feet of travel distance from the Santa Maria Campus, thus potential programs and users must be able to function separately from other college programs on the Santa Maria Campus. Programming should be aimed at students and employees that need not travel often to the Santa Maria Campus. The location is visible to the community, with convenient access to State Routes 101 and 135 via Stowell Road. The commercial zoning and the proximity to existing retail and office commercial uses add to the value of the site for commercial use and community uses. The South College Drive street frontage facing the Santa Maria Cemetery influences the character of the streetscape. The condition of the existing facilities and site improvements render them unsuitable for longterm college use and replacement should be planned.

## SUMMARY OF FINDINGS (cont.)

### RECOMMENDED DEMOLITION + REMOVAL

The graphic on the opposing page illustrates the recommendations for demolition and removal of facilities. The removal of temporary Building W will take place as the functions that it houses move to new or repurposed permanent facilities. Aged permanent facilities, which are no longer feasible to renovate, are recommended for replacement. The demolition of these facilities clears the way to improve the utilization of the campus land area.

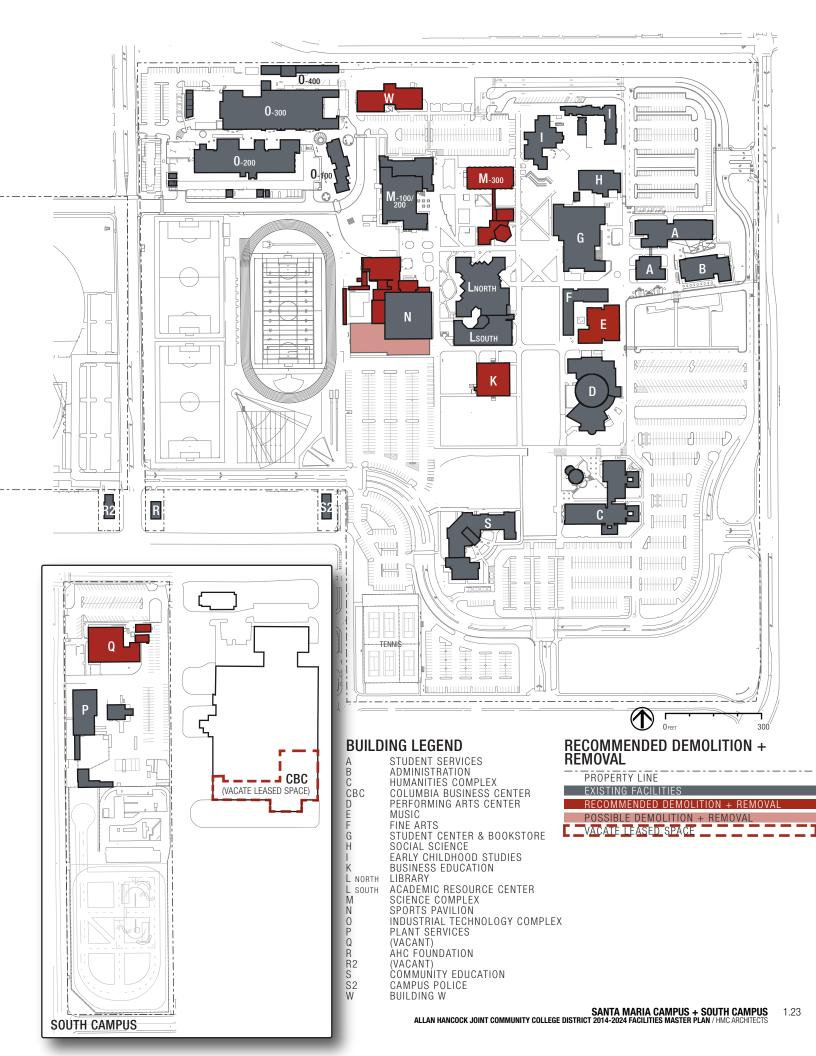
- / Building E
- / Building K
- / Building M-300/400
- / Sports Pavilion N (selective demolition)
- / Building Q
- / Building W











## SUMMARY OF FINDINGS (cont.)

### SPACE INVENTORY ANALYSIS

The Allan Hancock College Space Inventory Report was used as the basis for the analysis of space. The adjacent *Table 5* includes a summary of the capacity load categories of space at Allan Hancock College and their respective totals.

It is important to note that the Space Inventory
Report includes all facilities on campus that are in
use, including temporary facilities. As described in
the analysis of existing facilities, there are several
facilities that are recommended as part of this
2014-2024 Allan Hancock Joint Community College
District Facilities Master Plan to be removed. Table
5 includes an "adjusted inventory" in which the
removal of temporary, leased, off-site, and non-credit
instructional facilities and the addition of facilities
under construction and in design are accounted for.

#### **TABLE 5: SPACE INVENTORY: CURRENT + ADJUSTED**

SPACE TYPE	CURRENT INVENTORY (ASF)	ADJUSTED INVENTORY (ASF)*
Lecture + Lab	133,249	110,302
Office	66,206	57,017
Library	29,063	27,156
Instructional Media	3,206	3,206
Other	136,692	104,714
TOTALS	368,416	302,395

<sup>\*</sup> Temporary Building W, Building S, and leased space currently on the space inventory, have been removed. Industrial Technology Building (under construction) has been added.

### MASTER PLAN SPACE PROGRAM

The master plan space program forms the basis for developing recommendations for facilities. The space inventory analysis combined with the space needs forecast is summarized in Table 6 and indicates the total amount of additional assignable space needed to accommodate a master plan horizon student headcount of 14,000.

The methodology for projecting future space needs is summarized as follows:

- Master plan and WSCH projections were applied in combination with appropriate space planning standards to result in a total space requirement in ASF by type of space.
- The space inventory was adjusted to reflect the proposed removal of temporary facilities and the addition of projects currently under construction or in capital outlay planning. This is referred to as the "adjusted inventory."
- The "adjusted inventory" was subtracted from the total space requirements described above to result in the net ASF overage or need by type of space for each master plan horizon.
- The result, net assignable square footage by type of space, served as the basis for developing facilities options for Allan Hancock College.

**TABLE 6: MASTER PLAN SPACE PROGRAM** (14,000 HEADCOUNT)

SPACE TYPE	CURRENT INVENTORY (ASF)	ADJUSTED INVENTORY (ASF)*	2024 SPACE NEEDS	DIFFERENCE
Lecture + Lab	133,249	110,302	187,016	(76,714)
Office	66,206	57,017	36,671	20,346
Library	29,063	27,156	26,870	286
Instructional Media	3,206	3,206	10,563	(7,357)
Other	136,692	104,714	99,480	5,234
TOTALS	368,416	302,395	360,600	

<sup>\*</sup> Temporary Building W, Building S, and leased space currently on the space inventory, have been removed. Industrial Technology Building (under construction) has been added.







### RECOMMENDATIONS

The recommendations build upon the character and structure of the campus while reinforcing the innovative concepts that underlie the design of recent buildings and those currently in planning. Collectively, the recommendations strengthen Allan Hancock College's identity and its institutional presence within the community.

The FMP recommendations translate the educational planning needs and the identified campus issues into a series of facilities and site recommendations. The recommendations are included in this section and are described in the following subsections:

While drawings presented in this section appear specific, the forms are conceptual sketches that highlight the location and purpose of improvements. The final design of each site and facility project will take place as projects are funded and detailed programming and design occurs.

### PLANNING PRINCIPLES

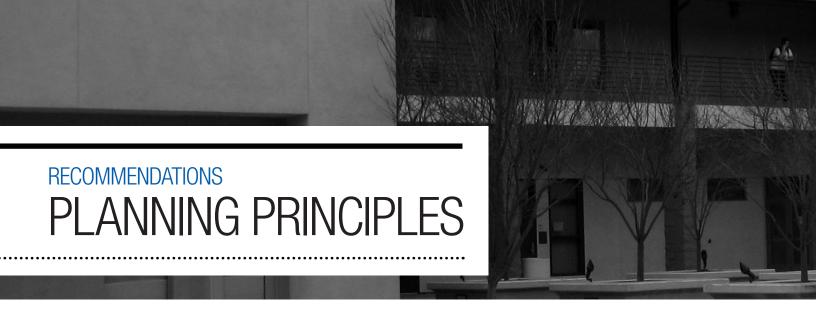
### SUMMARY OF RECOMMENDATIONS

#### SANTA MARIA CAMPUS

- Capital Improvement **Projects**
- Minor Projects
- **Partnerships**
- Site Improvement Projects

### **SOUTH CAMPUS**

- **Partnerships**
- **Future Exploration**



### **FOCUS ON STUDENT SUCCESS**

- Develop campuses to support student success.
- / Align facilities with the educational plan directions for instructional and student support services.

### **Facilities Planning Strategies:**

- / Provide more space for students to study and collaborate, including more study rooms and open-access computer labs in the Library and instructional buildings.
- / Renovate the Student Center and fully outfit outdoor patios and courtyards to better support their use as study and gathering places.
- / Provide new spaces for the Math Center, MESA Center, and STEM Center facilities near related academic departments in the Technology Center.
- / Engage students with improved kinesiology and athletic facilities in the Sports Pavilion and athletic fields.
- / Provide new spaces for Health Services and the Veterans Center.

## 02

### INTEGRATE PLANNING

- / Educational Master Plan
- / Resource Management Plan
- / Technology Master Plan
- Sustainability Plan

#### **Facilities Planning Strategy:**

/ Plan facilities and site improvement projects with an eye toward synergistic solutions that address the goals of the Educational Master Plan, the Technology Master Plan, and the Energy and Sustainability Plan.

## 03

### RIGHT-SIZE THE CAMPUS TO ADDRESS PROGRAM NEEDS

- Align the space inventory with state standards.
- Position the college to maximize funding opportunities.

#### **Facilities Planning Strategy:**

/ Build new facilities and renovate existing facilities; including the Fine Arts Complex, the Theatre Arts Complex, the O-300 Renovation, the Technology Center, the Sports Pavilion Renovation/Addition, Business/ Humanities, and the University Center; that will address instructional program needs.



### MAXIMIZE FUNCTIONAL SPACE

- / Address program needs.
- / Renovate facilities.

### **Facilities Planning Strategy:**

/ Maximize the utilization of existing space through renovation projects that rezone functions to improve student access and operational efficiencies and upgrade the technology infrastructure, finishes, furnishings, and building systems.

## 05

### ELIMINATE NON-FUNCTIONAL SPACE

- / Replace aged facilities.
- / Remove temporary facilities.

#### **Facilities Planning Strategy:**

/ Remove temporary building W and aged facilities E, K, M-300, M-400, N, and Q, to make way for the construction of sustainable, state-of-the-art instructional and support facilities.

## 06

### IMPROVE EFFICIENCY + UTILIZATION OF FACILITIES + LAND

- / Consolidate related programs.
- Create flexible interdisciplinary space.
- Align zoning and land use with institutional priorities.

### **Facilities Planning Strategies:**

- / Fully develop the campus, including under-utilized land areas. Construct a multilevel parking structure.
- / Repurpose vacated facilities on the Santa Maria Campus and the South Campus.

### RECOMMENDATIONS

## PLANNING PRINCIPLES (cont.)

## 07

### MAXIMIZE FISCAL RESOURCES

/ Plan for total cost of ownership.

#### **Facilities Planning Strategies:**

- Develop permanent district facilities to preclude the need to lease off-campus facilities.
- / Build green and sustainable campus facilities that minimize operational costs.

### ENHANCE THE CAMPUS ENVIRONMENT

- Improve first impression at campus edges and entries.
- Plan for collegiate campus aesthetics.
- / Enhance way finding and pedestrian linkages.
- Facilitate transportation access and safe multi-modal circulation.
- / Preserve and enhance the campus' collection of trees.

#### **Facilities Planning Strategies:**

- / Welcome students, employees, and the community and enhance the college's brand and image.
- / Improve vehicular circulation and parking, and integrate safe and convenient pedestrian and bicycle circulation.
- / Develop and implement campus design standards for buildings and open spaces.
- / Outfit the existing outdoor quad and patios to better support their use as study and gathering places.
- Remove all barriers to universal accessibility.

## 09

### PLAN WITH CONSIDERATION FOR A SAFE ENVIRONMENT FOR ALL CONSTITUENTS

### **Facilities Planning Strategy:**

/ Provide a campus that is designed with consideration for safety with regard to circulation and parking areas, adequate visibility and site lighting for night time use, security cameras and alarms, and compliance with life-safety codes and standards to support safe working and learning environments. 10

### PLAN FOR SUSTAINABILITY

- / Minimize negative impacts on the environment.
- / Minimize energy and water use.
- / Plan for healthy learning and working environments.

#### **Facilities Planning Strategies:**

- / Integrate strategic paths from the six focus areas of the Energy and Sustainability Plan.
- / Provide space for the AHC Office of Sustainability.
- Build healthy LEED Certified facilities and site areas that model sustainability practices.
- / Implement campus-wide tools to measure and showcase progress toward sustainability targets.

11

### SIMPLIFY IMPLEMENTATION

Plan logistically to minimize cost and disruption.

#### **Facilities Planning Strategies:**

- / The Facilities Master Plan builds upon the existing development framework of the campus.
- / Short-term plans provide for interim housing of programs in available existing space.

12

### LAND USE GUIDING PRINCIPLES AND PRIORITIES

- / First Priority Permanent College Facilities: Pursue development of permanent facilities for college use in lieu of leasing facilities.
- / Second Priority Partnerships:

  If land or facilities are not needed for college programs and services, then pursue leasing district facilities for partnerships that will further Allan Hancock College's mission.
- / Third Priority Revenue Generation: Lease, sell, or swap land or facilities to generate revenue for Allan Hancock College.

### **Facilities Planning Strategy:**

/ Apply these principles and priorities to guide decisions regarding the use of the South Campus.

### RECOMMENDATIONS

# SUMMARY OF RECOMMENDATIONS

The 2014-2024 AHJCCD Facilities Master Plan for the Allan Hancock College Campuses presents an overall picture of development that is crafted to support the educational directions of the 2014-2020 AHJCCD Educational Master Plan. The recommendations address the requirements of the projected enrollment through the translation of educational planning data to facilities space needs.

The recommendations for the Santa Maria Campus and South Campus include capital improvement projects and minor projects for the construction and renovation of facilities and improvements to the campus open spaces, circulation systems, and parking facilities. In addition, the recommendations identify locations for facilities to support educational and community partnerships. While drawings in the FMP appear specific, the forms are conceptual sketches that illustrate the location and purpose of recommended improvements. The final design of each site and facilities project will take place as they are funded and detailed programming and design occur with a designated user group.

### SANTA MARIA CAMPUS

### CAPITAL IMPROVEMENT PROJECTS

- / Fine Arts Complex
- / Theatre Arts Complex
- / Technology Center
- / Business/Humanities
- Building O-300 Renovation for Long-Term Uses
- / Building H Renovation
- Sports Pavilion NRenovation/Addition
- / Athletics Stadium Support Facilities

### MINOR PROJECTS

- / Vineyards Center
- / Grounds Storage
- Building O-300 Renovation for Interim Uses
- / Student Center GRenovation
- / Library L-North Renovation
- / Softball/Baseball Field Support Facilities

### **PARTNERSHIPS**

- / University Center
- / Student Housing
- / Carillon

### **OPEN SPACE CONCEPTS**

### PARKING + CIRCULATION PROJECTS

- / Campus-wide Circulation Improvements
- / Campus-wide Parking Lots Improvements
- / Parking Lot 11 Improvement
- / Future Parking Structure

### **SOUTH CAMPUS**

### **PARTNERSHIPS**

Educational Partnerships

### **FUTURE EXPLORATION**

/ Explore leasing or sale to provide additional revenues, and/or land swap to acquire additional land.

### **RECOMMENDATIONS**

## SUMMARY OF RECOMMENDATIONS (cont.)

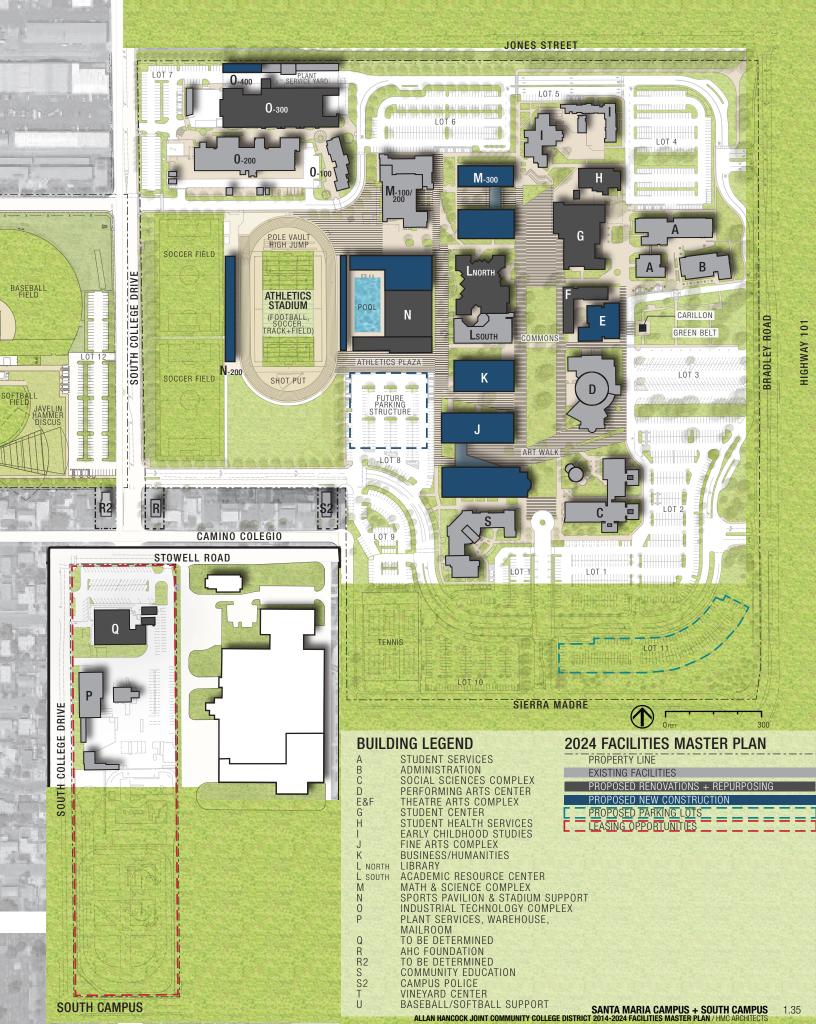


EAST CAMINO COLEGIO



EAST STOWELL ROAD







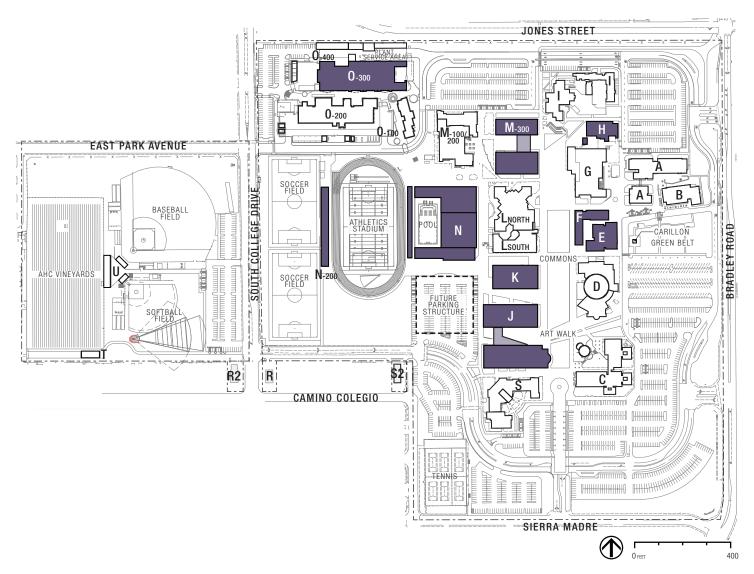


# CAPITAL IMPROVEMENT PROJECTS

The construction of new facilities and the renovation of existing facilities will provide space to replace temporary and nonfunctional space and address the projected enrollment. The projects align the campus facilities with the District's priorities and the **Education Directions established** in the Educational Master Plan. The projects are planned to accommodate the programmatic and functional needs that are articulated in the Educational Master Plan Implications for the Facilities Master Plan. The projects will implement the District's technology standards, provide space that supports state-of-the-art learning technologies, and address the functional needs that are articulated in the Technology Master Plan Implications for the Facilities Master Plan. The projects present the opportunity to build green and support the goals of the AHJCCD Energy and Sustainability Plan.

### CAPITAL IMPROVEMENT PROJECTS

- / Fine Arts Complex
- / Theatre Arts Complex
- / Technology Center
- / Business/Humanities
- Building O-300 Renovation for Long-Term Uses
- / Building H Renovation
- / Sports Pavilion NRenovation/Addition
- / Athletics Stadium Support Facilities



### **BUILDING LEGEND**

STUDENT SERVICES A B C D ADMINISTRATION SOCIAL SCIENCES COMPLEX PERFORMING ARTS CENTER E&F THEATRE ARTS COMPLEX STUDENT CENTER STUDENT HEALTH SERVICES H EARLY CHILDHOOD STUDIES FINE ARTS COMPLEX BUSINESS/HUMANITIES LIBRARY SOUTH ACADEMIC RESOURCE CENTER

MATH & SCIENCE COMPLEX Ν SPORTS PAVILION & STADIUM SUPPORT 0 INDUSTRIAL TECHNOLOGY COMPLEX PLANT SERVICES, WAREHOUSE,

MAILROOM Q TO BE DETERMINED AHC FOUNDATION R2 TO BE DETERMINED

COMMUNITY EDUCATION Š2 CAMPUS POLICE VINEYARD CENTER

BASEBALL/SOFTBALL SUPPORT

### CAPITAL IMPROVEMENT **PROJECTS**

PROPERTY LINE

FACILITIES

CAPITAL IMPROVEMENT PROJECTS

# CAPITAL IMPROVEMENT PROJECTS (cont.)



### **FINE ARTS COMPLEX**

The Fine Arts Complex is intended to consolidate the fine arts instruction in new facilities to meet the growing demand for arts training. The complex would provide adjacency of spaces to facilitate interaction between disciplines and shared spaces, such as computer labs, for better space utilization. The planned complex provides instructional space, offices, a music library, a music recital hall, instructional media space, and meeting space in facilities equipped with a robust technology network infrastructure, adequate ventilation, and electrical power.

The project is envisioned to include a number of site improvements that will complete the southern section of the Commons. These include the Art Walk, which connects the Fine Arts Complex to the Theater Arts Complex, and provides pedestrian gateways into the campus from Parking Lots 3 and 8, as well as the circular arrival area and landscaped gateway plaza that will create a welcoming southern portal to the Commons.



#### THEATRE ARTS COMPLEX

Completion of the new Fine Arts Complex will allow for Building E to be replaced, and Building F to be renovated and repurposed to house the business offices of the Pacific Conservancy of the Performing Arts, rehearsal and studio space, and technical theatre laboratories for the Dramatic/Theatre Arts program. This project will enable these programs to vacate leased off-campus space and relocate near the theaters and the Fine Arts Complex.

The Theatre Arts Complex is located at the heart of the campus and will be an integral element of the campus' arts instructional facilities. The project completes the Art Walk to create a strong pedestrian link between the Fine Arts Complex and the Theater, the Theatre Arts Complex, and the Carillon at the Green Belt.



### TECHNOLOGY CENTER

This project is intended bring together a number of diverse functions on campus that will profit from a closer affiliation in new, expanded quarters with access to modern technology. Information Technology Services, Engineering Technology, Mathematical Sciences, Life & Physical Sciences, Health Sciences, the Math Engineering Science Achievement Program (MESA), Science Technology Engineering Mathematics (STEM) Center, math tutorial laboratory, open-access computer laboratory, and other computer technology-based instruction is planned for the new facility.

The site design for the Technology Center incorporates the existing landscape elements that were constructed as a part of the Building M renovation. The area between the new Technology Center buildings is envisioned to include a plaza with informally designed landscape seating areas incorporating and preserving a number of the mature trees that currently grace this location.

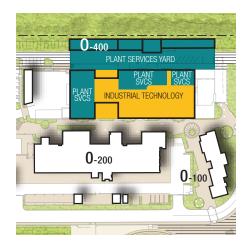


### **BUSINESS/HUMANITIES**

This project is intended to provide state-of-the-art instructional space for the Business and Humanities disciplines, as well as interdisciplinary classroom and laboratory space. It is planned to include a shared open-access computer laboratory, office space, and meeting space in facilities with the technology network infrastructure needed to support innovative modes of instruction. The location adjacent to the Fine Arts Complex will position this building to facilitate cross-disciplinary collaboration between the Business and Fine Arts programs. Programs moving to this facility from Building C will vacate space that will be repurposed for the Social Sciences programs.

