



2018

SOUTHWESTERN COLLEGE
FACILITIES MASTER PLAN



2018

SOUTHWESTERN COLLEGE

FACILITIES MASTER PLAN

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LETTER FROM THE SUPERINTENDENT/PRESIDENT



Kindred Murillo, Ph.D.

For more than 57 years, Southwestern College and the South County have grown together to create a community that builds pathways to success for its residents.

At Southwestern College, those pathways include academic programs that prepare our students for four-year universities and livable wage jobs and the construction of world-class educational facilities to house those programs.

Because our community believes in the hopes and dreams of its residents, voters supported three general obligation bonds since 2000, totaling \$878 million. Through Proposition AA we built a new campus in Otay Mesa, improved our National City campus and built a new library and café on our Chula Vista campus. Through Proposition R passed in 2008, we built a new wellness and aquatics complex, new math and science building, expanded the National City campus, installed emergency communication systems at all campuses and built the largest solar array at any educational institution in the county. Through Proposition Z passed in 2016, we are currently building a new performing arts center and new college police building, with more projects in design.

Guiding all the construction are Facilities Master Plans that bring together the voices of college and community stakeholders. This latest update reflects 13 to 16 months of collaboration to ensure the next phases of construction reflect the physical and educational needs of our district.

Not since the first years of Southwestern College's existence has there been this much construction. We are excited about a future that honors our Maya architectural history. We hope you share our enthusiasm and that you will feel welcome to come and see our transformation. You belong at SWC!

A handwritten signature in black ink that reads "Kindred Murillo". The signature is fluid and cursive, written on a light-colored background.

OVERVIEW

Southwestern College's long-term and short-term planning processes inform and are informed by one another in cyclic, integrated processes that begin with the mission. The mission describes Southwestern College's target student population and the services that the College promises to provide to its communities.

MISSION

Southwestern Community College District, the only public institution of higher education in southern San Diego County, provides services to a diverse community of students by providing a wide range of dynamic and high quality academic programs and comprehensive student services, including those offered through distance education. The College District also stimulates the development and growth of the region through its educational, economic and workforce opportunities, community partnerships and services.

Southwestern Community College District promotes student learning and success and prepares students to become engaged global citizens by committing to continuous improvement that includes planning, implementation and evaluation. The College District provides educational opportunities in the following areas: associate degree and certificate programs, transfer, professional, technical, and career advancement, basic skills, personal enrichment and continuing education.

PHILOSOPHY

We are committed to meeting the educational goals of students and other stakeholders in an environment that promotes intellectual growth and develops human potential. The mission is accomplished by providing technology and tools, varied curriculum and a culture of inclusiveness where all student can learn, grow and succeed.

VISION

Southwestern Community College District, in recognizing diversity, serves to enrich the community resources as a foundation where students prepare for University, the workforce, the global economy and productive citizenship.

VALUES + PRIORITIES

Plan, design and construct facilities at all locations to meet the evolving needs of all students, faculty, staff and the community

- Provide for the safety and security of students, faculty, and staff

- Foster Innovation / consider new educational facility models (think outside the box)

- Ensure that all facilities are planned to be inclusive of technology and provide the appropriate tools to support and deliver 21st Century instruction

Create an educational environment at all Southwestern College locations that is welcoming, inclusive and accessible

- Improve accessibility and the overall student experience

- Explore student housing options to assist in alleviating housing insecurity

- Meet student support services needs

- Improve parking & address transportation needs

Ensure an inclusive and transparent FMP update that is broadly communicated

- Ensure all constituent groups and sites that are to be represented are present at meetings

- Provide opportunities for District-wide dialog by holding forums at the higher education centers as well as the main campus

- Provide opportunities for community dialog and input by holding community forums at off campus locations (similar to what was done during the bond campaign)

- Provide options and communicate recommendations to the Governing Board for review discussion and approval





01 SWCCCD

SWCCD OVERVIEW

This section of the document provides an overview of the District and describes the purpose and process for developing this Facilities Master Plan for Southwestern College.



The following elements are included in this section:

REGIONAL CONTEXT

DISTRICT SERVICE AREA

PURPOSE

PROCESS

PARTICIPATION

CAMPUS IMPRESSIONS

PLANNING FOR SUCCESS

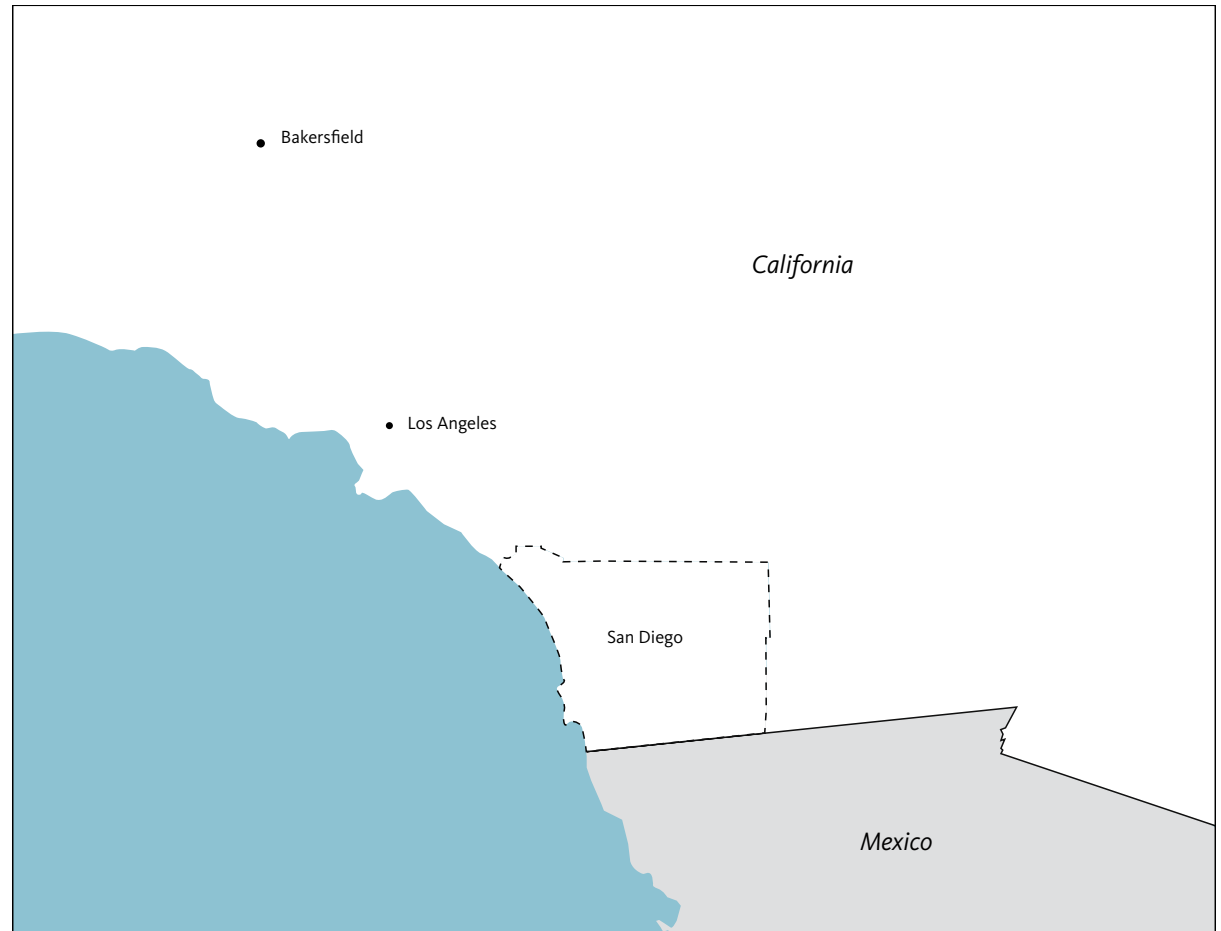
FACILITIES PLANNING PRINCIPLES

REGIONAL CONTEXT

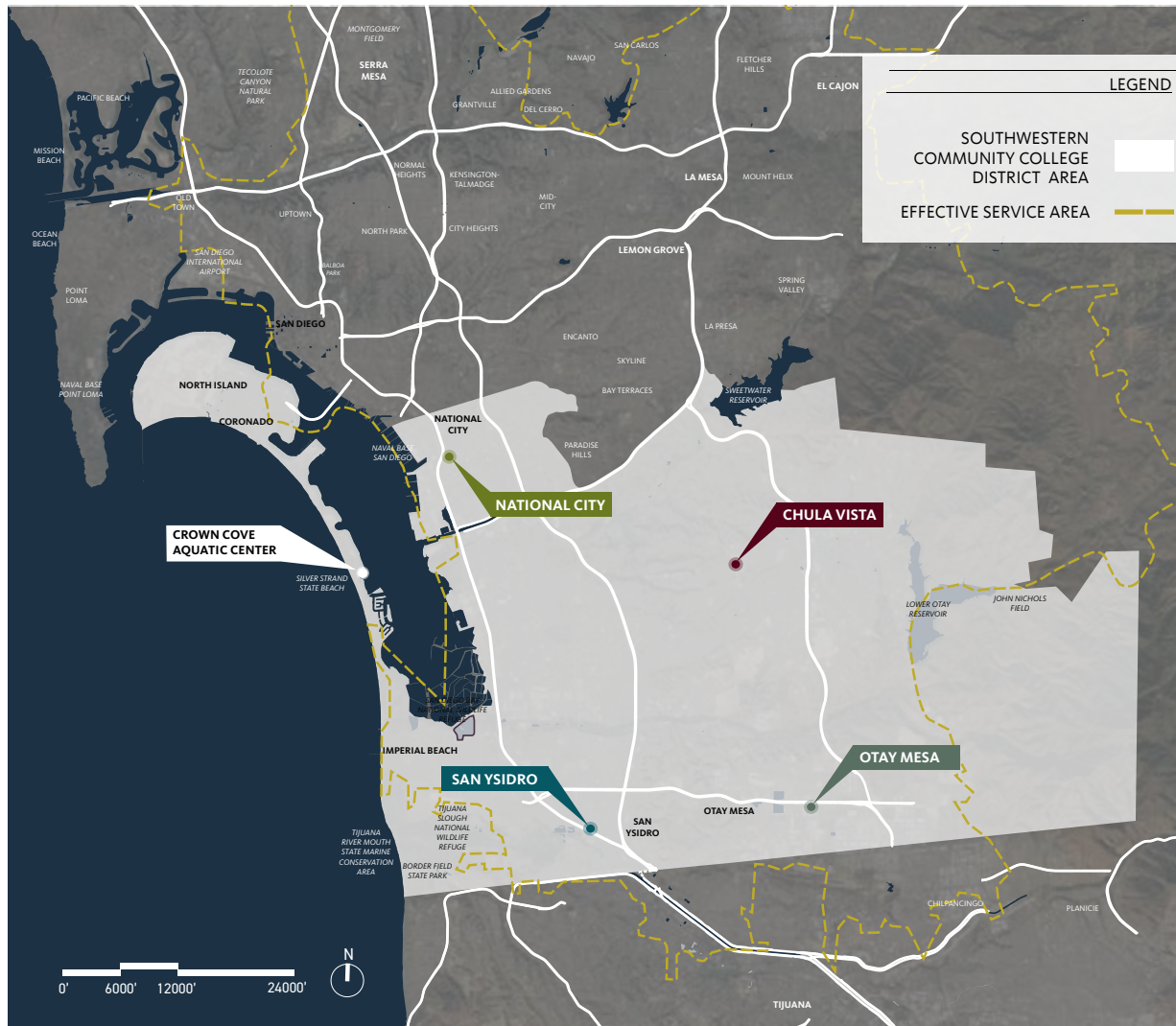
The Southwestern Community College District, located south of San Diego and extending to the U.S.—Mexico border, is one of 72 community college districts in the California Community College system.

It is located within 15 miles of Downtown San Diego and the Pacific Ocean. It is the only public institution of higher education in southern San Diego County. Regionally, San Diego is home to many industries including technology, aerospace, hospitality and more. Southwestern College has been an integral cornerstone to the education opportunities in the region.

CONTEXT IN CALIFORNIA



DISTRICT SERVICE AREA



Southwestern Community College District is a single college district with four campuses that together comprehensively serve the communities in their geographic boundaries. The four campuses are

- **CHULA VISA CAMPUS**
- **NATIONAL CITY CAMPUS**
- **OTAY MESA CAMPUS**
- **SAN YSIDRO CAMPUS**

In addition to these four campuses, the College offers a range of educational and recreational aquatic activities at Crown Cove Aquatic Center. This is a collaborative effort with California State Parks and Recreation and the Division of Boating and Waterways and serves the surrounding communities.

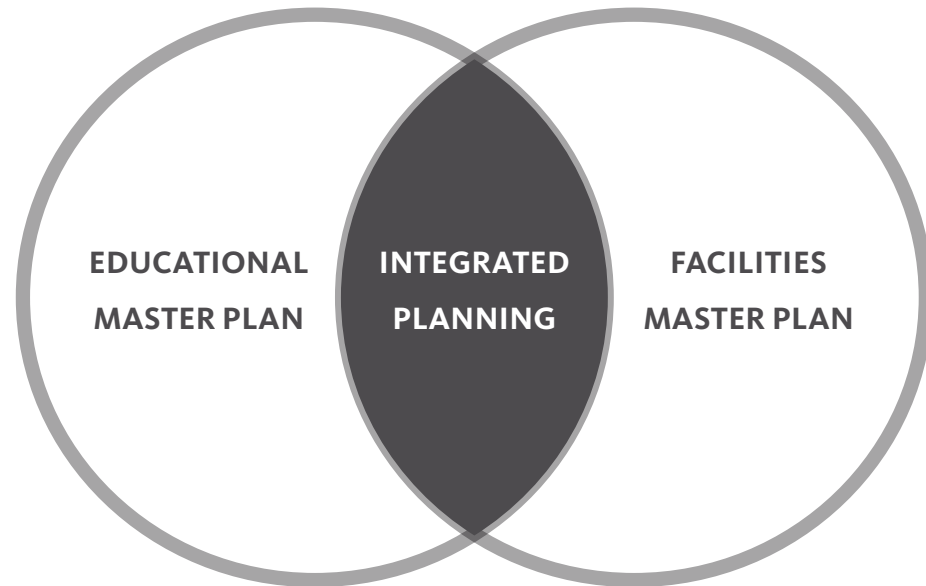
Southwestern College serves as the primary source of college education for approximately 400,000 residents of the South San Diego County area including the communities of Bonita, Chula Vista, Imperial Beach, National City, Nestor, Otay Mesa, Palm City, San Ysidro, Sunnyside, and Coronado. Its effective service area stretches farther than its service boundaries, serving much farther north in the county and region. The nearest community college is City College in Downtown San Diego which is part of the San Diego Community College District, about 15 miles away.

PURPOSE

The Facilities Master Plan begins with an Educational Master Plan (EMP). The purpose of an EMP is to assess Southwestern College's external and internal environment and provide recommendations on instructional programs and support programs that will meet the changing needs of the communities it serves.

The Educational Master Plan is the centerpiece of Southwestern College's cycle of integrated planning because it is the foundation for the College's long-term Facilities Master Plan and also guides the short-term planning processes, such as program review and strategic planning.

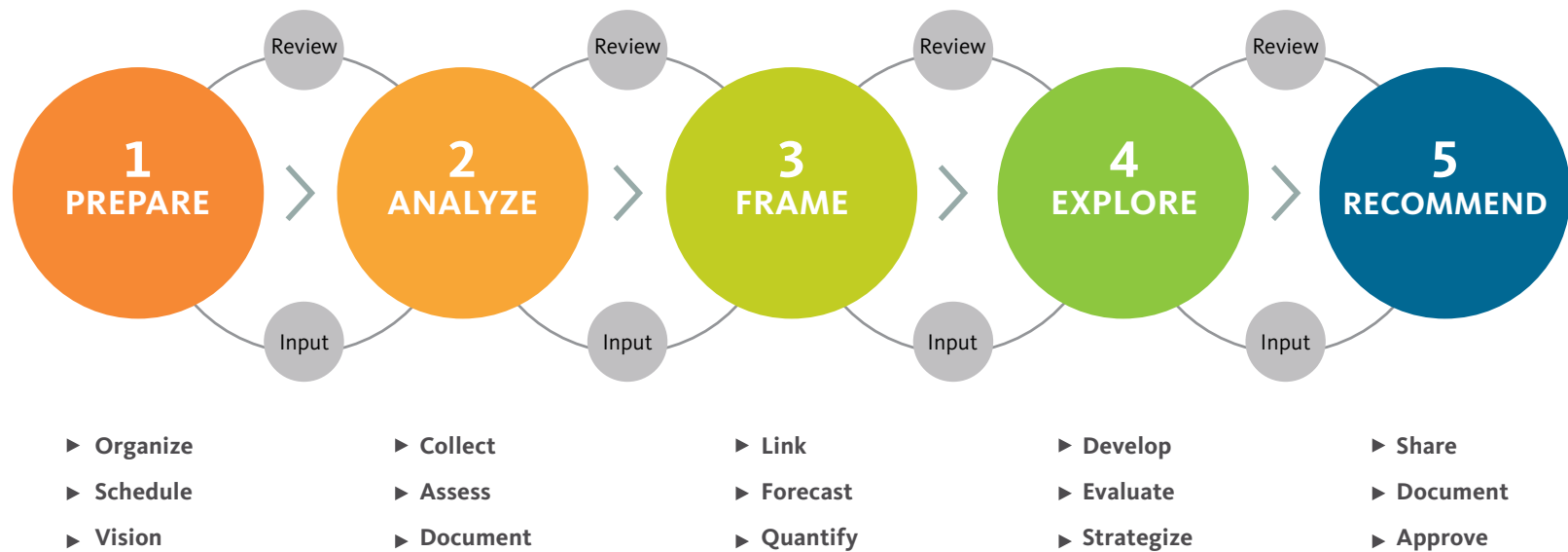
The intent of the Facilities Master Plan is to establish current and future space needs, identify the building/facilities required, establish building facilities priorities, and formulate project costs. The purpose of the current planning effort is to review and refresh the Facilities Master Plan that was completed five years ago.



PROCESS

The Five Step Planning Process provided the framework for the development of the Facilities Master Plan (FMP) and allowed the opportunity for multiple stakeholders to be involved. The planning team worked closely with a designated FMP Task Force to define planning goals, validate the analysis of information, evaluate a series of options and make decisions that led to the development of the recommendations.

5 STEP PLANNING PROCESS



PARTICIPATION

The planning process to develop the Facilities Master Plan was a highly participatory one involving the many constituencies of the Southwestern College community. In addition to the FMP Task Force meetings, the planning team met with a number of other representative groups throughout the planning process.

CONSULTED GROUPS

In order to maximize participation and to include the many voices of Southwestern College, the planning process included a series of presentations with key groups on campus. The meetings were attended by stakeholder representatives from all areas of the college: administration, faculty, staff, and students.

FACULTY SENATE

SHARED CONSULTATION COUNCIL (SCC)

COLLEGE MANAGEMENT TEAM (CMT)

ASSOCIATED STUDENT ORGANIZATION (ASO)

INSTITUTIONAL FACILITIES COMMITTEE (IFC)

PRESIDENT'S CABINET

PLANNING + BUDGET COMMITTEE (PBC)

CAMPUS FORUMS + COMMUNITY

The FMP was presented to each campus in a forum setting to include feedback from many voices. The forums included sessions at the National City, Otay Mesa, San Ysidro and Chula Vista Campuses. Each session included a mix of faculty, students, administration and individuals with a shared interest.

NATIONAL CITY CAMPUS FORUM

OTAY MESA CAMPUS FORUMS

SAN YSIDRO CAMPUS FORUM

CHULA VISTA CAMPUS FORUM

SUSTAINABILITY WORKSHOP

GOVERNING BOARD WORKSHOP

CITIZENS BOND OVERSIGHT COMMITTEE

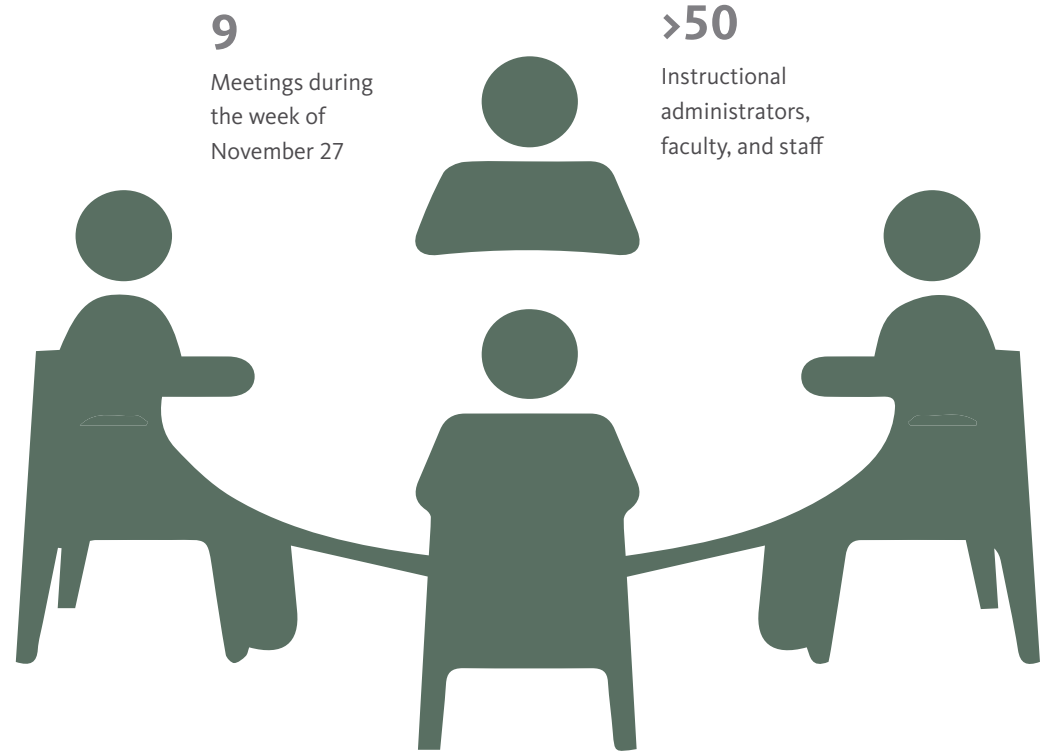


DETERMINING GROWTH RATE

Early in the process, the planning team met with representatives of each School and the Higher Education Centers to discuss the performance of each instructional discipline. A data template was developed with the Instructional Deans and focused on these benchmarks:

- Enrollment measured by the number of enrollments, the number of sections offered, and the average enrollment per section;
- Productivity measured by the fill rate at census and the amount of FTES generated by the discipline; and
- Student Outcomes measured by retention rates and by a comparison of Southwestern College's rate of successful course completion to the statewide rate of successful course completion for the same instructional discipline in the same semesters.

This data were analyzed to forecast each discipline's future growth relative to the projected College-wide growth over the next decade. By making plans to accommodate the projected population growth in the communities it serves, SWC is fulfilling its mission of providing access to higher education to the residents of its service area.



DATA ANALYSIS

Data was analyzed at three levels:

- College
- Campus
- Discipline

DATA TEMPLATE

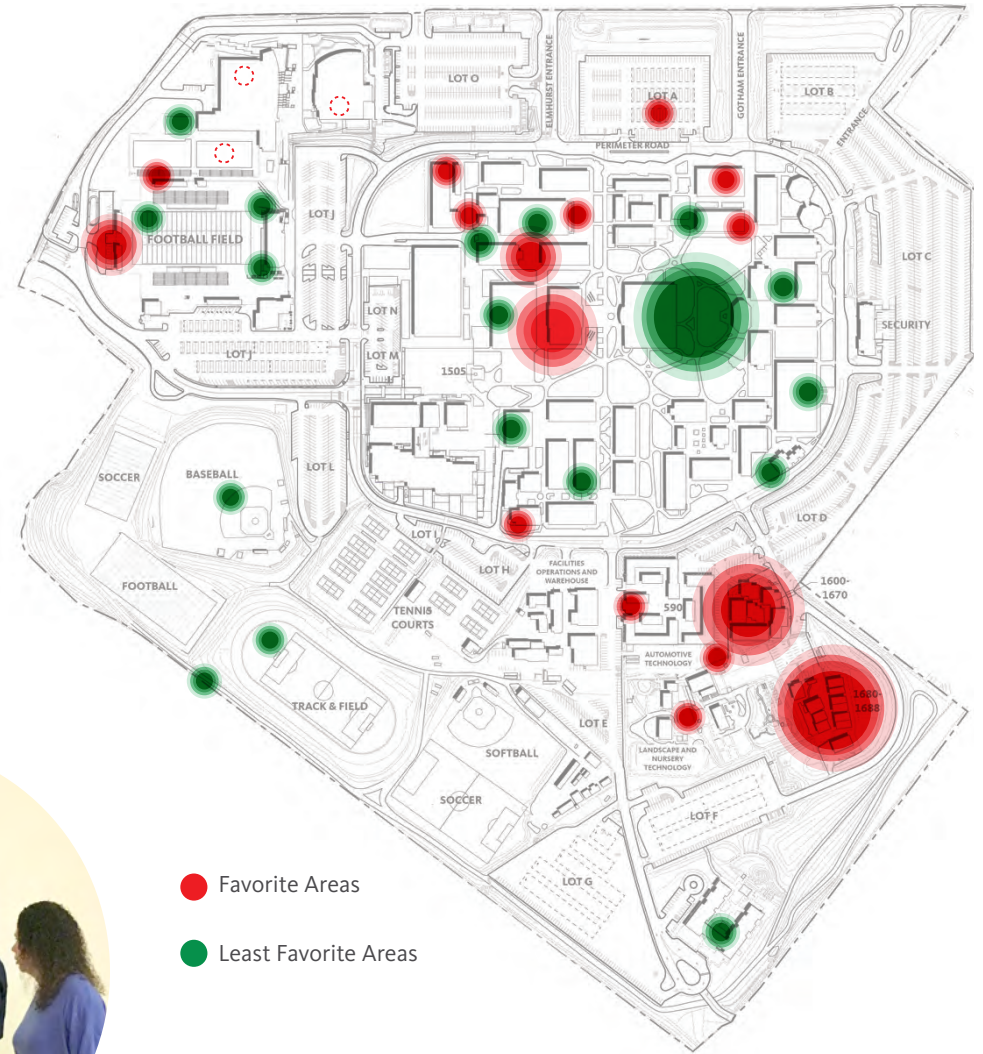
Factors included:

- Enrollment
- Productivity
- Student Outcomes

CAMPUS IMPRESSIONS

During the Task Force meetings, committee members also participated in an exercise to use red and green dots to highlight their favorite and least favorite places on the Chula Vista Campus. This exercise was also completed by the Associated Student Organization (ASO) leaders during one of their regular meetings. Both exercises were combined into the diagram to the right and summarized below.

- Temporary facilities are located too far outside the core of campus and do not offer the same flexibility and quality of facilities as elsewhere on campus
- Outdoor areas for instruction are lacking such as for the art program
- The Student Center and Student Union/Cafeteria are outdated and uninviting, there is room for improvement to create a better hub for students on campus
- Outdoor landscaping is a signature feature of Southwestern College and should be maintained or improved



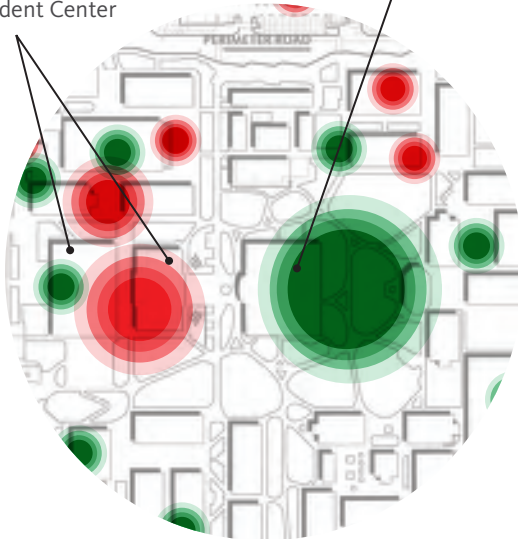
● Favorite Areas

● Least Favorite Areas



600s
Student Union
Student Center

Student Services



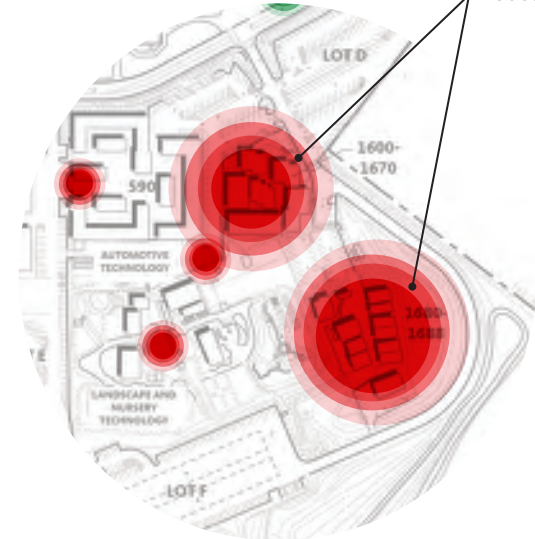
FAVORITE PLACES

- Large central lawn area to the east of the Student Services building
- Outdoor landscape and plantings throughout campus
- Athletics fields and facilities
- Specialized classrooms spaces throughout campus

LEAST FAVORITE PLACES

- Temporary facilities such as the 1600s
- Student Center/Student Cafeteria
- Older facilities such as the 100s, 200s

1600s Facilities



FAVORITE PLACE

Open green space with grand collegiate lawn and courtyard landscapes with intimate gathering areas



FAVORITE PLACE

Athletic facilities and fields and specialized classroom spaces throughout campus



LEAST FAVORITE PLACE

Modular, temporary and aging facilities outside the core of campus

PLANNING FOR SUCCESS

WHAT DOES SUCCESS LOOK LIKE FROM DIFFERENT PERSPECTIVES?

In the Planning for Success activity, each Task Force member was asked to describe what success looks like from three different perspectives:

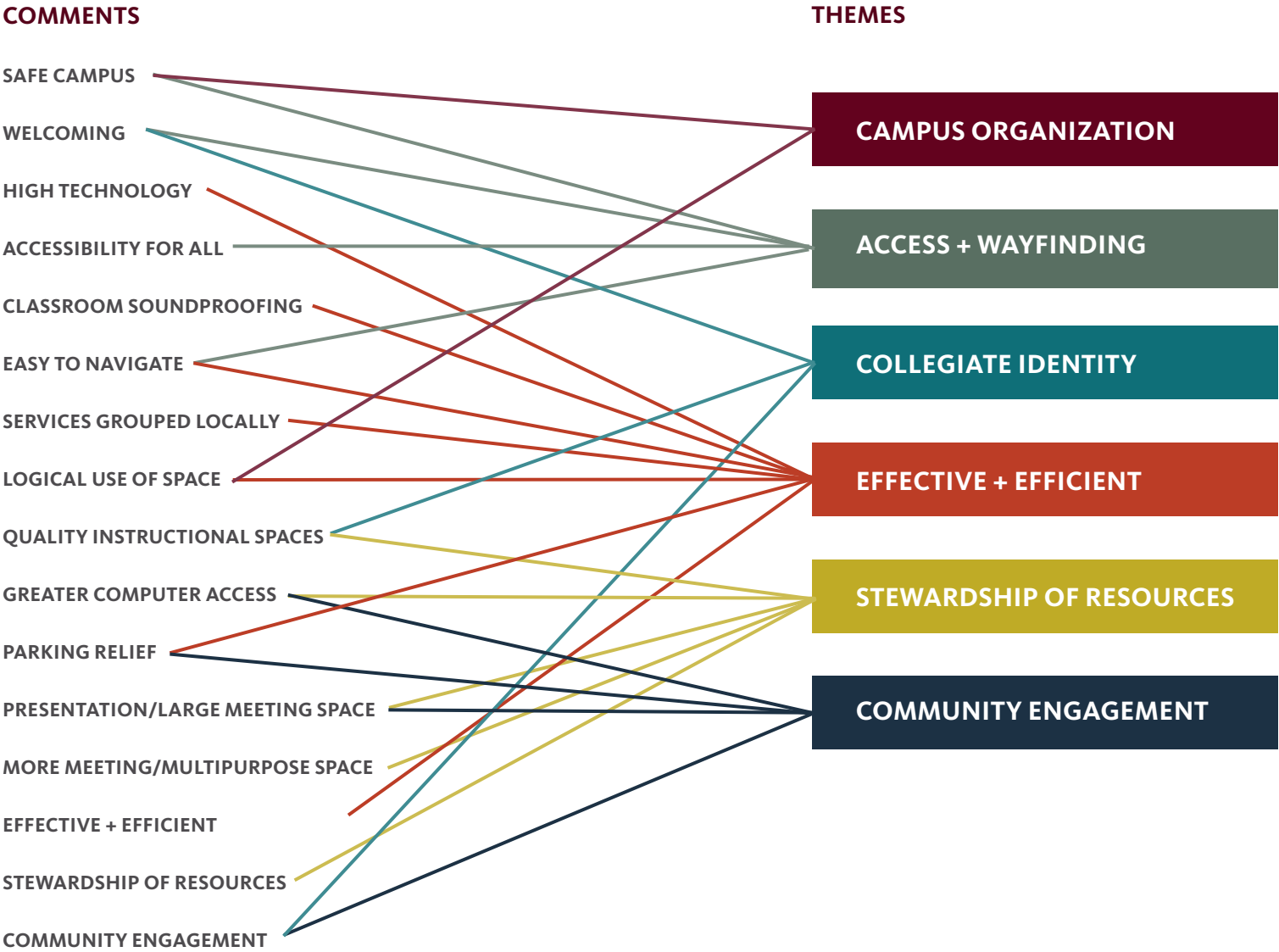
- Students
- Faculty + Staff
- Community

Using colored notes to represent these perspectives, the groups generated a series of thoughts and ideas. The results included a series of words or short phrases that were collected and discussed as a group.



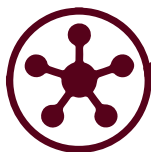
FINDINGS

A summary of many of the comments collected are listed below. Together they represent the collective thoughts about what success looks like from multiple perspectives. The comments were analyzed, sorted and grouped and a set of six themes emerged.



FACILITIES PLANNING PRINCIPLES

The six themes from the Planning for Success Activity established the basis for the development of a set of Facilities Planning Principles. The principles are summarized below and form the basis for all projects identified as part of this Facilities Master Plan.



CAMPUS ORGANIZATION

- Organize campus functions to support a guided pathway model
- Create logical groupings of functions to enhance student success
- Integrate instructional and student support services



ACCESS + WAYFINDING

- Develop welcoming + inviting campus entries
- Enhance wayfinding and campus organization
- Improve access to programs and services
- Develop and clarify circulation patterns



COLLEGIATE IDENTITY

- Create collegiate campus identities
- Enhance student and faculty engagement
- Develop indoor and outdoor spaces to support collaboration
- Create a sense of belonging + pride



EFFECTIVE + EFFICIENT

- Align facilities use with institutional priorities
- Improve facilities to enhance learning outcomes
- Develop flexible, multi-purpose space to adapt over time
- Replace inefficient and underperforming facilities



STEWARDSHIP OF RESOURCES

- Optimize available resources
- Maximize land use to align with institutional priorities
- Increase awareness and create a culture of sustainability
- Position Southwestern College to maximize funding (state and local)



COMMUNITY ENGAGEMENT

- Increase visibility of all Southwestern College campuses
- Strengthen connections with surrounding communities
- Develop campuses to enhance community engagement
- Improve access to college events and performances



540



02

PLANNING DATA

PLANNING DATA OVERVIEW

To reinforce the linkage between the Educational Master Plan and the Facilities Master Plan, this Southwestern College 2018 Facilities Master Plan begins with the analysis of the educational planning data needed to develop long range plans for facilities.

This Planning Data section presents a summary of the data analyzed and describes the methodology used to determine the amount and type of space necessary to support Southwestern College through the year 2025.



The following elements are included in this section:

ANALYSIS OF SOUTHWESTERN COLLEGE

ANALYSIS BY CAMPUS

ENROLLMENT + WSCH FORECASTS

INSTRUCTIONAL PROGRAM FORECASTS

**SPACE UTILIZATION + PLANNING
STANDARDS**

CAPACITY LOAD RATIOS

SPACE INVENTORY

FACILITIES MASTER PLAN PROGRAMS

ANALYSIS OF SOUTHWESTERN COLLEGE

Southwestern College (SWC) is a large, comprehensive single-college district that offers credit and noncredit academic programs and student services at the following four campuses distributed across the communities within its geographic boundaries:

1. Chula Vista Campus
2. National City Campus
3. Otay Mesa Campus
4. San Ysidro Campus

Southwestern College also offers credit and noncredit courses online and in various community locations, including the Crown Cove Aquatic Center.

83.11% OF THE TOTAL SWC WSCH IN FALL 2016 WAS CREDITED TO THE CHULA VISTA CAMPUS.

TABLE 1: ANALYSIS OF SOUTHWESTERN COLLEGE

SWC TOTAL	Fall 2012	Fall 2016	% Change
ENROLLMENT			
Enrollment	60,328	60,631	0.5%
Number of Sections	1,965	2,079	5.8%
Enrollment per Section	30.7	29.2	-5.0%
PRODUCTIVITY			
Fill Rate at Census	94.7%	89.2%	-5.8%
FTES at Census	7,379.7	6,982.4	-5.4%
STUDENT OUTCOMES			
Retention Rate	86.0%	84.0%	-2.3%
DEGREES + CERTIFICATES			
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	666	1,279	92.0%
Certificates ≥ 18	237	219	-7.6%
Certificates < 18	203	253	24.6%

TABLE 2: HEADCOUNT, FTES, AND WSCH IN FALL 2016 BY SWC SITE

	UNDUPLICATED HEADCOUNT	FTES	WSCH
Chula Vista Campus	14,827	6,141.2	199,020.7
National City Campus + Crown Cove Aquatic Center	1,741	446.5	14,469.7
Otay Mesa Campus	1,072	315.0	10,208.1
San Ysidro Campus	1,843	398.2	12,903.1
SWC TOTAL	19,483	7,300.8	236,601.6

OBSERVATIONS

- Although a greater number of sections were offered in fall 2016 compared to fall 2012, all other enrollment and productivity metrics for Southwestern College decreased between these two semesters.
- The number of associate degrees awarded almost doubled between 2012-13 and 2016-17.
- As the largest Southwestern College site, the Chula Vista Campus serves the greatest number of students (76 percent of the total) and generates the greatest amount of FTES and WSCH (83 percent).
- The National City/Crown Cove and San Ysidro Campuses both serve nine percent of the total Southwestern College students and generate six percent and five percent respectively of the total FTES and WSCH.
- The Otay Mesa Campus serves six percent of the total Southwestern College students and generates four percent of the total FTES and WSCH.
- The successful course completion rate for all courses taught at Southwestern College in fall 2016 was below the statewide rate for all disciplines.
- The National City Campus and the Otay Mesa Campuses had higher successful course completion rates in fall 2016 than the Chula Vista and San Ysidro Campuses and statewide in the same semester.
- The fill rates at census in fall 2016 were highest at the Chula Vista Campus.

TABLE 3: SUCCESSFUL COURSE COMPLETION RATES - FALL 2016 TOTAL

	SWC Total	Statewide
All Disciplines	67.7%	70.6%

TABLE 4: SUCCESS COURSE COMPLETION RATES FALL 2016 BY SITE

Chula Vista	National City	Otay Mesa	San Ysidro	TOTAL	STATEWIDE
66.9%	72.0%	78.6%	67.2%	67.7%	70.6%

TABLE 5: FILL RATES AT CENSUS FALL 2016 BY SITE

Chula Vista	National City	Otay Mesa	San Ysidro	SWC Total
91.7%	67.5%	79.8%	87.0%	89.2%

ANALYSIS BY CAMPUS

CHULA VISTA CAMPUS

MISSION

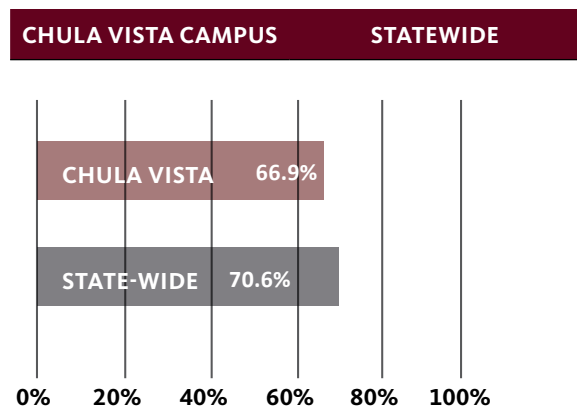
The mission of the Chula Vista Campus is to provide:

- ACCESS TO A COMPREHENSIVE CATALOG OF GENERAL EDUCATION DISCIPLINES TYPICAL OF COMMUNITY COLLEGES THAT PREPARE STUDENTS TO COMPLETE CERTIFICATES, ASSOCIATE DEGREES, OR TRANSFER REQUIREMENTS
- ACCESS TO A VARIETY OF CAREER TECHNICAL EDUCATION PROGRAMS THAT ARE UNIQUE TO THIS LOCATION, SUCH AS COMPUTER INFORMATION SYSTEMS, AUTOMOTIVE TECHNOLOGY, AND LANDSCAPE AND NURSERY TECHNOLOGY, AND ACCESS TO COURSES IN CAREER TECHNICAL EDUCATION PROGRAMS THAT ARE UNIQUE TO ONE OF THE OTHER SWC SITES, SUCH AS ADMINISTRATION OF JUSTICE AND CHILD DEVELOPMENT
- ACCESS TO A COMPREHENSIVE ARRAY OF STUDENT SUPPORT SERVICES
- SUPPORT OF COMMUNITY PARTNERSHIPS, SUCH AS DUAL ENROLLMENT PROGRAMS WITH K-12 DISTRICTS ADVANCEMENT, BASIC SKILLS, PERSONAL ENRICHMENT AND CONTINUING EDUCATION.



TABLE 6: CHULA VISTA CAMPUS ENROLLMENT

SWC TOTAL	Fall 2012	Fall 2016	% Change
ENROLLMENT			
Enrollment	48,886	51,431	5.2%
Number of Sections	1,520	1,665	9.5%
Enrollment per Section	32.2	30.9	-4.0%
PRODUCTIVITY			
Fill Rate at Census	96.1%	91.7%	-4.7%
FTES at Census	5,922.0	5,824.5	-1.6%
STUDENT OUTCOMES			
Retention Rate	85.7%	83.3%	-2.8%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	417	875	109.8%
Certificates ≥ 18	124	103	-16.9%
Certificates < 18	171	111	-35.1%

**TABLE 7: SUCCESSFUL COURSE COMPLETION RATES
FALL 2016****OBSERVATIONS**

- Although there was an almost ten percent increase in the number of sections offered at the Chula Vista Campus in fall 2016 compared to fall 2012, all other enrollment and productivity metrics decreased between these two semesters.
- The fill rate for courses taught at the Chula Vista Campus in fall 2016 was higher than the fill rates at all other Southwestern College sites.
- The successful course completion rate for courses taught at the Chula Vista Campus in fall 2016 was lower than the rates for all other Southwestern College sites as well as the statewide rate for all disciplines.

ANALYSIS BY CAMPUS *(cont'd)*

NATIONAL CITY CAMPUS

MISSION

The mission of the National City Campus is to provide:

- THREE HEALTH-RELATED CAREER TECHNICAL EDUCATION PROGRAMS THAT ARE UNIQUE TO THIS LOCATION: DENTAL HYGIENE, MEDICAL LABORATORY TECHNICIAN, AND MEDICAL OFFICE PROFESSIONAL;
- AN ARRAY OF GENERAL EDUCATION COURSES FOR STUDENTS WHO LIVE IN THE VICINITY OF THIS CAMPUS AS WELL AS FOR STUDENTS SEEKING AN ASSOCIATE DEGREE IN ONE OF THE THREE CAREER TECHNICAL EDUCATION PROGRAMS UNIQUE TO THIS LOCATION; AND
- A COMPREHENSIVE ARRAY OF STUDENT SUPPORT SERVICES.

The National City Campus supports regional economic development through the Center for Business Advancement, which includes the Small Business Development Center and Network, the San Diego Contracting Opportunities Center, and the San Diego Center for International Trade Development.

A new National City Campus laboratory building opened in spring 2018 that will make it possible for students to complete health science program prerequisites on site.

Data for the National City Campus includes courses taught at the Crown Cove Aquatic Center, which is an aquatics facility developed in collaboration with California State Parks and Recreation and the Division of Boating and Waterways to offer a range of educational and recreational aquatic activities to the surrounding communities.

The career technical education programs offered at the National City Campus have limited potential for growth due to a shortage of off-campus clinical sites that provide students with access to required hands-on instruction.

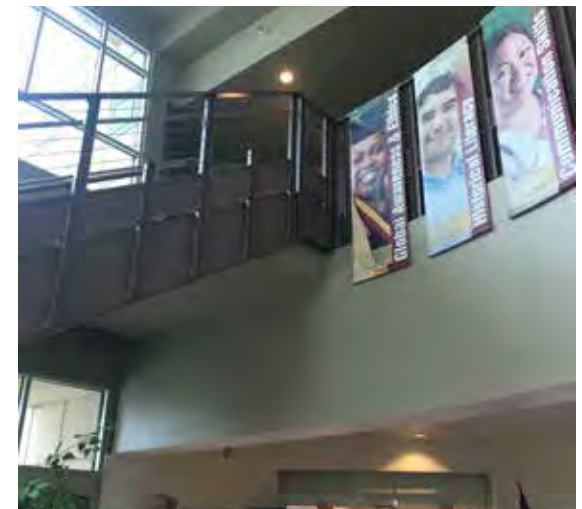
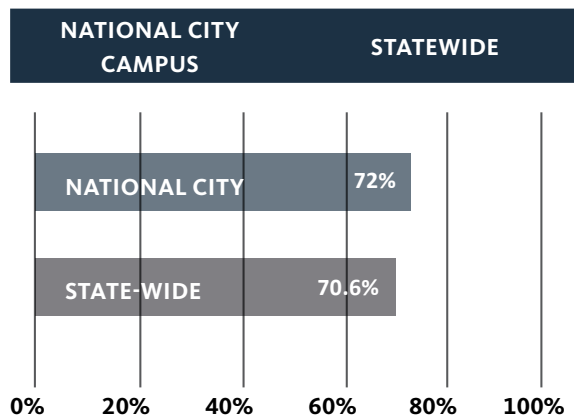


TABLE 8: NATIONAL CITY CAMPUS ENROLLMENT

	Fall 2012	Fall 2016	% Change
ENROLLMENT			
Enrollment	4,122	3,157	-23.4%
Number of Sections	156	156	0.0%
Enrollment per Section	26.4	20.2	-23.4%
PRODUCTIVITY			
Fill Rate at Census	86.7%	67.5%	-22.1%
FTES at Census	467.4	368.9	-21.1%
STUDENT OUTCOMES			
Retention Rate	87.3%	87.0%	-0.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	43	49	14.0%
Certificates ≥ 18	17	17	0.0%
Certificates < 18	0	0	0.0%

OBSERVATIONS

- Although the number of sections remained the same in fall 2012 and fall 2016, all other enrollment and productivity metrics decreased between these two semesters.
- The fill rate for courses taught at the National City Campus in fall 2016 was lower than the fill rate at this site for fall 2012, and below that of the other Southwestern College sites.
- The successful course completion rate for courses taught at the National City Campus in fall 2016 was higher than the overall statewide rate.

**TABLE 9: SUCCESSFUL COURSE COMPLETION RATES
FALL 2016**

ANALYSIS BY CAMPUS *(cont'd)*

OTAY MESA CAMPUS

MISSION

The mission of the Otay Mesa Campus is to provide:

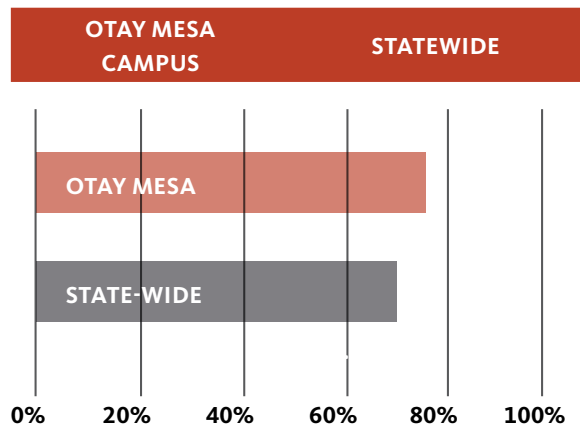
- NINE PUBLIC SAFETY AND HEALTH SERVICES PROGRAMS THAT ARE UNIQUE TO THIS LOCATION;
- AN ARRAY OF GENERAL EDUCATION COURSES FOR STUDENTS WHO LIVE IN THE VICINITY OF THIS CAMPUS AS WELL AS FOR STUDENTS SEEKING AN ASSOCIATE DEGREE IN ONE OF THE PUBLIC SAFETY/ HEALTH CAREER TECHNICAL EDUCATION PROGRAMS UNIQUE TO THIS LOCATION; AND
- A COMPREHENSIVE ARRAY OF STUDENT SUPPORT SERVICES.

In order to provide the necessary hands-on instruction, facilities that are unique to the discipline or access to off-campus clinical sites are needed for many of the career technical education programs offered at the Otay Mesa Campus.



TABLE 11: OTAY MESA CAMPUS ENROLLMENT

	Fall 2012	Fall 2016	% Change
ENROLLMENT			
Enrollment	2,726	2,650	-2.8%
Number of Sections	133	137	3.0%
Enrollment per Section	20.5	19.3	-5.6%
PRODUCTIVITY			
Fill Rate at Census	83.6%	79.8%	-4.6%
FTES at Census	484.2	396.9	-18.0%
STUDENT OUTCOMES			
Retention Rate	89.3%	89.1%	-0.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	177	301	70.1%
Certificates ≥ 18	93	99	6.5%
Certificates < 18	0	118	100.0%

TABLE 12: SUCCESSFUL COURSE COMPLETION RATES FALL 2016**OBSERVATIONS**

- Although the same number of sections were offered at the Otay Mesa Campus in fall 2012 and fall 2016, all other enrollment and productivity metrics decreased between these two semesters.
- The successful course completion rate for courses taught at the Otay Mesa Campus in fall 2016 was higher than the overall statewide rate in the same semester.
- All levels of awards that mark program completion at the Otay Mesa Campus increased between 2012-13 and 2016-17, including a significant increase in the number of associate degrees awarded.

ANALYSIS BY CAMPUS *(cont'd)*

SAN YSIDRO CAMPUS

MISSION

The mission of the National City Campus is to provide local access to:

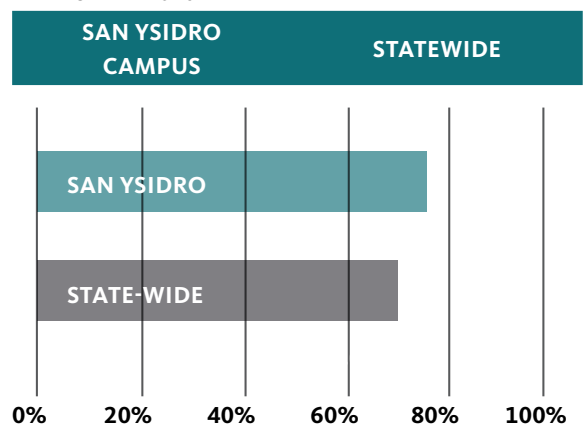
- THE FAMILY STUDIES/CHILD DEVELOPMENT CAREER EDUCATION PROGRAM THAT IS SHARED BETWEEN THIS SITE AND THE CHULA VISTA CAMPUS,
- AN ARRAY OF GENERAL EDUCATION COURSES FOR STUDENTS WHO LIVE IN THE VICINITY OF THIS CAMPUS AS WELL AS FOR STUDENTS SEEKING AN ASSOCIATE DEGREE IN CHILD DEVELOPMENT, AND
- A COMPREHENSIVE ARRAY OF STUDENT SUPPORT SERVICES.

Although the Child Development Center is located on the Chula Vista Campus, this program is administered by the San Ysidro Campus. FTES from Child Development courses taught at the San Ysidro Campus and from online and hybrid courses taught at other Southwestern College sites are credited to the San Ysidro Campus.



TABLE 14: SAN YSIDRO CAMPUS ENROLLMENT

	Fall 2012	Fall 2016	% Change
ENROLLMENT			
Enrollment	4,594	3,393	-26.1%
Number of Sections	156	121	-22.4%
Enrollment per Section	29.4	28.0	-4.8%
PRODUCTIVITY			
Fill Rate at Census	94.3%	87.0%	-7.7%
FTES at Census	506.0	392.0	-22.5%
STUDENT OUTCOMES			
Retention Rate	86.1%	87.6%	1.7%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	29	54	86.2%
Certificates ≥ 18	3	0	-100.0%
Certificates < 18	32	24	-25.0%

TABLE 15: SUCCESSFUL COURSE COMPLETION RATES FALL 2016**OBSERVATIONS**

- Although reductions in the sections offered at the San Ysidro Campus in fall 2016 were matched by proportionate reductions in enrollment, fill rate, and FTES, enrollment per section on this Campus was comparable in fall 2012 & fall 2016.
- Student retention in courses taught at the San Ysidro Campus increased between fall 2012 and fall 2016.
- The number of associate degrees awarded in Child Development almost doubled between 2012-13 and 2016-17.
- Successful course completion rate for courses taught at the San Ysidro Campus in fall 2016 was below the overall statewide rate.

ENROLLMENT + WSCH FORECASTS

The Long Range Enrollment and Weekly Student Contact Hours (WSCH) forecasts are issued by the California Community Colleges Chancellor's Office (CCCCO) each year and projects enrollment growth for the next 10 years. It includes historical data from the previous years and projects total enrollment and WSCH for the District using an average anticipated growth factor.

The growth rate projections in this Facilities Master Plan are based on the projection that Southwestern College's Weekly Student Contact Hours will increase 2.5 percent per year for the next decade. This projection is based on a variety of internal indices, such as student completion rates, and external indices, such as the projected population growth for this region.

The base year used for this analysis is the fall semester of 2016 (the most recent complete year of data available at the start of this planning process), and the long range forecast is for Fall semester of 2025.

FIGURE A: PROJECTED ENROLLMENT

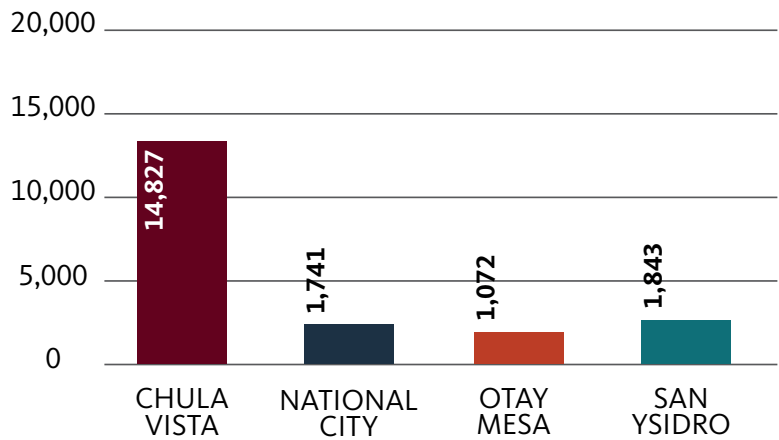
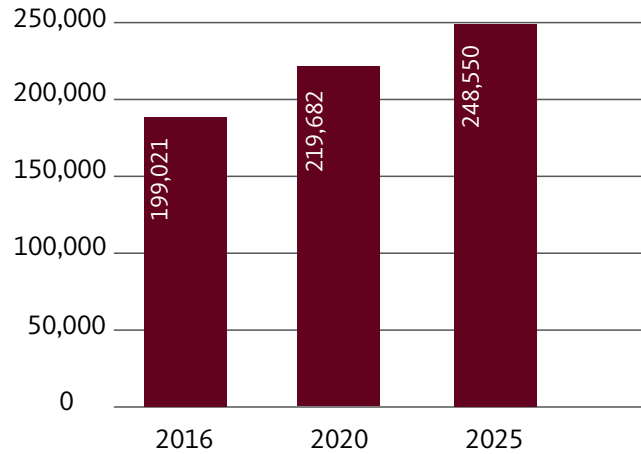
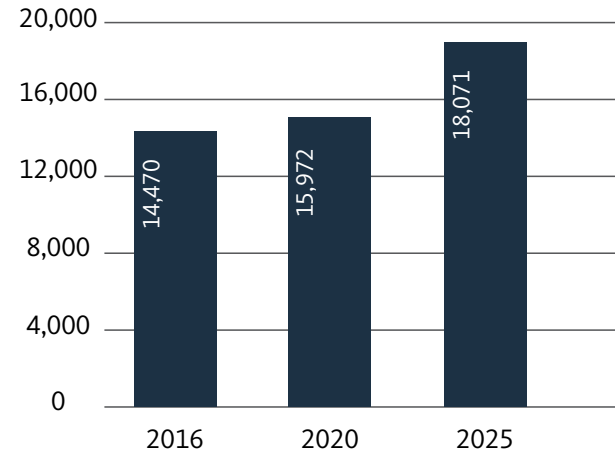


FIGURE B: WEEKLY STUDENT CONTACT HOURS
(WSCH) FORECASTS BY SITE

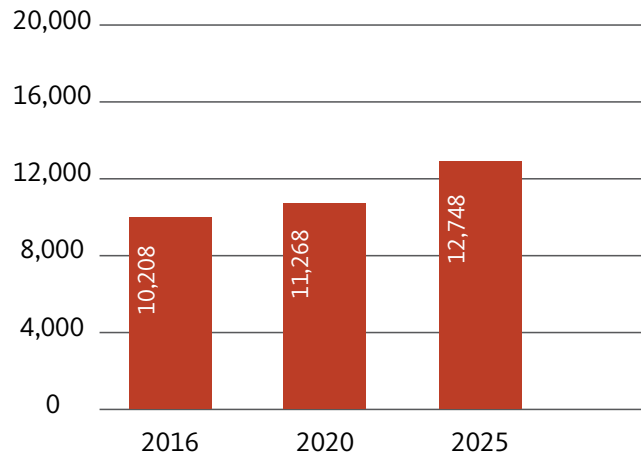
CHULA VISTA CAMPUS



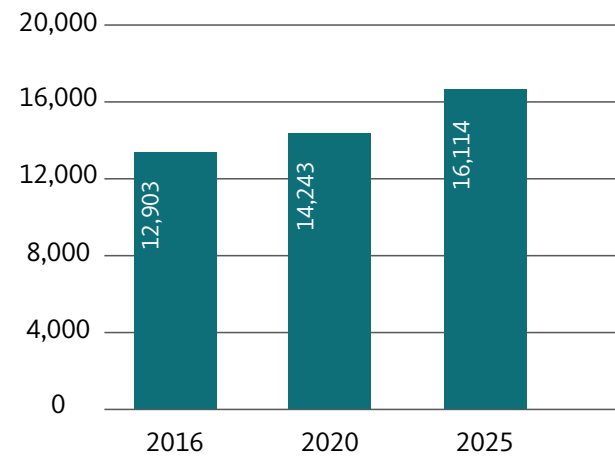
NATIONAL CITY CAMPUS



OTAY MESA CAMPUS



SAN YSIDRO CAMPUS



INSTRUCTIONAL PROGRAM FORECASTS

The performance of each instructional discipline was analyzed by comparing data for two semesters (Fall 2012 and Fall 2016) on these benchmarks:

1. Enrollment measured by the number of enrollments, the number of sections offered, and the average enrollment per section;
2. Productivity measured by the fill rate at census and the amount of FTES generated by the discipline; and
3. Student Outcomes measured by retention rates and by a comparison of Southwestern College's rate of successful course completion to the statewide rate of successful course completion for the same instructional discipline in the same semesters.

