LASC

carrierjohnson + CULTURE

LOS ANGELES SOUTHWEST COLLEGE
1600 W Imperial Highway | Los Angeles | CA 90047
323.241.5225 | www. lasc.edu

FACILITIES MASTER PLAN UPDATE 2017 - 2022

TABLE OF CONTENTS

ACKNOWLEDGMENTS

LOS ANGELES COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES

Sydney K. Kamlager, President
Mike Fong, Vice President
Gabriel Buelna, Ph.D.
Andra Hoffman
Ernest H. Moreno
Scott J. Svonkin
Steven F. Veres
Christopher Martinez, Student Trustee

DISTRICT ADMINISTRATION

Francisco C. Rodriguez, Ph.D., Chancellor
Deputy Chancellor (Vacant)
Robert B. Miller, D.P.A., Vice Chancellor of Finance and Resource Development
Ryan M. Cornner, Ed.D., Vice Chancellor of Educational Programs and Institutional Effectiveness
Albert J. Roman, D.P.A., Vice Chancellor for Human Resources
Jeffrey M. Prieto, J.D., General Counsel
David Salazar, AICP, Chief Facilities Executive

LOS ANGELES SOUTHWEST COLLEGE

Los Angles Southwest College
Administration:
Dr. Denise Noldon – Interim President
Daniel Hall – Vice President Administrative Services
Dr. Howard Irvin- Vice President Student Services
Dr. Lawrence Bradford - Vice President Academic Affairs

Academic Affairs:
Dr. Tangelia Alfred – Dean
Rick Hodge – Dean
Dr. Allison Moore – Dean
Dr. Todd Roberts – Chair
James Hicks – Chair
Rasheed Saafir – Chair
Dr. Catherine Azubuike – Chair

Student Services:
Marisol Velazquez – Financial Aid Manager
Erika Miller – Counselor
Kimberly Carpenter - Registrar

Administrative Services:
Pam Sanford – Associate Vice President Administrative Services
Al Mah – Director of Facilities
Vibha Gupta – IT Manager
Ron Tatum – Asst. College Store Manager

ASO:
Craig Mitchell – ASO President
Jennifer Dominguez
Rainna Hinds

Community Stakeholders:
Eva F. Holmes
Reginald O. McCoy
Christopher White

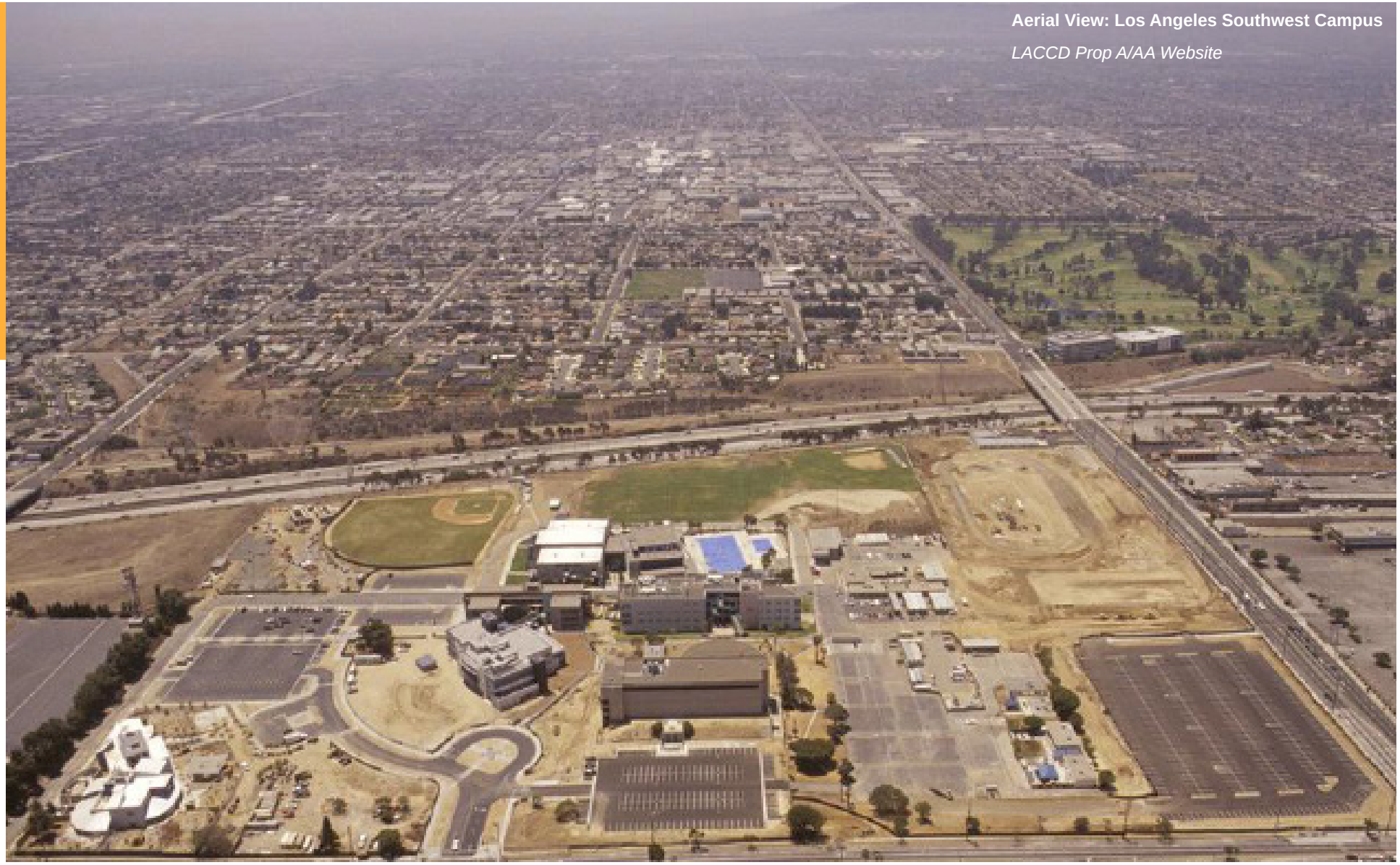
Facilities Planning Committee:
Daniel Hall – VP Administrative Services – Co-Chair
Deborah Farber – Co Chair Academic Senate
Alfred Gallegos – Dean of Institutional Advancement
Dr. Tangelia Alfred – Dean of Academic Affairs
Al Mah – Director of Facilities
Vibha Gupta – IT Manager
Sinchell Nelson – AFT Staff
Pam Sanford – Classified Manager
Jackson Chu – Trades
Courtney Pierce – Classified Supervisor
James Bradley – SEIU Staff
Travis Du Bry – AFT Faculty
Craig Mitchell – ASO President
Bayon Washington – ASO Rep

BUILD LACCD DISTRICT PROJECT MANAGEMENT OFFICE

Mark Al-Soufi
Meredith Burnley

DESIGN TEAM CARRIERJOHNSON + CULTURE

Akiko Yamamoto
John Beck
Kyle Peterson
Shan Jin



Aerial View: Los Angeles Southwest Campus

LACCD Prop A/AA Website

LASC FACILITIES MASTER PLAN OVERVIEW

The Los Angeles Southwest College (LASC) Facilities Master Plan (2017-2022) is an update to the 2003 Facilities Master Plan prepared by Sasaki Associates and the 2008 Plan prepared by GKK. Since 2003, many of the building projects identified in the Campus Facilities Master Plan have been designed, built, and are in use.

PURPOSE

One of the last remaining projects from 2008 Facilities Master Plan - LASC's new School of Science (SoS) (27,000 sq. ft.) - will break ground in September 2017 with occupancy targeted for February 2019. The SoS building replaces the former Lecture Lab (LL) building (60,000 sq. ft.) that was taken down in January 2015.

Unfortunately, the new SOS does not include space for the Nursing program as originally envisioned. Because LASC's campus is overbuilt, a top priority of the new Facilities Master Plan is to identify and convert existing space for the Nursing program.

PROCESS

The facilities master planning process was initiated in February 2017 with a kick-off meeting and campus tours. The college's Facilities Planning Committee, comprised of administration, faculty, students and staff, served as the representative body for the College, providing information, reviewing drafts, and guiding decision making.

A series of meetings with faculty, staff, students, and community stakeholders were held in March to receive input on the status of current facilities and how they could be improved as well as future facility needs.

Major themes were identified in the feedback and information collected that became part of the recommended strategies.

THEMES

- Develop permanent space for the Nursing program.
- Expand Central Plant to support future planned facilities.
- Design and build a Student Union Building (25,000 sq. ft.) at the heart of the campus to include student food services, student government, club and organization space, and conference facilities.
- Renovate the existing TEC-ED building.
- Comprehensive way-finding and building signage.
- Renovate the existing Child Development Center (CDC) building.
- Install electronic marquees at college entrances.
- Implement campus-wide drought tolerant landscaping, drip irrigation, reclaimed water project.
- Upgrade existing softball, baseball and soccer practice facilities.
- Complete West Campus accessibility (ADA) project.

KEY GOALS

2017-2022 FACILITIES MASTER PLAN SUPPORTS KEY LASC STRATEGIC GOALS:

Access and Student Success:

- Focuses on the "Whole Campus Concept" encouraging student connections and engagement by developing campus food services housed in a student union building that will provide student government and club space as well as conference space.
- Increases distributed informal study and collaborative space.
- Develops high quality, flexible, Interdisciplinary learning environments.
- Supports state-of-the-art technology infrastructure.
- Improves campus security and safety.

Resources:

- Improves utilization of existing space through classroom renovations.
- Decreases utility consumption through Central Plant project, drought tolerant landscaping, drip irrigation, and use of reclaimed water.
- Incorporates sustainable design throughout.
- Increases facility rental revenues through more aggressive marketing as well as development of conference facilities in proposed Student Union building.

Collaboration and Partnership:

- Subleases space in the SoCTE Building to Los Angeles County supporting Work Source partner ship (July 2017).
- Utilizes West Campus to support MOU with Los Angeles World Airports (LAWA) project (August 2017).
- Supports dual enrollment with LAUSD South (July 2017).
- Supports dual enrollment with Middle College High School (on going).
- Supports partnership development.

TIMELINE

CURRENT to 5 YEARS

- Construct School of Science.
- Develop permanent space for the Nursing program.
- Expand Central Plant to support future planned facilities.
- Student Union Building - includes cafeteria and conference facilities.
- Renovate the existing TEC-ED building
- Campus wayfinding signage and building signage.
- Two new electronic marquees at entrances.
- Campus-wide drought tolerant landscaping, irrigation, reclaimed water project.
- West campus bungalows ADA project.

5 to 10 YEARS

- SSEC facility renovation.
- Child care facility renovation.
- Upgrade baseball, softball and soccer practice facilities.

BEYOND

- Football/soccer stadium turf and track replacement.
- School of Science (SoS) expansion - future project based on enrollment growth.
- School of Arts & Humanities (SoAH) (Measure J) - future project based on enrollment.

PROGRAM FUNDING

Los Angeles Community College State Funding

LACCD BUILDING PROGRAM MONTHLY PROGRESS REPORT

Sub-Project ID	Project/Building Name	Status	[a] Current Budget	[b] Estimate at Completion	[c]=[a]-[b] Budget Variance	Academic Occupancy Date
06S-615.03	Transit Centers	At DSA	$2,058,699	$2,058,699	$0	03/14/2018
06S-618.01	School of Science	At DSA	$44,817,605	$44,817,605	$0	02/11/2019
06S-663.00	Campus Wide Infrastructure Upgrades	In Construction	$2,086,679	$2,086,679	$0	03/17/2017
	Total Active Subprojects		**$48,962,983**	**$48,962,983**	**$0**	
06S-662.00	Campus Wide Security Upgrades	Future	$997,326	$997,326	$0	03/03/2020
	Total Pending Subprojects		**$997,326**	**$997,326**	**$0**	
Cancelled*			$2,468,073	$2,468,073	$0	
Completed*			$311,434,393	$311,434,393	$0	
Land Aquisition			$1,902,283	$1,902,283	$0	
Master Plan			$2,594,520	$2,594,520	$0	
Procurement			$48,706	$48,706	$0	
Support Services			$36,685,389	$36,685,389	$0	
	All Remaining Subprojects		**$355,133,364**	**$355,133,364**	**$0**	
Total Los Angeles Southwest College Subprojects			**$405,093,672**	**$405,093,672**	**$0**	

Description	[a] Current Funding	[b] Contracted	[c] Expended	[d] Estimate at Completion	[e]=[a]-[d] Funding Variance
Los Angeles City College	$568,440,910	$492,943,819	$479,555,852	$568,440,910	$0
East Los Angeles College	$663,774,484	$633,097,597	$612,771,260	$663,774,483	$0
Los Angeles Harbor College	$450,736,780	$435,020,958	$395,801,883	$451,777,780	$(1,041,000)
Los Angeles Mission College	$445,512,012	$425,103,463	$415,289,525	$445,512,012	$0
Pierce College	$625,055,558	$508,049,777	$467,968,669	$625,055,558	$0
Los Angeles Southwest College	$405,093,672	$392,839,098	$375,827,122	$405,093,672	$0
Los Angeles Trade-Tech College	$582,291,240	$472,169,448	$464,818,332	$582,291,240	$0
Los Angeles Valley College	$612,021,373	$579,094,743	$488,789,748	$612,021,373	$0
West Los Angeles College	$399,130,800	$364,933,282	$359,677,709	$399,130,800	$0
Total College Projects	**$4,752,056,828**	**$4,303,252,185**	**$4,060,500,099**	**$4,753,097,828**	**$(1,041,000)**

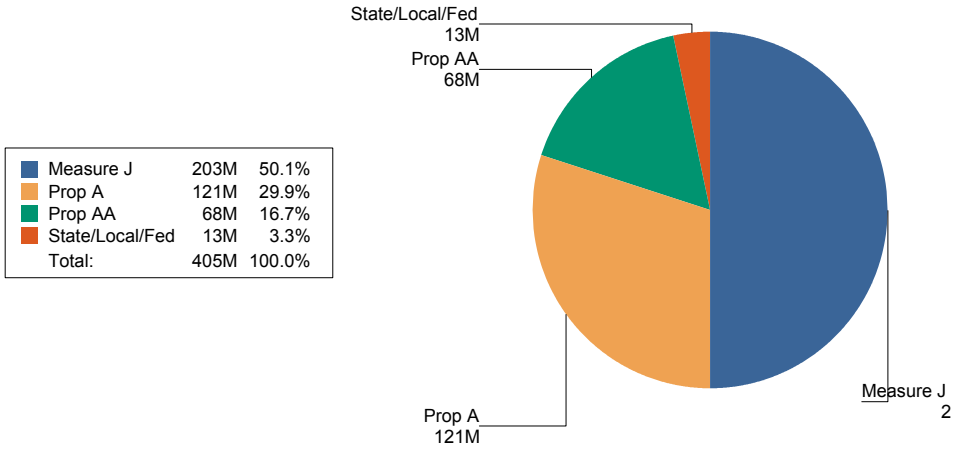
Los Angeles Southwest College (LASC) elects to utilize the return of Measure A/AA/J program reserve funds (approx. $12M) to secure permanent space for the Nursing program.

The proposed course of action is to remodel and re-purpose the 1st floor of the existing TEC-ED building to house the Nursing program.

LASC's number one and two priority projects utilizing Measure CC funds are a Student Union building (subject to further evaluation and review) and an upgrade and expansion of our Central Plant.

The proposed Student Union Building/Central Plant expansion meets the intent of Measure CC priorities by ensuring that students will have a place to study, obtain healthy food choices, and a place to meet for co- and extracurricular activities that we now have to host off campus due to the lack of adequate facilities. The "whole campus" concept of LACCD intends that our colleges provide an environment that supports student learning and success. The addition of this facility gives the college the ability to provide a full array of programming, meeting spaces and student governance office space that we believe will create a more hospitable environment for our students and an opportunity to have more community involvement at Los Angeles Southwest College.

By upgrading our Central Plant, we will be able to control temperatures in office and classroom spaces which is a major issue now. We will need the increased Central Plant capacity for our new School of Science and the proposed Student Union building. This increased capacity will ensure that current challenges we face with efficient operation of our facilities will, along with the new buildings being brought online, have the proper environment in which to offer classes, conduct college and district business and meet the extra- and co-curricular needs of our students.