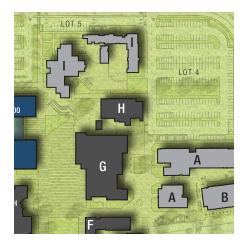
The Business/Humanities Buildings and the Fine Arts Complex will both orient toward the landscaped courtyard between these buildings. The landscape concept will recognize and honor the increasingly important, real world link between the Fine Arts and Business disciplines and provide opportunities for students and faculty within these disciplines to comingle, collaborate, and develop connections that will enrich all.

# CAPITAL IMPROVEMENT PROJECTS (cont.)



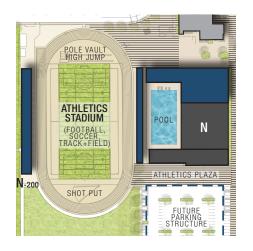
### BUILDING 0-300 RENOVATION FOR LONG-TERM USES

Initially, the building is planned to be used for short-term needs as described in the list of Minor Projects, under the project named <u>Building O-300</u> Renovation for Interim Uses. Upon completion of the Fine Arts Complex and Theatre Arts Complex, Building O-300 is envisioned to be repurposed to provide laboratories for the future expansion of Industrial Technology and other Career Technical Education programs and for Plant Services. It would continue to house state-of-the-art learning environments for Electronics, Automotive Technology/Diesel and Hybrid Vehicles, and the Agricultural Mechanics automotive lab. Plant Services will continue to use the yard and covered outdoor areas, as well as additional indoor space.



### **BUILDING H RENOVATION**

This existing facility is planned to be renewed and repurposed to expand Campus Graphics and provide permanent space for Health Services and the Veterans Center in a location that is adjacent to the Student Center and student services offices in the One Stop Student Service Center.



### SPORTS PAVILION N RENOVATION/ADDITION

Built in 1962 to serve an enrollment of 2,000 students, Sports Pavilion N is planned to be renovated and expanded to address the current and projected need for space to support the Kinesiology, Recreation, and Athletics programs. Study is recommended to determine the feasibility of retaining the existing main gymnasium, while selectively removing nonfunctional building space and constructing new facilities. The project is intended to provide athletic training facilities, a physical fitness lab, lockers and showers, team facilities, and equipment storage; and to replace the existing swimming pool with a 50-meter swimming pool, including spectator seating and support facilities for accommodating swim meets. The area to the north of the Sports Pavilion is envisioned to be a pre-function plaza area for staging events and athletic activities. The outdoor space between the Sports Pavilion and Library is seen as an important link between the Math & Science Complex, the Fine Arts Complex, and Parking Lot 8. This area is an opportunity to refresh the landscape on the east side of the library and make a major north-south bicycle and pedestrian route across campus.

### ATHLETICS STADIUM SUPPORT FACILITIES

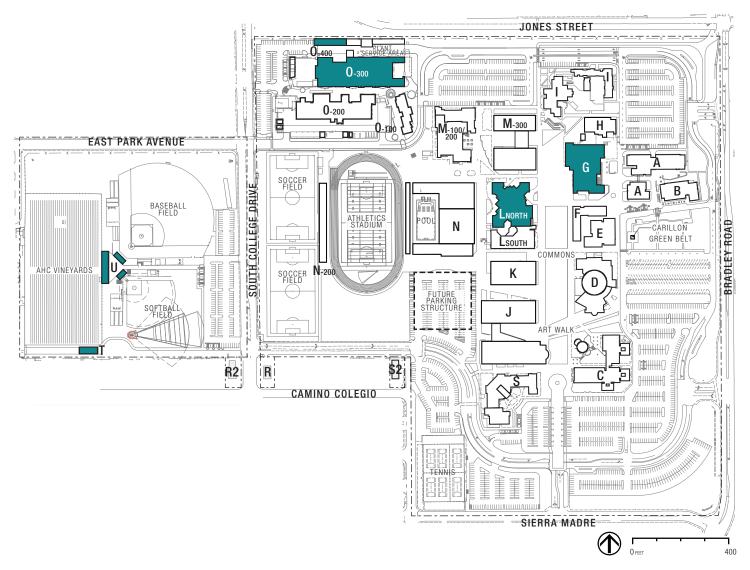
This project presents the opportunity to expand the functionality of the athletics stadium, potentially allowing the Allan Hancock College football team to host games at home. A press/announcer/scorekeepers booth and spectator seating is planned to be integrated with locker rooms, team rooms, an athletic training room, public restrooms, and a concession. Field lighting for night time use and infrastructure to support audiovisual and technology systems used for events, performances, and commencement ceremonies are planned. Accessible paths and plazas, landscaping, and signage will link the stadium site to the campus-wide circulation systems and integrate it with the campus open space design.

# MINOR PROJECTS

The Minor Projects represent improvements to the Santa Maria Campus that maximize the functionality and utilization of campus facilities. Projects will revitalize existing facilities, extending the useful lives of valuable capital assets and aligning their programming and functionality with the objectives of the Educational Master Plan, the Technology Master Plan, and the Energy and Sustainability Plan.

### MINOR PROJECTS

- / Vineyards Center
- / Grounds Storage
- Building O-300 Renovation for Interim Uses
- / Student Center G Renovation
- / Library L-North Renovation
- / Softball/Baseball Field Support Facilities



### **BUILDING LEGEND**

#### STUDENT SERVICES A B C D **ADMINISTRATION** SOCIAL SCIENCES COMPLEX PERFORMING ARTS CENTER E&F THEATRE ARTS COMPLEX STUDENT CENTER STUDENT HEALTH SERVICES H

EARLY CHILDHOOD STUDIES FINE ARTS COMPLEX BUSINESS/HUMANITIES LIBRARY

SOUTH

ACADEMIC RESOURCE CENTER MATH & SCIENCE COMPLEX Ν

SPORTS PAVILION & STADIUM SUPPORT 0 INDUSTRIAL TECHNOLOGY COMPLEX PLANT SERVICES, WAREHOUSE,

MAILROOM

Q TO BE DETERMINED AHC FOUNDATION R2 TO BE DETERMINED COMMUNITY EDUCATION Š2 CAMPUS POLICE VINEYARD CENTER

BASEBALL/SOFTBALL SUPPORT

### **MINOR PROJECTS**

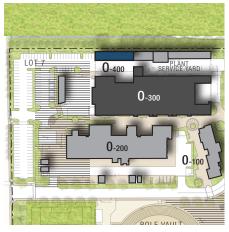
PROPERTY LINE

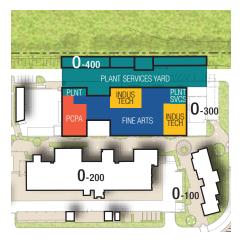
☐ FACILITIES

MINOR PROJECTS

# MINOR PROJECTS (cont.)







### **VINEYARDS CENTER**

The Vineyard Center is envisioned as indoor and outdoor space and support facilities to accommodate classes, gatherings, and events. The recommended location is adjacent to the Santa Maria Campus on-campus vineyard, which serves as the instructional field laboratory for the Agribusiness program's viticulture courses.

### **GROUNDS STORAGE**

This facility will provide storage space for ground-keeping equipment and supplies, as well as furnishings and equipment for campus events, in a location that supports efficient distribution to all areas of the campus.

### BUILDING 0-300 RENOVATION FOR INTERIM USES

With the completion of the Industrial Technology Complex, space within Building O-300 will become available for other uses. This project renovates and repurposes this facility for shortterm use until the completion of the Fine Arts Complex and Theatre Arts Complex. Space currently occupied by the Pacific Conservancy of the Performing Arts (PCPA) will continue to be allocated for this use. Existing space for the Fine Arts programs— Film, Multimedia Art, Graphic Art, and Photography—is planned to be expanded. Space will be allocated for the Industrial Technology programs -Electronics, Agricultural Mechanics automotive lab, and Automotive Technology/Diesel and Hybrid Vehicles. Storage space, a yard, and covered exterior areas will be allocated to Plant Services. A clear pedestrian path with a safe crossing at the newly extended Loop Road will be provided.







### STUDENT CENTER G RENOVATION

The Student Center is the hub of campus life and is well-used by all. This renovation project is intended to repair and refresh finishes and selectively upgrade equipment, furniture, technology, and building systems to maintain the fullest use of these facilities. Existing spaces will be outfitted and furnished to better support study, collaboration, and informal social activity, both within the building and in the adjacent outdoor plazas and patios.

### LIBRARY L-NORTH RENOVATION

The Library Renovation will selectively upgrade building components and refresh finishes, furniture, equipment, and technology systems as needed to maintain the fullest use of this well-used facility. This renovation provides the opportunity to adjust and reprogram the library space as needed to keep current with advances in the ways that students are served and the ways that faculty and staff work.

## SOFTBALL/BASEBALL FIELD SUPPORT FACILITIES

This project is planned to provide support facilities to improve the functionality of the Softball and Baseball Fields. A press/announcer/scorekeepers booth is planned for both fields. A shared area will house concessions, public restrooms, team changing rooms, and an athletic training room.

# **PARTNERSHIPS**

Partnership opportunities support the AHJCCD's initiative to develop a closer working relationship with area schools, expand its outreach to the community, and seek non-apportionment revenue. The following have been identified as potential projects with a recommended location at the Santa Maria Campus.

### PARTNERSHIPS

- / University Center
- / Student Housing
- / Carillon



# G CARILLON GREEN BELT LOT 3 LOT 3

### UNIVERSITY CENTER

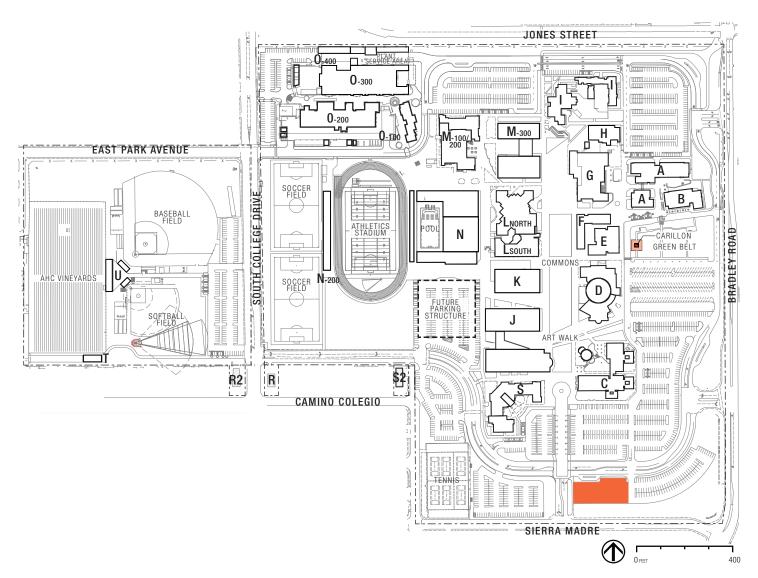
AHJCCD is exploring the potential to partner with universities to teach on the Allan Hancock College Campus. An easily accessed and visible zone within the campus has been identified in which to build a University Center. This zone presents several potential locations near the campus' southern entrance and adjacent to parking.

### STUDENT HOUSING

AHJCCD is exploring the potential to provide student housing on the Allan Hancock College Campus. Should the district decide that student housing is a viable endeavor for the campus, an easily accessed and visible zone within the campus has been identified in which to build. This zone presents several potential locations near the campus' southern entrance and adjacent to parking.

### CARILLON

The Carillon tower is envisioned at the western end of the Green Belt, the front lawn of the Santa Maria Campus, to serve as a visual and auditory means of reinforcing the Allan Hancock College brand. In this location, the Carillon will be visible from much of the campus and from State Route 101. The potential to lease the Carillon to cellular phone providers will be explored. The plan for a similarly designed carillon at Lompoc Valley Center, and potentially at other district sites, presents the opportunity to reinforce the District-wide identity.



### **BUILDING LEGEND**

#### STUDENT SERVICES **ADMINISTRATION**

A B C D SOCIAL SCIENCES COMPLEX PERFORMING ARTS CENTER E&F THEATRE ARTS COMPLEX STUDENT CENTER STUDENT HEALTH SERVICES G H

EARLY CHILDHOOD STUDIES FINE ARTS COMPLEX BUSINESS/HUMANITIES

LIBRARY

SOUTH ACADEMIC RESOURCE CENTER MATH & SCIENCE COMPLEX

Ν SPORTS PAVILION & STADIUM SUPPORT 0 INDUSTRIAL TECHNOLOGY COMPLEX PLANT SERVICES, WAREHOUSE,

MAILROOM

Q TO BE DETERMINED AHC FOUNDATION R2 TO BE DETERMINED COMMUNITY EDUCATION Š2 CAMPUS POLICE VINEYARD CENTER

BASEBALL/SOFTBALL SUPPORT

### **PARTNERSHIPS**

PROPERTY LINE

FACILITIES

UNIVERSITY CENTER + STUDENT HOUSING PARTNERSHIP OPPORTUNITY AREAS

# SITE IMPROVEMENT PROJECTS: OPEN SPACE

### **OPEN SPACE CONCEPTS**

The existing campus green edges, Commons, Green Belt, and other open spaces form the fundamental fabric of the Santa Maria Campus and play an important role in defining the character of the College as a place of learning, collaboration, and informal collegial interaction. For the 2014-2024 AHJCCD Facilities Master Plan, the concept for open space planning is focused on improving and enhancing the established framework of public open space on campus.

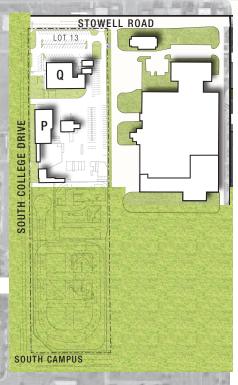
#### THE COMMONS

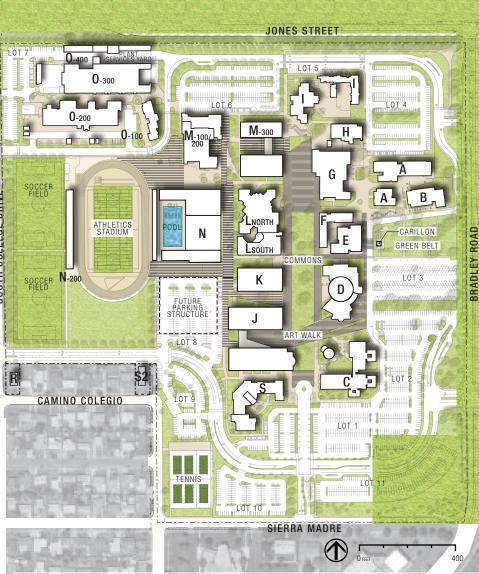
The campus is organized around a central Commons that gives structure and spatial clarity to the campus built environment. The parklike Commons provides the College with a place for campus-wide events and informal social interaction and extends the functionality of the classrooms in the adjacent academic buildings. The open space planning concept for the Commons includes reinforcing and defining the northern end of the Commons as the campus' main outdoor student social space and adding amenities for seating and gathering. The south end of the Campus Commons is envisioned as an important gateway to welcome visitors, students, faculty, and staff to that precinct of the campus. The newly articulated vehicular campus entry would provide a gracious circular arrival area with a landscaped plaza to serve as a staging area for students and faculty who often load and transport their musical equipment and athletic gear, as well as an attractive and welcoming arrival space for patrons attending evening events at the music recital hall in the Fine Arts Complex.

### THE ART WALK

The Art Walk moves in a diagonal, east-west direction crossing the Commons and linking to gateways that welcome pedestrians into the campus after parking their vehicles. The Art Walk is envisioned to be designed as a modern outdoor space and a counter point to the formal framework established by the Commons. The Art Walk incorporates plant materials and paved areas of stone, wood, concrete, and steel and features beautiful public spaces to support a variety of activities, scaled from intimate seating to larger spaces for the display of large-scale sculptures and performance art. The plant palette is envisioned to utilize the native flora of the central California coast and more specifically of the Santa Maria region. Appropriately, low level lighting to wash walking surfaces for evening use and to highlight art installations will be a part of the artistic milieu created to distinguish the Art Walk from other campus outdoor environments.







### **BUILDING LEGEND**

STUDENT SERVICES
ADMINISTRATION
SOCIAL SCIENCES COMPLEX
PERFORMING ARTS CENTER
THEATRE ARTS COMPLEX
STUDENT CENTER
STUDENT HEALTH SERVICES
EARLY CHILDHOOD STUDIES
FINE ARTS COMPLEX
BUSINESS/HUMANITIES
LIBRARY
ACADEMIC RESOURCE CENTER
MATH & SCIENCE COMPLEX
SPORTS PAVILION & STADIUM SUPPORT
INDUSTRIAL TECHNOLOGY COMPLEX
PLANT SERVICES, WAREHOUSE,
MAILROOM STUDENT SERVICES BCD E&F

NORTH

L M SOUTH

Ν 0 P

MAILROOM
TO BE DETERMINED
AHC FOUNDATION
TO BE DETERMINED
COMMUNITY EDUCATION Q R R2 S S2 CAMPUS POLICE

VINEYARD CENTER BASEBALL/SOFTBALL SUPPORT

### RECOMMENDED SITE IMPROVEMENTS

PROPERTY LINE FACILITIES

# SITE IMPROVEMENT PROJECTS: OPEN SPACE (cont.)

### JONES STREET CAMPUS EDGE

The campus edge along Jones
Street must discourage mid-block
pedestrian crossing, yet be visually
open to the community north of
campus. These seemingly opposing
requirements are achievable and can
be designed with an open matrix
of fence and plant materials to
effectively discouraging cut-through,
while maintaining visual access and
appropriate campus character.

### BRADLEY ROAD AND SIERRA MADRE AVENUE CAMPUS EDGES

The campus edge along Bradley Road currently has many established, large specimen trees extending the length of the campus between the two main vehicular entries and presents an open understory that offers travelers on Bradley Road pleasant view corridors into campus. The attractive tree canopy and open landscape fabric give the College the overall impression of being a gracious and well-regarded institution within the community. Future landscape projects along Bradley Road should include replacement of turf with drought tolerant turf and native/ adapted plant species to link the College and campus landscape to its Central Coast environment.

The open space located at the corner of Bradley Road and Sierra Madre Avenue presents the opportunity to create a positive first impression on people traveling north on Bradley Road towards the campus. Because this site is also needed to meet the demand for additional onsite parking, the planning concept is to create a landscape foreground in character with the existing landscape along Bradley Road, as a screen for the new parking created beyond.

### SOUTH COLLEGE DRIVE EDGE

Improvements at the two campus entries on South College Drive and the campus edges on both sides of South College Drive between these entries would extend the green edge concept to the western sector of the campus. Recommended improvements include enhanced landscaping, lighting, and street trees to make this edge of campus a more pedestrian friendly experience and advertise the College's presence to the community.

### **GREEN CAMPUS EDGES**

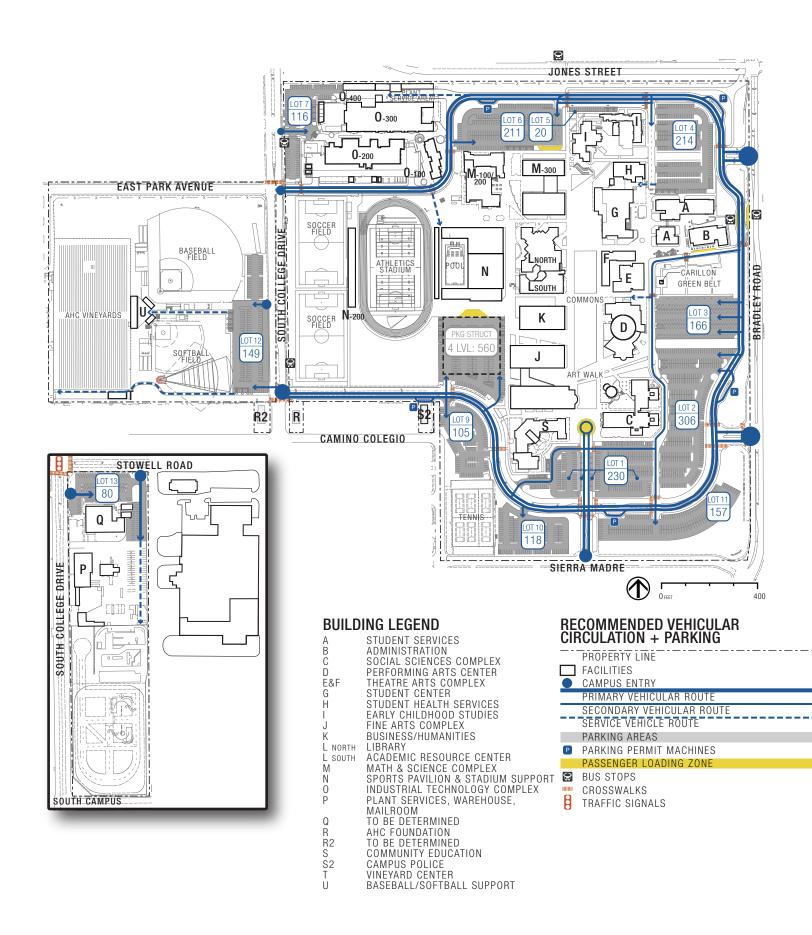
Extend an attractively landscaped green edge around the campus and incorporate a continuous path that would allow walkers to circumnavigate the campus and engage in par course activities. This project presents the opportunity to demonstrate sustainable landscape strategies, including the use of native and adapted trees and plants and storm water best management practices. The landscaped edges of the campus provide the College with the opportunity to enhance its image and advocate for a culture of health and sustainability.

# SITE IMPROVEMENT PROJECTS: VEHICULAR CIRCULATION + PARKING

The AHJCCD Facilities Master Plan recommendations for vehicular access and parking bear directly on student success and access to learning. A safe and sufficient vehicular circulation infrastructure respects the students and employees that navigate the campus day-to-day and strongly affects the satisfaction of all stakeholders. The graphic on the opposing page illustrates recommendations to improve access to public transit, facilitate vehicular access and flow, provide sufficient parking capacity, and facilitate safety, security, and sustainability.

### VEHICULAR CIRCULATION

The planning concept for campus vehicular circulation is to enhance and complete the existing well-organized and functional schema. The Facilities Master Plan recommendations focus on completing the Loop Road, developing the campus entries, and improving traffic flow by providing designated passenger loading zones and parking pass vending turn-outs. The FMP recommends establishing the Commons as a car-free, pedestrian environment through policies aimed at diverting service vehicle circulation and parking to designated alternate routes, except when it is deemed necessary to service the Commons.



# SITE IMPROVEMENT PROJECTS: VEHICULAR CIRCULATION + PARKING

### CAMPUS-WIDE VEHICULAR CIRCULATION IMPROVEMENTS

This campus-wide project will provide the following improvements with the option to phase the work over time.

#### COMPLETE THE LOOP ROAD

After the removal of temporary Building W, the Loop Road is planned to be extended towards the Industrial Technology Complex where it will turn south and connect with the existing road leading to South College Drive.

### CAMPUS ENTRIES FOR THE LOOP ROAD AT SOUTH COLLEGE DRIVE

The two campus entries at the intersection of South College Drive and the north and south ends of the Loop Road will mark the presence of the campus to travellers on South College Drive and welcome visitors into the campus. The improvements at the southern entry will help regulate traffic turning into or out of the Parking Lot 12. It is envisioned to have marked cross walks with crossing indicators to assist pedestrians to safely cross South College Drive and connect with paths to the athletic fields and Vineyard Center. Other planned features include enhanced landscaping, lighting and trees to make this edge of campus a more pedestrian friendly experience.

### SOUTH COMMONS ARRIVAL PLAZA

The South Commons Arrival Plaza will welcome visitors, students, and staff to the southern sector of the campus. The entrance driveway to Sierra Madre Avenue is planned to be extended north of the Loop Road, through Parking Lot 1, to the new circular pick-up and drop-off point for passengers at the arrival plaza.

### **NEW BUS STOP**

The planned bus stop would be centrally located on the loop road just east of Building A. This new bus stop allows both north-bound and south-bound Santa Maria Area Transit buses traveling on Bradley Road to safely enter and exit the campus via the vehicular entries on Bradley Road, providing safe and convenient access to the center of the campus.

### PARKING PERMIT VENDING ......

Currently, vehicles stopping at parking permit vending machines often impede circulation in parking lots. To address this issue, three new parking permit machines are recommended at convenient locations near the main entries to campus: on the Loop Road to the north of the northern Bradley Road vehicular entry; on the Loop Road to the north of the southern Bradley Road vehicular entry; and on the Sierra Madre entry drive into campus. Each vending machine is placed on a dedicated turnout lane, on the driver side of the vehicle. A shade structure would provide shelter from rain and lighting for night time use and display a campus directory. In addition to this recommendation, opportunities for visitors to purchase parking permits via mobile phone will be explored. See "Recommended Vehicular Circulation + Parking" diagram on previous spread for locations designated for these vending machines, marked with a P symbol.