Refer to the **GLOSSARY** in the **APPENDIX** for the definitions of the metrics in this data analysis.

This data were analyzed to forecast each discipline's future growth relative to the projected College-wide growth over the next decade. Based on estimates that the surrounding communities will increase in population and labor market opportunities, Southwestern College is developing plans to accommodate 2.0 percent growth each year over the next ten years. By making plans to accommodate the projected population growth in the communities it serves, Southwestern College is fulfilling its mission of providing access to higher education to the residents of its service area.

In order to serve a greater number of students, it is reasonable to expect that most or all instructional disciplines will grow in the next decade. However, all disciplines will not grow at the same rate. The projected rate of growth for each instructional discipline is identified relative to the projected College-wide growth rate. The growth of each discipline is forecast to be:

- Faster than the projected 2.0 percent growth per year for each of the next ten years,
- Same as the projected 2.0 percent growth per year for each of the next ten years, or
- Slower than the projected 2.0 percent growth per year for each of the next ten years.

The resulting growth rate of each instructional discipline is shown in **Table 17** and details of the analysis for each discipline can be found in the **APPENDIX**.

TABLE 17: INSTRUCTIONAL PROGRAM FORECASTS

	FASTER > 2.5% PROJECTED GROWTH	SAME = 2.5% PROJECTED GROWTH	SLOWER < 2.5% PROJECTED GROWTH
Accounting (ACCT)		•	
Administration of Justice (AJ)		•	
African-American Studies (AFRO)		•	
American Sign Language (ASL)		•	
Anthropology (ANTH)		•	
Architecture (ARCH)			•
Art (ART)		•	
Asian-American Studies (ASIA)			•
Associate Degree Nursing (ADN)			•
Astronomy (ASTRO)		•	
Automotive Technology (AT)	•		
Biology (BIOL)	•		
Business, Insurance, Real Estate, Leadership (BUS, INS, RE, LDR)		•	
Certified Nursing Assistant (CNA)		•	
Chemistry (CHEM)		•	
Child Development (CD)		•	
Communication (COMM)	•		
Computer Aided Design & Drafting (CAD)			•
Computer Information Systems (CIS)		•	
Computer Literacy (CL)			•
Construction Inspection (CI)		•	
Dance (DANC)		•	
Dental Hygiene (DH)			•
Economics (ECON)		•	

TABLE 17: INSTRUCTIONAL PROGRAM FORECASTS (CONT'D)

	FASTER > 2.5% PROJECTED GROWTH	SAME = 2.5% PROJECTED GROWTH	SLOWER < 2.5% PROJECTED GROWTH
Education (ED)		•	
Electronics (ELEC)			•
Emergency Medical Technology (EMT)		•	
Emergency Medical Technology & Paramedic (EMTP)		•	
Engineering (ENGR)			•
English (ENGL)	•		
English as a Second Language (ESL)		•	
Environmental Hazardous Materials Technology (EHMT)			•
Exercise Science (ES/A, ES/I, ES/L, ES/T)		•	
Filipino (FIL)			•
Fire Science Technology (FS)			•
French (FREN)		•	
Geography (GEOG)		•	
Geology (GEOL)		•	
Health (HLTH)		•	
History (HIST)	•		
Hospitality and Tourism Management; Culinary Arts; Event and Convention Planning; Travel and Tourism (HTM, CA, EVNT, T&T)		•	
Humanities (HUM)		•	
Italian (ITAL)		•	
Japanese (JPN)			•
Journalism (JOUR)			•
Landscape and Nursery Technology, Landscape Architecture (LNT, LA)		•	
Learning Skills (LS)			•
Legal (LEGL)		•	

TABLE 17: INSTRUCTIONAL PROGRAM FORECASTS (CONT'D)

	FASTER > 2.5% PROJECTED GROWTH	SAME = 2.5% PROJECTED GROWTH	SLOWER < 2.5% PROJECTED GROWTH
Library (LIB)			•
Mathematics (MATH)	•		
Medical Laboratory Technician (MLT)			•
Medical Office Professional (MEDOP)		•	
Mexican-American Studies (MAS)		•	
Music (MUS)		•	
Noncredit (NC)	•		
Operating Room Nurse (ORN)			•
Personal Development (PD)	•		
Philosophy (PHIL)		•	
Physical Science (PHS)		•	
Physics (PHYS)		•	
Political Science (PS)		•	
Portuguese (PORT)			•
Psychology (PSYC)	•		
Reading (RDG)		•	
Recording Arts & Technology (RA&T)			•
Recreation (REC)			•
Sociology (SOC)		•	
Spanish (SPAN)		•	
Surgical Technology (ST)			•
Telemedia (TELE)			•
Theatre Arts (TA)		•	
Vocational Nursing (VN)			•

SPACE UTILIZATION + PLANNING STANDARDS

To determine space capacity requirements for a college, the enrollment and program forecasts are applied to a set of standards for each type of space. Title 5 of the California Code of Regulations, prescribes standards for the utilization and planning of educational spaces on public community college campuses. These standards, when applied to the total number of students, or weekly student contact hours (WSCH), produce total capacity requirements that are expressed in assignable square feet (space available for assignment to occupants).

The Title 5 space standards used to determine future capacity requirements are listed in **TABLE 18**. Each component of these standards is applied with an appropriate form of enrollment to produce a total assignable square feet (ASF) capacity requirement for each category of space. The sum of these categories represents the total building requirements for the college.

TABLE 18: TITLE 5 SPACE STANDARDS BY SPACE TYPE

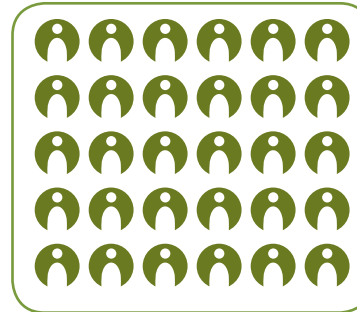
CATEGORY	FORMULA	RATE
Classrooms	ASF/ Student Station	15
	Station Utilization Rate	66%
	Average hours room/week	53
Labs	ASF / Student Station*	
	Station Utilization Rate	85%
	Average hours room / week	27.5%
Offices/Conference Rooms	ASF per FTEF	140
Library/Learning Resource Center	Base ASF Allowance	3,795
	ASF / 1st 3,000 DGE	3.83
	ASF / 3,001-9,000 DGE	3.39
	ASF / > 9,000 DGE	2.94
Instructional Media AV/TV/Radio	Base ASF Allowance	3,500
	ASF / 1st 3,000 DGE	1.50
	ASF / 3,001-9,000 DGE	0.75
	ASF / > 9,000 DGE	0.25

CAPACITY LOAD RATIOS

Capacity load ratios represent 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. The space type “other” includes a number of spaces on campus that are considered to be non-capacity load categories. These are spaces that are not analyzed by the CCCCCO in relation to utilization and efficiency, but are important as part of the college’s inventory related to maintenance and operations.

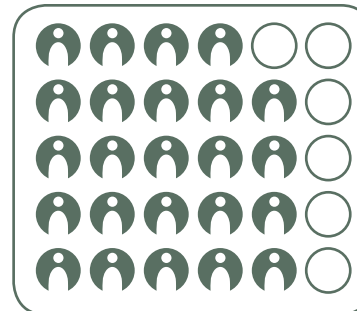
- The capacity/load ratio is the measure of the space utilization efficiency according to Title 5 standards.
- Assumed utilization for classrooms is 53 hours per week, utilization for labs varies per discipline.
- Capacity/load ratio’s are rolled up and measured as an aggregate by room use category for each campus.

RIGHT-SIZED



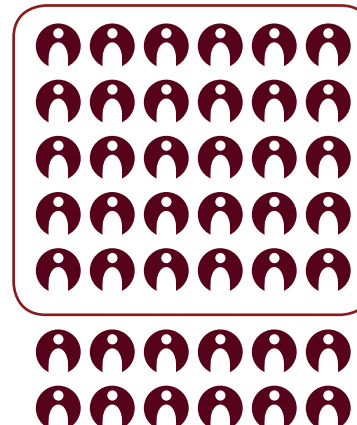
OF SEATS = # OF STUDENTS
100% capacity/load

OVER CAPACITY



OF SEATS > # OF STUDENTS
OVER 100% capacity/load

UNDER CAPACITY



OF SEATS < # OF STUDENTS
UNDER 100% capacity/load

SPACE INVENTORY

The inventory of facilities is an important tool in planning and managing college campuses. The Facilities Utilization Space Inventory Options Net (FUSION) is a database maintained by the California Community Colleges Chancellor Office (CCCCO), and includes descriptive data on buildings and rooms for each college and district within the state. This information is essential for analyzing space utilization, projections, space needs and capital outlay planning.

The District maintains a detailed Space Inventory of all buildings on the Southwestern College campus according to the requirements of the State Chancellor's Office Space Inventory Handbook. As required by the state standards, it is updated and submitted to the State Chancellor's office annually. The Space Inventory contains data about every building and room according to state guidelines for space code, space type name, and ASF.

CAPACITY LOAD CATEGORIES



LECTURE

100s

Classrooms
Support Spaces



LAB

200s

Labs
Support Spaces



OFFICE

300s

Offices
Support Spaces
All Offices including administrative and student services



LIBRARY

400s

Library
Study
Tutorial
Support Spaces



INSTRUCTIONAL MEDIA

530s

AV/TV
Technology
Support Spaces



OTHER

520,540-800s

PE	Meeting Rooms
Assembly	Data Processing
Food Service	Physical Plant
Lounge	Health Service
Bookstore	

The Chula Vista Campus has the largest allocation within the space inventory, while San Ysidro has the least. Overall, the District has over six hundred thousand assignable square feet utilized for lecture, lab, office, library, instructional media and other types of spaces.

The 2017 Space Inventory Report was used as the basis for the analysis of space. The diagram on the right includes a summary of the categories of space on campus 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.

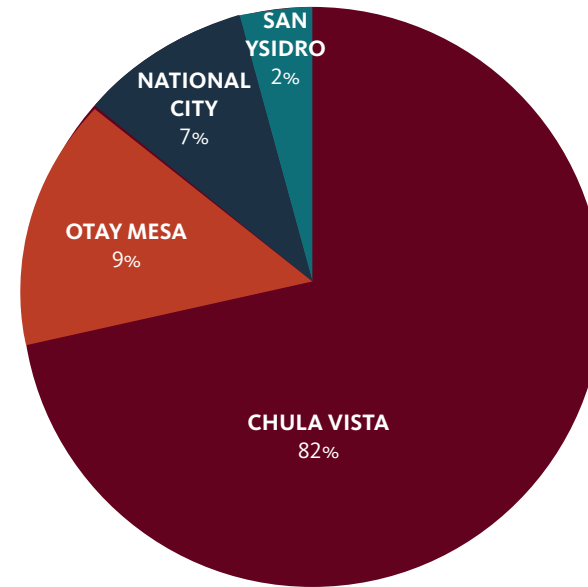







TABLE 19: SWC CURRENT INVENTORY

	CHULA VISTA	NATIONAL CITY	OTAY MESA	SAN YSIDRO	DISTRICT TOTALS
 LECTURE+LAB	208,211	27,460	27,802	9,747	273,220
 OFFICE	94,858	11,459	8,228	2,217	116,762
 LIBRARY	61,028	765	4,006	-	65,799
 INSTRUCTIONAL MEDIA	7,259	-	-	-	7,259
 OTHER	197,039	10,055	16,852	991	224,937
TOTAL ASF	568,395	49,739	56,888	12,955	687,977
	82%	7%	9%	2%	100%

FACILITIES MASTER PLAN PROGRAMS

The 2018 Space Inventory was used as the basis for the Space Analysis. The Facilities Master Plan Programs, on the following page, summarize the current and projected needs for space on Chula Vista, Otay Mesa, National City, and San Ysidro Campus and indicate the approximate differences to be addressed with the implementation of this Facilities Plan.

It is important to note that the Space Inventory Report includes all facilities on campus that are in use, including temporary facilities. The Facilities Plan recommends the removal of temporary facilities and the full or partial removal of some buildings. The following tables include an adjusted inventory that reflects the removal of temporary facilities and buildings in the column labeled “adjusted inventory.”

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

- Enrollment forecasts and WSCH projections, from the Educational Plan, were applied in combination with appropriate space planning standards to result in a total space requirement in ASF by type and space, as shown in the Master Plan Space Program column.
- The Master Plan Space Program for each campus was subtracted from the Adjusted Inventory which resulted in the net ASF need by type of space for the 2025 master plan horizon.
- The Difference column indicates the result and served as the basis for developing recommendations for facilities.

The buildings’ overall square footage is calculated by dividing the ASF by the grossing factor, which is the ratio of ASF to GSF. The State Chancellor’s Office recommends grossing factors for community college facilities of approximately 65% for instructional facilities.

Therefore, in anticipating building needs and costs, if one needs to estimate the gross square footage for a facility based on the needed ASF from the facilities space program, one would use the following formula:

$$\text{ASF}/0.65 = \text{GSF}$$



CHULA VISTA CAMPUS

The FMP Space Program for the Chula Vista Campus has been adjusted to reflect the removal of several buildings as identified on page 3.36 and 3.37 and listed below.





In addition, the inventory has been adjusted to include the addition of new facilities, currently in design or construction, including:

- Math/Science
- Security Complex
- Performing Arts + Cultural Center

The FMP Space Program indicates a need for additional space for instruction, offices for faculty and staff, and instructional media space.

The numbers listed in the 'Difference' column represent the assignable square feet needed to support the projected enrollment and program forecast.

TABLE 20: CHULA VISTA FACILITIES MASTER PLAN SPACE PROGRAM (ASF)

	CURRENT INVENTORY 2018	ADJUSTED INVENTORY*	FMP SPACE PROGRAM	DIFFERENCE
 LECTURE +LAB	208,211	111,758	198,417	(86,659)
 OFFICE	94,858	49,413	66,280	(16,867)
 LIBRARY	61,028	57,589	43,266	14,323
 INSTRUCTIONAL MEDIA	7,259	7,116	13,150	(6,034)
OTHER	197,039	230,082	144,518	85,564

* The Adjusted Inventory includes the following

Demolition:

100, 102, 103, 104, 105, 200, 210, 220, 300, 310, 320, 330, 340, 381, 382, 390, 390, 410, 420, 430, 400, 440, 450, 460, 470, 500, 510, 540, 550, 560, 570, 590, 600, 610, 640, 650, 660, 700, 710, 750, 800, 850, 900, 1100, 1200, 1500, 1505, 1600, 1620, 1630, 1650, 1660, 1670, 1680-1688, 1800





New Construction:

Math Science, Security Complex, Performing Arts + Cultural Center

FACILITIES MASTER PLAN PROGRAM *(cont'd)*

NATIONAL CITY CAMPUS





TABLE 21: NATIONAL CITY FACILITIES MASTER PLAN SPACE PROGRAM

	CURRENT INVENTORY 2018	FMP SPACE PROGRAM	DIFFERENCE
 LECTURE+LAB	27,460	10,493	16,967
 OFFICE	11,459	4,819	6,640
 LIBRARY	765	7,025	(6,260)
 INSTRUCTIONAL MEDIA	-	4,765	(4,765)
OTHER	10,055	23,085	(13,030)

The FMP Space Program for National City indicates that there is adequate space to support the current and projected instructional program needs. Additional space is needed for instructional and student support services space - identified as 'library, instructional media, and other'.

OTAY MESA CAMPUS





TABLE 22: OTAY MESA FACILITIES MASTER PLAN SPACE PROGRAM

	CURRENT INVENTORY 2018	FMP SPACE PROGRAM	DIFFERENCE
 LECTURE+LAB	27,802	8,973	18,829
 OFFICE	8,228	3,400	4,828
 LIBRARY	4,006	6,074	(2,068)
 INSTRUCTIONAL MEDIA	-	4,392	(4,392)
OTHER	16,852	19,555	(2,703)

The FMP Space Program for Otay Mesa indicates that there is adequate space to support the current and projected instructional program needs. Additional space is needed for instructional and student support services space - identified as 'library, instructional media, and other'.

SAN YSIDRO CAMPUS

TABLE 23: SAN YSIDRO FACILITIES MASTER PLAN SPACE PROGRAM

	CURRENT INVENTORY 2018	FMP SPACE PROGRAM	DIFFERENCE
 LECTURE+LAB	9,747	9,535	212
 OFFICE	2,217	4,297	(2,080)
 LIBRARY	-	6,675	(6,675)
 INSTRUCTIONAL MEDIA	-	4,628	(4,628)
OTHER	991	22,661	(21,670)

The FMP Space Program for San Ysidro indicates that there is adequate space to support the current and projected instructional program needs. Additional space is needed for instructional and student support services space - identified as 'library, instructional media and other'.



J
A
G
U
A
R



03

CHULA VISTA

CHULA VISTA CAMPUS OVERVIEW

The planning process began with the analysis of existing conditions on the Chula Vista Campus in order to identify the key planning issues to be addressed in the FMP.

The 2018 recommendations were made for the Chula Vista campus to present an overall picture of the future developed campus after reviewing with many groups including the Task Force.

This chapter includes both the existing conditions analysis and the recommendations for the future. The following elements are included in this section:

EXISTING CONDITIONS

LOCAL CONTEXT

EXISTING FACILITIES

CAMPUS DEVELOPMENT HISTORY

FACILITIES CONDITION

CAMPUS ZONING

EXISTING CAMPUS

VEHICULAR CIRCULATION

CAMPUS PARKING

PEDESTRIAN CIRCULATION + OPEN SPACE

LANDSCAPE TYPOLOGY

TREE CANOPY

RECOMMENDATIONS

FACILITIES PLANNING PRINCIPLES

DEVELOPMENT CONCEPTS

FACILITIES REPLACEMENT

FACILITIES MASTER PLAN

PROJECT DESCRIPTIONS

VEHICULAR + TRAFFIC

PEDESTRIAN + OPEN SPACE

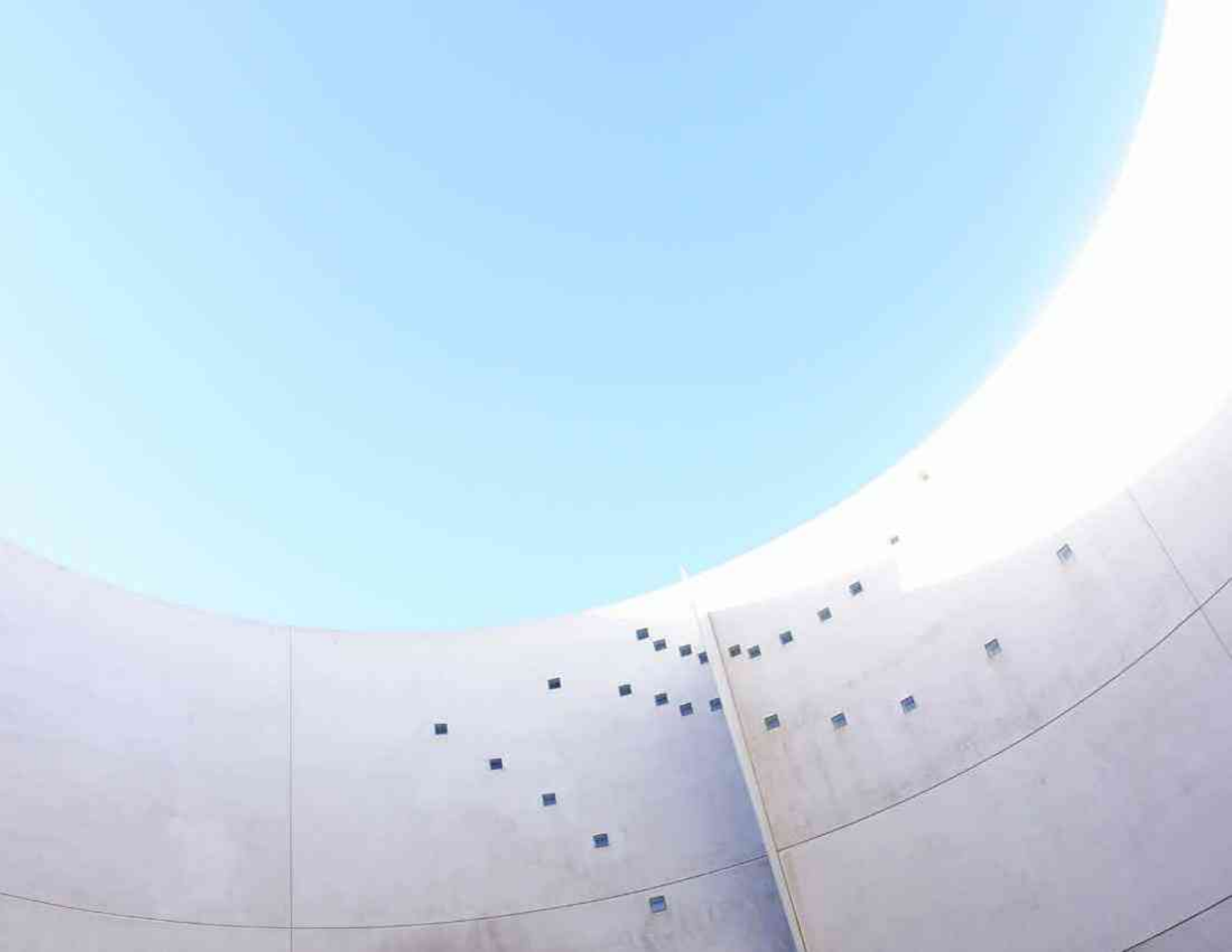
LANDSCAPE TYPOLOGIES

PHASED DEVELOPMENT

PHASE 1 PROJECTS

PHASE 2 PROJECTS

PHASE 3 PROJECTS



EXISTING CONDITIONS

EXISTING CONDITIONS OVERVIEW

The analysis of the existing conditions for the Chula Vista Campus identified the key planning issues to be addressed in the FMP. The information was gathered through a series of meetings, tours and discussions with college faculty, staff, students and the FMP Task Force.

The findings are summarized in a series of graphics that illustrate patterns, observations and characteristics to guide future development.



The following elements are included in this section:

LOCAL CONTEXT

EXISTING FACILITIES

CAMPUS DEVELOPMENT HISTORY

FACILITIES CONDITION

CAMPUS ZONING

EXISTING CAMPUS

VEHICULAR CIRCULATION

CAMPUS PARKING

PEDESTRIAN CIRCULATION + OPEN SPACE

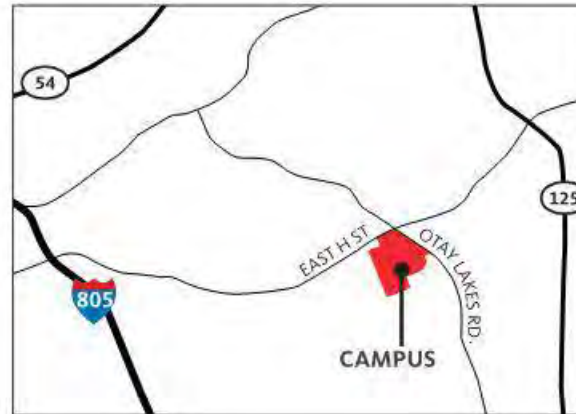
LANDSCAPE TYPOLOGY

TREE CANOPY

LOCAL CONTEXT

The Chula Vista Campus of Southwestern College is located in the city of Chula Vista in San Diego County. It is located within the communities of Rancho Del Rey, Bonita Canyon and Otay Ranch. It is situated on sloping topography between H Street and Otay Lakes Road. The campus can be reached from the 805 freeway to the west and the 125 toll road to the east. The campus is surrounded on two sides by residential neighborhoods, Bonita Vista Middle and High School are located across Otay Lakes Road and commercial businesses are located across East H Street.

ACCESS



COMMUNITY FACTS

- Local population of approximately 265,000
- Located approximately 7 miles from the US-Mexico border
- Considered the only higher education college in the southeast of the county
- Located within a 20 minute drive to downtown San Diego
- San Diego coastline and military operation are located within 2 miles



Discovery Park



Bonita Vista High School



Elite Athletic Training Center



EXISTING FACILITIES

The Chula Vista campus includes 86 buildings on 156 acres of land with low scale buildings centered around campus open space with lush planting. The architectural character of the buildings create the campus identity such as the Aztec character of the campus is evident in the frieze of the concrete and glass buildings.

Gateways to single-story buildings lead into quiet, formal courtyards used for gathering and circulation. Many of the features of the Chula Vista campus are iconic to the community and region and offer a landmark of history for the college.

LIST OF BUILDINGS

A

Function	Building #
Academic Senate	104
Academic Success CNT	420
Administration	100
Administration	210
Animal Storage	315
Art Gallery	710
Art	700
Art	750
Associated Students	600
Auditorium	900
Auto Maintenance	1250
Automotive	590

B

Behavior Science	460
Biology	310
Bookstore	630
Business	220
Business Operation	1650
Business	200

C

Chemistry	330
Child Develop. Center	2000
Classroom	103
Classroom	1680
Classroom	1600
Classroom	1670
Classroom	105
Classroom	430
Community Service	66
Conference	1630
Classroom	510

E

Electronics	540
English	410
Exhibit Hall	381

F

Function	Building #
Field House	1700
Fiscal Services	1660
Fitness Center	1550

G

General Classrooms	560
Graphics	500
Greenhouse	1810
Greenhouse	316
Gymnasium	1500

H

Horticulture	1800
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J

Journalism	640
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L

Language	440
Learning Res Center	620
Life Science	320

M

Maintenance	1200
Mathematics	390
Music	800
Music	850

O

Function	Building #
Office	1620
Office	400
Office	450
One Stop S.S.C.	1400

P

Photography Lab	570
Physics	340
Planetarium	382

R

Resource Training	650
-------------------	-----

S

Science Lecture	300
Snack Bar	1505
Social Science	470
Staff Lounge	102
Student Union	610

T

Tech/Human SVC	550
Tool Storage	1265
Time Out Café	480

W

Warehouse	1100
Wellness Center	



CAMPUS DEVELOPMENT HISTORY

1963
SWC Opens



1988
San Ysidro Campus Opens



EXISTING CONDITIONS

1960

1964
SWC Moves to Chula Vista Location
+ Initial Instruction Complete

1998
National City Campus Opens

CHULA VISTA



1960-1969



1970-1979



1980-1989



2007

Otay Mesa Campus Opens



2008

Prop R passes

2016

Prop Z passes

2018



1990-1999



2000-2009



2010-PRESENT

2018 SOUTHWESTERN COLLEGE FMP

CAMPUS DEVELOPMENT HISTORY

Southwestern College began offering classes in 1961 and was temporarily housed in Chula Vista High School. The 156-acre campus opened officially in 1963 with initial construction finishing in 1964. The college has been accredited from the Western Association of Schools and Colleges continuously since that time.

Most of the original campus buildings were constructed within the Ring Road, establishing the campus core. Over time, additional facilities were added outside the campus core including landscape technology and athletics around the perimeter. In more recent years, temporary buildings were added for District operations, maintenance and additional instructional space.

The Chula Vista campus was developed from the center of campus outwards. Development began in the 1960s with buildings such as Mayan Hall, the Student Union, as well as the 200s, 300s and some of the 400s. In the 1970s, additional facilities were added closer to the Ring Road which included Music + Art buildings, Buildings 210, 420-570 and 550-570. In addition, Automotive Technology facilities were added outside the Ring Road to the south of the campus core. Facilities Maintenance and Warehouse facilities were also built at this time.

The Campus Bookstore, Building 320 and Landscape & Nursery Technology were all developed in the 1980s. These facilities filled in gaps on campus inside and outside the Ring Road where land was available. Later on in the 1990s, Buildings 640-660 were built housing instructional space and Continuing Education. Portable buildings were also added to the south of the Ring Road outside the campus core for District Services and additional instructional space. These were meant to be temporary and are not considered ideal for learning and travel time between classes however they still remain today.

Between 2000 and 2010, the Child Development Center and the Learning Resource Center were constructed. From 2010 to today, the Wellness & Aquatic Center, Devore Stadium & Field House were completed. Currently, the Math/Science Complex, the Performing Arts & Cultural Center and the Security building are in construction.

OBSERVATIONS

- The majority of buildings in the campus core were built in the 1970s and are still in use
- Development continued outward towards the Campus Ring Road and eventually outside the road where land was available
- The more recent building designs are larger in scale than the original buildings and are highly visible to the community



Child Development Center



DeVore Stadium & Field House



Time Out Cafe



CAMPUS DEVELOPMENT HISTORY

LEGEND

1960'S

1970'S

1980'S

1990'S

2000'S

2010'S

TEMPORARY STRUCTURE

OTHER FACILITIES

2018 SOUTHWESTERN COLLEGE FMP



SCALE



FACILITIES CONDITION

A Facilities Condition Survey was conducted in 2015 to assess the status of each building on the Chula Vista campus. The survey consisted of a comprehensive assessment of interior and exterior closure, roof, HVAC, plumbing and electrical systems. Each building was assigned an excellent, good, fair or poor designation. A graphic representation of the designations, along with the identification of temporary structures is illustrated on the opposite page.

After reviewing the results of the survey with the FMP Task Force, it was noted that there are several buildings on campus that are in good or excellent condition, but were ineffective for the functions housed within them. These buildings are indicated on the plan with a purple dashed outline.

2015 FACILITY CONDITION SURVEY

SOUTHWESTERN COLLEGE

SURVEY CONDUCTED BY:

Pack & Associates, LLC
2715 185th Ave. NE
Redmond, WA 98052



REQUESTED BY:

Proposition R Bond Program
Southwestern College
Chula Vista, California



Low-Rise Buildings with
Exterior Circulation



Mayan Hall



Child Development Center



FACILITIES CONDITION LEGEND

- EXCELLENT
- GOOD
- FAIR
- POOR
- INEFFECTIVE
- TEMPORARY STRUCTURE
- OTHER FACILITIES (NOT SURVEYED)

2018 SOUTHWESTERN COLLEGE FMP



SCALE



CAMPUS ZONING

The campus core includes buildings that house the majority of core instructional and student support services. At the heart of the campus, the student support services buildings are located and include the Student Union, Student Center and Student Services buildings.

The athletics buildings and site facilities are located at the west perimeter of campus. These facilities include baseball, the DeVore Stadium & Field House, Wellness & Aquatics Complex and the tennis courts and athletics fields. The Performing Arts & Cultural Center is adjacent to the Wellness & Aquatics Complex rounding out the front corner of campus along Otay Lakes Road.

Facilities Operations and Warehouse, Automotive Technology and District Services are all located just outside the Ring Road outside the campus core. Landscape and Nursery Technology and the Child Development Center expand further south with access to additional parking and the 1600s instructional complex are in temporary facilities at the southeast end of campus.

OBSERVATIONS

- The campus is zoned with the majority of instructional facilities located inside of the Campus Ring Road
- Student support services are located in the center of campus
- The Learning Resource Center and the Academic Success Center are located on either end of the campus core adjacent to the campus Ring Road
- Functions housed in temporary facilities outside of the campus core are difficult to access
- Athletic facilities are located around the outside edges of campus
- Most parking is located around the Campus Ring Road and campus core



CAMPUS ZONING LEGEND

- INSTRUCTIONAL FACILITIES
- INSTRUCTIONAL SITE AREAS
- INSTRUCTIONAL SUPPORT
- STUDENT SUPPORT
SERVICES & ACTIVITIES
- ADMINISTRATION
- FACILITIES & SERVICES

2018 SOUTHWESTERN COLLEGE FMP



SCALE



VEHICULAR CIRCULATION

The Chula Vista campus is accessed from two main streets: H Street and Otay Lakes Road. H Street provides direct access to the nearby 805 freeway. The campus has three entrances onto campus including the H Street entrance to the southwest and the Elmhurst and Gotham Street entrances to the northeast. There is an additional exit only driveway on the northeast edge of campus that opens to Otay Lakes Road going east. Parking lot O also has a direct entrance to Otay Lakes Road. The campus has an emergency exit near the Child Development Center that is closed to through traffic onto Woodcrest Street, a residential area.

Currently, the campus is accessed around a Ring Road that provides entrances to parking and areas at the south side of campus. Vehicles and pedestrians conflict frequently along the Ring Road traveling from parking onto campus. There are also two vehicular drop off locations at the north entrance to campus and the east side of the Ring Road. Informal drop off is frequent and often causes traffic congestion.

In addition, parking lots have irregular striping and striping that causes pedestrians to transversely cross through cars rather than walking in the path of travel towards buildings. Parking lots generally surround the Ring Road, with the exception of smaller, inefficient lots at the south side of campus. These lots extend out past the ten to fifteen minute walk range and some have no safe pedestrian routes going toward the center of campus.



Bus Stop



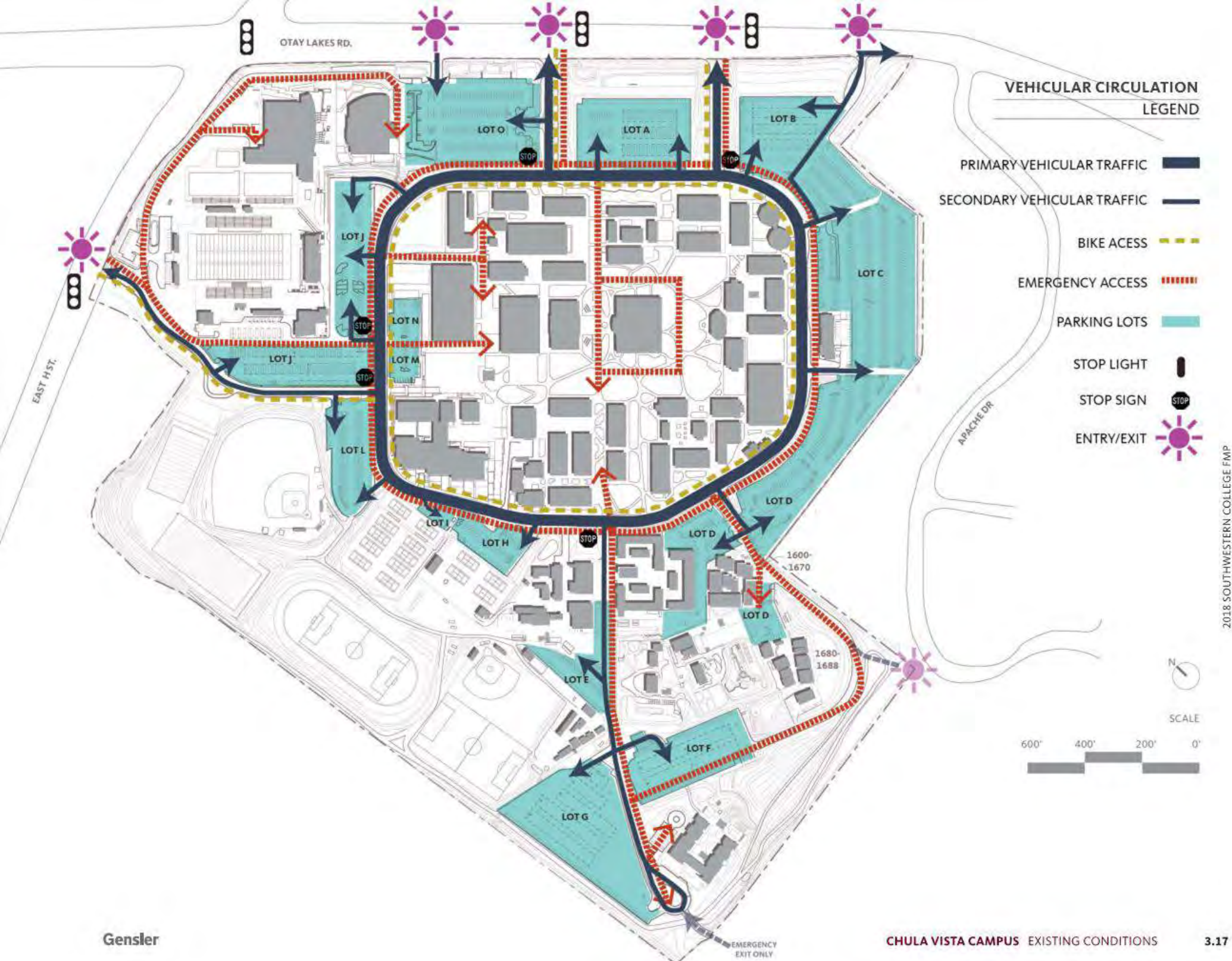
Gotham Entrance



Campus Ring Road

OBSERVATIONS

- Vehicular circulation on campus is congested around the Campus Ring Road due to pedestrian crossings and multiple drop-offs
- The H Street entrance is heavily utilized and has minimal way-finding
- The bus drop-off location interferes with vehicular drop-off at the front entrance to campus near the 100s buildings
- Circulation in many parking lots is confusing and causes congestions
- Lots E, F and G are far removed from the center of campus
- Many campus roadways and parking lots have accessibility challenges and do not have adequate pedestrian walkways into the center of campus



2018 SOUTHWESTERN COLLEGE FMP

CAMPUS PARKING

Parking at the Chula Vista campus is currently spread amongst sixteen parking lots which are designated with lettered alphabetical names ranging from A to P. When the campus was opened, it was organized with an academic campus core with a Ring Road that wrapped around the heart of campus. The parking lots were located across the Ring Road spread around the center of campus. Over time, as more parking was needed and functions moved outside the core, the parking lots expanded outwards towards the edges of campus. This created additional parking in areas remote from the campus core.

The majority of campus parking is located in lots B, C and D. Lot G and F serve as overflow for other lots on campus. Since the Ring Road is between the academic campus core and the parking lots, there are many vehicular and pedestrian conflicts. Pedestrians must first traverse through parking lots that are not oriented towards the campus core, then they must attempt to cross the Ring Road. At peak times, this causes a significant amount of traffic on the Ring Road, preventing students from getting to where they need to be on time.

Additional parking is needed to address the current and projected enrollment for the Chula Vista Campus.



Parking Near H Street Entrance



Emergency Phones



Ring Road Congestion


PARKING COUNT

LOT NAME	# OF SPACES
A	206
B	265
C	775
D	182
E	137
F	274
G	449
H	90
I	22
J	284
L	182
M	252
N	39
O	252
P	12

TOTAL 3,252

OTAY LAKES RD.

CAMPUS PARKING LEGEND

PARKING LOTS 

EAST H ST.

ELKHURST ENTRANCE

LOTA

GOTHAM ENTRANCE

LOT B

PERIMETER ROAD

LOT P

LOT J

LOT N

LOT M

LOT L

LOT C

LOT D

LOT I

LOT H

LOT D

LOTE

LOT D

LOT F

LOT G

1600-1670

1680-1688

APACHE DR.



SCALE



PEDESTRIAN CIRCULATION + OPEN SPACE

The Chula Vista Campus has a park-like open space setting at the core of campus. Many of the existing buildings also have courtyards between them that are used for instruction and gathering. Pedestrian circulation flows throughout campus on both orthogonal and meandering walkways through the campus core extending to the buildings.

Pedestrian circulation flowing onto campus is challenging from the H Street entrance which has forty-five feet of grade change causing accessibility to be a challenge. In addition, pedestrian routes from parking lots lead across parking aisles rather than with the flow of traffic due to current layouts and striping. There are many pedestrian/vehicular conflicts along the campus Ring Road as pedestrians cross to lead to the interior of the campus core. These conflicts cause confusion, slowing and vehicular congestion at peak times.

Pedestrian circulation organization is more sporadic and less organized moving out past the parking adjacent to the campus core. These routes include areas without sidewalks leading to perimeter parking lots. Main campus walkways begin to form a grid pattern starting with Jaguar Walk at the north entrance that end up less organized at the core where Student Services is currently located. These routes have many areas where pedestrian sight lines are not clearly defined looking across campus. Way-finding and signage is minimal around buildings that have exterior circulation causing confusion.

OBSERVATIONS

- The campus core is separated from parking by the campus Ring Road and creates pedestrian/vehicle conflicts and congestion
- Pedestrian way-finding from parking to destinations on campus is difficult to navigate
- The Ring Road includes one drop-off area at the front of the campus. Other non-designated areas are used for drop-off and pick up and cause congestion
- The campus is difficult to navigate, particularly to areas located outside the campus core



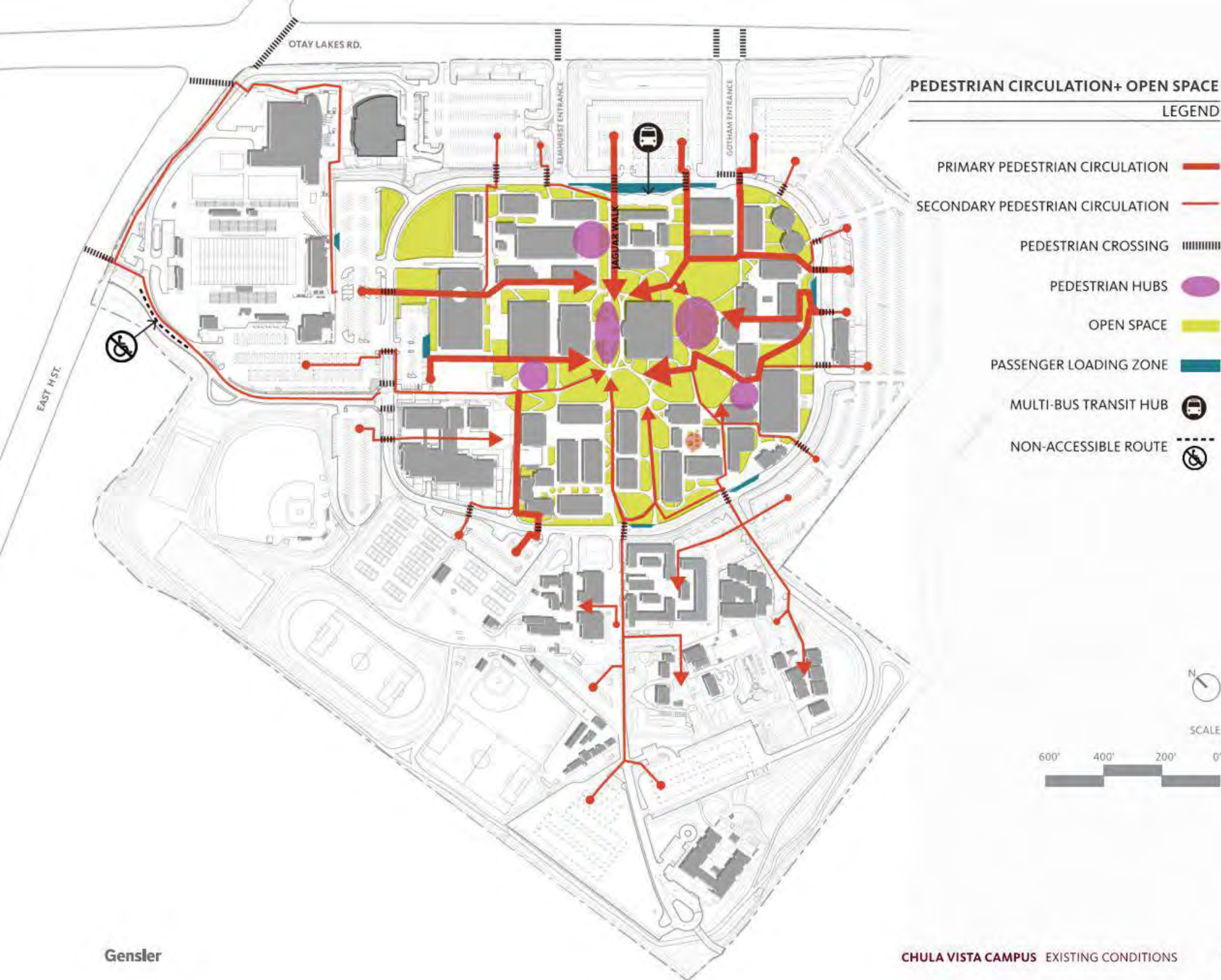
**Main Campus Circulation Walkway
Extending to Ring Road**



Park-Like Campus Setting



Challenging Way-Finding



PEDESTRIAN CIRCULATION + OPEN SPACE CAMPUS CORE

The core of the Chula Vista Campus consists of a series of buildings centered on a campus grid with green space and tree-lined walkways. Many of the older buildings have small academic courtyards and spaces for outdoor learning. Each courtyard also serves as a pass-through for pedestrian circulation to other buildings on campus. While the interior of the campus core is set on a park-like setting, there is a lack of hierarchy with signage and monuments to help visitors navigate their way around campus. The campus grid also is not complete in some locations, making it difficult to serve as a streamlined pedestrian walkway for circulation on campus.

Pedestrian routes from the Ring Road lead into the large green campus core. Much of the campus core is designated as green space and lacks areas for gathering, studying and informal meet-ups. In addition, accessible pathways are not always equal or easily found creating a different experience on campus for some visitors.

Jaguar Walk extends from the pedestrian drop-off near the bus stop towards the center of campus. It has light poles and banners at the front of campus which end as you enter into the core of campus and could be extended through.

OBSERVATIONS

- The large open space at the center of campus is a key feature that should be preserved
- There are outdoor areas within the campus core that are underutilized and can be improved to support collaboration
- Pedestrian way-finding is difficult from building to building since many of the buildings look similar and have exterior circulation
- ADA path of travel throughout campus is not consistent and could be improved for a unified experience



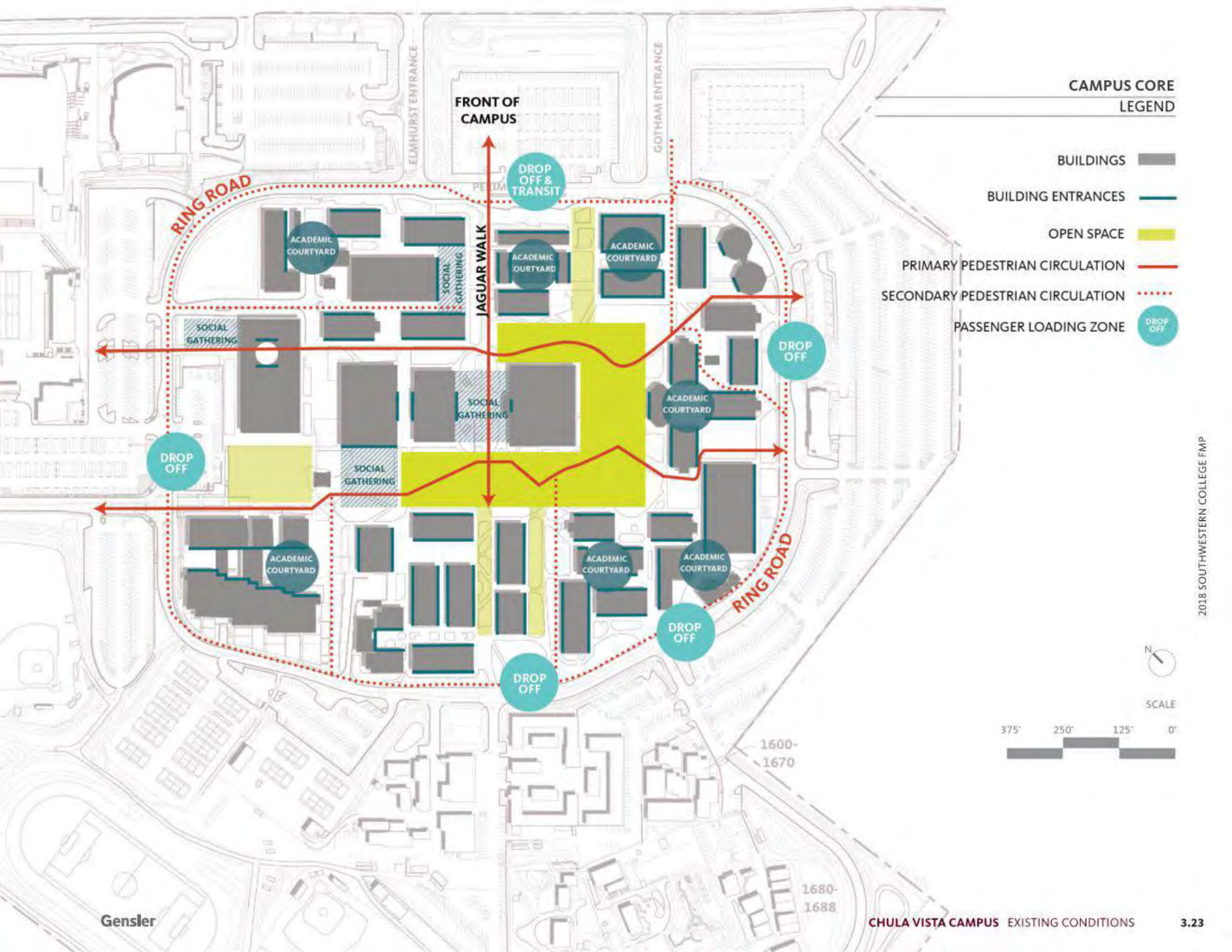
Tree-Lined Pedestrian Walkways



Large Open Green Spaces



Academic Courtyards



CAMPUS CORE
LEGEND

- BUILDINGS
- BUILDING ENTRANCES
- OPEN SPACE
- PRIMARY PEDESTRIAN CIRCULATION
- SECONDARY PEDESTRIAN CIRCULATION
- PASSENGER LOADING ZONE



SCALE



2018 SOUTHWESTERN COLLEGE FMP

LANDSCAPE TYPOLOGY

The Chula Vista Campus landscape is predominantly turf starting at the campus entrance, along the Ring Road in areas with minimal topography, covering the sports fields and surrounding areas, and continues as the dominating landscape typology of the central campus. Non-native plantings are found within the central campus as well. The shift to sustainable landscape typologies such as drought tolerant plantings and bioswales are introduced through new building construction on campus.

The future of the Chula Vista Campus sustainable landscape typologies is to emphasize creating a unified framework and using planting guidelines with a palette that includes signature species. Guidelines such as formal streetscape plantings to aid in wayfinding and expanding the network of pedestrian promenades, plazas, and courtyards would heighten the visitor experience. Including a standard of shaded walkways, parking lot trees, and shade for open spaces would minimize the water runoff and aid in combating the urban heat island effect on campus. Creating a comfortable pedestrian network will help promote physical wellness and social interaction.



Large Grassy Areas



Tropical Plantings



Drought-Tolerant Planting

OBSERVATIONS

- New buildings on campus (Wellness/Aquatic Center, PACC, Stadium, Math & Science) are setting a new precedent of drought tolerant/low maintenance landscapes
- The remaining campus landscape has a non-cohesive, water thirsty, non-native plant palette that is struggling in the environment
- Large amount of turf landscape in interstitial spaces throughout campus that is requiring high water use and maintenance resources
- There are minimal bioswales within the central campus; predominantly relying on drains and a set of bioswales along Otay Lakes Rd at the Elmhurst Entrance. Newly planted bioswales can be found Northeast of Parking Lot O



TREE CANOPY

Southwestern College holds a vast collection of pleasing established specimen trees within the inner campus. The campus, as a whole has strategically established tree plantings around the Ring Road, athletic fields, campus entrances, and buildings. Large Carrotwood trees (*Cupaniopsis anacardioides*) line Jaguar Walk as Tipu trees (*Tipuana tipu*) connect the stadium and library. Trees such as Oak (*Quercus*), Pines (*Pinus*), White Alder (*Alnus rhombifolia*) are located within sight lines of verdant rolling hills of the Central Campus helping to create a park-like atmosphere.

Varying Palm species (*Washingtonia/Phoenix ssp*) act as beacons, drawing students towards a centralized Student Services building. Fragrant and showy Jacarandas (*Jacaranda mimosifolia*) bloom a charming violet hue as campus visitors travel along the Ring Road. Sports fields are surrounded by large Pine (*Pinus*) species and palms (*Washingtonia/Phoenix ssp*) before transitioning to a progression of drought tolerant vibrant chartreuse Palo Verde (*Cercidium floridum*) trees, to connect with the football stadium.

Proposed trees at Southwestern College should pay homage to the cherished species on campus while expanding the Tree palette to include drought-tolerant, adaptive and native species. New trees should be established with careful campus placement to combat the urban heat island effect, create much needed shade, stabilize soils, screen, formalize paths, and frame views throughout campus.



Courtyard Shade Cover



Unique Tree Specimens



Tree-Lined Walkways

OBSERVATIONS

- The campus has a large variety of established existing trees
- Campus trees have a mix of requirements: non-natives require more water
- Existing trees are used for campus education programs such as: plant identification
- The large and older trees create a park-like setting
- Signature trees on campus such as Jacaranda provide clear direction for pathways
- Conifers around athletic area provide screening and wind protection



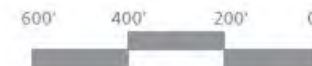
TREE CANOPY LEGEND

- CENTRAL CAMPUS TREES
- PALM TREES
- JAGUAR WALK TREES
- STREET TREES
- CAMPUS TREES

2018 SOUTHWESTERN COLLEGE FMP



SCALE





RECOMMENDATIONS

FACILITIES MASTER PLAN OVERVIEW

The 2018 FMP recommendations for the Chula Vista Campus present an overall picture of the future developed campus and includes proposed sites for new facilities, recommendations for renovations of existing facilities and site development projects.

The recommendations included in this section follow the Facilities Master Plan program (from the Planning Data section of this report), and address the discussion that took place during the planning process.

The following elements are included in this section:

FACILITIES PLANNING PRINCIPLES

DEVELOPMENT CONCEPTS

FACILITIES REPLACEMENT

FACILITIES MASTER PLAN

PROJECT DESCRIPTIONS

VEHICULAR + TRAFFIC

PEDESTRIAN + OPEN SPACE

LANDSCAPE TYPOLOGIES

PHASED DEVELOPMENT

PHASE 1 PROJECTS

PHASE 2 PROJECTS

PHASE 3 PROJECTS

FACILITIES PLANNING PRINCIPLES

The Facilities Planning Principles provide the framework for the FMP recommendations for the Chula Vista Campus. These principles were developed early in the planning process and were used as a guide for the development and evaluation of early concepts and ideas. The principles represent a set of overarching goals for future development and have been translated into a series of projects described in this chapter. **(Refer to the SWCCD section for additional information).**



CAMPUS ORGANIZATION

- Organize campus functions to support a guided pathway model
- Create logical groupings of functions to enhance student success
- Integrate instructional and student support services



ACCESS + WAYFINDING

- Develop welcoming + inviting campus entries
- Enhance wayfinding and campus organization
- Improve access to programs and services
- Develop and clarify circulation patterns



COLLEGIATE IDENTITY

- Create collegiate campus identities
- Enhance student and faculty engagement
- Develop indoor and outdoor spaces to support collaboration
- Create a sense of belonging + pride



EFFECTIVE + EFFICIENT

- Align facilities use with institutional priorities
- Improve facilities to enhance learning outcomes
- Develop flexible, multi-purpose space to adapt over time
- Replace inefficient and underperforming facilities



STEWARDSHIP OF RESOURCES

- Optimize available resources
- Maximize land use to align with institutional priorities
- Increase awareness and create a culture of sustainability
- Position Southwestern College to maximize funding (state and local)



COMMUNITY ENGAGEMENT

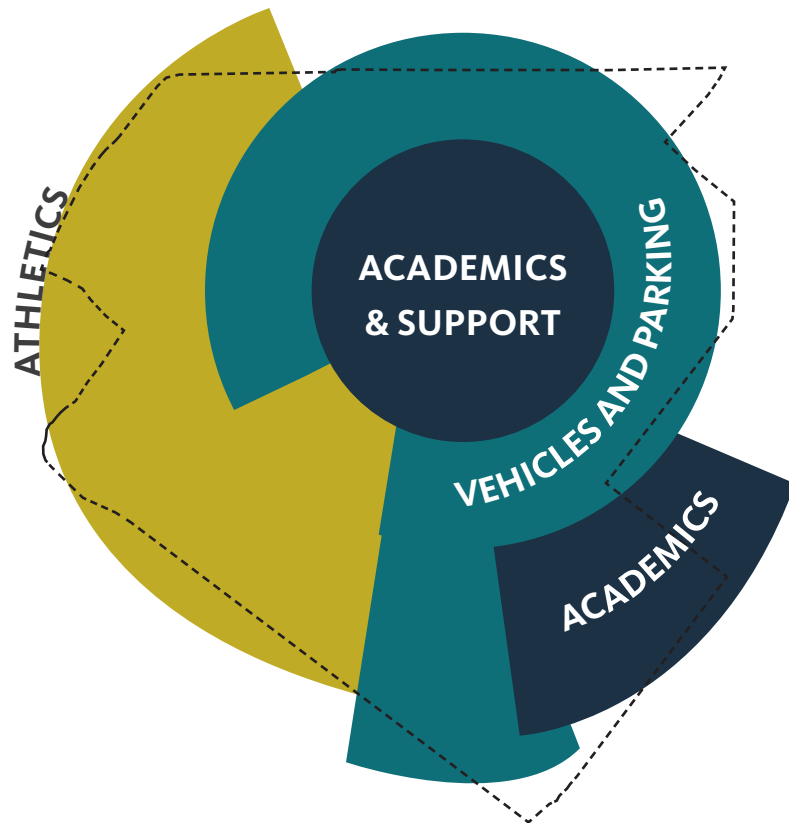
- Increase visibility of all Southwestern College campuses
- Strengthen connections with surrounding communities
- Develop campuses to enhance community engagement
- Improve access to college events and performances

DEVELOPMENT CONCEPTS

1. RE-CENTER THE CAMPUS CORE

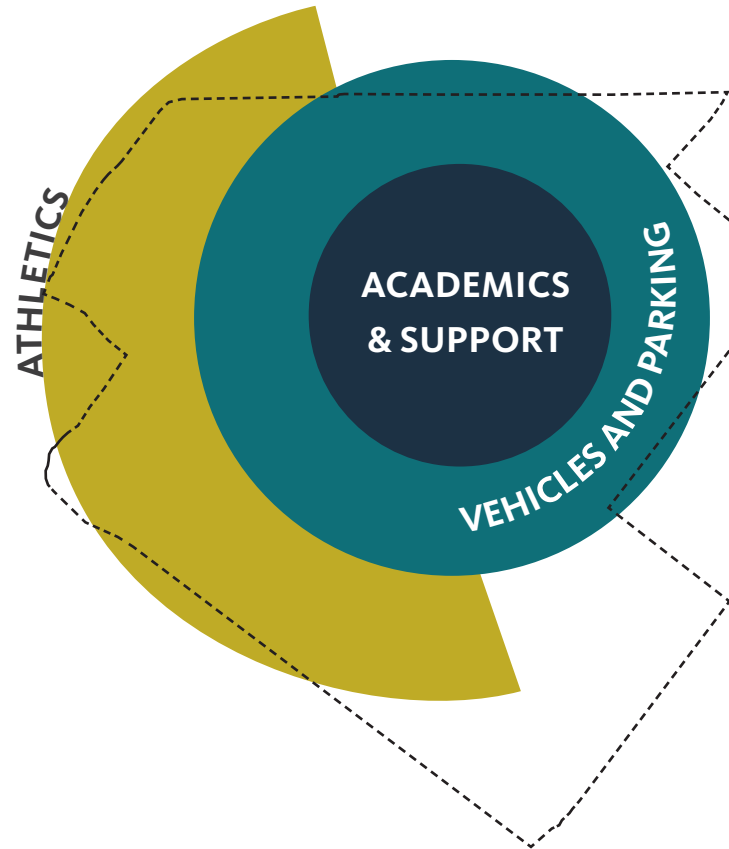
EXISTING CAMPUS

The Chula Vista campus is organized around an academic core which is framed by the campus Ring Road. Outside of this zone, parking, athletics and some academic and administrative functions are located on the outer edges in temporary facilities.