Cost Type "Bucket"	[a] Current Budget	[b] Contracted	[c] Expended	[d] Estimate at Completion	[e]=[a]-[d] Budget Variance
Furniture, Fixtures & Equipment	$18,045,520	$16,067,191	$15,739,624	$18,045,520	$0
Owner's Reserve	$1,559,002	$0	$0	$1,559,002	$0
Program & Project Management	$43,365,786	$40,152,589	$39,745,101	$43,365,786	$0
Asset, Move, Legal/Audit & Specialty	$9,138,096	$8,834,603	$8,834,603	$9,138,096	$0
Construction	$287,719,878	$283,115,573	$267,412,146	$287,719,878	$0
Land Acquisition	$1,428,194	$1,428,194	$1,428,194	$1,428,194	$0
Programming & Design	$43,837,196	$43,240,948	$42,667,454	$43,837,196	$0
Total Budget	$405,093,672	$392,839,098	$375,827,122	$405,093,672	$0

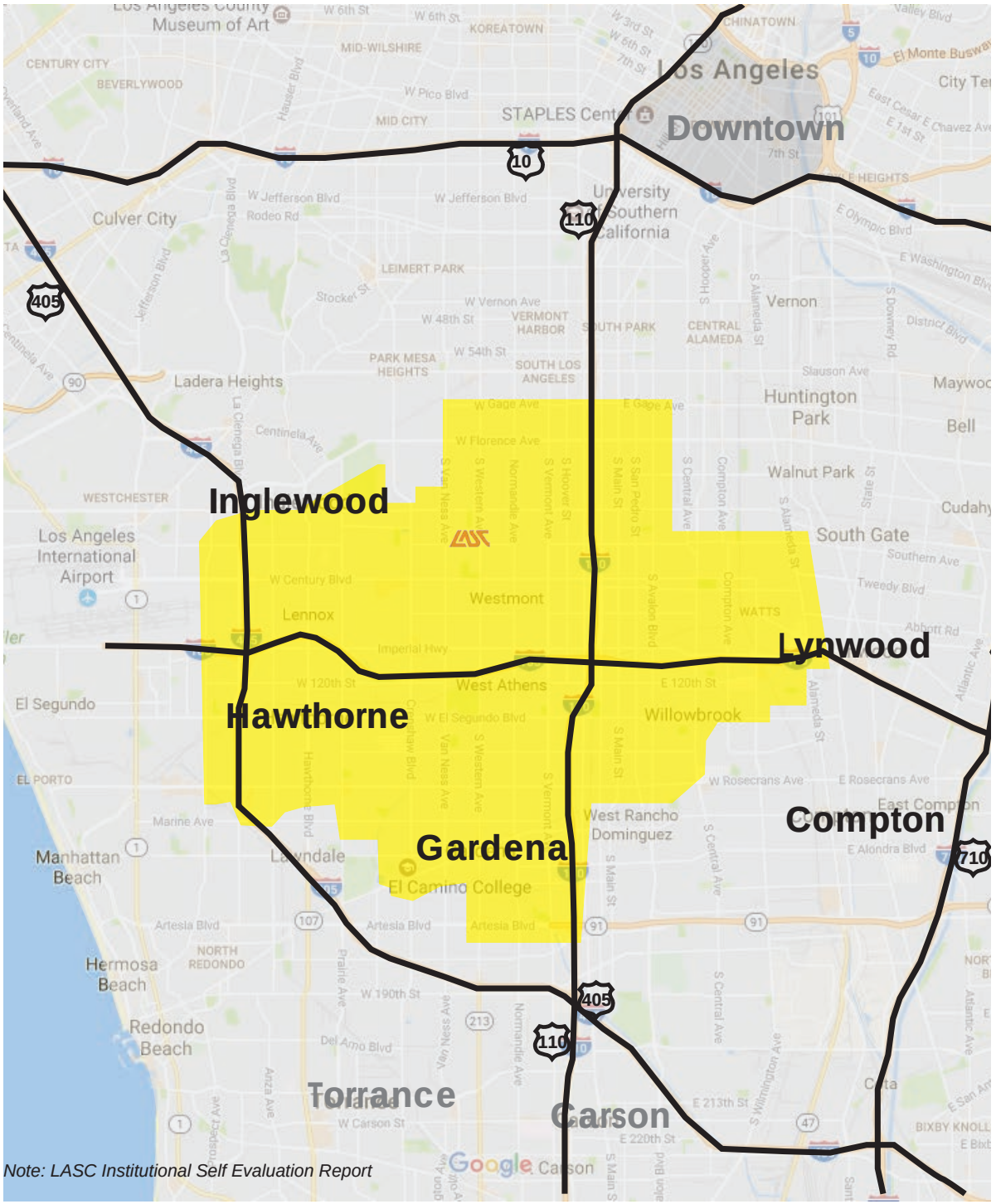
New Construction	Completed Date
Maintenance and Operations	2008
West Entry Drive and Parking Facilities	2008
Sheriff's Station	2009
Athletic Field Athletic House, Stadium	2009
Walking Track	2009
Central Plant	2009
Student Services Building	2009
Child Development Center	2010
MIddle College High School	2012
School of Career & Technical Education	2014
School of Math and Sciences	TBD

Renovation Projects	Completed Date
Campus Corner Sign	2008
RWGPL	2008
Northeast Quadrant Parking Structure	2012
Student Services Education Center (SSEC)	2012
Fitness and Wellness Center	2013
Campus -Wide IT Improvements	2014
Cox Building & Little Theater	2015

Sub Project Number	Sub Project Title	% Complete	Academic Occupancy Date	Progress Summary
06S-618.01	School of Science	4.00%	02/11/2019	100% DD. Project presentation to FMP&OC on 9/21/16.

REGIONAL + COMMUNITY SETTING

LASC is located approximately 12 miles south-west from down town Los Angeles. The College serves socioeconomic and ethnically diverse communities of Gardena, Hawthorne, Inglewood, Compton and Lynwood. This service area has a lower median household income and higher poverty rate than both Los Angeles County and the state of California average.



Note: LASC Institutional Self Evaluation Report

CAMPUS BOUNDARIES + EDGE CONDITIONS

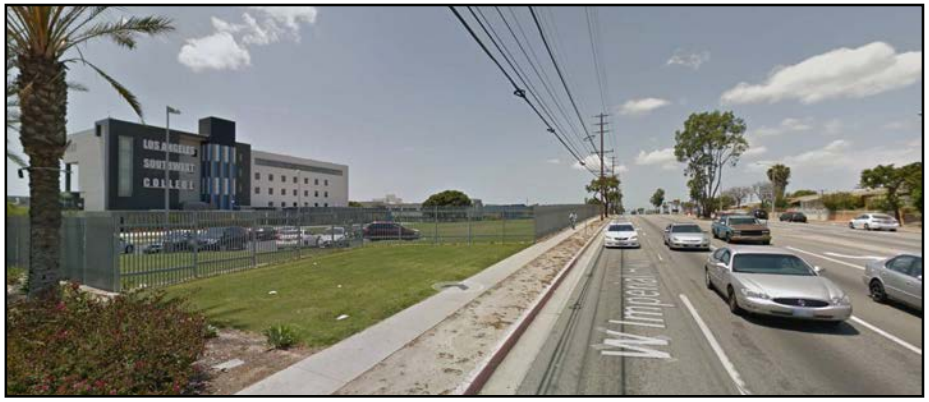
The Campus site is approximately square, north edge is Imperial Highway, west edge is Western Avenue, and south edge is the 105 freeway. East edge is a church property and parking.

Surrounding north properties are small scale single family homes and apartment buildings. Across the street from Western Avenue is a large retail center.

All edges of campus slopes down into the campus especially the south edge 105 freeway where there's a significant grade drop. The campus is set back by parking lots and grade changes, the buildings are facing inward and not visibly connected to the surrounding streets.

Recent projects mitigated some connectivity issues by placing signs at corner of Imperial Highway and Western Avenue as well as at north face of Cox building. The addition of Cox Annex moving the administrative offices from the top floor of the five story Cox building to the ground floor softens the edge visually to the street. The renovation also included ground floor access from north side of Cox building to south side of building so north side of campus has a potential of being activated and visible from the street.

North (Imperial) entry - well defined by palms and landscape.



North edge - main image is of the fence line and turf with building beyond. Very few trees and unimproved sidewalk landscape.

Corner Imperial & Western - palms and hardscape layout work well, planter landscape needs re planting, and new trees behind fence line.

North portion of Western - sidewalk has no planter or shade.

West (Western) entry - pedestrian walk on left has no trees or shade.

South portion of Western - sidewalk has tree wells and some trees planted inside fence line, but could benefit from more tree planting.

2017 EDUCATION MASTER PLAN GOALS:

GOAL 1: Access and Preparation for Success: improve equitable access to a high-quality education that promotes student success.

GOAL 2: Success: Increase student success and academic excellence with a focus on student-centered instruction and support services.

GOAL 3: Institutional Effectiveness and Accountability: Enhance institutional effectiveness and accountability through data-driven decision making, as well as planning, evaluation, and improvement of college programs, professional development opportunities, and governance structures.

GOAL 4: Resources: Optimize human, physical, technological, and financial resources to ensure quality services for our students.

GOAL 5: Collaboration and Partnerships: Maximize collaboration within the college while cultivating the strengthening partnerships with industry, community, and other educational institutions.

ENROLLMENT TRENDS and STUDENT POPULATION

LASC has consistently enrolled students from our Central Service Area for the past five years with a slight increase (1.8%) of students from 2013-2014 to the 2014-2015 academic year. LASC enrolled 58.3 percent of the credit student population on average over the past five years.

LASC in the last five years had a peak in enrollments in 2013-2014 (fall and spring). This peak in enrollments allowed the college to take advantage of an opportunity to grow in FTES and receive funding above the usual from the state. The growth was primarily in the credit enrollments from 2013-14 to 2014-15 with the greatest drop in credit enrollments (decrease of 15.3 percent) and a 20.7 percent drop in Non-credit enrollments.

Although most students come from low-performing high schools, they are increasingly stating that their educational goal is to transfer to a 4-year university. From 2010-2013, there was a 12.3 percent increase from 2013-2016.

LASC is currently in the process of updating Enrollment Management Plan to strategize the College's efforts to carry out a multi-year plan for growth. One of the strategies is forming a Participation Agreement with LAUSD Local District South as an inaugural effort to develop dual enrollment opportunities for local high school students. Other contiguous high schools/districts has been approached and in development.

LASC students also face external pressures that impact the length of time they are able to devote to their studies, a spring 2012 survey indicated that nearly 40 percent of LASC students work more than 20 hours per week. In addition, 52 percent of student said that financial factors were a moderate or major problem in their academic success.

Fall 2016 COLLEGE PROFILE

Fall 2016 College Profile

Credit students: 6,701
Non-credit students: 1,928
Total students: 8,629

Total enrollments: 19,682

Fall 2016 Demographics Credit Students

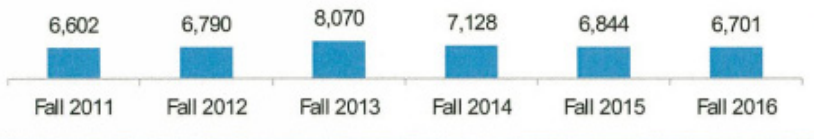
Ethnicity	
American Indian	0.2%
Asian Pacific Islander	2.0%
Black/ African-American	53.8%
Hispanic	37.1%
Multi-Ethnic	3.0%
Unknown	2.1%
White	1.7%
Gender	
Female	69.7%
Male	30.3%
Age Group	
19 or less	15.0%
20-24	30.6%
25-29	18.3%
30-34	11.1%
35-39	7.4%
40-49	9.1%
50+	8.5%
Educational Goals	
Career/ Workforce	17.2%
College Prep	2.7%
General Education	17.3%
Transfer to 4 Year	52.8%
Undecided	10.1%
Study Load	
12 units or more	25.9%
6 to 11 units	38.7%
5 units or less	35.4%
Primary Language	
English	91.4%
Spanish	6.7%
Other	1.9%

Other Statistics

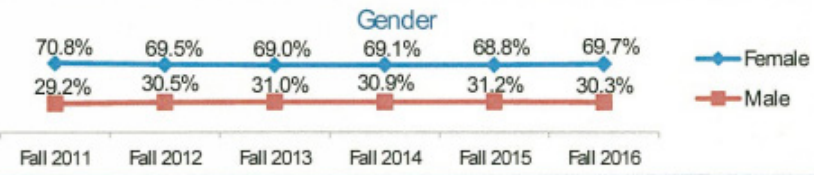
U. S. Citizens	90.2%
AB 540	2.0%
Financial Aid Recipients	68.1%

FIVE-YEAR TRENDS

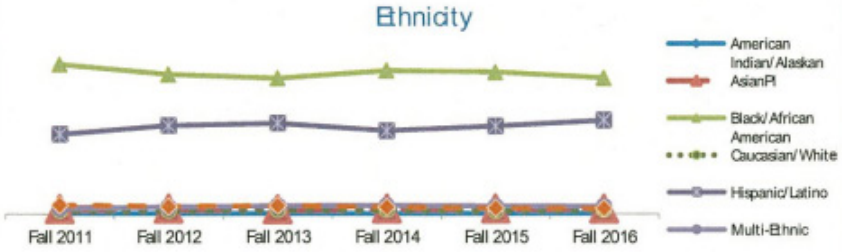
Fall Credit Headcount



Gender



Ethnicity



Completions	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Associate Degrees	346	306	324	485	573	752
Certificates	70	90	74	150	193	211
Skill Certificates	35	5	3	7	107	141
CSU Transfers	104	110	113	122	138	135
UC Transfers	4	5	4	7	17	13
Private & OOS Transfers	121	129	140	115	133	---

Efficiency Measures	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Cost per Enrollment	$1,669	$1,725	$1,780	$1,658	$2,058	$2,367
Cost per FTES	$4,440	$4,687	$5,009	$4,854	$5,057	$5,431
Cost per FTES(District)	$3,851	$4,041	$4,148	$4,305	$4,353	$4,624

Year End Expenditures	2013-14	2014-15	2015-16*	% Change (2015-6 vs. 2013-14)
Certificated Salaries	$12,847,650	$9,131,706	$15,791,977	22.92%
Non-Certificated Salaries	$5,333,071	$5,258,222	$6,483,814	21.58%
Benefits	$4,956,671	$5,388,591	$6,027,721	21.61%
Books and Supplies	($1,613)	$155,449	$41,634	2,481.15%
Operating Expenses	$1,497,300	$2,513,434	$2,395,087	59.96%
Capital Outlay	$284,855	$356,526	$226,465	-20.50%
Other	$73,986	$628,597	$4,943	-93.32%
Total	$24,991,920	$27,450,448	$30,971,641	23.93%

* 2015-16 figures based on Final Budget #s.

COMMUNITY CONNECTIVITY:

Goals to enhance the College image within the community;

Become a better community asset by continually seeking to establish a role in the community.

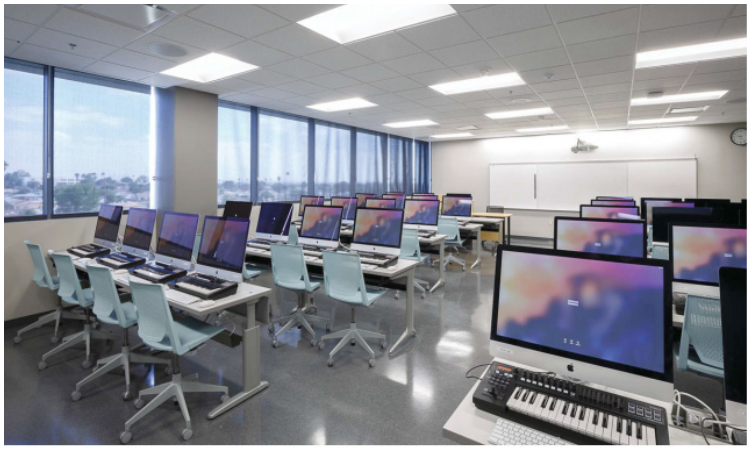
Development of student union; LASC is currently utilizing the Theater and surrounding outdoor spaces to hold events inviting the surrounding communities. The future Conference Center in the Student Union building can increase use by providing a forum for larger groups of people to hold multiple events at the same time. Flexibility for various events can be facilitated with adjacent food service area if there's a need for catering and can provide the College with an additional funding source.

Inviting the community to share campus amenities;
Upgrades such as seats with shade along walking paths and exercise equipment near the athletic fields can enhance the public experience for those who use the College for fitness. Use of the track by community morning walkers, community boot camp fitness groups, and youth summer camp sports programs are examples of sharing that can be explored.

LASC is exploring opportunities to provide outdoor learning environments as an extension of the classroom that student groups, clubs and community members can also use. Familiarity with the campus and awareness of what it has to offer the community builds connection & ownership. /Familiarity and a sense of community ownership helps security and maintenance

Development of an arboretum; by drawing on the greater city and local community the push to develop an arboretum can engage all groups from students & professors/administrators to local youth, active parents, and retired seniors who share a common interest in botany, landscape design, and stewardship of the ecology.

Opening the campus to more groups and a variety of hours creates complexities for security and facilities operations, but if well managed can improve recruiting and help to retain students through completion of courses and certificates programs.



CAMPUS SECURITY:

The Los Angeles Community College District (LACCD) contracts with the Los Angeles County Sheriff's Department to provide security on the nine campuses. At LASC, the Sheriff's Office is housed in the Campus Security Facility, a 1,021 sq. ft. purpose-built structure completed in 2009.

The incidence of crime on the LASC campus is relatively low compared to other campuses in the District and to the surrounding neighborhood.

Security on the LASC campus is supported by security cameras, emergency phones, fire alarms, a notification system and security lighting.

Campus security at LASC will be enhanced by the district-wide Measure J Technology program which was initiated in May 2015 to address infrastructure needs as identified in the Strategic Execution Plan (SEP) and authorized by the Joint Task Force in December 2016. The initiatives developed as a result of a district-wide assessment include:

- Baseline Infrastructure
- Classroom and Instructional Technologies
- Safety and Emergency Response Systems

The Safety and Emergency Response Systems include:

- Physical Security System Deployment (Phase 1)Access Controls and Video Surveillance.
  - Initiation – Qtr. 2 2017.
  - Planning – Qtr. 3 and 4 2017.
  - Design – Qtr. 1 and 2 2018.
  - Implementation – Qtr. 3 2018 through Qtr. 2 2019.
  - Closeout – Qtr. 3 2019.
- Physical Security System Deployment (Phase 2) Mass Notification and Emergency Phones
  - Initiation – Qtr. 2 2018
  - Planning – Qtr. 3 2018
  - Design – Qtr. 4 2018
  - Implementation – Qtr. 1 2019 through Qtr. 3 2019
  - Closeout – Qtr. 4 2019

SUSTAINABILITY APPROACH:

Sustainability and LEED

- LASC campus and LACCD district are committed to sustainable growth and the concept that embracing sustainability can be both fiscally and environmentally beneficial.
- Currently on LASC campus there are multiple LEED certified buildings each with its own limit defined LEED boundary for the purposes of individual certification.

LEED for Campus

- LEED campus certification streamlines the certification process for LEED users who are certifying more than one project located on a single shared site.
- The Campus Program was designed to simplify the certification process for multiple buildings while maintaining the technical integrity and rigor of LEED. It can be used for multiple rating systems including: New Construction & Existing Buildings - Operations & Maintenance.
- By streamlining the LEED process for many of the credit in the Sustainable Sites, Energy & Atmosphere, and Innovation categories, the effort for design team is reduced.

Synergies

- LEED for campus is also a way to generate evaluation of existing structures by looking at the campus as a whole. Current funding models sometimes favor new construction while deferring repair or upgrades to existing when similar budgets applied can potentially bring about greater energy savings and improve the usefulness of older structures.
- Instituting campus wide programs in areas such as; landscape management, pest management, green cleaning, and waste management can bring about regular review of practices & procurement that can also result in potential Operations and Maintenance savings.

SUSTAINABLE STRATEGIES

The triple bottom line concept incorporates a long-term view for assessing potential effects and best practices for three kinds of resources:

- People (social capital). All the costs and benefits to the people who design, construct, live in, work in, and constitute the local community and are influenced, directly or indirectly, by a project.
- Planet (natural capital). All the costs and benefits of a project on the natural environment, locally and globally.
- Profit (economic capital). All the economic costs and benefits of a project for all the stakeholders (not just the project owner).