# SITE IMPROVEMENT PROJECTS: VEHICULAR CIRCULATION + PARKING

### PARKING CAPACITY

The graphic on a previous page illustrates the recommendations to address the need for parking for projected campus enrollment. Planning must take into account the cost of providing parking, both in financial terms, which is significant for the construction of parking structures, and in the prioritization for the use of the campus' finite land area. Equally important is the desire to "reduce carbon emissions resulting from Allan Hancock College traffic"—the stated goal under the Transportation Dimension of the AHJCCD Energy and Sustainability Plan. Projections of the parking demand for a horizon ten years hence should take into account the evolving priorities driving municipal and regional transportation planning and the community's desire for alternative transportation options. These pressures are likely to lead to solutions that will lessen the demand for campus parking.

Based on these considerations and priorities, the recommendations support a multi-modal, evidence-based approach to transportation and parking management.

Explore alternative transportation opportunities and gather data to assess their effectiveness.

Begin by building surface parking lots and optimizing alternative transportation opportunities. Explore innovative options for accommodating the peak parking demand. Optimize the location and proportion of accessible, student, and staff parking. Retain the option to build parking structures by preserving potential sites.

As documented in the analysis of Existing Vehicular Circulation + Parking, the existing parking capacity for the Santa Maria Campus and South Campus provides for a ratio of 5.91 fulltime equivalent students (FTES) per one parking space, based on the enrollment of 11,500 FTES in fall 2013. The parking capacity is scheduled to increase to 1,995 permanent and temporary parking spaces by July 2014 when parking areas associated with on-going construction projects will become available for use.

Many suburban community colleges in California use a 5:1 ratio (five full-time equivalent students (FTES) to one parking stall) as the guideline for providing adequate parking capacity. Urban locations with more options for alternative

modes of transportation may be adequately served by a higher ratio. A parking capacity that lies in the range between 5:1 and 5.5:1 is recommended. A minimum of 641 additional parking spaces for a total of 2,636 spaces are required to achieve a 5.5:1 ratio, using the projected enrollment of 14,500 FTES for 2024. The additional parking capacity will be provided by building additional surface parking and a four-level parking structure at the location of existing Parking Lot 8. Parking Lot 6 is recommended for expansion following the removal of temporary Building W. It is recommended that the expanded footprint of Parking Lot 6 be preserved as a potential parking structure location should future demand warrant the need for additional capacity.

Parking lots and parking structures will be designed in accordance with a sustainable approach with regard to encouraging ridesharing and low/zero-emission vehicles with preferred parking.

### CAMPUS WIDE PARKING LOT IMPROVEMENTS

- Improve and reconfigure existing parking lots to accomplish a number of objectives.
- Replace or restore aged paving.
- Provide safe and accessible pedestrian circulation paths and crossing points for pedestrians navigating parking lots.
- Provide an adequate level of lighting for secure night time use.
- Improve the flow of traffic by providing dedicated passenger loading zones.
- / Install native and adapted species of shade trees and plants to minimize heat island effect and reduce water consumption.
- Incorporate stormwater best management practices.
- Provide preferred parking for carpool and hybrid and alternative-fuel vehicles, as well as, electric car charging stations.

### PERMANENT PARKING LOT 11

Convert temporary parking to permanent parking and extend the campus green edge along the east and south sides of the parking lot to screen the vehicles from view. Include a generous number of trees to create a park-like environment at this prominent corner of the campus.

### PARKING LOT 6 EXPANSION

Expand Lot 6 into the site that will be vacated with the removal of temporary Building W. Incorporate a passenger loading zone on the south edge of the lot, as well as pedestrian gateways to link the parking lot to the primary pedestrian routes.

### FUTURE PARKING STRUCTURE

A four-level, 560-stall parking structure is recommended for the current site of Parking Lot 8. Incorporate a ground-level passenger loading zone at the plaza facing Sports Pavilion N. Stairs and elevators would bring users to the plaza and the primary pedestrian path along on the east edge of the parking structure.

# SITE IMPROVEMENT PROJECTS: PEDESTRIAN + BICYCLE CIRCULATION

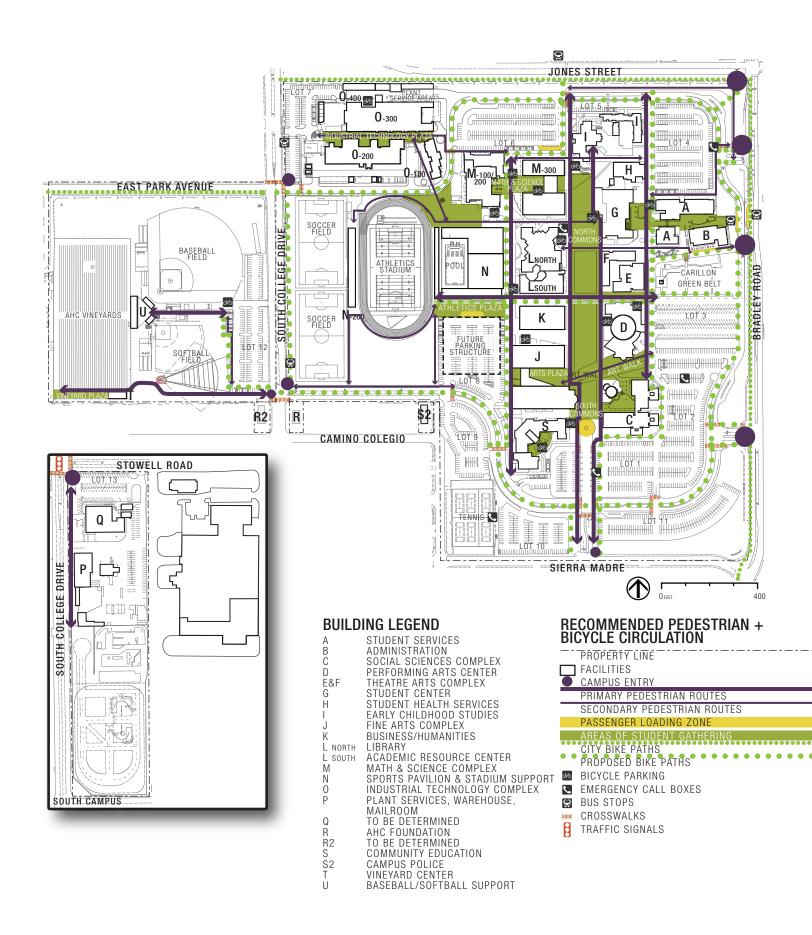
Pedestrian circulation is the main form of travel on campus for students, faculty, and staff. It is a convenient way to exercise and promote a healthy lifestyle and allows for chance meetings and spontaneous collaboration. The sidewalks and hardscape plazas on campus will be enhanced as an integral part of the design of each of the capital improvement projects. Special attention will be given to major circulation routes and important gathering areas, such as those around the Student Center.

Bicycle circulation is an important mode of transportation for people commuting to campus, as well as circulation between the various buildings and the athletic fields of the College. Encouraging bicycle use as an alternative to driving is one of the strategic paths for the transportation goal in the Energy and Sustainability Plan. The planning concept for bicycle circulation starts with connecting to existing and planned municipal bike paths. The bike path proposed for the former railroad right-of-way along the north property line of the campus presents a unique opportunity to link the campus with developing mixed-use development in the Jones Street Specific Plan area.

It is recommended that the Loop Road be designated as the primary bicycle route and it be linked to existing and proposed city routes on Bradley Road, East Park Avenue, and along Jones Street. A study to integrate well designed bicycle facilities into the campus is recommended. Given the speed limit along the Loop Road, separate facilities (lanes) for vehicles and bicycles are not likely to be needed or desired. Signage to foster awareness and frequently conducted programs to educate the campus community about safe multi-modal circulation on shared routes are recommended.

On pedestrian paths that are shared with bicycles, the FMP recommends a study into the safety and efficacy of designating bicycle lanes on certain primary walkways, with lanes differentiated by subtle variation in color and texture and marked with the symbol for bicycle traffic. These lanes would serve to channel bicycle traffic and alert pedestrians. Bicycle circulation will be encouraged on the paths shown in the graphic in lieu of on the Commons and areas with heavy pedestrian traffic, where logic suggests caution be used. Consider signage designating limited zones as "Dismount Area."

Finally, it is recommended that policies for campus bicycle use be determined through an open and participatory process with the ultimate goal of developing a culture of mutual respect for all.



# SITE IMPROVEMENT PROJECTS: PEDESTRIAN + BICYCLE CIRCULATION

### CAMPUS-WIDE PEDESTRIAN + BICYCLE CIRCULATION IMPROVEMENTS

This campus-wide project is intended to provide the following improvements, with the option to phase the work over time.

### SAFE PEDESTRIAN ACCESS

Safe and accessible pedestrian entries and paths of travel are planned to provide continuous pedestrian access from the public right-of-way to the campus core. Accessible pedestrian paths and safe crosswalks would link the campus core to campus entries, parking lots, and facilities that lie outside the Loop Road. Crosswalks at primary vehicular routes, such as the Loop Road, will be enhanced with in-pavement crosswalk lights and lighted crosswalk traffic control signage that will be activated by pedestrians.

### **BICYCLE CIRCULATION SYSTEM**

The campus-wide system is intended to connect to the municipal bicycle circulation system, including the proposed Jones Street bike path. A collaborative planning effort with the City is recommended to establish bike lane access points to the campus. Engage college stakeholders in a process to develop a campus bicycle circulation policy and provide the physical improvements to support bicycle use as defined by the policy.

### **GREEN CAMPUS EDGES**

Extend an attractively landscaped green edge around the campus and incorporate a continuous path that would allow walkers to circumnavigate the campus and engage in par course activities. This project presents the opportunity to demonstrate sustainable landscape strategies, including the use of native and adapted trees and plants and stormwater best management practices. The landscaped edges of the campus provide the College with the opportunity to enhance its image and advocate for a culture of health and sustainability.





### SOUTH CAMPUS RECOMMENDATIONS

# FACILITIES PROJECTS

Until 2013, the South Campus housed the training facilities for the AHJCCD Public Safety Training Complex, as well as a portion of the district's plant services facilities. With the relocation of the PSTC to new facilities at the Lompoc Valley Center, much of the South Campus is vacated and its future use is in question. The facilities master planning process provides a key element for decision-making by identifying potential district uses for the South Campus—uses that align with the priorities and initiatives of the AHJCCD Educational Master Plan and are deemed suitable based upon the findings of the analysis of existing conditions.

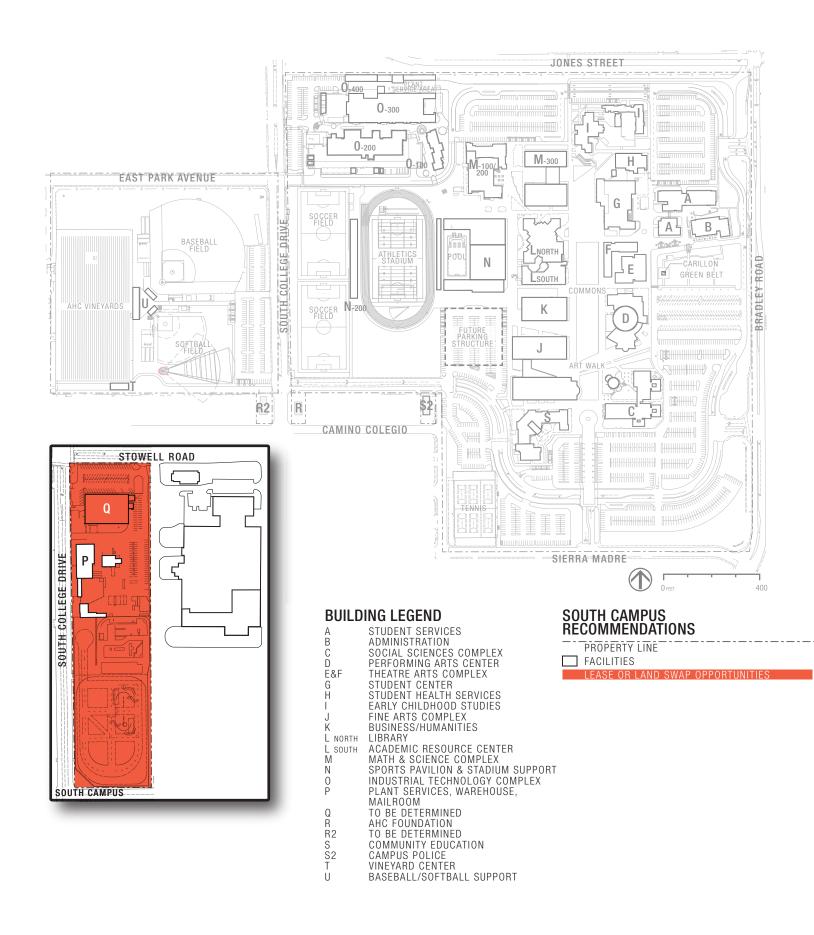
A partnership project is recommended for the South Campus, as well as priorities for the exploration of alternatives to developing the South Campus for District facilities.

### **PARTNERSHIPS**

/ Educational Partnerships

### **FUTURE EXPLORATION**

/ Lease or sell to generage revenue, and/or swap land



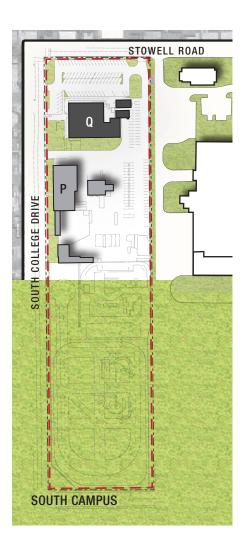
### SOUTH CAMPUS RECOMMENDATIONS

# **PARTNERSHIPS**

Partnership opportunities support the AHJCCD's initiative to develop a closer working relationship with area schools, expand its outreach to the community, and seek non-apportionment revenue. A partnership opportunity has been identified as a potential project with a recommended location on the Allan Hancock College South Campus.

### EDUCATIONAL PARTNERSHIP FACILITIES

Renovate Building Q or develop new instructional facilities with an educational partner.



### SOUTH CAMPUS RECOMMENDATIONS

# **FUTURE EXPLORATION**

The previous pages describe recommendations for development of District and partnership facilities on the South Campus. These facilities have been deemed suitable for the existing conditions of this campus. These conditions include location, neighborhood context and zoning, visibility and circulation access, and the type and condition of the existing facilities. The existing conditions also bear on the market value of the property and options for its use by others.

The Facilities Master Plan identifies one potential use, which is described in the preceding section. The location identified for the potential use is on the north parcel of the South Campus. This use will be taken into consideration for the on-going decision-making process that will determine the long-range plan for the South Campus. The **AHJCCD Facilities Master Plan** recommends that the approach to this decision-making process be guided by the following priorities.

### **GUIDING PRINCIPLES + PRIORITIES**

First Priority: Permanent District Facilities

Pursue development of permanent facilities for district use.

Second Priority: Partnerships

If not needed for District use, then pursue opportunities to lease district land or facilities for partnerships that will further AHJCCD's mission.

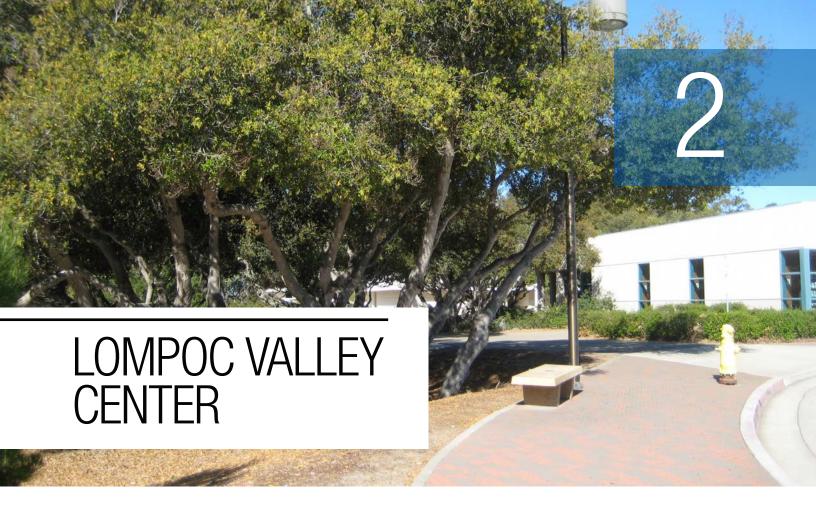
Third Priority: Revenue Generation

If not needed for District use, then pursue opportunities to lease, sell, or exchange land and acquire land better suited for District use or generate revenue for AHJCCD.



# OMPOC WALLEY CENTER





The planning process began with the collection of facilities information. The Planning Team listened to the insights of multiple stakeholders regarding the condition and functionality of the existing facilities and sites and overlaid this with their own research and observations. The resulting analysis examines existing conditions that shape the use of the Allan Hancock College campuses. It was presented to the Educational

and Facilities Master Plan Joint Task Force, who validated its findings and helped to identify key issues. The analysis and findings are presented with a series of graphic plates that illustrate patterns and characteristics to be considered in the planning of future development. Please refer to Chapter 4 for the environmental analysis of the Santa Maria Campus, South Campus, and Lompoc Valley Center campuses.

### **ANALYSIS**

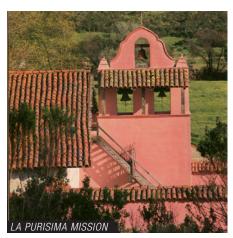
- Local Context
- Neighborhood Context
- Campus Plan
- Campus Development History
- **Facilities Condition** 
  - + Adequacy
- Vehicular Circulation
  - + Parking
- Pedestrian Circulation
- Campus Zoning
- Open Space Typology
  - + Programming
- Summary of Findings

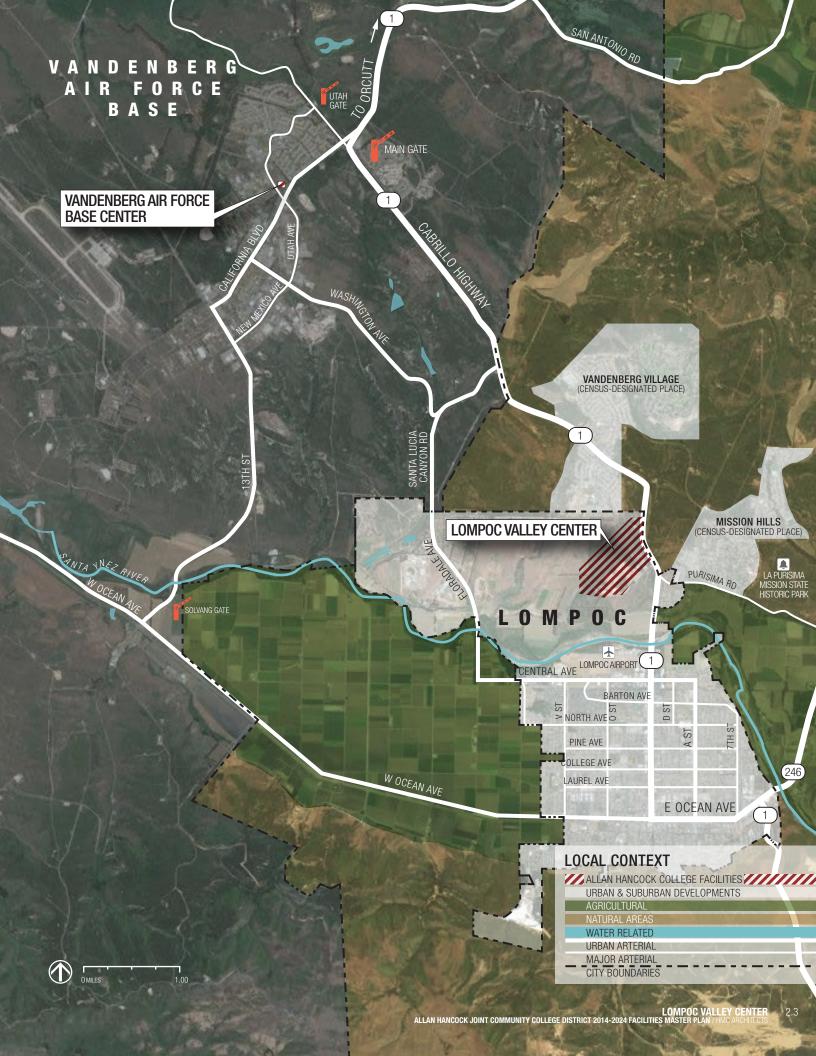
# LOCAL CONTEXT

The Lompoc Valley Center is situated at the northern edge of the City of Lompoc, on a coastal plateau between river valleys. The westward course of the Santa Ynez River has excavated the broad valley to the south of the plateau. Lompoc town center and the surrounding agricultural fields are situated on its fertile bottom lands. The graphic on the opposing page illustrates the following:

- / The primary local circulation route is State Route 1.
- / Vandenberg Air Force Base is situated to the west of campus.
- / Allan Hancock College Vandenberg Air Force Base Center is located nearby, within the base.



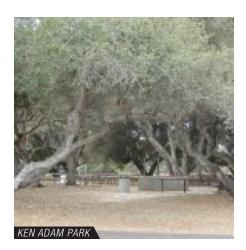




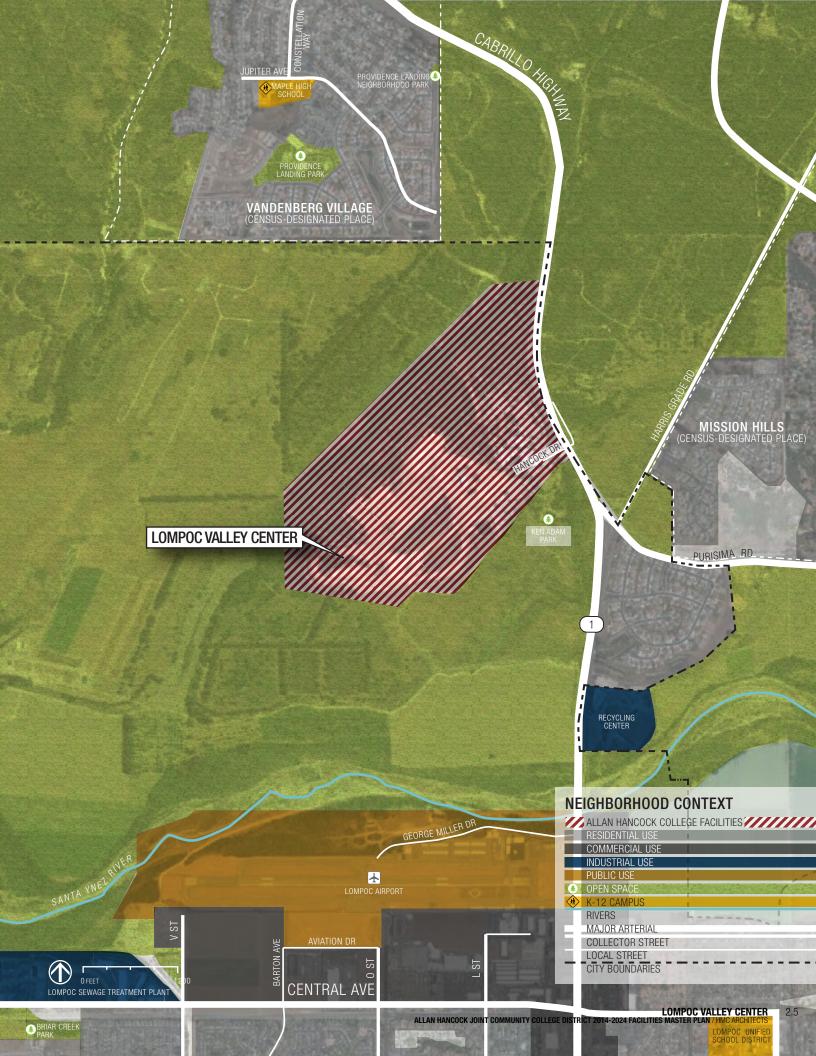
# **NEIGHBORHOOD CONTEXT**

The Lompoc Valley Center is surrounded by natural open space and park land. Ken Adam Park lies to the east of campus. The residential communities of Vandenberg Village and Mission Hills are located in the vicinity of the campus. Lompoc Airport is situated in the Santa Ynez River valley to the south of campus.

- The campus is accessed and visible from State Route 1.
- The campus is surrounded by natural open space.







# **CAMPUS PLAN**

The graphics on the opposing page illustrates the existing development on the Lompoc Valley Center Campus.

### **OBSERVATIONS**

All campus facilities are permanent buildings.