FUTURE CAMPUS

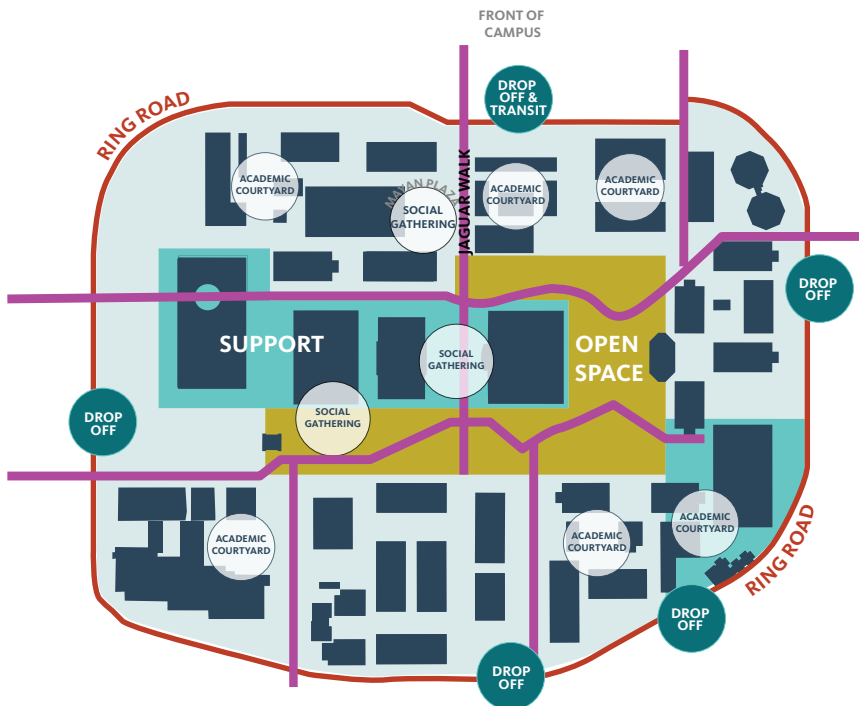
The FMP recommendations include re-centering core academic functions back into the campus core and evenly distributing and expanding parking evenly around. Athletics functions remain at the outer edges of campus with some facilities moving to this area to make room for parking closer to the core.



2. IMPROVE ACCESS TO PROGRAMS + SERVICES

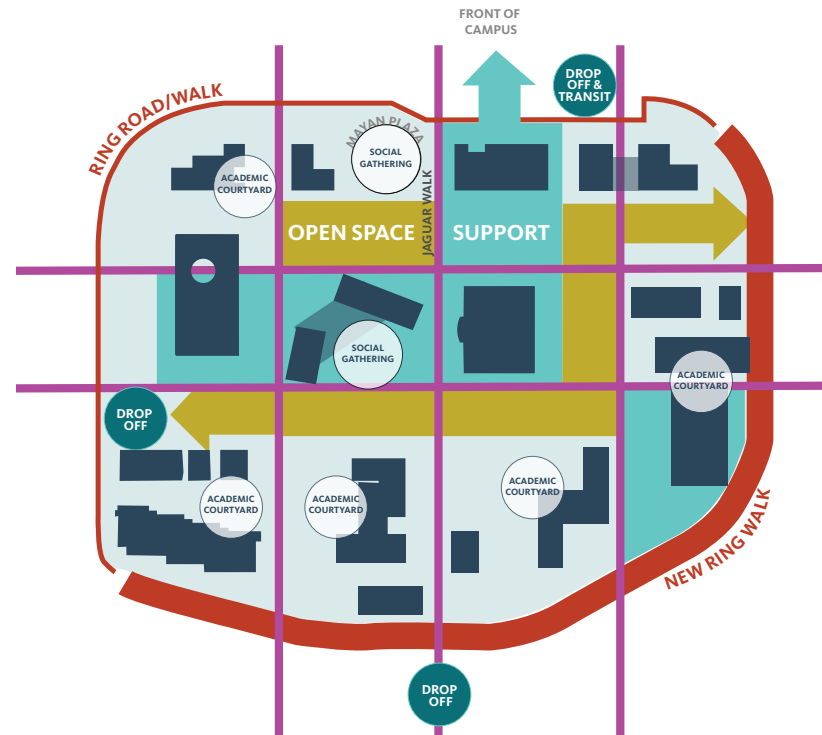
EXISTING CAMPUS

The campus core is centered on a large green open space with student support functions in the middle and ends of this area. The pedestrian campus grid has many paths with some more significant walkways such as Jaguar Walk. Many of the building clusters have smaller academic courtyards and social gathering mainly occurs in Mayan Plaza and around the One Stop Student Services building and the Student Union.



FUTURE CAMPUS

The proposed plan extends the open space around the center of campus and out to the Ring Road and new pedestrian Ring Walk which will serve as a front door to the new buildings. Student support functions remain at the heart of campus and are extended out to the main drop off and entry at the front door to campus. Academic courtyards are maintained with the new buildings and larger social gathering areas and plazas are lined around the open space.

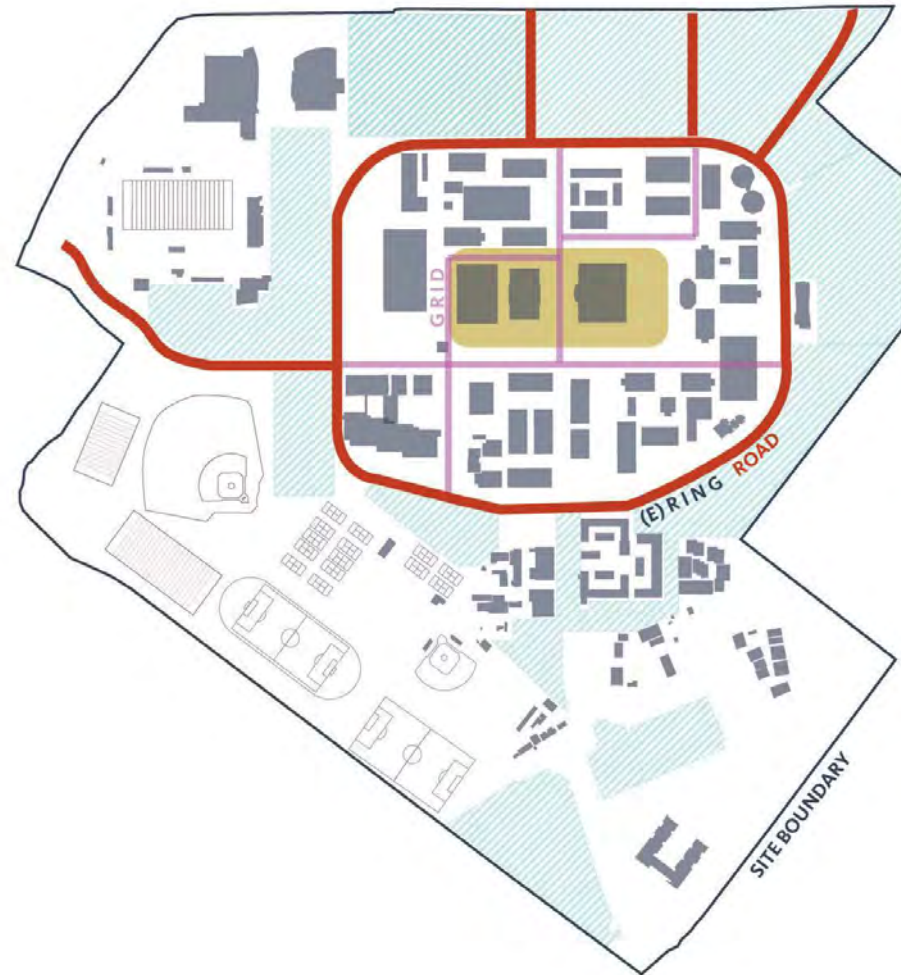


DEVELOPMENT CONCEPTS

3. IMPROVE CIRCULATION PATTERNS

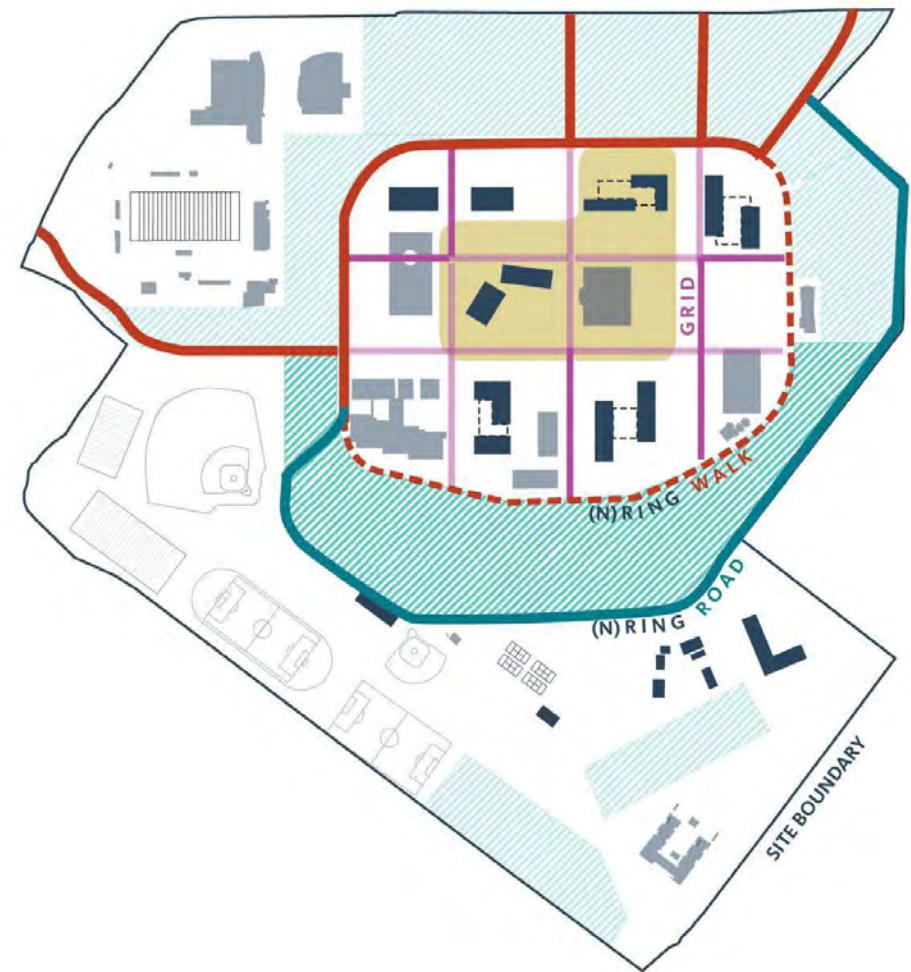
EXISTING CAMPUS

The current Chula Vista Campus pedestrian circulation routes are disconnected from one another and do not carry through from one end of the campus core to the other. In addition, the majority of the parking is located far from the core and is not evenly distributed around the campus core. A number of buildings and functions are located outside the core of campus. Exterior circulation around many disconnected buildings makes wayfinding difficult. Student Support Services are located at the center of the campus core and are not visible from the “front door”.



FUTURE CAMPUS

The proposed plan redistributes parking around the campus core to improve access. The perimeter Ring Road is relocated to improve safety and vehicular access. Temporary, poor condition and outdated facilities are removed and functions are shifted into the core of campus into permanent buildings.



FACILITIES REPLACEMENT

During the development of the Facilities Master Plan, replacement of facilities was carefully considered to support the guiding principles to improve the effectiveness and efficiency of facilities. Legacy buildings and areas on campus were also discussed and defined, such as Mayan Hall's plaza and steps, as important to preserve or recreate with future development. Based on the analysis of existing conditions, the review of the Facilities Condition Index ([see page 3.20](#)) and discussions with faculty and staff, a number of buildings have been identified to be demolished as part of this FMP. Functions housed in these buildings will be relocated to new locations in new or re-purposed buildings.

The four groups identified for replacement include the following:

TEMPORARY BUILDINGS

Functions relocated to a permanent home on campus

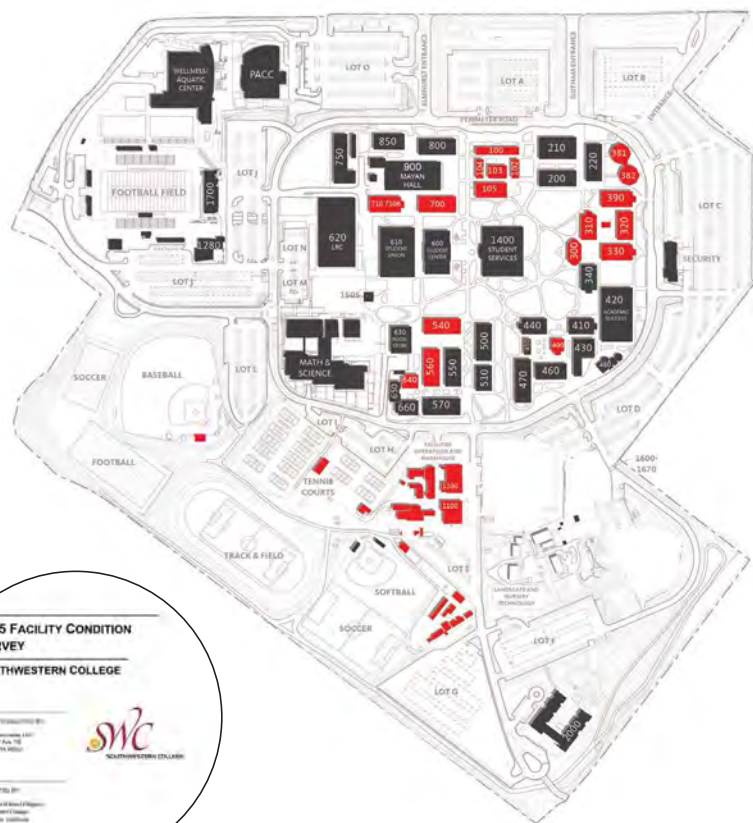


AUTOMOTIVE TECHNOLOGY

Relocate program to Otay Mesa campus



Functions to be relocated based on 2015 FCI report



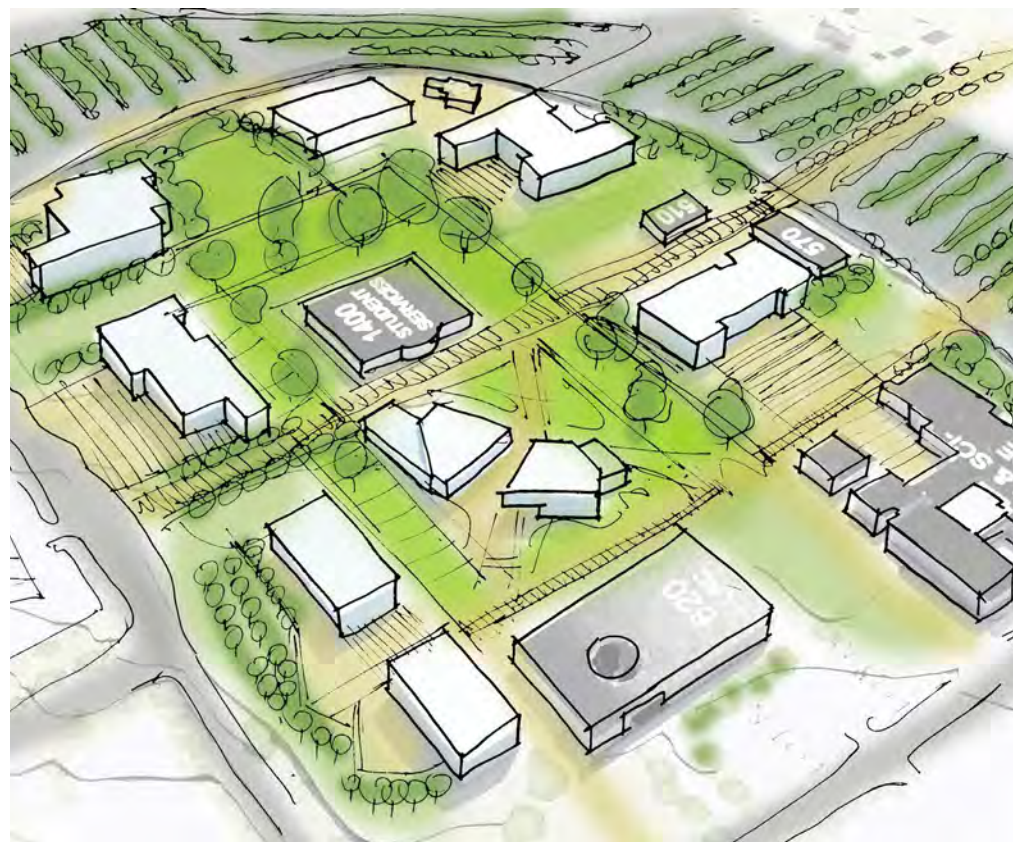
Functions to be relocated based on discussion with faculty and staff



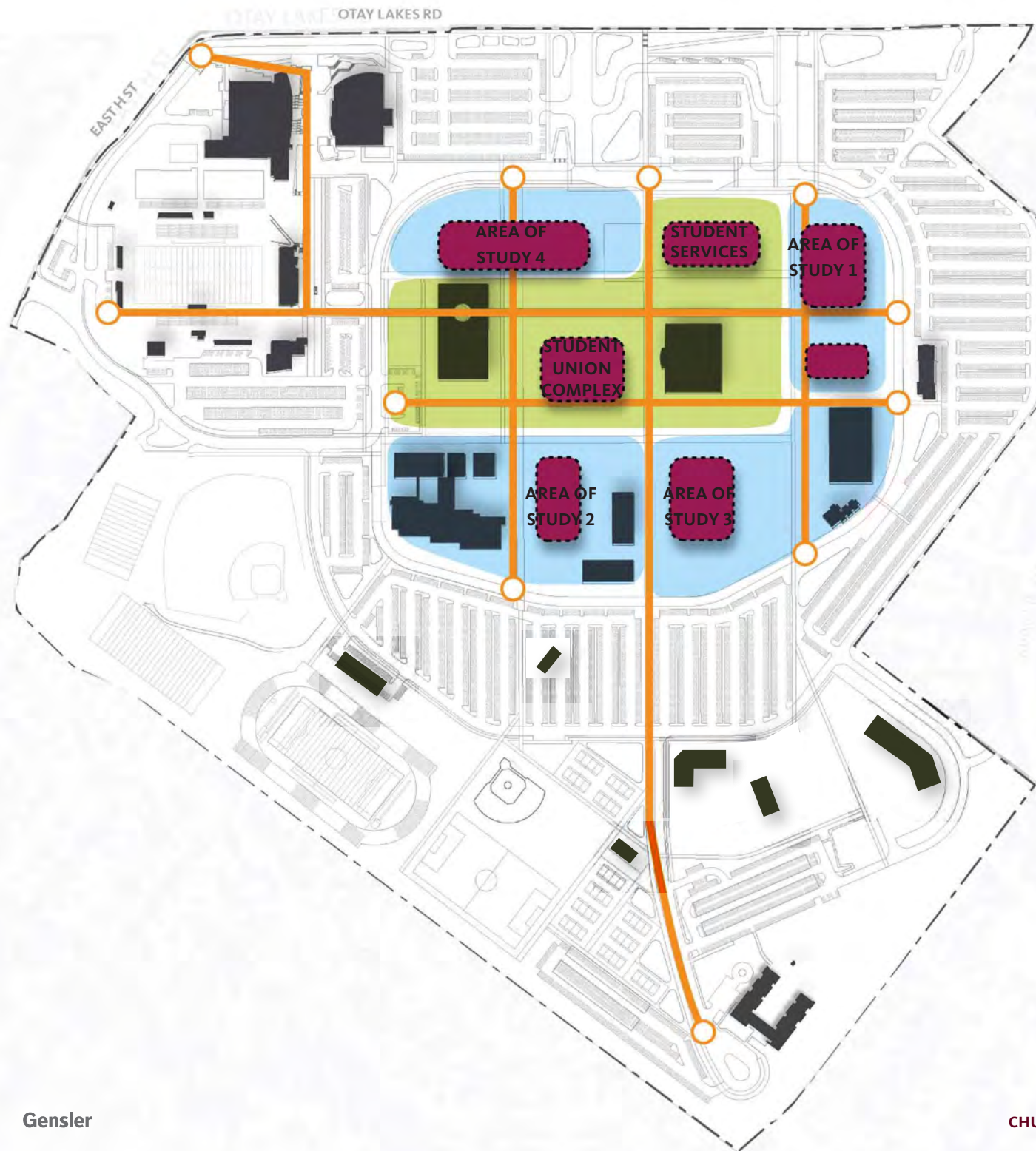
FRAMEWORK DEVELOPMENT PLAN

The Framework Development Plan was developed during the planning process, prior to the development of the complete FMP recommendations. This plan was reviewed and approved by the Task Force and Board of Trustees and served as the basis for developing the final recommendations presented in this chapter.

The Framework Development Plan included the identification of four Areas of Study based on the college's integration of the Guided Pathways model. Each Area of Study is intended to group synergistic programs together to better utilize space and resources. Additional development sites were identified for a student services expansion and campus gateway as well as the Student Union Complex.



Preliminary Framework Plan Rendering



FRAMEWORK DEVELOPMENT PLAN

LEGEND

- DEVELOPMENT SITES
- CAMPUS PEDESTRIAN AXES
- CAMPUS CORE/STUDENT SUPPORT
- INSTRUCTIONAL ZONES

FACILITIES MASTER PLAN

The FMP establishes an overall picture of the future developed campus and includes recommendations for new construction, building renovations and site development projects. The drawings represent a conceptual layout of the buildings and their site surroundings that highlight the location and purpose for the purposed improvements.

The FMP recommends demolition and replacement of many of the older and outdated buildings on campus. These are identified in the previous page spread. Functions currently housed in these facilities will be relocated to permanent facilities and will support the new campus zoning diagram and address program needs. A complete list of all program shifts is included in the Appendix of this document.

The project list to the right summarizes the FMP projects that are illustrated on the campus plan and described on the following pages.

FMP PROJECT LIST

UNDER CONSTRUCTION	BUILDING PROJECTS	SITE DEVELOPMENT PROJECTS
1 Math + Science Engineering Building	1 Instructional Complex 1	1 Parking + Ring Road + Bus Stop
2 Security Complex	2 Instructional Complex 2	2 Pedestrian Ring Walk
3 Performing Arts + Cultural Center	3 Instructional Complex 3	3 Tennis Facility
	4 Instructional Complex 4	4 Track + Field Improvements
	5 Facilities, Operations, Maintenance + Grounds	
	6 Landscape + Nursery Technology	
	7 New Student Services Gateway	
	8 One Stop Modernization	
	9 Student Union Complex	

FACILITIES MASTER PLAN

LEGEND

EXISTING TO REMAIN	
NEW	
RENOVATE	
FUTURE	



FMP FACILITIES PROJECT DESCRIPTIONS

Descriptions for each of the projects identified in the FMP are described on the following pages and grouped as illustrated in this key plan.

- 1 New Student Support Services/Administration + One Stop Modernization
- 2 Student Union Complex
- 3 Instructional Complex 1
- 4 Instructional Complex 2 + 3
- 5 Instructional Complex 4
- 6 Parking + Ring Road + Bus Stop
- 7 Facilities, Operations + Warehouse + Grounds
- 8 Landscape + Nursery Technology
- 9 Tennis Facility + Athletics Support Bldg + Track and Field

FACILITIES PLANNING PRINCIPLES



CAMPUS
ORGANIZATION



ACCESS +
WAYFINDING



COLLEGIATE
IDENTITY



EFFECTIVE +
EFFICIENT



STEWARDSHIP
OF RESOURCES



COMMUNITY
ENGAGEMENT

FMP PROJECTS

NEW BUILDING CONSTRUCTION

Instructional Complex 1	●	●	●	●		
Instructional Complex 2	●	●	●	●		
Instructional Complex 3	●	●	●	●		
Instructional Complex 4	●	●	●	●		
Facilities, Operations, Maintenance + Grounds	●			●	●	
Landscape + Nursery Technology				●	●	●
New Student Services Gateway	●	●	●	●		
Student Union Complex	●	●	●	●		●

SITE DEVELOPMENT PROJECTS

Parking + Ring Road		●		●	●	
Pedestrian Ring Walk	●	●		●	●	
Tennis Facility	●				●	
Track and Field Improvements					●	●

RENOVATION/CHANGE OF USE

One Stop Modernization	●			●	●	
------------------------	---	--	--	---	---	--

FMP FACILITIES PROJECT DESCRIPTIONS



2018 SOUTHWESTERN COLLEGE FMP



SCALE



1 NEW STUDENT SERVICES/ADMINISTRATION GATEWAY + ONE STOP MODERNIZATION

NEW STUDENT SERVICES GATEWAY

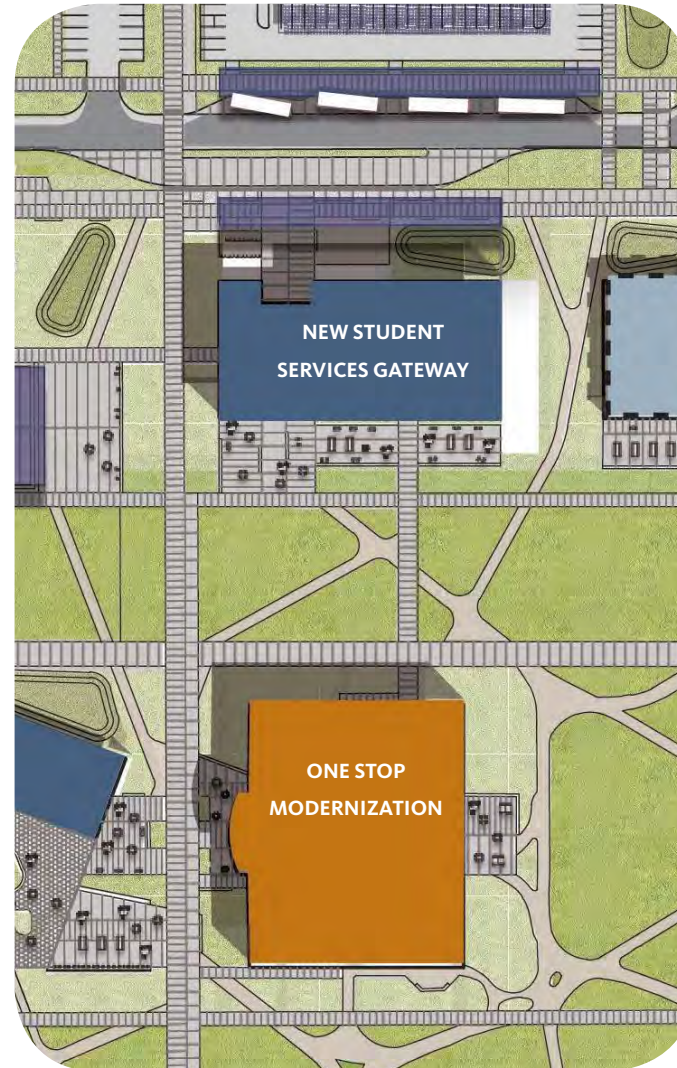
Positioned as the front door to campus, a new Student Support Services facility will welcome students and visitors to the campus and provide immediate access to essential student support services. This new gateway building will establish a positive entry experience and connect. This new gateway building will engender greater access to programs and services in a comfortable setting that offers intuitively legible pathways for students to begin their journey at Southwestern College. Campus Administration will be co-located in this facility as a signal that leadership is accessible, inclusive, and transparent to the broader community.

ONE STOP MODERNIZATION

Currently impacted, the One Stop's modernization will reinvest in this legacy building upon completion of the new Student Support Services Building. Located at the heart of campus, adjacent to the new Student Union, this modernized facility will provide expanded space and improved access for the services and resources to enhance student success.



KEY PLAN

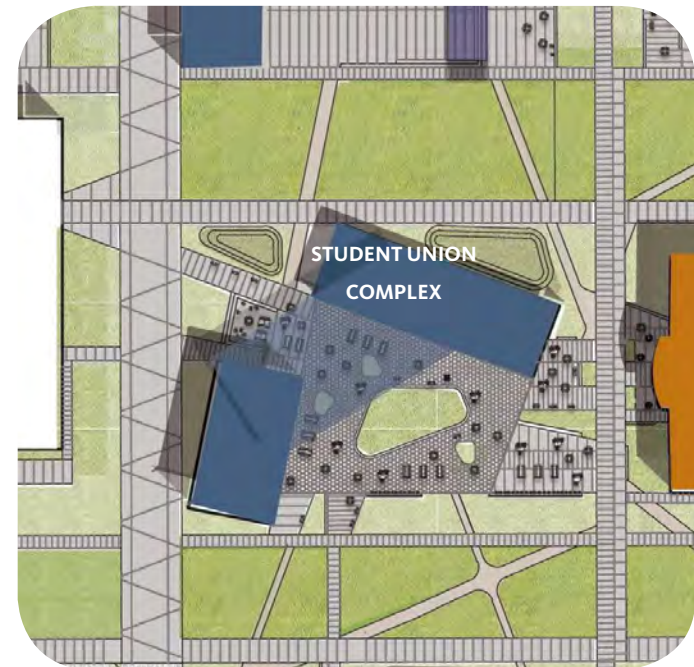


2 STUDENT UNION COMPLEX

A new Student Union will complete the heart of campus by offering a range of activities and spaces for students to gather, socialize, and interact with their peers. Balancing a number of small discrete spaces with larger flexible spaces will support student and campus programs and activities ranging from quiet study, to casual dining, to formal events. Food service and dining are critical elements of a successful Student Union and should take advantage of Chula Vista's benign climate by connecting indoor spaces with outdoor terraces and patios.



KEY PLAN



3 INSTRUCTIONAL COMPLEX 1

INSTRUCTIONAL COMPLEX 1

Instructional Complex 1 will address the demand for highly effective general use instructional space by offering a range of teaching and learning spaces including lecture classrooms, active classrooms for hands-on learning, and spaces for peer to peer collaboration and project work. Class labs that support specific academic programs will be coordinated as Areas of Study are clarified through the college's Guided Pathways Initiative. Faculty offices and support space will be included, and organized to support these Areas of Study.

DATA CENTER

A new consolidated Data Center will be integrated with Instructional Building 1. This portion of the project will provide both dedicated data storage space as well as space for instructional and information technology staff.



KEY PLAN



4 INSTRUCTIONAL COMPLEX 2 + 3

INSTRUCTIONAL COMPLEX 2

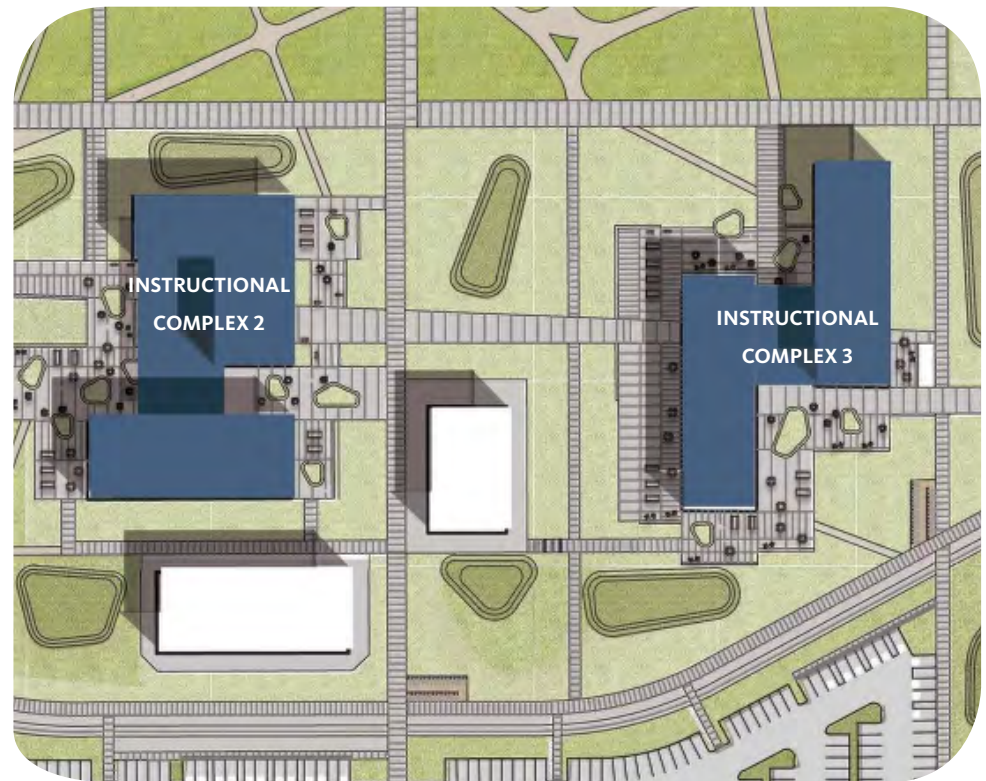
Instructional Complex 2 will address future additional demand for highly effective general use instructional space, and will also offer a range of teaching and learning spaces including lecture classrooms, active classrooms for hands-on learning, and spaces for peer to peer collaboration and project work. Class labs that support specific academic programs will be coordinated as Guided Pathways and Areas of Study are developed. Faculty offices and support space will be included and organized in support of Areas of Study.

INSTRUCTIONAL COMPLEX 3

Instructional Complex 3 will address longer range future additional demand for highly effective general use instructional space, and will also offer a variety of teaching and learning spaces including lecture classrooms, active classrooms for hands-on learning, and spaces for peer to peer collaboration and project work. Class labs that support specific academic programs will be coordinated as Guided Pathways and Areas of Study are developed. Faculty offices and support space will be included and organized in support of Areas of Study.

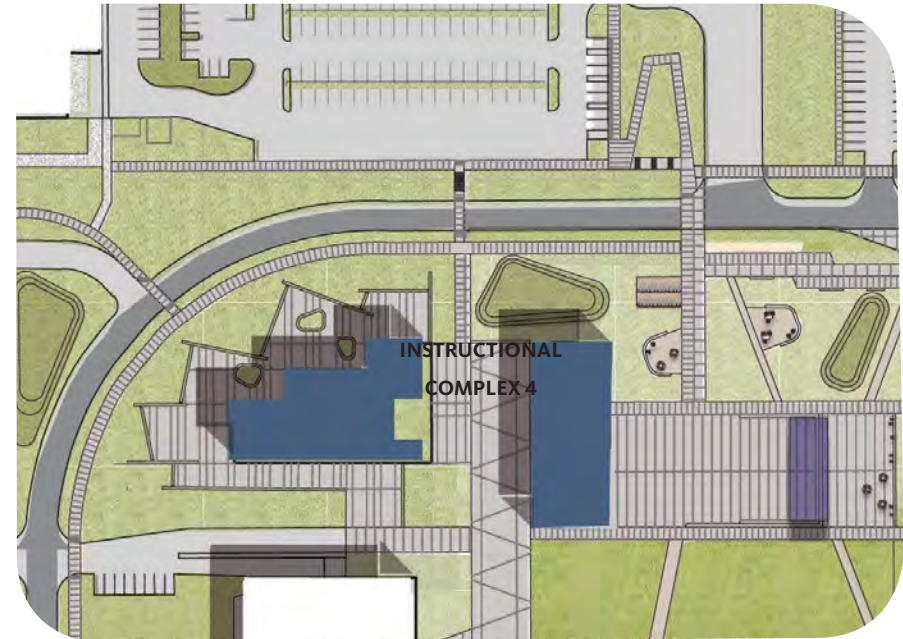


KEY PLAN



5 INSTRUCTIONAL COMPLEX 4

Instructional Complex 4 will provide specialized studio and class lab space to meet the discipline-specific needs of the visual and performing arts Areas of Study. Flexible space for exhibits, showcases, and limited production performances will complement the larger performance venues provided in nearby Performing Arts Center, completing the Arts precinct of the campus. Faculty offices and support space will be included and organized in support of the Art and Music Programs.



KEY PLAN

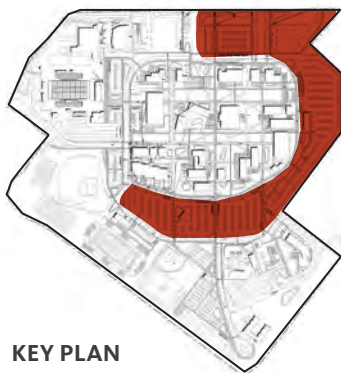
6 PARKING + RING ROAD + RING WALK + TRANSIT STOP

PARKING

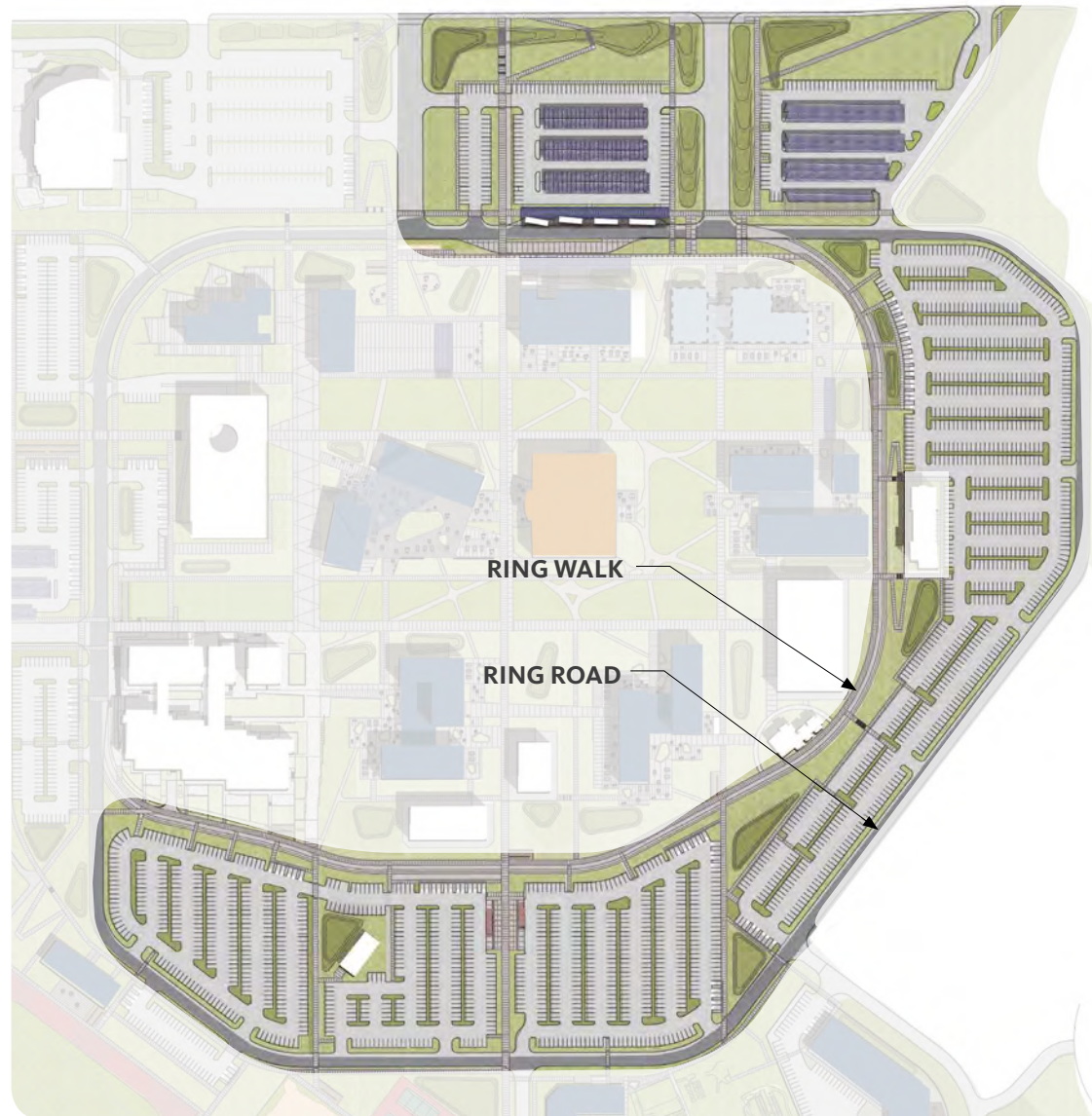
Analysis of campus parking facilities revealed that latent capacity could be increased and captured by re-orienting the drive aisles and re-striping the parking spaces. Relocating the Auto Technology program to a new state-of-the-art facility at the Otay Mesa campus, relocating the Tennis Court facilities to the southern-most portion of campus, and redeveloping Maintenance and Operations facilities in the southeast corner of the campus provides significant additional capacity. Importantly, parking will be distributed more uniformly around the campus core and in proximity to peak demands like the new Math & Science Building. The number of parking spaces planned for in this FMP will address the current and projected enrollment identified for the Chula Vista campus.

RING ROAD + RING WALK

As parking is improved, redistributed, and increased, vehicular traffic on the southern and eastern quadrants of the current Ring Road will be shifted to the perimeter of the parking. This shift will provide easier, more efficient access to the parking aisles and will allow much of the inner Ring Road to become a pedestrian promenade, with vehicles limited to emergency and service only. This new pedestrian-oriented space will eliminate many of the pedestrian - vehicular points of conflict, while improving campus safety, relieving traffic congestion, and creating a new campus amenity.



KEY PLAN

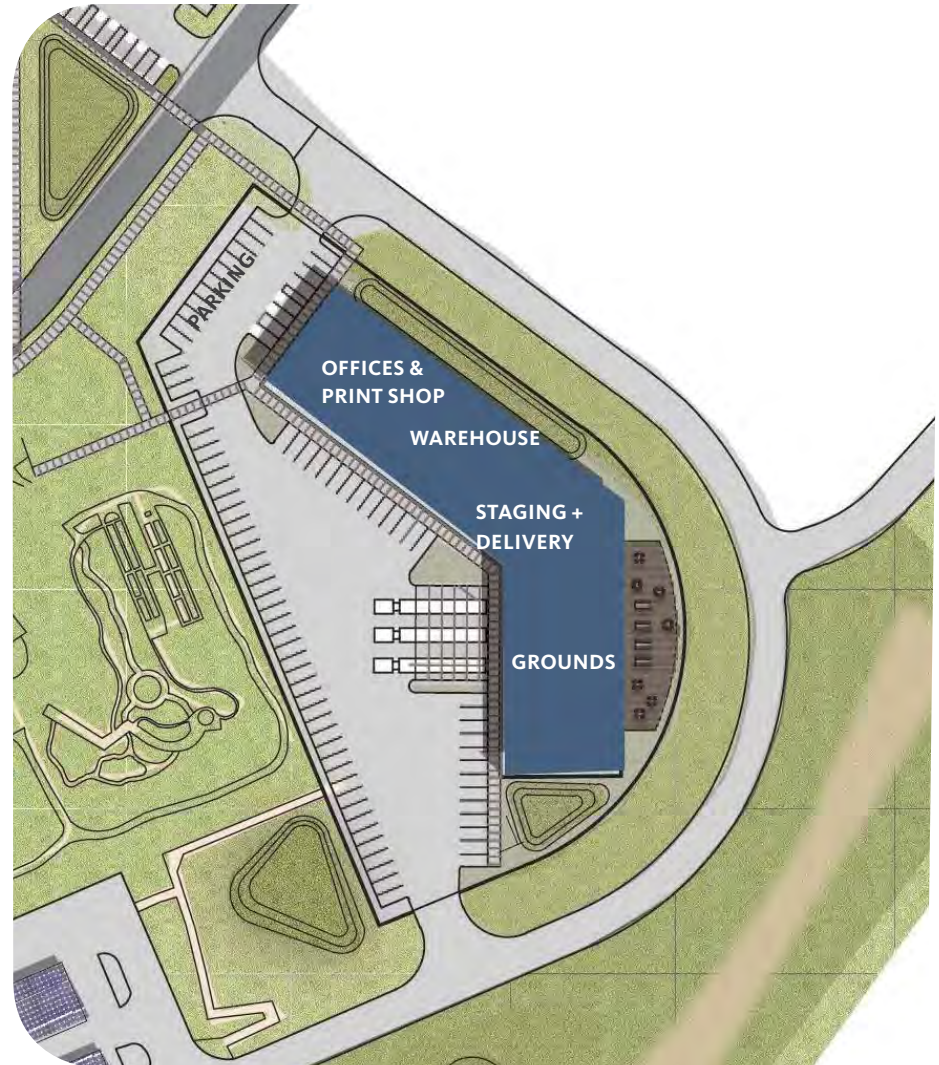


7 FACILITIES, OPERATIONS + WAREHOUSE + GROUNDS

Redeveloping the southeast portion of campus as a consolidated Facilities Operations, Maintenance and Grounds complex will centralize campus services in a location that is remote from areas of concentrated student activity, yet conveniently accessed by the new Ring Road. Deliveries and materials handling will be less disruptive to campus activity and can be efficiently staged and organized.

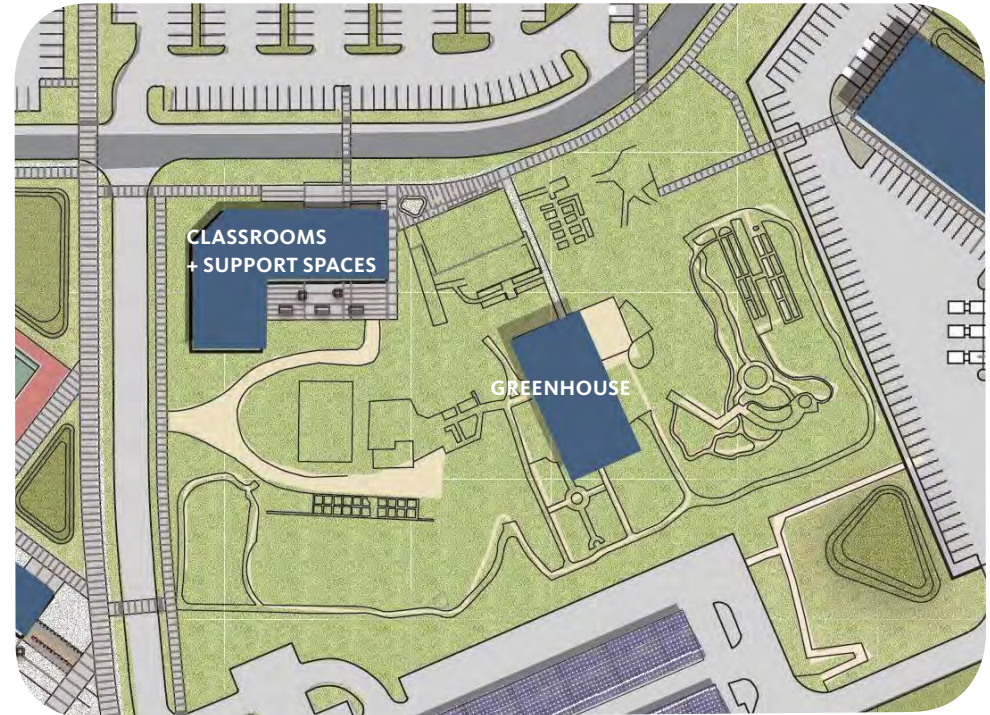


KEY PLAN



8 LANDSCAPE + NURSERY TECHNOLOGY

The South Bay Botanical Gardens and associated Landscape and Nursery Technology program will be modernized and refurbished with permanent, dedicated instructional spaces. Mature, stately, and significant specimens comprise the Botanical Garden's outdoor living lab, and hardscape improvements will facilitate accessibility for students and visitors. In addition to new green house and shop space, new class labs will provide discipline-specific teaching and learning settings that work in concert with the outdoor resources of the Botanical Gardens. Also, the turtle pond will be relocated and maintained within the renovated grounds.



KEY PLAN

9

TENNIS FACILITY + ATHLETICS SUPPORT BUILDING + TRACK AND FIELD

TENNIS COURTS AND SUPPORT BUILDING

Relocating the Tennis Facilities to the south side of campus will make way for consolidated parking closer to the campus core. New courts will be accompanied by a Support Building with restroom facilities for both student athletes and visitors, as well as space for storage and sports medicine.

ATHLETICS SUPPORT BUILDING

Consolidation and redevelopment of the athletic and physical education facilities will increase the density of use by students, student athletes, and visitors in an area of campus remote from the core. A Support Building will provide restrooms, sports medicine and storage space in a location central to the new athletics and physical education precinct.

TRACK AND FIELD

A new running track with a synthetic turf, multi-sport infield will be redeveloped in the location of the temporary parking lot.

**KEY PLAN**



VEHICULAR + TRAFFIC CIRCULATION

The Chula Vista Campus has two main vehicular entrances which include one entrance along H Street and two entrances along Elmhurst and Gotham Street respectively. Once onto campus, vehicles are directed along the campus Ring Road towards pedestrian drop-offs and parking.

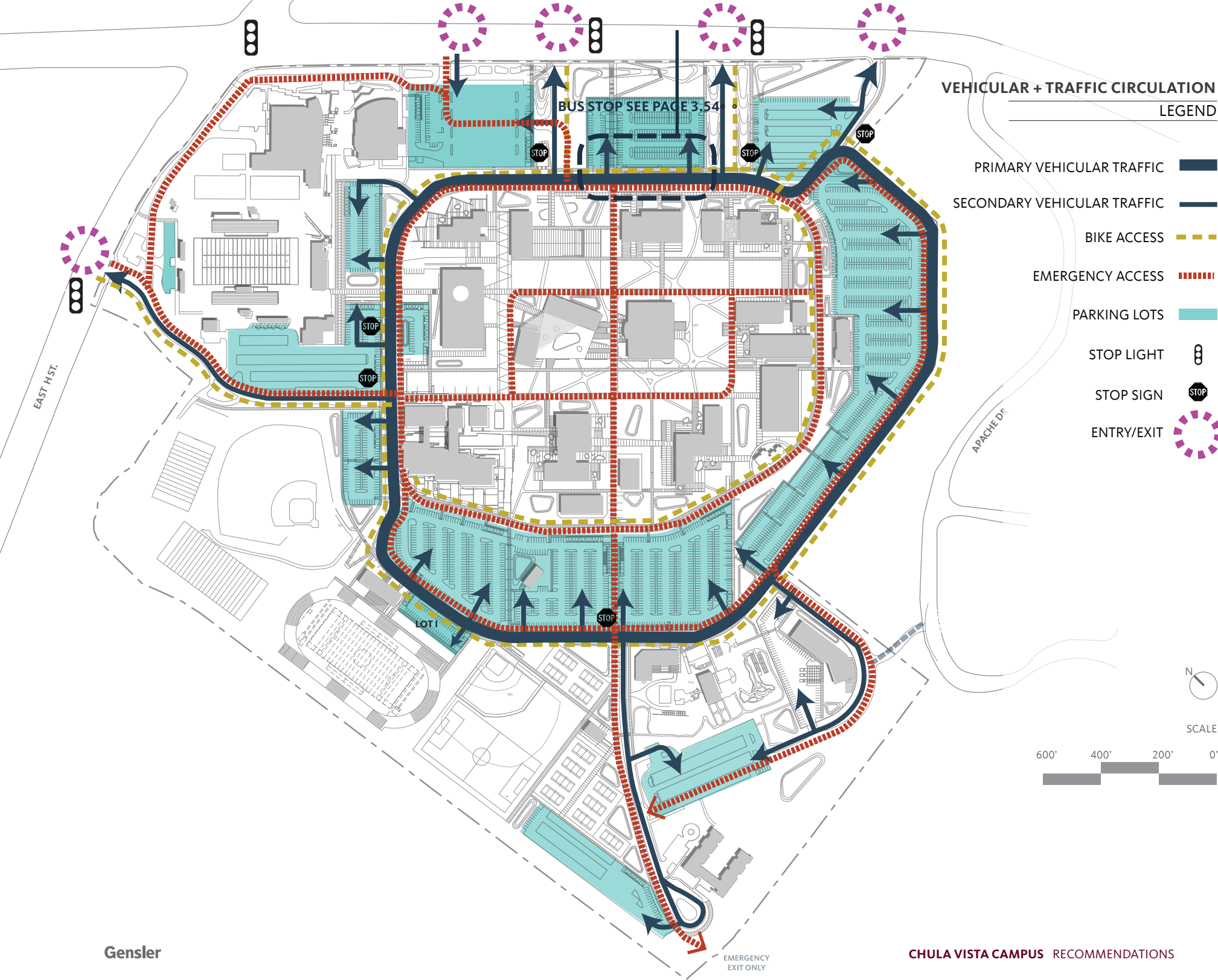
This main circulation pattern will remain unchanged, however its recommended to reduce pedestrian/vehicular conflicts by rerouting the Ring Road outside of parking, relocate parking towards the areas most accessed on campus and convert part of the current campus Ring Road into a campus Ring Walk for pedestrians.

In order to further reduce pedestrian/vehicle conflicts its recommended to move the bus stop from in front of the New Student Services building (current 100s buildings) across the Ring Road near Lot A. Buses will be rerouted to making continuous right turns to come up from Gotham Street turn right into the relocated bus stop and right to the Elmhurst entrance.

In addition, emergency access vehicle routes are shown to provide emergency access to all areas of campus including the campus core.