Source: USGBC

EXISTING CAMPUS PLAN

EXISTING BUILDINGS

PROP A/AA CONSTRUCTION

1. COX BUILDING
2. LITTLE THEATER
3. TECHNOLOGY EDUCATION BUILDING
4. THOMAS G. LARKIN PHYSICAL EDUCATION BUILDING
5. STUDENT SERVICES/EDUCATION BUILDING
6. CHILD DEVELOPMENT CENTER/CLASSROOM BUILDING
7. BOOKSTORE
8. STUDENT SERVICES/ACTIVITIES CENTER
9. MAINTENANCE/ OPERATIONS SHIPPING / RECEIVING
10. PARKING STRUCTURE
11. FIELD HOUSE
12. BLEACHERS
13. GENERAL USE RESTROOMS & CONCESSIONS
14. CENTRAL PLANT
15. CAMPUS POLICE STATION
16. MIDDLE COLLEGE HIGH SCHOOL
17. CAREER & APPLIED TECHNOLOGIES BUILDING
18. STADIUM
19. FOOTBALL/SOCCER PRACTICE FIELDS
20. SOFTBALL FIELD
21. DENNIS GILBERT BASEBALL FIELD
22. COVERED 25 METER POOL
23. EXERCISE PATH
24. PALM COURT
25. INFORMAL OUTDOOR AMPHITHEATER
26. THOMAS G. LARKIN GARDEN
27. TRAFFIC CIRCLE
28. PEDESTRIAN/ CART ACCESS
29. LIMITED ACCESS ROAD
30. LIMITED ACCESS ROAD
31. LIMITED ACCESS ROADWAY TO NORMANDIE
32. LANDSCAPE AND SITE WORK
33. CAMPUS MARQUEE SIGN
34. WEST CAMPUS BUILDINGS

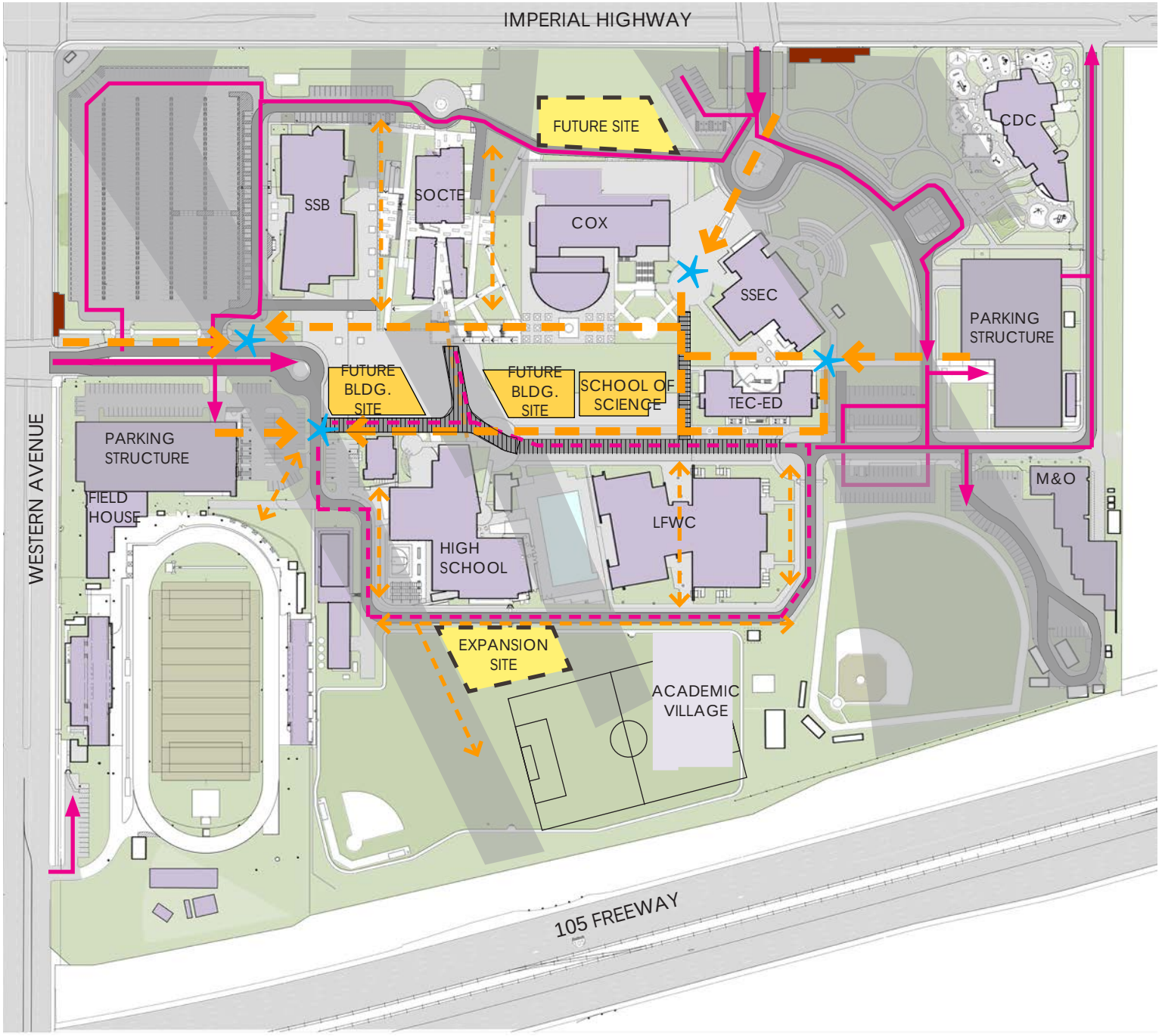
PARKING LOTS		SPACES
Ⓐ	PARKING LOT A	20
Ⓑ	PARKING LOT B	31
Ⓒ	PARKING LOT C	477
Ⓓ	PARKING LOT D	95
Ⓔ	PARKING LOT E	21
Ⓕ	PARKING LOT F	32
Ⓖ	PARKING LOT G	650
Ⓗ	PARKING LOT H	42
Ⓘ	PARKING LOT I	14
Ⓙ	PARKING LOT J	13
Ⓚ	PARKING LOT K	406
	TOTAL:	1801

LONG TERM CAMPUS PLAN

- RENOVATION PROJECTS
- CURRENT & FUTURE PROJECTS
- EXISTING BUILDINGS
- FIRE ACCESS LANE
- NEW BUS STOP

1. COX BUILDING
2. LITTLE THEATER
3. TECHNOLOGY EDUCATION BUILDING
4. THOMAS G. LARKIN PHYSICAL EDUCATION BUILDING
5. STUDENT SERVICES/EDUCATION BUILDING
6. CHILD DEVELOPMENT CENTER/CLASSROOM BUILDING
7. COLLEGE STORE
8. STUDENT SERVICES/ACTIVITIES CENTER
9. MAINTENANCE/ OPERATIONS SHIPPING / RECEIVING
10. PARKING STRUCTURE
11. FIELD HOUSE
12. BLEACHERS
13. GENERAL USE RESTROOMS & CONCESSIONS
14. CENTRAL PLANT
15. CAMPUS POLICE STATION
16. MIDDLE COLLEGE HIGH SCHOOL
17. CAREER & APPLIED TECHNOLOGIES BUILDING
18. STADIUM
19. FOOTBALL/SOCCER PRACTICE FIELDS
20. SOFTBALL FIELD
21. DENNIS GILBERT BASEBALL FIELD
22. COVERED 25 METER POOL
23. EXCERSISE PATH
24. PALM COURT
25. INFORMAL OUTDOOR AMPHITHEATER
26. THOMAS G. LARKIN GARDEN
27. TRAFFIC CIRCLE
28. PEDESTRIAN/ CART ACCESS
29. LIMITED ACCESS ROAD
30. LIMITED ACCESS ROAD
31. LIMITED ACCESS ROADWAY TO NORMANDIE
32. LANDSCAPE AND SITE WORK
33. CAMPUS MARQUEE SIGN
34. WEST CAMPUS BUILDINGS

PARKING LOTS		SPACES
Ⓐ	PARKING LOT A	20
Ⓑ	PARKING LOT B	31
Ⓒ	PARKING LOT C	477
Ⓓ	PARKING LOT D	95
Ⓔ	PARKING LOT E	21
Ⓕ	PARKING LOT F	32
Ⓖ	PARKING LOT G	650
Ⓗ	PARKING LOT H	42
Ⓘ	PARKING LOT I	14
Ⓙ	PARKING LOT J	13
Ⓚ	PARKING LOT K	406
	TOTAL:	1801



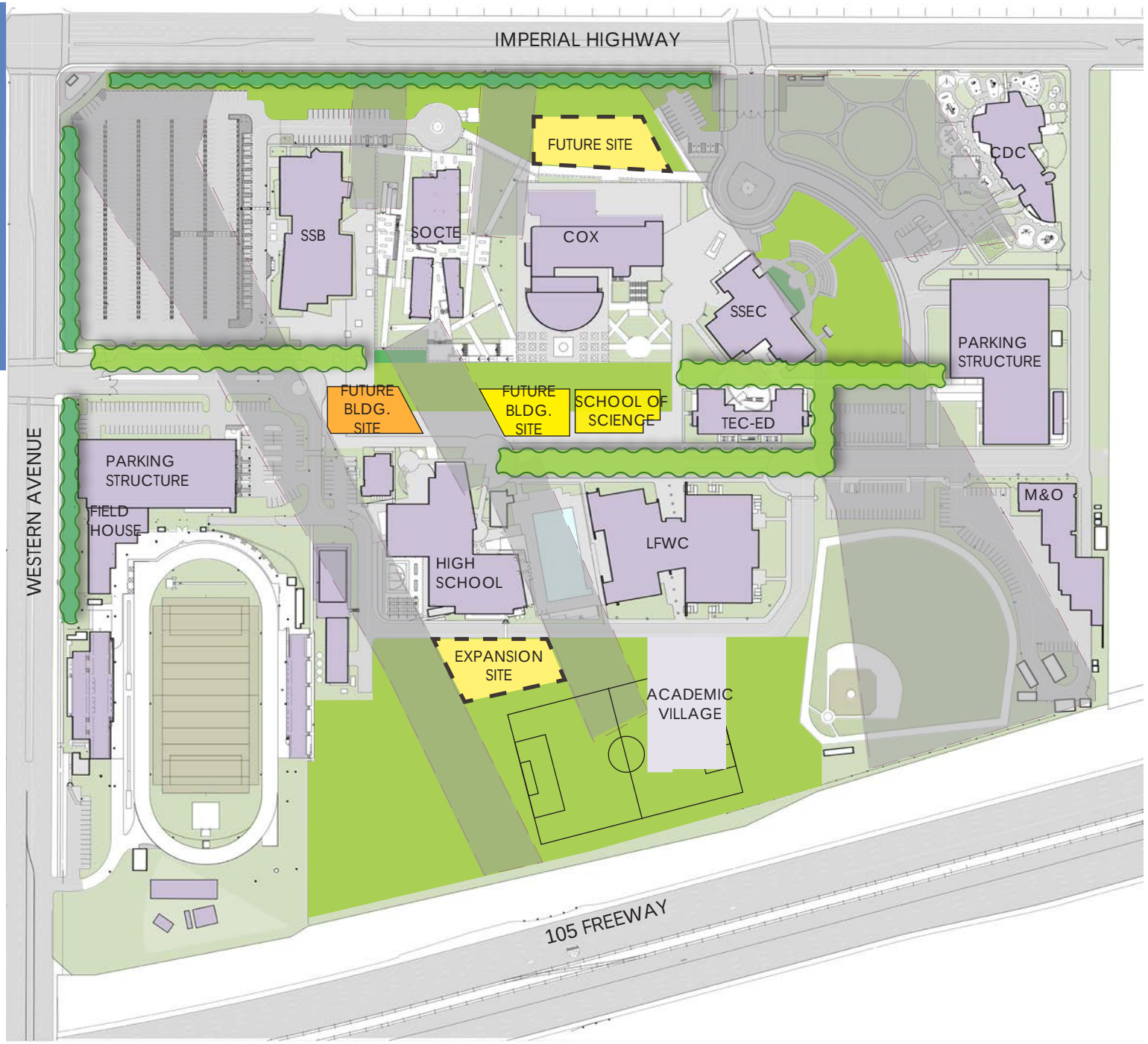
CIRCULATION PLAN

- CURRENT/FUTURE BUILDING SITE
- EXISTING BUILDINGS
- BUS STOP
- MAJOR PEDESTRIAN CIRCULATION
- MINOR PEDESTRIAN CIRCULATION
- VEHICLE CIRCULATION
- PROPOSED LIMITED VEHICULAR CIRCULATION - NOTE 1
- PARKING
- OPEN SPACE
- FIRE ACCESS LANE
- VEHICULAR/FIRE LANE PROPOSED PEDESTRIAN FOCUSED - NOTE 2 COUGAR WALK / ARBORETUM
- PROPOSED LOCATION FOR ADDITIONAL CAMPUS MAP SIGNAGE

NOTES:

1. VEHICULAR ACCESS LIMITED TO SERVICE, EMERGENCY, & FIRE - PERSONAL VEHICLE ACCES CONTROLED BY USE OF BOLLARDS.

2. EACH PRECEEDING MASTER PLAN HAS IDENTIFIED THE IMPORTANCE OF CREATING A CAMPUS CORE THAT IS PEDESTRIAN FOCUSED WITH PERSONAL VEHICULAR ACCESS LIMITED TO THE ENTRIES AND LOOP AROUND THE NORTH.



DEVELOPMENT PLAN

- EXISTING BUILDINGS
- EARTHQUAKE FAULT LINE BUILDING SETBACK
- DEDICATED GREEN SPACE
- SoS BUILDING SITE
- FUTURE BUILDING SITE
- POTENTIAL BUILDING SITE
- LANDSCAPE/HARDSACPE ENHANCEMENT AREA - NOTE 1
- PERIMETER TREE ENHANCEMENT AREA - NOTE 2

NOTES:

1. EACH PRECEEDING MASTER PLAN HAS IDENTIFIED THE IMPORTANCE OF CREATING A CAMPUS CORE THAT IS PEDESTRIAN FOCUSED AND DESCRIBES IN GREAT DETAIL THE IMPORTANCE OF TREES, SHADE, AND APPRORIATE LANDSCAPE/PAVING ALONG WITH INFORMAL SEATING AND OR GATHERING AREAS TO FACILITATE STUDENT INTERACTION.

2. ADDITION OF TREES ALONG THE CAMPUS PERIMTER IS PROPOSED TO PROVIDE SHADE FOR PEDESTRIANS, SOFTEN THE FENCELINE, AND TO ENHANCE THE URBAN CANOPY IN THIS SECTION OF LOS ANGELES.

SCHOOL OF SCIENCE

SPACE USE

The new School of Science is a two story building totaling 26,790 sf. Planned spaces include a large lecture hall, laboratories, faculty areas, restrooms, and an outdoor patio for astronomy.

The new SoS building fills a key site on the campus and allows for the pedestrian walkway and landscape areas around the site to be developed to the same level as adjacent areas.

SCHOOL OF NURSING

The School of Nursing along with the Schools of Math and Science were formerly located in the Lecture Lab building which had an area of 79,824 square-foot. The original plan was to renovate the Lecture Lab building, and based on this, the School of Nursing and School of Science were moved into temporary housing referred to as Academic Village (approx. 39,247 square feet). The School of Math was moved into the Tech Education Center building. Upon detailed analysis of the Lecture Lab building, it was determined that there were extensive water intrusion and structural issues and the building was subsequently demolished, in March 2015.

The plan was to house Nursing in temporary space until a new School of Nursing building could be constructed (2015). Due to lack of funding at that time, only a new 27,000 School of Science building was proposed. The School of Nursing project was deferred.

Because the LASC campus is overbuilt from a capacity/load standpoint, the proposed solution is to remodel and repurpose the first floor of the existing TEC-ED building (approx. 18,000 sq. ft.) to house the Nursing program utilizing the return of Measure A/AA/J program reserve funds (approx. $12M).

The existing temporary Academic Village location does not meet accreditation standards and is not suitable from an access standpoint.

STUDENT UNION

The proposed Student Union building is intended to become the heart of campus life. This proposed building is subject to futher evaluation and reivew. If approved, this building will provide services to support educational, cultural, social, recreational, and leadership programs to the academic experience. The following spaces are proposed to be incorporated in this building.

1) Food Service Kitchen and seating area with ability to serve hot meals
2) Grab and Go
3) Conference Center (for approximately 500 people)
4) Break out spaces adjacent to the Conference Center
5) Student Lounge
6) Game Room
7) Open Computer Lab for student use
8) Offices for Student Government (ASO)
9) Restrooms
10) Storage

Food Service capability has been recommended since the 2003 Master Plan. Both SSB and Cox buildings have areas identified for café or vending service with future utility hookups but a fully built-out food service has been value engineered out of projects. Ability to have nutritious hot meals before, during or after classes while on campus not only saves time for students but also creates opportunities to interact with peers. It is well known that students perform better when they are on-campus longer. The commercial kitchen may support campus or theater performances with catering services. A Grab and Go or convenience store provides a quick meal option.

A Student Lounge will be adjacent to Food Service with comfortable seating in various flexible arrangements to encourage social interaction and group study.

A Game Room area adjacent to the Student Lounge provides an opportunity for various recreational activities to possibly include; billiards, video games, foosball, and table tennis.

An Open Computer Lab, Tutoring, and Technology Center accessible to all students with extended hours to provide flexibility for student use. This space could be used for a combination of one-on-one tutoring, collaborative group projects, or simply learning how to use a computer by providing access. One large computer lab in the center of campus can consolidate various resources in one place.

The Conference Center will provide a large meeting space for approximately 500 people and represents a potential revenue source to the campus.

FACILITIES TOTAL COST OF OWNERSHIP (TCO)

The total cost of ownership (TCO) approach to facilities management is accounting for and understanding all of the costs associated with owning and occupying a facility – or college campus – over the entire life cycle.

The TCO approach to facilities management balances the annual operating expenses of operations and maintenance with the capital expenditures necessary to replace specific components. It allows management to understand the impact of each category of building costs and how it will impact other areas, and to optimize the value that can be derived from facilities while controlling costs.

Facilities costs fall broadly into two categories:

Building related expenses are the expenses incurred in construction, maintenance and renewal of the facility to its original state, and are generally included in the facilities maintenance and operations (M&O) budget.

Program related expenses are the expenses incurred through the occupation and use of the facility. These expenses are not necessarily paid by the M&O Department, they may be departmental expenses which are paid by the program area or the institution. However, these expenses often relate to or impact the costs of building operation, upkeep or renewal.

In the Building related expense category there are five distinct categories. These expenses are:

1. Acquisition or construction: These are the costs to obtain, build, or completely restore the facility.
2. Utilities: This is the cost to provide heating, ventilation, air conditioning, water and sewer service to the facility. This could also include the cost of technology such as telephone, computer connections and Internet service.
3. Daily Maintenance: This is the daily cleaning, trash removal, litter control, grounds and landscape maintenance, and other routine maintenance performed daily to keep the facility operational.
4. Periodic Maintenance: This includes preventative maintenance and occasional breakage repairs performed to keep the facility in good operating order.
5. Capital Renewal: These are the repairs and replacements done to bring the facility back to its original condition. These activities may include the replacement of key building systems or components such as roofs, HVAC systems, etc.

Program related expenses are derived from the activities occurring within the building. Examples include:

1. Specialty Equipment: This is usually equipment that is moved in after construction of the facility – such as lab equipment, but may require specific modifications to the building.
2. Operational Activities: This could include mail services, food services, building security, or other services necessary to support building occupants.
3. Remodel, Renovation or Adaption: This is building reconstruction that is beyond what is required for capital renewal. Examples include updating décor, making changes to accommodate new building activities, or to adapt for changing uses. It can also be building modifications to meet new code requirements which have been implemented.

Managing Facilities TCO at Los Angeles Southwest College:

- Building and Program related expenses at Los Angeles Southwest College (LASC) are funded by a combination of operating and capital budget accounts:
- New Construction, Remodeling, Renovation or Adaption projects are generally covered out of Bond funds – although Scheduled Maintenance Project (SMP) or Deferred Maintenance funds may be used for Remodeling, Renovation and Adaption.
    - Voters in Los Angeles approved the Los Angeles Community College District (LACCD) $3.3B Bond Measure in November 2016.