# CAMPUS DEVELOPMENT **HISTORY**

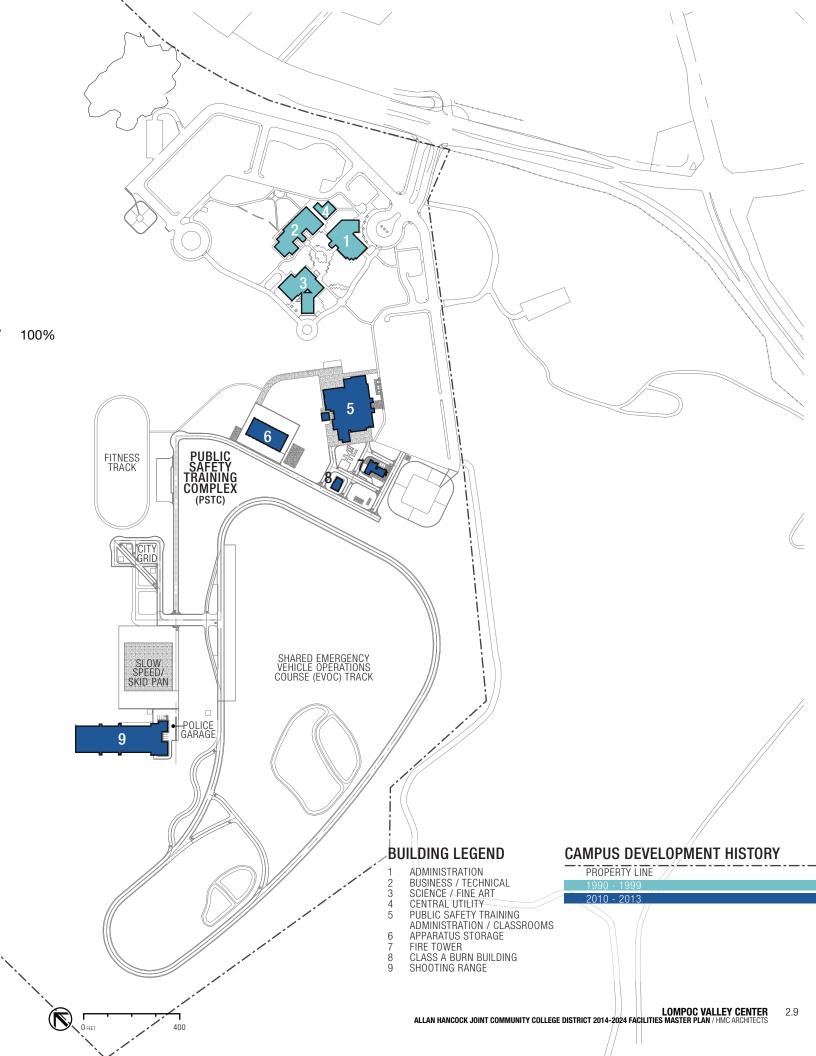
The graphic on the opposing page illustrates campus development by decade:

- Facilities built in the 1990s
- Facilities built from 2010 to 2013

- The campus was built in two phases.
- The facilities for the **Public Safety Training** Complex (PSTC) were recently completed.







# **FACILITIES CONDITION** + ADEQUACY

The graphic on the opposing page indicates the results of the assessment conducted in late 2013 by a team from the California Community College Foundation. The team assessed each facility and determined its FCI value, which is of the cost of all needed repairs as a percentage of the replacement cost of the facility. The graphic illustrates the following categories:

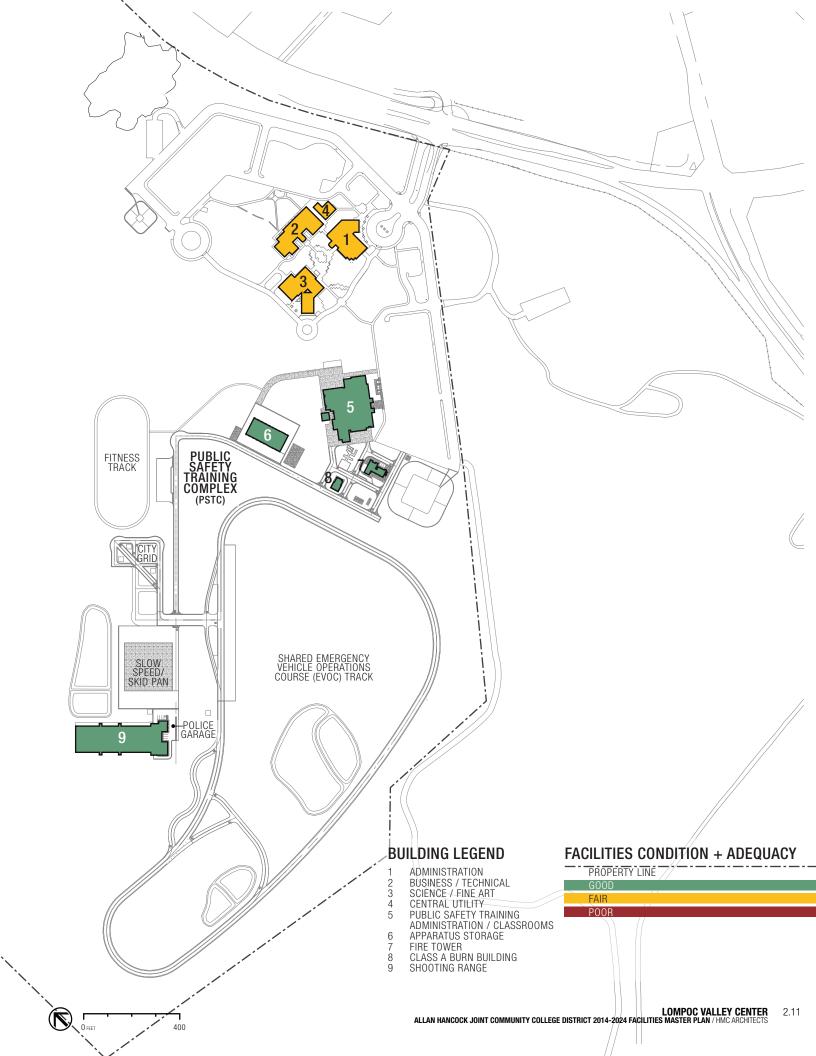
The review of facilities needs gathered from program review and from the educational planning program development tool indicates that certain buildings were the focus of significant issues and needs.

- All of the campus facilities are in good condition.
- No significant issues were reported in program review and the educational planning process.

- **Facilities Condition Index** 0% to 20% GOOD
- **Facilities Condition Index** >20% to 50% FAIR
- **Facilities Condition** Index > 50% POOR







# VEHICULAR CIRCULATION + PARKING

The graphic on the opposing page illustrates the following:

- / Campus entry points
- / Primary and secondary vehicular routes
- / Service vehicle routes
- / Emergency vehicle routes
- / Parking lots
- / Bicycle parking
- / Bicycle lanes
- / Bus stops
- / Parking permit dispensers
- / Passenger loading zones
- / Crosswalks
- / Traffic signals

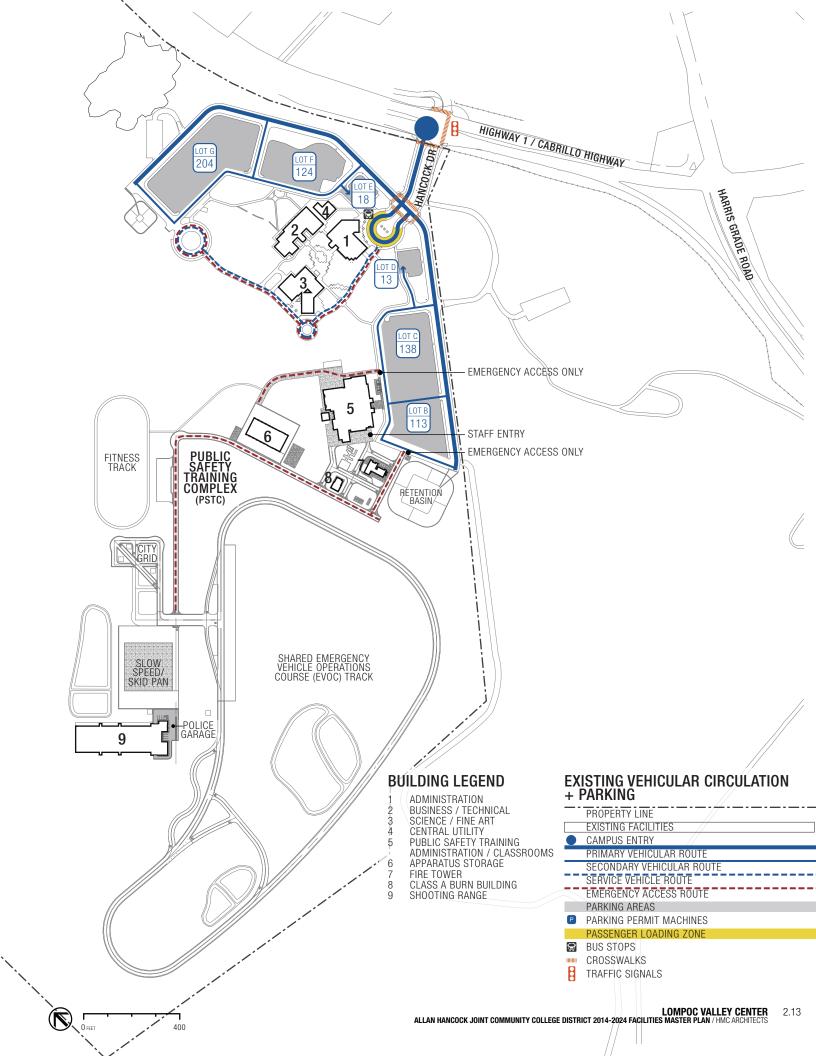
### **EXISTING PARKING CAPACITY**

The graphic highlights the existing parking areas on the campus. The current total of 610 permanent parking spaces provides for a ratio of 4.1 full-time equivalent students (FTES) per each parking space (4.1:1), based on the baseline enrollment in fall 2013 of 2,500 FTES (adjusted to include PTSC enrollment, which was deducted from the Santa Maria Campus headcount and added to the Lompoc Valley Center headcount for the purpose of planning for parking capacity).

- / The campus has one vehicular entrance.
- / Access to the vehicular circulation routes within the PTSC is controlled.
- / The passenger loading zone/ bus stop is centrally located.
- / The circulation routes and parking lots are well organized.
- / The parking capacity is more than adequate to serve the demand.
- / The Allan Hancock College bike path links the campus to SR-1, south of campus.
- / A bicycle path that links the campus to destinations to the north, such as Vandenberg Village, would be used.





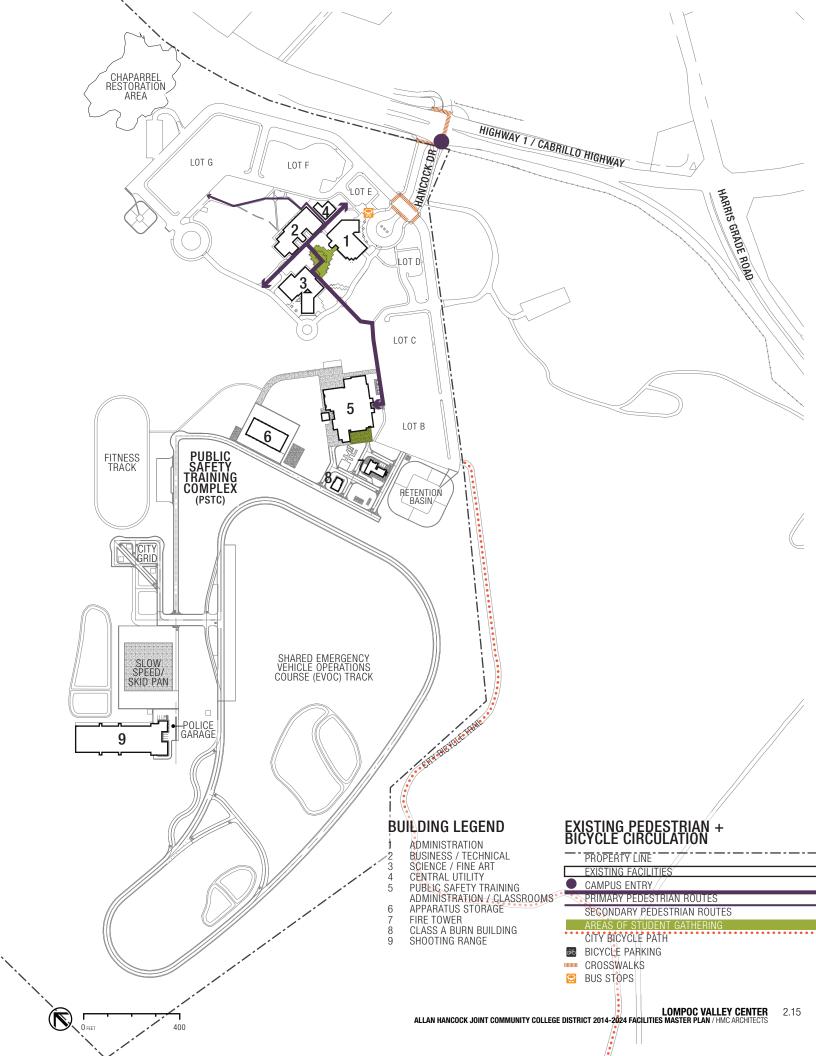


# PEDESTRIAN + **BICYCLE CIRCULATION**

The graphic on the opposing page illustrates the following:

- Campus entry points
- Primary and secondary pedestrian routes
- Outdoor gathering spaces
- Bicycle parking
- Emergency call boxes
- Bus stops
- Crosswalks

- Pedestrian access to the PSTC is controlled and must pass through Building 5.
- Accessible paths linking the center of campus to Parking Lots F and G are lacking.
- The Quad presents an opportunity to create a well-used gathering place through the installation of site furnishings and other amenities.



# **CAMPUS ZONING**

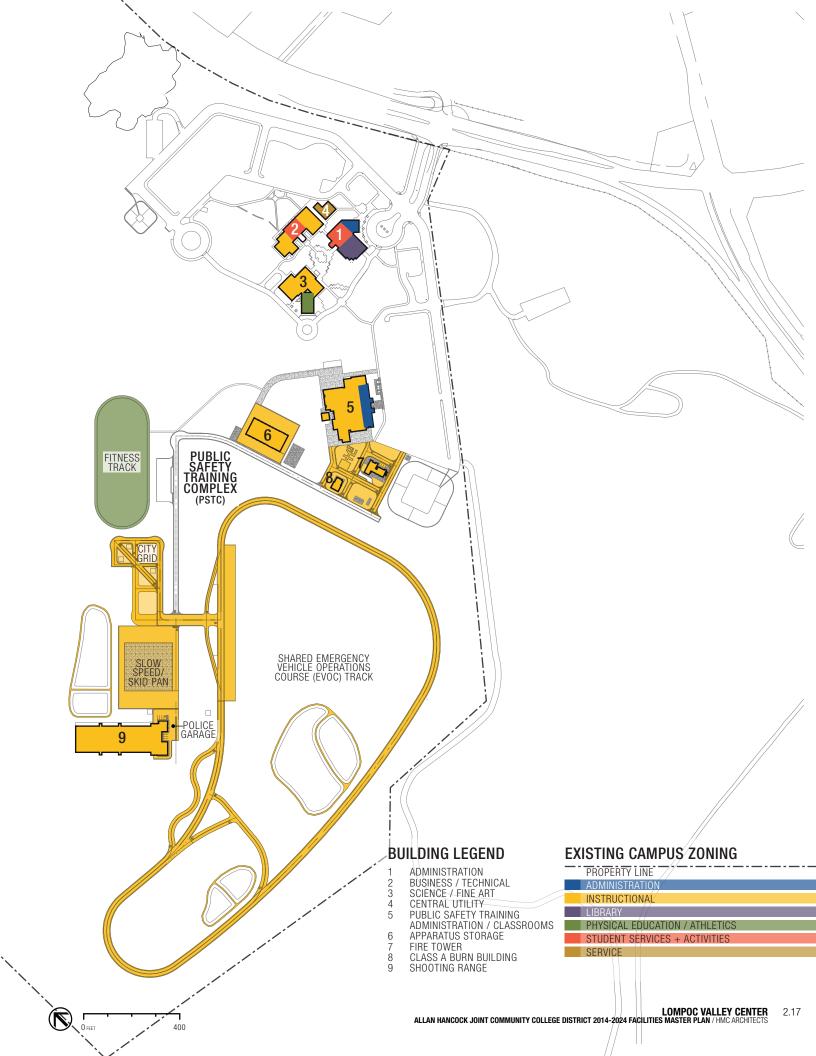
The graphic on the opposing page illustrates the location of the following functional zones:

- Administration
- Instruction
- Library
- Student Services and Activities
- Physical Education and Athletics
- Services

- The campus is well zoned, but it is divided among two distinct precincts: Buildings 1 through 4 and the Public Safety Training Complex.
- Student services and activities are distributed among Buildings 1, 2, and 3.







# OPEN SPACE TYPOLOGY + PROGRAMMING

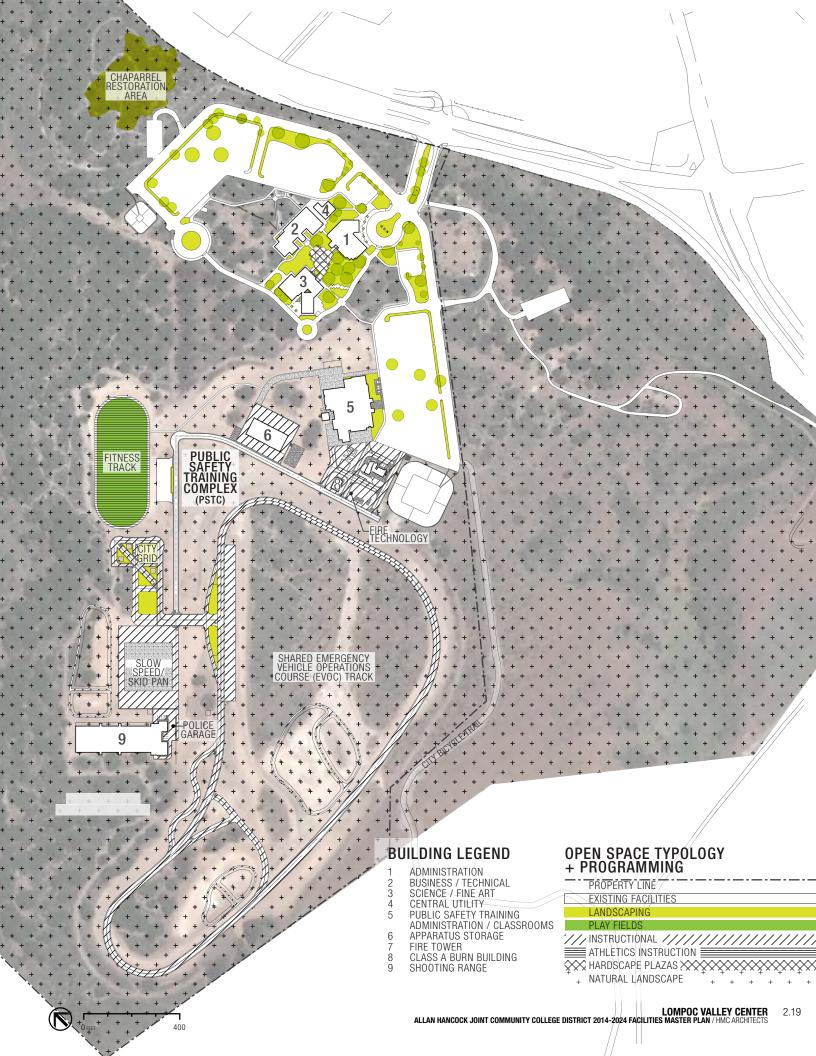
The graphic on the opposing page categorizes open space design and use by the following types:

- **Outdoor Instructional Space** on the campus consists of the PSTC training facilities for Law Enforcement, Fire Technology, Emergency Medical Services, and Environmental Technology Training. These facilities including burn buildings and fire training tower, confined space/trench rescue simulator, fire prop training area, obstacle course, off pavement driving areas, simulated city grid, scenario village, slow speed skid pan, and Emergency Vehicle Operations Center (EVOC) track.
- **Outdoor Athletic** Instructional Space
  - **PSTC Fitness track** and athletic field
- Hardscape/Plazas
  - Quad between Buildings 1, 2, and 3
- Natural Landscape
  - The natural landscape has been preserved within the core of the campus, as well as around its undeveloped edges.
  - The campus extends into the arroyo along its western edge.

- Much of the campus has been preserved as natural landscape.
- Many mature existing trees were kept in place and protected during the construction of the campus.
- There is an opportunity to restore the native vegetation in areas disturbed during the construction of the PSTC.







# SUMMARY OF FINDINGS

The opening of the Public Safety Training Complex greatly expands the Lompoc Valley Center building space inventory and site area. The PSTC facilities have a distinct identity, set apart from the previously developed facilities. This separation results from the nature of the public safety programs, but much can be done to integrate the campus and foster a shared identity while respecting the need for security and controlled access to the PSTC. The challenges for the future are to continue the development of the campus in a manner that aligns it with the Educational Directions established in the AHJCCD Educational Master Plan, provide facilities for educational and community partnership opportunities, and build a shared campus identity embodied by vibrant, welcoming, and sustainable learning environments.

### SPACE INVENTORY ANALYSIS

The Lompoc Valley Center Space Inventory Report was used as the basis for the analysis of space. The adjacent *Table 7* includes a summary of the capacity load categories of space at Lompoc Valley Center and their respective totals.

**TABLE 7: SPACE INVENTORY: CURRENT + ADJUSTED** 

SPACE TYPE	CURRENT INVENTORY (ASF)	ADJUSTED INVENTORY (ASF)
Lecture + Lab	35,998	50,642
Office	6,420	11,547
Library	3,910	3,910
Instructional Media	87	87
Other	10,793	83,210
TOTALS	57,208	149,396

<sup>\*</sup> Public Safety Training Complex has been added.

### MASTER PLAN SPACE PROGRAM

The master plan space program forms the basis for developing recommendations for facilities. The space inventory analysis combined with the space needs forecast is summarized in Table 8 and indicates the total amount of additional assignable space needed to accommodate a master plan horizon student headcount of 3,100.

The methodology for projecting future space needs is summarized as follows:

- Master plan and WSCH projections were applied in combination with appropriate space planning standards to result in a total space requirement in ASF by type of space.
- The space inventory was adjusted to reflect the proposed removal of temporary facilities and the addition of projects currently under construction or in capital outlay planning. This is referred to as the "adjusted inventory."
- The "adjusted inventory" was subtracted from the total space requirements described above to result in the net ASF overage or need by type of space for each master plan horizon.
- The result, net assignable square footage by type of space, served as the basis for developing facilities options for Lompoc Valley Center.

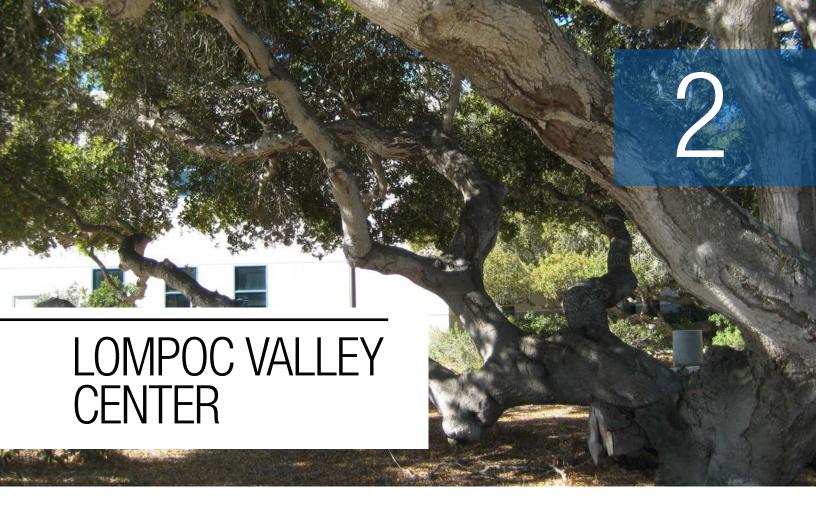
**TABLE 8: MASTER PLAN SPACE PROGRAM** (3,100 HEADCOUNT)

SPACE TYPE	CURRENT INVENTORY (ASF)	ADJUSTED INVENTORY (ASF)	2024 SPACE NEEDS	DIFFERENCE
Lecture + Lab	35,998	50,642	15,817	34,825
Office	6,420	11,547	5,106	6,441
Library	3,910	3,910	7,218	(3,308)
Instructional Media	87	87	4,840	(4,753)
Other	10,793	83,210	25,756	57,454
TOTALS	57,208	149,396	58,737	

<sup>\*</sup> Temporary Building W, Building S, and leased space currently on the space inventory, have been removed. Industrial Technology Building (under construction) has been added.







PLANNING PRINCIPLES

**SUMMARY OF RECOMMENDATIONS** 

### **RECOMMENDATIONS**

- Capital Improvement **Projects**
- Minor Projects
- **Partnerships**



### FOCUS ON STUDENT SUCCESS

- Develop campuses to support student success.
- Align facilities with the educational plan directions for instructional and student support services.

### **Facilities Planning Strategies:**

- Repurpose existing space to accommodate a comprehensive offering of student services and academic support, including a Writing Center, Learning Assistance Program learning lab, dedicated computerized testing center, food service, student lounge, and dining areas.
- Improve the existing outdoor quad and patios to better support their use as study and gathering places.

### INTEGRATE PLANNING

- Educational Master Plan
- Resource Management Plan
- Technology Master Plan
- Sustainability Plan

### **Facilities Planning Strategy:**

Plan facilities and site improvement projects with an eye toward synergistic solutions that address the goals of the Educational Master Plan, the Technology Master Plan, and the Energy and Sustainability Plan.