RECOMMENDATIONS

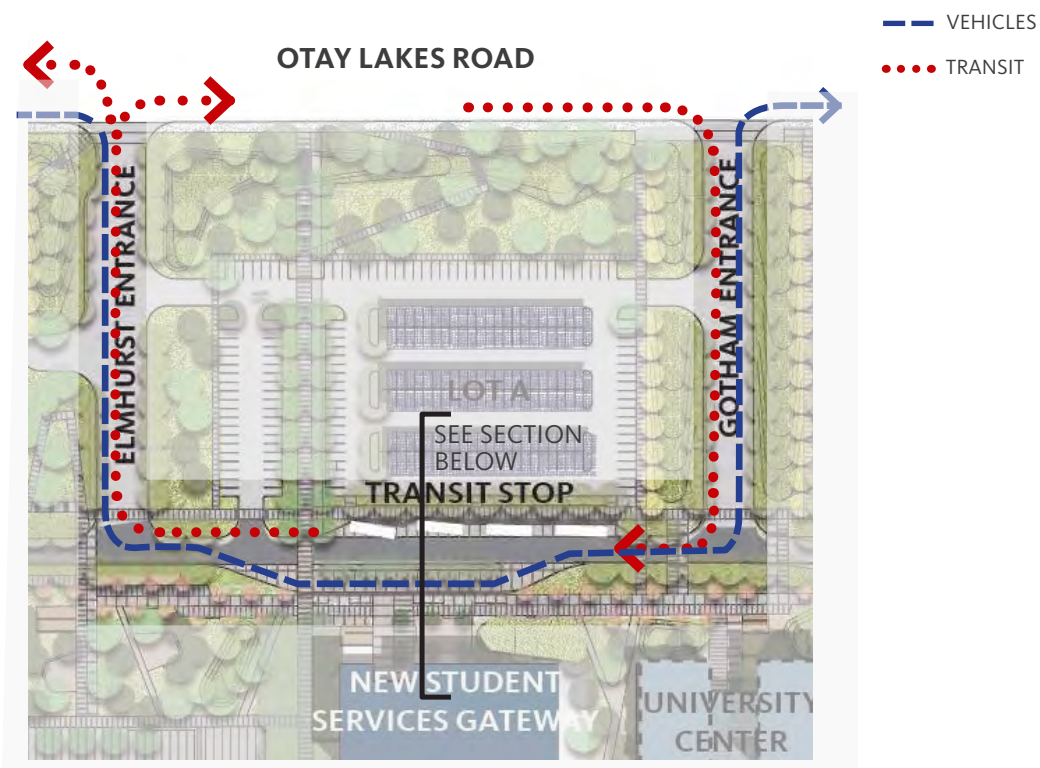
- Relocate bus stop to relieve vehicular congestion
 - Relocate Automotive Technology, Facilities Operations and the Tennis Facility and repurpose into parking lots
 - Reroute campus Ring Road around outside of parking lots
 - Original campus Ring Road become pedestrian, emergency vehicle access and bikes only
 - Create new student drop off from the H Street entrance intersection with the Campus Ring Road on the north side of campus
 - Provide designated emergency vehicle access routes throughout campus
-



TRANSIT STOP + PEDESTRIAN DROP-OFFS

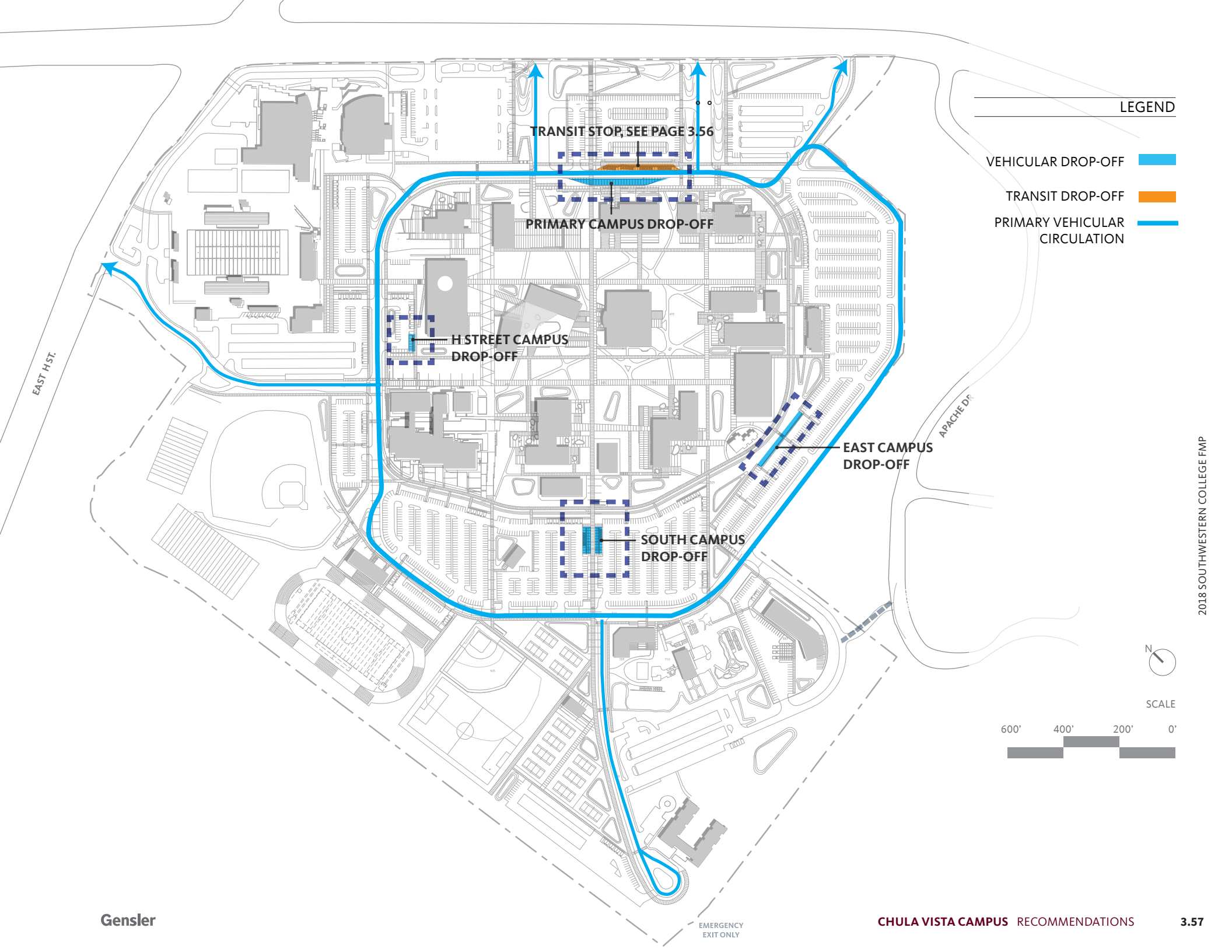
As part of the recommendations for the Chula Vista campus, the transit circulation and drop-off was analyzed to determine a better location for buses entering and leaving campus. It was determined that by moving the transit stop to the opposite side of the campus Ring Road, buses could make a right-in right-out and not impede into vehicular drop-off at the front of campus.

TRANSIT STOP



TRANSIT STOP SECTION





LEGEND

- VEHICULAR DROP-OFF
- TRANSIT DROP-OFF
- PRIMARY VEHICULAR CIRCULATION

TRANSIT STOP, SEE PAGE 3.56

PRIMARY CAMPUS DROP-OFF

H STREET CAMPUS
DROP-OFF

SOUTH CAMPUS
DROP-OFF

EAST CAMPUS
DROP-OFF

EAST H ST.

APACHE DR.



SCALE



EMERGENCY
EXIT ONLY

CAMPUS PARKING

As part of the vehicular circulation on the Chula Vista campus, parking is recommended to be relocated closer to the campus core and areas which are accessed most. In addition, Lots C and D should be restriped to reduce vehicular and pedestrian conflicts where possible and provide parking medians for lighting and tree canopies for shade.

It is also recommended to relocate the tennis courts and Lot E in order to make way for the rerouted campus Ring Road and additional parking. This extends to relocating the Automotive Technology, District administration buildings and facilities, operations and maintenance to create a cohesive and complete parking area around the campus core and Ring Walk.

In addition, a new parking area is recommended near the new Athletics Support building. In total, the parking capacity will increase to accommodate future needs through 2025 based on the current enrollment growth rate. As the parking areas are relocated closer to the campus core and the Ring Road is rerouted, there will be less demand on the most congested areas because there will be more even distribution and less pedestrian/vehicular conflicts.

There are currently over 3,200 parking spaces on the Chula Vista campus. By reorganizing and creating more efficient parking lots, visitors will utilize the parking spaces the campus already has more easily. Also, taking into account future enrollment, the recommendations include adding more parking spaces for a total parking ratio of 1:5 per the state Community College recommended average.



Provide Pedestrian and Landscape Buffers



Plant Parking Landscaping to Filter Storm Water



Plant With Drought Tolerant Landscaping

RECOMMENDATIONS

- Relocate parking near the most accessed areas of campus
- Restripe Lots C and D to create safer pedestrian access to campus where possible
- Relocate the tennis courts, facilities, maintenance and operations as well as the Automotive Technology and District administration buildings to create more parking closer to the core of campus
- Provide pedestrian drop-offs along the Ring Road and in parking areas to alleviate traffic and congestion

OTAY LAKES RD.

CAMPUS PARKING LEGEND

PARKING LOTS 

EAST H ST.

APACHE PKWY

2018 SOUTHWESTERN COLLEGE FMP



SCALE



PEDESTRIAN CIRCULATION + OPEN SPACE

The Chula Vista campus has a well-established campus core with a park-like setting where visitors can navigate down tree-lined thoroughfares and shaded courtyards. It is recommended to build upon the existing framework and strengthening the campus grid to extend across campus from multiple important points of interest, such as Jaguar Walk. This includes providing clear signage and a hierarchy of monuments along the walkways to improve way-finding. By carving out seating areas in the open space, destination points for collaboration and study can be established to maintain the same function as many of the courtyards which will be replaced.

Currently, there are only a few areas on campus in which to gather in larger groups. It is recommended that some of the open space be reclaimed for this function, including areas around new facilities. Buildings can become the backdrop for public events such as how Mayan Hall has done in the past.

RECOMMENDATIONS

- Activate open green space with seating and paving to invite students to gather and collaborate
 - Strengthen campus grid and pedestrian walkways for better way-finding and hierarchy on campus
 - Provide clear signage and walking surfaces to improve way-finding
 - Establish areas for large gathering and active engagement on campus
-



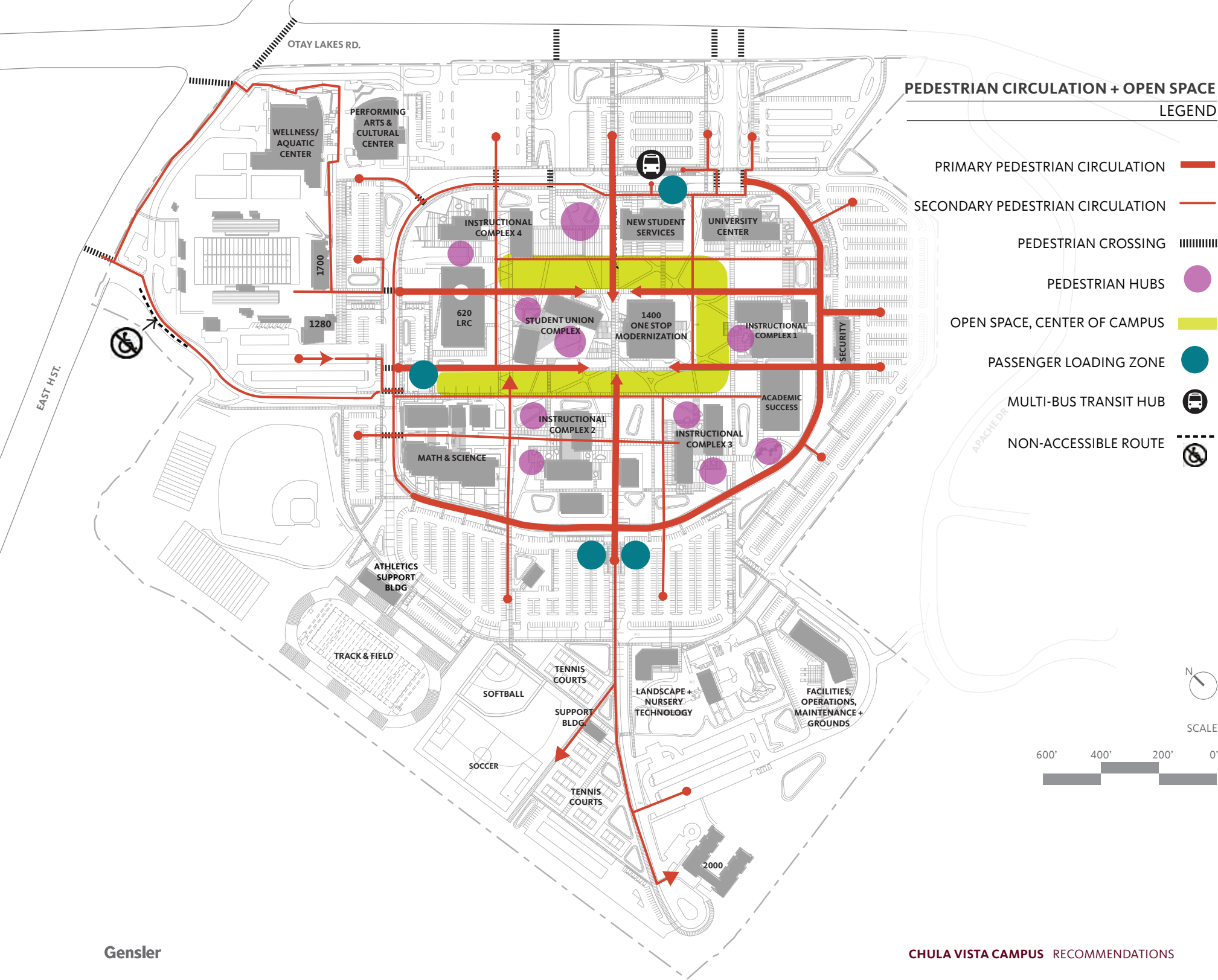
**Activate Underutilized Open
Green Space**



**Strengthen Pedestrian
Walkways**



Improve Wayfinding and Signage



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PEDESTRIAN CIRCULATION + OPEN SPACE CAMPUS CORE

As mentioned on the previous page, pedestrian circulation on campus will be strengthened by extending the campus grid to the edges of the campus core and Ring Road. In addition, designating areas along these walkways for seating and collaboration will activate the open space. The conversion of part of the campus Ring Road into a Ring Walk for pedestrians, bike riders and emergency vehicles will act as a newly softened front door to the rest of the campus core and new buildings. The new campus Ring Walk will provide a buffer between pedestrians and vehicles/parking on campus.

CAMPUS RING WALK SECTIONS



RECOMMENDATIONS

- Reroute campus Ring Road and convert it to a pedestrian campus Ring Walk
- Allow room for emergency vehicle access while providing unique paving to delineate biking and walking areas
- Provide bicycle storage and designated lanes for travel



Provide places to store and lock bicycles



Provide mixed-use pedestrian and biking paths



Provide soft buffer with porous paving

CAMPUS CORE LEGEND

BUILDINGS

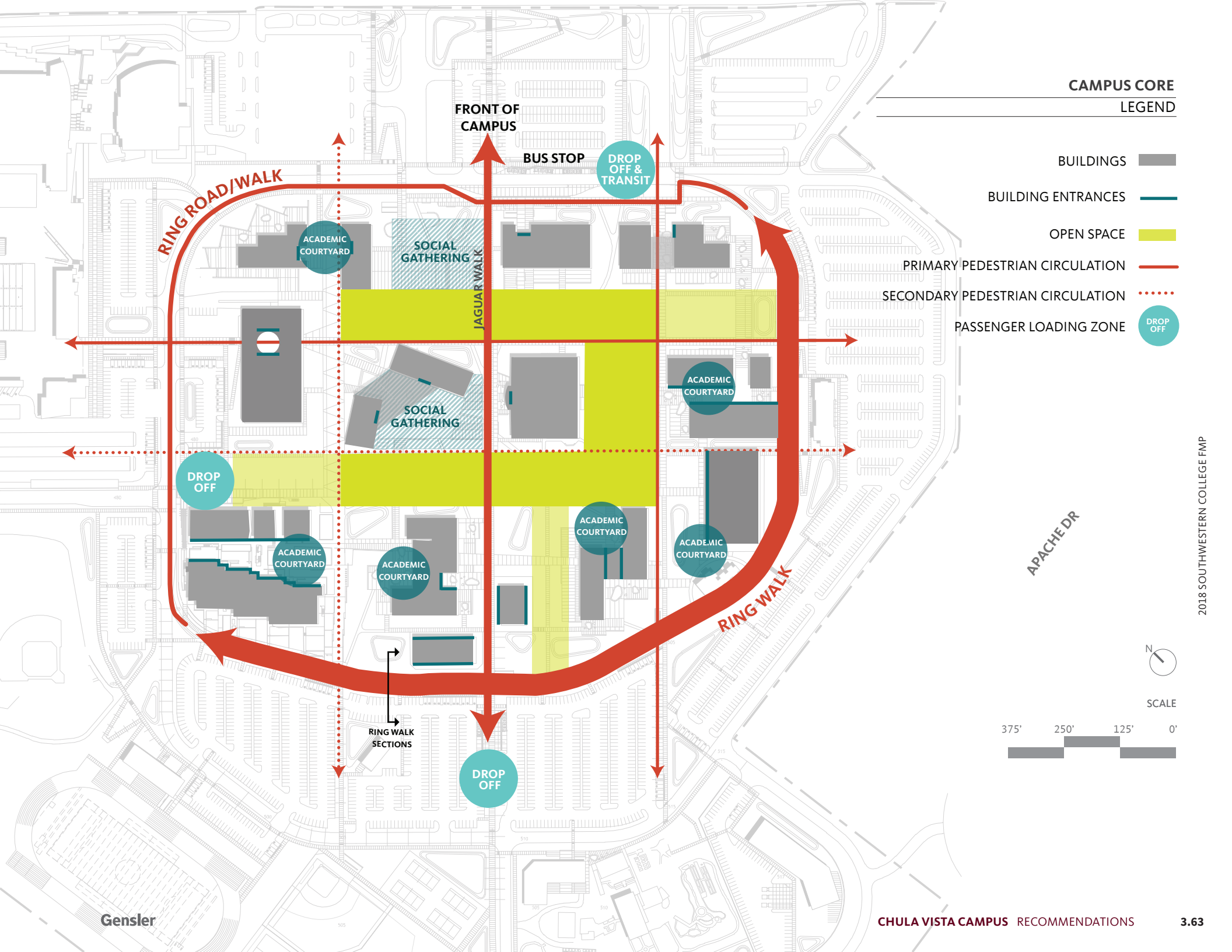
BUILDING ENTRANCES

OPEN SPACE

PRIMARY PEDESTRIAN CIRCULATION

SECONDARY PEDESTRIAN CIRCULATION

PASSENGER LOADING ZONE



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SCALE



LANDSCAPE TYPOLOGY

The landscape typology concept draws inspiration from the school's natural surroundings and the prerequisite to create a restorative environment. Chula Vista has its roots in agriculture-farming plus a natural history of a coastal sage scrub and chaparral habitat. The landscape typology should represent formal entry experiences, and promenades blending into a natural landscape with California native plant species. Perimeters of the campus should contain native shrubs and trees to screen the facilities and protect the hillsides, while also providing a beneficial natural wildlife corridor. Topography should allow for natural features to enhance the sustainability of the campus such as: boulder-lined arroyos that naturally channel storm-water runoff. Large expanses of low maintenance lawn provide active recreation space and should be used selectively within the campus.

The definition of Park within the campus core, takes on a new meaning within the core campus without being turf intensive. The campus core should create a functioning park experience where the user may experience nature. A native or adaptive plant palette in landscape areas help conserve water and while increasing site visibility in terms of user understanding of native landscapes such as within the South Bay Botanic Garden. The parking lots and roads should be constructed to aid in site drainage and storm water management with LID required plant palettes that allow for both periods of drought and inundation. Specialty gardens at buildings can create opportunities for learning, meditation and areas of respite within a busy campus atmosphere. A holistic landscape can educate users by establishing a connection to environment while reducing the impact on the environment and provide a means for public outreach.

RECOMMENDATIONS

- Increase sustainability within the landscape through integration of zones for storm water infiltration, filtration and retention
- Identify areas for “Landscape Revival” a system of turf removal and replacement with native, adaptive and drought tolerant planting
- Highlight architecture and key promenades using formal landscapes with a backdrop of California native plants
- Re-imagine and Redefine ‘lawn’ typically found in the ‘Park’ and sport fields with native, adaptive and drought tolerant planting
- Create a diverse plant palette for Southwestern College with a backbone of signature species that are hardy and low maintenance
- Define outdoor promenades and courtyard open spaces, enhance views, and mitigate climate by using plant typologies to frame promenades and pathways
- Examine a diverse plant palette that attracts native wildlife and encourages a biological balance between beneficial insects and pests
- Establish offsets from hard surfaces to minimize maintenance and encourage natural plant shapes
- Choose plant species that fit existing soil conditions and microclimate created by topography and the built environment
- Arrange plants in irrigation hydrozones that reflect the selected species moisture needs to reduce excessive water consumption and evapotranspiration
- Review site topography when selecting plant species to encourage capture and infiltrate rainfall, minimize irrigation runoff and soil erosion.
- Install campus standard ground cover or mulch to assist in minimizing water runoff, soil erosion and temperature, control weeds and maintain plant moisture
- Induct planting schedules for installation occurring from late fall - early winter to allow plant species to utilize seasonal rain and mitigate heat and moisture stress



LANDSCAPE TYPOLOGY LEGEND

- PLANTED SLOPES
- TURF
- BARK MULCH
- SPORTS TURF
- DROUGHT TOLERANT PLANTING
- BIOSWALE
- ARTIFICIAL TURF
- HORTICULTURE CENTER

2018 SOUTHWESTERN COLLEGE FMP



SCALE



TREE CANOPY

Proposed trees at Southwestern College should pay homage to the cherished species on campus while expanding the Tree palette to include drought-tolerant, adaptive and native species. New trees should be established with careful campus placement to combat the urban heat island effect, create much needed shade, stabilize soils, screen, formalize paths, and frame views throughout campus.

Campus trees within the framework of pathways and built environment should help to establish differences between the varying areas of campus. Formal open space should outline spaces such as quads, courtyards, promenades and squares. These spaces should drift and transition seamlessly into natural park-like open space with a continuation of trees species that enhance and enforce the park setting. Trees that do not fit within the framework of native, low-water or adaptive species should be reviewed with the school to verify its inclusion within the campus palette. Trees that provide seasonal color are desirable to help establish change of season.

OBSERVATIONS

- Trees used within quads, courtyards, promenades and squares should be open canopy, mix of evergreen, deciduous, and conifers. Trees should provide structure to spaces with canopies to help combat the Urban Heat Island Effect. Trees that provide shade to the campus users are desirable. Care should be taken in establishing trees that drop excessive fruit or material to be planted within large planting zones to minimize litter on hardscape elements
 - Trees used within the campus park should allow for an expansion of tree species however, the principle of “right tree for the right space” should take precedence over in species choices. Trees should maintain sustainability standards and contain largely naturalized trees species that thrive in the local environment
 - Trees surrounding the campus will provide backdrops, screening and slope stabilization. It is desirable that trees used be easy to maintain, drought-tolerant and hardy variety. Trees at campus edge will need to maintain standards that make them excellent choices to increase the native flora and fauna within the region. Trees at edges should help establish Brush Management Zones with trees planted to adhere to restrictions of zones and respect the built environment
-



TREE CANOPY LEGEND

- EXISTING CAMPUS TREES ●
- PROPOSED TREES
 - *Cercis canadensis*
 - *Cercidium x 'Desert Museum'*
 - *Jacaranda mimosifolia*
 - *Koelreuteria bipinnata*
 - *Lagerstroemia indica*
 - *Platanus racemosa*
 - *Phoenix dactylifera*
 - *Prosopis chilensis*
 - *Quercus agrifolia*
 - *Quercus engelmannii*
 - *Ulmus parvifolia*

2018 SOUTHWESTERN COLLEGE FMP



SCALE



PHASED DEVELOPMENT

The FMP recommendations for the Chula Vista Campus will be implemented in a series of phases. The phasing will be based on the logical sequencing of projects in order to address the priority needs of the college, limit disruption and minimize the need for swing space.

The phasing plans on the following pages represent the general sequencing of campus development. Additional analysis and discussions will follow the completion of the FMP in order to develop a comprehensive Implementation Plan.

1

PHASE 1 PROJECTS

- 1 LANDSCAPE + NURSERY TECHNOLOGY
- 2 INSTRUCTIONAL COMPLEX 1
- 3 STUDENT UNION COMPLEX
- 4 BUS STOP RELOCATION/LOT A
- 5 PARKING
- 6 FACILITIES OPERATIONS, MAINTENANCE + GROUNDS
- 7 TENNIS FACILITY

2

PHASE 2 PROJECTS

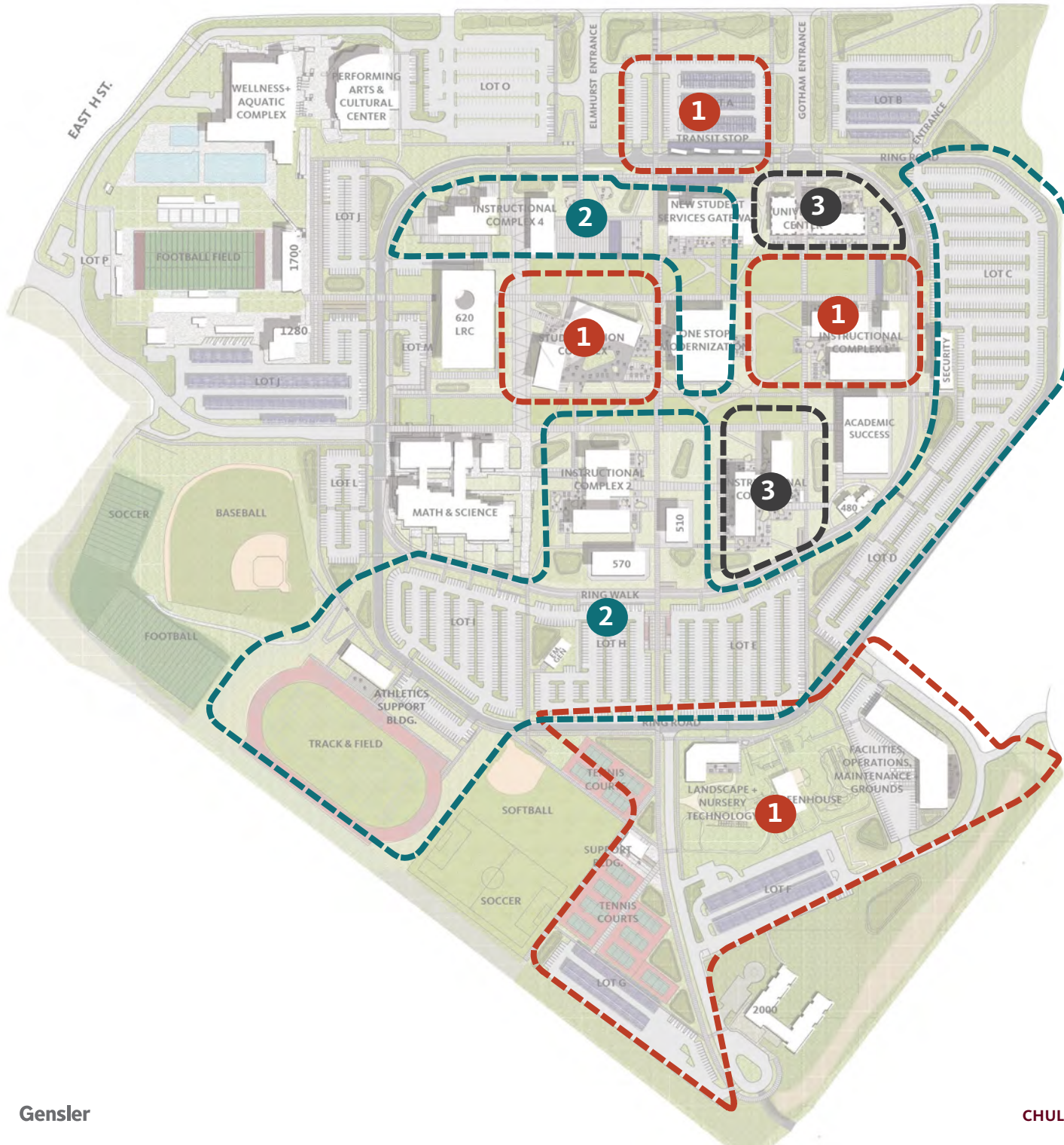
- 1 NEW STUDENT SERVICES GATEWAY
- 2 INSTRUCTIONAL COMPLEX 2 (INCLUDING PLANETARIUM)
- 3 ONE STOP MODERNIZATION
- 4 INSTRUCTIONAL COMPLEX 4
- 5 ATHLETICS SUPPORT + TRACK AND FIELD
- 6 PARKING + RING ROAD + BUS STOP

3

PHASE 3 PROJECTS

- 1 INSTRUCTIONAL COMPLEX 3
- 2 UNIVERSITY CENTER

PHASED DEVELOPMENT



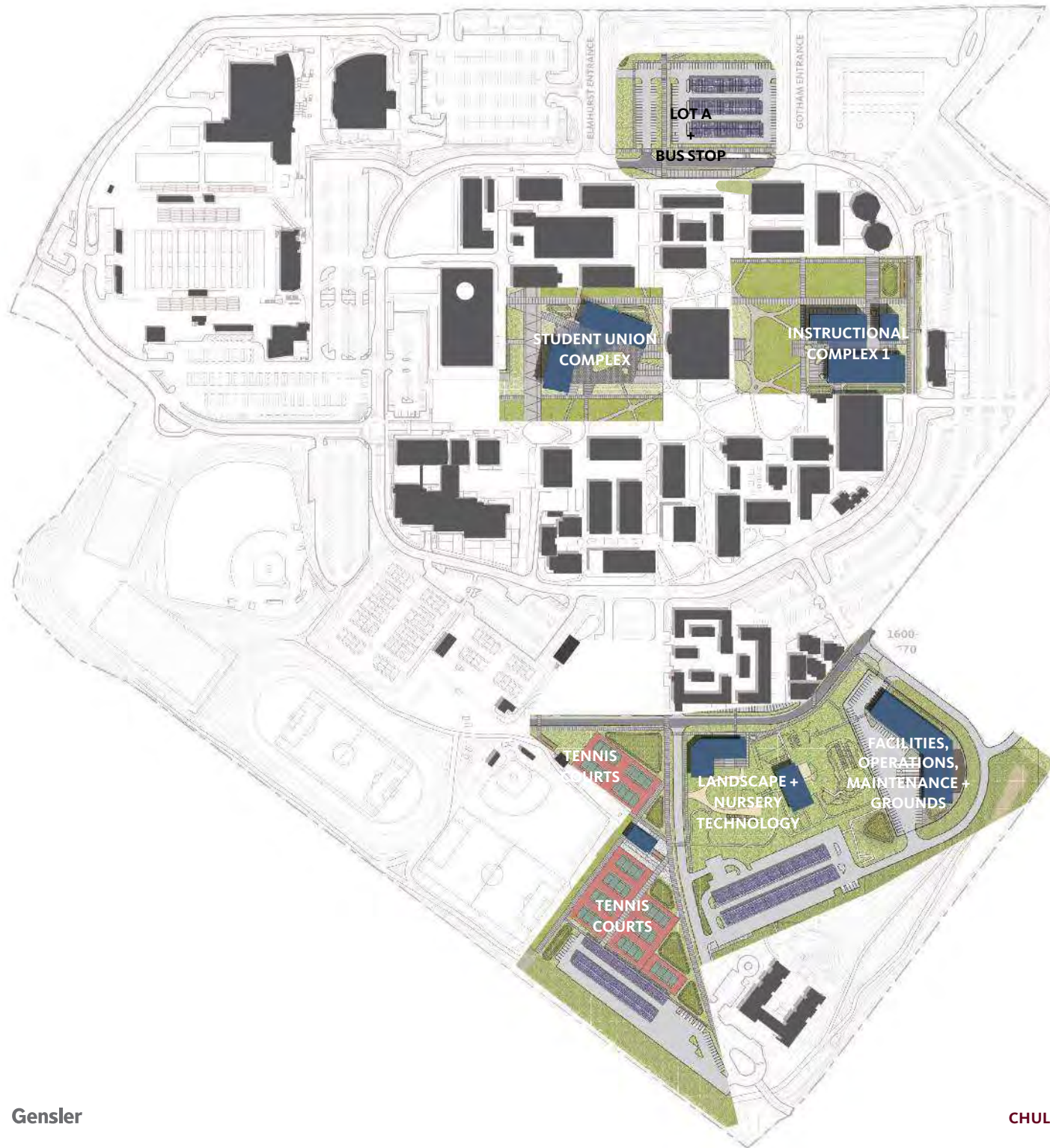
PHASE 1 PROJECTS

In the first phase of the FMP, swing space will need to be established to allow for demolition and relocation of programs during development. This includes moving the 1600s modular buildings to the previous location of the Gymnasium between the Learning Resource Center and the Math & Science Complex.

This phase also completes Instructional Building 1 which will include a relocated data center for the campus. In addition, the Student Union Complex will be demolished and rebuilt to consolidate the current two building complex. It is recommended that the bus stop be relocated along with modification made to Lot A at this time. The Tennis Facility and Facilities, Operations, Maintenance and Grounds relocation will also be in Phase 1 to allow for parking and part of the Ring Road to be completed.

PHASE 1 PROJECTS

- 1 LANDSCAPE + NURSERY TECHNOLOGY
 - 2 INSTRUCTIONAL COMPLEX 1
 - 3 STUDENT UNION COMPLEX
 - 4 BUS STOP RELOCATION/LOT A
 - 5 PARKING
 - 6 FACILITIES OPERATIONS, MAINTENANCE + GROUNDS
 - 7 TENNIS FACILITY
-



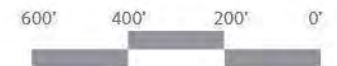
PHASE 1 PROJECTS

LEGEND

EXISTING TO REMAIN	
NEW	
RENOVATE	



SCALE



PHASE 2 PROJECTS

In Phase 2, the New Student Support Services will be constructed as the new front door to campus. Once it's complete, the renovation of the One Stop Modernization can be started. Instructional Building 2 will also be completed near the Math and Science Complex. Music and Art will be completed in two phases, allowing equipment intensive studios to maintain their location until the new facility is built.

The remainder of the parking and Ring Road will be completed in this phase alleviating the congestion and wayfinding issues for vehicles. Also, the Athletics support building and the track and field will be completed in Phase 2.

PHASE 2 PROJECTS

- 1 NEW STUDENT SERVICES GATEWAY
 - 2 INSTRUCTIONAL COMPLEX 2 (INCLUDING PLANETARIUM)
 - 3 ONE STOP MODERNIZATION
 - 4 INSTRUCTIONAL COMPLEX 4
 - 5 ATHLETICS SUPPORT + TRACK AND FIELD
 - 6 PARKING + RING ROAD + BUS STOP
-



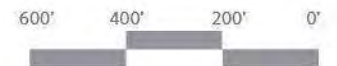
PHASE 2 PROJECTS

LEGEND

EXISTING TO REMAIN	
NEW	
RENOVATE	



SCALE

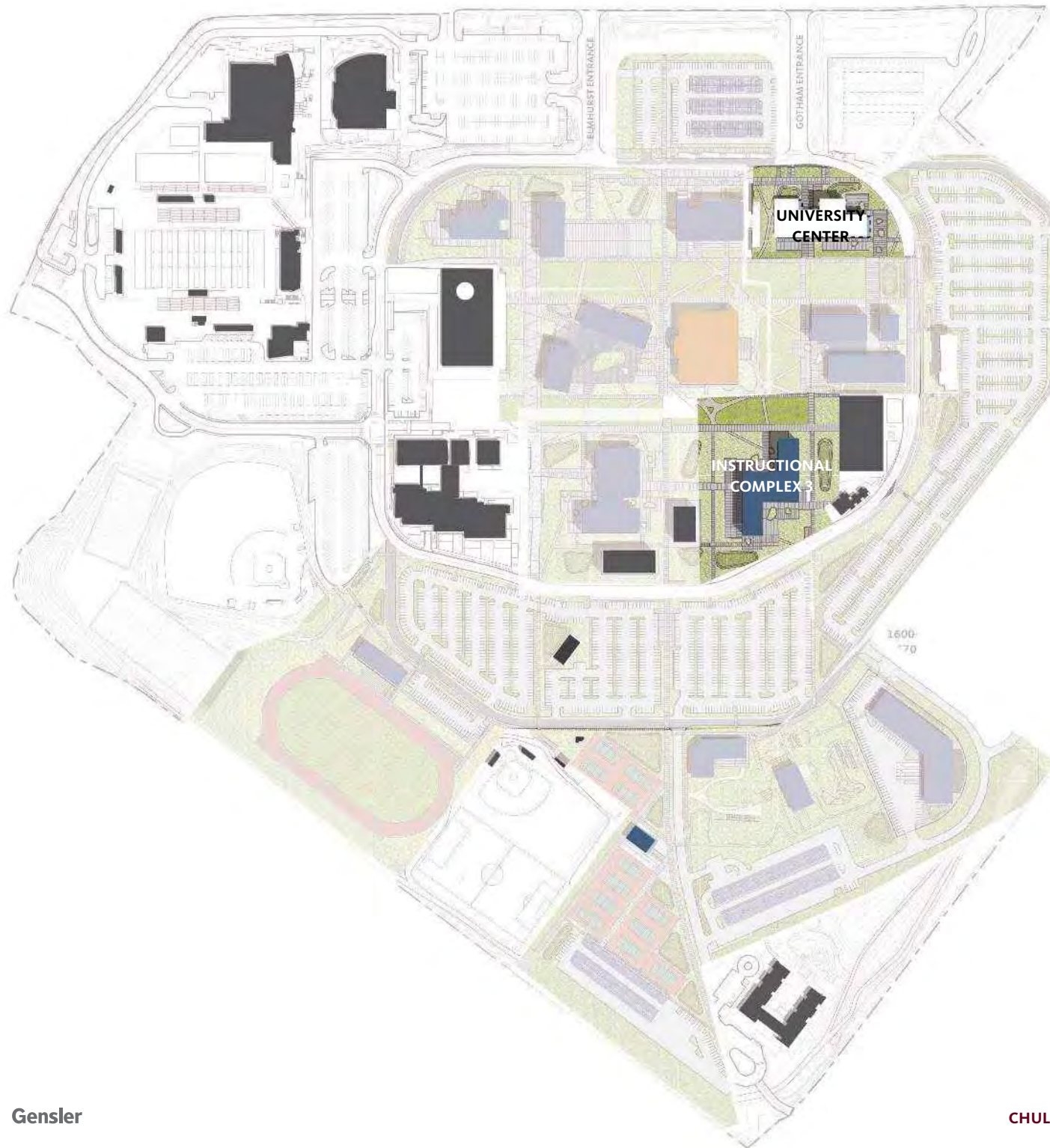


PHASE 3 PROJECTS

Phase 3 will complete the 2025 FMP for Southwestern College and will include constructing Instructional Building 3. In the future, the University Center may be constructed on the Chula Vista Campus and will be located near the New Student Services and Instructional Building 1 at the front of campus.

PHASE 3 PROJECTS

- 1 INSTRUCTIONAL COMPLEX 3
 - 2 UNIVERSITY CENTER (POTENTIAL FUTURE)
-




PHASE 3 PROJECTS

LEGEND

EXISTING TO REMAIN	
NEW	
RENOVATE	



A grayscale photograph of a modern, multi-story building with large windows and a flat roof. The building is identified by a sign as the San Diego County Office of Education. The image is used as a background for a title page.

SAN DIEGO COUNTY OFFICE OF EDUCATION

04

NATIONAL CITY

NATIONAL CITY CAMPUS OVERVIEW

The National City Campus is located 9.5 miles from the Chula Vista Campus. Established in 1998, the campus at National City is part of the South Bay providing health-related technical education. These programs include the areas of Dental Hygiene, Medical Laboratory Technician, and Medical Office professional. General education courses are also offered for students who live in the vicinity of the campus.

In addition, the National City Campus supports regional economic development through the Center for Business Advancement, which includes the Small Business Development Center and Network, the San Diego Contracting Opportunities Center, and the San Diego Center for International Trade Development.

MISSION

The mission of the National City Campus is to provide local access to:

- Three health-related career technical education programs that are unique to this location: Dental Hygiene, Medical Laboratory Technician, and Medical Office Professional
- An array of general education courses for students who live in the vicinity of this Campus as well as for students seeking an associate degree in one of the three career technical education programs unique to this location
- A comprehensive array of student support services.

The following elements are included in this section:

LOCAL CONTEXT

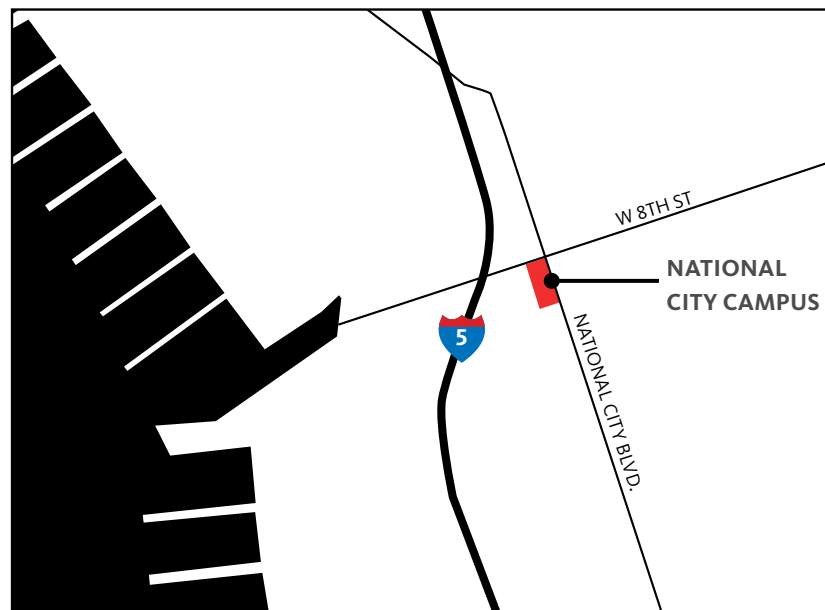
EXISTING CONDITIONS

RECOMMENDATIONS

LOCAL CONTEXT

The National City Campus is located northwest of the Chula Vista Campus in the urban heart of National City. It is surrounded by mixed-used buildings including residential and commercial uses and the National City Chamber of Commerce is located across National City Boulevard.

The campus shares its site with the San Diego County Office of Education to the north and it also has a three-story parking structure for students and staff at the east side of the site with access from Roosevelt Avenue.



National City Library



Downtown-National City



Bayfront - Pepper Park



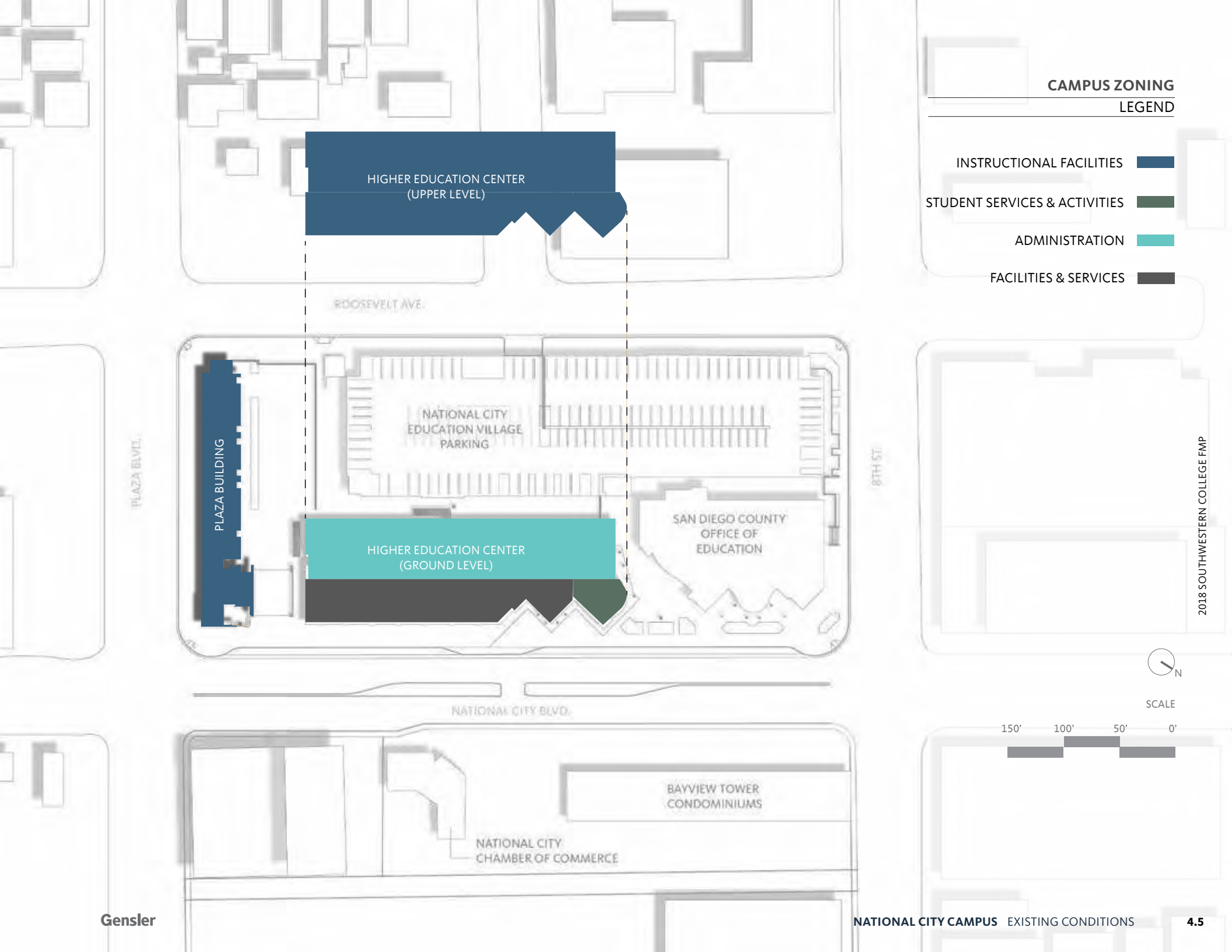
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EXISTING CONDITIONS

CAMPUS ZONING

The National City Campus includes a two building complex and parking structure that fronts the busy National City Boulevard housing a mix of Student Services, Facilities and Administration. The campus opened a new facility adjacent to the original building at the corner of National City Boulevard and Plaza Boulevard in 2018. This building includes science classrooms, labs and a medical clinic. The north end of the site is home to a building for the San Diego County Office of Education (SDCOE). The parking structure completes the west side of the campus.





CAMPUS ZONING
LEGEND

- INSTRUCTIONAL FACILITIES
- STUDENT SERVICES & ACTIVITIES
- ADMINISTRATION
- FACILITIES & SERVICES

2018 SOUTHWESTERN COLLEGE FMP



SCALE



EXISTING CONDITIONS

VEHICULAR + PEDESTRIAN CIRCULATION

The campus is located within one mile of Interstate 5 to the west and less than five miles to downtown San Diego and within a short drive to many local neighborhoods.

Vehicles access the campus from the west, along Roosevelt Avenue, directly into the parking structure. Pedestrians access the campus primarily along National City Boulevard. A bus stop is located across the street with a crossing at the intersection of National City Boulevard and East Plaza Boulevard. There is a MTS trolley station nearby at 8th Street that is within walking distance to the campus.

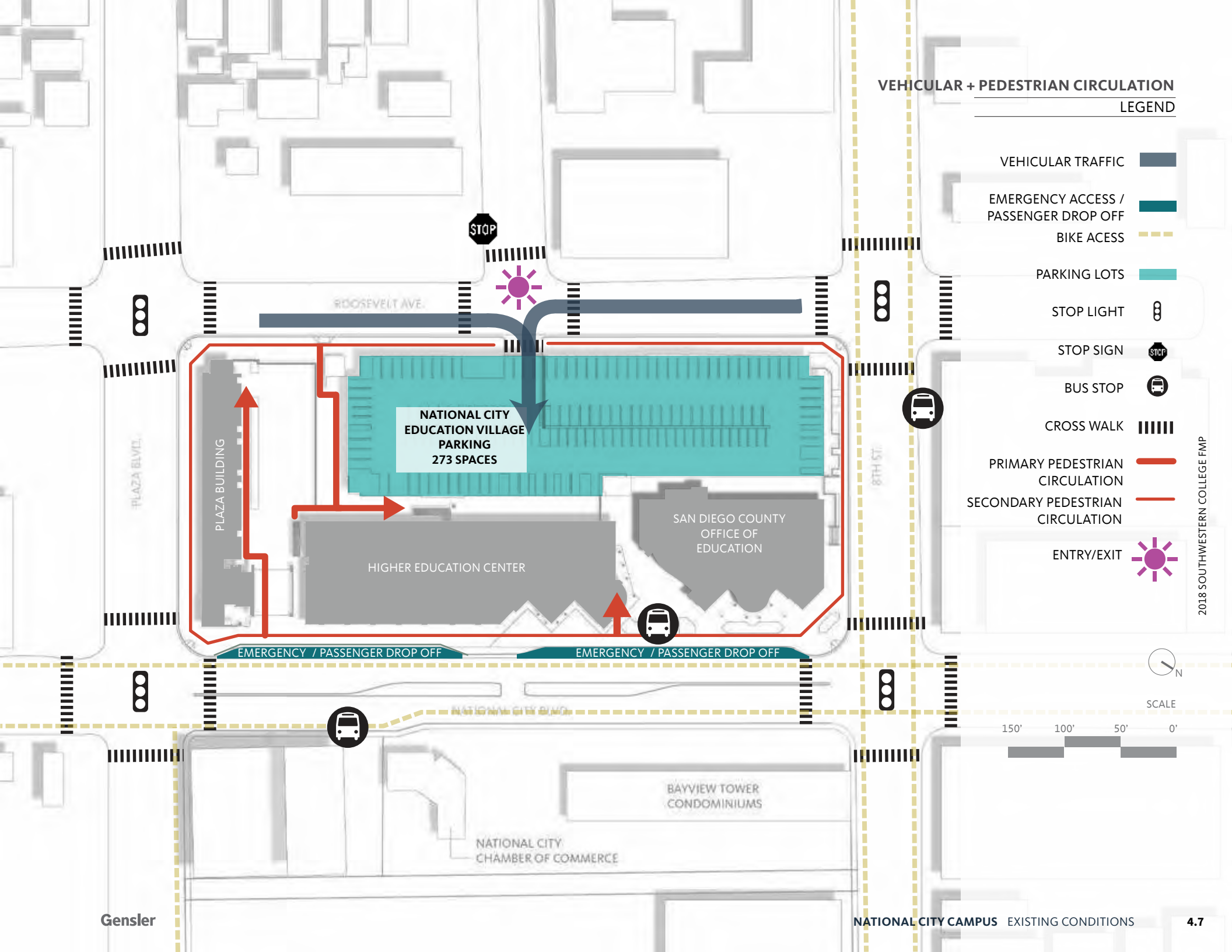
There are a total of 273 parking spaces allocated for the college. The number is adequate for the current and projected enrollment for National City.



Parking Structure



**Pedestrian Drop-off Along
National City Boulevard**



RECOMMENDATIONS

FACILITIES MASTER PLAN

With the addition of the recently completed Plaza Building, the National City Campus includes adequate space for the current and projected program needs for this FMP.

If additional space is needed beyond the FMP horizon, a parcel of land has been identified across National City Boulevard for potential expansion. This could be developed in partnership with the city as a multi-story, mixed-use development.




Expansion to the south, across the city street, will increase the visibility of the National City Campus within the surrounding community and increase access to programs and services.

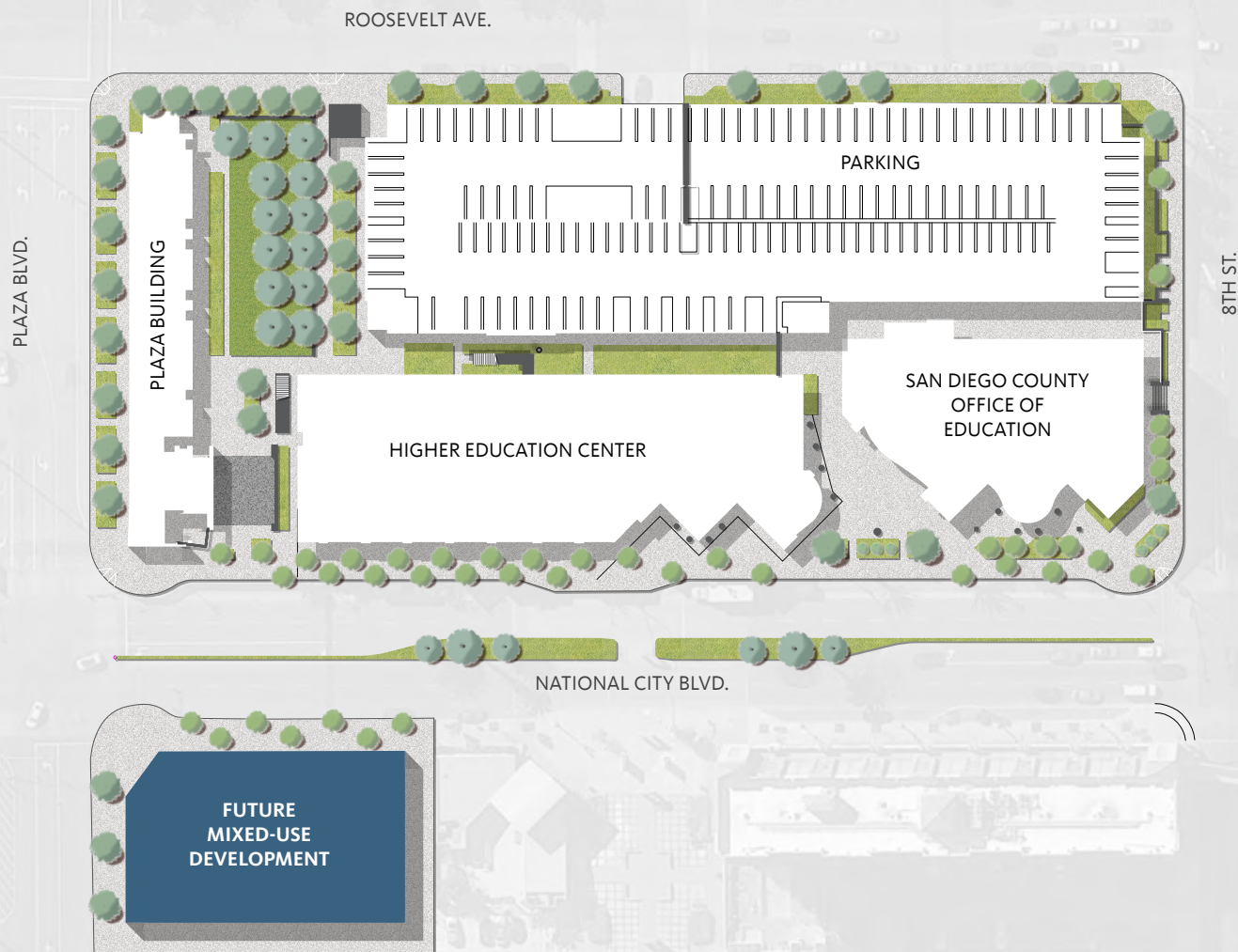
FMP PROJECT LIST

BUILDING PROJECTS

- 1 Future Mixed-Use Development
-

FACILITIES MASTER PLAN LEGEND

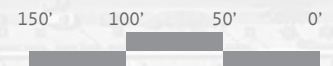
- EXISTING TO REMAIN 
- NEW 
- RENOVATE 



2018 SOUTHWESTERN COLLEGE FMP



SCALE





Global Awareness & Ethics

Historical Literacy

Communication Skills



05

OTAY MESA

OTAY MESA CAMPUS OVERVIEW

The San Ysidro Campus is located eight miles from the Chula Vista Campus. The campus offers general education courses and signature programs which include a Police Academy, Nursing, Fire Science Technology, Paramedic and Emergency Medical Technician programs. It also provides multiple student services including Admissions and Records, Assessment, Financial Aid, Counseling, Disability Support Services and tutoring.

MISSION

The mission of the Otay Mesa Campus is to provide local access to:

- Nine public safety and health services programs that are unique to this location
- An array of general education courses for students who live in the vicinity of this Campus as well as for students seeking an associate degree in one of the public safety/health career technical education programs unique to this location
- A comprehensive array of student support services.

The following elements are included in this section:

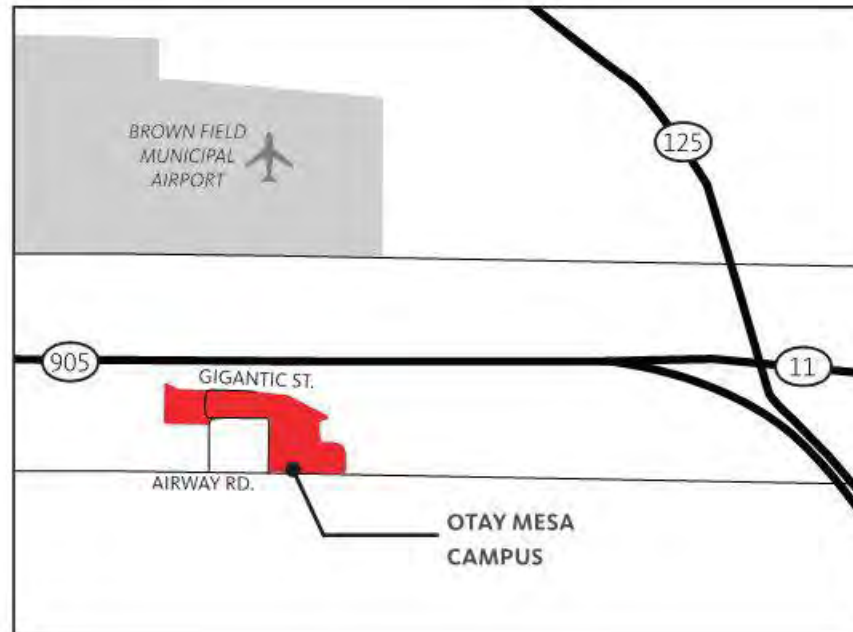
LOCAL CONTEXT

EXISTING CONDITIONS

RECOMMENDATIONS

LOCAL CONTEXT

The Otay Mesa Campus is located near the US - Mexico border and is surrounded by industrial industry and the Brown Field Municipal Airport. Otay Mesa is a developing area bordered by Interstate 805 and Chula Vista.