- Scheduled Maintenance Project or SMP funds come from the State to the District. The District allocates the funds (Block Grant) based on FTES. The college generally splits the funds (50/50) between Instructional Equipment and Scheduled Maintenance (SMP). SMP projects are the college's choice and must be eligible for State Funding.
- Deferred Maintenance funds are distributed to college's based on District needs. Each college in the District gets at least one project.
- California Proposition 39 "Clean Energy Jobs Act" funds are utilized for energy savings projects.

- Capital Renewal projects are generally covered with SMP or Deferred Maintenance funds.
- Utility costs as well as daily and preventative maintenance costs are covered out of M&O's operating budget.
- Specialty equipment may be purchased with Bond monies when outfitting a building as part of a new construction project or major building renovation. Replacing specialty equipment is generally done with Physical Plant and Instructional Support (PPIS) block grant funds.
- Operational Activities are funded through the campus operating budget.

In order to optimize LASC's Facilities TCO, it is important to have a very close understanding of each of the costs that are being charged against the various funding sources. This goes beyond identifying the replacement or equipment or building components at the end of their life cycle. In fact, if the maintenance and operations (including utility costs) of equipment is rising, it may be very cost effective to replace the equipment with more energy efficient equipment that could also have a lower maintenance cost. Well targeted capital expenditures can become an investment that will reduce annual operating costs.

An excellent example of the TCO approach to managing LASC's campus facilities costs is the current analysis of Central Plant capacity requirements. Proposed upgrades to the Central Plant will insure that future (planned) facilities are supported, and that alternative energy sources (solar) and storage capabilities are incorporated into the recommended project.

LASC Facilities' Total Cost of Ownership is detailed on the following table including Campus Buildings as well as Infrastructure.

CAMPUS BUILDINGS										
Building	**Year Built**	**Last Reno-vation**	**Replacement Cost**	**Gross SF**	**FCI % (2017)**	**Total Repair Cost**	**Operat-ing Cost $10.23**	**Capital Renewal Cost 0.015**	**75 Year Amort.**	**Total Cost of Owner-ship**
Cox Building A (Theatre)	1974	2013	$9,629,170	19,036	27.70%	$2,667,467	$194,676	$144,438	$128,388.93	$467,503
Cox Building B	1974	2013	$49,761,224	95,645	25.86%	$12,869,300	$978,138	$746,418	$663,482.99	$2,388,039
Technology Educ. Building	1994	N/A	$26,794,800	54,000	12.56%	$3,365,275	$552,245	$401,922	$357,264.00	$1,311,431
Lakin PE Building - A	1997	2013	$19,411,202	31,865	0.00%	$0	$325,876	$291,168	$258,816.03	$875,860
Lakin PE Building - B	1997	2013	$23,318,651	36,340	0.26%	$60,586	$371,640	$349,780	$310,915.35	$1,032,335
Student Services Ed. Ctr.	2005	2011	$29,682,701	62,038	3.26%	$968,074	$634,447	$445,241	$395,769.35	$1,475,457
Student Services Building	2009	N/A	$29,130,214	67,266	0.04%	$11,539	$687,913	$436,953	$388,402.85	$1,513,269
School of Career & Tech. Ed.	2015	N/A	$24,291,976	48,833	0.39%	$93,998	$499,403	$364,380	$323,893.01	$1,187,676
Child Development Center	2007	N/A	$9,942,845	22,056	0.79%	$78,745	$225,561	$149,143	$132,571.27	$507,275
Temp. Academic Village	2012	N/A	$11,309,217	33,865	2.75%	$310,904	$346,329	$169,638	$150,789.56	$666,757
West Campus	2013	N/A	$3,396,939	10,172	12.27%	$416,799	$104,027	$50,954	$45,292.52	$200,273
Field House	2009	N/A	$9,745,368	19,640	0.03%	$2,889	$200,853	$146,181	$129,938.24	$476,972
Maintenance and Operations	2008	N/A	$12,379,067	25,575	0.00%	$0	$261,549	$185,686	$165,054.23	$612,289
Campus Security Building	2009	N/A	$1,927,317	3,966	0.00%	$0	$40,559	$28,910	$25,697.56	$95,167
Total Campus Buildings	N/A	N/A	$260,720,691	530,297	N/A	$20,845,576	$5,423,217	$3,910,810	$3,476,276	$12,810,303

CAMPUS INFRASTRUCTURE

Building	Year Built	Last Reno-vation	Replacement Cost	Gross SF	FCI % (2017)	Total Repair Cost	Operat-ing Cost $10.23	Capital Renewal Cost 0.015	75 Year Amort.	Total Cost of Owner-ship
Central Plant	2009	N/A	$14,698,320	4,800	0.30%	$43,438	$0	$220,475	$195,977.60	$416,452
East Pump House	2011	N/A	$4,299,259	1,404	0.00%	$0	$0	$64,489	$57,323.45	$121,812
Electric Switchgear Building	2008	N/A	$828,778	960	4.44%	$36,828	$0	$12,432	$11,050.37	$23,482
Emergency Generator Bldg.	2005	N/A	$474,821	550	0.00%	$0	$0	$7,122	$6,330.95	$13,453
Power Unit Substation	2014	N/A	$1,132,996	734	0.00%	$0	$0	$16,995	$15,106.61	$32,102
Pool Equipment Building	2012	N/A	$1,799,325	2,500	17.07%	$307,219	$0	$26,990	$23,991.00	$50,981
Stadium Home Concessions	2009	N/A	$9,134,393	2,983	0.10%	$9,051	$0	$137,016	$121,791.91	$258,808
Stadium Restrooms, Tickets	2013	N/A	$3,137,167	4,696	0.96%	$5,769	$0	$47,058	$41,828.89	$88,886
Baseball Press Box, Dugouts	2009	N/A	$19,836	1,820	64.44%	$12,783	$0	$298	$264.48	$562
NE Parking Structure P8	2013	N/A	$20,760,349	232,896	14.34%	$2,977,882	$0	$311,405	$276,804.65	$588,210
West Parking Structure P4	2013	N/A	$13,207,072	148,161	0.00%	$149,913	$0	$198,106	$176,094.29	$374,200
Facilities Storage (2)	2008	N/A	$1,879,426	2,177	0.00%	$0	$0	$28,191	$25,059.01	$53,250
Storage Containers (18)	2002-2015	N/A	$191,628	5,441	0.00%	$0	$0	$2,874	$2,555.04	$5,429
Total Campus Infrastructure	N/A	N/A	$71,563,370	409,122	N/A	$3,542,883	$0	$1,073,451	$954,178	$2,027,629
Total LASC ex. MCHS	N/A	N/A	$332,284,061	939,419	6.87%	$24,388,459	$5,423,217	$4,984,261	$4,430,454	$14,837,932
Middle College HS	2011	N/A	$22,753,405	52,541	0.08%	$19,280	$0	$341,301	$303,378.73	$644,680
Total LASC with MCHS	N/A	N/A	$355,037,466	991,960	6.87%	$24,407,739	$5,423,217	$5,325,562	$4,733,833	$15,482,612

OPERATING COST

		FY 2015-16 Expenditure		FY 2016-17 Final Budget		FY 2017-18 Pre. Budget	
Major Function	**Description**	**Amount**	**% of Total**	**Amount**	**% of Total**	**Amount**	**% of Total**
6500	Maintenance and Operations	$5,172,594	$0	$5,376,298	$0	$5,423,217	18.0%
	Campus Building GSF	$530,297		$530,297		$530,297	
	Annual Cost per GSF	$10		$10		$10	

The single largest challenge facing Facilities is the underutilization of spaces within existing buildings.

The plans on the following pages illustrate the current utilization based on LACCD 2018-22 5YR Construction Plan.

Contributing factors include: Lower or less growth than expected in enrollment is the greatest contributer to underutilization.

As growth does occur, factors such as scheduling and staffing levels can be an issue affecting the fiscal result of that growth.

Physical factors such as configuration, and technology capabilities that do not match the facilities requirements established through program review and the educational master plan are also contributers.

Enrollment - LASC currently offers 63 degree programs & 44 certificate programs and is projecting conservative enrollment growth over the next 5 years per the draft 2016 Financial Recovery plan.

Strategies for improvement -

- Dual enrollment – Students taking classes at High School during the week and at LASC on weekends extending the overall days the facilities are used.
- Increasing Middle College High School dual enrollment where High School students already on campus attend courses held in LASC buildings.
- Expansion of the Middle College High School program enrollment by creating either new space adjacent to the existing facility or within existing buildings on LASC campus.
- Use of west campus portable classrooms which offer an outdoor area to train qualified locals in the construction industry to support the Los Angeles World Airports project.

Scheduling - Strategies for improvement:

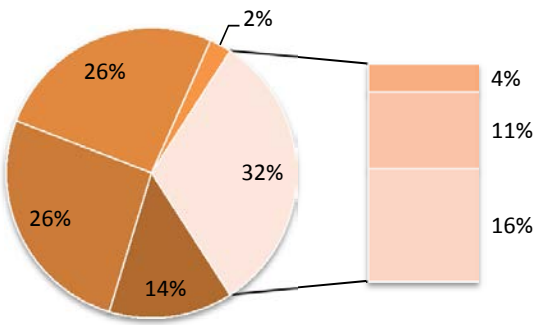
- Increase average class size from 31.4 to 35.0 – note the historical average class size trends referenced in the LASC Financial Recovery Plan.

Physical factors - Strategies for improvement through thoughtful planned renovations to include:

- Development of high quality, flexible, interdisciplinary learning environments that support state-of-the-art technology infrastructure including wifi and audio visual capabilities, improve acoustics and thermal comfort, and allow for flexibility.
- Consolidate and intensify use of spaces such as computer labs by combining resources to extended hours and increase availability through interdepartmental shared use.
- Increase distributed informal study and collaborative space where students from varying majors can relax or take a break from study and learn from one another and engage in informal tutoring.
- Provide utilities (water or gas) or plumbing fixtures (sinks) needed to support specific classroom activities.
- Offset costs of improvements through conservative utility savings based on fine tuning existing infrastructure – does not reflect impact of reclaimed water utilization or drought tolerant landscaping – note discussion of utilities on pages 11-12.

CAMPUS SPACE LOAD RATIOS:

USE TYPE	SF	%
1. LAB	24,295	14%
2. CLASSROOM	46,011	26%
3. OFFICE	45,393	26%
4. STUDY SPACE	4,282	2%
5. CONFERENCE	7,064	4%
6. SPACIAL USE FACILITIES	19,865	11%
7. SUPPORT	28,940	16%
TOTAL	175,850	100%



COX BUILDING

BUILDING SUMMARY

COX BUILDING A (THEATER)	2017 FCI REPORT
Year Built	1974
Last Renovation	2013
Gross SF	19,036
FCI	27.70%
Total Repair Cost	$2,667,467
COX BUILDING B	
Year Built	1974
Last Renovation	2013
Gross SF	95,645
FCI	25.86%
Total Repair Cost	$12,869,300
SPACE UTILIZATION	
Total Number of Classroom/Labs	10
Weekly Room Hours Avaliable	840
Hours used per week	88
Weekly Hours Used Percentage	10.50%

SPACE USE

The Cox Building consists of several departments; Library Science, Theater, Music, Speech, Communication Studies, and Humanities. The Library levels have two smart classrooms that can be used for general classes or library instruction during the Library's operating hours. Study desks, reading lounges, small group study rooms, and computer areas in addition to book stacks are located on each of the three floors in the Library. Faculty offices as well as a Faculty Conference Room and Lounge are also located on the fifth floor. The Cox Annex was added in the previous renovation to provide administrative office space originally located on the fifth floor.

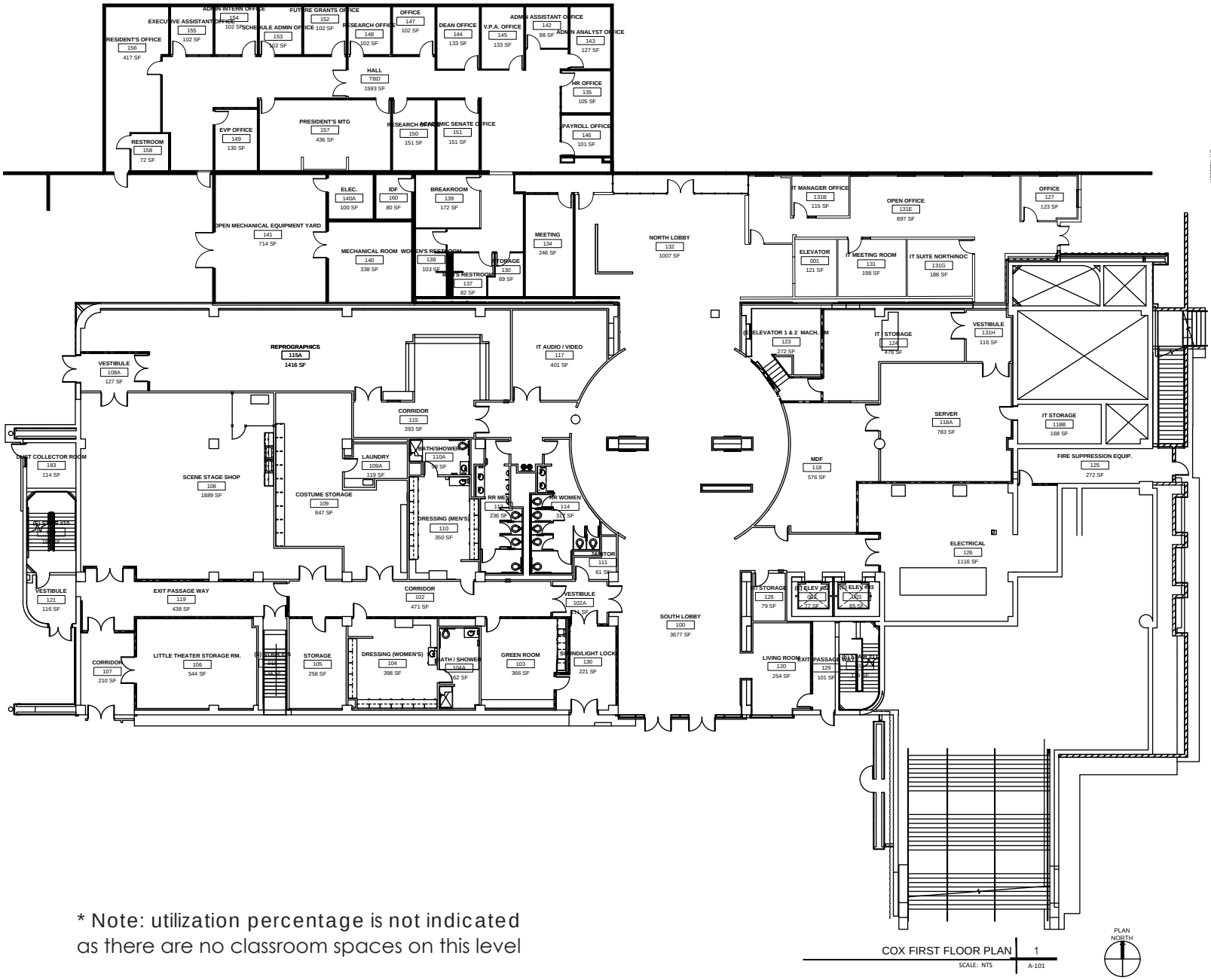
CONDITION SUMMARY

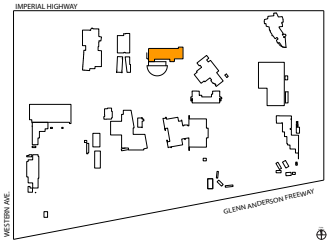
The recent renovation created more classrooms, upgraded technologies, and incorporated environmental strategies for a more pleasant educational environment.

PROJECTS COMPLETED SINCE 2015 RENOVATION

None

* LASC: Summary of Assignable and Support Space by Building



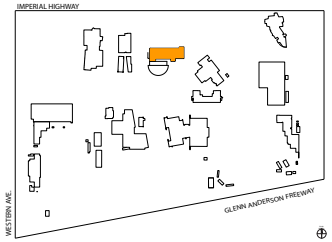


KEY MAP

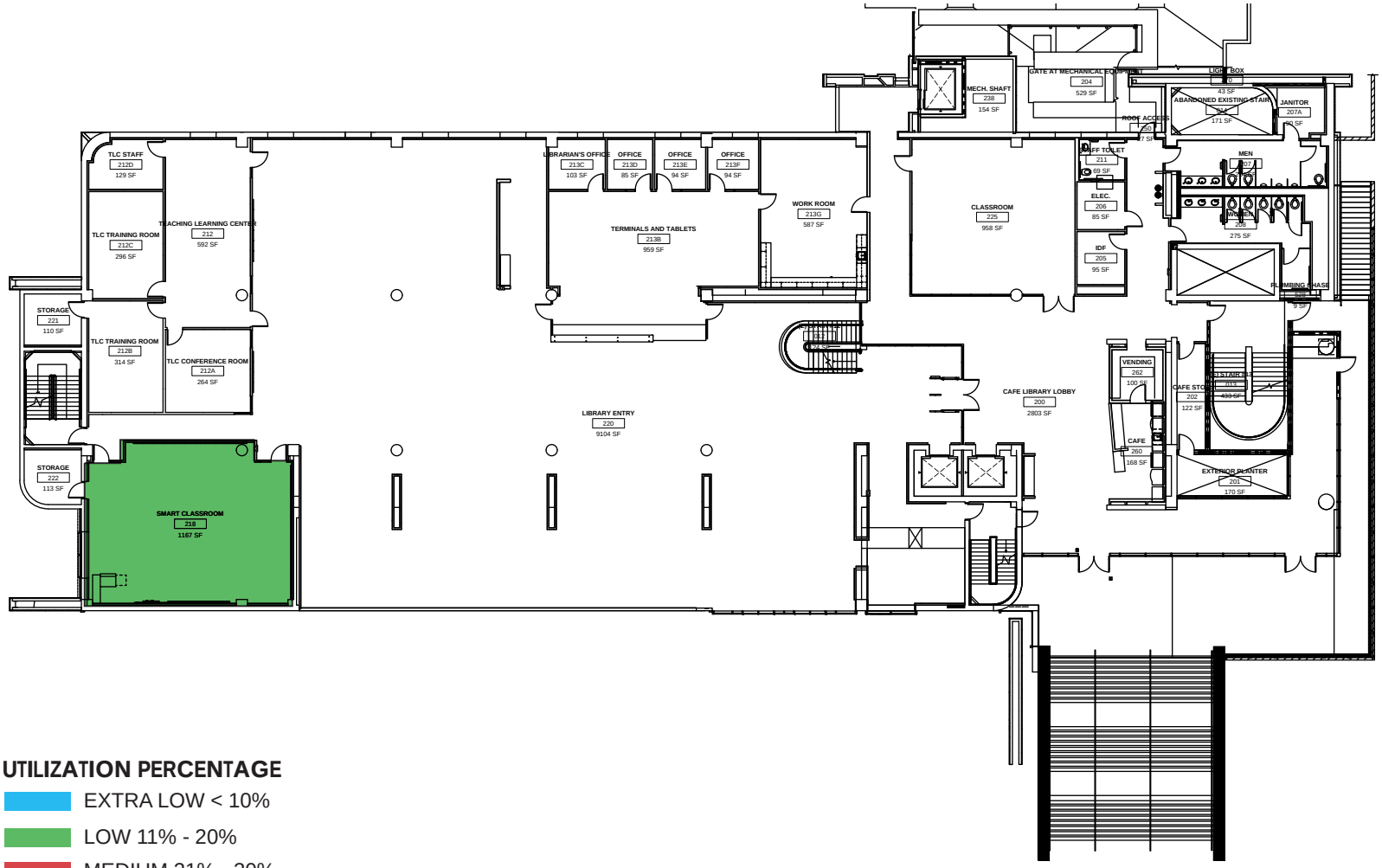
* Note: utilization percentage is not indicated as there are no classroom spaces on this level