### RIGHT-SIZE THE CAMPUS TO ADDRESS PROGRAM NEEDS

- Align the space inventory with state standards.
- Position the college to maximize funding opportunities.

### **Facilities Planning Strategies:**

- Repurpose existing space to address the need for part-time faculty workspace and additional library, academic resources, and instructional media space.
- Expand the Public Safety training facilities.



### MAXIMIZE FUNCTIONAL **SPACE**

- Address program needs.
- Renovate facilities.

### **Facilities Planning Strategy:**

Maximize the utilization of existing space through renovation projects that rezone functions to improve student access and operational efficiencies and upgrade the technology infrastructure, finishes, furnishings, and building systems.

### **ELIMINATE NON-FUNCTIONAL SPACE**

- Replace aged facilities.
- Remove temporary facilities.

### **Facilities Planning Strategy:**

Repurpose existing space to align functions with current and future programming needs.

### IMPROVE EFFICIENCY + UTILIZATION OF FACILITIES + LAND

- Consolidate related programs.
- Create flexible interdisciplinary space.
- Align zoning and land use with institutional priorities.

### **Facilities Planning Strategy:**

Fully develop the campus to accommodate the expansion and improvement of the Public Safety training areas and the development of new facilities for educational partnerships, an amphitheater, an astronomical observation site, and a new Plant Services Building.

# PLANNING PRINCIPLES (cont.)

07

### MAXIMIZE FISCAL RESOURCES

/ Plan for total cost of ownership.

### **Facilities Planning Strategies:**

- Develop permanent district facilities to preclude the need to lease off-campus facilities.
- Build green and sustainable campus facilities that minimize operational costs.



# ENHANCE THE CAMPUS ENVIRONMENT

- / Improve first impression at campus edges and entries.
- Plan for collegiate campus aesthetics.
- / Enhance way finding and pedestrian linkages.
- Facilitate transportation access and safe multi-modal circulation.
- / Preserve and enhance the campus' collection of trees.

### **Facilities Planning Strategies:**

- / Welcome students, employees, and the community and enhance the college's brand and image.
- / Improve pedestrian and bicycle circulation.
- / Develop and implement campus design standards for buildings and open spaces.
- / Renovate and repurpose existing space to provide food service, student lounge, and dining areas.
- / Outfit the existing outdoor quad and patios to better support their use as study and gathering places.
- Remove all barriers to universal accessibility.



### PLAN WITH CONSIDERATION FOR A SAFE ENVIRONMENT FOR ALL CONSTITUENTS

### **Facilities Planning Strategy:**

/ Provide a campus that is designed with consideration for safety with regard to circulation and parking areas, adequate visibility and site lighting for night time use, security cameras and alarms, and compliance with life-safety codes and standards to support safe working and learning environments.

10

### PLAN FOR SUSTAINABILITY

- / Minimize negative impacts on the environment.
- / Minimize energy and water use.
- / Plan for healthy learning and working environments.

### **Facilities Planning Strategies:**

- / Integrate strategic paths from the six focus areas of the Energy and Sustainability Plan.
- Provide space for the AHC Office of Sustainability. Build healthy LEED Certified facilities and site areas that model sustainability practices. Implement campus-wide tools to measure and showcase progress toward sustainability targets.

11

### SIMPLIFY IMPLEMENTATION

Plan logistically to minimize cost and disruption.

### **Facilities Planning Strategy:**

/ The Facilities Master Plan builds upon the existing development framework of the campus.

# SUMMARY OF RECOMMENDATIONS

The 2014-2024 AHJCCD Facilities Master Plan for the Lompoc Valley Center campus presents an overall picture of development that is crafted to support the educational directions of the 2014-2020 AHJCCD Educational Master Plan. The recommendations address the requirements of the projected enrollment through the translation of educational planning data to facilities space needs.

The recommendations for the Lompoc Valley Center campus include capital improvement projects and minor projects for the construction and renovation of facilities and improvements to the campus open spaces, circulation systems, and parking facilities. In addition, the recommendations identify locations for facilities to support educational and community partnerships. While drawings in the FMP appear specific, the forms are conceptual sketches that illustrate the location and purpose of recommended improvements. The final design of each site and facilities project will take place as they are funded and detailed programming and design occur with a designated user group.

### **OPEN SPACE CONCEPT**

### VEHICULAR CIRCULATION + PARKING

# PEDESTRIAN + BICYCLE CIRCULATION

# CAPITAL IMPROVEMENT PROJECTS

- / Physical Plant Building
- / Public Safety Training Complex (PSTC) Facilities
- / Amphitheater

### **MINOR PROJECTS**

- / AstronomicalObservation Site
- / Buildings 1, 2, 3, + 4 Renovation

### **PARTNERSHIPS**

- / PartnershipOpportunity Area
- / Carillon
- Student Housing



# OPEN SPACE CONCEPT

The Lompoc Valley Center campus has been greatly expanded with the addition of the Public Safety Training Complex, both in terms of land area and facilities. This expansion has challenged the cohesive identity of the campus but it has also increased its vitality and opened up opportunities for continuing growth. A number of new opportunities have the potential to transform the campus yet again.

For the 2014-2024 AHJCCD Facilities Master Plan, the concept for open space planning is focused on completing and restoring transitional areas and fostering a cohesive campus identity that will support the campus as it grows. Project designs are intended to be sensitive to the natural environment by minimizing environmental impacts and the footprint of the area disturbed by construction activities. Consideration would be given to preserving the natural topography, site features, flora, and wildlife. Building materials, site lighting, and landscaping should be designed sensitively. The Amphitheater, Carillon, and PSTC Training Facilities Improvements, and the Astronomical Observation Site are site improvement projects that would all be designed to align with the campus' open space concept.

Most of the recommended site improvements are included in projects that are in the Capital Improvements and Minor Projects categories. The Campus-wide Open Space Improvements project will provide a number of additional improvements.



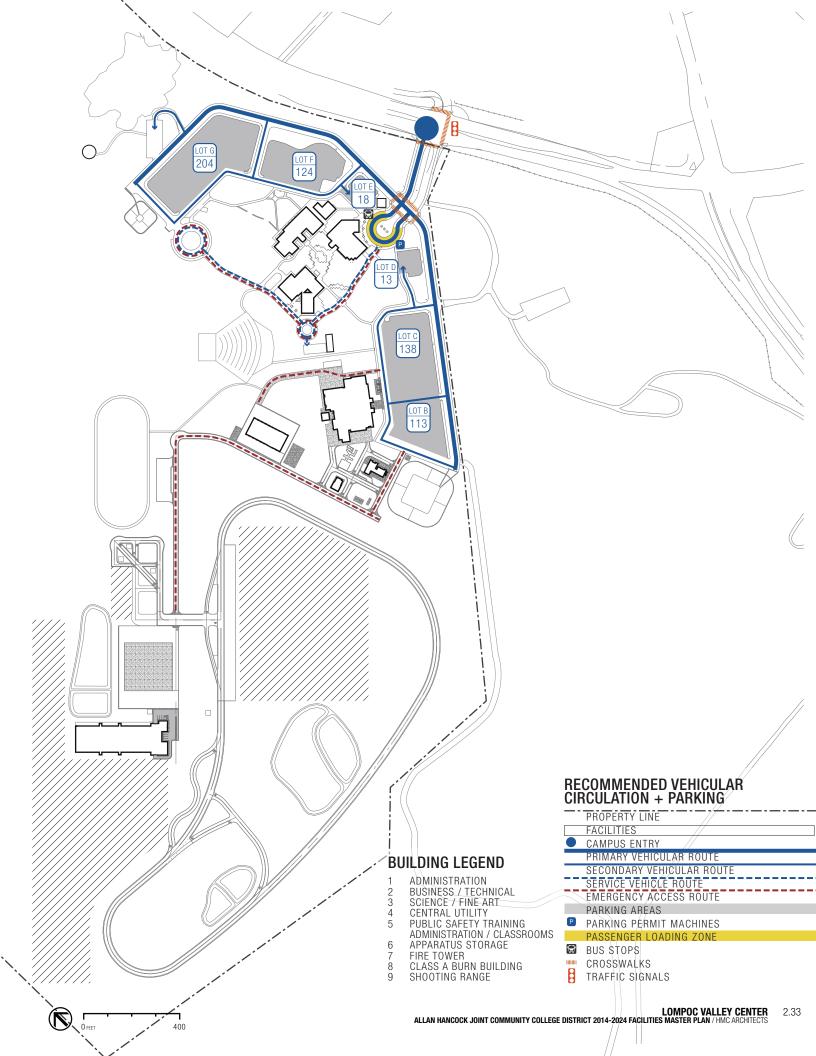
# VEHICULAR CIRCULATION + PARKING

The AHJCCD Facilities Master Plan recommendations for vehicular access and parking bear directly on student success and access to learning. A safe and sufficient vehicular circulation infrastructure respects the students and employees that navigate the campus day-to-day and strongly affects the satisfaction of all stakeholders. The graphic on the opposing page illustrates recommendations to improve access to public transit, facilitate vehicular access and flow, provide sufficient parking capacity, and facilitate safety, security, and sustainability.

### PARKING CAPACITY

The graphic on the opposing page illustrates the recommendations for parking capacity. As documented in the analysis of Existing Vehicular Circulation + Parking, the existing parking capacity for the Lompoc Valley Center is 610 spaces, which provides for a ratio of 4.1 full-time equivalent students (FTES) per one parking space, based on the enrollment of 2,500 FTES in fall 2013. Many suburban community colleges in California use a 5:1 ratio (five full-time equivalent students (FTES) to one parking stall) as the guideline for providing adequate parking capacity. Urban locations with more options for alternative modes of transportation may be adequately served by a higher ratio. Given its suburban location at the edge of the City of Lompoc, the recommended parking ratio is 5:1. Using the projected enrollment of 3.100 FTES for 2024, a capacity of 620 parking spaces is recommended, requiring no additional parking spaces.

Planning must take into account the cost of providing parking, both in financial terms and in the prioritization for the use of the campus' finite land area. Equally important is the desire to "reduce carbon emissions resulting from Allan Hancock College traffic"—the stated goal under the Transportation Dimension of the AHJCCD Energy and Sustainability Plan. Projections of the parking demand for a horizon ten years hence should take into account the evolving priorities driving municipal and regional transportation planning and the community's desire for alternative transportation options. These pressures are likely to lead to solutions that will lessen the demand for campus parking. The recommendations support a multimodal, evidence-based approach to transportation and parking management. Explore alternative transportation opportunities and gather data to assess their effectiveness. Take advantage of opportunities to maintain or reduce the parking capacity should the demand shift to alternative transportation modes. For parking lots that the District chooses to retain, a number of improvements are recommended to enhance accessibility and sustainability.

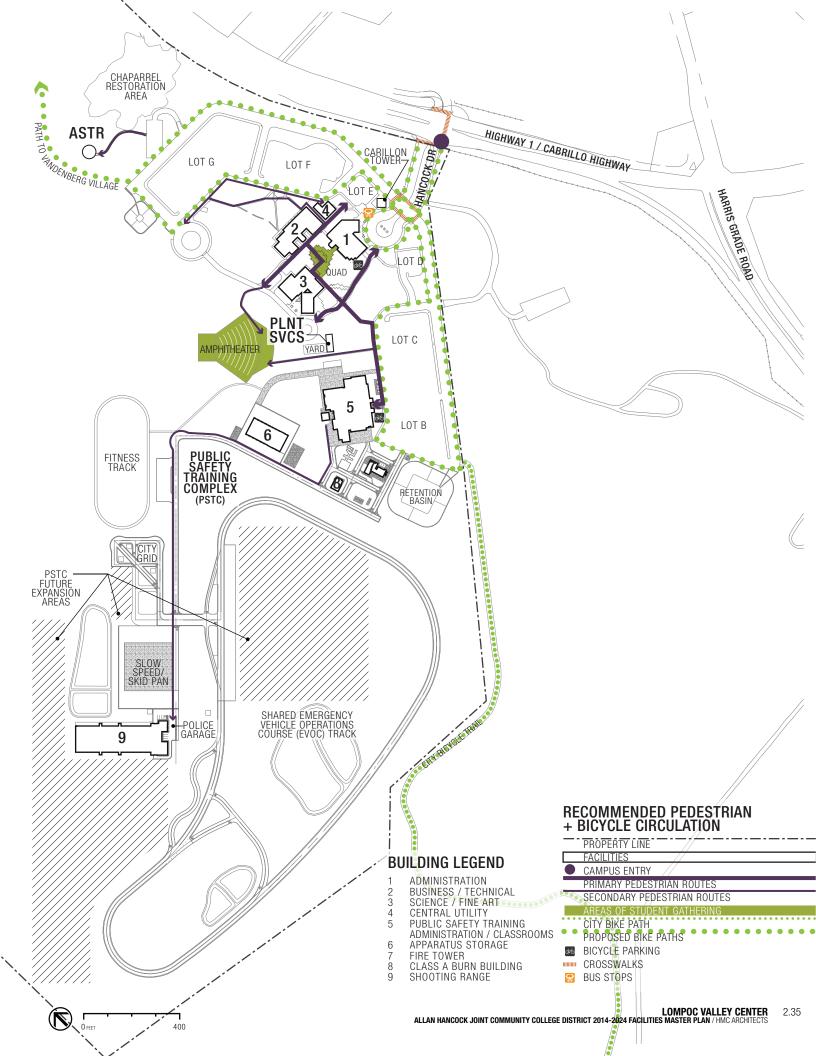


# PEDESTRIAN + **BICYCLE CIRCULATION**

Pedestrian circulation is the main form of travel on campus for students, faculty, and staff. Walking is a convenient way to exercise and promote a healthy lifestyle and allows for chance meetings and spontaneous collaboration. The pedestrian circulation recommendations will improve the existing system of paths, provide universal accessibility between all campus facilities, and fully furnish and outfit courtyards to support their function as gathering places and extensions of the classroom. The sidewalks and hardscape plazas on campus would be enhanced as an integral part of the design of each project.

Bicycle circulation is an important mode of transportation for people commuting to campus. Encouraging bicycle use as an alternative to driving is one of the strategic paths for the transportation goal in the Energy and Sustainability Plan. The planning concept for bicycle circulation starts with connecting to existing neighborhood bicycle routes. At Lompoc Valley Center, State Route 1 is the neighborhood's primary bicycle route. The Recommended Pedestrian + Bicycle graphic shows the route of bicycle paths that connect to SR-1 and follow the vehicular routes. A study to integrate well designed bicycle facilities into the

campus is recommended. Given the speed limit along the driveways, separate facilities (lanes) for vehicles and bicycles are not likely to be needed or desired. Signage to foster awareness and frequently conducted programs to educate the campus community about safe multi-modal circulation on shared routes are recommended.

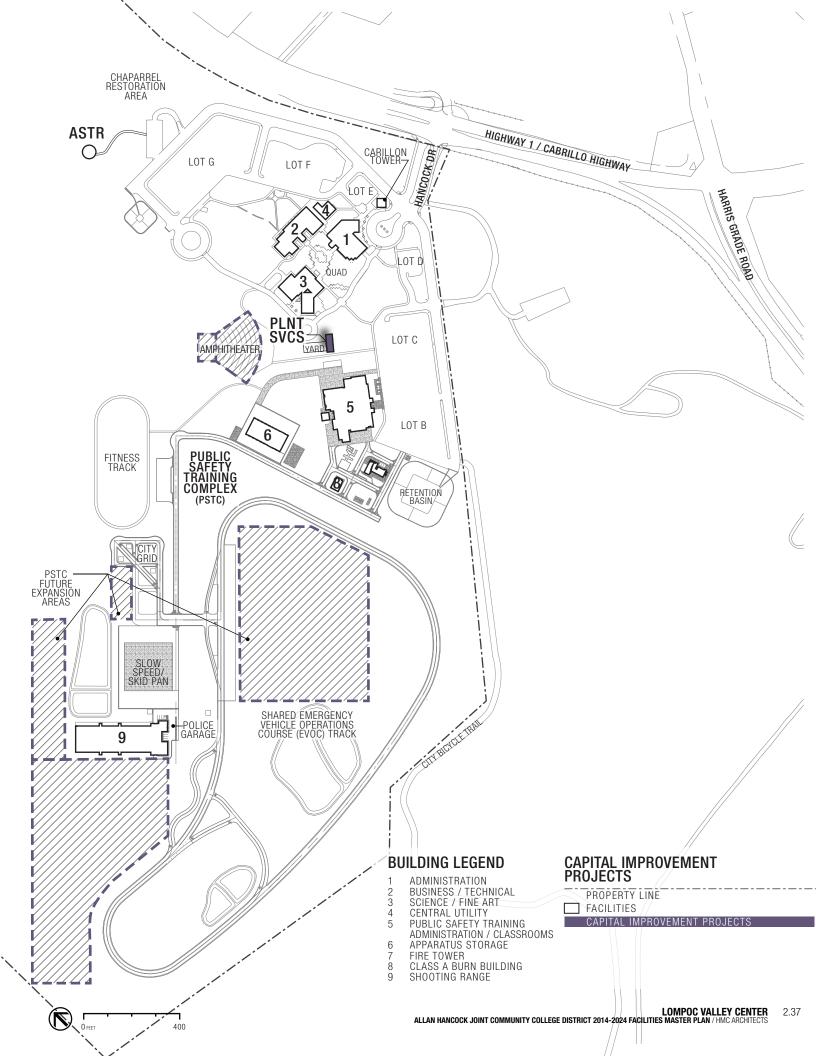


# CAPITAL IMPROVEMENT **PROJECTS**

The Capital Improvement Projects align the campus facilities with the **Education Directions established** in the Educational Master Plan. The projects are planned to accommodate the programmatic and functional needs that are articulated in the Educational Master Plan Implications for the Facilities Master Plan. The projects will implement the District's technology standards, provide space that supports state-of-the-art learning technologies, and address the functional needs that are articulated in the Technology Master Plan Implications for the Facilities Master Plan. The projects present the opportunity to build green and support the goals of the AHJCCD Energy and Sustainability Plan.

# CAPITAL IMPROVEMENT **PROJECTS**

- Physical Plant Building
- **Public Safety Training** Complex (PSTC) Facilities
- **Amphitheater**



# CAPITAL IMPROVEMENT PROJECTS (cont.)



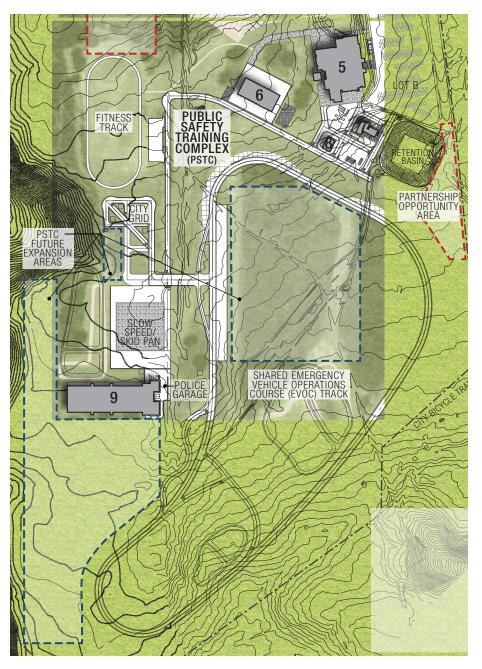
### PHYSICAL PLANT BUILDING

Provide new facilities and service yard that will support sustainable and healthy custodial, grounds, maintenance, facilities operations, and recycling/waste/hazardous waste management practices.



### **AMPHITHEATER**

The Lompoc Valley Center Amphitheater will be a unique venue for events, performances, and commencement ceremonies and would provide a signature outdoor gathering and learning space. The recommended location will help to integrate the Public Safety Training Complex with the original campus precinct. Great care and sensitivity to the environment should inform the design of the Amphitheater. It is intended to be nestled into the existing site contours with the minimum amount of grading needed to achieve the design intent. The design solution should respect and use the many beautiful oak and eucalyptus trees and the other special character defining elements. Additional oak trees could be planted to screen and embrace the site. The design should be inspired by the natural beauty of the campus and should emphasize the appropriate use of local materials, such as stone and wood, in the construction of the Amphitheater and site work. This facility would have the infrastructure and technology to support audio/visual systems and provide lighting for night time use.



# **PUBLIC SAFETY TRAINING COMPLEX (PSTC) FACILITIES**

This project would improve and add to the functionality of the outdoor training facilities at the Public Safety Training Complex. In addition to the improvements listed below, the Facility Master Plan recommends the exploration of the space requirements to support the additional training needs that are identified in the Educational Master Plan and the determination of the potential need for additional land area. Mitigating measures for proposed development within the conservation area and buffer zone will be explored and considered in the determination of project feasibility.

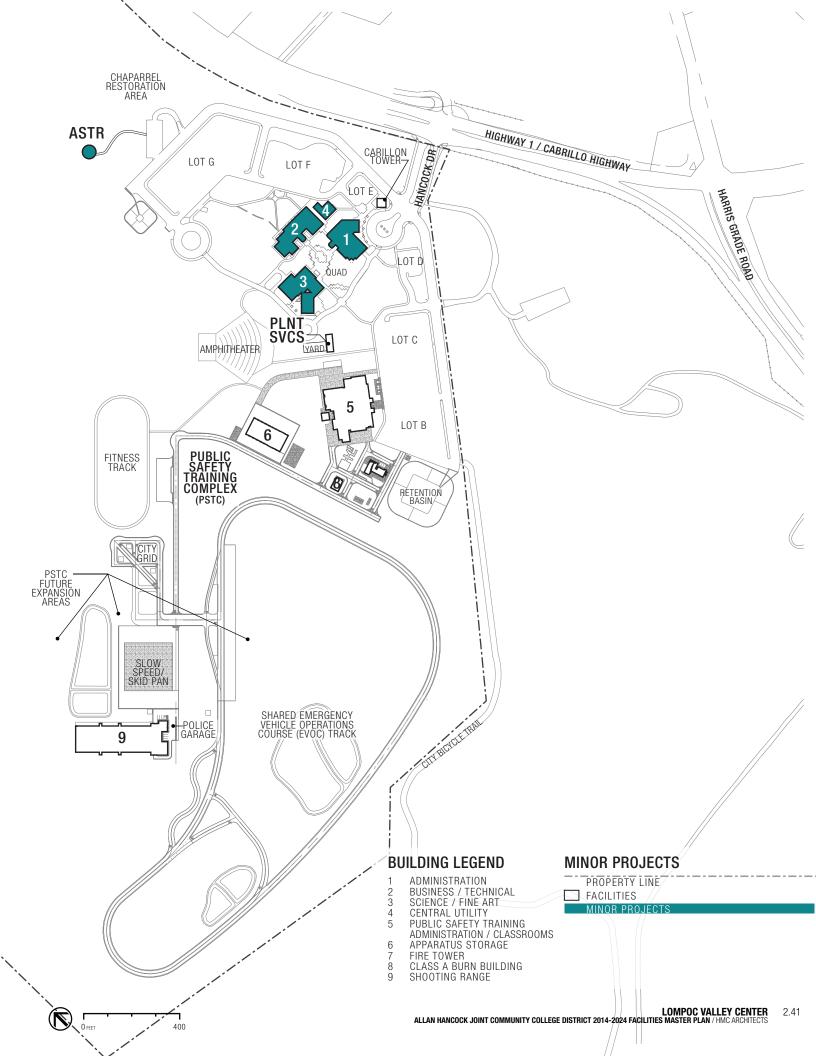
- / Expand the off-road driving track.
- Provide an inner city grid track.
- Provide an access gate to skid pad area.
- Provide additional paving at the Scenario Buildings.
- Build restrooms for the outdoor training area.
- Build additional burn buildings.
- Expand the fire technology simulated street area.
- Explore adding tanker, rail cars, and aircraft props for rescue training.

# MINOR PROJECTS

The Minor Projects represent improvements to the Lompoc Valley Center that maximize the functionality and utilization of campus facilities. Projects will revitalize existing facilities, extending the useful lives of valuable capital assets and aligning their programming and functionality with the objectives of the Educational Master Plan, the Technology Master Plan, and the Energy and Sustainability Plan.

### MINOR PROJECTS

- / AstronomicalObservation Site
- / Buildings 1, 2, 3, + 4 Renovation
- / Campus-Wide Open Space Improvements



# MINOR PROJECTS (cont.)



### ASTRONOMICAL OBSERVATION SITE

Development of facilities to support courses in astronomy are planned to begin with the construction of an astronomical observation site near and accessible from the parking lot of the Burton Mesa Chaparral Restoration Area. The site would provide an observation deck with appropriate screening from off-campus light sources, secure storage, power and technology network infrastructure, and controllable, night-vision safe lighting. The location of the site will be selected with care and with consideration for the topography, sight-lines, and existing flora and site features.