Brown Field Airport



Otay Mesa Border Crossing



Otay Mesa Mountain
Wilderness Area



BROWN FIELD MUNICIPAL AIRPORT



LOCAL CONTEXT

INDUSTRIAL

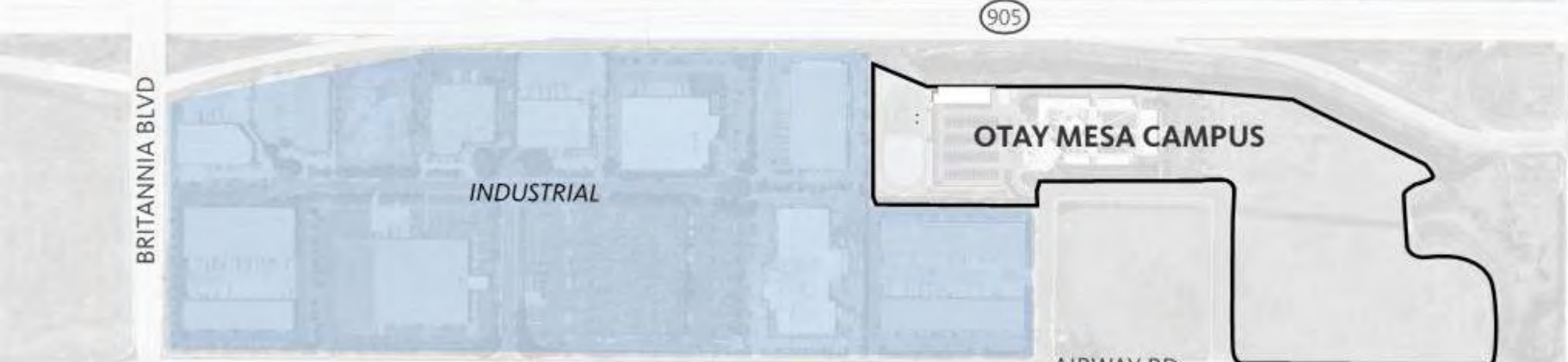


OTAY MESA RD

INDUSTRIAL

INDUSTRIAL

LA MEDIA RD



905

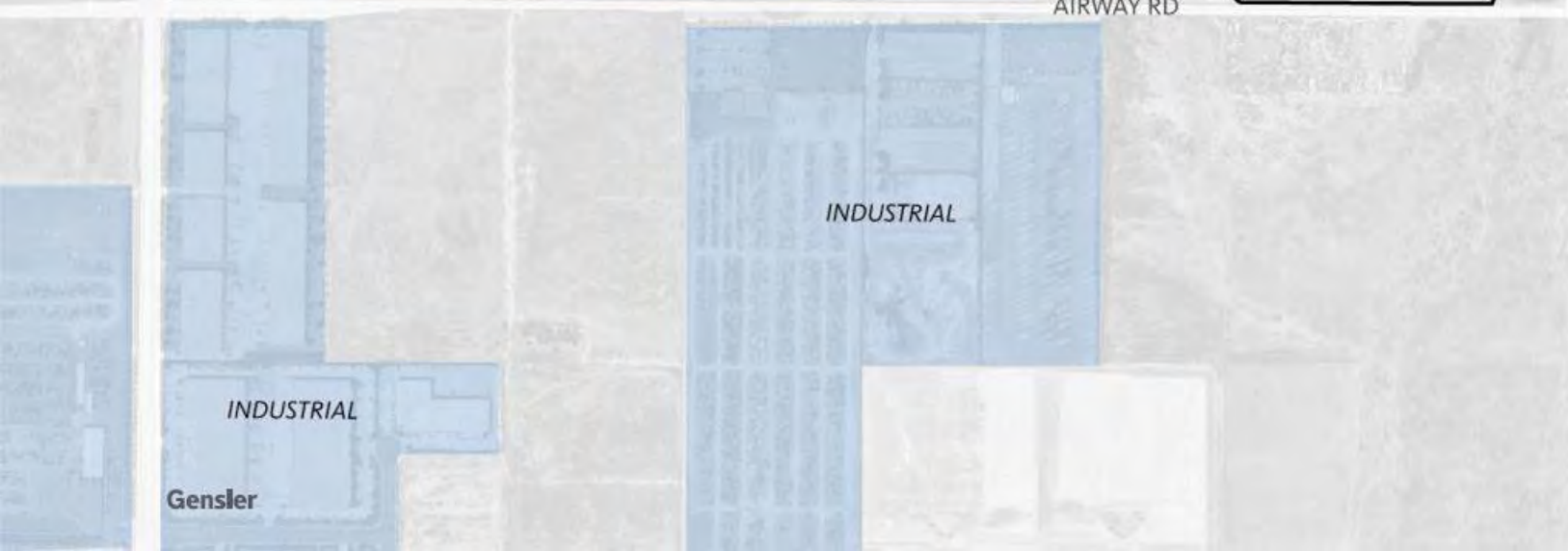
OTAY MESA CAMPUS

INDUSTRIAL

AIRWAY RD



2018 SOUTHWESTERN COLLEGE FMP



INDUSTRIAL

INDUSTRIAL

Gensler



INDUSTRIAL



OTAY MESA CAMPUS

5.3

EXISTING CONDITIONS

CAMPUS ZONING

The Otay Mesa Campus consists of nine buildings including the Administration & Student Services Building, Instructional Facilities, a Conference Center with Student Services and a Student Center/Library on the west side of the courtyard. The buildings are arranged around a courtyard with gathering spaces for the campus community. On the west side of campus, there are outdoor facilities for the Fire, EMT, EMS training program including a police training course and track.



Entrance to Building



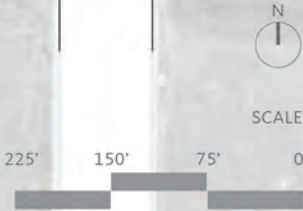
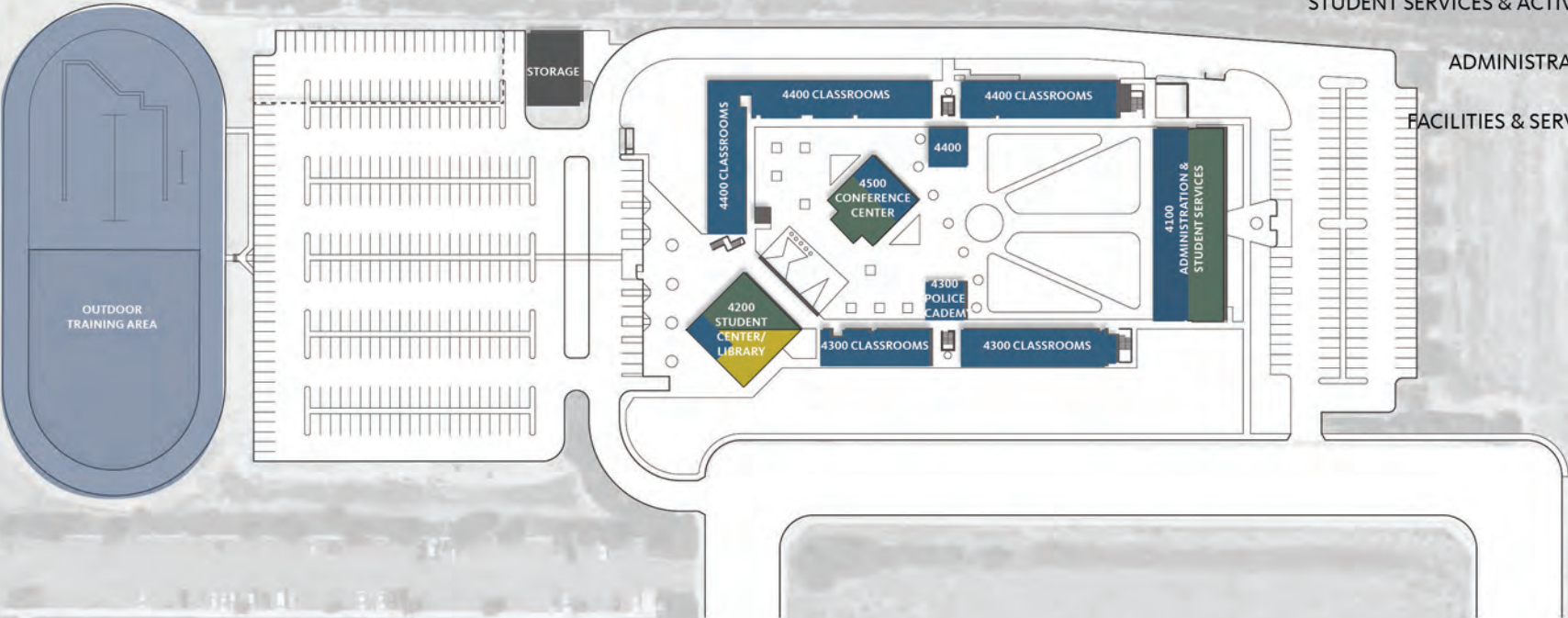
Campus Courtyard



2-Story Instructional Building

CAMPUS ZONING
LEGEND

- INSTRUCTIONAL FACILITIES
- INSTRUCTIONAL SITE
- INSTRUCTIONAL SUPPORT
- STUDENT SERVICES & ACTIVITIES
- ADMINISTRATION
- FACILITIES & SERVICES



EXISTING CONDITIONS

VEHICULAR + PEDESTRIAN CIRCULATION

The Otay Mesa Campus is accessed by vehicles from Interstate 805 and the nearby 125 toll road. It is approximately twenty miles from Downtown San Diego and within a short driving distance to many communities in the South Bay. Parking lots are available on the east and west ends of the campus. Metropolitan Transit Authority also runs a route and stop south of the campus along Airway Road and Excellante Street. It is located far away from campus without adequate lighting.

The campus is organized around a central courtyard which is easily traversed through exterior circulation within a matter of minutes. Pedestrian areas at the center of campus are underutilized.

There are 337 parking spaces between both parking lots and there is adequate parking for the current and projected enrollment for Otay Mesa.



**Pedestrian Plaza at Center of
Campus**



**Parking Lot on West End of
Campus**



Entrance from Parking Lot

905 FREEWAY

VEHICULAR + PEDESTRIAN CIRCULATION

LEGEND

VEHICULAR TRAFFIC

EMERGENCY ACCESS

ENTRY / EXIT

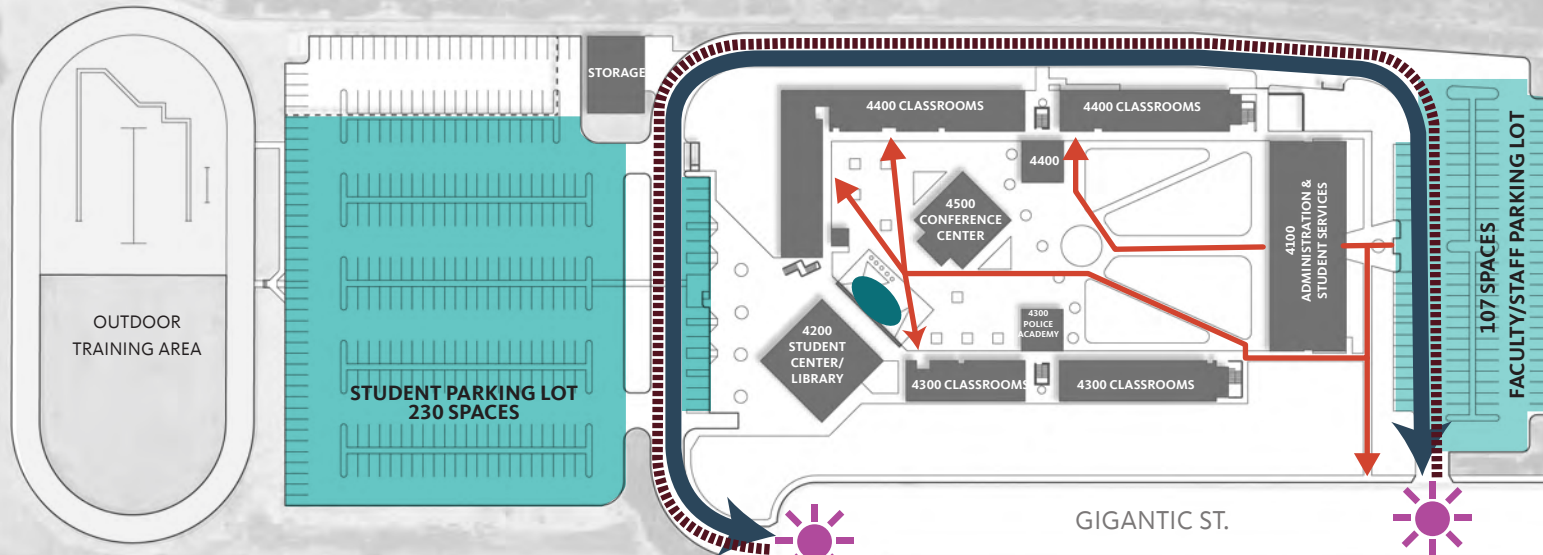
PARKING LOTS

BUS STOP

PEDESTRIAN
CIRCULATION

PEDESTRIAN HUBS

TOTAL PARKING COUNT
337 SPACES



GIGANTIC ST.

EXCELLANTE ST.

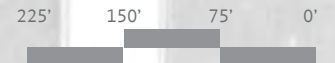
CENTURION ST.



BUS STOP AT
AIRWAY ROAD



SCALE



RECOMMENDATIONS FACILITIES MASTER PLAN

The FMP recommendations for the Otay Mesa Campus include improvements to support the growing Fire Science, Police and EMS training programs. The development will include new buildings for training and storage of program supplies and improvements to the outdoor training areas.

A new Automotive Technology Complex is recommended to be relocated from the Chula Vista Campus to Otay Mesa on the available land on the east side of campus. This location provides ample space to develop the facilities and site support space needed for this program.

Development of the outdoor areas of the campus is recommended to enhance student and faculty engagement and support collaboration.

FMP PROJECT LIST

BUILDING PROJECTS

- 1 Fire Science / Police / EMS Training Facilities
- 2 Automotive Technology Complex

SITE DEVELOPMENT PROJECTS

- 1 Outdoor Site Development

FACILITIES MASTER PLAN

LEGEND

- EXISTING TO REMAIN
- NEW
- RENOVATE

905 FREEWAY

GIGANTIC ST.

EXCELLANTE ST.

CENTURION ST.

AUTO TECHNOLOGY

OUTDOOR
TRAINING AREA

FIRE SCIENCE/
POLICE/
EMS TRAINING

STORAGE

4400 CLASSROOMS

4400 CLASSROOMS

4400 CLASSROOMS

4400 CLASSROOMS

4300 CLASSROOMS

4300 CLASSROOMS

4200 STUDENT
CENTER/
LIBRARY

4300

4400

4500 CONFERENCE
CENTER

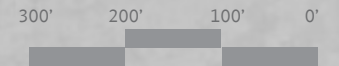
4100 ADMINISTRATION &
STUDENT SERVICES

FACULTY /STAFF

PARKING LOT



SCALE



4200



The background image is a photograph of a modern building with a stone staircase and a metal fence. The image is overlaid with a semi-transparent teal color. The building has large windows and a stone facade. The staircase is made of large, light-colored stone blocks. The fence is made of vertical metal bars. The number '460' is visible on the building's facade.

06

SAN YSIDRO

SAN YSIDRO CAMPUS OVERVIEW

The San Ysidro Campus was built in 1988 and is located nine miles from the Chula Vista Campus. The campus offers general education courses for students who live in the vicinity of this campus, specialized courses for students seeking an associate degree in Child Development, and a comprehensive array of student support services.

MISSION

The mission of the San Ysidro Campus is to provide local access to:

- The family Studies/Child Development career education program that is shared between this site and the Chula Vista Campus
- An array of general education courses for students who live in the vicinity of this Campus as well as for students seeking an associate degree in Child Development
- A comprehensive array of student support services.

The following elements are included in this section:

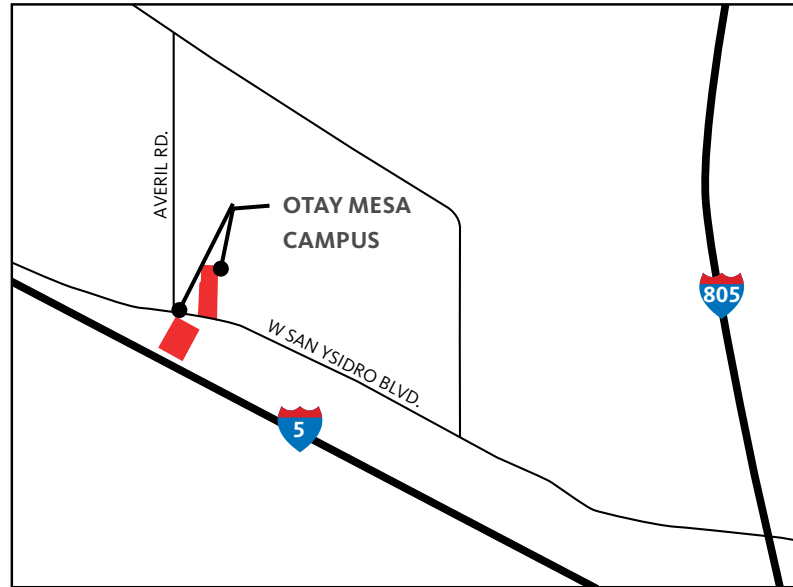
LOCAL CONTEXT

EXISTING CONDITIONS

RECOMMENDATIONS

LOCAL CONTEXT

The San Ysidro Campus is located near the US - Mexico border within twenty five miles of the Chula Vista Campus. It is situated in a mixed neighborhood of commercial and residential properties along the busy San Ysidro Boulevard. Visitors access the campus from the nearby 805 and 5 freeways.



San Ysidro Public Library



San Ysidro High School



Border Field State Park

RESIDENTIAL

RESIDENTIAL

LOCAL CONTEXT

RESIDENTIAL

RESIDENTIAL

SUNSET ELEMENTARY
SCHOOL

RESIDENTIAL

AVERIL RD

W SAN YSIDRO BLVD

COMMERICAL

SAN YSIDRO
CAMPUS

COMMERICAL

SAN DIEGO FWY



INDUSTRIAL

2018 SOUTHWESTERN COLLEGE FMP



EXISTING CONDITIONS

CAMPUS ZONING

The campus includes one building which houses programs on two levels. The main floor includes Administration, Student Support Services and Instructional spaces. The second floor includes additional instructional space. Spaces within the building are flexible and serve multiple functions. This leads to scheduling conflicts and the need for additional space. In addition, the Student Support Services area is limited and requires more room.

There is a small outdoor area facing San Ysidro Boulevard and parking that extends around the building. Additional parking is located across San Ysidro Boulevard for students and staff. Outdoor space is limited with minimal seating to support studying and collaboration. Many spaces within the building serve multiple needs and limit scheduling opportunities.



San Ysidro Street View



Campus Bookstore



Lobby



CAMPUS ZONING LEGEND

- INSTRUCTIONAL FACILITIES
- STUDENT SERVICES & ACTIVITIES
- STUDENT SERVICES & ACTIVITIES
- ADMINISTRATION
- FACILITIES & SERVICES



SCALE



EXISTING CONDITIONS

VEHICULAR + PEDESTRIAN CIRCULATION

The campus is accessed by vehicles from San Ysidro Boulevard and Averil Boulevard from Interstate 805 and 5 freeways. It is located within a twenty five minute drive from the Chula Vista Campus and a short commute from the South Bay. It is located within five miles of the US-Mexico border and is also a fifteen minute walk or short bike ride from the Beyer Boulevard Trolley Station.

There is a Metropolitan Transit Authority bus stop in front on San Ysidro Boulevard and across the street on the corner of Averil Boulevard. Pedestrians access the campus along these roads crossing at the intersection through designated crossings and access from the parking lot across San Ysidro is a safety concern.



Bus Stop in Front of Campus

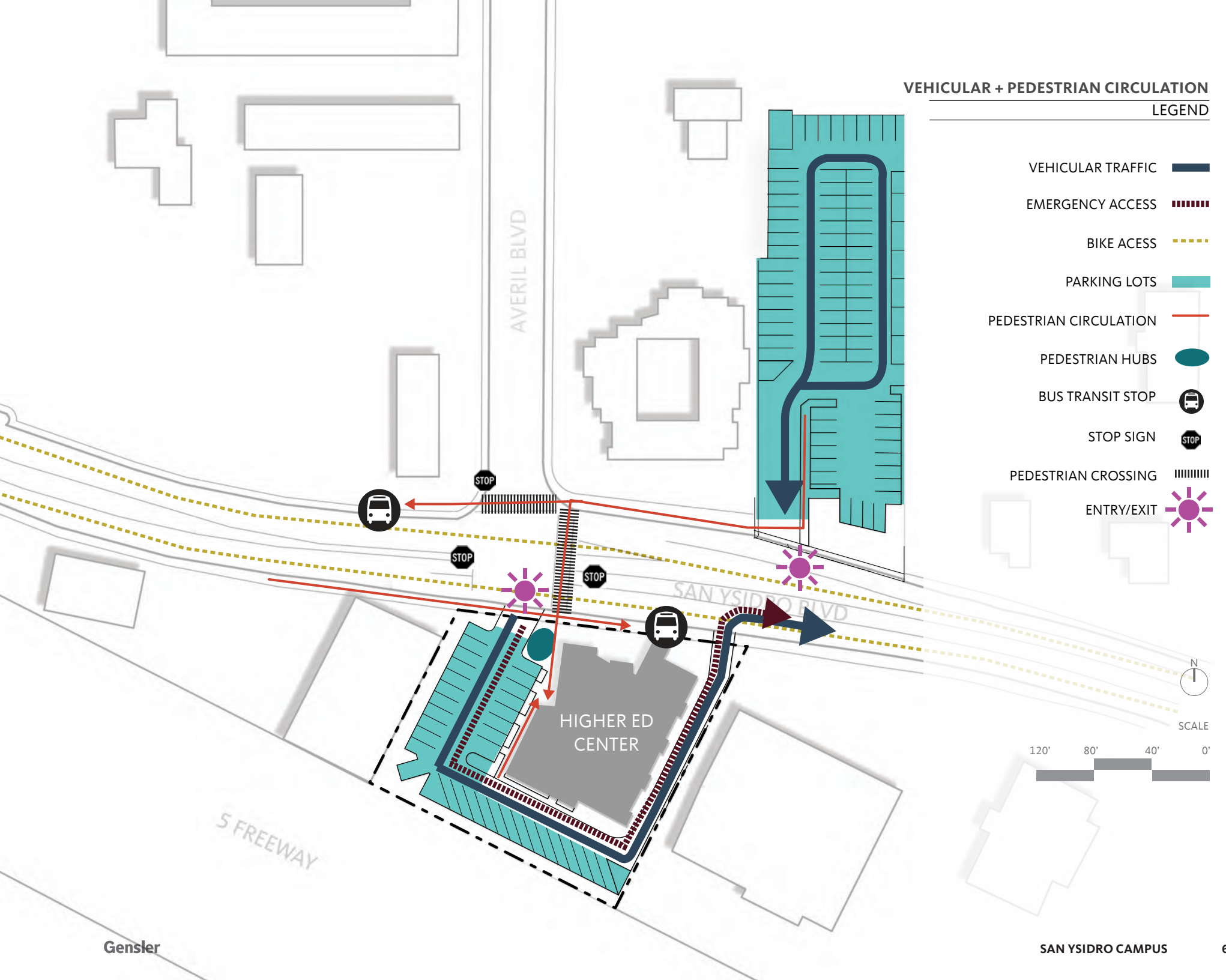


Secondary Parking Lot Across
San Ysidro Boulevard

VEHICULAR + PEDESTRIAN CIRCULATION

LEGEND

- VEHICULAR TRAFFIC
- EMERGENCY ACCESS
- BIKE ACCESS
- PARKING LOTS
- PEDESTRIAN CIRCULATION
- PEDESTRIAN HUBS
- BUS TRANSIT STOP
- STOP SIGN
- PEDESTRIAN CROSSING
- ENTRY/EXIT



RECOMMENDATIONS FACILITIES MASTER PLAN

The San Ysidro Campus site includes two parcels of land across San Ysidro Boulevard. The current building is located on the southern site and the second parcel to the north is currently an overflow parking lot. The outdoor space and entry experience for the campus needs to be improved with more seating and landscaped areas. Parking spaces at the front of the building could be converted for this use. Also, a safer and highly visible pedestrian crossing at the intersection of Averil and San Ysidro Boulevard is needed to guide visitors safely across the road from the overflow parking lot.

In addition, a future building expansion and more parking are needed to support the campus. One location being considered for this expansion is the current overflow parking lot across the street. Due to the size needed for these functions alternate local sites should be considered for expansion.

FMP PROJECT LIST



BUILDING PROJECTS

- 1 Future building to support expansion of programs

SITE DEVELOPMENT PROJECTS

- 1 Enhanced outdoor space
 - 2 Additional parking
-

**FACILITIES MASTER PLAN
LEGEND**

EXISTING TO REMAIN 
NEW 

AVERIL BLVD

**PARKING
STRUCTURE**

**THREE-
STORY
BUILDING**

SAN YSIDRO BLVD

**HIGHER ED
CENTER**

120' 80' 40' 0'



2018 SOUTHWESTERN COLLEGE FMP


EC SY TUTOR
Child Development
Naomi Gomez
Monday
9am - 12pm & 2:30pm - 4pm
Thursday
8:30am





07

SUSTAINABILITY

SUSTAINABILITY OVERVIEW

Colleges are leaders in their communities. They provide knowledge centers and opportunities for research and practice. They inform community education and provide positive opportunities for communities' sustainable futures.

As part of the FMP, the planning team completed a detailed study of energy and water use, as well as carbon emission profile. This information (included in the FMP Appendix) was presented as part of the Sustainability Workshop conducted on April 20, 2018. Workshop participants included a cross-disciplinary group, represented by faculty, staff, students and community members who engaged in a dialogue focused on sustainability at SWC. The group discussed current strategies and engaged in a series of activities to plan the sustainability goals for the FMP.

A summary of SWC's current sustainability efforts and the sustainability workshop is presented in this section.

The following elements are included in this section:

ENVIRONMENTAL ANALYSIS

SUSTAINABILITY LENSES AT SWC

SUSTAINABILITY THEMES

WORKSHOP ACTIVITIES + SUMMARY

SUSTAINABILITY GOALS

LOOKING INTO THE FUTURE

FACILITIES PLANNING PRINCIPLES FOCUS ON SUSTAINABILITY

The Facilities Planning Principles outlined in the beginning of this document are grouped into six categories. The Stewardship of Resources principle relates to utilizing space, monetary resources and resources available efficiently and effectively as a way to prioritize actions. Sustainable resources and efforts are grouped into this category.

Southwestern College has focused on making good use of resources for sustainability efforts thus far including installing photovoltaic panels at parking areas and drought tolerant landscaping. This chapter further explores those strategies, looking from where SWC is now and where it strives to be in the future.

In addition to the planning principles, the Governing Board has outlined a District-wide policy on Sustainability as defined below:

No. 3260 BP - Business & Financial Affairs SUSTAINABILITY

The Governing Board of Southwestern Community College District delegates to the Superintendent/President the authority to develop practices and procedures that promote leadership on sustainability issues in all areas of the College District, including instruction, operations, construction, facilities, land use, energy management, water conservation, solid-waste minimization, storm-water pollution preventions, recycling, and environmental and biological integrity. In addition to promulgating efficiency and sustainability for their own sake, Southwestern College, as an institution of higher education, shall become a model and classroom of sustainability for students, faculty, staff, and the community. The energy and sustainability procedures will include goals and guidance for all facets of the College District that ensure the evolution of best practices in sustainability.



SUSTAINABILITY IS...

The term “sustainable” is most simply defined as being able to be maintained; to cause to continue; to prolong. Within the architectural community, sustainability has long been defined by developments which meet the needs of today, without compromising the needs of the future. However, the concept of sustainability has evolved.

Sustainability is not just about doing better for the planet; it is about maintaining balance in a triple bottom line approach that enhances society, the economy, and the environment. Where these strategies collide: sustainability can take root and prosper within a community. Where strategies support the needs of the individuals living, working and learning in that community, an equitable social economy thrives. Where the natural environment, both interior and exterior of the building, are better served, the community further prospers. And when financially, the decisions made support further growth and prosperity, while respecting inhabitants and resources, those developments become the new standard.

Creating an equitable social environment leads to a more successful society which therefore leads to a thriving economy. Within these facets of life is the desire to be true stewards of the earth and to protect it for future generations.



SUSTAINABILITY LENSES AT SOUTHWESTERN COLLEGE

During the Sustainability workshop, the group discussed the layers of economic, environmental and social sustainability. The categories on the right further define each of these.



DEFINING SUSTAINABILITY TERMINOLOGY

Having a common language which defines a project's impact on the environment is the next fundamental step in having a fruitful discussion about sustainability. Further quantifying that impact through measurable metrics provides a feedback loop for the team through which they can measure the success of their respective design decisions and sustainable strategies.

Understanding how the built environment contributes to climate change requires the team to measure the associated energy demands of that development. Thereafter, the team can appreciate how design decisions directly affect the project's impact on the planet, or its global warming potential.

These terms were reviewed during the Sustainability Workshop, establishing a common language for next level design integration.

DESIGN RESILIENCE

a responsible approach towards the design of buildings, communities and cities to be able to adapt and respond to the changing conditions due to the consequences of climate change.

EUI

Energy Use Intensity (EUI) expresses a building's energy use as a function of its size or other characteristics. For most property the EUI is expressed as energy per square foot per year. It is calculated by dividing the total energy consumed by the building in one year (measured in kbtu) by the total gross floor area of the building.

BTU

The British Thermal Unit (BTU) is a traditional unit of work equal to about 1055 Joules. It is the amount of work needed to raise the temperature of one pound of water by one degree Fahrenheit (physical analogue: one four-inch wooden kitchen match consumed completely generates approximately 1 BTU).

For reference:

1 Therm (gas) = 100,000 btus, or 100 kbtus

1 Kbtu = 1000 btus

1 Kwh (electricity) = 3.412 Kbtu

GHG

Greenhouse Gas (sometimes abbreviated GHG) is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect.

GWP

Global Warming Potential (GWP) is a relative measure of how much heat a greenhouse gas traps in the atmosphere. It compares the amount of heat trapped by a certain mass of the gas in question to the amount of heat trapped by a similar mass of carbon dioxide.

ENVIRONMENTAL ANALYSIS

The environmental analysis for Southwestern College included establishing a baseline understanding of existing climate data in the region.

This section contains the following analysis:

CLIMATE

TEMPERATURE

PRECIPITATION

RELATIVE HUMIDITY

SOLAR RADIATION

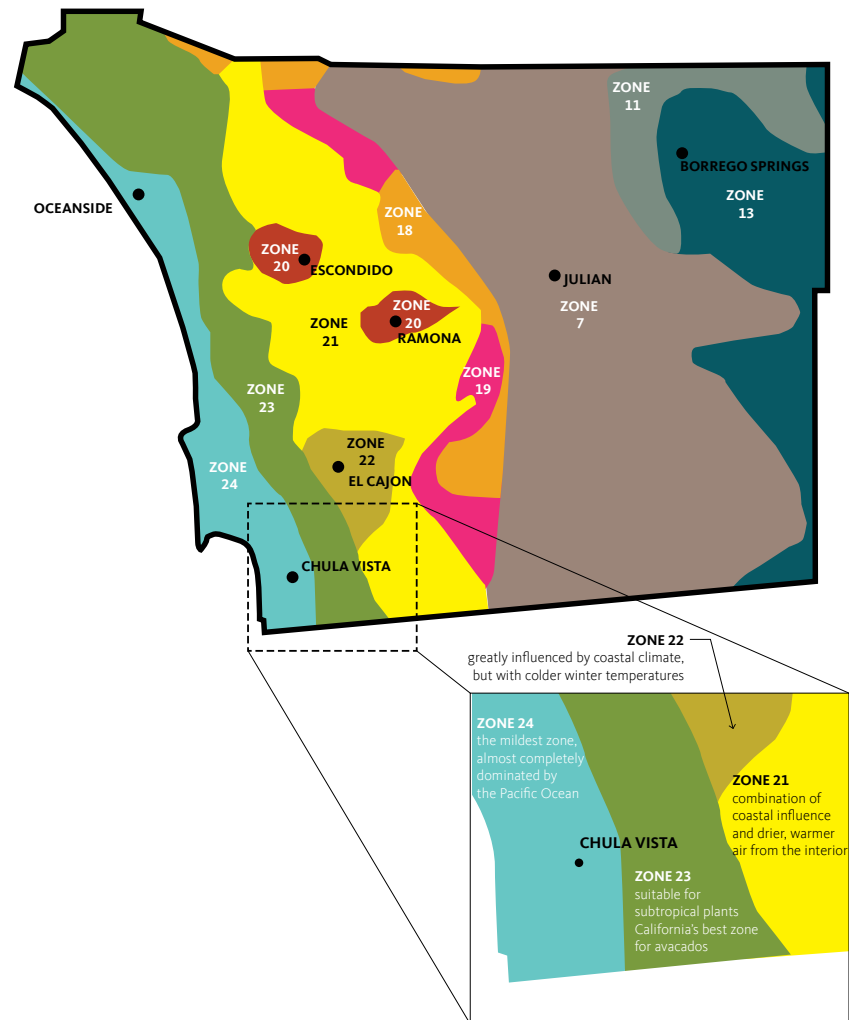
SUN PATH

WIND SPEED + PATTERNS

CLIMATE

As a result of the nearby Pacific Ocean and San Ysidro Mountains, the college is in Climate Zone 23. This zone is considered a thermal belt adjacent to the California coastline. It is considered one of the most favored areas to grow subtropical plants and eighty-five percent of the time the weather is still dominated by the Pacific Ocean influence. The other fifteen percent of the time the climate is controlled by the inland areas such as with the Santa Ana wind condition which blows hot, dry air.

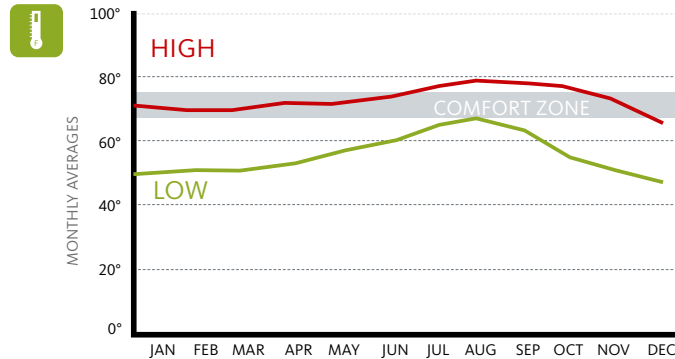
CLIMATE



source: The New Sunset Western Garden Book

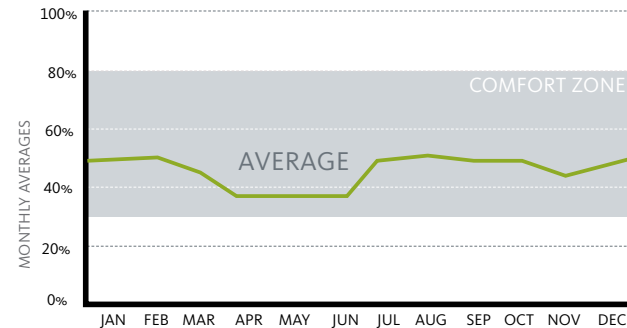
TEMPERATURE

At SWC, during the fall and winter months (November-February), seasonal temperatures tend to stay below the comfort zone, ranging between 46–64 degrees Fahrenheit. During the spring and summer months (May-September), temperatures tend to stay partially above and in the comfort zone, ranging from 70-80 degrees Fahrenheit.



RELATIVE HUMIDITY

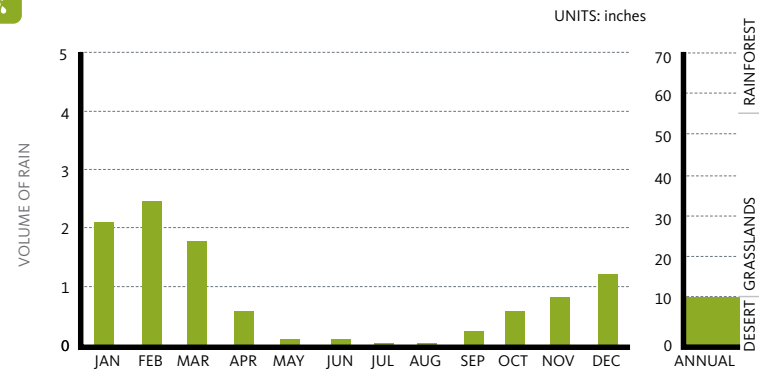
To feel comfortable, both the temperature and humidity must be within their comfort zones. Thus, excessively high or low humidity can push otherwise comfortable temperatures to feel uncomfortable. Moisture (humidity) can be an asset by evaporating in hot, dry climates to cool and humidify the air. The relative humidity ranges from 30% to 60%. The air is driest around July and August and the most humid in March.



ENVIRONMENTAL ANALYSIS (CONTINUED)

PRECIPITATION

At SWC, the amount of precipitation varies between 0 and just over 2 inches with approximately 10 inches annually. Chula Vista is considered a semi-arid desert climate.

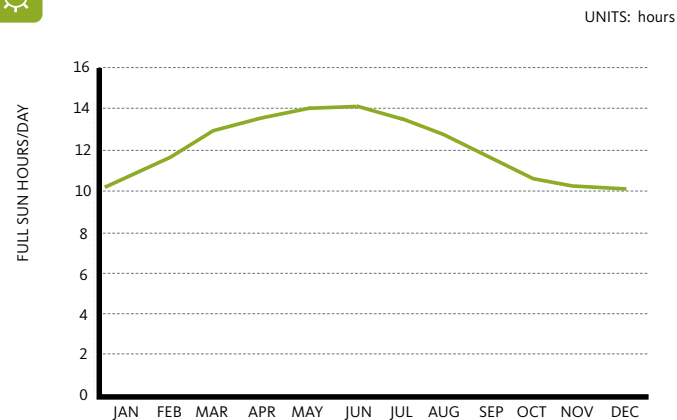


SOLAR RADIATION

Solar radiation, also known as sunniness, can extend the comfort zone by cooling during periods of high temperatures.

The sun can be used as an asset in cool and cold climates to provide passive heating to reduce heating loads, but can be a significant liability in hot climates where it can quickly overheat a building.

The length of the day varies over the course of the year. The shortest day is in December and the longest day is June 20.

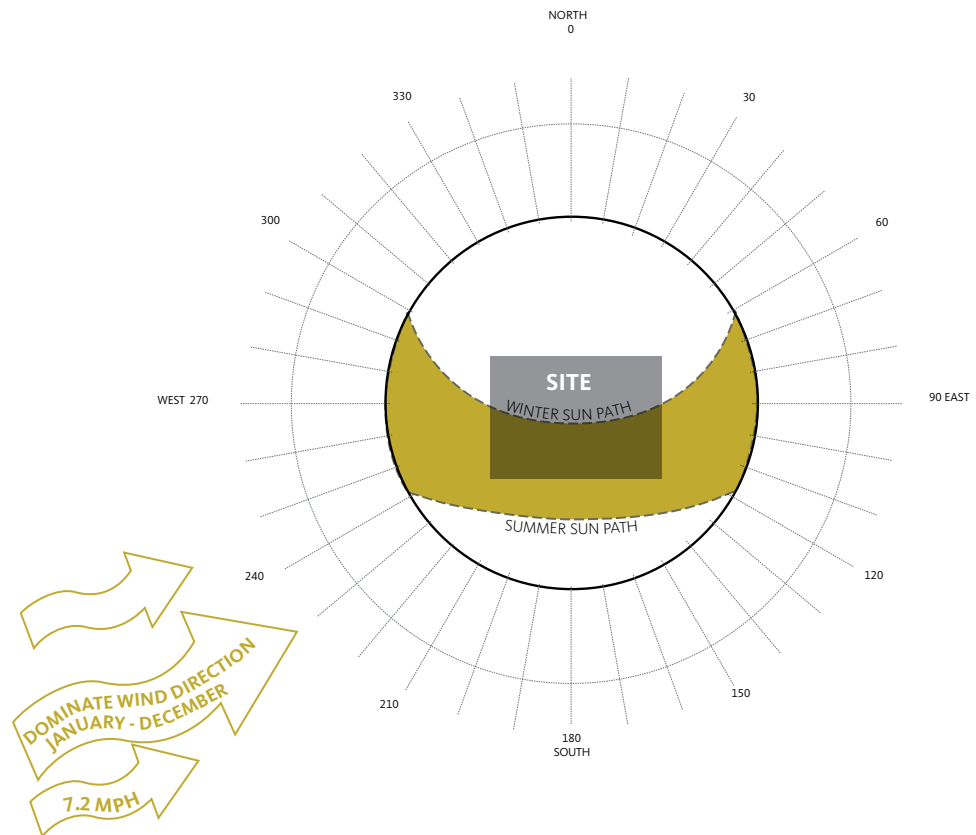


SUN PATH + WIND SPEED + WIND PATTERNS

The Sun Path diagram characterizes the movement of the sun through the sky in summer and winter. The orange arc indicates the widest extent of sunrise and sunset in summer. The yellow arc indicates the minimum extent of sunrise and sunset in winter. The diagram at left begins to illuminate where the opportunities are for sun penetration into the building and the characteristics of shading devices.

The Wind Patterns diagram characterizes the direction from which the wind enters the site and the percentage of hours per year that the wind is coming from a particular direction. The length of each arrow indicates the percentage of hours per year that wind blows from each direction. This diagram describes orientation opportunities that exist, along with locations where natural ventilation may be incorporated into the design, and the availability of user-accessible comfort strategies.

During the summer and fall season the winds tend to come from the west with an annual range between 5 and 45 miles per hour, and temperatures which range between 30–70 degrees Fahrenheit. During the winter, consistent wind coming from the north east hits the campus as high as 30 miles per hour, with temperature ranging between 30 and 70 degrees Fahrenheit.



ENERGY CONSUMPTION ANALYSIS + STRATEGIES

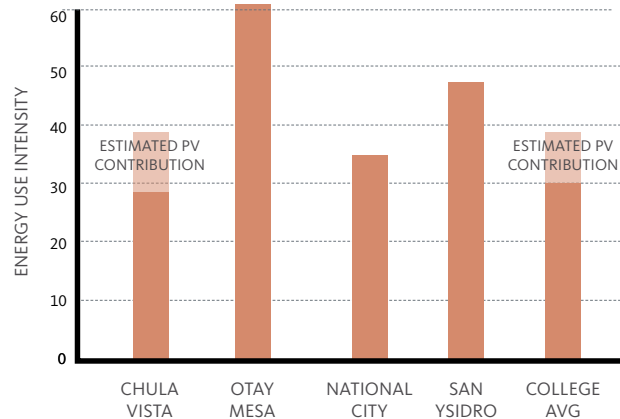
ANALYSIS

As required by the Chancellors office, Southwestern College has been collecting and reporting its energy consumption for many years. Prior to the Workshop, an intensive discovery process occurred, including the analysis of existing historical energy consumption for each of the four campuses, and compiled as an average.

For the 2016-2017 period, over 70% of the energy used is associated with the Chula Vista Campus. This is to be expected, given it is the largest campus, both in student enrollment totals and facilities. When taking the actual building space into account, the Chula Vista campus is also the best performing from an Energy Use Intensity (EUI) perspective, using a little less than 40 kbtus/sf/year.

By establishing a baseline of each campuses energy demand, attendees were able to graphically visualize where the greatest impacts could be perceived.

2016-2018 ENERGY USE INTENSITY (kBtu/sf/year)

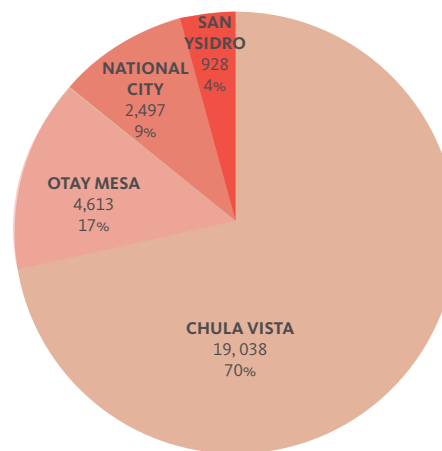


STRATEGIES

The Chula Vista campus, being largest in scale, also presented as the largest overall consumer of energy - which was to be expected. However, when comparing the energy use intensities per campus (the total energy demand per square foot), Chula Vista proved to be the most successful of the group.

To maximize and enhance energy efficiency in the SWC campuses as a whole, additional efforts should be focused on Otay Mesa and San Ysidro. It should be noted however that, when compared with similar 2 and 4-year college campuses, the SWC campus outperformed its peers.

2016-2017 TOTAL ENERGY CONSUMPTION (MILLION BTUs)



PVS IN PARKING LOTS AND / OR ON BUILDING ROOFTOPS



BI-LEVEL LIGHTING IN PARKING LOTS



LED LIGHTING IN BUILDINGS, PARKING LOTS AND SIDEWALKS



CLIMATEC EMS SYSTEM FOR COMFORT MONITORING (TEMPERATURE, HUMIDITY, AIRFLOW VELOCITY)



LIGHTING OCCUPANCY SENSORS IN CLASSROOMS AND OTHER SPACES



EMERGENCY GENERATOR ON CAMPUS

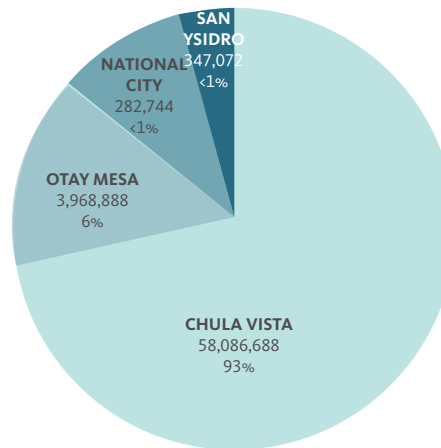
WATER CONSUMPTION ANALYSIS

Quantifying water consumption in non-residential buildings is a complex issue and depends on the total number of site users as well as the extent of process and landscape water demanded by the site.

Prior to the Workshop, historical water consumption was analyzed for each of the four campuses and shared with the group. Water consumption is quantified via the public utility records reporting cubic feet of water provided to the sites between 2016 and 2018.

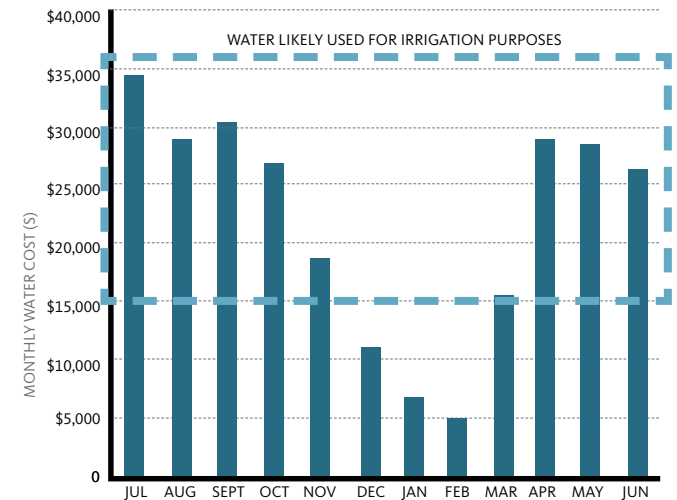
Data indicated peak usage in summer months, when populations in college campuses tend to be at their lowest, and unoccupied buildings are left unconditioned. Based on water consumption spikes during times of limited occupancy, landscape is reasoned to be the largest consumer of potable water.

WATER USE BY CAMPUS (Gallons)

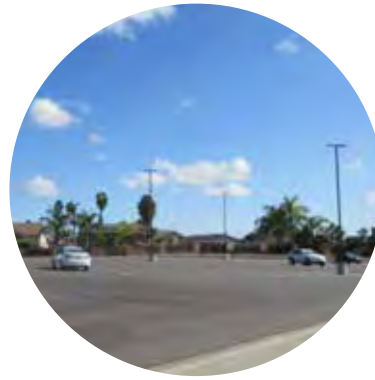


2016-2017 WATER CONSUMPTION
(GALLONS)

**CHULA VISTA CAMPUS WATER COST TREND
2016-2017**



Water Runoff



**Minimal Shade
at Parking Areas**



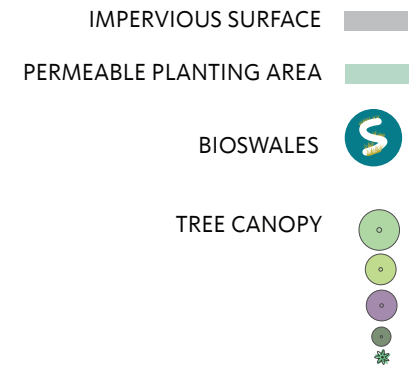
Tropical Planting



High Water Use



CHULA VISTA CAMPUS CURRENT WATER CONSERVATION STRATEGIES



CURRENT STRATEGIES

CALSENSE Irrigation Control Systems
nearly complete campus wide

Reclaimed Water infrastructure to
Wellness + Aquatics Center for irrigation

Storm water treatment basins at the
Wellness + Aquatics Center

Bioswales at the front of the Chula Vista
campus and National City campus

2018 SOUTHWESTERN COLLEGE FMP



SCALE



WATER CONSUMPTION STRATEGIES

Southwestern College has taken great steps in reducing water consumption starting with updating their irrigation system to be weather sensitive. Existing high water use on campus is currently shifting towards irrigating turf landscape within the center of campus, the vehicular entries on Otay Lakes Road, sports fields, and around the ring road. Medium water use areas are found where there are sloping landscapes along portions of the ring road, portions of the central campus, and within bioswales. Low water use areas are found around the new buildings, leaving the very low water use for maintaining the artificial turf in the DeVore stadium.

Southwestern College is making great strides through community connections to install cisterns in new construction where applicable, using reclaimed water for landscape irrigation from the Otay Water District, along with the CalSense irrigation system. The next integral step to aid in decreasing water use is to remove turf in intermediate areas, transform the landscape to hold low water use plant & tree species.

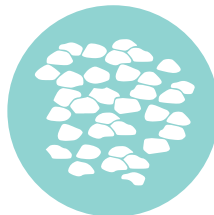
WATER USE REDUCTION STRATEGIES



REPLACE WATER HEAVY TURF WITH LOW WATER USE AND INCREASE NATIVE PLANTINGS



REDUCE HEAT ISLAND EFFECT INCREASE TREE CANOPIES



INCORPORATE STORM WATER INFILTRATION AREAS

ADDITIONAL STRATEGIES

- Further implementation of the CalSense program should occur in order to further optimize landscape water use
- Continuing maintenance of the existing irrigation on campus, replacing any leaking irrigation heads
- Continue the coordination and implementation with Otay Water District to have access on campus to their non-potable water for landscape irrigation
- When implementing rainwater harvesting through cisterns as an effective albeit seasonal way to provide water to localized vegetated areas, while providing a sustainable education component
- Set a standard for all new construction on campus to have native/low water use plant & tree species
- Begin transitioning unused intermediate turf areas to low water use planting areas
- Maintain larger turf areas in center of campus that contribute to the park like experience while updating all others to be irrigated with tree bubblers and drip irrigation



LEGEND

- HIGH WATER USE
- MEDIUM WATER USE
- LOW WATER USE
- VERY LOW WATER USE
- NON-IRRIGATED
- HORTICULTURE CENTER

2018 SOUTHWESTERN COLLEGE FMP



SCALE



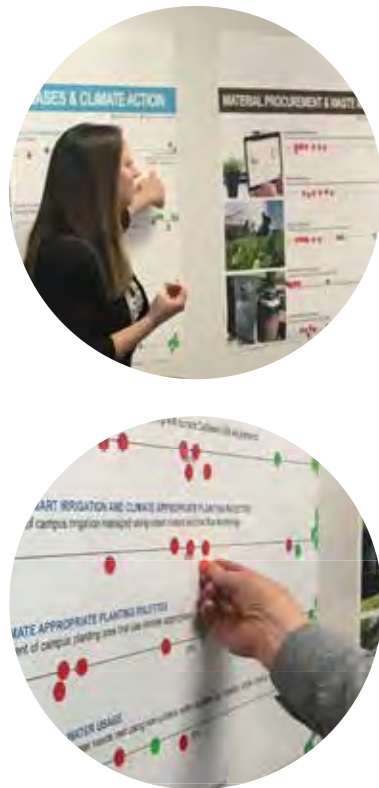
WORKSHOP ACTIVITIES

Workshop participants engaged in a series of activities to establish priorities and goals. These included:

FUTURE VISION EXERCISE

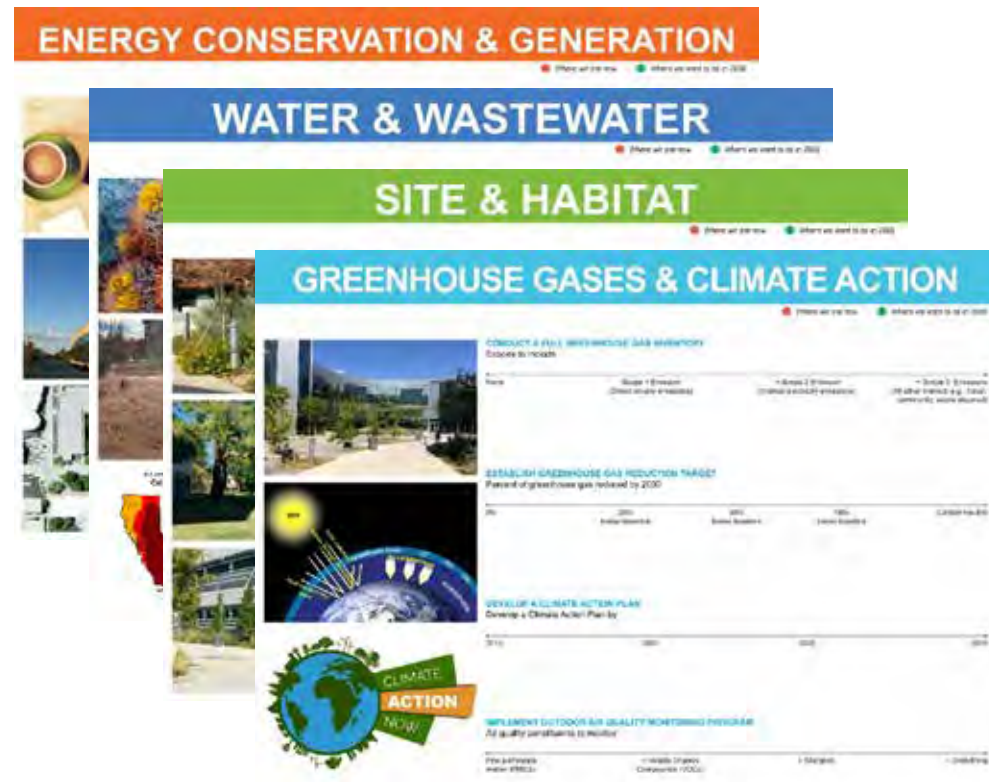
PRIORITIES EXERCISE

The following pages illustrate the exercises and show the feedback received from the workshop participants that helped form the Sustainability Goals for the FMP.



FUTURE VISION EXERCISE

Participants were given red and green dots to indicate the College's current and envisioned statuses for each stewardship theme. In general, the participants think the college is currently in the lower half of sustainability-related accomplishments and should strive to be in the top half of sustainability-related achievements.



PRIORITIES EXERCISE

During the Priorities exercise, participants were asked to rank sustainability themes by high, medium and low priority using different colored sticky notes as shown to the right. They were given idea cards, shown on the left to help them brainstorm ideas on how these priorities could be implemented at Southwestern College.



FEEDBACK

EDUCATION + CULTURE

- Provide healthy food by teaching how to growing and cook
- Provide green tech classes for workforce development



STUDENT + COMMUNITY ENGAGEMENT

- Promote inter-campus collaboration
- Extend partnerships with other community organizations



MONITORING + REPORTING

- Develop a Sustainability Action Plan
- Collect meter and other data throughout campuses that can be analyzed and improved
- Ensure new buildings have Green building certification such as LEED and Energy Star

HEALTH + WELLNESS

- Provide access to daylight + views
- Maintain healthy indoor air quality
- Provide affordable, healthy food
- Improve universal design throughout campuses



TRANSPORTATION + ACCESS

- Provide incentives for carpooling and public transit
- Improve pedestrian network + safety
- Provide bicycle storage and improve access on campus

SUSTAINABILITY GOALS

Sustainability goals were developed in conjunction with the guiding principles for the future of Southwestern College. Each of these goals were reviewed with the Task Force committee.

MONITOR

Set high bars for building performance goals, with consistent monitoring and routine reporting

Develop a sustainability action plan

Monitor and report

RECYCLE

Promote a culture of reduce, reuse and recycle

Purchase equipment with positive environmental attributes

Procure food and products from local region

Make recycling easy

EDUCATE

Nurture environmental stewardship and literacy across the campus, educate and prepare students for the green workforce

Provide student and employee orientation

Promote sustainability in curriculum

Develop outreach material and publications

Promote community service and partnership



ENERGY



Become a leader in Energy Efficiency and increase the levels of on-and off-site renewable energy

Reduce Energy Consumption / Increase Energy Efficiency

Increase Self-generated Energy Capacity



WATER



Manage building and landscape water use to conserve water

Increase biodiversity across campus

Avoid invasive plant species

Avoid heat island effect



HEALTH



Promote healthy living culture, and provide a safe and healthy environment

Provide healthy food & beverages

Improve indoor / outdoor air quality

Provide access to daylight and views

Provide public transit access



LOOKING INTO THE FUTURE...

As we look into the future and the threat of climate change, the building industry is challenged with bringing forth environmentally responsible designs. California's Public Utilities Commission has established a variety of regulations applicable to both new and existing buildings, targeting a strategy for net zero energy buildings: those which generate an equal amount or more energy than that which they consume.