COX FIRST FLOOR PLAN
SCALE: NTS
1
A-101

PLAN NORTH



KEY MAP



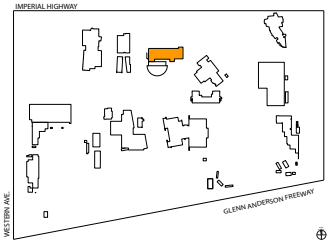
UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

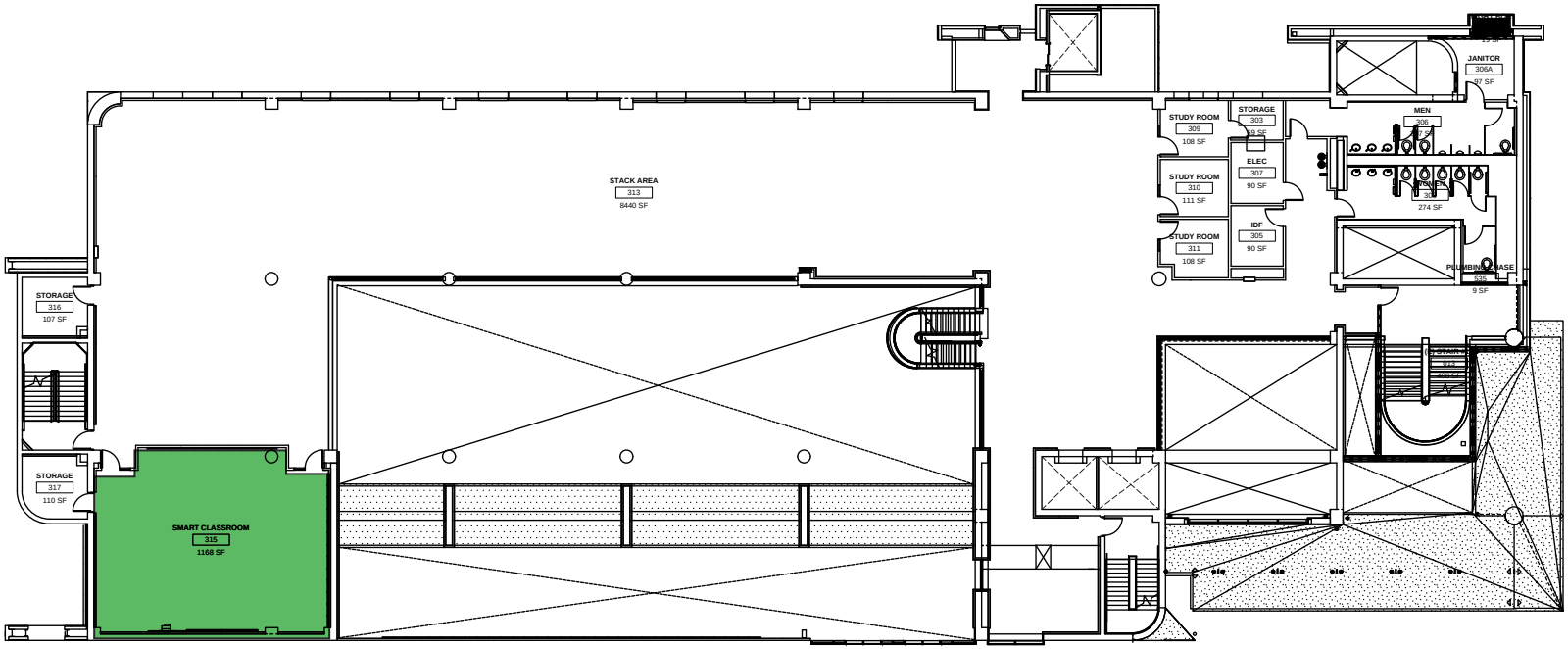
COX SECOND FLOOR PLAN 1
SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building



KEY MAP

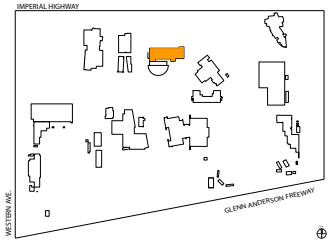


UTILIZATION PERCENTAGE

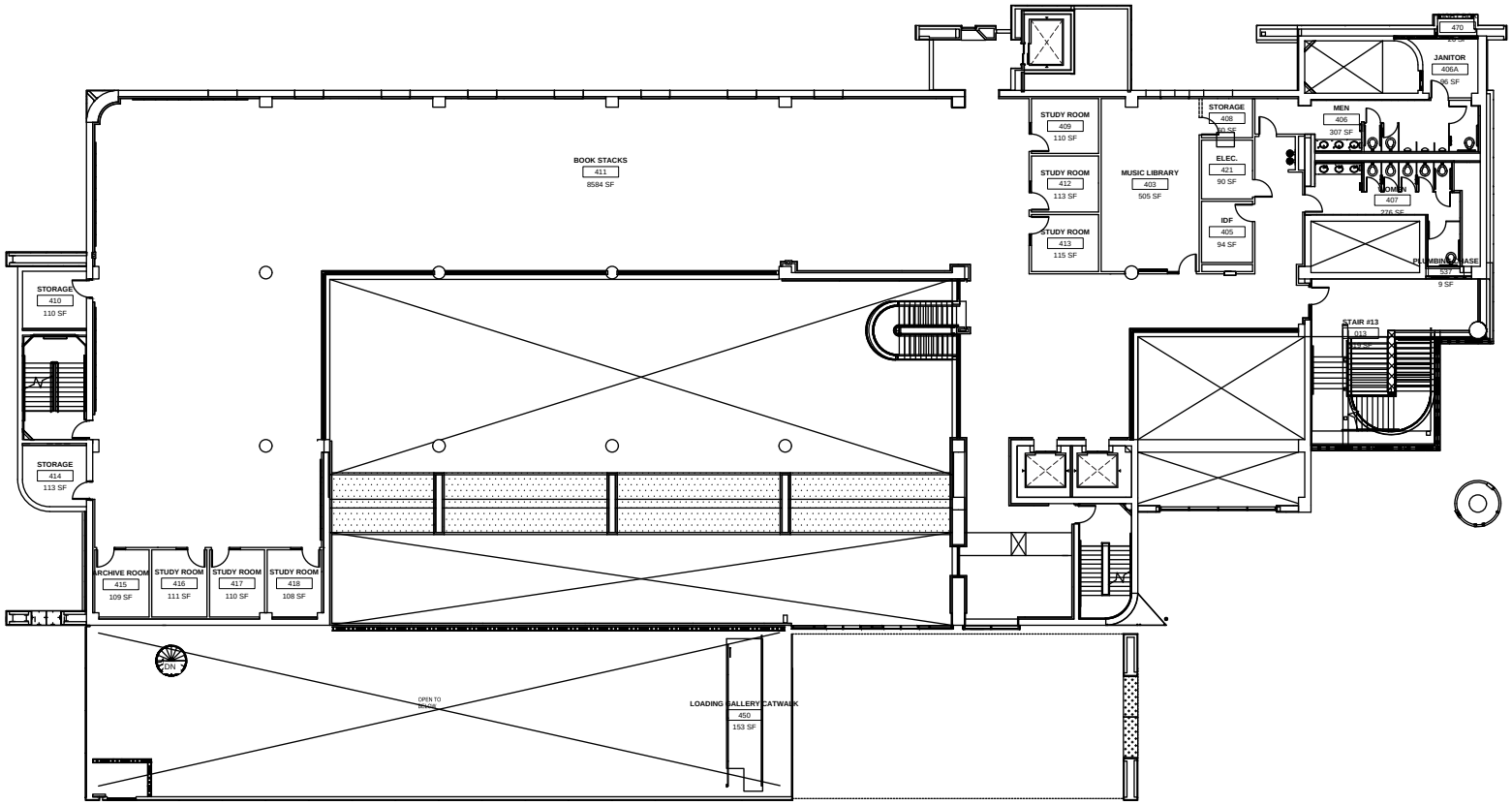
- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

COX THIRD FLOOR PLAN 1
SCALE: NTS

PLAN NORTH



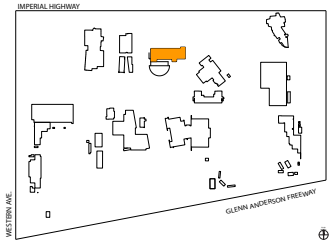
KEY MAP



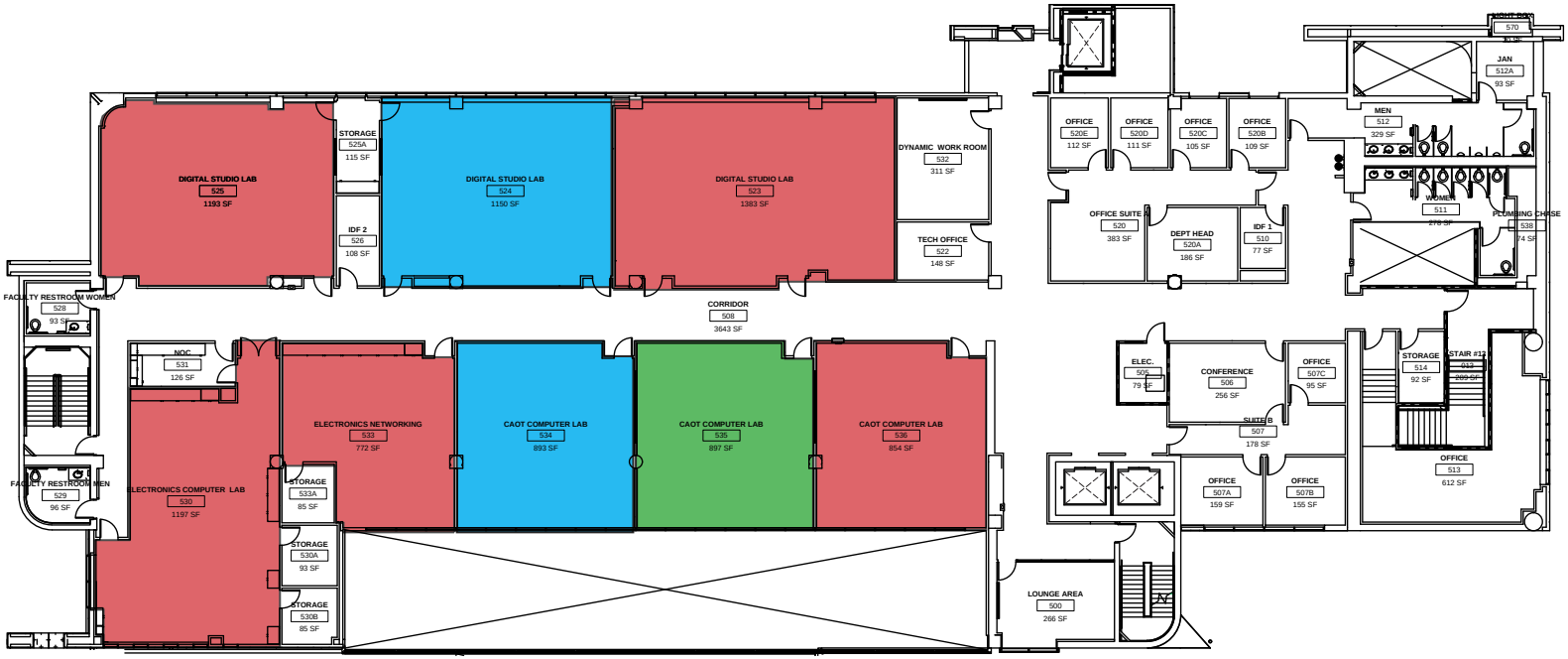
* Note: utilization percentage is not indicated as there are no classroom spaces on this level

COX FOURTH FLOOR PLAN 1
SCALE: NTS

PLAN NORTH



KEY MAP



UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

COX FIFTH FLOOR PLAN 1
SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building

TECHNOLOGY EDUCATION BUILDING

BUILDING SUMMARY

TECH-ED	2017 FCI REPORT
Year Built	1994
Last Renovation	N/A
Gross SF	54,000
FCI	12.56%
Total Repair Cost	$3,365,275
SPACE UTILIZATION	
Total Number of Classroom/Labs	22
Weekly Room Hours Available	1365
Hours used per week	205
Weekly Hours Used Percentage	15.00%

SPACE USE

TEC-ED consists of three floors of general classrooms and computer labs. Departments that utilize these spaces are Art, Computer Science-Information Technology, Electronics, Mathematics, Basic Skills, and English as a Second Language. Faculty office suite is located on the third floor.

CONDITION SUMMARY

- Dated building infrastructure
- Dated classroom technology – many classrooms are "chalk and talk"
- Classroom configurations do not meeting teaching and learning needs
- Dated restroom fixtures and finishes
- Dated elevator cab and controls – water in elevator pit
- Building exterior and interior surfaces require repair and repainting
- Documented water incursion issues – building envelope
- Some fan coils not accessible
- Fire alarm system operates intermittently – may be related to wa ter intrusion
- No electronic door access – interior or exterior
- Limited number of functioning security cameras
- Need to remove obsolete chiller from rooftop and cap roof pen etrations
- No automatic lighting controls
- Sanitation issue due to bird droppings
- Drinking fountains do not function

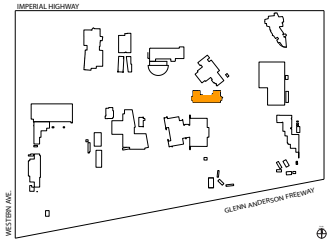
* LASC: Summary of Assignable and Support Space by Building

PROJECTS COMPLETED SINCE 1994 CONSTRUCTION

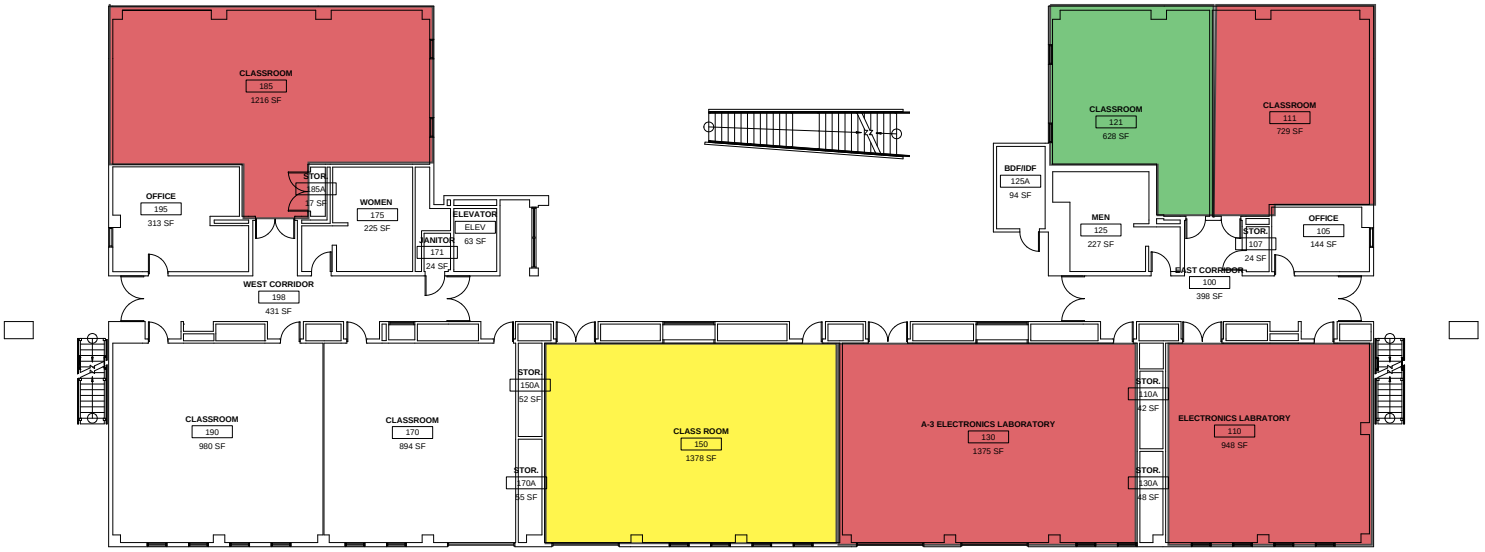
- Connected building to Central Plant (2015)
- Replaced connections to building fan coils (approx. 80) (2015)
- Replaced pneumatic HVAC controls with EMS (2015)
- Replaced chilled and hot water lines throughout building (2016)
- Replaced air handlers (2016)
- Replaced emergency back-up generator (2017)

RECOMMENDATIONS

- Upgrade Infrastructure include HVAC, water proofing, IT
- Upgrade security by improving fire alarm system electronic door access



KEY MAP



UTILIZATION PERCENTAGE

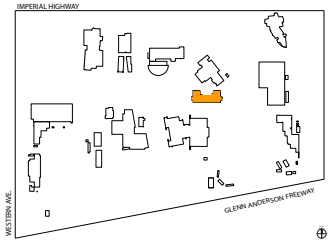
- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