# **BUILDINGS 1, 2, 3, 4**

The original buildings at the Lompoc Valley Center opened in 1999 and have been maintained in very good condition since that time without significant refreshment. In order to maintain the fullest use of these facilities, the repair or replacement of finishes and selective upgrade of equipment, furniture, technology, and building systems are recommended. Improvements to achieve universal accessibility and energy and water efficiency would also be included in this project.

In addition, this project is an opportunity to repurpose selected spaces within these buildings to provide homes for new and expanded functions and improve zoning and adjacencies. It would address the demonstrated need for additional library and instructional media space. It would provide student services offices, faculty and adjunct faculty offices, and the instructional space needed to support innovation, new programs, and the growth of programs. These improvements are intended to align the existing space with the priorities of the Educational Master Plan and address the need to achieve parity and equal student access to college facilities at Lompoc Valley Center.

# CAMPUS-WIDE OPEN SPACE IMPROVEMENTS

# **WALKING PATH TO** PARKING I OT F AND G

An accessible pedestrian path is recommended to provide a path of travel from the Quad and Buildings 1 through 3 to the western end of Parking Lot G, along the southern edge of Parking Lots F and G. The path would be of sufficient width to accommodate the anticipated pedestrian traffic at periods of peak usage.

### QUAD IMPROVEMENTS

The Quad is the courtyard at the heart of the cluster of buildings that house Administrative Services, Student Services, and instructional and physical education space. The project would furnish and outfit the Quad to better support study, collaboration, and informal social activity.

### **BIKE PATHS**

A study to integrate well-designed bicycle facilities throughout the campus is recommended. Paths shared with vehicles and pedestrians would be provided with pavement markings and signage to foster awareness.

The existing Allan Hancock College Bike Path affords cyclists with a dedicated bicycle facility that serves as an alternative to SR-1. Its route extends south from the campus to the bottom lands of the Santa Ynez River valley—about half the distance to the center of Lompoc. The Facilities Master Plan recommends the exploration of the option to extend this bicycle route northward and link the campus to the Vandenberg Village neighborhood through the adjacent arroyo. Explore the possibility of forming a partnership with neighboring land owners to extend the bike route beyond college property.

### RESTORATION OF OPEN SPACE

Areas disturbed and not restored in the Public Safety Training Complex project would be restored as natural habitat in this project.

# **PARTNERSHIPS**

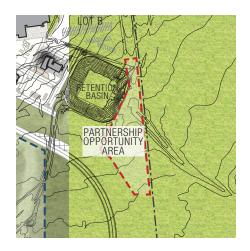
Partnership opportunities support the AHJCCD's initiative to develop a closer working relationship with area schools, expand its outreach to the community, and seek non-apportionment revenue. The following have been identified as potential projects with a recommended location on the Lompoc Valley Center campus.

### **PARTNERSHIPS**

- / Partnership
  Opportunity Area
- / Carillon
- / Student Housing



# PARTNERSHIPS (cont.)



### PARTNERSHIP OPPORTUNITY AREA

The Facilities Master Plan identifies a campus area for a partnership with Santa Barbara County to develop facilities for a redundant 911 call center.



### PARTNERSHIP OPPORTUNITY AREA

The Facilities Master Plan identifies a campus area for petroleum industry training facilities, including off-shore oil platform and production line training props. The recommendations include the exploration of the space requirements for facilities to support the training needs that are identified in the Educational Master Plan and the determination of the potential need for additional land area. Mitigating measures for proposed development within the conservation area and buffer zone will be explored and considered in the determination of project feasibility.



### **CARILLON**

Located adjacent to the main campus entry, the Carillon tower would be visible from State Route 1 and serve as a visual and audible means of reinforcing the Allan Hancock College brand on the Lompoc Valley Center campus. The potential to lease the Carillon to cellular phone providers will be explored. A similarly designed carillon at the Santa Maria Campus, and potentially at other district sites, will help to reinforce the district-wide identity.

# STUDENT HOUSING

AHJCCD is exploring the potential for student housing on the Santa Maria Campus. The Lompoc Valley Center campus will be considered for an additional or alternative location should the District decide to pursue a partnership to provide student housing.



# OTHER SITES



# OTHER SITES SOLVANG CENTER





# **OVERVIEW**

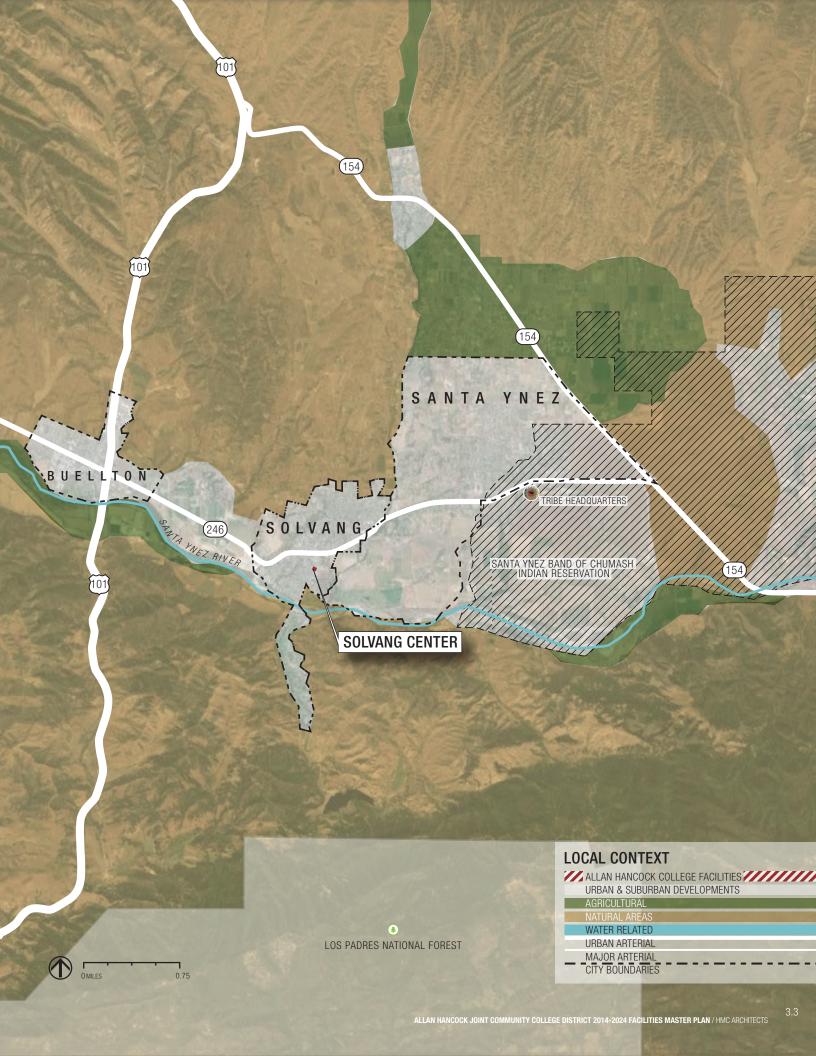
# **ANALYSIS**

- **Local Context**
- Neighborhood Context
- Campus Plan
- Campus Zoning

# **RECOMMENDATIONS**

# LOCAL CONTEXT

The Solvang Center is located in the City of Solvang and near the City of Buellton and the towns of Santa Ynez and Los Olivos. These communities are situated in the Santa Ynez River valley, which is bounded by the Santa Ynez Range and the Sierra Madre. The local area is rich in agricultural land and natural open space. The primary local circulation routes are State Route 101, State Route 246 Mission Drive, and State Route 154 the Chumash Highway.



# **NEIGHBORHOOD CONTEXT**

The campus is situated in the Danish-themed commercial center of Solvang, a well-known regional destination. Residential neighborhoods are located nearby and the city is situated amongst both lands used for agriculture and preserved as natural open space. The primary local circulation routes are State Route 246 Mission Drive and Alisal Road.

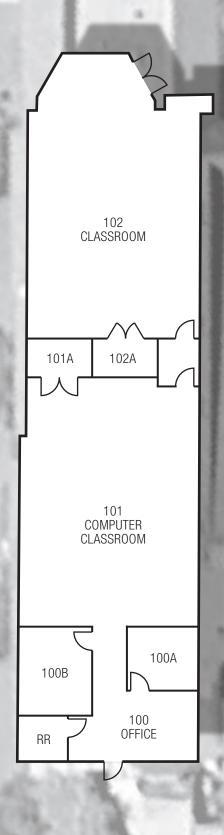


# **CAMPUS PLAN**

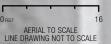
The graphic on the opposing page illustrates the campus facilities, which are located in leased space within the Solvang Village Square shopping center.

### **OBSERVATIONS**

- Signage for the campus is located on Alisal Road.
- Ample parking is provided at the back of the shopping center.
- The campus entrance faces the rear parking lot and first time visitors often need help finding it.







PROPERTY LINE
EXISTING FACILITIES

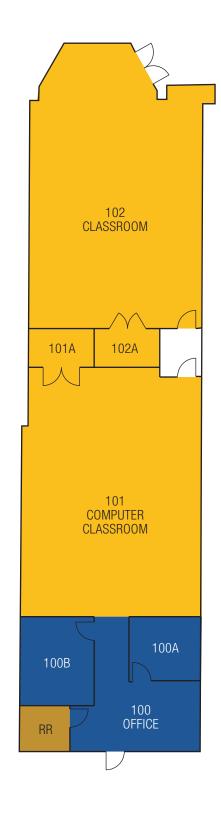
# **CAMPUS ZONING**

The graphic illustrates the location of the following functional zones:

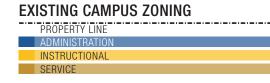
- Administration
- Instruction
- Services

### **OBSERVATIONS**

- Two instructional spaces are provided:
  - Classroom 101
  - Computer Classroom 102
- An office, front counter, storeroom, and a restroom are provided.







# SUMMARY OF RECOMMENDATIONS

Look for a new partnership or permanent location.

- / Find a location that is visible and easy to find.
- / Provide more instructional space, to allow AHC to offer an increased number and variety of courses.
- / Provide more space to house student support services.
- / Consider a location at or near Santa Ynez High School to better support dual-enrollment and concurrent-enrollment programs with high school students.



# **OVERVIEW**

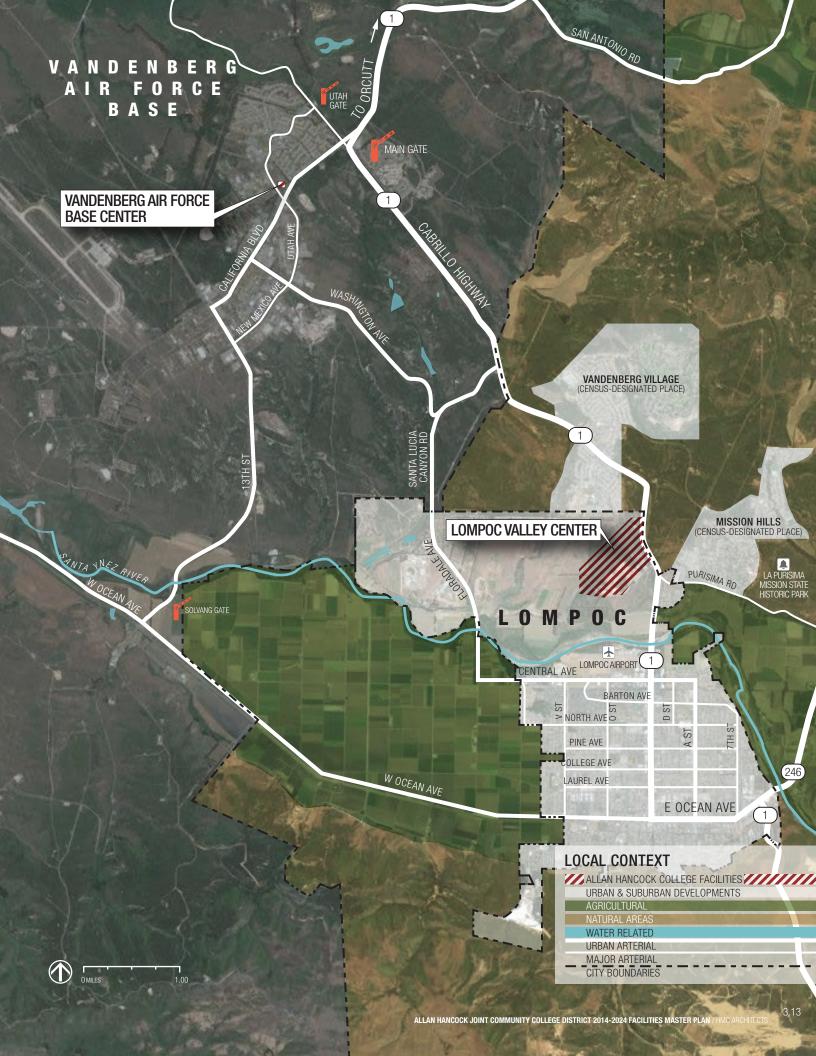
# **ANALYSIS**

- **Local Context**
- Neighborhood Context

**RECOMMENDATIONS** 

# **ANALYSIS** LOCAL CONTEXT

The campus is located within the same local context as the Lompoc Valley Center. Access to the Vandenberg Air Force Base Center is subject to base security requirements.



### **ANALYSIS**

# **NEIGHBORHOOD CONTEXT**

Space within a new building has been provided for the college by the Air Force.

## **RECOMMENDATIONS** SUMMARY OF RECOMMENDATIONS

The recently built facilities meet the College's needs for the foreseeable future; therefore, no new facilities or other improvements are recommended at this time.





# SUSTAINABILITY

SUSTAINABILITY





### **OVERVIEW**

In keeping with the District's long history of successful efforts to build and operated sustainable campus facilities, the AHJCCD Energy and Sustainability Plan describes an approach to broaden these efforts by integrating sustainability holistically into its culture and role in the community. To this end, the AHJCCD Energy and Sustainability Plan sets goals and strategic paths for the development of both an environmentally conscious college culture and sustainable physical environment.

The first section of this chapter describes the purpose of the plan and the highly participatory process through which it was created. The next section documents the AHJCCD Energy and Sustainability Plan, which is organized around six dimensions or focused areas of interest. Following the plan is the analysis of district environmental data which was included in the 2011-2012 sustainability planning process and was updated for the facilities master planning process. The chapter concludes with sustainability recommendations for the Santa Maria Campus and Lompoc Valley Center. This section provides campus- and locationspecific recommendations to implement the strategic paths of the Energy and Sustainability Plan.

### WHY SUSTAINABILITY?

### ENERGY + SUSTAINABILITY PLAN

### **ANALYSIS**

- Climate Zone
- Stormwater
- **Energy Use**
- Water Use
- Waste Management
- **Transportation**
- Carbon Footprint

### RECOMMENDATIONS

- Santa Maria Campus
  - + South Campus
- Lompoc Valley Center

### SUSTAINABILITY

# WHY SUSTAINABILITY?

The Board of Governors of the California Community Colleges' Energy and Sustainability Policy recommends energy efficiency and sustainability goals for California community colleges. One of these goals recommends community colleges develop an energy and sustainability plan to provide their campuses with strategic direction. Allan Hancock College's 2009-2013 Strategic Plan, Objective 3.4.3, outlines a goal "to define and clarify the college's commitment to developing an environmentally conscious physical environment."

The development of an Energy and Sustainability Plan is an institutional goal also identified in the Facilities Council and Vice President, Facilities and Operations goals. The plan is an approach to establish institutional sustainability goals in all areas of the institution including instruction, operations, construction, facilities, energy conservation, energy production, and environmental integrity. In addition, the plan proposes strategic paths for implementation of goals and identifies alternative funding sources.

Development of the plan started in fall 2012. As a first step in the planning process, Vice President of Facilities and Operations, Felix Hernandez and Cochairs Kathy Buckey and Margaret Lau recruited taskforce members and worked with the facilitation team to plan the workshop series. The newly established Sustainability Taskforce, whose members constituted a broad representation of the college constituencies, participated in a series of three visioning workshops that served as platforms for sharing, research, discussion, and further collaboration on diverse sustainability issues. The workshops were held on March 2, 16, and 30, 2012. Through the valued participation of the taskforce members and college partners and guests, the Energy and Sustainability Plan was drafted. In fulfillment of their charge, the taskforce recommended the plan to the Facilities Council, for review and recommendation to the College Council. As an integral part of the 2014-2024 AHJCCD Facilities Master Plan, the Energy and Sustainability Plan was adopted into the District's institutional planning structures and will guide efforts to integrate sustainability in every aspect of college life.

### SUSTAINABILITY BOARD POLICY

In addition to the Energy and Sustainability Plan, the Sustainability Taskforce drafted a sustainability board policy. The charge for the taskforce did not include providing a draft board policy, however, during development of the sustainability plan, it became evident a board policy was needed. The policy is seen as an opportunity for the board of trustees to articulate Allan Hancock College's environment stewardship commitment. The draft policy was developed further and constituency feedback was sought during the 2012-2013 academic year. BP 3950 was adopted by the Board of Trustees on August 20, 2013.

### "

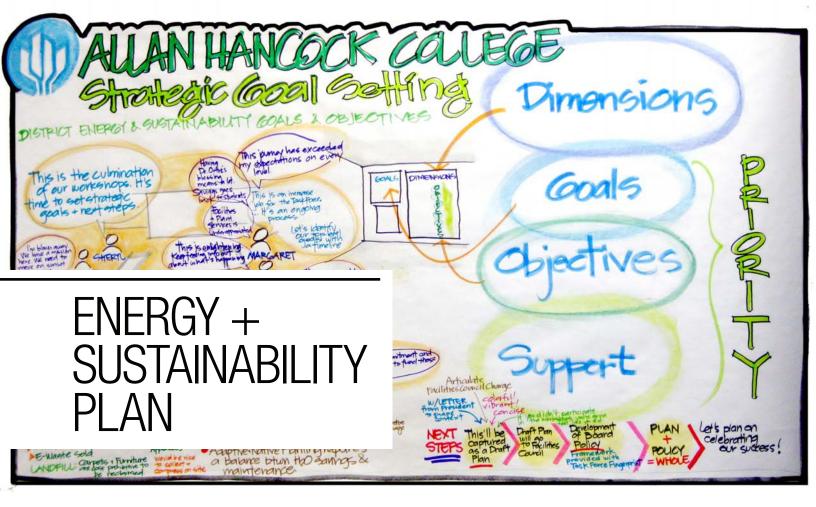
Sustainability is defined as meeting our needs today while ensuring that future generations can continue to meet their needs. Sustainability means longterm cultural, ecological and economic health and vitality. Environmental Sustainability is a process that maintains and enhances economic opportunity and community well-being for every segment of society while protecting and restoring the natural and social environment upon which people and economies depend.

As a member of the greater Santa Barbara County community, the Allan Hancock Joint Community College District plays a critical role in the educational and economic health of the region. As part of this responsibility, the district recognizes the importance of addressing sustainability in its daily operations to provide stewardship of the environment, and to provide students, employees, and visitors with knowledge that is intended to promote environmentally responsible behavior.

In order to continue the legacy of leadership in sustainability in all areas of the college, including instruction, operations, construction, facilities, land use, energy conservation, and environmental integrity; the board delegates to the superintendent/ president the authority to develop practices and an Energy and Sustainability plan as part of the district's educational and facilities master plan.

- Board Policy 3950, adopted August 20, 2013





### **OVERVIEW**

The Energy and Sustainability Plan is intended as the District's guide for the integration of sustainability into all areas of Allan Hancock College. The plan is organized around six dimensions, on which the college intends to focus its efforts. The goal for each dimension is stated and is followed by the objective(s) and activities that will support its achievement.

# DIMENSION 1: LEADERSHIP IN SUSTAINABILITY

### **GOAL**

Establish and promote campus-wide sustainability awareness that supports Allan Hancock College students and employees to be global citizens and stewards of the environment.

# OBJECTIVE 1.1

To provide students, employees, and volunteers with a shared vision of sustainability at Allan Hancock College

### **ACTIVITY 1.1.1:**

Draft and recommend a Sustainability Policy for approval by the Board of Trustees.

### ACTIVITY 1.1.2:

Recommend adoption of sustainability as a core value of the college.

### ACTIVITY 1.1.3:

Recommend that the Superintendent/President becomes a signatory to the American College and University President Climate Commitment (ACUPCC).

# OBJECTIVE 1.2 OBJECTIVE 1.3 OBJECTIVE 1

To have centralized support and resources for sustainability efforts at Allan Hancock College

### **ACTIVITY 1.2.1:**

Establish an Allan Hancock College Office of Sustainability (an online presence as well as a consistent physical location) to provide coordination and serve as a resource center.

To have an Allan Hancock College cyber-location for disseminating sustainability information, news, and resources

### **ACTIVITY 1.3.1:**

Develop, maintain, and publicize an easily accessed college Sustainability website.

### ACTIVITY 1.3.2:

Create an Allan Hancock College "green" logo by which to identify, document, celebrate, and publicize sustainability efforts and achievements.

To support, facilitate, and build capacity for sustainability implementation

### ACTIVITY 1.4.1:

Collaborate with local, regional, state, national, and international efforts in the government and education sectors.

### **ACTIVITY 1.4.2:**

Partner with local industry, utilities, and communitybased organizations to share and leverage resources in addressing sustainability issues.

### **ACTIVITY 1.4.3:**

Develop robust networks and coalitions among sustainability stakeholders to enhance diversity and promote efficiencies in collaboration and best practices.

### **ACTIVITY 1.4.4:**

Aggressively research and pursue all possible sources of funding and leveraged human and financial resources to develop, implement, and promote sustainability initiatives.

# DIMENSION 2: INFORMED, INCLUSIVE, + DYNAMIC PLANNING

### **GOAL**

Incorporate sustainability into the financial, facilities, and operational aspects of the master planning process.

# OBJECTIVE 2.1

To provide students and employees the opportunity to collaborate for positive change related to the implementation of the College sustainability initiative

### **ACTIVITY 2.1.1:**

Establish and recruit membership for a Sustainability Committee as part of the shared governance system.

### ACTIVITY 2.1.2:

Emphasize transparency and openness in sustainability planning and related professional development by posting all information on the Sustainability website and designate sustainability liaisons on each of the college committees.

# OBJECTIVE 2.

To ensure that college plans give students, employees, and the community a clear picture of the Allan Hancock College commitment to sustainability

### **ACTIVITY 2.2.1:**

As appropriate, include the commitment to sustainability in the college's Mission Statement, college-wide plans, and annual reports to internal and external communities.

### ACTIVITY 2.2.2:

Make sustainability planning an inclusive process by providing the opportunity to provide and/or post feedback.

### **ACTIVITY 2.2.3:**

Ensure that college plans are integrated with one another and, when printed, are formatted in ways that minimize waste and maintain legibility.

### ACTIVITY 2.2.4:

Broadly communicate measurable and time-specific sustainability targets; gather, measure, and evaluate progress; and celebrate milestone achievements.

### **ACTIVITY 2.2.5**:

Review and evaluate existing policies and update (as appropriate) to reflect sustainability values.

# OBJECTIVE 4

To keep Allan Hancock College up to date on sustainability issues and technologies

### ACTIVITY 2.3.1:

Design and implement staff/ professional development activities relating to sustainability that are fun, inclusive, and educational.

### **ACTIVITY 2.3.2:**

Actively encourage participation by employees from diverse parts of the college in sustainability conferences where they can network with other universities. colleges, and community-based organizations to exchange knowledge and best practices on sustainability issues.

# DIMENSION 3: SUSTAINABILITY IN EDUCATION + TRAINING

### **GOAL**

Promote informed citizenry and ecological literacy by incorporating and modeling sustainability practices in educational programs.

# OBJECTIVE 3.1

To infuse environmental, social, and economic sustainability throughout curricula

### ACTIVITY 3.1.1:

Utilize existing resources to develop and implement career and technical education related to new technologies for sustainability, including entrepreneurship.

### ACTIVITY 3.1.2:

Explore creation of a global sustainability awareness course and assess feasibility as a requirement for graduation.

### **ACTIVITY 3.1.3:**

Develop and implement a variety of courses that target audiences from "pre-K through grey" to educate the community on sustainability issues.

### **ACTIVITY 3.1.4:**

Incorporate bilingual (Spanish-English) communications wherever appropriate and practical.

To minimize energy use and generation of solid waste associated with traditional classroom methodology

### ACTIVITY 3.2.1:

Encourage instructors to develop web pages as a resource for their classes.

### ACTIVITY 3.2.2:

Offer distance learning alternatives.

# 3.2 OBJECTIVE

To promote awareness of campus facilities as informal "learning labs" to link curricula with campus operations

### ACTIVITY 3.3.1:

Install "Did You Know...." signage to promote responsible behavior.

### ACTIVITY 3.3.2:

Install "Did You Know..." signage that showcases sustainability features on campus.

### **ACTIVITY 3.3.3:**

Develop outdoor classroom curricula.

### ACTIVITY 3.3.4:

Create a campus garden for organic produce.

# OBJECTIVE

To provide service learning opportunities related to sustainability

### ACTIVITY 3.4.1:

Encourage and acknowledge volunteer work with organizations promoting environmental, social, and/ or economic sustainability.