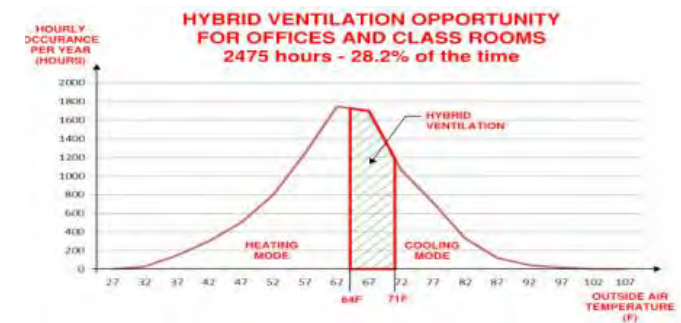
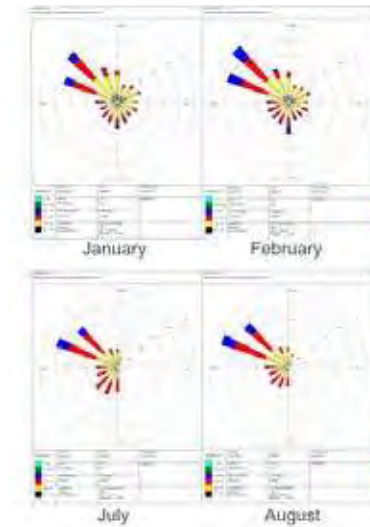
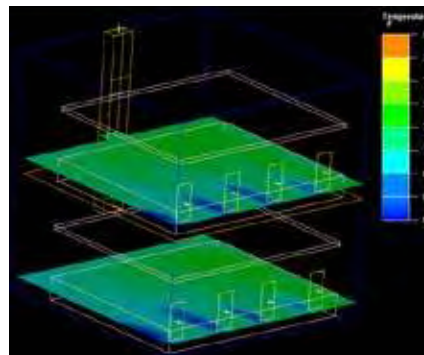
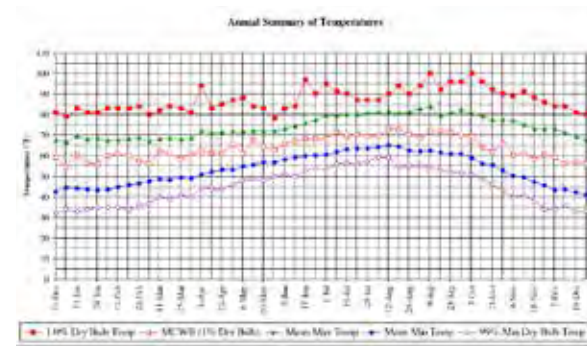
The California Energy Efficiency Strategic Plan mandates:

- All new residential construction (low rise and single family) shall be designed to be zero net energy (ZNE) by 2020
- All new State-owned buildings, and 50% of State-owned existing buildings shall be NZE by 2025
- All new commercial construction shall be designed to be ZNE by 2030
- 50% of all existing commercial buildings shall be retrofit to ZNE by 2030

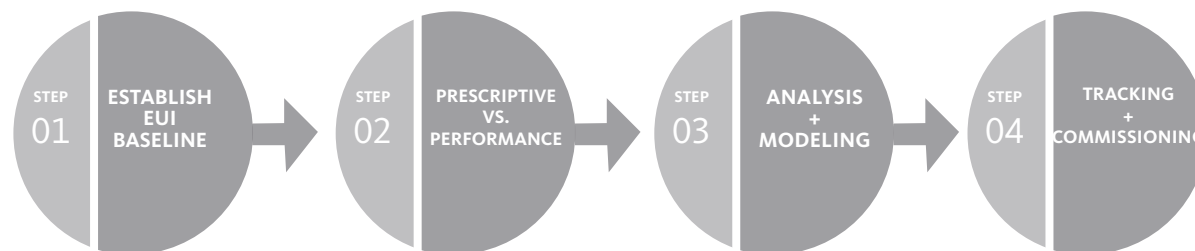


ENERGY MODELING

A building uses energy through utilizing lighting, mechanical systems, such as heating, cooling and ventilation, as well as plug load consumption through the use of office equipment and appliances. The practice of energy modeling, is completed by a mechanical or electrical engineer, allows a team to study how best to reduce energy demands and provide an efficient heating, cooling and ventilation system. This can be done by two methods, either through prescriptive or performance analysis. In the prescriptive method, an outline of requirements to meet the state and local requirements is followed to come to the desired result. In the performance method, the specific building geometry, orientation and geographical climate data, are taken into account to provide performance analysis of anticipated energy demands. Next, the engineer tests various systems which can be reviewed with the design team and owner to provide a custom solution that meets the state and local requirements for compliance.



WHERE DO WE START?



ZERO NET ENERGY IS...

Zero Net Energy (ZNE), or sometimes known as Net Zero Energy, is a building or community in which the total energy consumed is equal to or less than the amount of renewable energy it produces. ZNE can be achieved with a integrated design approach where lighting and other systems are selected for low energy use and by integrating photovoltaic panels or a battery storage device to harvest and use on demand as necessary. A creative approach to ZNE is necessary to achieve this designation, however the mild Southern California climate makes this process more easily achievable than in other parts of the country.

As we approach 2030, each project should take into consideration its effect on the ZNE community of Southwestern College as the District plans to meet these requirements.

BELOW IS THE TERMINOLOGY OF ZERO NET ENERGY COINED BY THE DEPARTMENT OF ENERGY

ZNE BUILDING

An energy-efficient building where, on a source energy basis, the actual annual consumed energy is less than or equal to the on-site renewable generated energy.

ZNE CAMPUS

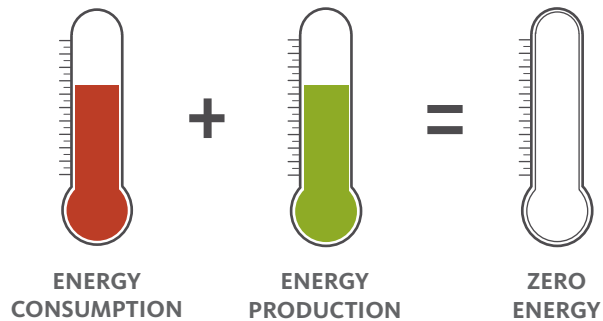
An energy-efficient campus where, on a source energy basis, the actual annual consumed energy is less than or equal to the on-site renewable generated energy.

ZNE PORTFOLIO

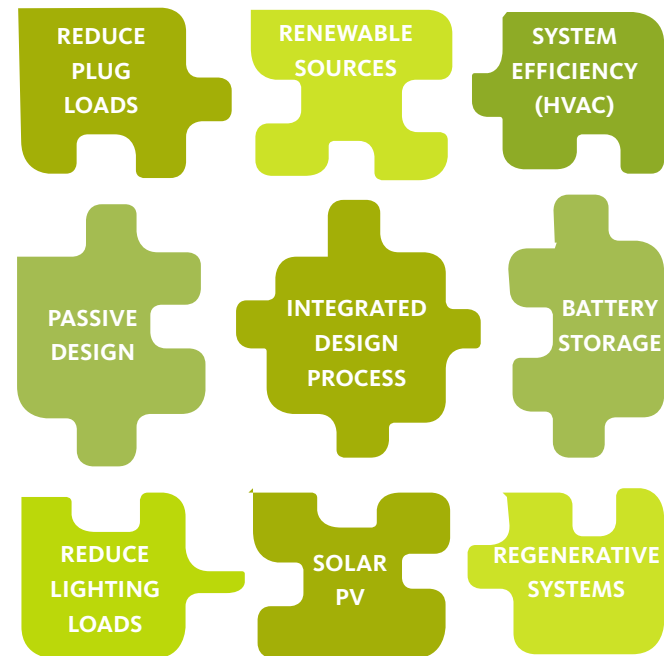
An energy-efficient portfolio in which, on a source energy basis, the actual annual consumed energy is less than or equal to the on-site renewable generated energy.

ZNE COMMUNITY

An energy-efficient community where, on a source energy basis, the actual annual consumed energy is less than or equal to the on-site renewable generated energy.



“ a building that makes as much energy as it uses ”







08

BUILDING DESIGN GUIDELINES

BUILDING DESIGN GUIDELINES OVERVIEW

The 2018 FMP for Southwestern College establishes a vision that promotes a reinvigorated sense of pride for the students, faculty, staff and local community.

The Building Design Guidelines presented in this section provide a framework for the future architectural design of facilities projects. It is intended to ensure the development of SWC campuses as a cohesive identity while supporting creative expression and innovative design solutions for individual projects.

The following elements are included in this section:

PURPOSE + PROCESS

TAKING STOCK

DEFINING MODERN MAYAN

ELEMENTS OF DESIGN

DESIGN RESILIENCE

UNIVERSAL DESIGN

TO BE COMPLETED AT A LATER DATE



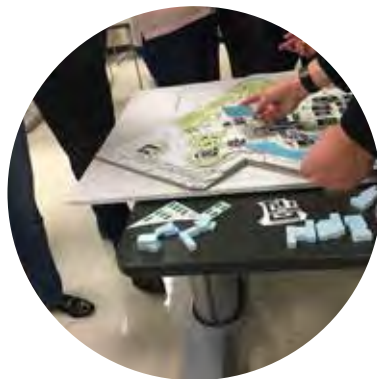


09

APPENDIX

APPENDIX OVERVIEW

The Appendix section of this FMP document includes information that was referenced and developed during the planning process.



The following elements are included in this section:

**FMP PROJECTS TO FACILITIES PLANNING
PRINCIPLES**

**LONG-RANGE GROWTH FORECASTS BY
DISCIPLINE**

GLOSSARY OF DATA ELEMENTS

UTILITY MASTER PLAN



FACILITIES PLANNING PRINCIPLES



CAMPUS
ORGANIZATION



ACCESS +
WAYFINDING



COLLEGIATE
IDENTITY



EFFECTIVE +
EFFICIENT



STEWARDSHIP OF
RESOURCES



COMMUNITY
ENGAGEMENT

FMP PROJECTS

NEW BUILDING CONSTRUCTION						
Instructional Complex 1	●	●	●	●		
Instructional Complex 2	●	●	●	●		
Instructional Complex 3	●	●	●	●		
Instructional Complex 4	●	●	●	●		
Facilities, Operations, Maintenance + Grounds	●			●	●	
Landscape + Nursery Technology				●	●	●
New Student Services Gateway	●	●	●	●		
Student Union Complex	●	●	●	●		●
National City -Future Mixed-Use Development			●	●		●
Otay Mesa - Fire Science / Police / EMS Training Facilities			●	●		
Otay Mesa - Automotive Technology Complex			●	●		●
San Ysidro - Phase II Expansion			●	●		
SITE DEVELOPMENT PROJECTS						
Parking + Ring Road + Bus Stop		●		●		
Pedestrian Ring Walk		●	●	●	●	
Tennis Facility	●				●	
Track and Field Improvements					●	●
Otay Mesa - Outdoor Site Development			●	●		
San Ysidro - Enhanced Outdoor Space			●	●		
San Ysidro - Additional Parking		●		●		
RENOVATION/CHANGE OF USE						
One Stop Modernization	●			●	●	

LONG-RANGE GROWTH FORECASTS BY DISCIPLINE

The Southwestern College 2018 Facilities Master Plan is grounded in an analysis of the current status and the anticipated future of the instructional programs. The Long-Range Growth Forecasts by Discipline presents data on the current performance of each instructional discipline offered by the College and the projected growth of each discipline over the next decade in the following order:

Accounting (ACCT)
Administration of Justice (AJ)
African-American Studies (AFRO)
American Sign Language (ASL)
Anthropology (ANTH)
Architecture (ARCH)
Art (ART)
Asian-American Studies (ASIA)
Associate Degree Nursing (ADN)
Astronomy (ASTR)
Automotive Technology (AT)
Biology (BIOL)
Business, Insurance, Real Estate, Leadership (BUS, INS, RE, LDR)
Certified Nursing Assistant (CNA)
Chemistry (CHEM)
Child Development (CD)
Communication (COMM)

Computer Aided Design & Drafting (CAD)
Computer Information Systems (CIS)
Computer Literacy (CL)
Construction Inspection (CI)
Dance (DANC)
Dental Hygiene (DH)
Economics (ECON)
Education (ED)
Electronics (ELEC)
Emergency Medical Technology (EMT)
Emergency Medical Technology & Paramedic (EMTP)
Engineering (ENGR)
English (ENGL)
English as a Second Language (ESL)
Environmental Hazardous Materials Technology (EHMT)
Exercise Science (ES/A, ES/I, ES/L, ES/T)
Filipino (FIL)



Fire Science Technology (FS)
French (FREN)
Geography (GEOG)
Geology (GEOL)
Health (HLTH)
History (HIST)
Hospitality and Tourism Management;
Culinary Arts; Event and Convention
Planning;
Travel and Tourism (HTM, CA, EVNT,
T&T)
Humanities (HUM)
Italian (ITAL)
Japanese (JPN)
Journalism (JOUR)
Landscape and Nursery Technology,
Landscape Architecture (LNT, LA)
Learning Skills (LS)
Legal (LEGL)

Library (LIB)
Mathematics (MATH)
Medical Laboratory Technician (MLT)
Medical Office Professional (MEDOP)
Mexican-American Studies (MAS)
Music (MUS)
Noncredit (NC)
Operating Room Nurse (ORN)
Personal Development (PD)
Philosophy (PHIL)
Physical Science (PHS)
Physics (PHYS)
Political Science (PS)
Portuguese (PORT)
Psychology (PSYC)
Reading (RDG)
Recording Arts & Technology (RA&T)
Recreation (REC)
Sociology (SOC)

Spanish (SPAN)
Surgical Technology (ST)
Telemedia (TELE)
Theatre Arts (TA)
Vocational Nursing (VN)

ACCOUNTING

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

An increase in the number of Accounting sections in fall 2016 was matched by increases in enrollment and FTES. Given this pattern, Accounting is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Accounting (ACCT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	495	670	35.4%
Number of Sections	15	19	26.7%
Enrollment per Section	33	35	6.9%
<i>Productivity</i>			
Fill Rate at Census	86.8%	94.4%	8.7%
FTES at Census	64.7	91.1	40.7%
<i>Student Outcomes</i>			
Retention Rate	78.8%	77.3%	-1.9%

NATIONAL CITY CAMPUS Accounting (ACCT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	38	40	5.3%
Number of Sections	1	1	0.0%
Enrollment per Section	38	40	5.3%
<i>Productivity</i>			
Fill Rate at Census	118.8%	100.0%	-15.8%
FTES at Census	5.1	5.7	12.1%
<i>Student Outcomes</i>			
Retention Rate	78.8%	71.4%	-9.3%
<i>OTAY MESA CAMPUS Accounting (ACCT)</i>			
<i>Enrollment</i>			
Enrollment	24	0	-100.0%
Number of Sections	1	0	-100.0%
Enrollment per Section	24	0	-100.0%
<i>Productivity</i>			
Fill Rate at Census	80.0%	0.0%	-100.0%
FTES at Census	4.0	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	87.5%	0.0%	-100.0%

DISCIPLINE TOTAL Accounting (ACCT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	557	710	27.5%
Number of Sections	17	20	17.6%
Enrollment per Section	32.8	35.5	8.3%
<i>Productivity</i>			
Fill Rate at Census	88.1%	94.7%	7.4%
FTES at Census	73.8	96.8	31.1%
<i>Student Outcomes</i>			
Retention Rate	79.2%	77.0%	-2.8%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	41	43	4.9%
Certificates ≥ 18	6	2	-66.7%
Certificates < 18	16	4	-75.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC National City	SWC Total	Statewide Accounting- 0502
Accounting	65.9%	57.1%	65.5%	69.1%

OBSERVATIONS

- The fill rates in Accounting courses offered at both Southwestern College sites in fall 2016 were close to the maximums.
- Successful course completion rates for Accounting courses in fall 2016 were below the statewide rate for this discipline at both Southwestern College sites.

ADMINISTRATION OF JUSTICE

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

The Administration of Justice program includes a Police Academy as well as transfer-level courses in the discipline. Police Academy courses are offered only at the Otay Mesa Campus, and transfer-level courses in this discipline are offered at three Southwestern College locations. The additional sections of Administration of Justice offered in fall 2016 at the Chula Vista Campus and the Otay Mesa Campus met student demand as evidenced by fill rates over 90 percent and increases in both enrollment per section and FTES. Administration of Justice is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Administration of Justice (AJ) Excluding Police Academy	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	743	871	17.2%
Number of Sections	18	21	16.7%
Enrollment per Section	41	41	0.5%
<i>Productivity</i>			
Fill Rate at Census	99.1%	96.8%	-2.3%
FTES at Census	79.3	98.1	23.7%
<i>Student Outcomes</i>			
Retention Rate	90.9%	74.7%	-17.8%

NATIONAL CITY CAMPUS Administration of Justice(AJ) Excluding Police Academy	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	16	0	-100.0%
Number of Sections	1	0	-100.0%
Enrollment per Section	16	0	0.0%
<i>Productivity</i>			
Fill Rate at Census	53.3%	0.0%	-100.0%
FTES at Census	1.6	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	94.1%	0.0%	-100.0%

OTAY MESA CAMPUS and DISCIPLINE TOTAL Administration of Justice (AJ): Police Academy (only AJ 41 and AJ 42)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	29	39	34.5%
Number of Sections	2	2	0.0%
Enrollment per Section	14.5	19.5	34.5%
<i>Productivity</i>			
Fill Rate at Census	44.6%	60.0%	34.5%
FTES at Census	21.3	20.6	-3.2%
<i>Student Outcomes</i>			
Retention Rate	80.0%	87.5%	9.4%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	12	25	108.3%
Certificates < 18	0	0	0.0%

OTAY MESA CAMPUS				
Administration of Justice (AJ) Excluding Police Academy		Fall 2012	Fall 2016	% Change
Enrollment				
Enrollment		283	457	61.5%
Number of Sections		8	14	75.0%
Enrollment per Section		35	33	-7.7%
Productivity				
Fill Rate at Census		94.3%	94.2%	-0.2%
FTES at Census		28.3	43.1	52.5%
Student Outcomes				
Retention Rate		88.4%	89.0%	0.6%

SAN YSIDRO CAMPUS				
Administration of Justice (AJ)		Fall 2012	Fall 2016	% Change
Excluding Police Academy				
Enrollment				
Enrollment	70	32	-54.3%	
Number of Sections	2	1	-50.0%	
Enrollment per Section	35	32	-8.6%	
Productivity				
Fill Rate at Census	97.2%	88.9%	-8.6%	
FTES at Census	7.0	3.4	-52.0%	
Student Outcomes				
Retention Rate	81.2%	87.1%	7.3%	

ADMINISTRATION OF JUSTICE (cont'd)

DISCIPLINE TOTAL				
Administration of Justice (AJ)				
Excluding Police Academy				
Enrollment				
Enrollment	1,112	1,360	22.3%	
Number of Sections	29	36	24.1%	
Enrollment per Section	38.3	37.8	-1.5%	
Productivity				
Fill Rate at Census	96.4%	95.7%	-0.8%	
FTES at Census	116.2	144.6	24.5%	
Student Outcomes				
Retention Rate	89.7%	90.9%	1.4%	
	AY 2012-13	AY 2016-17	% Change	
Degrees (AA, AS, ADT)	73	161	120.5%	
Certificates ≥ 18	30	18	-40.0%	
Certificates < 18	0	0	0.0%	

Discipline	Successful Course Completion Rates Fall 2016				Statewide Administration of Justice-2105
	SWC Chula Vista	SWC Otay Mesa	SWC San Ysidro	SWC Total	
Administration of Justice - All courses	77.0%	67.6%	83.9%	73.8%	83.8%

OBSERVATIONS

All enrollment and productivity metrics for both the Police Academy and Administration of Justice transfer programs increased or remained approximately the same between fall 2012 & fall 2016.

The section of Administration of Justice offered at the National City Campus in fall 2012 was not offered in fall 2016. In fall 2012 two sections of Administration of Justice were offered at the San Ysidro Campus; these offerings were reduced to one section in fall 2016.

Student retention rates were strong in both fall 2012 and fall 2016 for both the Police Academy and Administration of Justice transfer courses taught at various Southwestern College sites.

The number of associate degrees awarded in Administration of Justice doubled between 2012-13 and 2016-17.

There is not a comparable statewide successful course completion rate for the Police Academy courses separate from the Administration of Justice transfer courses. The successful course completion rate for the Administration of Justice course taught at the San Ysidro Campus in fall 2016 was above the statewide rate for the same discipline. The successful course completion rates for the Administration of Justice courses taught at the Chula Vista Campus and the Otay Mesa Campus were below the statewide rate for the same discipline.

AFRICAN AMERICAN STUDIES

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data for fall 2012 and fall 2016 were consistent, indicating that student demand for courses in this discipline are being met. Given these patterns, African-American Studies is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL African-American Studies (AFRO)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	93	94	1.1%
Number of Sections	3	3	0.0%
Enrollment per Section	31	31	1.1%
<i>Productivity</i>			
Fill Rate at Census	68.9%	69.6%	1.1%
FTES at Census	9.3	9.9	6.0%
<i>Student Outcomes</i>			
Retention Rate	93.3%	92.1%	-1.3%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total African-American Studies	Statewide History-2205
African-American Studies	85.1%	65.3%

OBSERVATIONS

- Given that the fill rate was approximately 70 percent in both fall 2012 and fall 2016, there is potential for this discipline to grow without additional sections or resources.
- Since there is not a statewide comparison for the discipline of African-American Studies, the successful course completion rate for this discipline is compared to the rate for History. In fall 2016 the student successful course completion rate in African-American Studies courses was higher than the statewide rate in History.

AMERICAN SIGN LANGUAGE

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

The number of sections of American Sign Language doubled in fall 2016 compared to fall 2012. This increase in sections of American Sign Language had a positive impact on total enrollment and FTES but had the negative impact of dispersing students across a greater number of sections, and thereby reducing enrollment per section and fill rate at all three Southwestern College sites. Given the increase in total enrollment, American Sign Language is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

SAN YSIDRO CAMPUS American Sign Language (ASL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	62	76	22.6%
Number of Sections	2	4	100.0%
Enrollment per Section	31	19	-38.7%
<i>Productivity</i>			
Fill Rate at Census	103.3%	60.3%	-41.6%
FTES at Census	6.2	6.1	-1.3%
<i>Student Outcomes</i>			
Retention Rate	77.4%	84.0%	8.5%

CHULA VISTA CAMPUS American Sign Language (ASL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	96	128	33.3%
Number of Sections	3	6	100.0%
Enrollment per Section	32	21	-33.3%
<i>Productivity</i>			
Fill Rate at Census	106.7%	65.6%	-38.5%
FTES at Census	9.6	11.4	18.8%
<i>Student Outcomes</i>			
Retention Rate	94.7%	85.3%	-11.0%

NATIONAL CITY CAMPUS Ameri- can Sign Language (ASL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	28	58	107.1%
Number of Sections	1	2	100.0%
Enrollment per Section	28	29	3.6%
<i>Productivity</i>			
Fill Rate at Census	93.3%	96.7%	3.6%
FTES at Census	2.8	4.8	71.0%
<i>Student Outcomes</i>			
Retention Rate	100.0%	88.9%	-11.1%

DISCIPLINE TOTAL			
American Sign Language (ASL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	186	262	40.9%
Number of Sections	6	12	100.0%
Enrollment per Section	31.0	21.8	-29.6%
<i>Productivity</i>			
Fill Rate at Census	103.3%	68.8%	-33.5%
FTES at Census	18.6	22.3	20.0%
<i>Student Outcomes</i>			
Retention Rate	89.7%	85.7%	-4.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	9	100.0%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Sign Language-0850
American Sign Language	68.2%	79.6%	74.7%	72.5%	72.3%

OBSERVATIONS

- Given that the fill rate for American Sign Language courses at two Southwestern College sites decreased appreciably between fall 2012 and fall 2016, there is potential for this discipline to increase FTES without adding sections.
- Successful course completion rates in American Sign Language courses at the National City and San Ysidro Campuses were above the statewide rate for this discipline. However, the successful course completion rate at the Chula Vista Campus was lower than the statewide rate for this discipline in fall 2016.

ANTHROPOLOGY

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Although there was not a corresponding increase in enrollment per section or FTES when two additional sections of Anthropology were offered at the Chula Vista Campus in fall 2016, this discipline fulfills core general education requirements. As Southwestern College's enrollment increases, it is likely that Anthropology will keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Anthropology (ANTH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	586	568	-3.1%
Number of Sections	14	16	14.3%
Enrollment per Section	42	36	-15.2%
<i>Productivity</i>			
Fill Rate at Census	93.0%	81.1%	-12.8%
FTES at Census	58.6	58.2	-0.8%
<i>Student Outcomes</i>			
Retention Rate	82.1%	74.7%	-9.1%

SAN YSIDRO CAMPUS Anthropology (ANTH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	34	21	-38.2%
Number of Sections	1	1	0.0%
Enrollment per Section	34	21	-38.2%
<i>Productivity</i>			
Fill Rate at Census	94.4%	58.3%	-38.2%
FTES at Census	3.4	1.9	-42.8%
<i>Student Outcomes</i>			
Retention Rate	79.4%	90.0%	13.3%

DISCIPLINE TOTAL Anthropology (ANTH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	620	589	-5.0%
Number of Sections	15	17	13.3%
Enrollment per Section	41.3	34.6	-16.2%
<i>Productivity</i>			
Fill Rate at Census	93.1%	80.0%	-14.0%
FTES at Census	62.0	60.1	-3.1%
<i>Student Outcomes</i>			
Retention Rate	82.0%	75.2%	-8.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	10	9	-10.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC San Ysidro	SWC Total	Statewide Anthropology-2202
Anthropology	51.7%	40.0%	51.3%	69.2%

OBSERVATIONS

- Retention increased between fall 2012 and fall 2016 in Anthropology courses offered both at the Chula Vista Campus and the San Ysidro Campus.
- Enrollment per section, fill rate, and FTES were higher for Anthropology courses offered at the Chula Vista Campus than at the San Ysidro Campus.
- The successful course completion rates in Anthropology courses at both Chula Vista Campus and the San Ysidro Campus were below the statewide rate for this discipline in fall 2016.

ARCHITECTURE

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Fewer sections of Architecture were offered in fall 2016 compared to fall 2012. Despite this reduction in sections offered, enrollment per section declined. Architecture is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Architecture (ARCH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	277	152	-45.1%
Number of Sections	13	10	-23.1%
Enrollment per Section	21	15	-28.7%
<i>Productivity</i>			
Fill Rate at Census	98.2%	75.2%	-23.4%
FTES at Census	50.2	27.8	-44.5%
<i>Student Outcomes</i>			
Retention Rate	93.4%	88.7%	-4.9%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	8	4	-50.0%
Certificates ≥ 18	4	2	-50.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Architecture and Architectural Technology-0201
Architecture	79.5%	73.7%

OBSERVATIONS

- Given that the fill rate for Architecture courses was approximately 75 percent in fall 2016 compared to 93 percent in fall 2012, there is potential for this discipline to increase FTES without adding sections.
- The successful course completion rate for Architecture courses in fall 2016 was higher than the statewide rate for this discipline in the same semester.

ART

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the fall 2016 decrease in the number of sections offered at three Southwestern College sites met student needs. Although there was an expected decline in enrollment, the fill rate for Art courses at two sites was strong at slightly over 85 percent. Given the potential for enrollment growth in Art lecture courses and the current enrollment patterns, Art is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

SAN YSIDRO CAMPUS Art (ART)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	152	82	-46.1%
Number of Sections	5	3	-40.0%
Enrollment per Section	30.4	27.3	-10.1%
<i>Productivity</i>			
Fill Rate at Census	102.7%	89.1%	-13.2%
FTES at Census	19.9	10.9	-45.3%
<i>Student Outcomes</i>			
Retention Rate	89.7%	95.8%	6.8%

CHULA VISTA CAMPUS Art (ART)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,329	2,086	-10.4%
Number of Sections	83	81	-2.4%
Enrollment per Section	28	26	-8.2%
<i>Productivity</i>			
Fill Rate at Census	96.2%	85.9%	-10.7%
FTES at Census	350.9	295.6	-15.8%
<i>Student Outcomes</i>			
Retention Rate	87.7%	87.2%	-0.6%

NATIONAL CITY CAMPUS Art (ART)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	69	0	-100.0%
Number of Sections	2	0	-100.0%
Enrollment per Section	34.5	0	0.0%
<i>Productivity</i>			
Fill Rate at Census	86.3%	0.0%	-100.0%
FTES at Census	6.9	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	93.3%	0.0%	-100.0%

ART (cont'd)

DISCIPLINE TOTAL Art (ART)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,550	2,168	-15.0%
Number of Sections	90	84	-6.7%
Enrollment per Section	28.3	25.8	-8.9%
<i>Productivity</i>			
Fill Rate at Census	96.3%	86.1%	-10.6%
FTES at Census	377.7	306.4	-18.9%
<i>Student Outcomes</i>			
Retention Rate	88.0%	87.5%	-0.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	25	36	44.0%
Certificates \geq 18	6	6	0.0%
Certificates < 18	4	0	-100.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC San Ysidro	SWC Total	Statewide Art-1002
Art	73.3%	75.0%	73.3%	77.1%

OBSERVATIONS

- Art offerings are limited to lecture courses at some Southwestern College sites due to the lack of appropriate facilities for studio courses.
- Sections were not offered at the National City Campus in fall 2016 due to construction at that site.
- Student retention rate at the Chula Vista Campus decreased between the two semesters in this snapshot while the student retention rate in Art courses taught at the San Ysidro Campus increased.
- The successful course completion rates for Art courses offered in fall 2016 at the Chula Vista and San Ysidro Campuses were below the statewide rate for the same semester and same discipline.
- The number of associate degrees awarded in Art increased notably between 2012-13 and 2016-17.

ASIAN-AMERICAN STUDIES

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Between fall 2012 and fall 2016, the number of sections offered was reduced from four to two. However, the decline in enrollment and productivity was proportionately greater than the decline in the number of sections. While Asian-American Studies is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Asian-American Studies (ASIA)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	118	33	-72.0%
Number of Sections	4	2	-50.0%
Enrollment per Section	30	17	-44.1%
<i>Productivity</i>			
Fill Rate at Census	65.6%	36.7%	-44.1%
FTES at Census	11.8	3.5	-70.7%
<i>Student Outcomes⁴</i>			
Retention Rate	71.7%	78.1%	9.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total for Asian-American Studies	Statewide for History-2205
Asian-American Studies	68.8%	65.3%

OBSERVATIONS

- Although the number of sections offered in Asian-American Studies was reduced from four to two sections between fall 2012 and fall 2016, there was a reduction of over 70 percent in enrollment and FTES.
- Since there is not a statewide comparison for the discipline of Asian-American Studies, the successful course completion rate for this discipline is compared to the rate for History. In fall 2016 the student successful course completion rate in Asian-American Studies courses was slightly higher than the statewide rate in History courses.

ASSOCIATE DEGREE NURSING

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Although the patterns of enrollment and productivity data show increased sections and FTES, the availability of clinical sites limits the expansion of this cohort-based career technical education program. Associate Degree Nursing may grow over the next decade, but it is unlikely to keep pace with Southwestern College's 2.0 percent per year growth rate.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Associate Degree Nursing (AND)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	320	389	21.6%
Number of Sections	21	24	14.3%
Enrollment per Section	15.2	16.2	6.4%
<i>Productivity</i>			
Fill Rate at Census	74.4%	85.7%	15.1%
FTES at Census	85.3	73.7	-13.7%
<i>Student Outcomes</i>			
Retention Rate	98.1%	97.7%	-0.4%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	70	87	24.3%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Nursing-1230
Associate Degree Nursing	93.8%	92.4%

OBSERVATIONS

- FTES declined between fall 2012 and fall 2016 despite increases in total enrollment and fill rate.
- Student retention rates were close to the maximum in both fall 2012 and fall 2016.
- The successful course completion rate for Associate Degree Nursing courses in fall 2016 was above the statewide rate for the same discipline.

ASTRONOMY

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the 120 percent increase in the number of sections between fall 2012 and fall 2016 at the Chula Vista Campus met student needs as evidenced by increased enrollment and FTES. The difference in the fill rates between fall 2012 and fall 2016 are explained by the mix of Astronomy courses offered: more introductory than advanced Astronomy classes were offered in fall 2012 and more advanced than introductory Astronomy classes were offered in fall 2016. Given these enrollment and productivity patterns, Astronomy is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Astronomy (ASTRO)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	258	422	63.6%
Number of Sections	5	11	120.0%
Enrollment per Section	52	38	-25.7%
<i>Productivity</i>			
Fill Rate at Census	112.2%	87.9%	-21.6%
FTES at Census	25.8	44.6	72.7%
<i>Student Outcomes</i>			
Retention Rate	87.5%	75.7%	-13.5%

NATIONAL CITY CAMPUS Astronomy (ASTRO)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	27	22	-18.5%
Number of Sections	1	1	0.0%
Enrollment per Section	27	22	-18.5%
<i>Productivity</i>			
Fill Rate at Census	67.5%	77.2%	-14.4%
FTES at Census	2.7	2.3	-14.5%
<i>Student Outcomes</i>			
Retention Rate	88.9%	77.3%	-13.1%

DISCIPLINE TOTAL Astronomy (ASTRO)	Fall 2012	Fall 2016	% Change
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ASTRONOMY (cont'd)

<i>Enrollment</i>			
Enrollment	285	444	55.8%
Number of Sections	6	12	100.0%
Enrollment per Section	47.5	37.0	-22.1%
<i>Productivity</i>			
Fill Rate at Census	105.6%	85.4%	-19.1%
FTES at Census	28.5	46.9	64.4%
<i>Student Outcomes</i>			
Retention Rate	87.6%	75.8%	-13.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC National City	SWC Total	Statewide Astronomy-1911
Astronomy	48.6%	22.7%	47.3%	66.7%

OBSERVATIONS

- Twice as many sections of Astronomy courses were offered in fall 2016 compared to fall 2012; this increase was matched by increases in total enrollment and FTES.
- The student retention rate decreased between the two semesters in this snapshot.
- The successful course completion rates for Astronomy courses at both Southwestern College sites in fall 2016 were below the statewide rate for the same discipline. The successful course completion rate at the National City Campus was notably lower than the rate for courses taught at the Chula Vista Campus and the statewide rate.

AUTOMOTIVE TECHNOLOGY

PROJECTED GROWTH RATE:

FASTER THAN COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the fall 2016 increase in the number of sections offered at the Chula Vista Campus met student needs and increased FTES. This discipline plans to expand the curriculum to include electric vehicles and to develop short-term vocational programs. Given these plans and the patterns in enrollment and productivity, Automotive Technology is projected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Automotive Technology (AT)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	295	325	10.2%
Number of Sections	13	17	30.8%
Enrollment per Section	23	19	-15.8%
Productivity			
Fill Rate at Census	96.7%	83.5%	-13.6%
FTES at Census	63.0	68.7	9.0%
Student Outcomes			
Retention Rate	93.2%	88.9%	-4.7%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	7	7	0.0%
Certificates ≥ 18	7	12	71.4%
Certificates < 18	18	5	-72.2%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Automotive Technology-0948
Automotive Technology	70.5%	75.9%

OBSERVATIONS

- The increase of four additional sections in fall 2016 was matched with increases in total enrollment and FTES, but a decline in the average enrollment per section.
- The successful course completion rate in Automotive Technology was lower than statewide rate for the same discipline.

BIOLOGY

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

Biology courses are offered at all Southwestern College sites. The increase in the numbers of sections offered at the Chula Vista Campus and the National City Campus were matched by increases in total enrollment and FTES while maintaining fill rates close to capacity. The same numbers of sections were offered in fall 2012 and fall 2016 at the San Ysidro and Otay Mesa Campuses, and in both semesters, enrollment per section was close to capacity. Given these data and the role of Biology courses in fulfilling prerequisites for health science careers, Biology is expected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Biology (BIOL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,680	2,753	2.7%
Number of Sections	77	82	6.5%
Enrollment per Section	35	34	-3.5%
<i>Productivity</i>			
Fill Rate at Census	101.2%	98.9%	-2.3%
FTES at Census	368.8	401.9	9.0%
<i>Student Outcomes</i>			
Retention Rate	85.7%	83.1%	-3.0%

NATIONAL CITY CAMPUS Biology (BIOL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	300	339	13.0%
Number of Sections	9	12	33.3%
Enrollment per Section	33.3	28.3	-15.3%
<i>Productivity</i>			
Fill Rate at Census	100.0%	84.8%	-15.3%
FTES at Census	35.3	43.8	24.0%
<i>Student Outcomes</i>			
Retention Rate	82.9%	82.3%	-0.7%

OTAY MESA CAMPUS Biology (BIOL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	240	239	-0.4%
Number of Sections	8	8	0.0%
Enrollment per Section	30.0	29.9	-0.4%
<i>Productivity</i>			
Fill Rate at Census	90.9%	90.5%	-0.4%
FTES at Census	40.0	41.0	2.5%
<i>Student Outcomes</i>			
Retention Rate	82.4%	74.7%	-9.4%

SAN YSIDRO CAMPUS Biology (BIOL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	70	65	-7.1%
Number of Sections	2	2	0.0%
Enrollment per Section	35	32.5	-7.1%
<i>Productivity</i>			
Fill Rate at Census	106.1%	95.6%	-9.9%
FTES at Census	7.0	6.8	-2.6%
<i>Student Outcomes</i>			
Retention Rate	85.7%	90.8%	5.9%

DISCIPLINE TOTAL Biology (BIOL)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	3,290	3,396	3.2%
Number of Sections	96	104	8.3%
Enrollment per Section	34.3	32.7	-4.7%
Productivity			
Fill Rate at Census	100.4%	96.6%	-3.8%
FTES at Census	451.1	493.5	9.4%
Student Outcomes			
Retention Rate	85.2%	82.6%	-3.1%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	8	27	237.5%
Certificates ≥ 18	1	5	400.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016					Statewide Biology, General-0401
	SWC Chula Vista	SWC National City	SWC Otay Mesa	SWC San Ysidro	SWC Total	
Biology	67.3%	65.9%	60.1%	58.5%	66.5%	67.5%

OBSERVATIONS

- Enrollment and productivity metrics were close to capacity for the Biology courses offered at all Southwestern College sites.
- The student retention rate decreased slightly between the two semesters in this snapshot.
- The number of associate degrees awarded in Biology tripled between 2012-13 and 2016-17.
- Successful course completion rates for fall 2016 were comparable to the statewide rate for this discipline at the Chula Vista Campus and were below than the statewide rate at the other Southwestern College locations.

BUSINESS

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

The discipline of Business encompasses four areas of concentration: Business, Insurance, Real Estate, and Leadership. This discipline plans to assess the courses required for degrees and certificates with the goal of streamlining the requirements. In combination, it is likely that these areas will keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Business (BUS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	1,794	1,628	-9.3%
Number of Sections	58	61	5.2%
Enrollment per Section	31	27	-13.7%
<i>Productivity</i>			
Fill Rate at Census	90.3%	78.6%	-13.0%
FTES at Census	189.7	153.5	-19.1%
<i>Student Outcomes</i>			
Retention Rate	83.7%	82.6%	-1.3%

NATIONAL CITY CAMPUS Business (BUS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	72	57	-20.8%
Number of Sections	3	3	0.0%
Enrollment per Section	24	19	-20.8%
<i>Productivity</i>			
Fill Rate at Census	65.5%	51.8%	-20.8%
FTES at Census	9.4	5.6	-40.6%
<i>Student Outcomes</i>			
Retention Rate	87.3%	86.8%	-0.5%

OTAY MESA CAMPUS Business (BUS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	43	0	-100.0%
Number of Sections	3	0	-100.0%
Enrollment per Section	14.3	0.0	0.0%
<i>Productivity</i>			
Fill Rate at Census	51.2%	0.0%	-100.0%
FTES at Census	13.4	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	90.0%	0.0%	-100.0%

SAN YSIDRO CAMPUS Business (BUS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	165	77	-53.3%
Number of Sections	8	3	-62.5%
Enrollment per Section	20.6	25.7	24.4%
<i>Productivity</i>			
Fill Rate at Census	71.7%	96.3%	34.2%
FTES at Census	15.6	8.5	-45.5%
<i>Student Outcomes</i>			
Retention Rate	88.1%	93.3%	6.0%

DISCIPLINE TOTAL Business (BUS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,074	1,762	-15.0%
Number of Sections	72	67	-6.9%
Enrollment per Section	28.8	26.3	-8.7%
<i>Productivity</i>			
Fill Rate at Census	86.1%	77.9%	-9.4%
FTES at Census	228.1	167.5	-26.5%
<i>Student Outcomes</i>			
Retention Rate	84.2%	83.2%	-1.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	53	168	217.0%
Certificates ≥ 18	20	13	-35.0%
Certificates < 18	39	20	-48.7%

CHULA VISTA CAMPUS & DISCIPLINE TOTAL Insurance (INS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	83	76	-8.4%
Number of Sections	3	3	0.0%
Enrollment per Section	28	25	-8.4%
<i>Productivity</i>			
Fill Rate at Census	79.0%	72.4%	-8.4%
FTES at Census	4.4	4.3	-1.1%
<i>Student Outcomes</i>			
Retention Rate	74.7%	84.2%	12.8%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	4	1	-75.0%

CHULA VISTA CAMPUS & DISCIPLINE TOTAL Real Estate (RE)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	140	152	8.6%
Number of Sections	6	6	0.0%
Enrollment per Section	23	25	8.6%
<i>Productivity</i>			
Fill Rate at Census	58.3%	84.4%	44.8%
FTES at Census	14.0	14.1	0.5%
<i>Student Outcomes</i>			
Retention Rate	86.0%	85.4%	-0.7%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	3	1	-66.7%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	2	10	400.0%

BUSINESS (cont'd)

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Leadership and Supervision (LDR)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	184	131	-28.8%
Number of Sections	7	7	0.0%
Enrollment per Section	26	19	-28.8%
<i>Productivity</i>			
Fill Rate at Census	95.8%	66.2%	-31.0%
FTES at Census	14.0	10.5	-24.8%
<i>Student Outcomes</i>			
Retention Rate	87.8%	73.6%	-16.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	1	0	-100.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	24	9	-62.5%

Disciplines	Successful Course Completion Rates Fall 2016				Statewide
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	
Business	66.4%	78.9%	81.3%	67.4%	68.1%
Insurance	47.4%	NA	NA	47.4%	62.4%
Real Estate	51.8%	NA	NA	51.8%	68.5%
Leadership & Supervision	63.2%	NA	NA	63.2%	69.2%

NOTE: THE TOPS CODES FOR STATEWIDE RATES OF SUCCESSFUL COURSE COMPLETION ARE

Business: Business and Commerce, General-0501

Insurance: Insurance-0512

Real Estate: Real Estate-0511

Leadership & Supervision: Business Management-0506

OBSERVATIONS

- In total, fewer sections of Business courses were offered in fall 2016 than in fall 2012. Three sections were added at the Chula Vista Campus while Business sections at the other Southwestern College Campuses were either the same (National City Campus), eliminated (Otay Mesa Campus), or reduced (San Ysidro Campus).
- Although the section count for Insurance and Leadership and Supervision courses was the same in fall 2012 and fall 2016, enrollment per section, fill rate, and FTES declined. For Real Estate, enrollment per section and fill rate increased between fall 2012 and fall 2016, although the amount of FTES increased minimally.
- The successful course completion rates of Business courses taught at the National City and San Ysidro Campuses exceed the statewide rate for this discipline in fall 2016. The successful course completion rates for Business, Insurance, Real Estate, and Leadership and Supervision courses taught at the Chula Vista Campus were below the statewide rates for these disciplines.
- The number of associate degrees awarded in Business tripled between 2012-13 and 2016-17.

CERTIFIED NURSING ASSISTANT

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

The additional section of Certified Nursing Assistant offered in fall 2016 met student needs as evidenced by a fill rate over 98 percent and increases in total enrollment and FTES. Given increased employment opportunities and curriculum revisions that add training in long-term care and acute care, the Certified Nursing Assistant program is likely to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Certified Nursing Assistant (CNA)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	93	108	16.1%
Number of Sections	7	8	14.3%
Enrollment per Section	13.3	13.5	1.6%
Productivity			
Fill Rate at Census	93.0%	98.2%	5.6%
FTES at Census	19.8	21.2	7.1%
Student Outcomes			
Retention Rate	98.1%	94.4%	-3.8%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	117	100.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Nursing-1230
Certified Nursing Assistant	86.1%	92.4%

OBSERVATIONS

- Enrollment per section is low due to the mandatory limit of ten students per section in laboratory courses.
- The successful course completion rate for Certified Nursing Assistant courses taught in fall 2016 was below the statewide rate for Nursing.

CHEMISTRY

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

An increase in the number of sections offered in fall 2016 at the Chula Vista Campus was matched by increases in enrollment and FTES. Four sections of Chemistry were offered at the Otay Mesa Campus in fall 2012 and fall 2016, and enrollment per section and fill rate were close to capacity in both semesters. Given these enrollment and productivity data, Chemistry is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Chemistry (CHEM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	468	557	19.0%
Number of Sections	21	25	19.0%
Enrollment per Section	22	22	0.0%
<i>Productivity</i>			
Fill Rate at Census	94.0%	93.8%	-0.2%
FTES at Census	107.3	131.5	22.5%
<i>Student Outcomes</i>			
Retention Rate	76.5%	71.6%	-6.4%

OTAY MESA CAMPUS Chemistry (CHEM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	92	94	2.2%
Number of Sections	4	4	0.0%
Enrollment per Section	23.0	23.5	2.2%
<i>Productivity</i>			
Fill Rate at Census	95.8%	97.9%	2.2%
FTES at Census	18.4	19.7	7.2%
<i>Student Outcomes</i>			
Retention Rate	87.0%	44.6%	-48.8%

DISCIPLINE TOTAL Chemistry (CHEM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	560	651	16.3%
Number of Sections	25	29	16.0%
Enrollment per Section	22.4	22.4	0.2%
<i>Productivity</i>			
Fill Rate at Census	94.3%	94.3%	0.1%
FTES at Census	125.7	151.2	20.3%
<i>Student Outcomes</i>			
Retention Rate	78.2%	67.7%	-13.4%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	2	1	-50.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC Otay Mesa	SWC Total	Statewide Chemistry, Gen- eral-1905
Chemistry	50.4%	25.0%	46.8%	67.9%

OBSERVATIONS

- The student successful course completion rates in Chemistry courses in fall 2016 at both Southwestern College sites were below than the statewide rates for the same discipline. The successful course completion rate at the Otay Mesa Campus is notably below the rate for Chemistry courses taught at the Chula Vista Campus and the statewide rate.
- For the discipline overall, the student retention rate decreased slightly between the two semesters in this snapshot. However, the student retention rate in Chemistry courses at the Otay Mesa Campus declined by almost half in the comparison of fall 2012 and fall 2016.

CHILD DEVELOPMENT

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

Although the San Ysidro Campus is responsible for staffing and scheduling Child Development courses, the Child Development Center, which serves as a laboratory for these courses, is located on the Chula Vista Campus. The reduction in the sections of Child Development in fall 2016 met student demand as evidenced by increases in enrollment per section at all sites and strong fill rates. Given these patterns, Child Development is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Child Development (CD)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	848	741	-12.6%
Number of Sections	27	21	-22.2%
Enrollment per Section	31	35	12.3%
<i>Productivity</i>			
Fill Rate at Census	87.9%	93.2%	6.1%
FTES at Census	90.0	80.2	-10.9%
<i>Student Outcomes</i>			
Retention Rate	88.8%	89.3%	0.5%
NATIONAL CITY CAMPUS Child Development (CD)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	183	93	-49.2%
Number of Sections	6	3	-50.0%
Enrollment per Section	30.5	31	1.6%
<i>Productivity</i>			
Fill Rate at Census	94.3%	88.6%	-6.1%
FTES at Census	18.3	9.4	-48.4%
<i>Student Outcomes</i>			
Retention Rate	90.8%	90.8%	0.0%
SAN YSIDRO CAMPUS Child Development (CD)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	849	850	0.1%
Number of Sections	32	30	-6.3%
Enrollment per Section	26.5	28.3	6.8%
<i>Productivity</i>			
Fill Rate at Census	84.3%	86.5%	2.6%
FTES at Census	76.0	82.9	9.1%
<i>Student Outcomes</i>			
Retention Rate	84.8%	92.8%	9.5%

DISCIPLINE TOTAL Child Development (CD)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	1880	1684	-10.4%
Number of Sections	65	54	-16.9%
Enrollment per Section	28.9	31.2	7.8%
<i>Productivity</i>			
Fill Rate at Census	86.8%	89.4%	3.0%
FTES at Census	184.3	172.5	-6.4%
<i>Student Outcomes</i>			
Retention Rate	87.1%	91.2%	4.6%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	29	54	86.2%
Certificates ≥ 18	3	0	-100.0%
Certificates < 18	32	24	-25.0%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Child Development/ Early Care and Education-1305
Child Development	69.3%	81.6%	75.0%	72.8%	74.5%

OBSERVATIONS

- Of the 54 sections of Child Development offered in fall 2016, enrollment per section was 28 or higher.
- Student retention rates were 89 percent or above for Child Development courses taught in fall 2016.
- The number of associate degrees awarded in Child Development nearly doubled between 2012-13 and 2016-17.
- The successful course completion rates for the Child Development courses taught at the National City and San Ysidro Campuses in fall 2016 were above the statewide rate for the same discipline. The successful course completion rate for the Child Development courses taught at the Chula Vista Campus was below the statewide rate for the same discipline.

COMMUNICATION

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

Communication courses are offered at all Southwestern College sites. The increase in the number of sections offered in fall 2016 was matched by increases in enrollment and FTES. Given these patterns and the role of Communication courses in fulfilling prerequisites for associate degrees and transfer, this discipline is projected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Communication (COMM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	1,348	1,731	28.4%
Number of Sections	44	58	31.8%
Enrollment per Section	31	30	-2.6%
<i>Productivity</i>			
Fill Rate at Census	101.2%	98.1%	-3.0%
FTES at Census	135.8	175.6	29.3%
<i>Student Outcomes</i>			
Retention Rate	90.9%	88.7%	-2.4%

NATIONAL CITY CAMPUS Communication (COMM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	146	125	-14.4%
Number of Sections	5	5	0.0%
Enrollment per Section	29.2	25	-14.4%
<i>Productivity</i>			
Fill Rate at Census	95.4%	81.7%	-14.4%
FTES at Census	14.6	13.6	-7.0%
<i>Student Outcomes</i>			
Retention Rate	85.4%	92.7%	8.6%

OTAY MESA CAMPUS Communication (COMM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	0	13	100.0%
Number of Sections	0	1	100.0%
Enrollment per Section	0.0	13.0	100.0%
<i>Productivity</i>			
Fill Rate at Census	0.0%	43.3%	100.0%
FTES at Census	0.0	1.4	100.0%
<i>Student Outcomes</i>			
Retention Rate	0.0%	88.9%	100.0%

SAN YSIDRO CAMPUS Communication (COMM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	149	142	-4.7%
Number of Sections	5	5	0.0%
Enrollment per Section	29.8	28.4	-4.7%
<i>Productivity</i>			
Fill Rate at Census	96.8%	93.4%	-3.4%
FTES at Census	14.9	15.1	1.6%
<i>Student Outcomes</i>			
Retention Rate	87.8%	85.4%	-2.8%

DISCIPLINE TOTAL Communication (COMM)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	1,643	2,011	22.4%
Number of Sections	54	69	27.8%
Enrollment per Section	30.4	29.1	-4.2%
Productivity			
Fill Rate at Census	100.2%	95.8%	-4.4%
FTES at Census	165.3	205.7	24.4%
Student Outcomes			
Retention Rate	90.1%	88.7%	-1.6%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	15	33	120.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016					
	SWC Chula Vista	SWC National City	SWC Otay Mesa	SWC San Ysidro	SWC Total	Statewide Speech Communication 1506
Communication	77.8%	76.4%	77.8%	59.1%	76.4%	76.9%

OBSERVATIONS

- Although enrollment per section, fill rate, and student retention for Communication courses decreased slightly between 2012 and 2016, these metrics are close to the maximums.
- Successful course completion rates for fall 2016 were comparable to the statewide rate for this discipline at three Southwestern College sites, but the successful course completion rate at the San Ysidro Campus was lower than the statewide rate.
- The number of associate degrees awarded in Communication doubled between 2012-13 and 2016-17.

COMPUTER AIDED DESIGN AND DRAFTING

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

All enrollment and productivity metrics declined in fall 2016 compared to fall 2012. Computer-aided design technology is a useful tool in a variety of other fields. Given this support function, Computer Aided Design and Drafting is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Computer Aided Design & Drafting (CAD)				
	Fall 2012	Fall 2016	% Change	
Enrollment				
Enrollment	79	35	-55.7%	
Number of Sections	4	3	-25.0%	
Enrollment per Section	20	12	-40.9%	
Productivity				
Fill Rate at Census	87.8%	53.0%	-39.6%	
FTES at Census	10.5	5.4	-49.0%	
Student Outcomes				
Retention Rate	87.8%	88.6%	0.8%	
	AY 2012-13	AY 2016-17	% Change	
Degrees (AA, AS, ADT)	4	5	25.0%	
Certificates ≥ 18	1	1	0.0%	
Certificates < 18	2	2	0.0%	

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Drafting Technology-0903
Computer Aided Design and Drafting	74.3%	74.2%

OBSERVATIONS

- Although only one fewer section of Computer Aided Design and Drafting was offered in fall 2016 compared to fall 2012, enrollment per section and the fill rate in fall 2016 were significantly below fall 2012 levels.
- The student outcome measures of retention rates and degrees awarded were consistent in the two semesters analyzed in this snapshot.

COMPUTER INFORMATION SYSTEMS

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

Although five fewer sections of Computer Information Systems were offered in fall 2016 compared to fall 2012 at the Chula Vista Campus, enrollment and productivity metrics declined. Data for the single section offered at the San Ysidro Campus in fall 2012 and fall 2016 were consistent. This discipline plans to revise the curriculum to improve the alignment with the Associate Degrees for Transfer requirements and to add courses in Cyber Security and digital forensics. Given the enrollment and fill rates in fall 2012 and the discipline's plans to revise and expand the curriculum, Computer Information Systems is likely to keep pace with Southwestern College's growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS Computer Information Systems (CIS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	1,105	798	-27.8%
Number of Sections	42	37	-11.9%
Enrollment per Section	26	22	-18.0%
<i>Productivity</i>			
Fill Rate at Census	90.5%	74.4%	-17.7%
FTES at Census	205.8	146.6	-28.7%
<i>Student Outcomes</i>			
Retention Rate	84.9%	78.9%	-7.1%

SAN YSIDRO CAMPUS Computer Information Systems (CIS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	21	20	-4.8%
Number of Sections	1	1	0.0%
Enrollment per Section	21	20	-4.8%
<i>Productivity</i>			
Fill Rate at Census	70.0%	66.7%	-4.8%
FTES at Census	4.2	4.2	-0.1%
<i>Student Outcomes</i>			
Retention Rate	90.0%	90.0%	0.0%

COMPUTER INFORMATION SYSTEMS (cont'd)

DISCIPLINE TOTAL Computer Information Systems (CIS)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	1,126	818	-27.4%
Number of Sections	43	38	-11.6%
Enrollment per Section	26.2	21.5	-17.8%
Productivity			
Fill Rate at Census	90.0%	74.2%	-17.5%
FTES at Census	210.0	150.8	-28.2%
Student Outcomes			
Retention Rate	85.0%	79.2%	-6.9%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	23	13	-43.5%
Certificates ≥ 18	12	4	-66.7%
Certificates < 18	25	8	-68.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC San Ysidro	SWC Total	Statewide Computer Information Systems-0702
Computer Information Systems	63.4%	85.0%	63.9%	67.7%

OBSERVATIONS

- Fill rates declined at both Southwestern College sites that offered Computer Information Systems courses.
- The number of associate degrees awarded dropped by almost 50 percent between fall 2012 and fall 2016.
- The successful course completion rate in fall 2016 for the Computer Information System course taught at the San Ysidro Campus was significantly higher than the statewide rate for the same discipline, while the successful completion rate of courses in this discipline taught at the Chula Vista Campus was slightly below the statewide rate.

**PROJECTED GROWTH RATE:
SLOWER THAN COLLEGE-WIDE GROWTH RATE**

This discipline is a single course that was previously required for graduation. All enrollment and productivity metrics declined after this requirement was eliminated in fall 2015. It is unlikely that this discipline will keep pace with Southwestern College's growth rate of 2.0 percent per year.

SAN YSIDRO CAMPUS Computer Literacy (CL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	101	6	-94.1%
Number of Sections	4	1	-75.0%
Enrollment per Section	25.25	6	-76.2%
<i>Productivity</i>			
Fill Rate at Census	84.2%	20.0%	-76.2%
FTES at Census	5.1	0.4	-91.7%
<i>Student Outcomes</i>			
Retention Rate	83.3%	0.0%	-100.0%

CHULA VISTA CAMPUS Computer Literacy (CL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	227	169	-25.6%
Number of Sections	8	8	0.0%
Enrollment per Section	28	21	-25.6%
<i>Productivity</i>			
Fill Rate at Census	94.6%	70.4%	-25.6%
FTES at Census	11.4	10.6	-6.5%
<i>Student Outcomes</i>			
Retention Rate	84.0%	80.7%	-4.0%

OTAY MESA CAMPUS Computer Literacy (CL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	20	0	-100.0%
Number of Sections	1	0	-100.0%
Enrollment per Section	20.0	0.0	0.0%
<i>Productivity</i>			
Fill Rate at Census	66.7%	0.0%	-100.0%
FTES at Census	1.0	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	67.7%	0.0%	-100.0%

COMPUTER LITERACY (cont'd)

DISCIPLINE TOTAL Computer Literacy (CL)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	376	175	-53.5%
Number of Sections	14	9	-35.7%
Enrollment per Section	26.9	19.4	-27.6%
Productivity			
Fill Rate at Census	89.5%	64.8%	-27.6%
FTES at Census	18.8	11.0	-41.3%
Student Outcomes			
Retention Rate	82.3%	80.7%	-2.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates \geq 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Information Technology, General-0701
Computer Literacy	58.6%	65.7%

OBSERVATIONS

- Fewer sections of Computer Literacy were offered at all Southwestern College sites given that this course is no longer a graduation requirement for local associate degrees. This reduction in sections was followed by a reduction in all enrollment and productivity metrics.
- The successful course completion rate of the Computer Literacy course for fall 2016 was below the statewide rate for this discipline.

CONSTRUCTION INSPECTION

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity metrics declined in fall 2016 even though five sections of Construction Inspection were offered in both fall 2012 and fall 2016. This discipline plans to revise the current curriculum to include an emphasis on construction management and green technologies. Given this plan, Construction Inspection is likely to keep pace with Southwestern College's growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Construction Inspection (CI)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	112	96	-14.3%
Number of Sections	5	5	0.0%
Enrollment per Section	22	19	-14.3%
<i>Productivity</i>			
Fill Rate at Census	49.8%	42.7%	-14.3%
FTES at Census	11.2	10.1	-10.1%
<i>Student Outcomes</i>			
Retention Rate	94.6%	88.4%	-6.6%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	6	2	-66.7%
Certificates ≥ 18	8	6	-25.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Civil and Construction Management Technology-0957
Construction Inspection	83.2%	79.2%

OBSERVATIONS

- The fill rate for Construction Inspection courses was below 50 percent in both fall 2012 and fall 2016. Given these fill rates, there is potential for this discipline to increase FTES without adding sections.
- The successful course completion rate for Construction Inspection classes in fall 2016 was higher than the statewide rate for the same discipline.