TECHED FIRST FLOOR PLAN 1

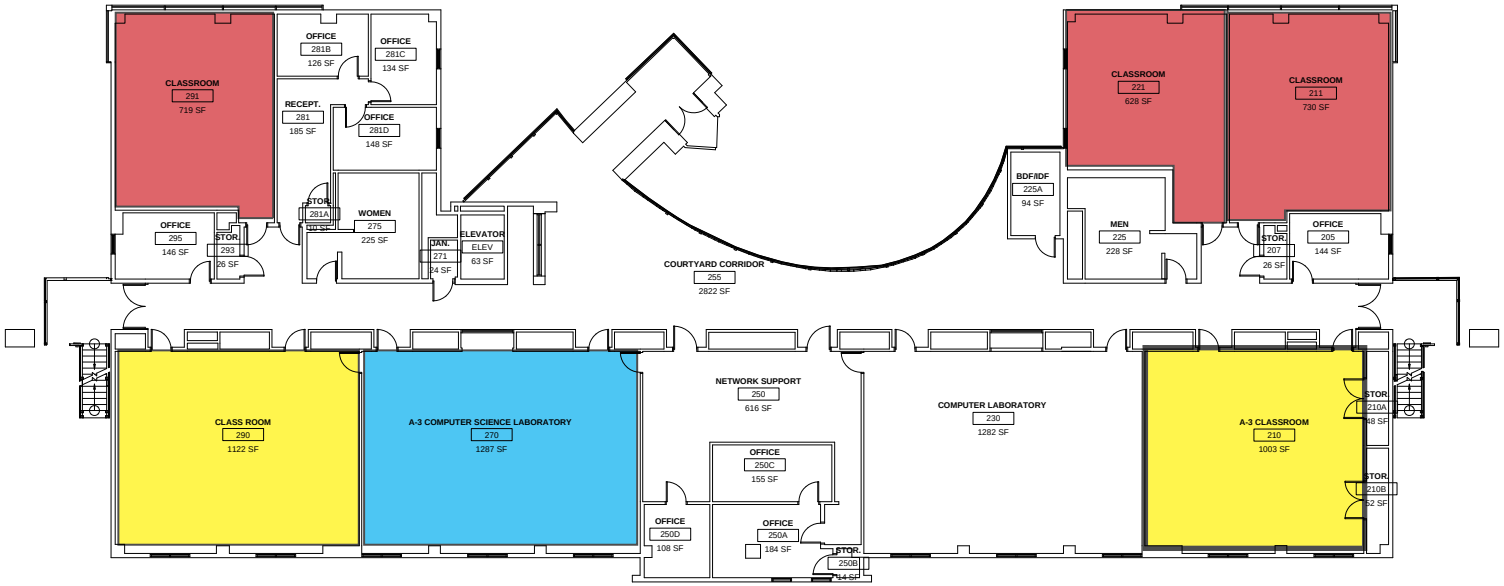
SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building



KEY MAP



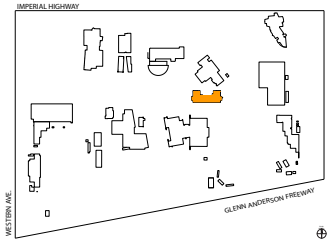
UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

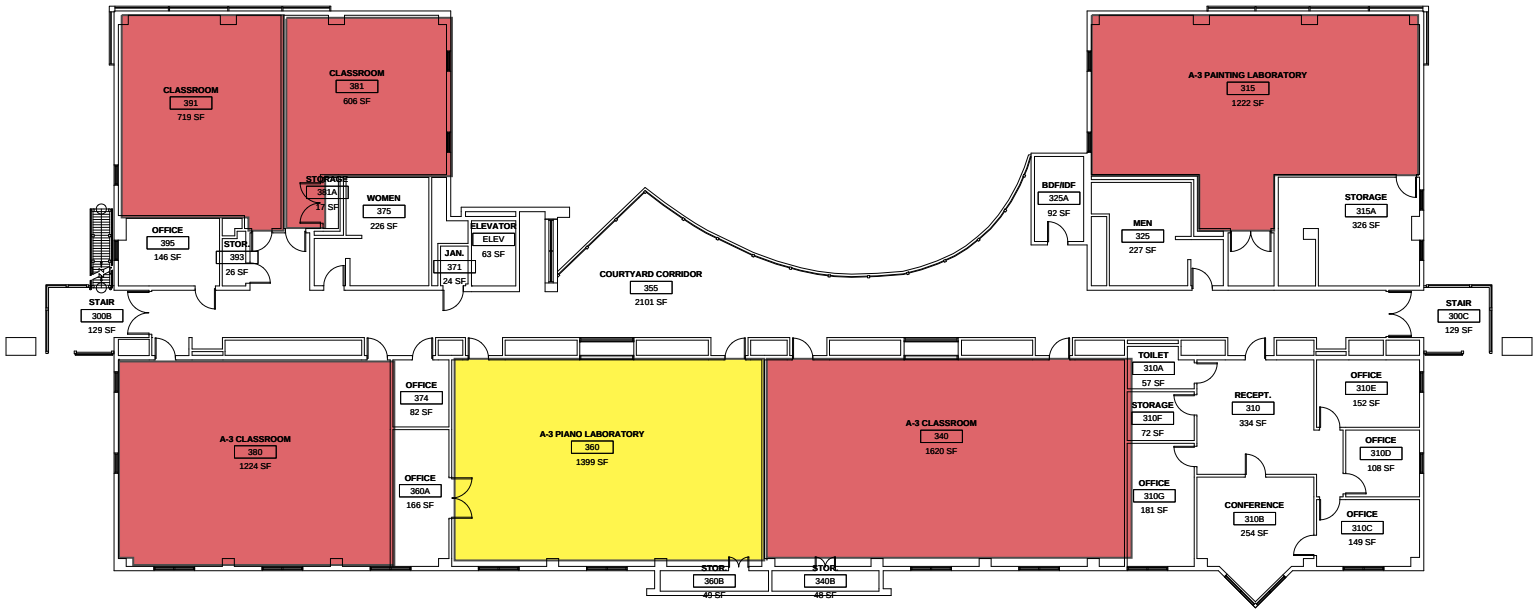
TECHED SECOND FLOOR PLAN 1
SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building



KEY MAP



UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

TECHED THIRD FLOOR PLAN 1

SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building

THOMAS G. LAKIN PHYSICAL EDUCATION BUILDING

BUILDING SUMMARY

LFWC A	2017 FCI REPORT
Year Built	1997
Last Renovation	2013
Gross SF	31,865
FCI	0.00%
Replacement Cost	$-
LFWC B	2017 FCI REPORT
Year Built	1997
Last Renovation	2013
Gross SF	36,340
FCI	0.26%
Replacement Cost	$60,586
SPACE UTILIZATION	
Total Number of Classroom/Labs	6
Weekly Room Hours Avaliable	560
Hours used per week	45
Weekly Hours Used Percentage	8.00%

SPACE USE

The Fitness and Wellness Center was recently modernized to accommodate team sports lockers and additional smart classrooms. Other improvements include gymnasium floor and bleacher repair, lighting, lockers, shower and physical therapy room upgrades. There are two general purpose classrooms setup as smart classrooms. Other rooms are designed for dance, aerobics and fitness. The Kinesology and Health Departments are housed in the Lakin Center.

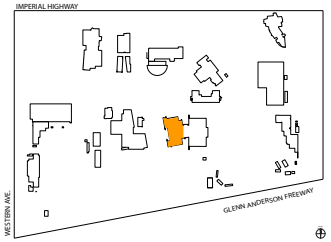
CONDITION SUMMARY

- Main domestic water line requires replacement (approx. 50 yards)
- Lighting controls to outdoor swimming pool not operating
- Bleachers require structural maintenance and repairs
- Documented water incursion issues
- Entry doors require constant maintenance
- No electronic door access
- Elevator clearance issue on 2nd floor
- Limited and challenging accessibility to rooftop mechanical equipment
- Sanitation issue due to bird droppings

PROJECTS COMPLETED SINCE 2013 RENOVATION

- Outdoor swimming pool boiler replaced (2015)
- Outdoor swimming pool chemical room refurbished (2015)
- Repaired domestic waterline (2016)
- LED retrofit of main gym – in final punch list

* LASC: Summary of Assignable and Support Space by Building



KEY MAP

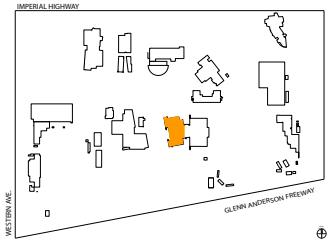
UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

LFWC FIRST FLOOR PLAN 1
SCALE:NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building



KEY MAP

UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

LFWC SECOND FLOOR PLAN 1

SCALE:NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building

STUDENT SERVICES EDUCATION CENTER

BUILDING SUMMARY

SSEC	2017 FCI REPORT
Year Built	2009
Last Renovation	2011
Gross SF	62,038
FCI	3.26%
Total Repair Cost	$968,074
SPACE UTILIZATION	
Total Number of Classroom/Labs	22
Weekly Room Hours Avaliable	1540
Hours used per week	291
Weekly Hours Used Percentage	18.90%

SPACE USE

SSEC consists of three floors of general classrooms and labs. Disciplines that utilize these spaces are Administration of Justice, English, Reading, Spanish, Basic Skills, ESL, Saturday classes, Education, Counseling, French, History, Journalism, Mathematics, Political Science, Psychology, Anthropology, Sociology, Philosophy and American Sign Language Fingerprinting. Faculty offices are on the first and second floors and the Non-Credit Adult and Continuing Education Service Center is located on the first floor.

CONDITION SUMMARY

- Dated building infrastructure
- Dated classroom technology
- Classroom configurations do not meeting teaching and learning needs
- Dated restroom fixtures and finishes
- Building exterior and interior surfaces require repair and repainting
- Flooring in common areas requires replacement – trip hazards
- Documented water incursion issues - windows
- Electronic door access works intermittently (interior)
- No exterior electronic door access
- Limited number of functioning security cameras
- No automatic lighting controls
- Recommissioning required for building HVAC controls
- Need to replace instant hot units for restrooms
- No actuators on exterior doors
- Sanitation issue due to bird droppings

* LASC: Summary of Assignable and Support Space by Building

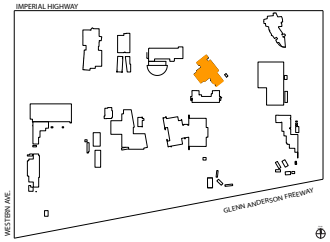
- Upgrading elevator controls, door package and cooling system (Fall 2017)

PROJECTS COMPLETED SINCE 2012 CONSTRUCTION

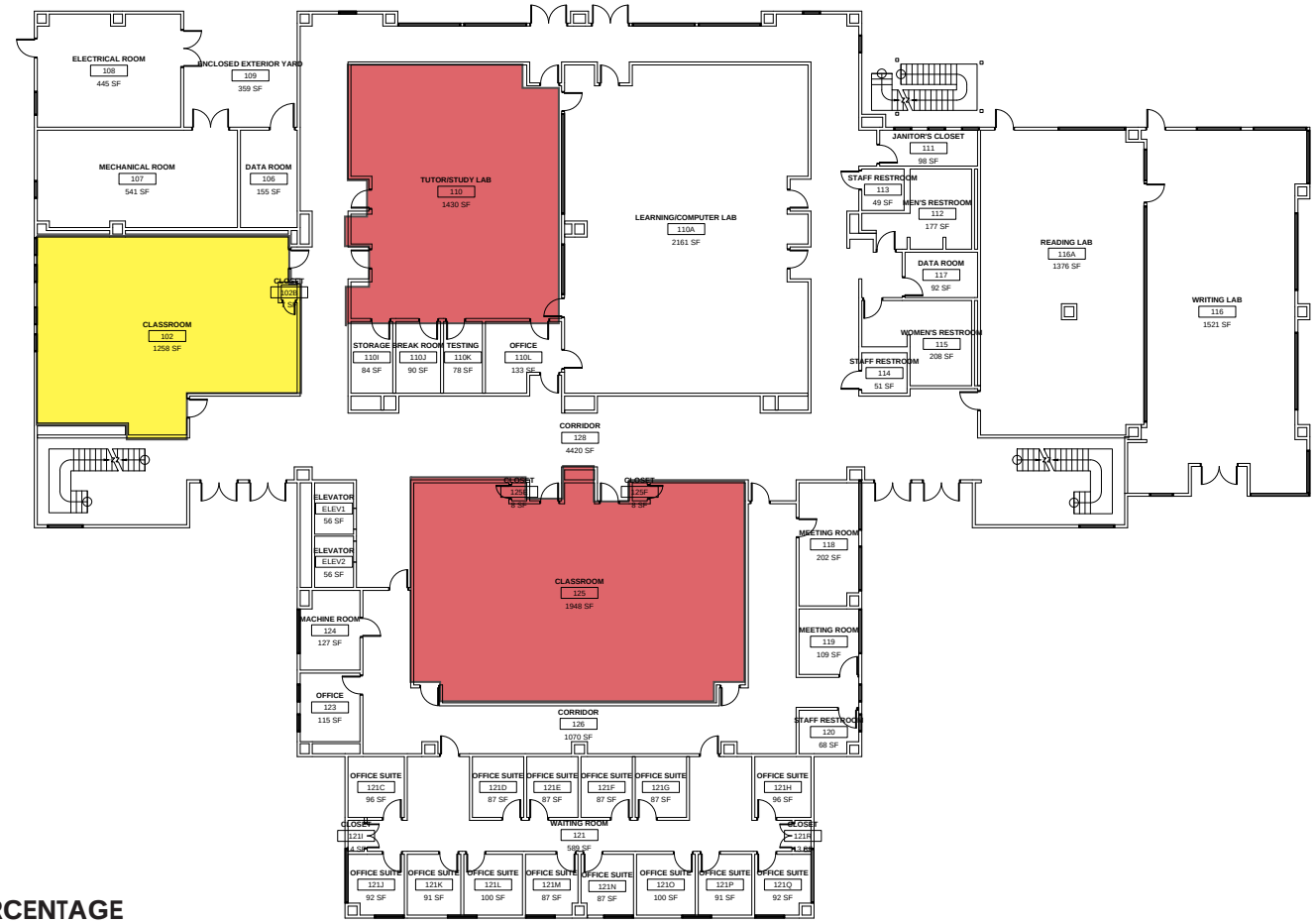
- Replaced HVAC controls (2015) – tied in to main EMS
- Repaired automatic entry doors (2016)

RECOMMENDATION

- Priority to renovate per measure CC



KEY MAP



UTILIZATION PERCENTAGE

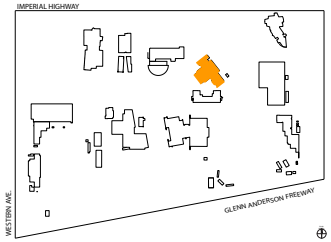
- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

SSEC FIRST FLOOR PLAN 1

SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building



KEY MAP

UTILIZATION PERCENTAGE

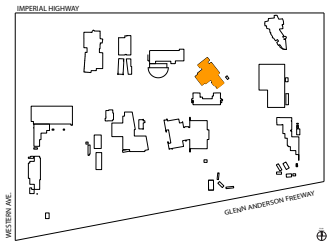
- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

SSEC SECOND FLOOR PLAN 1

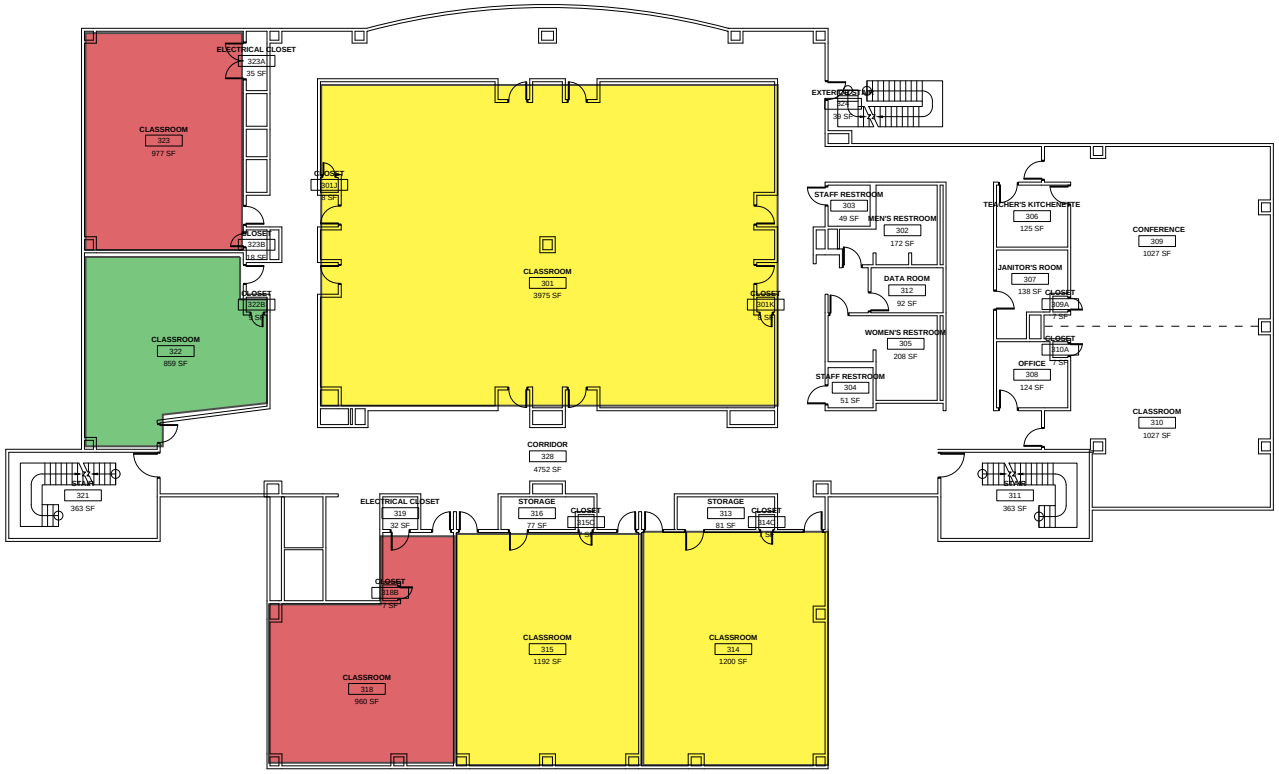
SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building



KEY MAP



UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

SSEC THIRD FLOOR PLAN 1

SCALE: NTS

PLAN NORTH

* LASC: Summary of Assignable and Support Space by Building

STUDENT SERVICES BUILDING

BUILDING SUMMARY

SSB	2017 FCI REPORT
Year Built	2009
Last Renovation	N/A
Gross SF	67,266
FCI	0.04%
Total Repair Cost	$11,539

* Note: utilization percentage is not indicated for this building as there are no classroom spaces in the building.

SPACE USE

SSB houses the Bookstore and offices that provide services to students including Admissions and Records, Financial Aid, Business Office, ASO Offices, Health Center, Counseling, Assessment, Veterans Center, Bridges to Success, Disabled Students Programs and Services (DSPS), TRIO Scholars, Talent Search, Upward Bound, Cal Works and Extended Opportunity Programs and Services (EOPS). A Central two story atrium space is used as student lounge area.