### ACTIVITY 3.4.2:

Develop service learning projects for students.

# DIMENSION 4: SUSTAINABLE OPERATIONS

### **GOAL**

Develop and employ sustainable operations, standards, and best practices at Allan Hancock College.

# OBJECTIVE 4.1

To motivate students, employees, volunteers, and visitors to engage in positive environmentally-friendly practices

### **ACTIVITY 4.1.1:**

Promote behavior-based environmental responsibility.

### ACTIVITY 4.1.2:

Promote behavior-based energy conservation.

### ACTIVITY 4.1.3:

Schedule classes and hours of operation to maximize conservation of energy.

### **ACTIVITY 4.1.4:**

Promote awareness of global and local sustainability issues and best practices.

# OBJECTIVE 4.2 OBJECTIVE 4

To minimize the generation of solid waste by reducing, recycling, and reusing

### ACTIVITY 4.2.1:

Work toward a target goal of reducing pounds per person per year on campus.

### ACTIVITY 4.2.2:

Increase composting efforts.

### ACTIVITY 4.2.3:

Encourage paperless offices and communication strategies.

### **ACTIVITY 4.2.4:**

Install water bottle refilling stations at targeted campus locations.

### ACTIVITY 4.2.5:

Institute quality controls for environmentally safe waste disposal.

To institute environmentally preferable investment, purchasing, and procurement strategies

### ACTIVITY 4.3.1:

Create a community garden for organic produce.

### ACTIVITY 4.3.2:

Purchase locally-sourced supplies, materials, and organic produce when feasible.

### ACTIVITY 4.3.3:

Celebrate current 85% utilization of green cleaning methods and work toward 100% attainment.

### ACTIVITY 4.3.4:

Purchase green electricity.

### ACTIVITY 4.3.5:

Research and encourage development of a policy on environmentally and socially responsible investing.

# DIMENSION 5: SUSTAINABLE FACILITIES

### **GOAL**

Practice sustainable design and construction for existing and new facilities.

# OBJECTIVE 5.1

To attain a Leadership In Energy and Environmental Design (LEED) silver rating for new construction, major renovation projects, existing building operations, and upgrades

### **ACTIVITY 5.1.1:**

Achieve energy efficiency through the use of efficient systems, equipment, controls, and building design.

### ACTIVITY 5.1.2:

Build with environmentally preferable materials.

### **ACTIVITY 5.1.3:**

Employ water conservation strategies in plumbing, landscape design and installation, and irrigation.

### **ACTIVITY 5.1.4:**

Uphold storm water quality and quantity standards on campuses.

# OBJECTIVE 5.2 OBJECTIVE 5

To employ environmentally preferable, clean air strategies

### **ACTIVITY 5.2.1:**

Encourage landscape design clean air strategies.

### **ACTIVITY 5.2.2:**

Implement retrofit projects to minimize air pollution.

To attain net-zero or netpositive energy use

### ACTIVITY 5.3.1:

Explore the potential of generating power with solar shade structures and wind turbines.

### **ACTIVITY 5.3.2:**

Explore the potential of using landfill methane to fuel a co-gen plant.

### **ACTIVITY 5.3.3:**

Explore the potential of fuel cell, biofuel, and other emerging technologies.

# DIMENSION 6: TRANSPORTATION

### **GOAL**

Reduce carbon emissions resulting from Allan Hancock College traffic.

# OBJECTIVE 6.1

To develop and implement a comprehensive system of transportation management

### **ACTIVITY 6.1.1:**

Promote and accommodate use of alternative transportation to campus.

### **ACTIVITY 6.1.2:**

Promote use of and increase access to public transit.

### **ACTIVITY 6.1.3:**

Consider strategies to support environmentally beneficial transportation.

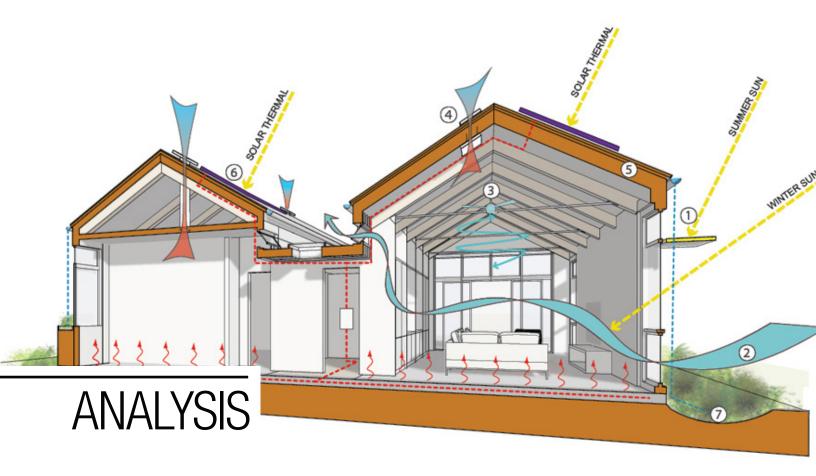
### **ACTIVITY 6.1.4:**

Promote and accommodate use of low and zero emission vehicles.

### **ACTIVITY 6.1.5:**

Replace existing district vehicle fleet with low and zero emission, high mileage vehicles with consideration for alternative fuels and electric vehicles.

# SUSTAINAE ANALYSIS



### **OVERVIEW**

In order to plan for the District's sustainable future, it was necessary to first assess its existing state. Data on historic and current water and energy use, waste production, and transportation utilization for both sites was collected, analyzed and compared to industry benchmarks. This criteria was then converted into a total carbon footprint. This analysis empowered the District to understand their existing natural resource use and subsequent environmental impact. Most importantly, this also provided the District with an opportunity to identify a path towards a reduced carbon footprint and create an environmentally positive impact for the region as a whole.

### **ANALYSIS**

- Climate Zone
- Stormwater
- **Energy Use**
- Water Use
- Waste Management
- Transportation
- Carbon Footprint

### ANALYSIS

# **CLIMATE ZONE**

The Allan Hancock College campuses experience a cool, Mediterranean climate typical of northern Californian coastal areas north of Point Conception. The climate is mostly sunny and is refreshed by cool breezes. Summers are warm with afternoon winds blowing until sunset, which naturally cools the region. The air is usually moist and fog or cloud cover commonly block the sun in the morning and evenings. Winters are cold but not severe enough to frost. The coolest parts of this region are the valley floors, canyons, and land troughs.

The further inland the location, the fewer heating degree days (HDD) and more cooling degree days (CDD) can be expected. Climate Zone 5 comes close to comfort standards, meaning little cooling is needed and heat is only necessary for part of the day, even in the winter. The mildness of the weather in Zone 5 is reflected by the fact that it is one of the lowest energy consuming climates.

Although both campuses are located within Climate Zone 5 each campus experiences unique climatic conditions. For the purpose of conducting the environmental analysis and in order to obtain an accurate depiction of the

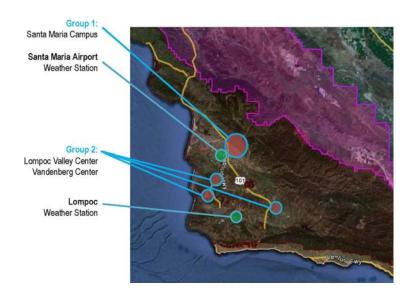
environmental conditions for each site, weather data from nearby weather stations for each location was used. Weather data was imported into Climate Consultant v5.4, Ecotect, WeatherTool and Vasari weather analytics software and was then graphed within a series of climatic charts.

Allan Hancock's dry bulb temperature, (indicated by the red line undulating up and down on the chart), remains relatively consistent throughout the course of the year relative to the comfort zone, (indicated by the grey bar which moves across the grid and which marks a temperature range of 70-75 degrees Fahrenheit). During the fall and winter seasons (November-March), temperatures tend to stay well below the comfort zone, and range between 40-60 degrees Fahrenheit; however, temperatures can dip as low as 28 degrees and can spike as high as 80 degrees. During the spring and summer months (April to September), temperatures continue to stay below the comfort zone, and range between 55-70 degrees, but can dip as low as 43 degrees and can spike as high as 84 degrees.

The area receives primarily northwest winds at an average of 6-9 mph with gusts up to 25 miles per hour. The winds maintain a cooling effect across the region at 51 degrees during the day. Winds cool down by 15-20 degrees at night. Precipitation usually falls during late autumn, through the winter, and into the early spring, with the majority of rain occurring from November to April. The summer is generally dry, however, some precipitation may occur from fog, which is common during the summer months. The average annual precipitation is 14 inches. In recent years, this area, as much of California, has been subjected to drought conditions.

The cool temperature trend and wind patterns are characteristic of the northern Santa Barbara county area. The profile provides an ideal setting for solar passive design strategies such as natural ventilation and thermal mass. These strategies are detailed further in the sustainability recommendations section.

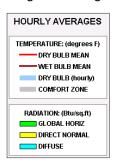
### **CLIMATE ZONE 5**

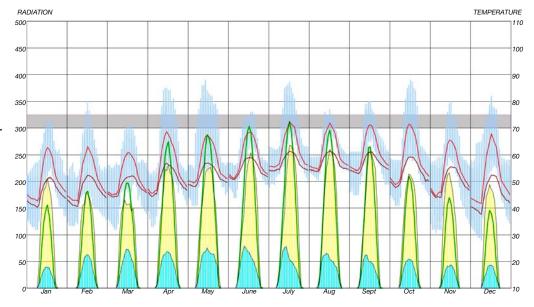


### **CLIMATIC DATA**

### Comfort Zone:

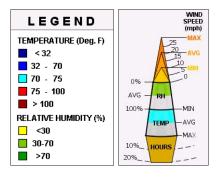
Majority of the year, temperatures are below the comfort range of 75 degrees.

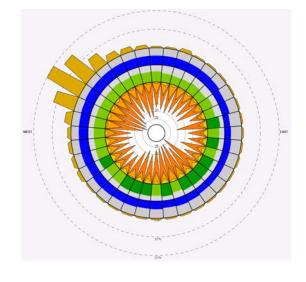




### Wind Rose:

Majority of the year, wind direction is coming from the northwest at an average of 6-9 miles per hour, with gusts up to 25 miles per hour





### ANALYSIS

# STORMWATER

The City of Santa Maria is located in the Santa Maria River Hydrologic Unit as identified by the Federal Register, which includes all areas tributary to the Cuyama River, Sisquoc River, and the Santa Maria River. The Santa Maria River Watershed is approximately 1,880 square miles (1.2 million acres) in size and is one of the largest coastal drainage basins in California. Agriculture and open space (undeveloped land) are the primary land uses in the Santa Maria River Watershed. Urban land use comprises about 3 percent of the watershed in the area, which includes the Santa Maria campus. The campus is located in Zone AE, which is characterized by a 1% chance of an annual flood event.

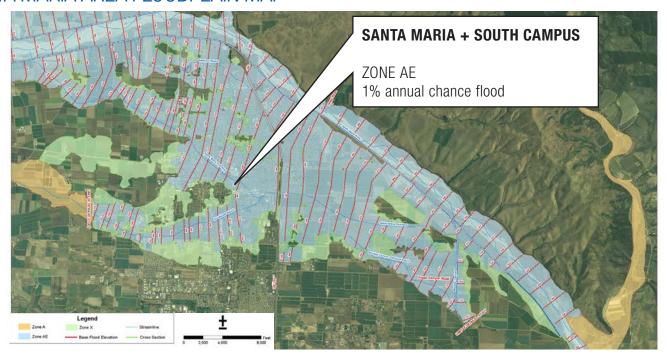
Lompoc receives flow from the upstream watersheds of the

Santa Ynez River and from San Miguelito Creek, which drains from unincorporated Santa Barbara County lands, south of town. After reaching a detention basin, San Miguelito Creek travels through the City of Lompoc in a deep concrete channel, before it enters the Santa Ynez River in the northwest section of the City. The City is located at the lower end of the Santa Ynez River Watershed. In times of heavy flow, the Santa Ynez River reaches flood stage and water flows onto agricultural fields west of town. The City's lowest laying areas are flooded and the channels back up. as there is nowhere for the water to discharge. In this situation, the City's streets are designed to accommodate storm flows until the river level recedes. Lompoc Valley Center is located in a zone that does not occur within the 100-year floodplain of the Santa

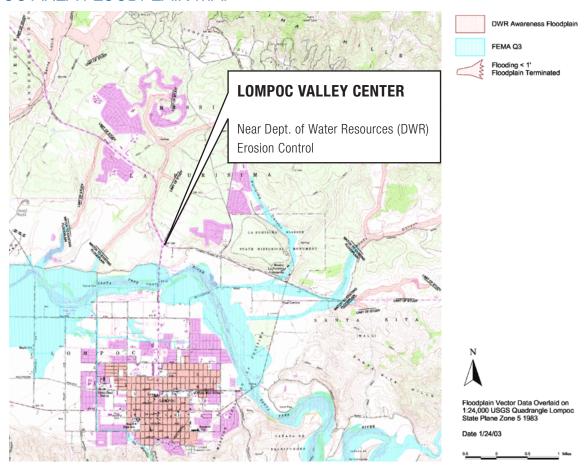
Ynez River. However, it is located in a zone designated as requiring erosion control measures to prevent excessive stormwater runoff and degradation of sediment from occurring. As such, Allan Hancock College has a prime role at both campuses of upholding stormwater quantity and quality through the implementation of best management practices of stormwater policy.

The City of Santa Maria and the City of Lompoc have formulated respective Storm Water Management Plans (SWMP) which can serve as a framework for identifying, assigning, and implementing control measures and Best Management Practices (BMPs) intended to reduce the discharge of pollutants from the City's small municipal separate storm sewer system and protect downstream water quality.

### SANTA MARIA AREA FLOODPLAIN MAP



### LOMPOC AREA FLOODPLAIN MAP



# ENERGY USE

An analysis of Allan Hancock College's energy use over the past 3 years (from 2011-2013) for the Santa Maria and Lompoc campuses was conducted. Electricity and gas use were compiled together in order to show total energy use.

Two energy metrics were used in order to provide the College with reference for performance. The first of these two metrics is the California Energy Commission's 2006 report on energy use in higher education buildings. This report specifically looked at energy use in 206 million square feet worth of higher education facilities. The CEC reference energy use for a higher education building is 76.6 kBTU/sf/year.

Energy Star utilizes the Energy Information Administration's Commercial Buildings Energy Consumption Survey (CBECS) to determine the type and scale of energy usage a building should meet in order to qualify as an Energy Star building. A building should perform 35% better than an average building of a similar building type in a similar climate zone to be considered an Energy Star building. A 35% more efficient higher education building would operate at 49.9 kBTU/sf/year and would be minimally compliant with EnergyStar requirements.

Santa Maria consumed about 81 kbtu/sf/year ion 2009 and increased to 86 kbtu/sf/year in 2012. Lompoc consumed approximately 117 kBtu/sf/year in 2009, which spiked up to 137 kBTU/sf/year in 2010, and then dipped down to 117 kBtu/sf/year again in 2012. Both campuses are above the California Energy Commission 2006 report of higher education facilities' energy use, (76.6 kBTU/sf/yr) as well as the Energystar higher education facility's energy use of 49.9/sf/yr. At Santa Maria, this maybe attributed to the fact that new facilities came online to the campus during this time period, which thereby resulted in additional energy demand. At Lompoc, the energy use increase could be attributed to an issue of testing, balancing and coordination of time of use with class scheduling.

### **SUSTAINABLE STRATEGIES**

### **WINTER STRATEGIES**



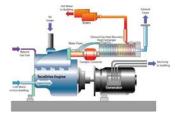
Behavioral changes in building operations



Build a tight building envelope with high R value insulation in walls and roof.



Thermal Mass (concrete, masonry, structurally insulated panel construction)



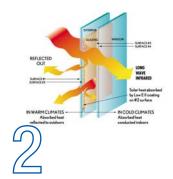
4

High Efficiency Mechanical Heating

### SUMMER STRATEGIES



Behavioral changes in building operations

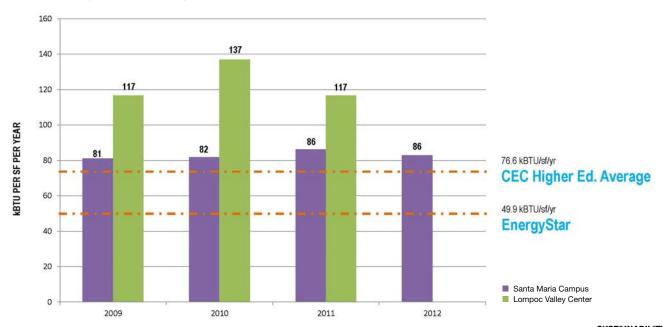


Use insulating glass plus thermal mass to naturally warm buildings, while preventing overheating through glass.



Mechanical cooling is rarely required, rely on natural ventilation.

### **ENERGY USE** (KBTU/SF/YEAR)



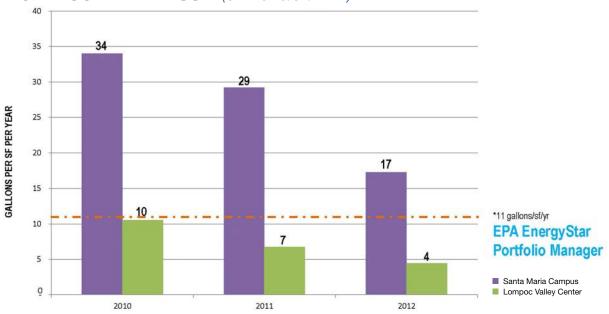
# ANALYSIS WATER USE

An analysis of Allan Hancock College's building water use over the past 3 years (from 2009-2012) was also conducted. The College has been able to reduce water use significantly over the last 2 years at both campuses. This is due to the upgrading of plumbing fixtures. The Environmental Protetection Agency's Data Trends Water Use Tracking study serves as reference baseline for water use in this analysis. The Santa Maria campus data shows that the water use is above the average (17 gallons per square foot), when compared to an average use of 11 gallons/sf/year per the EPA. Lompoc water data shows that the campus outperforms the EPA's water use benchmark, at 4 gallons/sf/year.

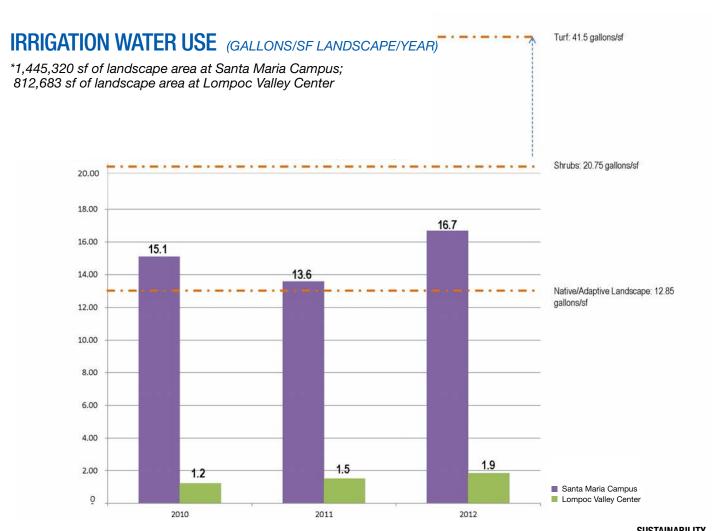
Analyzing the planting areas and materials reveals that the Santa Maria campus has a significant amount of landscaped area that is composed of turf, which requires substantially more irrigation than native, adaptive and drought tolerant plants. Over the last three years, irrigation use has increased from 15.1 gallons/sf of landscaping to 16.7 gallons/sf of landscaping. At Lompoc, the majority of the landscaping is composed of native, adaptive and drought tolerant plant typologies. As a result, the campus's irrigation use has been relatively low, ranging from 10 gallons/sf in 2009 to 4 gallons/sf in 2012. Three irrigation figures have been used to provide a frame of

reference: turf water use, shrubs water use and native/adaptive landscape water use. With the scarcity of water in the region, reduced water use is recommended at Santa Maria, and can be achieved through the incorporation of more native, adaptive, and drought tolerant landscaping.

### BUILDING INDOOR WATER USE (GALLONS/SF/YEAR)



<sup>\*</sup> Median water use averaged between K-12 and office building types



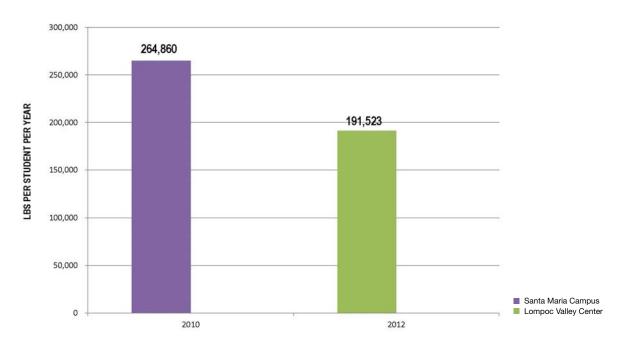
### **ANALYSIS**

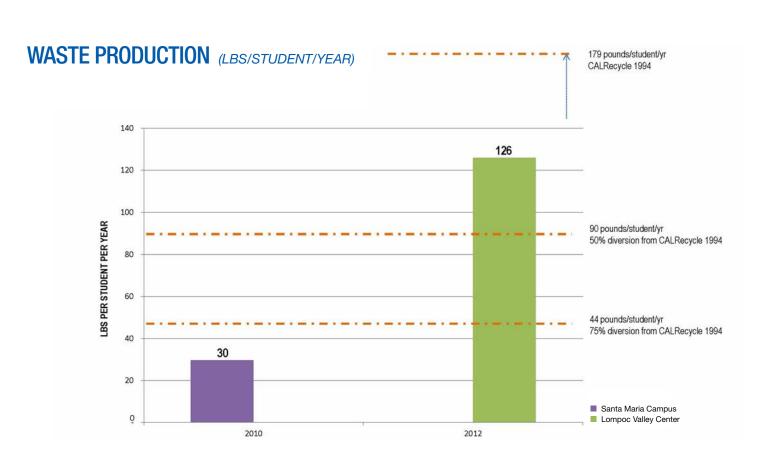
## WASTE MANAGEMENT

Waste production was studied at both Santa Maria and Lompoc. In 2010, Santa Maria produced a total of 264,860 pounds of trash. In 2012, Lompoc produced a total of 191,523 pounds of trash. When considering the student population of each campus, the data shows that Santa Maria produced 30 pounds of trash/ student in 2010, while Lompoc produced 126 pounds of trash per student. When compared to a CalRecycle study of higher institutions' waste production, the Santa Maria campus outperformed a

minimum benchmark of 44 pounds per student, whereas Lompoc was well above the maximum benchmark of 90 pounds per student. Through further campus wide recycling efforts such as green waste, composting, e-waste collection, construction waste diversion and involvement in student recycling campaigns such as Recyclemania, and with more detailed coordination with the campus's respective hauling agencies, a reduced waste production rate can be achieved.

## WASTE PRODUCTION (TOTAL POINTS OF WASTE)





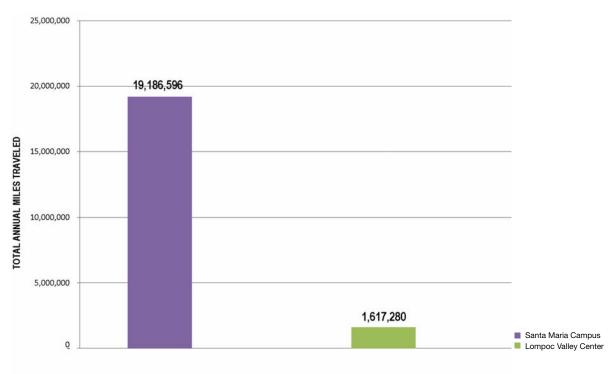
#### **ANALYSIS**

# **TRANSPORTATION**

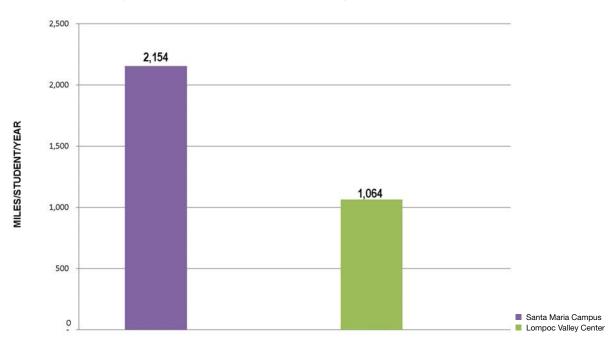
Transportation over the course of 2013 was analyzed in order to ascertain the frequency and intensity of automobile use at Allan Hancock College. Data was based upon the number of units attempted per enrolled student within a 50 mile radius. The study also took roundtrip miles per effective days per semester into account. A total of approximately 19.1 million miles were traveled in

2012 by students at Santa Maria. This equates to 2,154 miles per student. A total of approximately 1.6 million miles were traveled in 2012 by students at Lompoc. This equates to 1,064 miles per student. These relatively high figures can in part be attributed to the fact that the campuses are isolated educational community college resources in the region with matched limited mass transit resources.