DANCE

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

The decline in enrollment and productivity in fall 2016 can be attributed to the lack of appropriate facilities. In 2016-17 Dance courses were taught in the Cafeteria, which decreased the amount of space for these courses and the quality of the accompanying music. When this discipline moves into more appropriate facilities in the near future, enrollment in Dance is likely to keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS Dance (DANC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	586	345	-41.1%
Number of Sections	22	15	-31.8%
Enrollment per Section	27	23	-13.7%
<i>Productivity</i>			
Fill Rate at Census	80.9%	72.8%	-10.1%
FTES at Census	59.2	25.0	-57.8%
<i>Student Outcomes</i>			
Retention Rate	88.1%	84.5%	-4.1%

SAN YSIDRO CAMPUS Dance (DANC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	79	24	-69.6%
Number of Sections	2	1	-50.0%
Enrollment per Section	39.5	24	-39.2%
<i>Productivity</i>			
Fill Rate at Census	109.7%	66.7%	-39.2%
FTES at Census	7.9	1.9	-75.5%
<i>Student Outcomes</i>			
Retention Rate	90.4%	89.5%	-1.0%

DISCIPLINE TOTAL Dance (DANC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	665	369	-44.5%
Number of Sections	24	16	-33.3%
Enrollment per Section	27.7	23.1	-16.8%
<i>Productivity</i>			
Fill Rate at Census	83.5%	72.4%	-13.4%
FTES at Census	67.1	26.9	-59.9%
<i>Student Outcomes</i>			
Retention Rate	86.9%	84.7%	-2.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	3	100.0%
Certificates \geq 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC San Ysidro	SWC Total	Statewide Dance-1008
Dance	74.1%	78.9%	74.3%	75.3%

OBSERVATIONS

- The fall 2016 decrease in the number of sections in Dance offered at the Chula Vista and the San Ysidro Campuses were matched by a to-be-expected decrease in all other metrics.
- The student successful course completion rate in Dance courses was highest at the San Ysidro Campus and was above the statewide rate for the same discipline. The successful course completion rate at the Chula Vista Campus was comparable to the statewide rate for fall 2016.

DENTAL HYGIENE

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

The patterns of the enrollment and productivity data for this cohort-based career technical education program show stability in enrollment per section and increased FTES. Although this program plans to expand offerings to include advanced training courses, given the size of the clinical facility, Dental Hygiene is projected to grow slower than Southwestern College's 2.0 percent per year growth rate over the next ten years.

NATIONAL CITY CAMPUS and DISCIPLINE TOTAL Dental Hygiene (DH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	525	443	-15.6%
Number of Sections	21	18	-14.3%
Enrollment per Section	25	24.6	-1.6%
<i>Productivity</i>			
Fill Rate at Census	92.1%	81.4%	-11.6%
FTES at Census	47.9	57.5	19.9%
<i>Student Outcomes</i>			
Retention Rate	98.5%	98.6%	0.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	29	32	10.3%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Dental Occupations-1240
Dental Hygiene	98.4%	93.1%

OBSERVATIONS

- Student retention rates were above 98 percent in both fall 2012 and fall 2016 for Dental Hygiene courses.
- The successful course completion rate for Dental Hygiene courses taught in fall 2016 was above the statewide rate for the same discipline.

ECONOMICS

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity metrics were strong for Economics in both fall 2012 and fall 2016. Given these patterns, Economics is likely to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Economics (ECON)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	639	618	-3.3%
Number of Sections	15	15	0.0%
Enrollment per Section	43	41	-3.3%
<i>Productivity</i>			
Fill Rate at Census	97.6%	95.1%	-2.5%
FTES at Census	63.9	62.2	-2.7%
<i>Student Outcomes</i>			
Retention Rate	85.1%	86.5%	1.6%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Economics-2204
Economics	78.5%	70.4%

OBSERVATIONS

- Fifteen sections of Economic courses were offered in both semesters, with over 40 enrollments per section and a fill rate of 95 percent or higher.
- The successful course completion rate of Economics courses in fall 2016 was higher than the statewide rate for this discipline.

EDUCATION

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

The discipline of Education includes tutor training courses and introductory courses in education. One additional section of Education was offered in fall 2016 compared to fall 2012, and this increase met student demand as evidenced by an increase in total enrollment and FTES with only a minor decrease in enrollment per section and fill rate. Education is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Education (ED)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	59	76	28.8%
Number of Sections	3	4	33.3%
Enrollment per Section	20	19	-3.4%
<i>Productivity</i>			
Fill Rate at Census	90.8%	84.4%	-7.0%
FTES at Census	5.2	6.6	28.4%
<i>Student Outcomes</i>			
Retention Rate	80.3%	88.9%	10.7%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	4	100.0%
Certificates ≥ 18	0	1	100.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Education, General-0801
Education	77.8%	76.5%

OBSERVATIONS

- Retention rates in Education courses increased between fall 2012 and fall 2016.
- The successful course completion rate Education courses in fall 2016 was comparable to the statewide rate for this discipline in the same semester.
- There was a notable increase in the number of associate degrees awarded in this discipline between 2012-13 with 2016-17.

ELECTRONICS

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

This discipline includes three courses that prepare students for employment as entry-level computer technicians. Even though the number of sections of Electronics was reduced from six sections in fall 2012 to two sections in fall 2016, both the enrollment per section and student retention decreased. Electronics is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Electronics (ELEC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	101	27	-73.3%
Number of Sections	6	2	-66.7%
Enrollment per Section	17	14	-19.8%
<i>Productivity</i>			
Fill Rate at Census	76.5%	75.0%	-2.0%
FTES at Census	19.0	5.4	-71.3%
<i>Student Outcomes</i>			
Retention Rate	93.1%	76.0%	-18.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	1	0	-100.0%
Certificates \geq 18	3	0	-100.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Electronics and Electric Technology-0934
Electronics	60.0%	77.9%

OBSERVATIONS

- The fill rate for Electronics courses was 75 percent or above in both fall 2012 and fall 2016.
- Successful course completion rate for Electronics courses in fall 2016 was lower than the statewide rate for the same discipline.

EMERGENCY MEDICAL TECHNOLOGY

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

The reduction of four sections of Emergency Medical Technology between fall 2012 and fall 2015 (15.4 percent reduction) was matched by a similar reduction in total enrollment (15.5 percent reduction), but a disproportionately high reduction in FTES (-48.2%). Given the 90.8 percent fill rate in fall 2016 and labor market needs for first responders, it is likely that Emergency Medical Technology will keep pace with Southwestern College's projected growth rate of 2.0 percent per year for the next decade.

NATIONAL CITY CAMPUS Emergency Medical Technology (EMT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	30	0	-100.0%
Number of Sections	1	0	-100.0%
Enrollment per Section	30	0	-100.0%
<i>Productivity</i>			
Fill Rate at Census	93.8%	0.0%	-100.0%
FTES at Census	5.5	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	80.7%	0.0%	0.0%

OTAY MESA CAMPUS Emergency Medical Tech- nology (EMT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	414	375	-9.4%
Number of Sections	25	22	-12.0%
Enrollment per Section	16.6	17.0	2.9%
<i>Productivity</i>			
Fill Rate at Census	87.0%	90.8%	4.4%
FTES at Census	50.6	29.1	-42.5%
<i>Student Outcomes</i>			
Retention Rate	82.9%	92.4%	11.4%

DISCIPLINE TOTAL Emergency Medical Technology (EMT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	444	375	-15.5%
Number of Sections	26	22	-15.4%
Enrollment per Section	17.1	17.0	-0.2%
<i>Productivity</i>			
Fill Rate at Census	87.4%	90.8%	3.9%
FTES at Census	56.1	29.1	-48.2%
<i>Student Outcomes</i>			
Retention Rate	82.9%	92.4%	11.4%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Emergency Medical Tech- nology-1250
Emergency Medical Technology	80.6%	74.4%

OBSERVATIONS

Student retention rates were above 90 percent in fall 2016 for Emergency Medical Technology courses.

The successful course completion rate for Emergency Medical Technology courses taught in fall 2016 was above the statewide rate for the same discipline.

EMERGENCY MEDICAL TECHNOLOGY & PARAMEDIC

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Although additional sections of Emergency Medical Technology & Paramedic were offered in fall 2016 compared to fall 2012, all other enrollment and productivity metrics decreased. Although enrollment in this program fluctuates with employment opportunities, given the fall 2012 enrollment and productivity data as well as the labor market needs for first responders, it is expected that Emergency Medical Technology & Paramedic will keep pace with Southwestern College's projected growth rate of 2.0 percent per year for the next decade.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Emergency Medical Technology and Paramedic (EMTP)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	155	130	-16.1%
Number of Sections	9	12	33.3%
Enrollment per Section	17.2	10.8	-37.1%
Productivity			
Fill Rate at Census	106.2%	64.4%	-39.4%
FTES at Census	41.9	36.5	-12.9%
Student Outcomes			
Retention Rate	94.8%	93.0%	-2.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	8	7	-12.5%
Certificates ≥ 18	19	15	-21.1%
Certificates < 18	0	0	0.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Paramedic-1251
Emergency Medical Technology & Paramedic	87.5%	85.3%

OBSERVATIONS

- Student retention rates were above 90 percent in both fall 2012 and fall 2016 for Emergency Medical Technology & Paramedic courses.
- The successful course completion rate for Emergency Medical Technology & Paramedic courses taught in fall 2016 was above the statewide rate for the same discipline.

ENGINEERING

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Enrollment and productivity patterns indicate that the reduction of one section of Engineering courses in fall 2016 compared to fall 2015 met student needs as evidenced by enrollment per section and fill rate. Given the plans to review and revise the curriculum, Engineering is likely to grow over the next decade, but it is unlikely that Engineering will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Engineering (ENGR)		Fall 2012	Fall 2016	% Change
Enrollment				
Enrollment		145	105	-27.6%
Number of Sections		6	5	-16.7%
Enrollment per Section		24	21	-13.1%
Productivity				
Fill Rate at Census		98.6%	72.9%	-26.1%
FTES at Census		19.0	13.9	-26.7%
Student Outcomes				
Retention Rate		87.2%	86.3%	-1.0%
	AY 2012-13	AY 2016-17	% Change	
Degrees (AA, AS, ADT)	0	1	100.0%	
Certificates ≥ 18	0	0	0.0%	
Certificates < 18	0	0	0.0%	
Certificates < 18	0	0	0.0%	
	Successful Course Completion Rates Fall 2016			
Discipline	SWC Total	Statewide Engineering, General-1901		
Engineering	67.6%	75.1%		

OBSERVATIONS

- All enrollment and productivity metrics for Engineering decreased between fall 2012 and fall 2016.
- Student retention rates were comparable in fall 2012 and fall 2016.
- The successful course completion rate for Engineering courses in fall 2016 was below the statewide rate in this discipline.

ENGLISH

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

English is offered at all Southwestern College sites. The number of sections offered at the Chula Vista Campus increased in fall 2016, while the number of sections offered at the other SCW sites remained the same or were reduced. Given that enrollment per section and fill rates have been consistently near capacity, English is expected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS English (ENGL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	4,554	5,118	12.4%
Number of Sections	151	173	14.6%
Enrollment per Section	30	30	-1.9%
<i>Productivity</i>			
Fill Rate at Census	99.8%	98.3%	-1.5%
FTES at Census	609.6	705.0	15.6%
<i>Student Outcomes</i>			
Retention Rate	85.6%	83.0%	-3.1%

NATIONAL CITY CAMPUS English (ENGL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	253	241	-4.7%
Number of Sections	9	9	0.0%
Enrollment per Section	28.1	26.8	-4.7%
<i>Productivity</i>			
Fill Rate at Census	93.7%	89.3%	-4.7%
FTES at Census	34.8	35.4	1.9%
<i>Student Outcomes</i>			
Retention Rate	82.2%	80.9%	-1.6%

OTAY MESA CAMPUS English (ENGL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	50	51	2.0%
Number of Sections	2	2	0.0%
Enrollment per Section	25.0	25.5	2.0%
<i>Productivity</i>			
Fill Rate at Census	83.3%	85.0%	2.0%
FTES at Census	6.7	7.2	8.6%
<i>Student Outcomes</i>			
Retention Rate	72.9%	96.2%	31.9%

SAN YSIDRO CAMPUS English (ENGL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	592	481	-18.8%
Number of Sections	19	17	-10.5%
Enrollment per Section	31.2	28.3	-9.2%
<i>Productivity</i>			
Fill Rate at Census	103.9%	94.3%	-9.2%
FTES at Census	84.2	68.9	-18.1%
<i>Student Outcomes</i>			
Retention Rate	86.8%	85.9%	-1.1%

ENGLISH (cont'd)

DISCIPLINE TOTAL English (ENGL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	5,449	5,891	8.1%
Number of Sections	181	201	11.0%
Enrollment per Section	30.1	29.3	-2.6%
<i>Productivity</i>			
Fill Rate at Census	99.7%	97.5%	-2.3%
FTES at Census	735.2	816.6	11.1%
<i>Student Outcomes</i>			
Retention Rate	85.5%	83.2%	-2.6%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	14	29	107.1%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016					Statewide English- 1501
	SWC Chula Vista	SWC National City	SWC Otay Mesa	SWC San Ysidro	SWC Total	
English	66.2%	60.0%	75.0%	66.7%	66.1%	68.0%

OBSERVATIONS

- Overall, the increase in the total number of sections in English was matched by a proportionate increase in FTES.
- Retention rates in English courses increased significantly at the Otay Mesa Campus but decreased slightly in English courses at other Southwestern College sites.
- The successful course completion rate for English courses taught at the Otay Mesa Campus in fall 2016 was above the statewide success rate for English courses, but the rates in English courses taught at the other Southwestern College sites were slightly below the statewide rate for this discipline.
- The number of associate degrees awarded in English doubled between 2012-13 and 2016-17.

ENGLISH AS A SECOND LANGUAGE

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Fewer sections of English as a Second Language were offered in fall 2016 compared to the number offered in fall 2012. This reduction in the number of sections met student needs as evidenced by increased enrollment per section and fill rate. English as a Second Language is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS English as a Second Language (ESL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	925	697	-24.6%
Number of Sections	47	29	-38.3%
Enrollment per Section	20	24	22.1%
<i>Productivity</i>			
Fill Rate at Census	69.6%	90.5%	30.1%
FTES at Census	111.6	106.6	-4.5%
<i>Student Outcomes</i>			
Retention Rate	94.5%	91.0%	-3.7%

SAN YSIDRO CAMPUS English as a Second Language (ESL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	355	109	-69.3%
Number of Sections	16	5	-68.8%
Enrollment per Section	22.19	21.8	-1.7%
<i>Productivity</i>			
Fill Rate at Census	78.9%	72.7%	-7.9%
FTES at Census	38.5	12.3	-68.1%
<i>Student Outcomes</i>			
Retention Rate	88.8%	92.5%	4.2%

ENGLISH AS A SECOND LANGUAGE (*cont'd*)

DISCIPLINE TOTAL				
English as a Second Language (ESL)	Fall 2012	Fall 2016	% Change	
Enrollment				
Enrollment	1,280	806	-37.0%	
Number of Sections	63	34	-46.0%	
Enrollment per Section	20.3	23.7	16.7%	
Productivity				
Fill Rate at Census	72.0%	87.6%	21.8%	
FTES at Census	150.0	118.9	-20.8%	
Student Outcomes				
Retention Rate	93.0%	91.2%	-1.9%	
	AY 2012-13	AY 2016-17	% Change	
Degrees (AA, AS, ADT)	0	0	0.0%	
Certificates ≥ 18	0	0	0.0%	
Certificates < 18	0	0	0.0%	
Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC San Ysidro	SWC Total	Statewide General Studies-4930
English as a Second Language	75.6%	82.2%	76.5%	76.1%

OBSERVATIONS

- This discipline is piloting an ESL-to-English course that would facilitate students' transition between these two disciplines.
- Although the number of sections offered in English as a Second Language at the Chula Vista Campus was reduced by almost 40 percent, the fill rate increased by 30 percent and FTES increased by 4.5 percent. At the San Ysidro Campus, the almost 70 percent reduction in the number of sections was matched by a proportionate reduction in FTES.
- Successful course completion rate for English as a Second Language courses was higher at the San Ysidro Campus compared to the statewide rate, while the successful course completion rate in this discipline at the Chula Vista Campus was comparable to the statewide rate.

ENVIRONMENTAL HAZARDOUS MATERIALS TECHNOLOGY

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Although five sections of Environmental Hazardous Materials Technology were offered in both fall 2012 and fall 2016, FTES decreased. This discipline is likely to grow over the next decade, but it is unlikely to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Environmental Hazardous Materials Technology (EHMT)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	67	75	11.9%
Number of Sections	5	5	0.0%
Enrollment per Section	13.4	15.0	11.9%
Productivity			
Fill Rate at Census	53.6%	62.5%	16.6%
FTES at Census	14.7	12.2	-17.4%
Student Outcomes			
Retention Rate	95.5%	95.8%	0.4%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	4	2	-50.0%
Certificates ≥ 18	11	5	-54.5%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Environmental Technology-0303
Environmental Hazardous Materials Technology	90.3%	88.9%

OBSERVATIONS

- Given that the fill rate for Environmental Hazardous Materials Technology courses was approximately 63 percent in fall 2016, there is potential for this discipline to increase FTES without adding sections.
- Retention rates in Environmental Hazardous Materials Technology courses were above 95 percent in both fall semesters.
- The successful course completion rate for Environmental Hazardous Materials Technology was slightly above the statewide rate for the same discipline.

EXERCISE SCIENCE - ACTIVITY/INTERCOLLEGIATE/LIMITED/THEORY

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

The discipline of Exercise Science encompasses four categories of physical education courses: activity, intercollegiate athletics, limited, and theory. Prior to fall 2015, a course in Exercise Science was required for graduation with an associate degree. The precipitous decline in Exercise Science enrollment and FTES between fall 2012 and fall 2016 was due to the elimination of this graduation requirement.

Despite this decline, there are a number of positive indices. In fall 2016, the fill rate for Exercise Science courses was above 85 percent at all Southwestern College sites. There are plans to increase FTES in Exercise Science by adding courses and an additional intercollegiate athletic team as well as developing strategies to integrate credit and noncredit enrollment. Given the pattern of fill rates, the plans for programmatic expansion, and the draw of the new facility that opened in spring 2018, it is likely that Exercise Science will keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS			
Exercise Science (ES/A, ES/I, ES/L, ES/T)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	3,456	2,500	-27.7%
Number of Sections	107	89	-16.8%
Enrollment per Section	32	28	-13.0%
<i>Productivity</i>			
Fill Rate at Census	107.5%	90.8%	-15.5%
FTES at Census	398.8	195.9	-50.9%
<i>Student Outcomes</i>			
Retention Rate	85.3%	85.5%	0.3%
NATIONAL CITY CAMPUS Ex-			
ercise Science (ES/A, ES/I, ES/L, ES/T)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	423	277	-34.5%
Number of Sections	26	20	-23.1%
Enrollment per Section	16.3	13.85	-14.9%
<i>Productivity</i>			
Fill Rate at Census	89.4%	85.5%	-4.4%
FTES at Census	41.1	15.4	-62.5%
<i>Student Outcomes</i>			
Retention Rate	78.1%	92.1%	17.9%

SAN YSIDRO CAMPUS					
Exercise Science (ES/A, ES/I, ES/L, ES/T)		Fall 2012	Fall 2016	% Change	
Enrollment					
Enrollment		118	102	-13.6%	
Number of Sections		5	5	0.0%	
Enrollment per Section		23.6	20.4	-13.6%	
Productivity					
Fill Rate at Census		98.3%	81.6%	-17.0%	
FTES at Census		11.8	7.9	-33.3%	
Student Outcomes					
Retention Rate		81.0%	84.5%	4.3%	
DISCIPLINE TOTAL					
Exercise Science (ES/A, ES/I, ES/L, ES/T)		Fall 2012	Fall 2016	% Change	
Enrollment					
Enrollment		3,997	2,879	-28.0%	
Number of Sections		138	114	-17.4%	
Enrollment per Section		29.0	25.3	-12.8%	
Productivity					
Fill Rate at Census		105.0%	89.9%	-14.3%	
FTES at Census		451.6	219.2	-51.5%	
Student Outcomes					
Retention Rate		84.9%	86.1%	1.4%	
		AY 2012-13	AY 2016-17	% Change	
Degrees (AA, AS, ADT)		2	28	1300.0%	
Certificates ≥ 18		2	3	50.0%	
Certificates < 18		12	7	-41.7%	
Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Physical Education -0835
Exercise Science	80.4%	88.5%	79.4%	81.2%	81.9%

OBSERVATIONS

- Given that the enrollment per section is lower in fall 2016 than in fall 2012, there is potential for Exercise Science to increase FTES without adding sections or resources.
- The successful course completion rates for Exercise Science courses in fall 2016 at the Chula Vista and San Ysidro Campuses were comparable to the statewide rate for this discipline, while the successful course completion rate in Exercise Science was higher than the statewide rate at the National City Campus.
- The number of associate degrees awarded in Exercise Science increased dramatically between 2012-13 and 2016-17.

FILIPINO

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Although only one fewer section of Filipino was offered in fall 2016 compared to fall 2012, total enrollment and FTES both declined a little more than 50 percent. Filipino is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Filipino (FIL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	88	41	-53.4%
Number of Sections	3	2	-33.3%
Enrollment per Section	29	21	-30.1%
<i>Productivity</i>			
Fill Rate at Census	100.0%	58.6%	-41.4%
FTES at Census	14.7	7.1	-51.7%
<i>Student Outcomes</i>			
Retention Rate	89.7%	75.0%	-16.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Foreign Languages, General-1101
Filipino	70.0%	72.3%

OBSERVATIONS

- Retention rates in Filipino courses declined between fall 2012 and fall 2016.
- The successful course completion rate in Filipino courses for fall 2016 was comparable to the statewide rate for foreign languages.

FIRE SCIENCE TECHNOLOGY

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Although two additional sections of Fire Science Technology were offered in fall 2016 compared to fall 2012, all other enrollment and productivity metrics decreased. Although it is likely that Fire Science Technology will grow over the next decade, it is unlikely to keep pace with Southwestern College's projected growth rate of 2.0 percent per year.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Fire Science Technology (FS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	497	419	-15.7%
Number of Sections	16	18	12.5%
Enrollment per Section	31.1	23.3	-25.1%
<i>Productivity</i>			
Fill Rate at Census	89.1%	67.9%	-23.8%
FTES at Census	72.7	47.3	-35.0%
<i>Student Outcomes</i>			
Retention Rate	91.9%	93.7%	2.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	22	20	-9.1%
Certificates ≥ 18	20	7	-65.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Fire Technology-2133
Fire Science Technology	88.7%	86.4%

OBSERVATIONS

- This discipline recently added curriculum for a wildland fire certificate and degree.
- Student retention rates were above 90 percent in both fall 2012 and fall 2016 for Fire Science Technology courses.
- The successful course completion rate for Fire Science Technology courses taught in fall 2016 was above the statewide rate for the same discipline.

FRENCH

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity patterns indicate that the offerings of French courses in fall 2016 met student needs. Over the coming decade, French is likely to keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL French (FREN)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	192	203	5.7%
Number of Sections	8	9	12.5%
Enrollment per Section	24	23	-6.0%
<i>Productivity</i>			
Fill Rate at Census	71.1%	70.0%	-1.6%
FTES at Census	32.0	35.0	9.4%
<i>Student Outcomes</i>			
Retention Rate	84.1%	80.5%	-4.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	7	4	-42.9%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide French-1102
French	69.2%	66.1%

OBSERVATIONS

- Enrollment per section was stable even though one section of French was added in fall 2016.
- The successful course completion rate in French courses in fall 2016 was above the statewide rate for this discipline.

GEOGRAPHY

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the fall 2016 increase in the number of sections offered at the Chula Vista Campus met student needs as evidenced by an increase in FTES and a fill rate above 85 percent. Although enrollment at the National City Campus dropped by half, the fall 2016 decrease in the number of sections at the San Ysidro Campus was matched by increases in enrollment per section and fill rate. Given these patterns, Geography is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Geography (GEOG)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	508	556	9.4%
Number of Sections	14	18	28.6%
Enrollment per Section	36	31	-14.9%
<i>Productivity</i>			
Fill Rate at Census	97.9%	85.7%	-12.5%
FTES at Census	50.8	55.5	9.3%
<i>Student Outcomes</i>			
Retention Rate	88.0%	83.9%	-4.7%

NATIONAL CITY CAMPUS Ge- ography (GEOG)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	30	15	-50.0%
Number of Sections	1	1	0.0%
Enrollment per Section	30	15	-50.0%
<i>Productivity</i>			
Fill Rate at Census	93.8%	37.5%	-60.0%
FTES at Census	3.0	1.7	-43.4%
<i>Student Outcomes</i>			
Retention Rate	90.3%	70.0%	-22.5%

GEOGRAPHY (cont'd)

SAN YSIDRO CAMPUS Geography (GEOG)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	103	59	-42.7%
Number of Sections	4	2	-50.0%
Enrollment per Section	25.75	29.5	14.6%
Productivity			
Fill Rate at Census	90.4%	92.2%	2.0%
FTES at Census	10.3	5.8	-43.5%
Student Outcomes			
Retention Rate	87.6%	93.2%	6.4%
DISCIPLINE TOTAL Geography (GEOG)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	641	630	-1.7%
Number of Sections	19	21	10.5%
Enrollment per Section	33.7	30.0	-11.1%
Productivity			
Fill Rate at Census	96.4%	83.7%	-13.2%
FTES at Census	64.1	63.1	-1.6%
Student Outcomes			
Retention Rate	88.1%	84.6%	-4.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	1	0	-100.0%
Certificates < 18	1	2	100.0%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Geography-2206
Geography	78.0%	60.0%	62.7%	76.2%	69.7%

OBSERVATIONS

- The student successful course completion rate in Geography courses was highest at the Chula Vista Campus and was above the statewide rate for the same discipline.
- The successful course completion rates at the National City and San Ysidro Campuses were lower than the Chula Vista Campus and the statewide rates.

GEOLOGY

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that there is potential for this program to grow. All metrics at the Chula Vista Campus increased while the number of sections offered remained the same in fall 2012 and fall 2016. Students also responded positively to the section offered at the National City Campus in fall 2016. Given these patterns, Geology is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Geology (GEOL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	266	291	9.4%
Number of Sections	7	7	0.0%
Enrollment per Section	38	42	9.4%
<i>Productivity</i>			
Fill Rate at Census	96.7%	105.8%	9.4%
FTES at Census	26.6	28.3	6.4%
<i>Student Outcomes</i>			
Retention Rate	81.0%	85.9%	6.0%

NATIONAL CITY CAMPUS Geology (GEOL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	0	20	100.0%
Number of Sections	0	1	100.0%
Enrollment per Section	0	20	100.0%
<i>Productivity</i>			
Fill Rate at Census	0.0%	50.0%	100.0%
FTES at Census	0.0	2.1	100.0%
<i>Student Outcomes</i>			
Retention Rate	0.0%	78.9%	100.0%

OBSERVATIONS

- The fill rates for Geology courses offered at the Chula Vista Campus were close to or above the maximum in both fall 2012 and fall 2016.
- The student successful course completion rate in Geology courses in fall 2016 taught at the Chula Vista Campus was above the statewide rate for the same discipline. The successful course completion rate at the National City Campus was lower than the Chula Vista Campus and statewide rates.

DISCIPLINE TOTAL Geology (GEOL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	266	311	16.9%
Number of Sections	7	8	14.3%
Enrollment per Section	38.0	38.9	2.3%
<i>Productivity</i>			
Fill Rate at Census	96.7%	98.7%	2.1%
FTES at Census	26.6	30.4	14.3%
<i>Student Outcomes</i>			
Retention Rate	81.0%	85.4%	5.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC National City	SWC Total	Statewide Geology-1914
Geology	76.0%	52.6%	74.5%	71.0%

HEALTH

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Prior to fall 2015, a Health course fulfilled associate degree graduation requirements. With the elimination of this option for fulfilling graduation requirements, there was a concomitant reduction in the number of sections offered.

Despite this decline, there are a number of positive indices. The fill rate for Health courses at two Southwestern College sites was above 80 percent in fall 2016. There are plans to increase FTES in Health by adding courses through dual enrollment and developing an Associate Degree for Transfer in Public Health and Nutrition. Given the pattern of fill rates and the plans for programmatic expansion, it is likely that Health will keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Health (HLTH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,099	1,432	-31.8%
Number of Sections	47	40	-14.9%
Enrollment per Section	45	36	-19.8%
<i>Productivity</i>			
Fill Rate at Census	103.4%	85.9%	-17.0%
FTES at Census	208.4	145.0	-30.4%
<i>Student Outcomes</i>			
Retention Rate	89.7%	87.0%	-2.9%

NATIONAL CITY CAMPUS Health	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	132	22	-83.3%
Number of Sections	4	1	-75.0%
Enrollment per Section	33	22	-33.3%
<i>Productivity</i>			
Fill Rate at Census	82.5%	55.0%	-33.3%
FTES at Census	13.2	2.3	-82.5%
<i>Student Outcomes</i>			
Retention Rate	86.3%	88.9%	3.0%

SAN YSIDRO CAMPUS Health (HLTH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	81	29	-64.2%
Number of Sections	2	1	-50.0%
Enrollment per Section	40.5	29	-28.4%
<i>Productivity</i>			
Fill Rate at Census	115.7%	80.6%	-30.4%
FTES at Census	8.1	3.0	-62.4%
<i>Student Outcomes</i>			
Retention Rate	91.1%	93.1%	2.2%

DISCIPLINE TOTAL Health (HLTH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,312	1,483	-35.9%
Number of Sections	53	42	-20.8%
Enrollment per Section	43.6	35.3	-19.1%
<i>Productivity</i>			
Fill Rate at Census	102.3%	85.1%	-16.9%
FTES at Census	229.7	150.4	-34.5%
<i>Student Outcomes</i>			
Retention Rate	89.5%	87.2%	-2.6%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016				Statewide Health Educa- tion-0837
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	
Health	72.1%	77.8%	65.5%	72.1%	70.7%

OBSERVATIONS

- Enrollment and the fill rate for Health courses were higher at the Chula Vista Campus than at the National City and San Ysidro Campuses.
- Given that the enrollment per section was lower in fall 2016 than in fall 2012, there is potential for Health to increase FTES without adding sections or resources.
- The successful course completion rates for Health courses in fall 2016 at both the Chula Vista and National City Campuses were higher than the statewide rate for this discipline, while the successful course completion rate in Health was lower than the statewide rate at the San Ysidro Campus.

HISTORY

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the fall 2016 increase in the number of History sections at the Chula Vista Campus met student needs as evidenced by increased enrollment and the over-capacity fill rates. Enrollment per section was above 40 in History courses at all Southwestern College sites. Given these patterns, History is projected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS History (HIST)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	1,873	1,914	2.2%
Number of Sections	35	40	14.3%
Enrollment per Section	54	48	-10.6%
<i>Productivity</i>			
Fill Rate at Census	118.9%	106.3%	-10.6%
FTES at Census	187.3	162.4	-13.3%
<i>Student Outcomes</i>			
Retention Rate	82.1%	77.6%	-5.5%

NATIONAL CITY CAMPUS History (HIST)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	85	46	-45.9%
Number of Sections	2	1	-50.0%
Enrollment per Section	42.5	46	8.2%
<i>Productivity</i>			
Fill Rate at Census	106.3%	115.0%	8.2%
FTES at Census	8.5	3.9	-54.0%
<i>Student Outcomes</i>			
Retention Rate	85.7%	85.7%	0.0%

SAN YSIDRO CAMPUS History (HIST)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	96	62	-35.4%
Number of Sections	2	1	-50.0%
Enrollment per Section	48	62	29.2%
<i>Productivity</i>			
Fill Rate at Census	137.1%	172.2%	25.6%
FTES at Census	9.6	3.4	-64.3%
<i>Student Outcomes</i>			
Retention Rate	79.6%	94.3%	18.6%

DISCIPLINE TOTAL History (HIST)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,054	2,022	-1.6%
Number of Sections	39	42	7.7%
Enrollment per Section	52.7	48.1	-8.6%
<i>Productivity</i>			
Fill Rate at Census	119.1%	107.8%	-9.5%
FTES at Census	205.4	169.7	-17.4%
<i>Student Outcomes</i>			
Retention Rate	82.2%	78.3%	-4.7%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	3	22	633.3%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC Nation- al City	SWC San Ysidro	SWC Total	Statewide History-2205
History	59.3%	54.8%	60.4%	59.2%	65.3%

OBSERVATIONS

- Student retention in History courses was higher at the National City and San Ysidro Campuses than at the Chula Vista Campus.
- Successful course completion rates in History courses for fall 2016 were below the statewide rate for this discipline at all Southwestern College sites.
- The number of associate degrees awarded in History increased dramatically between 2012-13 and 2016-17.

HOSPITALITY AND TOURISM MANAGEMENT

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

This discipline includes four areas of specialization: Hospitality and Tourism Management, Culinary Arts, Event and Convention Planning, and Travel and Tourism courses. Collectively, this discipline plans to assess and revise its curriculum in the near future. Given this plan and the enrollment patterns, this discipline is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Hospitality and Tourism Management (HTM)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	51	60	17.6%
Number of Sections	2	2	0.0%
Enrollment per Section	26	30	17.6%
Productivity			
Fill Rate at Census	85.0%	100.0%	17.6%
FTES at Census	5.3	4.7	-10.9%
Student Outcomes			
Retention Rate	81.6%	89.4%	9.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	3	100.0%
Certificates ≥ 18	3	1	-66.7%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide
Hospitality and Tourism Management	72.3%	72.5%
Culinary Arts	82.8%	71.8%
Event and Convention Planning	51.7%	72.5%
Travel and Tourism	71.8%	73.2%

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Culinary Arts (CA)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	161	129	-19.9%
Number of Sections	7	7	0.0%
Enrollment per Section	23	18	-19.9%
Productivity			
Fill Rate at Census	103.2%	82.7%	-19.9%
FTES at Census	21.8	15.4	-29.5%
Student Outcomes			
Retention Rate	96.3%	96.1%	-0.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	2	9	350.0%
Certificates ≥ 18	4	10	150.0%
Certificates < 18	2	6	200.0%

NOTE: THE TOPS CODES FOR STATEWIDE RATES OF SUCCESSFUL COURSE COMPLETION ARE

Hospitality and Tourism Management: Hospitality-1307

Culinary Arts: Nutrition, Foods, and Culinary Arts-1306

Event and Convention Planning: Hospitality-1307

Travel and Tourism: Travel Services and Tourism-3009

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Event and Convention Planning (EVNT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	64	33	-48.4%
Number of Sections	3	2	-33.3%
Enrollment per Section	21.3	16.5	-22.7%
<i>Productivity</i>			
Fill Rate at Census	71.1%	55.0%	-22.7%
FTES at Census	7.1	4.3	-39.5%
<i>Student Outcomes</i>			
Retention Rate	79.1%	55.2%	-30.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	1	0	-100.0%
Certificates < 18	0	0	0.0%

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Travel and Tourism (T&T)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	83	90	8.4%
Number of Sections	3	4	33.3%
Enrollment per Section	27.7	22.5	-18.7%
<i>Productivity</i>			
Fill Rate at Census	86.5%	71.4%	-17.4%
FTES at Census	8.3	9.4	13.4%
<i>Student Outcomes</i>			
Retention Rate	80.2%	77.5%	-3.4%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

OBSERVATIONS

- For Hospitality and Tourism, enrollment per section and fill rate increased even though the same number of sections were offered in both fall 2012 and fall 2016. For Culinary Arts, all enrollment and productivity metrics decreased even though the same number of sections were offered in both semesters. For Event and Convention Planning, all enrollment and productivity metrics decreased between fall 2012 and fall 2016. An additional section of Travel and Tourism was offered in fall 2016, matched by an increase in total enrollment and FTES.
- The successful course completion rates of both Hospitality and Tourism Management and Travel and Tourism courses in fall 2016 were comparable to the statewide rates in the same disciplines. The successful course completion rate for fall 2016 Culinary Arts courses was above the statewide rate for the same discipline, while the successful course completion rate for Event and Convention Planning courses was below the statewide rate for Hospitality courses.
- Three associate degrees in Hospitality and Tourism Management were awarded in 2016-17 compared to zero associate degrees in 2012-13. All levels of awards in Culinary Arts increased significantly between 2012-13 and 2016-17.

HUMANITIES

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTHRATE

In fall 2016, two sections were added to the Humanities offerings at the Chula Vista Campus and one section was eliminated from the offerings at the National City Campus. Despite the additional section, the overall fill rate for Humanities courses in fall 2016 was 85 percent. Humanities is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years

CHULA VISTA CAMPUS Humanities (HUM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	345	385	11.6%
Number of Sections	8	10	25.0%
Enrollment per Section	43	39	-10.7%
<i>Productivity</i>			
Fill Rate at Census	95.8%	85.6%	-10.7%
FTES at Census	34.5	38.1	10.3%
<i>Student Outcomes</i>			
Retention Rate	85.0%	82.5%	-2.9%
<i>NATIONAL CITY CAMPUS Humanities (HUM)</i>			
	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	36	0	-100.0%
Number of Sections	1	0	-100.0%
Enrollment per Section	36	0	-100.0%
<i>Productivity</i>			
Fill Rate at Census	90.0%	0.0%	-100.0%
FTES at Census	3.6	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	96.8%	0.0%	-100.0%

OBSERVATIONS

- The impact of reducing a section of Humanities at the National City Campus was offset by the addition of two sections at the Chula Vista Campus. Total enrollment increased slightly and FTES remained the same in this comparison of fall 2012 and fall 2016 enrollment and productivity data.
- The successful course completion rate in Humanities courses for fall 2016 was slightly lower than the statewide rate for the same discipline.

DISCIPLINE TOTAL Humanities (HUM)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	381	385	1.0%
Number of Sections	9	10	11.1%
Enrollment per Section	42.3	38.5	-9.1%
<i>Productivity</i>			
Fill Rate at Census	95.3%	85.6%	-10.2%
FTES at Census	38.1	38.1	-0.1%
<i>Student Outcomes</i>			
Retention Rate	86.0%	82.5%	-4.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Other Humanities-1599
Humanities	64.0%	69.3%

ITALIAN

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Three fewer sections of Italian were offered in fall 2016 compared to fall 2012. One section was eliminated at the Chula Vista Campus as were both sections previously offered at the National City Campus. Despite this decrease in sections offered, students demand was met as evidenced by the data on enrollment per section and fill rate. Given these patterns, Italian is likely to keep pace with Southwestern College's growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS Italian (ITAL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	213	170	-20.2%
Number of Sections	7	6	-14.3%
Enrollment per Section	30	28	-6.9%
<i>Productivity</i>			
Fill Rate at Census	88.8%	82.9%	-6.6%
FTES at Census	35.5	29.4	-17.3%
<i>Student Outcomes</i>			
Retention Rate	86.7%	80.5%	-7.1%

NATIONAL CITY CAMPUS Italian (ITAL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	42	0	-100.0%
Number of Sections	2	0	-100.0%
Enrollment per Section	21	0	-100.0%
<i>Productivity</i>			
Fill Rate at Census	60.0%	0.0%	-100.0%
FTES at Census	7.0	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	83.7%	0.0%	-100.0%

OBSERVATIONS

- The reduction in the number of sections offered between fall 2012 and fall 2016 stabilized the enrollment per section and fill rate for the discipline of Italian.
- The successful course completion rate in Italian courses for fall 2016 was slightly higher than the statewide rate for the same discipline.

DISCIPLINE TOTAL Italian (ITAL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	255	170	-33.3%
Number of Sections	9	6	-33.3%
Enrollment per Section	28.3	28.3	0.0%
<i>Productivity</i>			
Fill Rate at Census	82.3%	82.9%	0.8%
FTES at Census	42.5	29.4	-30.9%
<i>Student Outcomes</i>			
Retention Rate	86.2%	80.5%	-6.6%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	3	5	66.7%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Italian-1104
Italian	72.0%	70.0%

JAPANESE

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Two fewer sections of Japanese were offered in fall 2016 compared to fall 2012. Despite this decrease in sections offered, students demand was met as evidenced by increases in the enrollment per section and fill rate. Japanese is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Japanese (JPN)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	131	90	-31.3%
Number of Sections	5	3	-40.0%
Enrollment per Section	26	30	14.5%
<i>Productivity</i>			
Fill Rate at Census	84.0%	93.8%	11.6%
FTES at Census	19.1	15.6	-18.6%
<i>Student Outcomes</i>			
Retention Rate	87.6%	75.3%	-14.1%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Japanese-1108
Japanese	51.7%	66.5%

OBSERVATIONS

- Despite the reduction in the number of sections of Japanese offered between fall 2012 and fall 2016, enrollment per section and fill rate increased.
- The successful course completion rate in Japanese courses for fall 2016 was below the statewide rate for the same discipline.

JOURNALISM

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Enrollment and productivity patterns indicate that the current offerings exceed student demand. Although six sections were offered in both fall 2012 and fall 2016, all other metrics decreased, such as fill rate and FTES. Journalism is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Journalism (JOUR)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	158	123	-22.2%
Number of Sections	6	6	0.0%
Enrollment per Section	26	21	-22.2%
Productivity			
Fill Rate at Census	81.0%	55.9%	-31.0%
FTES at Census	21.9	12.2	-44.5%
Student Outcomes			
Retention Rate	95.5%	92.5%	-3.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	6	14	133.3%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Journalism-0602
Journalism	74.2%	73.8%

OBSERVATIONS

- The successful course completion rate in Journalism courses for fall 2016 is slightly higher than the statewide rate for this discipline.
- The number of associate degrees awarded in Journalism more than doubled between 2012-13 and 2016-17.

LANDSCAPE AND NURSERY TECHNOLOGY

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the decrease in the number of Landscape and Nursery Technology sections offered in fall 2016 met student demand. Enrollment per section remained at 17 and FTES increased. Given these patterns, Landscape and Nursery Technology is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

years.				
CHULA VISTA CAMPUS and				
DISCIPLINE TOTAL				
Landscape and Nursery				
Technology (LNT, LA)				
Fall 2012				
Fall 2016				
% Change				
Enrollment				
Enrollment		186	99	-46.8%
Number of Sections		11	6	-45.5%
Enrollment per Section		17	17	-2.4%
Productivity				
Fill Rate at Census		65.5%	60.0%	-8.4%
FTES at Census		15.4	18.2	17.9%
Student Outcomes				
Retention Rate		90.2%	84.5%	-6.3%
AY 2012-13		AY 2016-17	% Change	
Degrees (AA, AS, ADT)		2	4	100.0%
Certificates ≥ 18		2	1	-50.0%
Certificates < 18		0	0	0.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Horticulture-0109
Landscape and Nursery Technology	76.3%	76.5%

OBSERVATIONS

- Given that the fill rate for Landscape and Nursery Technology courses was 60 percent in fall 2016, there is potential for this discipline to increase FTES without adding sections.
- The successful course completion rate for Landscape and Nursery Technology courses in fall 2016 was comparable to the statewide rate for the same discipline.
- The number of associate degrees awarded in Landscape and Nursery Technology doubled between 2012-13 and 2016-17.

LEARNING SKILLS

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

The discipline of Learning Skills consists of two courses. All enrollment, productivity, and student outcome measures decreased between fall 2012 and fall 2016. Given these patterns, it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Learning Skills (LS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	514	224	-56.4%
Number of Sections	17	9	-47.1%
Enrollment per Section	30	25	-17.7%
<i>Productivity</i>			
Fill Rate at Census	97.0%	78.9%	-18.7%
FTES at Census	34.3	16.1	-52.9%
<i>Student Outcomes</i>			
Retention Rate	86.5%	63.2%	-26.9%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide General Studies-4930
Learning Skills	52.4%	76.1%

OBSERVATIONS

- Despite the reduction in the number of sections of Learning Skills offered between fall 2012 and fall 2016, enrollment per section and fill rate decreased, which indicates low student demand for these courses.
- The successful course completion rate in Learning Skills courses for fall 2016 was below the statewide rate for General Studies courses.

LEGAL

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity metrics declined in fall 2016 even though the same number of sections of Legal courses was offered in both fall 2012 and fall 2016. This program is in the process of applying for American Bar Association approval. If this validation is received and based on the fall 2012 enrollment and productivity patterns, this discipline is likely to keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Legal (LEGL)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	326	246	-24.5%
Number of Sections	12	12	0.0%
Enrollment per Section	27	21	-24.5%
Productivity			
Fill Rate at Census	89.3%	74.3%	-16.8%
FTES at Census	41.8	22.8	-45.6%
Student Outcomes			
Retention Rate	85.2%	87.5%	2.7%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	12	7	-41.7%
Certificates ≥ 18	28	26	-7.1%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Paralegal-1402
Legal	61.6%	73.3%

OBSERVATIONS

- Enrollment per section of Legal courses declined from 27 to 21, which was matched by a decline in fill rate and FTES.
- Although student retention increased between fall 2012 and fall 2016, the successful course completion rate for Legal courses in fall 2016 was lower than the statewide rate for the same discipline.

LIBRARY

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

The discipline of Library consists of one-unit courses. Although one section was offered in fall 2012 and fall 2016, all enrollment, productivity, and student outcome measures decreased between these two semesters. Given these patterns, it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Library (LIB)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	48	22	-54.2%
Number of Sections	1	1	0.0%
Enrollment per Section	48	22	-54.2%
<i>Productivity</i>			
Fill Rate at Census	150.0%	68.8%	-54.2%
FTES at Census	3.0	1.0	-67.1%
<i>Student Outcomes</i>			
Retention Rate	87.0%	82.6%	-5.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Library Science, General-1601
Library	69.6%	70.3%

OBSERVATIONS

- Although one section was offered in fall 2012 and fall 2016, enrollment per section and fill rate decreased, which indicates low student demand for this course.
- The successful course completion rate in the Library course taught in fall 2016 matched the statewide rate for Library Science courses.

MATHEMATICS

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

The discipline of Mathematics includes both Mathematics and Computer Science courses. Although Mathematics courses are offered at all Southwestern College sites, the Mathematics courses related to Computer Science are offered only at the Chula Vista Campus. In this comparison of fall 2012 to fall 2016, the offerings of Mathematics were either increased or remained the same at all Southwestern College sites. Given the increase in the number of sections, enrollment, FTES, and fill rates, Mathematics is expected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS				
Mathematics (MATH)	Fall 2012	Fall 2016	% Change	
Excluding Computer Science				
courses MATH 130, 140, 230				
Enrollment				
Enrollment	5,660	6,103	7.8%	
Number of Sections	153	167	9.2%	
Enrollment per Section	37	37	-1.2%	
Productivity				
Fill Rate at Census	104.7%	104.0%	-0.7%	
FTES at Census	734.3	844.7	15.0%	
Student Outcomes				
Retention Rate	82.4%	78.0%	-5.3%	
NATIONAL CITY CAMPUS				
Mathematics (MATH)	Fall 2012	Fall 2016	% Change	
Excluding Computer Science				
courses MATH 130, 140, 230				
Enrollment				
Enrollment	533	483	-9.4%	
Number of Sections	15	15	0.0%	
Enrollment per Section	35.5	32.2	-9.4%	
Productivity				
Fill Rate at Census	98.7%	90.4%	-8.4%	
FTES at Census	68.6	67.5	-1.6%	
Student Outcomes				
Retention Rate	87.3%	77.2%	-11.7%	

OTAY MESA CAMPUS				
Mathematics (MATH)				
Excluding Computer Science				
courses MATH 130, 140, 230				
	Fall 2012	Fall 2016	% Change	
Enrollment				
Enrollment	73	64	-12.3%	
Number of Sections	2	2	0.0%	
Enrollment per Section	36.5	32.0	-12.3%	
Productivity				
Fill Rate at Census	101.4%	88.9%	-12.3%	
FTES at Census	9.7	9.1	-6.7%	
Student Outcomes				
Retention Rate	87.7%	57.4%	-34.6%	

SAN YSIDRO CAMPUS				
Mathematics (MATH)		Fall 2012	Fall 2016	% Change
Excluding Computer Science courses MATH 130, 140, 230				
Enrollment				
Enrollment		607	671	10.5%
Number of Sections		16	19	18.8%
Enrollment per Section		37.9	35.3	-6.9%
Productivity				
Fill Rate at Census		108.8%	98.7%	-9.3%
FTES at Census		77.1	92.2	19.6%
Student Outcomes				
Retention Rate		86.7%	80.9%	-6.7%

DISCIPLINE TOTAL Mathematics (MATH) Excluding Computer Science courses MATH 130, 140, 230							Fall 2012	Fall 2016	% Change
Enrollment									
Enrollment							6,873	7,321	6.5%
Number of Sections							186	203	9.1%
Enrollment per Section							37.0	36.1	-2.4%
Productivity									
Fill Rate at Census							104.3%	102.0%	-2.2%
FTES at Census							889.7	1,013.5	13.9%
Student Outcomes									
Retention Rate							83.2%	78.0%	-6.2%
							AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)							8	30	275.0%
Certificates ≥ 18							0	0	0.0%
Certificates < 18							0	0	0.0%
Discipline	Successful Course Completion Rates Fall 2016								
	Chula Vista	National City	Otay Mesa	San Ysidro	SWC Total	Statewide Mathematics, General-1701			
Mathematics Excluding Computer Science courses 130, 140, 230	51.8%	44.2%	49.2%	51.8%	51.9%		56.1%		
CHULA VISTA CAMPUS and DISCIPLINE TOTAL Mathematics (MATH) Includes only Computer Science courses MATH 130, 140, 230							Fall 2012	Fall 2016	% Change
Enrollment									
Enrollment							100	177	77.0%
Number of Sections							4	6	50.0%
Enrollment per Section							25.0	29.5	18.0%
Productivity									
Fill Rate at Census							119.0%	118.8%	-0.2%
FTES at Census							19.3	30.9	60.0%
Student Outcomes									
Retention Rate							81.6%	74.4%	-8.8%
							AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)							2	25	1,150.0%
Certificates ≥ 18							3	1	-66.7%
Gensler	Certificates < 18						0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Chula Vista	Statewide Computer Science-0706
Mathematics Includes only Computer Science courses MATH 130, 140, 230	59.1%	68.9%

OBSERVATIONS

- Student retention in Mathematics courses declined at all Southwestern College sites, most notably at the Otay Mesa Campus.
- The successful course completion rates in Mathematics courses in fall 2016 at all Southwestern College sites were below the statewide rate for this discipline. However, enrollment and student successful course completion rates were higher at the Chula Vista and San Ysidro Campuses compared to the other two Southwestern College sites. Student successful course completion rates were lowest at the National City Campus.
- The number of associate degrees awarded in both specializations within Mathematics increased dramatically between 2012-13 and 2016-17.

MEDICAL LABORATORY TECHNOLOGY

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

The number of available clinical sites limits the growth of this cohort-based career technical education program. An additional section of Medical Laboratory Technology was offered in fall 2016 compared to fall 2012. However, all other enrollment and productivity measures declined between these two semesters. This program plans to expand partnerships with local hospitals to increase awareness of this relatively new career path. Given the limited clinical sites, Medical Laboratory Technology is projected to grow slower than Southwestern College's growth rate of 2.0 percent per year over the next ten years.

NATIONAL CITY CAMPUS and DISCIPLINE TOTAL Medical Laboratory Technology (MLT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	202	126	-37.6%
Number of Sections	11	12	9.1%
Enrollment per Section	18.4	10.5	-42.8%
<i>Productivity</i>			
Fill Rate at Census	61.2%	35.0%	-42.8%
FTES at Census	15.2	14.9	-2.1%
<i>Student Outcomes</i>			
Retention Rate	95.5%	93.4%	-2.2%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	11	8	-27.3%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Medical Laboratory Technology-1205
Medical Laboratory Technology	93.4%	86.1%

OBSERVATIONS

- Student retention rates were above 93 percent in both fall 2012 and fall 2016 for Medical Laboratory Technology courses.
- The number of associate degrees awarded in Medical Laboratory Technology declined between 2012-13 and 2016-17.
- The successful course completion rate for Medical Laboratory Technology courses taught in fall 2016 was above the statewide rate for the same discipline.

MEDICAL OFFICE PROFESSIONAL

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Seven additional sections of Medical Office Professional were offered in fall 2016 compared to fall 2012. Although this increase met student needs as evidenced by an increase in total enrollment, fill rate and FTES declined. Based on these patterns, Medical Office Professional is projected to keep pace with Southwestern College's growth rate of 2.0 percent per year over the next ten years. Given the fill rates for Medical Office Professional courses, there is potential for this discipline to increase FTES without adding sections.

NATIONAL CITY CAMPUS and DISCIPLINE TOTAL Medical Office Professional (MEDOP)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	287	362	26.1%
Number of Sections	14	21	50.0%
Enrollment per Section	20.5	17.2	-15.9%
<i>Productivity</i>			
Fill Rate at Census	67.5%	60.1%	-11.0%
FTES at Census	41.2	38.9	-5.5%
<i>Student Outcomes</i>			
Retention Rate	84.6%	89.1%	5.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	3	9	200.0%
Certificates ≥ 18	17	17	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016		
	SWC Total	Statewide Health Information Technology-1223	Statewide Medical Assisting-1208
Medical Office Professional	73.5%	80.0%	81.0%

OBSERVATIONS

- Student retention rates were above 93 percent in both fall 2012 and fall 2016 for Medical Office Professional courses.
- The number of associate degrees awarded in Medical Office Professional tripled between 2012-13 and 2016-17.
- The successful course completion rate for Medical Office Professional courses taught in fall 2016 was below the statewide rate for the disciplines of Health Information Technology and Medical Assisting.

MEXICAN-AMERICAN STUDIES

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data for fall 2012 and fall 2016 were consistent, indicating that student needs for Mexican-American Studies courses are being met. Mexican-American Studies is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years. This growth can occur without additional resources since the fill rates for this discipline are low.

CHULA VISTA CAMPUS Mexican-American Studies (MAS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	180	228	26.7%
Number of Sections	9	10	11.1%
Enrollment per Section	20	23	14.0%
<i>Productivity</i>			
Fill Rate at Census	44.4%	50.7%	14.0%
FTES at Census	18.0	23.1	28.2%
<i>Student Outcomes</i>			
Retention Rate	62.1%	75.8%	22.1%

NATIONAL CITY CAMPUS Mexican-American Studies (MAS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	15	7	-53.3%
Number of Sections	1	1	0.0%
Enrollment per Section	15	7	-53.3%
<i>Productivity</i>			
Fill Rate at Census	37.5%	17.5%	-53.3%
FTES at Census	1.5	0.7	-51.1%
<i>Student Outcomes</i>			
Retention Rate	93.3%	71.4%	-23.5%

SAN YSIDRO CAMPUS Mexican-American Studies (MAS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	28	24	-14.3%
Number of Sections	2	2	0.0%
Enrollment per Section	14	12	-14.3%
<i>Productivity</i>			
Fill Rate at Census	41.2%	37.5%	-8.9%
FTES at Census	2.8	2.6	-8.4%
<i>Student Outcomes</i>			
Retention Rate	87.1%	85.7%	-1.6%

DISCIPLINE TOTAL			
Mexican-American Studies (MAS)	Fall 2012	Fall 2016	% Change

Enrollment

Enrollment	223	259	16.1%
Number of Sections	12	13	8.3%
Enrollment per Section	18.6	19.9	7.2%

Productivity

Fill Rate at Census	43.5%	46.8%	7.5%
FTEs at Census	22.3	26.4	18.3%

Student Outcomes

Retention Rate	67.7%	76.5%	12.9%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

	Successful Course Completion Rates Fall 2016				
Discipline	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide History-2205
Mexican-American Studies	50.7%	28.6%	76.2%	52.2%	65.3%

OBSERVATIONS

- Mexican-American Studies courses were offered at three Southwestern College sites in fall 2012 and fall 2016. However, enrollment per section and fill rates were low at all Southwestern College sites.
- Since there is not a statewide comparison for the discipline of Mexican-American Studies, the successful course completion rate for this discipline is compared to the rate for History. In fall 2016 the student successful course completion rate in the Mexican-American Studies courses taught at the San Ysidro Campus was higher than the statewide rate in History courses, while the successful course completion rates for Mexican-American Studies courses taught at other Southwestern College sites were lower than the statewide rate for History.

MUSIC

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

Although the number of sections of Music courses offered at the Chula Vista Campus was the same in fall 2012 and fall 2016, the single section of Music offered at the National City and San Ysidro Campuses in fall 2012 was not offered at these sites in fall 2016. The section of Music usually offered at the National City Campus could not be offered in fall 2016 due to construction. Despite the decrease of the sections offered at the National City and San Ysidro Campuses, the total enrollment per section and the fill rate decreased only slightly and FTES increased. Given these patterns, Music is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Music (MUS)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	1,290	1,268	-1.7%
Number of Sections	54	54	0.0%
Enrollment per Section	24	23	-1.7%
Productivity			
Fill Rate at Census	88.9%	82.6%	-7.1%
FTES at Census	134.4	171.3	27.4%
Student Outcomes			
Retention Rate	86.4%	85.9%	-0.6%
NATIONAL CITY CAMPUS Music (MUS)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	38	0	-100.0%
Number of Sections	1	0	-100.0%
Enrollment per Section	38	0	-100.0%
Productivity			
Fill Rate at Census	95.0%	0.0%	-100.0%
FTES at Census	3.8	0.0	-100.0%
Student Outcomes			
Retention Rate	75.0%	0.0%	-100.0%
SAN YSIDRO CAMPUS Music (MUS)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	31	0	-100.0%
Number of Sections	1	0	-100.0%
Enrollment per Section	31	0	-100.0%
Productivity			
Fill Rate at Census	103.3%	0.0%	-100.0%
FTES at Census	2.1	0.0	-100.0%
Student Outcomes			
Retention Rate	59.3%	0.0%	-100.0%

DISCIPLINE TOTAL Music (MUS)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	1,359	1,268	-6.7%
Number of Sections	56	54	-3.6%
Enrollment per Section	24.3	23.5	-3.2%
Productivity			
Fill Rate at Census	89.3%	82.6%	-7.6%
FTES at Census*	140.3	171.3	22.1%
Student Outcomes			
Retention Rate	85.6%	85.9%	0.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	5	11	120.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	1	0	-100.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Music-1004
Music	71.7%	73.3%

OBSERVATIONS

- The anomaly of an increase in FTES at census although other indices, such as enrollment, decreased was verified and is explained by a difference in the reports for fall 2012 and fall 2016.
- The student successful course completion rate in Music courses in fall 2016 was comparable to the statewide rate for the same discipline.
- The number of associate degrees awarded in Music doubled between 2012-13 and 2016-17.

NONCREDIT

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

Southwestern College offers a range of noncredit courses and programs to prepare students for success in employment and/or college-level coursework. Noncredit courses and programs, which include offerings in the following ten areas, are open to the public without charge.