CONDITION SUMMARY

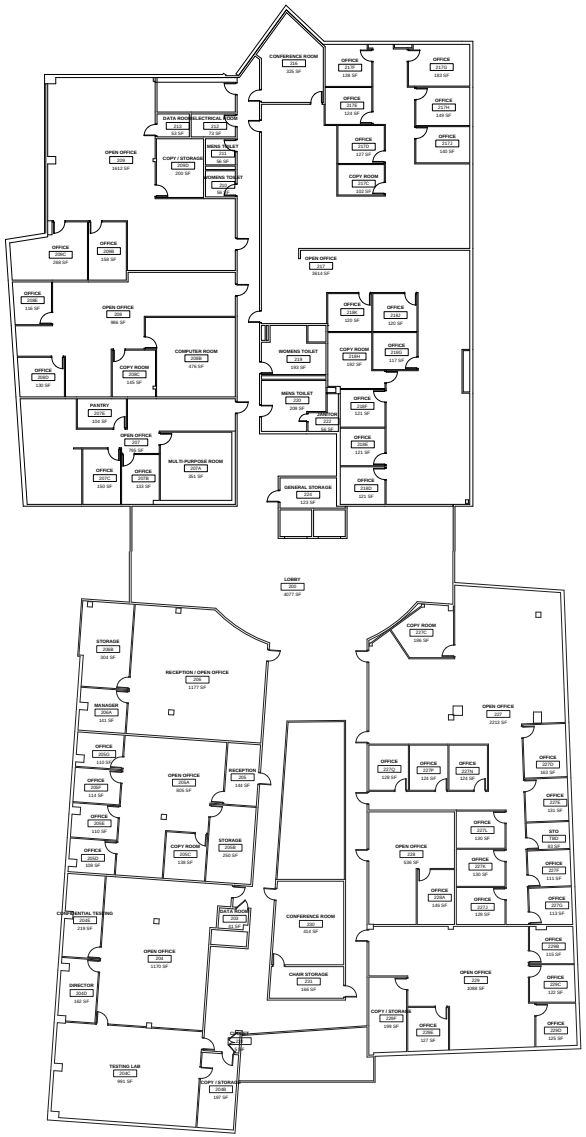
- HVAC system requires retro-commissioning, repair and upgrading – cooling and heating issues – not tied into EMS
- Dated restroom fixtures and finishes
- Office layout and design does not meet operational needs
- Limited space for ASO offices, clubs and activities
- Mechanical system to support food services not in SSB College Store – originally intended as student cafeteria and lounge space
- No lounge area for students to study and work on group projects
- No electronic door access – interior or exterior
- Limited number of functioning security cameras
- No automatic lighting controls
- No actuators on exterior doors
- Need for "carnival" electrical outlet to support outdoor events

PROJECTS COMPLETED SINCE 2011 CONSTRUCTION

- Collected trend data – ready to initiate HVAC retro commissioning project on State Board hold (2017)

RECOMMENDATION

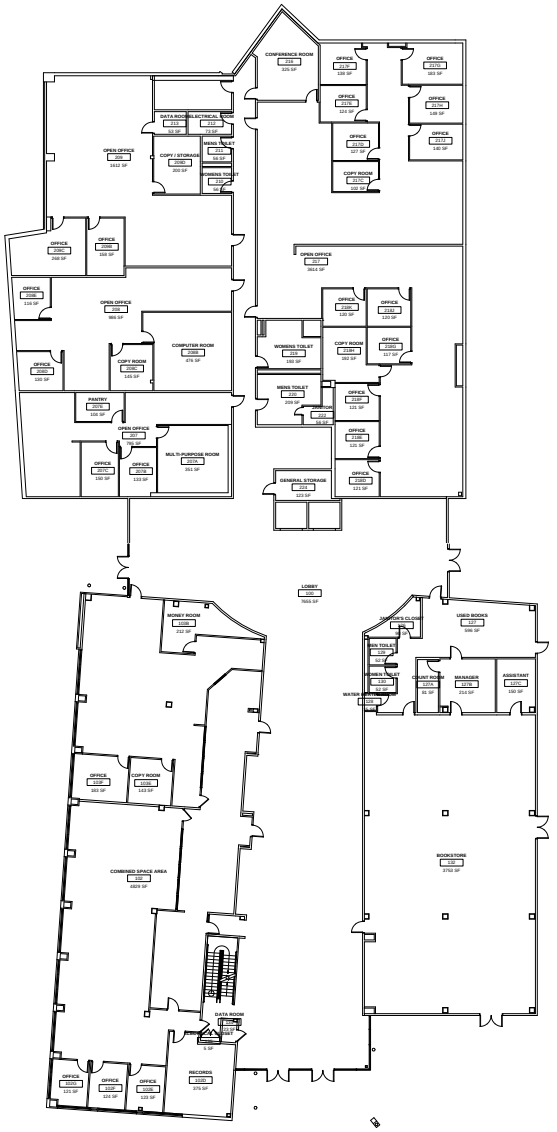
- Develop plan to improve functional adjacencies



SSB SECOND FLOOR PLAN 1

SCALE: NTS

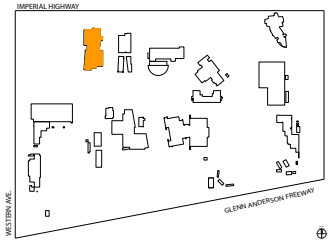
PLAN NORTH



SSB FIRST FLOOR PLAN 1

SCALE: NTS

PLAN NORTH



KEY MAP

SCHOOL OF CAREER AND TECHNICAL EDUCATION (SoCTE)

BUILDING SUMMARY

SoCTE	2017 FCI REPORT
Year Built	2015
Last Renovation	N/A
Gross SF	48,833
FCI	0.39%
Total Repair Cost	$93,998
SPACE UTILIZATION	
Total Number of Classroom/Labs	10
Weekly Room Hours Avaliable	650
Hours used per week	86
Weekly Hours Used Percentage	13.20%

SPACE USE

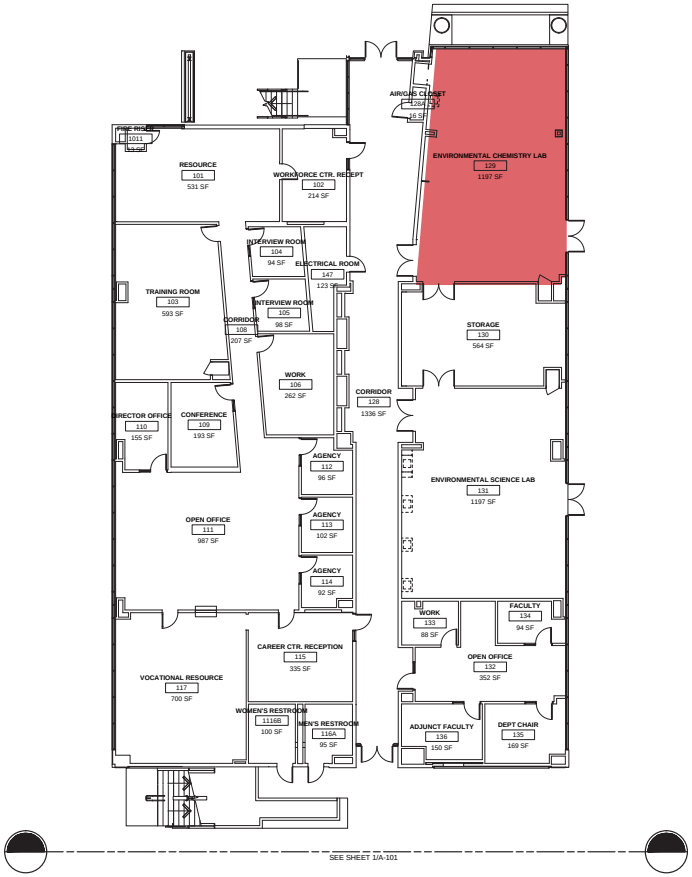
SoCTE is one of the newest buildings on campus with two floors of classrooms, computer classroom, labs and faculty offices. Departments using these classrooms include Accounting, Business, Computer Applications, Office Technologies, Compute Science – Information Technology, Counseling, Economics, English, International Business, Management, Nursing Skills Lab, Real Estate, Physics, Academic Preparation, Basic Skills, English as a Second Language and Vocational Education. The SoCTE building also houses the Career Center, CTE Programs, Pathways, FYE and Passages.

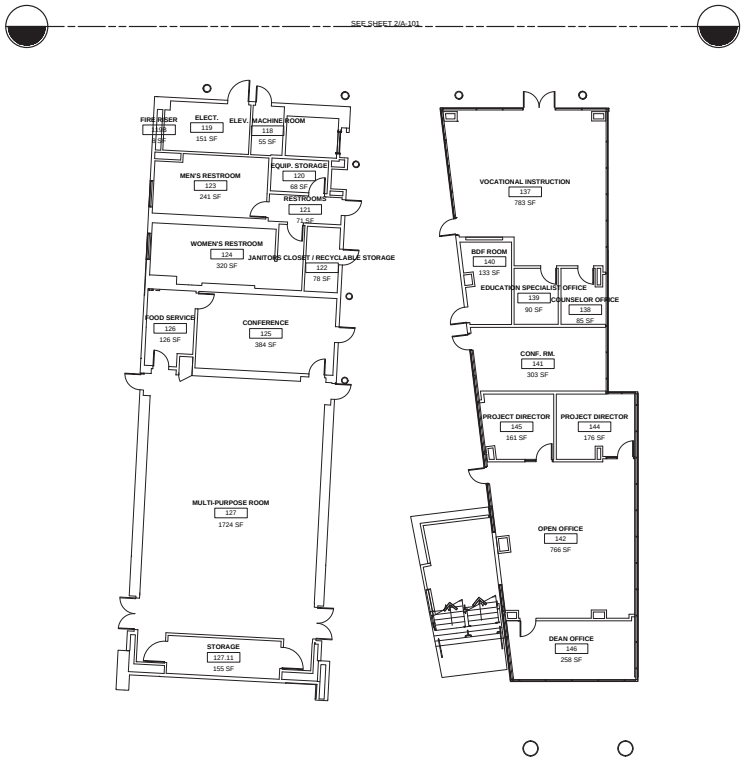
CONDITION SUMMARY

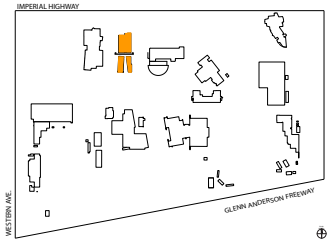
- Electronic door access works intermittently (exterior)
- No actuators on exterior doors
- Limited number of functioning security cameras
- Building HVAC not tied in to main campus EMS system
- Awnings or sunshades required – east to west on south end of building – generates excessive heat transfer
- Multi-Purpose Room has limited capacity (75) for campus and community events
- Plumbing design issue results in water leaks in common area ceilings

RECOMMENDATION

- Utilize space in SoCTE Building to develop an integrated work source partnership with County of Los Angeles







KEY MAP

SOCTE FIRST FLOOR PLAN 1

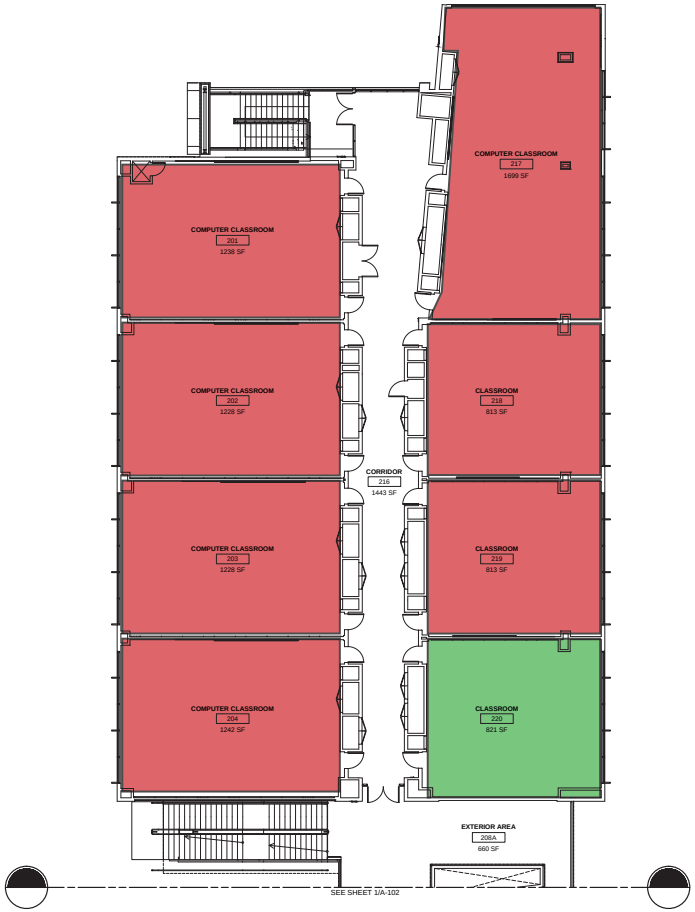
SCALE: NTS

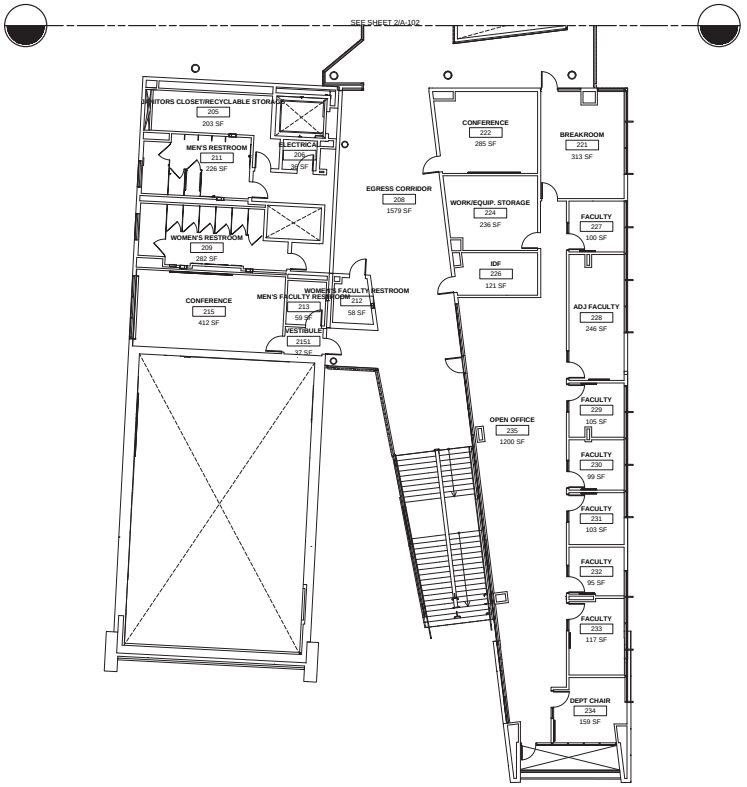
PLAN NORTH

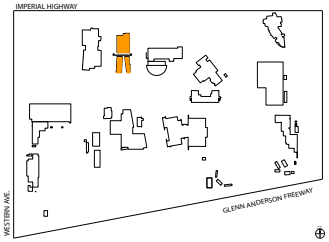
UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

* LASC: Summary of Assignable and Support Space by Building







KEY MAP

SOCTE SECOND FLOOR PLAN 1
SCALE: NTS

PLAN NORTH

UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

* LASC: Summary of Assignable and Support Space by Building

ACADEMIC VILLAGE

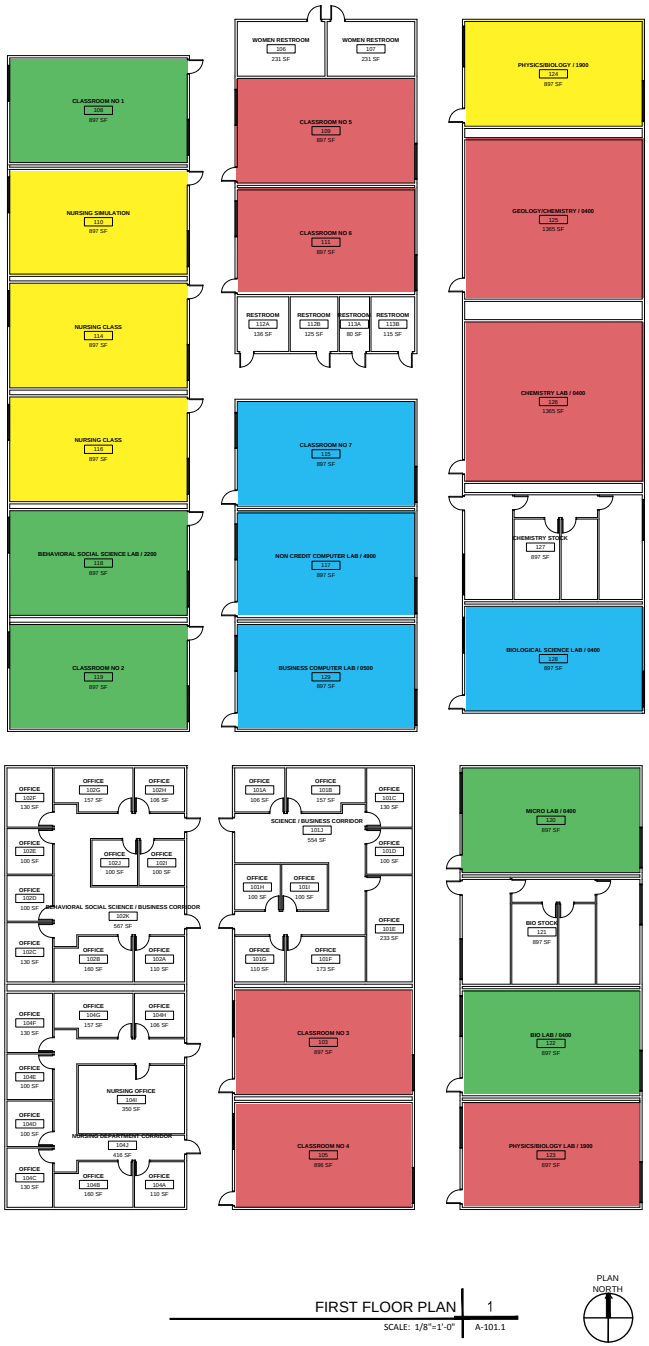
BUILDING SUMMARY

Temporary Academic Village (AV)	2017 FCI Report
Year Built	2012
Last Renovation	N/A
Gross SF	33,865
FCI	2.75%
Total Repair Cost	$310,904
Space Utilization	
Total Number of Classrooms/Labs	20
Weekly Room Hours Available	1,158
Hours Used per Week	457
Building Space Utilization	39.50%

SPACE USE

The temporary Academic Village (33,865 sq. ft.) comprised of 20 leased portable classrooms, labs and offices was established in 2012 to house the Science (Biology, Chemistry, Earth Sciences, Geology) and Nursing programs which were formerly housed in the Lecture Lab (LL) Building that was taken down due to building deficiencies.

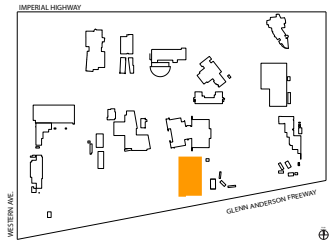
The footprint of the Academic Village will be reduced in the Spring of 2019 when the new School of Science (SoS) is completed. The Nursing program will remain in the Academic Village until the proposed Nursing building is complete in Spring 2020 (est.).