## TRANSPORTATION (TOTAL MILES/YEAR 2012)



## TRANSPORTATION (TOTAL MILES/STUDENT/YEAR 2012)



#### **ANALYSIS**

# CARBON FOOTPRINT

Energy, water, waste and transportation data for Allan Hancock College was combined and converted into a total carbon footprint, which is measured in pounds of carbon, or CO2e. CO2e stands for carbon dioxide equivalent, and is the standard unit used to measure the global warming potential (GWP) of greenhouse gases emitted into the earth's atmosphere. By using this unit of measurement, a carbon footprint consisting of various sources can be expressed as a single number. For the purposes of this analysis, the annual number of Kilowatt-hours of electricity, therms of fuel, gallons of water, pounds of waste, and miles driven has been converted into pounds of CO2e per square foot of building area. Energy (electricity and fuel), water, waste and transportation were chosen as the main criteria, as a solid set of data was available to provide a basis for the calculation.

The carbon footprint of Santa Maria and Lompoc with transportation and without transportation was studied. This allows for a better comprehension of each criteria's (energy, water, waste, transportation) contribution to the College's carbon emissions.

Taking transportation into account, the Santa Maria maintains a total of 59.7 pounds of Co2e. The greatest contributor to this carbon footprint is transportation, which accounts of 77% of the total. This can be attributed to the large number of miles traveled by students on an annual basis. Without transportation taken into account, the Santa Maria maintains a total of 14 pounds of Co2e. The greatest contributor to this version of the carbon footprint is energy, which accounts of 99% of the total.

At Lompoc the carbon footprint with transportation taken into account totals 42 pounds of Co2e. The greatest contributor to this carbon footprint is transportation, which accounts of 52% of the total. This can also be attributed to the large number of miles traveled by students on an annual basis. Without transportation taken into account, the Santa Maria maintains a total of 20 pounds of Co2e. The greatest contributor to this version of the carbon footprint is energy, which accounts of 99% of the total.

In order to provide the College with a frame of reference a comparative analysis of like institutions was conducted, the carbon footprints of several higher education institutions was calculated, based off of each institution's published carbon footprint data provided from the American College and University Climate Action Plan's

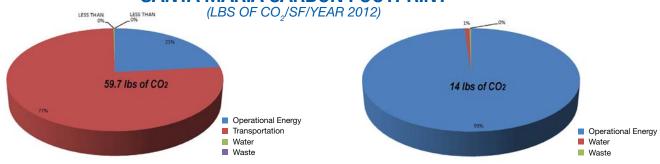
Annual report. The carbon footprints for all institutions in the study are represented by pounds of CO2 per square foot of building space per year. When taking transportation into account, the Santa Maria and Lompoc maintain fairly large carbon footprints. Institutions with on campus housing are indicated in light blue, institutions with no housing are indicated in dark blue. This detail allows the College to ascertain the impact of transportation on the overall carbon footprint. Those institutions with on campus housing benefited from reduced reliance on student travel by single occupant vehicles, and as a result also achieved a lower carbon footprint.

When omitting transportation from the carbon footprint equation, the Santa Maria and Lompoc maintain average carbon footprints. This further illustrates the impact of transportation on the carbon footprint of a higher education institution. Without transportation taken into consideration, Allan Hancock College maintains a significantly lower carbon footprint. This study indicates that relative to energy, Allan Hancock College is able to outperform several peer institutions.

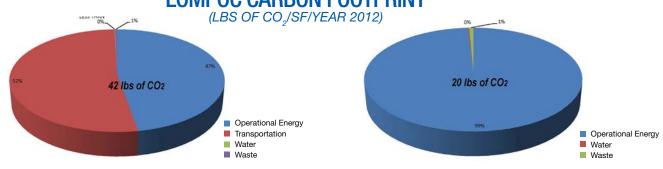
## WITH TRANSPORTATION

## WITHOUT TRANSPORTATION

#### SANTA MARIA CARBON FOOTPRINT

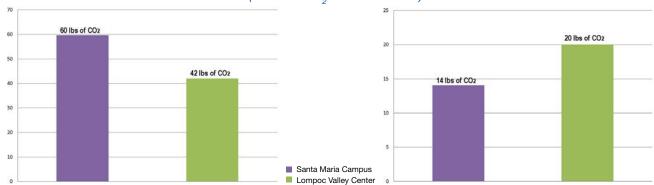


#### LOMPOC CARBON FOOTPRINT

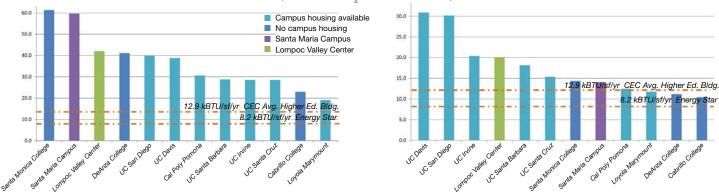


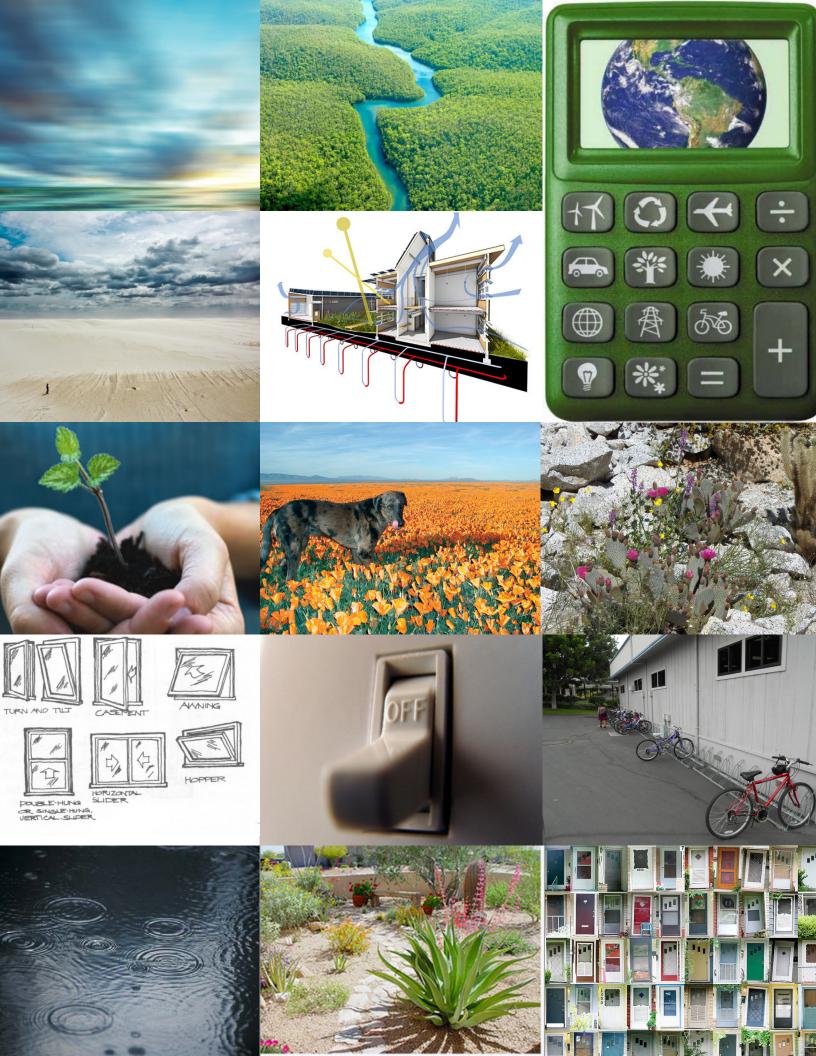
#### COMPARATIVE CARBON FOOTPRINT

(LBS OF CO,/SF/YEAR 2012)



## INSTITUTIONAL COMPARISON OF CARBON FOOTPRINTS (LBS OF CO./SF/YEAR 2012)





# SUSTAINABILITY RECOMMENDATIONS



#### **OVERVIEW**

The recommendations for sustainable campus facilities and site improvements are integrated into the overall recommendations for the future development of both college campuses. The focus of these recommendations was guided by the goals established by district stakeholders in the sustainability workshops and the opportunities that were brought to light through the environmental analysis process.

#### RECOMMENDATIONS

- Santa Maria Campus + South Campus
- Lompoc Valley Center

# SANTA MARIA CAMPUS + SOUTH CAMPUS

#### **ENERGY USE + RENEWABLES**

To optimize energy efficiency for new buildings and in existing buildings, the following recommended strategies are provided for consideration. New building projects should strive to achieve a Leadership in Energy and Environmental Design (LEED) of Silver. The recommendation below will aid in this effort, and most importantly will allow the campus to becomes a living laboratory for sustainability.

#### THERMAL MASS AND **SOLAR SHADING**

Using thermal mass building materials such as concrete masonry units (CMU) or high density concrete can block out the sun, absorb solar radiation progressively over the course of the day, and then emit the heat back into spaces when the warmth is needed. By allowing the sun to penetrate glazing and then warm the interior floor slab of spaces, for example, the thermal mass of the floor will be able to absorb the warmth of the sun and then radiate it back into the interior.

#### NATURAL VENTILATION

Natural ventilation combined with operable windows is an effective way of making use of the abundant and cooling breezes to allow building occupants to rely less on mechanical cooling systems. This strategy can be combined with HVAC interlocks, which, through the use of a sensor, ensures that when a window or door is propped open, mechanical heating or cooling is shut off. This will result in increased occupancy comfort and reduced energy consumption.

#### DAYLIGHT HARVESTING

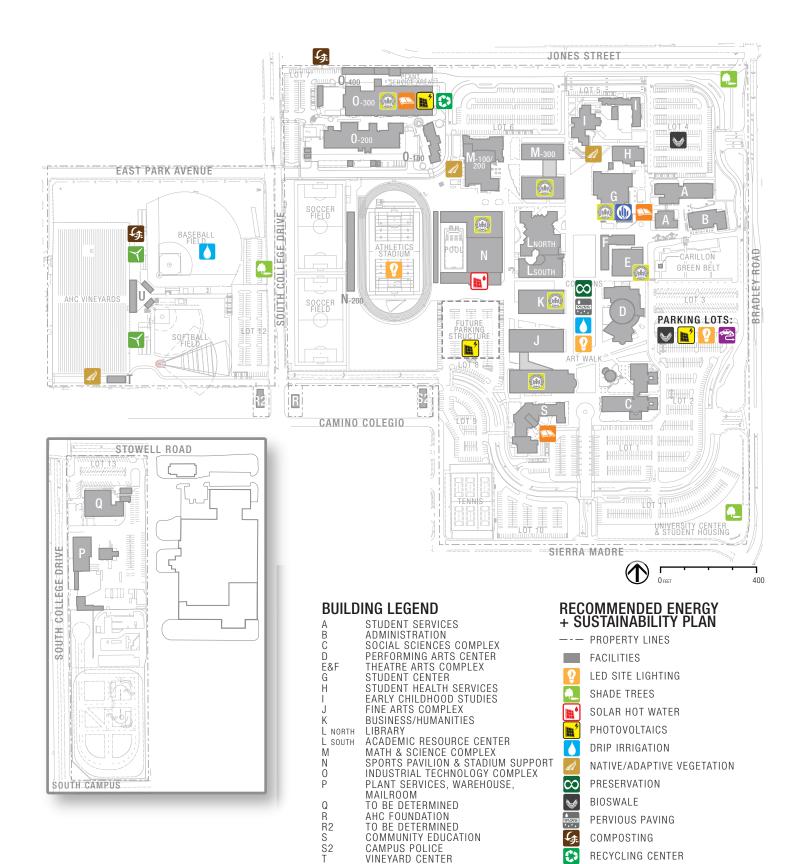
Daylight Harvesting via the use of skylights and solar tubes are an efficient and effective way of providing natural light, which reduces reliance on electrical lighting.

#### **BUILDING INSULATION**

Building insulation is recommended for all new construction via the use of high performance insulated glass units (SHGC of 0.27 and visible transmittance of 63%) and superior building envelope insulation (R30 roof, R21 walls). These strategies could also be effective if incorporated in the scope of building renovations.

#### LED SITE LIGHTING

It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED.



BASEBALL/SOFTBALL SUPPORT

#### OFFICE OF SUSTAINABILITY

WIND TURBINE

LEED SILVER

HYBRID VEHICLE PARKING OR CHARGING STATIONS SUSTAINABLE EDUCATION

# SANTA MARIA CAMPUS + SOUTH CAMPUS (cont.)

#### PHOTOVOLTAIC PANELS

Photovoltaic panels, which double as shading devices in parking lots, would provide the campus with reliable sources of renewable energy and greatly offset the energy use of the campus. This strategy is recommended as an enhancement to energy conservation methods described above.

#### WIND TURBINES

The campus receives significant wind which could generate some renewable energy. This technology, if implemented, is recommended at the agricultural fields to promote a clear air path and to prevent any visual obstructions.

#### **EFFICIENT BUILDING** PLUMBING FIXTURES

New buildings should include water fixtures to provide, at a minimum, 40% below the Energy Policy Act water usage baseline at the time of construction. A 40% water savings can be maintained and exceeded through the use of 1.28 gallon per flush (gpf) water closets, 0.125 gpf urinals, 0.5 gallon per minute (gpm) lavatories that operate on a 10 second metered cycle, 1.0 gpm sinks, and 1.5 gpm shower heads. Both campuses have phased out most older plumbing fixtures. Any remaining older plumbing fixtures should be replaced with new low-flow fixtures as well.

#### **SOLAR HOT WATER**

Provide solar domestic hot water at facilities with high hot water use for energy-efficient heating of water for food service in Student Center G and showers in Sports Pavilion N.

#### PLANTING DESIGN

Planting design, when possible, should follow a palette of California native plant varieties, low-water use Mediterranean or succulents. All plants would be grouped appropriately by hydrozones, by plant community, or according to Water Use Classifications of Landscape Species (WUCOLS) water use. Limit turf to places where it is needed and used. All planting areas should be mulched with bark or rock mulch to reduce water loss through evaporation.

#### SHADE TREES

Shade trees are an important part of the college's image and provide relief from the sun. Trees also prevent overheating of the campus hardscape, thereby reducing heat island effect.

#### **IRRIGATION**

Connect new irrigation systems to a campuswide irrigation monitoring system which relies on weather station data to adjust irrigation levels. Spray irrigation is preferred for equipment visibility and lower maintenance needs. When necessary, utilize a subsurface drip system, which is less susceptible to damage by animals or prone to typical maintenance issues. Plants shall be grouped according to hydrozones for more efficient irrigation system design.

#### POROUS PAVEMENT

Permeable hardscape alternatives should be used whenever possible: permeable pavers, porous concrete, porous asphalt, grasscrete/turf block are recommended for parking stalls, fire lanes, and pedestrian walkways and plazas. High albedo permeable or open-grid hardscape surfaces are preferred to reduce the heat island effect. Permeable surfaces can be used in conjunction with underground storage such as cisterns, pipes, tanks, or cells, for groundwater recharge or reuse in the irrigation system.

#### **BIOSWALES**

Vegetated swales are already incorporated into areas of the campus, but additional swales may be provided at parking areas and around new buildings. Swales should be planted with appropriate plant material, non-invasive California native riparian type species only. Deliberate use of boulders and rocks are encouraged to slow water and prevent bank and channel bed erosion. Overflow drains/ catch basins located in bioswales and retention basins should be raised above finished grade to allow small amounts of water to infiltrate naturally before overflow is discharged to the storm drain system.

#### RAINWATER HARVESTING

Modestly-scaled rainwater harvesting can be an effective, albeit seasonal, way to provide water to localized vegetated areas, while providing a valuable sustainable education component, such as near the Early Childhood Education and Student Center. The water capturing devices can be retrofitted onto existing buildings, near the downspouts of roof drains, and can either blend into the surroundings or be designed as purposeful icons of sustainability.

#### **COMPOSTING**

Composting areas located near food services and the Plant Services facilities will provide a means of diverting food waste from landfills, as well as a means of reusing refuse onsite as amendments for campus landscaping and the campus organic vegetable garden.

#### RECYCLING CENTER

A recycling center at the Plant Services facilities will provide the campus with a dedicated area for the collection and sorting of recyclable materials. The recycling center activities can be coordinated with local hauling agencies to maximize construction waste management and daily waste collection.

# SANTA MARIA CAMPUS + SOUTH CAMPUS (cont.)

#### CHARGING STATIONS AND PREFERRED PARKING FOR FUEL EFFICIENT VEHICLES/CARPOOLING

Electric vehicle charging stations and preferred parking spaces for LEVs, FEVs, and carpoolers should be placed in convenient locations throughout the campus, as determined through implementation studies. This will encourage students, staff and faculty to consider more ecologically aware modes of transportation, and will help to reduce the overall carbon footprint of the campus.

#### **EDUCATION**

Sustainable education can be provided throughout the campus by highlighting the green building and site strategies used. Sustainable "Did you know...?" signage that displays the College green logo will encourage students and visitors to stop and learn more about incorporating sustainability into their daily routines.

#### OFFICE OF SUSTAINABILITY

An Office of Sustainability is recommended near or at Student Center G to provide coordination and serve as a resource center for sustainable action on campus.



# LOMPOC VALLEY CENTER

#### **ENERGY USE + RENEWABLES**

To optimize energy efficiency for new buildings and in existing buildings, the following recommended strategies are provided for consideration. New building projects should strive to achieve a Leadership in Energy and Environmental Design (LEED) of Silver. The recommendation below will aid in this effort, and most importantly will allow the campus to becomes a living laboratory for sustainability.

## THERMAL MASS AND SOLAR SHADING

Using thermal mass building materials such as concrete masonry units (CMU) or high density concrete can block out the sun, absorb solar radiation progressively over the course of the day, and then emit the heat back into spaces when the warmth is needed. By allowing the sun to penetrate glazing and then warm the interior floor slab of spaces, for example, the thermal mass of the floor will be able to absorb the warmth of the sun and then radiate it back into the interior.

#### NATURAL VENTILATION

Natural ventilation combined with operable windows is an effective way of making use of the abundant and cooling breezes to allow building occupants to rely less on mechanical cooling systems. This strategy can be combined with HVAC interlocks, which, through the use of a sensor, ensures that when a window or door is propped open, mechanical heating or cooling is shut off. This will result in increased occupancy comfort and reduced energy consumption.

#### DAYLIGHT HARVESTING

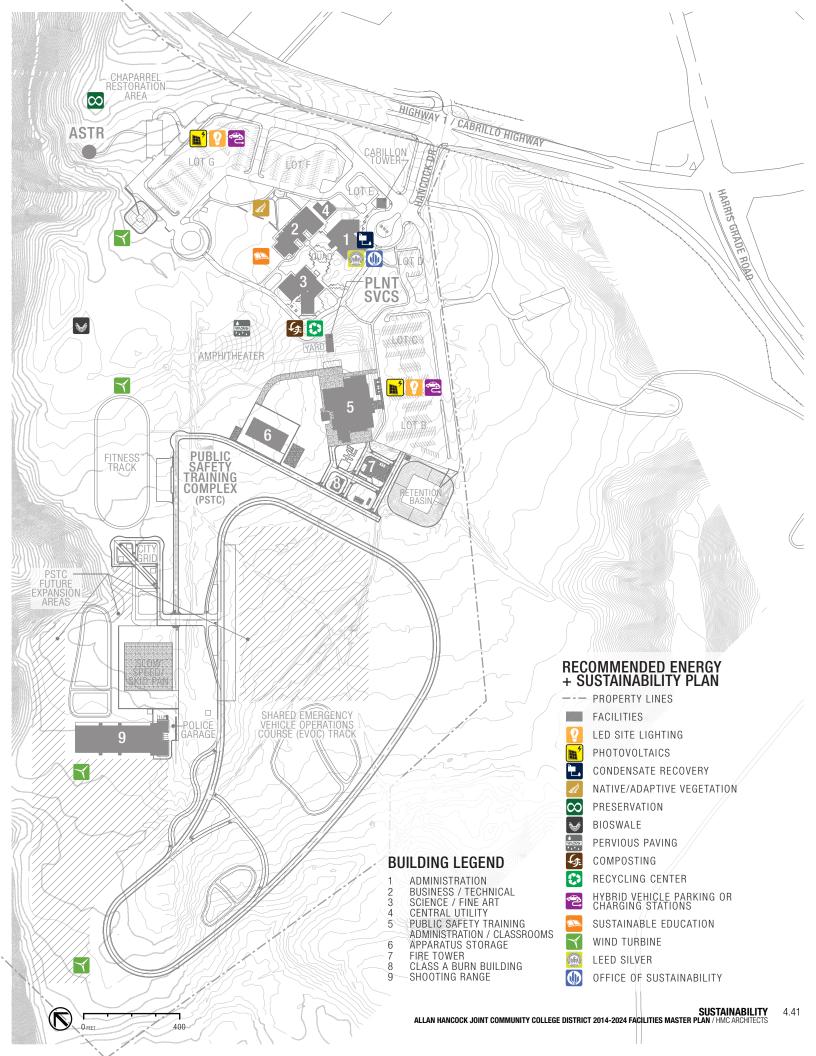
Daylight Harvesting via the use of skylights and solar tubes are an efficient and effective way of providing natural light, which reduces reliance on electrical lighting.

#### **BUILDING INSULATION**

The effectiveness of upgrading existing building windows and insulation should be considered for renovation projects. Consider the use of high performance insulated glass units (SHGC of 0.27 and visible transmittance of 63%) and superior building envelope insulation (R30 roof, R21 walls). These strategies could also be effective if incorporated in the scope of building renovations.

#### LED SITE LIGHTING

It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED.



# LOMPOC VALLEY CENTER (cont.)

#### PHOTOVOLTAIC PANELS

Photovoltaic panels, which double as shading devices in parking lots, will provide the campus with reliable sources of renewable energy and greatly offset the energy use of the campus. This strategy is recommended as an enhancement to energy conservation methods described above.

#### WIND TURBINES

The campus receives significant wind which could generate some renewable energy. This technology, if implemented, is recommended at the western edge of campus development or at the perimeter of parking lots to promote a clear air path and to prevent any visual obstructions.

## EFFICIENT BUILDING PLUMBING FIXTURES

New buildings should include water fixtures to provide, at a minimum, 40% below the Energy Policy Act water usage baseline at the time of construction. A 40% water savings can be maintained and exceeded through the use of 1.28 gallon per flush (apf) water closets, 0.125 gpf urinals, 0.5 gallon per minute (gpm) lavatories that operate on a 10 second metered cycle, 1.0 gpm sinks, and 1.5 gpm shower heads. Both campuses have phased out most older plumbing fixtures. Any remaining older plumbing fixtures should be replaced with new low-flow fixtures as well.

#### **SOLAR HOT WATER**

Provide solar domestic hot water at facilities with high hot water use for energy-efficient heating of water for food services and showers.

#### PLANTING DESIGN

The campus currently follows a palette of California native plant varieties, low-water use Mediterranean and succulents. Current planting design standards at Lompoc Valley Center should continue and be expanded to any future development on campus.

#### POROUS PAVEMENT

Permeable hardscape alternatives should be used whenever possible: permeable pavers, porous concrete, porous asphalt, grasscrete/turf block are recommended for parking stalls, fire lanes, and pedestrian walkways and plazas. High albedo permeable or open-grid hardscape surfaces are preferred to reduce the heat island effect. Permeable surfaces can be used in conjunction with underground storage such as cisterns, pipes, tanks or cells, for groundwater recharge or reuse in the irrigation system.

#### **BIOSWALES**

Swales should be planted with appropriate plant material, noninvasive California native ripariantype species only. Deliberate use of boulders and rocks are encouraged to slow water and prevent bank and channel bed erosion. Overflow drains/catch basins located in bioswales and retention basins should be raised above finished grade to allow small amounts of water to infiltrate naturally before overflow is discharged to the storm drain system.

#### **COMPOSTING**

Composting areas located near food services and Plant Services buildings will provide a means of diverting food waste from landfills, as well as a means of reusing refuse onsite as amendments for campus vegetation, such as the organic vegetable garden.

#### RECYCLING CENTER

A recycling center at the Plant Services building will provide the campus with a dedicated area for the collection and sorting of recyclable materials. The recycling center activities can be coordinated with local hauling agencies to maximize construction waste management and daily waste collection.

#### CHARGING STATIONS AND PREFERRED PARKING FOR FUEL EFFICIENT VEHICLES/CARPOOLING

Hybrid vehicle charging stations and preferred parking spaces for LEVs, FEVs and carpoolers should be located closest to campus buildings. This will encourage students, staff and faculty to consider more ecologically aware modes of transportation, and will help to reduce the overall carbon footprint of the campus.

#### **EDUCATION**

Sustainable education can be provided throughout the campus by highlighting the green building and site strategies used. Sustainable "Did you know...?" signage that displays the College green logo will encourage students and visitors to stop and learn more about incorporating sustainability into their daily routines.

#### OFFICE OF SUSTAINABILITY

An Office of Sustainability is recommended near or at Building 1 to provide coordination and serve as a resource center for sustainable action on campus.