Basic Skills*^
 Citizenship Preparation^
 Education for Adults with Disabilities^
 Education for Older Adults
 English as a Second Language*^

 Health and Safety
 Home Economics
 Parenting
 Short-term Vocational*^
 Workforce preparation*^

*Denotes CDCP (Career Development College Preparation) enhanced funding programs

^ Denotes SEBG (Adult Education Block Grant) eligible programs

Noncredit (NC)	CHULA VISTA CAMPUS Fall 2016	NATIONAL CITY CAMPUS Fall 2016	TOTAL NON- CREDIT Fall 2016
<i>Enrollment</i>			
Enrollment	3,546	43	3,589
Number of Sections	96	15	111
Enrollment per Section	37	2.9	32.3
<i>Productivity</i>			
Fill Rate at Census	111.8%	11.0%	100.7%
FTES at Census	93.2	0.5	93.8

OBSERVATIONS

- Although there were minimal offerings of noncredit courses and programs for several years, an expanded array of courses and programs will be offered in the future. As of December 2017, 30 new courses, including certificate programs, are in the curriculum pipeline. This rejuvenation has been sparked in part by the approval of Title 5, section 55151, which allocated the same level of funding for noncredit Career Development and College Preparation courses as allocated for credit courses. Many Noncredit courses have been and will continue to be offered at off campus sites due to limited space on campus. Given these funding changes and the unmet need for these programs during the prior period of inactivity, Noncredit programs are projected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year for the next ten years.

OPERATING ROOM NURSE

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

The limit on the maximum number of students per section plus the scant availability of clinical sites restricts the growth of this advanced training career technical education program. Given the enrollment and productivity patterns in fall 2012 and fall 2016, Operating Room Nurse is projected to grow slower than Southwestern College's 2.0 percent per year growth rate over the next ten years.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Operating Room Nurse (ORN)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	14	18	28.6%
Number of Sections	2	2	0.0%
Enrollment per Section	7.0	9.0	28.6%
<i>Productivity</i>			
Fill Rate at Census	46.7%	60.0%	28.6%
FTES at Census	5.4	4.9	-7.8%
<i>Student Outcomes</i>			
Retention Rate	100.0%	100.0%	0.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	1	100.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Surgical Technician-1217
Operating Room Nurse	100.0%	88.1%

OBSERVATIONS

- Student retention rates were 100 percent in both fall 2012 and fall 2016 for the Operating Room Nurse course.
- The successful course completion rate for Operating Room Nurse courses taught in fall 2016 was above the statewide rate for the same discipline.

PERSONAL DEVELOPMENT

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

Enrollment in Personal Development courses doubled between fall 2012 and fall 2016 as a result of the implementation or expansion of several student support programs: the First Year Experience program, dual enrollment partnerships with high schools, and Guided Pathways. Given the impressive doubling of total enrollment and FTES between fall 2012 and fall 2016 and the plans to use Personal Development courses as an integral component of students' transition from high school into Southwestern College, this discipline is expected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Personal Development (PD)	Fall 2012	Fall 2016	% Change
<i>Enrollment^{1,2,3}</i>			
Enrollment	516	1,219	136.2%
Number of Sections	20	45	125.0%
Enrollment per Section	26	27	5.0%
<i>Productivity</i>			
Fill Rate at Census	99.8%	95.1%	-4.7%
FTES at Census	54.3	113.0	108.2%
<i>Student Outcomes⁴</i>			
Retention Rate	88.6%	94.4%	6.6%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide General Studies-4930
Personal Development	80.1%	76.1%

OBSERVATIONS

- All enrollment and productivity measures for Personal Development courses increased between fall 2012 and fall 2016.
- The successful course completion rate in Personal Development courses in fall 2016 was higher than the statewide rate for the same discipline.

PHILOSOPHY

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment in Philosophy courses declined at both the Chula Vista and the National City Campuses in fall 2016. Although one section of Philosophy was eliminated at the Chula Vista Campus in fall 2016, the other enrollment and productivity metrics declined. Although only one section of Philosophy was offered at the National City Campus in fall 2012 and fall 2016, enrollment dropped by almost 62 percent between these two semesters. Given the enrollment and productivity data at the Chula Vista Campus in fall 2012 and the role of Philosophy in fulfilling general education requirements, Philosophy is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Philosophy (PHIL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	1,304	1,100	-15.6%
Number of Sections	29	28	-3.4%
Enrollment per Section	45	39	-12.6%
<i>Productivity</i>			
Fill Rate at Census	101.6%	88.8%	-12.6%
FTES at Census	130.4	113.2	-13.2%
<i>Student Outcomes</i>			
Retention Rate	88.5%	88.0%	-0.5%

NATIONAL CITY CAMPUS Philosophy (PHIL)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	42	16	-61.9%
Number of Sections	1	1	0.0%
Enrollment per Section	42	16	-61.9%
<i>Productivity</i>			
Fill Rate at Census	105.0%	40.0%	-61.9%
FTES at Census	4.2	1.7	-60.0%
<i>Student Outcomes</i>			
Retention Rate	80.0%	93.3%	16.7%

PHILOSOPHY (*cont'd*)

DISCIPLINE TOTAL Philosophy (PHIL)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	1,346	1,116	-17.1%
Number of Sections	30	29	-3.3%
Enrollment per Section	44.9	38.5	-14.2%
Productivity			
Fill Rate at Census	101.7%	87.3%	-14.2%
FTES at Census	134.6	114.9	-14.6%
Student Outcomes			
Retention Rate	88.2%	88.1%	-0.1%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	5	12	140.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016			
	SWC Chula Vista	SWC National City	SWC Total	Statewide Philosophy-1509
Philosophy	72.8%	66.7%	72.7%	67.4%

OBSERVATIONS

- All enrollment and productivity measures for Philosophy courses taught at the Chula Vista and the National City Campuses were lower in fall 2016 than in fall 2012.
- The successful course completion rate in Philosophy courses taught at the Chula Vista Campus in fall 2016 was above the statewide rate for the same discipline. The successful course completion rate in Philosophy courses taught at the National City Campus was comparable to the statewide rate for the same discipline.
- The number of associate degrees awarded in Philosophy doubled between 2012-13 and 2016-17.

PHYSICAL SCIENCE

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that current student needs are met with two or three sections per semester. Given the enrollment patterns in fall 2012 and the role of Physical Science in general education patterns, Physical Science is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Physical Science (PHS)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	132	81	-38.6%
Number of Sections	2	3	50.0%
Enrollment per Section	66	27	-59.1%
Productivity			
Fill Rate at Census	146.7%	71.1%	-51.6%
FTES at Census	13.2	8.2	-37.9%
Student Outcomes			
Retention Rate	68.0%	66.7%	-1.9%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Physical Sciences, General-1901
Physical Science	50.0%	71.6%

OBSERVATIONS

- Student enrollment, fill rate, FTES, and retention declined between fall 2012 and fall 2016. Although an additional section was added in fall 2016, there was a notable decrease in enrollment per section and FTES.
- The student successful course completion rate in Physical Science courses was below the statewide rate for the same discipline in fall 2016.

PHYSICS

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the fall 2016 increase in the number of sections of Physics offered at the Chula Vista Campus met student demand, as evidenced by increased enrollment per section, fill rate, and FTES. Given this discipline's plans to review and revise the Physics curriculum and these enrollment and productivity patterns, Physics is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Physics (PHYS)		Fall 2012	Fall 2016	% Change
<i>Enrollment</i>				
Enrollment		278	415	49.3%
Number of Sections		14	17	21.4%
Enrollment per Section		20	24	22.9%
<i>Productivity</i>				
Fill Rate at Census		69.0%	82.3%	19.4%
FTES at Census		30.3	44.0	45.2%
<i>Student Outcomes</i>				
Retention Rate		77.3%	60.5%	-21.7%
		AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)		2	3	50.0%
Certificates ≥ 18		0	0	0.0%
Certificates < 18		0	0	0.0%
Successful Course Completion Rates Fall 2016				
Discipline	SWC Total	Statewide Physics, General-1902		
Physics	40.4%	71.8%		

OBSERVATIONS

- FTES and the fill rate in Physics courses increased in fall 2016 compared to fall 2012.
- The student successful course completion rate in Physics courses is significantly below the statewide successful course completion rate for Physics courses in fall 2016.

POLITICAL SCIENCE

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Although the number of sections of Political Science courses offered at the Chula Vista Campus was the same in fall 2012 and fall 2016, the two sections of Political Science offered at the National City and San Ysidro Campuses in fall 2012 were not offered in fall 2016.

There were comparable reductions in the enrollment per section, fill rate, and FTES. Given that Political Science courses fulfill general education requirements and the fall 2012 fill rate for Political Science courses was 90 percent, it is likely that Political Science will keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Political Science (PS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	610	533	-12.6%
Number of Sections	15	15	0.0%
Enrollment per Section	41	36	-12.6%
<i>Productivity</i>			
Fill Rate at Census	90.4%	79.0%	-12.6%
FTES at Census	61.0	54.6	-10.5%
<i>Student Outcomes</i>			
Retention Rate	83.9%	75.9%	-9.5%
NATIONAL CITY CAMPUS Political Science (PS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	67	0	-100.0%
Number of Sections	2	0	-100.0%
Enrollment per Section	33.5	0	-100.0%
<i>Productivity</i>			
Fill Rate at Census	83.8%	0.0%	-100.0%
FTES at Census	6.7	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	76.8%	0.0%	-100.0%
SAN YSIDRO CAMPUS Political Science (PS)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	79	0	-100.0%
Number of Sections	2	0	-100.0%
Enrollment per Section	39.5	0	-100.0%
<i>Productivity</i>			
Fill Rate at Census	112.9%	0.0%	-100.0%
FTES at Census	7.9	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	77.9%	0.0%	-100.0%

POLITICAL SCIENCE (cont'd)

DISCIPLINE TOTAL Political Science (PS)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	756	533	-29.5%
Number of Sections	19	15	-21.1%
Enrollment per Section	39.8	35.5	-10.7%
Productivity			
Fill Rate at Census	91.6%	79.0%	-13.8%
FTES at Census	75.6	54.6	-27.8%
Student Outcomes			
Retention Rate	82.7%	75.9%	-8.1%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	19	36	89.5%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Political Science-2207
Political Science	59.9%	67.7%

OBSERVATIONS

- The successful course completion rate in Political Science courses for fall 2016 was below the statewide rate for this discipline.
- The number of associate degrees awarded in Political Science almost doubled between 2012-13 and 2016-17.

PORTUGUESE

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

One fewer section of Portuguese was offered in fall 2016 compared to fall 2012. This decrease met student demand as evidenced by consistency in the fill rate. Portuguese is likely to grow over the next decade, but it is unlikely to keep pace with Southwestern College's growth rate of 2.0 percent per year over the next ten years

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Portuguese (PORT)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	89	60	-32.6%
Number of Sections	3	2	-33.3%
Enrollment per Section	30	30	1.1%
<i>Productivity</i>			
Fill Rate at Census	84.8%	85.7%	1.1%
FTES at Census	14.8	10.4	-30.1%
<i>Student Outcomes</i>			
Retention Rate	82.8%	93.1%	12.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Foreign Language, General-1101
Portuguese	63.8%	72.3%

OBSERVATIONS

- Retention rates increased in Portuguese courses between fall 2012 and fall 2016.
- The successful course completion rate in Portuguese courses for fall 2016 was below the statewide rate for foreign languages.

PSYCHOLOGY

PROJECTED GROWTH RATE: FASTER THAN COLLEGE-WIDE GROWTH RATE

Two additional sections of Psychology were offered at the Chula Vista Campus in fall 2016. This increase was matched with increases in enrollment and FTES while maintaining fill rates at census close to capacity. The enrollment per section remained above 35 for the sections offered at all Southwestern College sites. Therefore, this discipline is projected to grow faster than Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Psychology (PSYCH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,500	2,852	14.1%
Number of Sections	52	58	11.5%
Enrollment per Section	48	49	2.3%
<i>Productivity</i>			
Fill Rate at Census	106.8%	109.3%	2.3%
FTES at Census	242.4	245.7	1.3%
<i>Student Outcomes</i>			
Retention Rate	84.5%	86.6%	2.5%

NATIONAL CITY CAMPUS Psychology (PSYCH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	151	113	-25.2%
Number of Sections	4	4	0.0%
Enrollment per Section	37.75	28.25	-25.2%
<i>Productivity</i>			
Fill Rate at Census	94.4%	70.6%	-25.2%
FTES at Census	15.1	12.4	-18.2%
<i>Student Outcomes</i>			
Retention Rate	83.8%	82.6%	-1.4%

OTAY MESA CAMPUS Psychology (PSYCH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	79	0	-100.0%
Number of Sections	2	0	-100.0%
Enrollment per Section	39.5	0.0	-100.0%
<i>Productivity</i>			
Fill Rate at Census	87.8%	0.0%	-100.0%
FTES at Census	7.9	0.0	-100.0%
<i>Student Outcomes</i>			
Retention Rate	81.4%	0.0%	-100.0%

SAN YSIDRO CAMPUS Psy- chology (PSYCH)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	237	142	-40.1%
Number of Sections	6	4	-33.3%
Enrollment per Section	39.5	35.5	-10.1%
<i>Productivity</i>			
Fill Rate at Census	112.9%	100.0%	-11.4%
FTES at Census	23.7	12.1	-48.9%
<i>Student Outcomes</i>			
Retention Rate	86.9%	78.4%	-9.8%

DISCIPLINE TOTAL Psychology (PSYCH)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	2,967	3,107	4.7%
Number of Sections	64	66	3.1%
Enrollment per Section	46.4	47.1	1.5%
Productivity			
Fill Rate at Census	106.0%	106.7%	0.7%
FTES at Census	289.1	270.1	-6.6%
Student Outcomes			
Retention Rate	84.6%	86.0%	1.7%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	60	128	113.3%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Psychology, General- 2001
Psychology	68.8%	60.6%	56.1%	67.9%	69.3%

OBSERVATIONS

- Increases in the sections offered in fall 2016 at the Chula Vista Campus were matched by increases in enrollment and a fill rate above 100 percent. In fall 2016, four sections of Psychology were offered at the National City and San Ysidro Campuses. Enrollment per section and fill rates were higher at the San Ysidro Campus compared to the National City Campus.
- The student retention rate increased in Psychology courses offered at the Chula Vista Campus but decreased for Psychology courses taught at the National City and San Ysidro Campuses.
- The successful course completion rate for Psychology courses at the Chula Vista Campus in fall 2016 was comparable to the statewide rate for this discipline. However, the successful course completion rates at the National City and San Ysidro Campuses were lower than the statewide rate for this discipline.
- The number of associate degrees awarded in Psychology doubled between 2012-13 and 2016-17.

READING

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

The number of sections of Reading courses offered at three Southwestern College sites was reduced between fall 2012 and fall 2016. Although this decrease was matched with proportionate reductions in enrollment per section, fill rate, and FTES at all three Southwestern College sites, fill rates in fall 2016 were strong: 90 percent at the Chula Vista Campus, 78 percent at the National City Campus, and 80 percent at the San Ysidro Campus. Given these patterns, Reading is expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Reading (RDG)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	1,683	1,433	-14.9%
Number of Sections	52	50	-3.8%
Enrollment per Section	32	29	-11.4%
<i>Productivity</i>			
Fill Rate at Census	101.1%	90.5%	-10.6%
FTES at Census	197.1	169.4	-14.1%
<i>Student Outcomes</i>			
Retention Rate	87.7%	82.8%	-5.6%
<i>NATIONAL CITY CAMPUS Reading (RDG)</i>			
<i>Enrollment</i>			
Enrollment	70	75	7.1%
Number of Sections	2	3	50.0%
Enrollment per Section	35	25	-28.6%
<i>Productivity</i>			
Fill Rate at Census	109.4%	78.1%	-28.6%
FTES at Census	7.0	8.8	25.6%
<i>Student Outcomes</i>			
Retention Rate	85.1%	78.3%	-8.0%

SAN YSIDRO CAMPUS Reading (RDG)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	258	130	-49.6%
Number of Sections	8	5	-37.5%
Enrollment per Section	32.25	26	-19.4%
<i>Productivity</i>			
Fill Rate at Census	100.8%	81.3%	-19.4%
FTES at Census	30.2	15.8	-47.6%
<i>Student Outcomes</i>			
Retention Rate	89.1%	88.9%	-0.2%

DISCIPLINE TOTAL Reading (RDG)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	2,011	1,638	-18.5%
Number of Sections	62	58	-6.5%
Enrollment per Section	32.4	28.2	-12.9%
<i>Productivity</i>			
Fill Rate at Census	101.4%	89.0%	-12.2%
FTES at Census	234.3	194.0	-17.2%
<i>Student Outcomes</i>			
Retention Rate	87.8%	83.1%	-5.3%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Reading - English-1520
Reading	70.2%	65.2%	73.0%	70.2%	67.7%

OBSERVATIONS

- The fill rate for Reading courses taught at the Chula Vista Campus in fall 2016 was higher than the fill rates for Reading courses taught at the National City and San Ysidro Campuses.
- The successful course completion rates in Reading courses at the San Ysidro Campus for fall 2016 was higher than the rates for the Chula Vista and National City Campuses as well as higher than the statewide rate for Reading.

RECORDING ARTS & TECHNOLOGY

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Enrollment and productivity patterns indicate that the current offerings in Recording Arts and Technology met student needs. Although the fill rate at census decreased between fall 2012 and fall 2016, the fill rate was close to maximum in fall 2016. Recording Arts and Technology is likely to grow over the next decade, but it is unlikely that it will keep pace with Southwestern College's growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Recording Arts and Technology (RA&T)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	102	83	-18.6%
Number of Sections	4	4	0.0%
Enrollment per Section	26	21	-18.6%
<i>Productivity</i>			
Fill Rate at Census	120.0%	97.6%	-18.6%
FTES at Census	14.0	8.9	-36.7%
<i>Student Outcomes</i>			
Retention Rate	91.2%	90.5%	-0.8%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	3	2	-33.3%
Certificates ≥ 18	1	2	100.0%
Certificates < 18	0	0	0.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Mass Communications-0610
Recording Arts and Technology	70.2%	72.7%

OBSERVATIONS

- Student enrollment and FTES declined between fall 2012 and fall 2016 although the same number of sections were offered in both semesters.
- The successful course completion rate in Recording Arts and Technology courses in fall 2016 was comparable to the statewide rate for the same discipline.

RECREATION AND LEISURE STUDIES

The discipline of Recreation and Leisure Studies is in transition. Although the curriculum includes three courses, the course related to lifeguarding has been offered most often. Although this program is likely grow over the next decade thanks to the new pools slated to open on the Chula Vista Campus in spring 2018, it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

NATIONAL CITY CAMPUS and DISCIPLINE TOTAL Recreation & Leisure Studies (REC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	51	22	-56.9%
Number of Sections	1	1	0.0%
Enrollment per Section	51	22	-56.9%
<i>Productivity</i>			
Fill Rate at Census	85.0%	36.7%	-56.9%
FTES at Census	15.3	4.2	-72.4%
<i>Student Outcomes</i>			
Retention Rate	0.0%	100.0%	100.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	0	0.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Physical Education-0835
Recreation and Leisure Studies	100.0%	81.9%

OBSERVATIONS

- Although only one section of Recreation and Leisure Studies was offered in 2012 and 2016, enrollment decreased 56.9 percent while FTES decreased 72.4 percent.
- The successful course completion rate for the section of Recreation and Leisure Studies offered in fall 2016 was higher than the statewide rate for this discipline.

SOCIOLOGY

PROJECTED GROWTH RATE:

SAME AS COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the fall 2016 increase in the number of sections offered at the Chula Vista Campus met student needs while increasing FTES. Although the number of sections offered in Sociology at the National City Campus was reduced by 50 percent, enrollment per section declined only five percent. The fill rate of Sociology courses offered at the San Ysidro Campus declined by almost 25 percent between fall 2012 and fall 2016. Overall, these patterns indicate that Sociology can be expected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Sociology (SOC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	936	1,318	40.8%
Number of Sections	27	42	55.6%
Enrollment per Section	35	31	-9.5%
<i>Productivity</i>			
Fill Rate at Census	77.0%	70.3%	-8.8%
FTES at Census	93.6	133.5	42.6%
<i>Student Outcomes</i>			
Retention Rate	85.6%	83.0%	-3.0%
NATIONAL CITY CAMPUS Sociology (SOC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	116	55	-52.6%
Number of Sections	4	2	-50.0%
Enrollment per Section	29	27.5	-5.2%
<i>Productivity</i>			
Fill Rate at Census	76.3%	64.7%	-15.2%
FTES at Census	11.6	5.9	-49.1%
<i>Student Outcomes</i>			
Retention Rate	87.2%	95.8%	9.9%
SAN YSIDRO CAMPUS Sociology (SOC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	150	93	-38.0%
Number of Sections	5	4	-20.0%
Enrollment per Section	30	23.25	-22.5%
<i>Productivity</i>			
Fill Rate at Census	89.3%	67.4%	-24.5%
FTES at Census	15.0	9.3	-38.2%
<i>Student Outcomes</i>			
Retention Rate	89.3%	85.9%	-3.8%

DISCIPLINE TOTAL Sociology (SOC)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	1,202	1,466	22.0%
Number of Sections	36	48	33.3%
Enrollment per Section	33.4	30.5	-8.5%
Productivity			
Fill Rate at Census	78.3%	69.9%	-10.8%
FTES at Census	120.2	148.7	23.7%
Student Outcomes			
Retention Rate	86.3%	83.6%	-3.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	32	107	234.4%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	0	0	0.0%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Sociology-2208
Sociology	68.9%	79.2%	64.1%	68.9%	68.3%

OBSERVATIONS

- Since fill rates in Sociology courses are 70 percent or below at all Southwestern College sites, there is potential for this discipline to grow without additional sections or resources.
- The reduction in the sections offered at the National City Campus met student demand as evidenced by stability in the enrollment per section in fall 2012 and fall 2016.
- The retention rates in Sociology courses at all Southwestern College sites were stable in these two semesters, with the exception of a striking increase in student retention in Sociology courses at the San Ysidro Campus.
- In fall 2016 the successful course completion rates in Sociology courses at the Chula Vista and San Ysidro Campuses were comparable to the statewide rate for the same discipline while the successful course completion rate at the National City Campus was higher than the statewide rate.
- The number of associate degrees awarded in Sociology tripled between 2012-13 and 2016-17.

SPANISH

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Fewer sections of Spanish were offered in fall 2016 compared to fall 2012, and this reduction was matched by proportionate reductions in FTES and fill rates. Given the fill rates for Spanish in fall 2012, Spanish is projected to keep pace with Southwestern College's projected growth rate of 2.0 percent per year over the next ten years.

CHULA VISTA CAMPUS Spanish (SPAN)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	699	621	-11.2%
Number of Sections	27	25	-7.4%
Enrollment per Section	26	25	-4.1%
<i>Productivity</i>			
Fill Rate at Census	82.3%	78.7%	-4.4%
FTES at Census	115.8	106.3	-8.2%
<i>Student Outcomes</i>			
Retention Rate	86.6%	88.2%	1.8%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	7	14	100.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	18	24	33.3%

NATIONAL CITY CAMPUS Span- ish (SPAN)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	87	57	-34.5%
Number of Sections	3	3	0.0%
Enrollment per Section	29	19	-34.5%
<i>Productivity</i>			
Fill Rate at Census	87.0%	57.0%	-34.5%
FTES at Census	14.5	9.9	-31.8%
<i>Student Outcomes</i>			
Retention Rate	73.5%	86.8%	18.1%

SAN YSIDRO CAMPUS Spanish (SPAN)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	107	96	-10.3%
Number of Sections	4	4	0.0%
Enrollment per Section	26.75	24	-10.3%
<i>Productivity</i>			
Fill Rate at Census	85.6%	76.8%	-10.3%
FTES at Census	17.8	16.6	-7.0%
<i>Student Outcomes</i>			
Retention Rate	87.3%	91.0%	4.3%

DISCIPLINE TOTAL Spanish (SPAN)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	893	774	-13.3%
Number of Sections	34	32	-5.9%
Enrollment per Section	26.3	24.2	-7.9%
<i>Productivity</i>			
Fill Rate at Census	83.1%	76.3%	-8.2%
FTES at Census	148.2	132.8	-10.4%
<i>Student Outcomes</i>			
Retention Rate	85.5%	88.4%	3.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	7	14	100.0%
Certificates ≥ 18	0	0	0.0%
Certificates < 18	18	24	33.3%

Discipline	Successful Course Completion Rates Fall 2016				
	SWC Chula Vista	SWC National City	SWC San Ysidro	SWC Total	Statewide Spanish-1105
Spanish	71.8%	77.4%	84.3%	73.6%	71.0%

OBSERVATIONS

- Although three sections of Spanish were offered at the National City Campus in both fall 2012 and fall 2016, all enrollment and productivity measures declined in fall 2016 compared to fall 2012.
- Retention rates in Spanish courses improved at the three Southwestern College sites that offer Spanish between fall 2012 and fall 2016.
- The student successful course completion rates for Spanish courses taught at the three Southwestern College sites were above the statewide rate for the same discipline.
- The number of associate degrees awarded in Spanish doubled between 2012-13 and 2016-17.

SURGICAL TECHNOLOGY

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Class-size maximums and the availability of clinical sites restrict the growth of this entry-level training career technical education program. One additional section of Surgical Technology was offered in fall 2016 compared to fall 2012. Although total enrollment increased, all other enrollment and productivity metrics decreased between fall 2012 and fall 2016. Surgical Technology is projected to grow slower than Southwestern College's 2.0 percent per year growth rate over the next ten years.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Surgical Technology (ST)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	81	87	7.4%
Number of Sections	4	5	25.0%
Enrollment per Section	20.3	17.4	-14.1%
<i>Productivity</i>			
Fill Rate at Census	81.8%	69.6%	-14.9%
FTES at Census	24.7	16.9	-31.4%
<i>Student Outcomes</i>			
Retention Rate	92.4%	92.0%	-0.5%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	0	6	100.0%
Certificates ≥ 18	8	16	100.0%
Certificates < 18	0	0	0.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Surgical Technician-1217
Surgical Technology	89.7%	88.1%

OBSERVATIONS

- Student retention rates were 92 percent in both fall 2012 and fall 2016 for the Surgical Technology course.
- The successful course completion rate for Surgical Technology courses taught in fall 2016 was slightly above the statewide rate for this discipline.

TELEMEDIA

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

Enrollment and productivity data indicate that the fall 2016 decrease in the number of sections offered at the Chula Vista Campus met student needs as evidenced by the increase in enrollment per section and fill rate. This discipline's curriculum and title were revised effective fall 2017. The discipline title is now Film, Television, and Media Arts (FTMA). This discipline is likely to grow over the next decade, but it is unlikely that it will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Telemedia (TELE)	Fall 2012	Fall 2016	% Change
Enrollment			
Enrollment	305	320	4.9%
Number of Sections	14	12	-14.3%
Enrollment per Section	22	27	22.4%
Productivity			
Fill Rate at Census	80.7%	94.7%	17.3%
FTES at Census	46.2	28.4	-38.5%
Student Outcomes⁴			
Retention Rate	89.3%	91.4%	2.4%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	3	11	266.7%
Certificates ≥ 18	0	2	100.0%
Certificates < 18	3	4	33.3%

Discipline	Successful Course Completion Rates Fall 2016	
	SWC Total	Statewide Radio and Television-0604
Telemedia	77.0%	77.6%

OBSERVATIONS

- The increase in the fill rate at census in fall 2016 in Telemedia courses is notable.
- The successful course completion rate for Telemedia courses in fall 2016 was comparable to the statewide rate for this discipline.
- The number of associate degrees awarded in Telemedia more than tripled between 2012-13 and 2016-17.

THEATRE ARTS

PROJECTED GROWTH RATE: SAME AS COLLEGE-WIDE GROWTH RATE

Although an additional section of Theatre Arts was offered in fall 2016, the enrollment, productivity, and student outcomes metrics declined compared to fall 2012. Theatre Arts plans to revise its curriculum to align with transfer requirements and this discipline will soon move into new facilities. Given these plans and the enrollment and productivity patterns in fall 2012, it is likely that Theatre Arts will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

CHULA VISTA CAMPUS and DISCIPLINE TOTAL Theatre Arts (TA)		Fall 2012	Fall 2016	% Change
<i>Enrollment</i>				
Enrollment		303	264	-12.9%
Number of Sections		12	13	8.3%
Enrollment per Section		25	20	-19.6%
<i>Productivity</i>				
Fill Rate at Census		90.4%	71.4%	-21.1%
FTES at Census		44.1	31.7	-28.0%
<i>Student Outcomes</i>				
Retention Rate		83.8%	82.7%	-1.3%
		AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)		0	3	100.0%
Certificates ≥ 18		0	0	0.0%
Certificates < 18		0	0	0.0%
Successful Course Completion Rates Fall 2016				
Discipline	SWC Total	Statewide Dramatic Arts-1007		
Theatre Arts	65.9%	78.4%		

OBSERVATIONS

- The successful course completion rate for Theatre Arts classes in fall 2016 was lower than the statewide rate for the same discipline.

VOCATIONAL NURSING

PROJECTED GROWTH RATE: SLOWER THAN COLLEGE-WIDE GROWTH RATE

All enrollment and productivity metrics for Vocational Nursing decreased between fall 2012 and fall 2016. Similar to other health science career programs, there is limited availability of clinical sites.

Vocational Nursing is likely to grow over the next decade, but it is unlikely that this discipline will keep pace with Southwestern College's overall growth rate of 2.0 percent per year.

OTAY MESA CAMPUS and DISCIPLINE TOTAL Vocational Nursing (VOC)	Fall 2012	Fall 2016	% Change
<i>Enrollment</i>			
Enrollment	148	92	-37.8%
Number of Sections	10	8	-20.0%
Enrollment per Section	14.8	11.5	-22.3%
<i>Productivity</i>			
Fill Rate at Census	77.1%	50.3%	-34.8%
FTES at Census	17.6	13.0	-26.2%
<i>Student Outcomes</i>			
Retention Rate	100.0%	100.0%	0.0%
	AY 2012-13	AY 2016-17	% Change
Degrees (AA, AS, ADT)	4	20	400.0%
Certificates ≥ 18	4	18	350.0%
Certificates < 18	0	0	0.0%

Successful Course Completion Rates Fall 2016		
Discipline	SWC Total	Statewide Nursing-1230
Vocational Nursing	100.0%	92.4%

OBSERVATIONS

- The number of degrees and certificates awarded in Vocational Nursing increased dramatically between fall 2012 and fall 2016.
- The retention rate was at maximum for both fall 2012 and fall 2016.
- The successful course completion rate for Vocational Nursing courses taught in fall 2016 was 100 percent, which was above the statewide rate for Nursing.



GLOSSARY OF DATA ELEMENTS

ENROLLMENT

ENROLLMENT

Total number of enrollments for all courses with the same course identifier

This is a count of enrollments or a duplicated student headcount. For example, if a student takes two courses with the same course identifier, such as two History courses, that student will be counted twice in this total.

NUMBER OF SECTIONS

Number of primary course sections

If a course is cross-listed with another course, the section will be counted only once.

Enrollment Per Section

Product of dividing total enrollment by the number of sections

PRODUCTIVITY

FILL RATE AT CENSUS

Ratio comparing enrollment in a section with the capacity of that section

A number of 100% indicates that the number of enrollments equals the capacity of that section. Capacity may be determined by room size or by curricular limits on enrollment.

FTES AT CENSUS

Number of FTES (full-time equivalent students) earned by the courses with the designated course identifier

FTES is the state metric for measuring workload and is the basis for state apportionment to the District.

STUDENT OUTCOMES

RETENTION RATE

Ratio comparing the number of students enrolled in a section at Census with the number of students who receive any grade in that section

This is equivalent to the term “Course Completion Rate” that is more commonly used at Southwestern College.

SUCCESSFUL COURSE COMPLETION RATE

Ratio comparing the number of students enrolled in a section at census with the number of students who receive a grade of C or better in that section

The successful course completion rate in discipline at Southwestern College, such as History, is compared to the successful course completion rate in a comparable statewide discipline, such as History. The statewide discipline name and four-digit TOP code are shown in this table.

UTILITY MASTER PLAN

Utility planning is an important component to the Facilities Master Plan and will provide the framework for the infrastructure that will support the facilities at the Chula Vista Campus. The following pages illustrate demolition and reroute as well as new utilities that must be incorporated into the new projects.

THE UTILITY PLANS INCLUDE:

	Storm Water System		Page		Irrigation/Reclaimed Water System		Page
	Existing Storm Drain System		9.114		Existing Reclaimed Water System		9.122
	Proposed Storm Drain System		9.115		Proposed Irrigation/ Reclaimed Water System		9.123
	Sewer System				Hydronic Water System (Central Plant)		
	Existing Sewer System		9.116		Existing Hydronic Water System		9.124
	Proposed Sewer System		9.117		Proposed Hydronic Water System		9.125
	Potable Water				Electrical Service		
	Existing Potable Water		9.118		Existing Electrical Service		9.126
	Proposed Potable Water		9.119		Proposed Electrical Service		9.127
	Fire Service						
	Existing Fire Service		9.120				
	Proposed Fire Service		9.121				



Central Plant at Southwestern College



EXISTING STORM DRAIN SYSTEM

LEGEND

- (E) STORM DRAIN LINE
- POINT OF CONNECTION



PROPOSED STORM DRAIN SYSTEM

LEGEND

(E) STORM DRAIN LINE ———

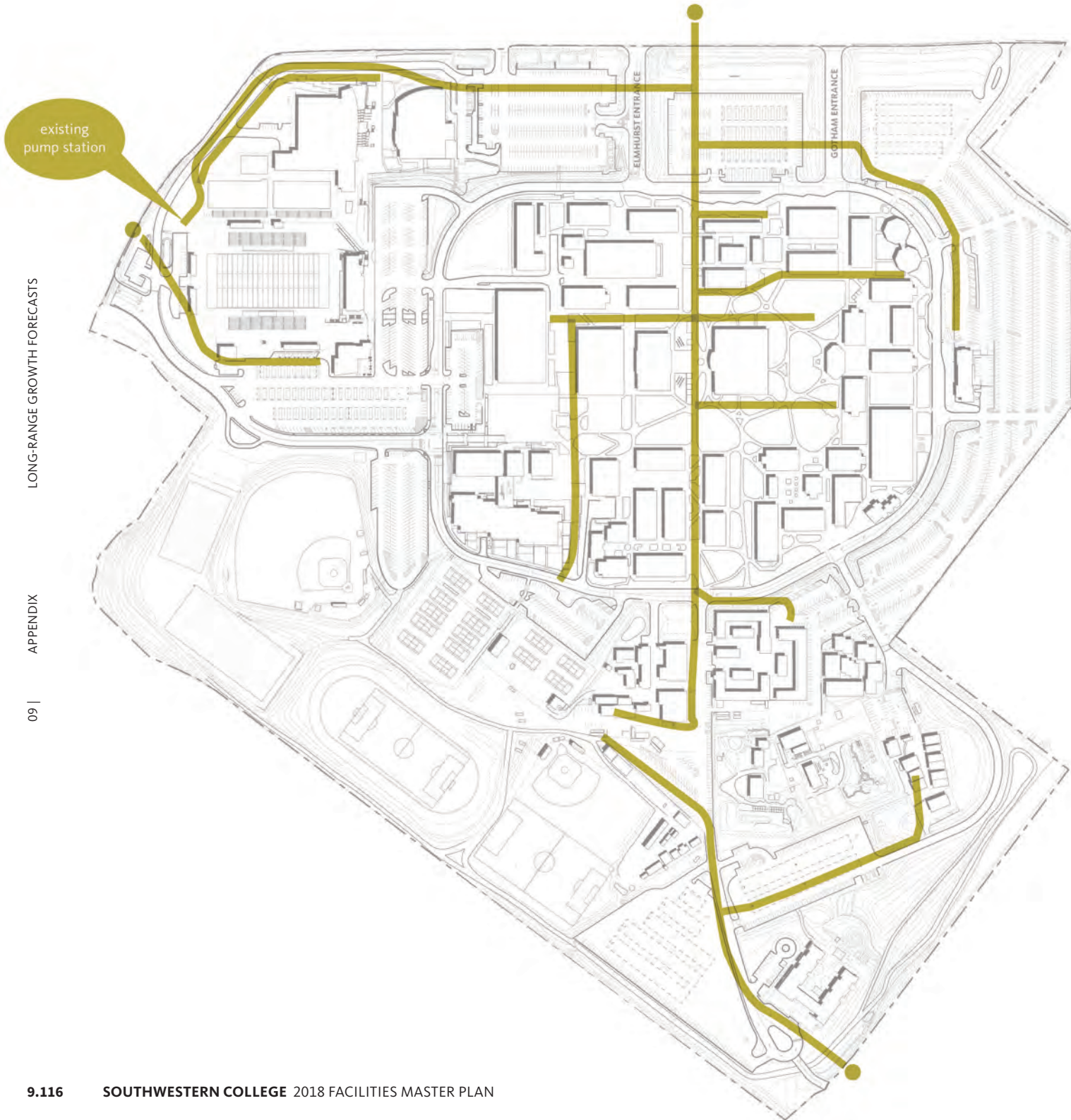
(N) STORM DRAIN LINE - - - - -

POINT OF CONNECTION ●



SCALE





EXISTING SEWER SYSTEM

LEGEND

(E) SEWER LINE



POINT OF CONNECTION



SCALE





PROPOSED SEWER SYSTEM

LEGEND

(E) SEWER LINE ———

(N) SEWER LINE - - - - -

POINT OF CONNECTION ●



SCALE





EXISTING POTABLE WATER

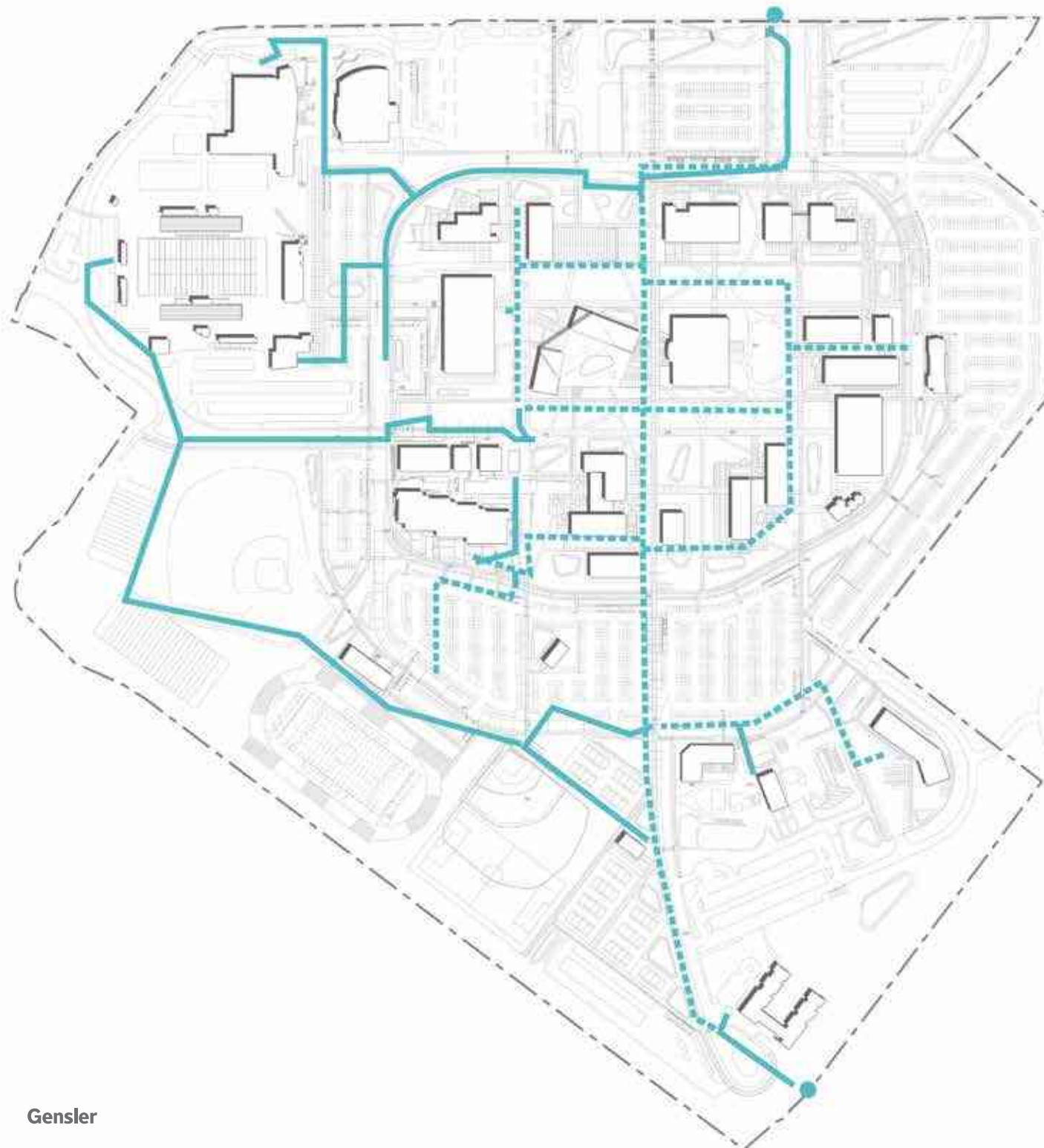
LEGEND

- (E) POTABLE WATER LINE ———
- POINT OF CONNECTION ●



SCALE





PROPOSED POTABLE WATER

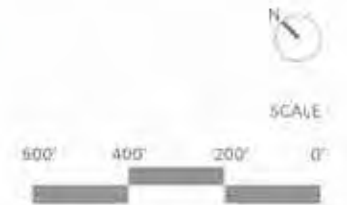
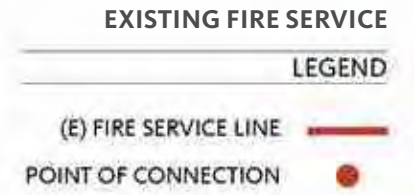
LEGEND

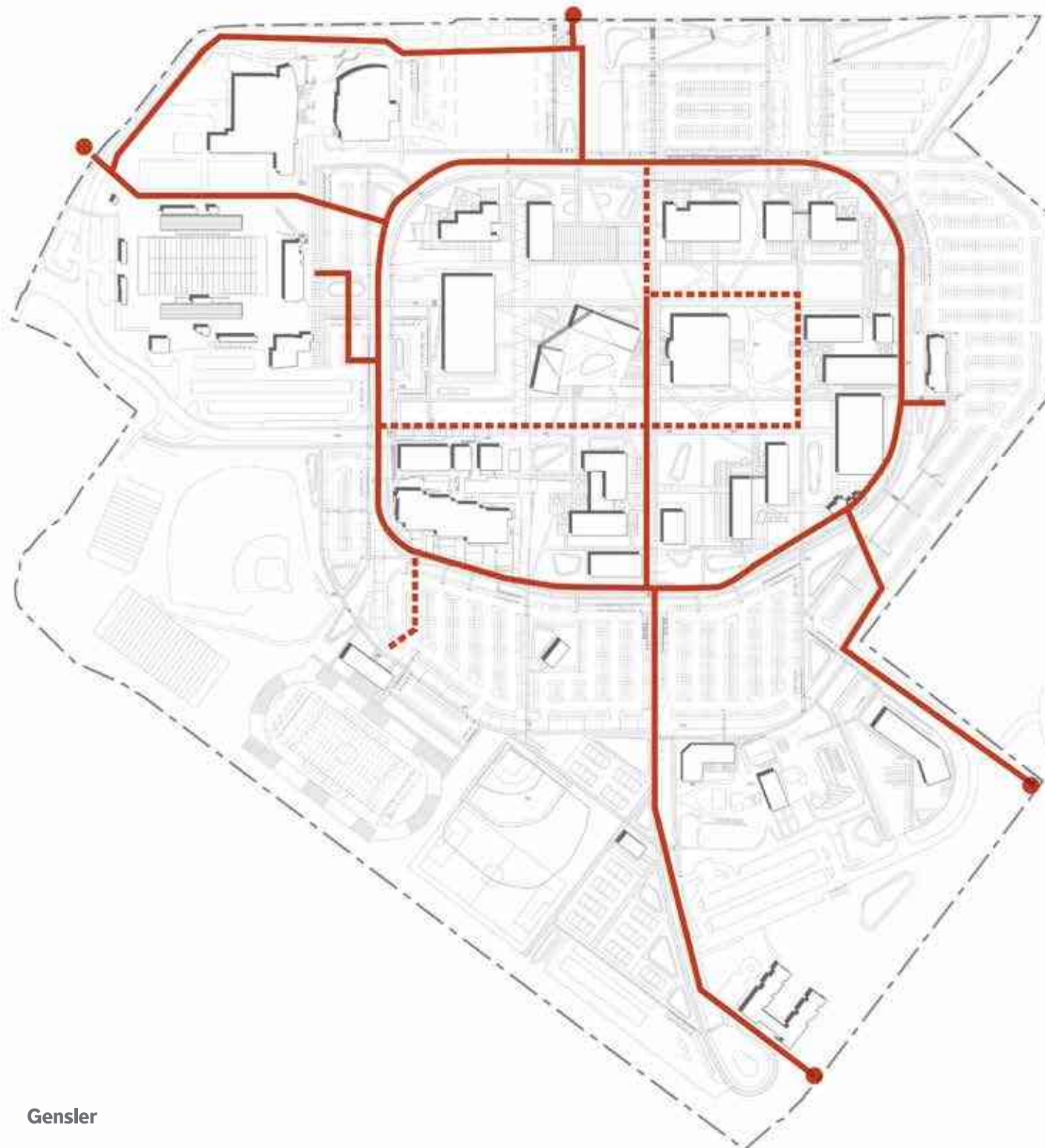
- (E) POTABLE WATER LINE ———
- (N) POTABLE WATER LINE - - - - -
- POINT OF CONNECTION ●



SCALE







PROPOSED FIRE SERVICE

LEGEND

- (E) FIRE SERVICE LINE ———
- (N) FIRE SERVICE LINE - - - - -
- POINT OF CONNECTION ●



SCALE





EXISTING RECLAIMED WATER SYSTEM

LEGEND

(E) RECLAIMED WATER LINE






SCALE





PROPOSED IRRIGATION/ RECLAIMED WATER SYSTEM

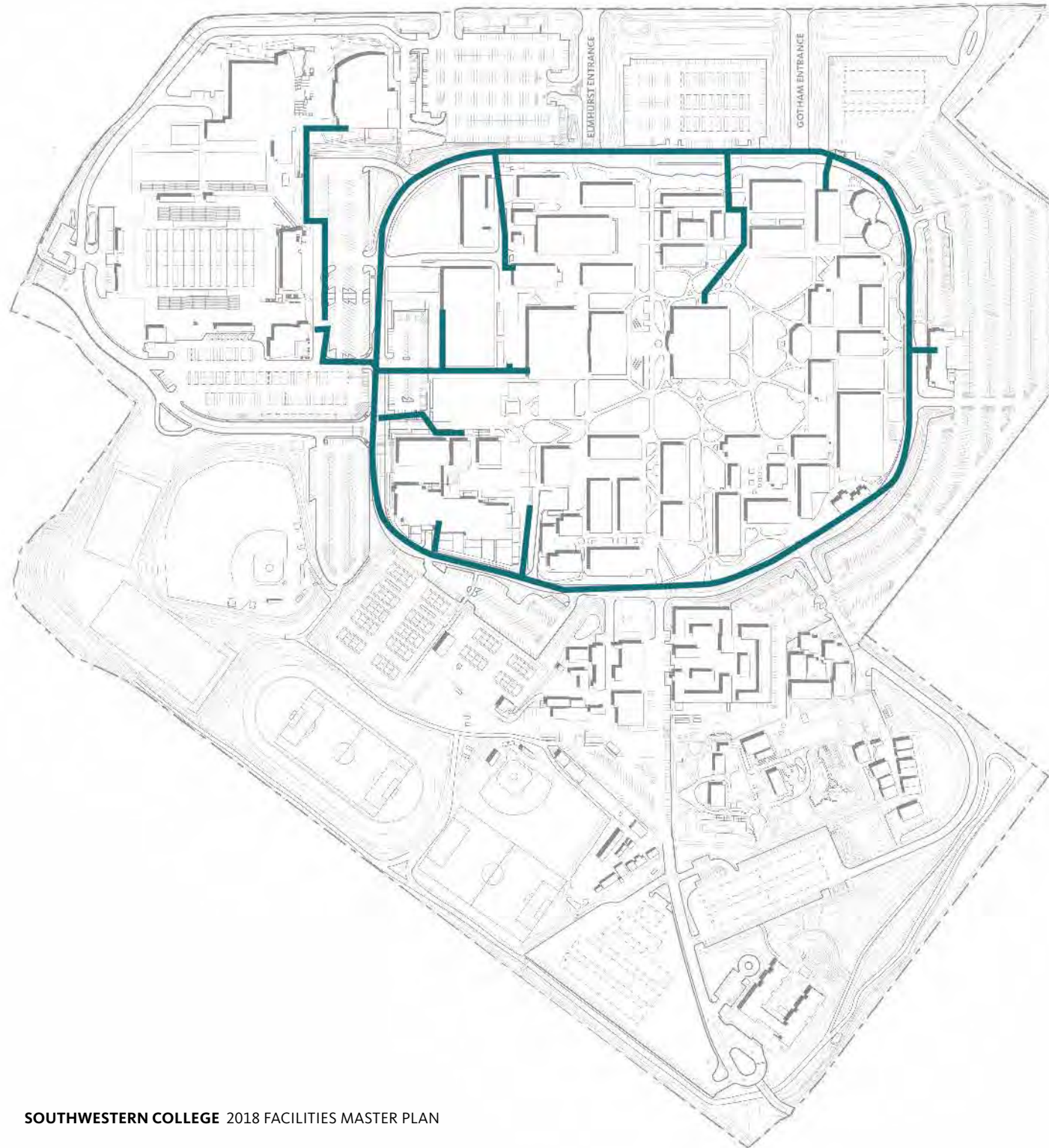
LEGEND

- (E) RECLAIMED WATER LINE 
- PROPOSED IRRIGATION SYSTEM 
- EXISTING SERVICE POINT OF CONNECTION FROM OTAY WATER DISTRICT 




SCALE





EXISTING HYDRONIC WATER SYSTEM

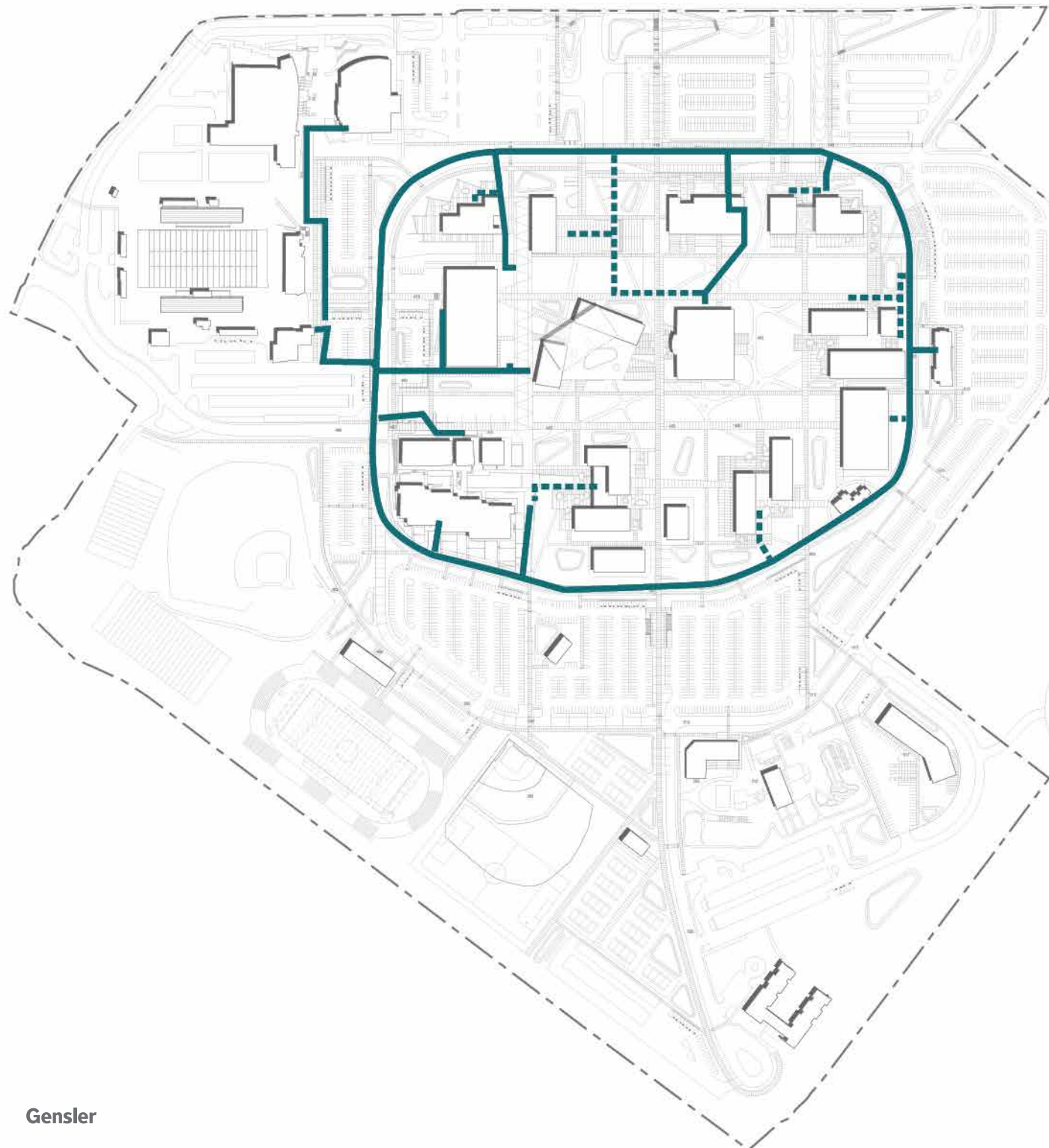
LEGEND

(E) HYDRONIC WATER LINE 



SCALE





PROPOSED HYDRONIC WATER SYSTEM

LEGEND

(E) HYDRONIC WATER LINE ———

(N) HYDRONIC WATER LINE - - - - -



SCALE





EXISTING ELECTRICAL SERVICE

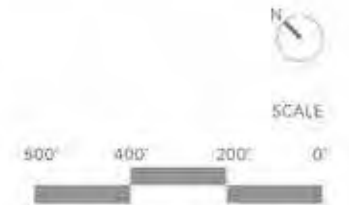
LEGEND

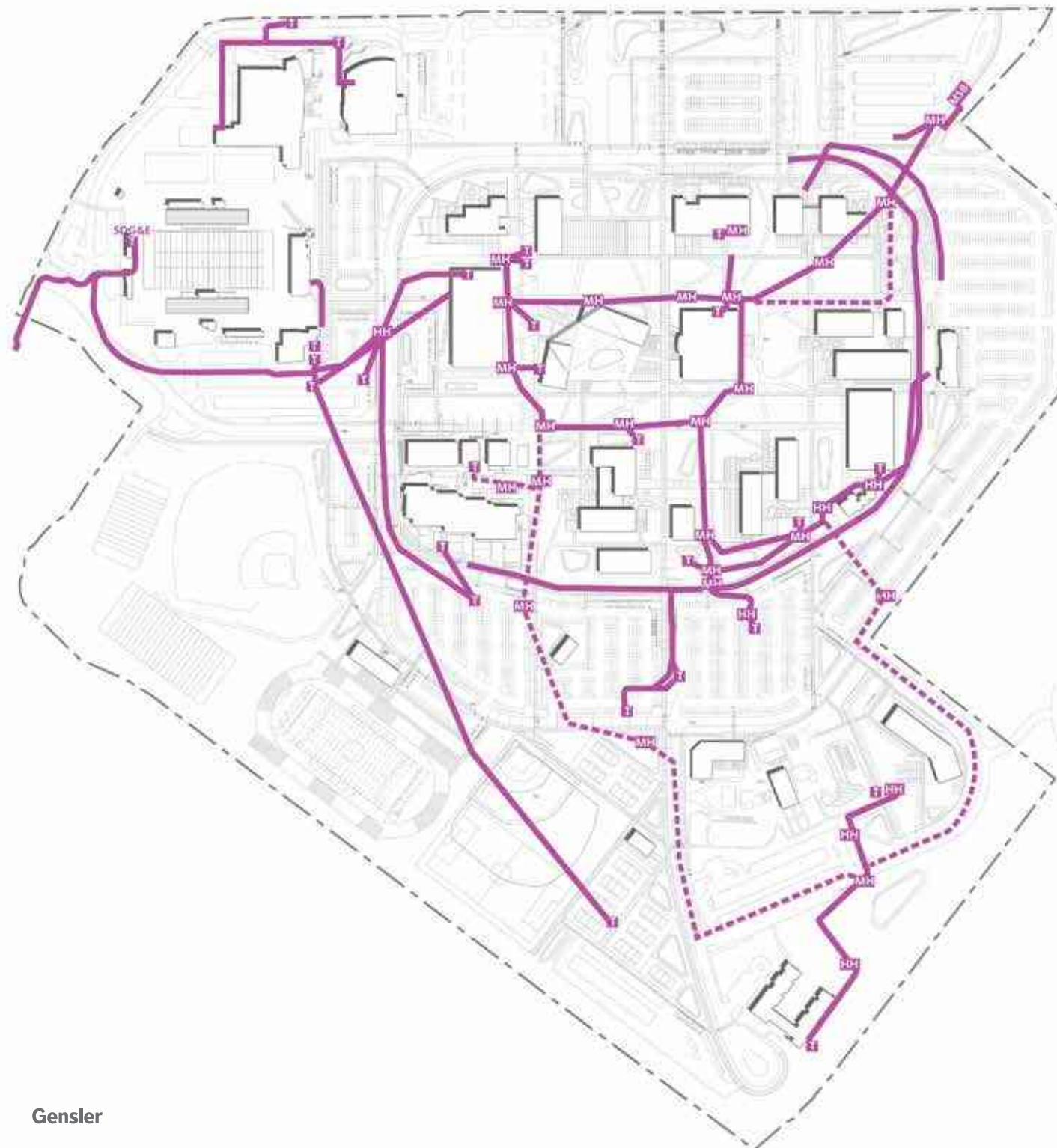
(E) ELECTRICAL DUCT BANK

TRANSFORMER

MANHOLE

HANDHOLE





PROPOSED ELECTRICAL SERVICE

LEGEND

(E) ELECTRICAL DUCT BANK ———

(N) ELECTRICAL DUCT BANK - - - - -

TRANSFORMER **T**

MANHOLE **MH**

HANDHOLE **HH**



SCALE







SOUTHWESTERN COLLEGE | **2018 Facilities Master Plan**