FIRST FLOOR PLAN 1

SCALE: 1/8"=1'-0" A-101.1

PLAN NORTH



KEY MAP

UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

CHILD DEVELOPMENT CENTER

BUILDING SUMMARY

CDC	2017 FCI REPORT
Year Built	2007
Last Renovation	N/A
Gross SF	22,056
FCI	0.79%
Total Repair Cost	$78,745
SPACE UTILIZATION	
Total Number of Classroom/Labs	4
Weekly Room Hours Available	41
Hours used per week	74
Weekly Hours Used Percentage	22.00%

SPACE USE

CDC consists of two floors of general classrooms and offices. Departments that utilize these spaces are child development, Spanish, and ESL. Faculty office suite is located on the first and second floor.

CONDITION SUMMARY

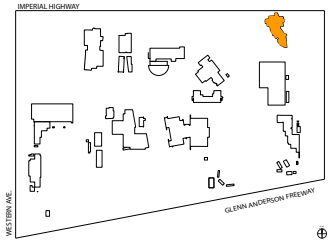
- Dated restroom fixtures and finishes
- Building exterior and interior surfaces require repair and repainting
- Stand-alone HVAC system – difficult to control – not tied to Central Plant
- Electronic door access works intermittently
- Limited number of functioning security cameras
- No automatic lighting controls
- Solar array inverter not working
- Concern about domestic water quality in building
- No actuators on exterior doors

PROJECTS COMPLETED

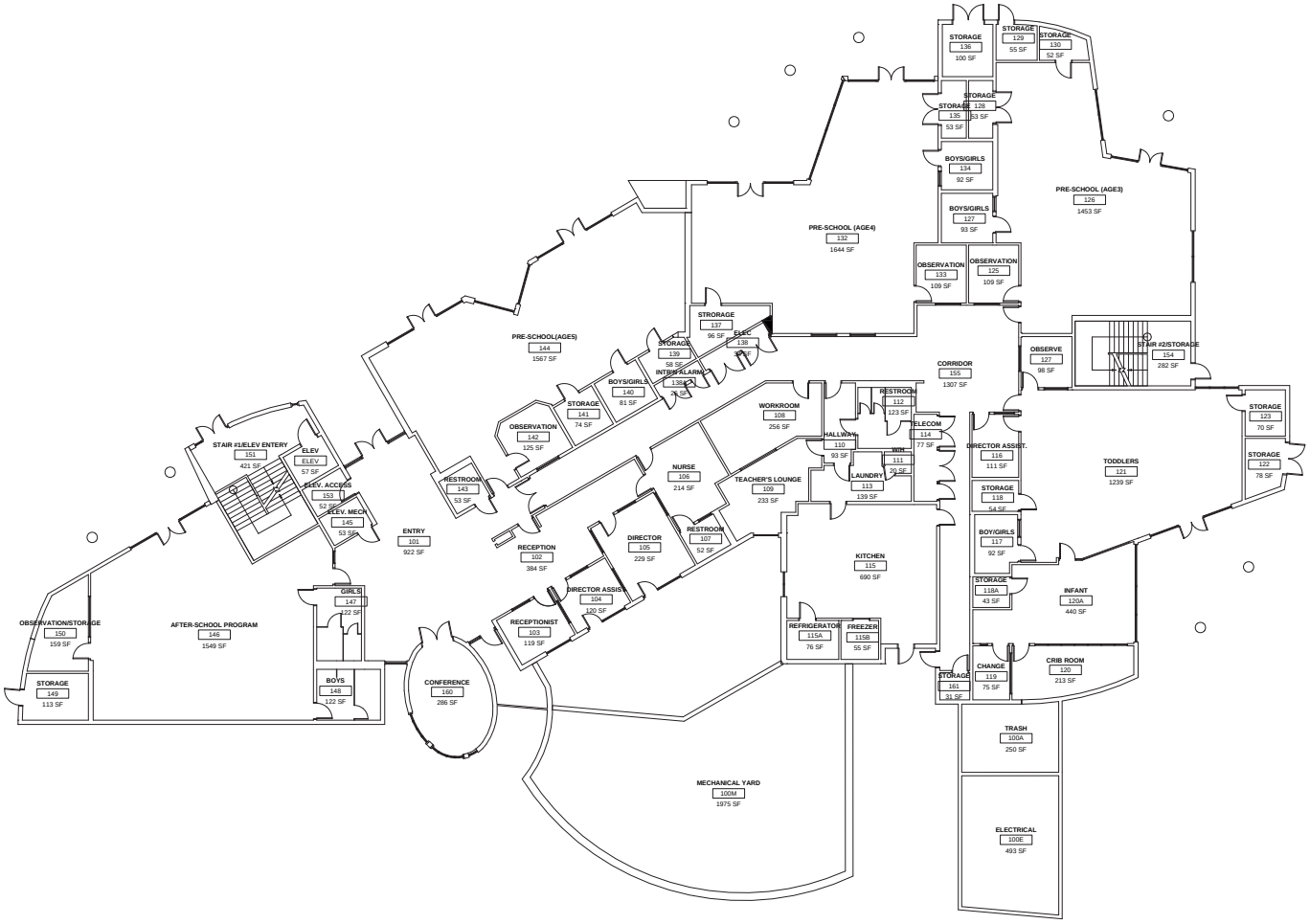
- Re-secured building gutters (2015)
- Replaced emergency back-up generator (2015)
- Repaired automatic entry doors (2016)
- Refurbished playground area (2016)
- Completed ADA project for children's restrooms (2016)

RECOMMENDATION

- Aesthetic renovation and modernization for learning environment, playground, and support spaces.



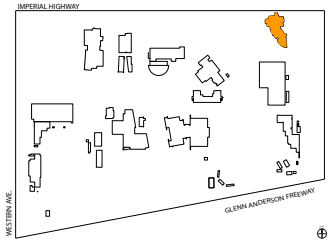
KEY MAP



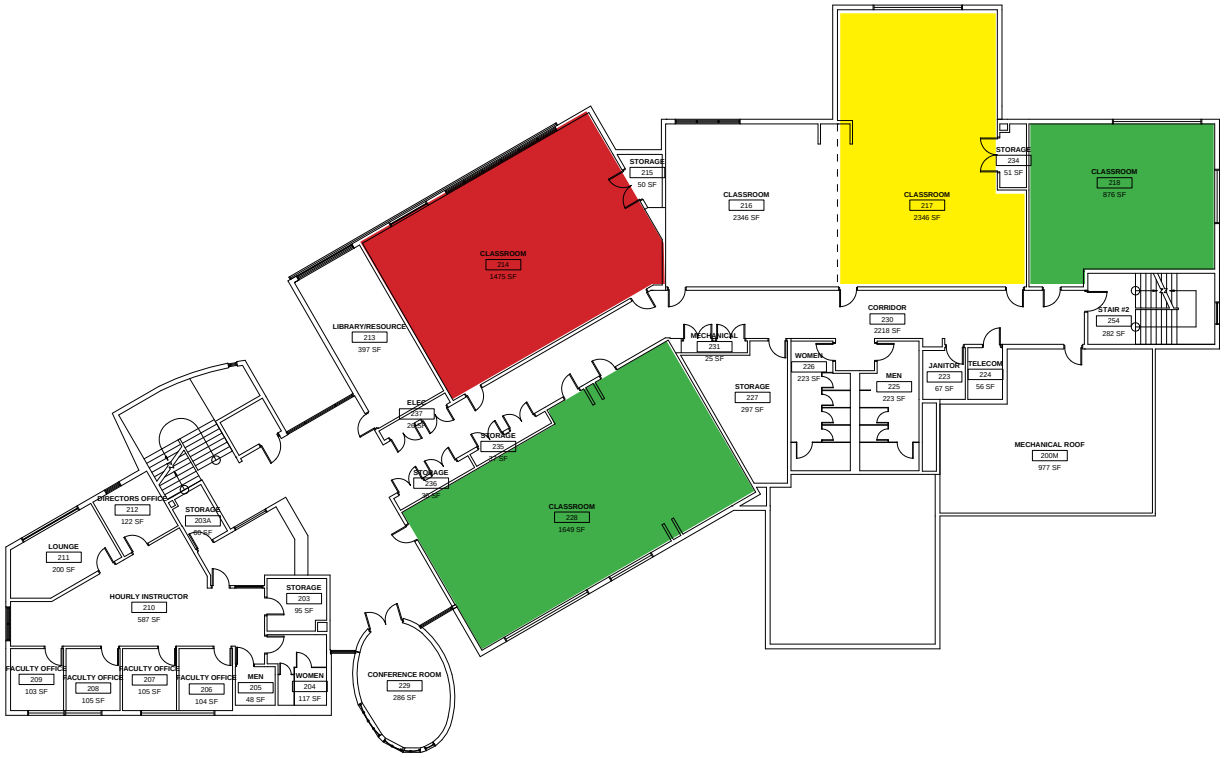
* Note: utilization percentage is not indicated as there are no classroom spaces on this level

CDC FIRST FLOOR PLAN 1
SCALE: NTS

PLAN NORTH



KEY MAP



UTILIZATION PERCENTAGE

- EXTRA LOW < 10%
- LOW 11% - 20%
- MEDIUM 21% - 30%
- HIGH > 31%

CDC SECOND FLOOR PLAN 1
SCALE: NTS

PLAN NORTH

MIDDLE COLLEGE HIGH SCHOOL

SPACE USE

Middle College High School (MCHS)
The Middle College High School Building on the LASC campus was constructed under an agreement between the Los Angeles Community College District (LACCD) and the Los Angeles Unified School District (LAUSD). The 52,535 sq. ft. facility was built in 2011 and currently serves approximately 400 students.
MCHS students have the opportunity to take dual enrollment classes at LASC and approximately 25 (FTES) currently do so. MCHS dual enrollment at the college is expected to grow in the future by approx. 10 FTES per year 55 FTES in FY 2020-21.
The MCHS athletic programs – soccer, basketball, volleyball, track and softball also share LASC facilities.
MCHS administration would like to increase enrollment by approximately 100 students in the near future. Because LASC is overbuilt for the number of current students enrolled – LASC has offered to accommodate MCHS's growth in enrollment in existing facilities. Future expansion of the MCHS facility could potentially be sited where the temporary Academic Village (AV) is located. The AV is scheduled for removal when the new School of Science opens in March 2019.

FUTURE EXPANSION

- Future plans to expand student capacity to approximately 150 students utilizing the site located to the south between areas of seismic concern.

FIELD HOUSE

BUILDING SUMMARY

FIELD HOUSE	2017 FCI REPORT
Year Built	2009
Last Renovation	N/A
Gross SF	19,640
FCI	0.03%
Total Repair Cost	$2,889

* Note: utilization percentage is not indicated for this building as there are no classroom spaces in the building.

SPACE USE

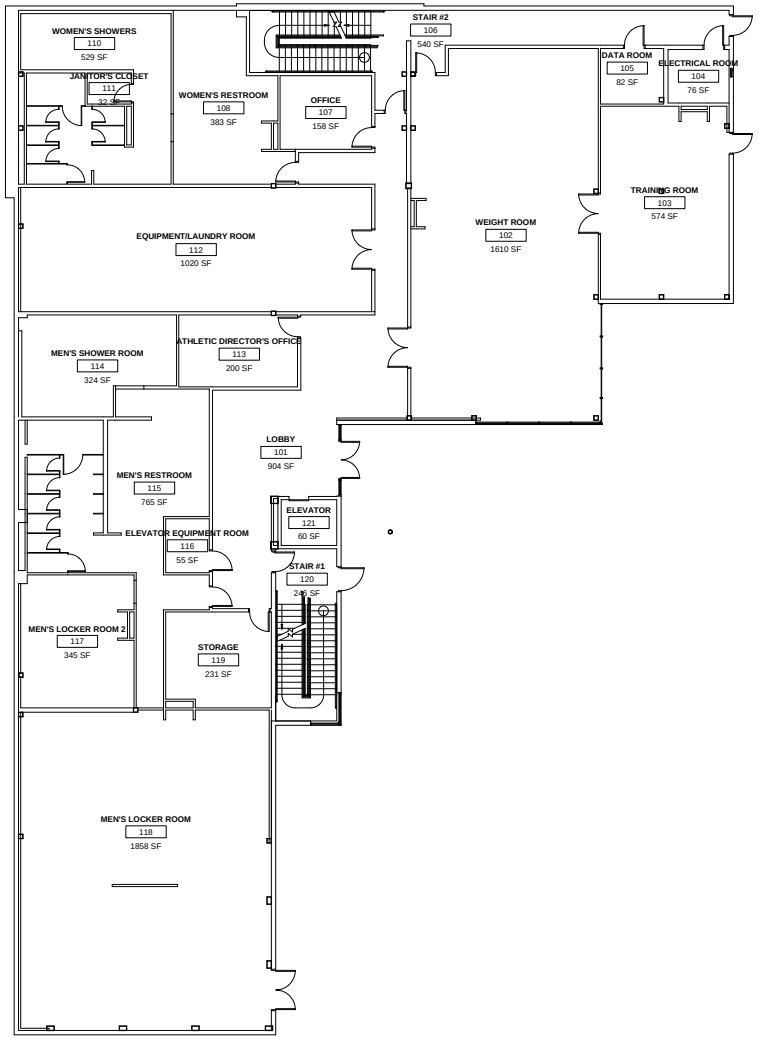
The LASC Field House (34,500 sq. ft.) opened in 2010 and provides locker rooms, equipment rooms, training facilities and office space for LASC's football program. The facility has the capacity to support future college soccer and track programs.

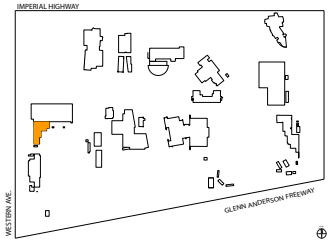
CONDITION SUMMARY

- Building design and roof membrane allow water incursion during heavy storms
- Building HVAC not tied in to main campus EMS system – requires retro-commissioning and repairs
- Dated restroom fixtures and finishes
- Building exterior and interior surfaces require repair and repainting
- No electronic door access – exterior or interior
- Water in elevator pit has impacted life of equipment - ongoing
- Limited number of functioning security cameras
- No automatic lighting controls

PROJECTS COMPLETED

- Replaced 4 rooftop HVAC package units (2015)



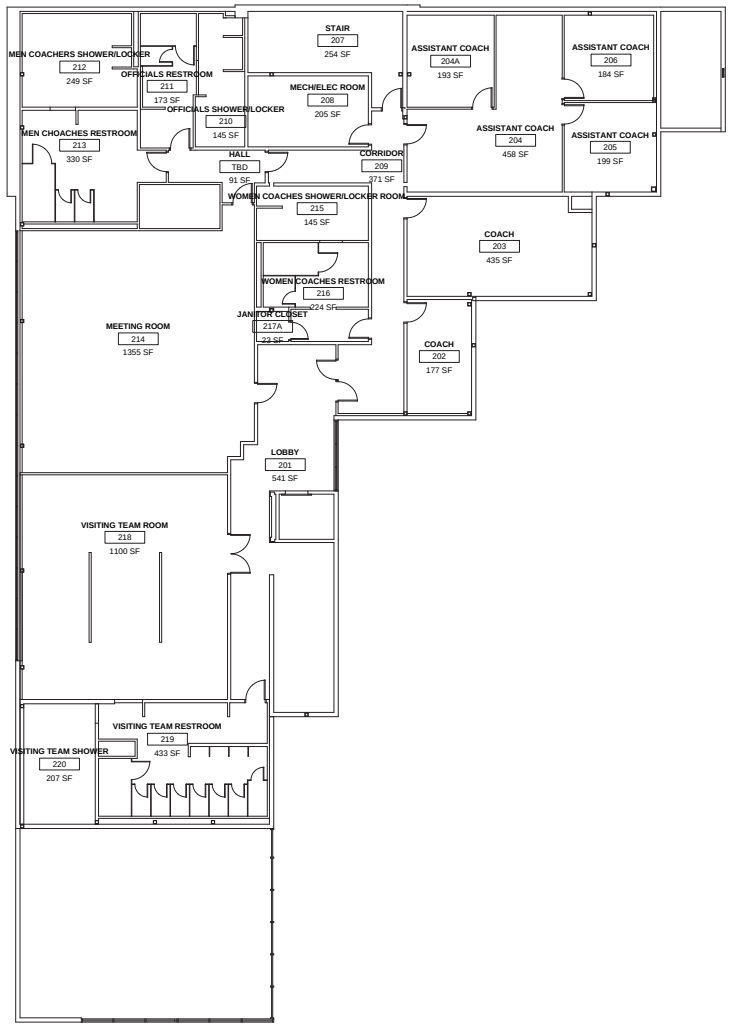


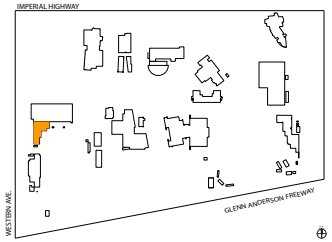
KEY MAP

FIRST FLOOR PLAN 1

SCALE: 1/8"=1'-0" A-101

PLAN NORTH





KEY MAP

SECOND FLOOR PLAN 1

SCALE: 1/8"=1'-0" A-102

PLAN NORTH

MAINTENANCE AND OPERATIONS OFFICE (M&O)

BUILDING SUMMARY

M & O	2017 FCI REPORT
Year Built	2008
Last Renovation	N/A
Gross SF	25,575
FCI	0.00%
Total Repair Cost	$-

* Note: utilization percentage is not indicated for this building as there are no classroom spaces in the building.

SPACE USE

M&O built in 2008, the maintenance department oversees all safety and health regulations and procedures, maintains utilities infrastructure systems, electricity, plumbing, gas, heating, cooling and ventilation, domestic and irrigation water systems, building maintenance, repairs and upgrades, including graffiti removal, interior and exterior painting and locksmith services.

CONDITION SUMMARY

- Roof membrane allows water incursion during heavy storms
- Building HVAC not tied in to main campus EMS system – requires retro-commissioning and repairs
- Electronic door access (exterior) not functioning
- Limited number of functioning security cameras
- Incomplete loop on fire alarm master controller – needs additional copper line
- Shipping and receiving layout requires re-configuration

CENTRAL PLANT

BUILDING SUMMARY

CENTRAL PLANT	2017 FCI REPORT
Year Built	2009
Last Renovation	N/A
Gross SF	4,800
FCI	0.30%
Total Repair Cost	$43,438

* Note: utilization percentage is not indicated for this building as there are no classroom spaces in the building.

SPACE USE

Central plant built in 2009, is a "district" heating and cooling plant. It is operated by school to provide centralized heating and cooling to 9 buildings in campus.

CONDITION SUMMARY

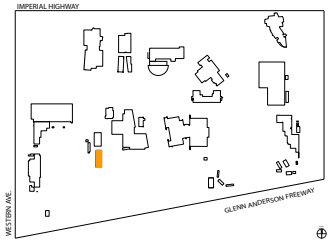
- Requires expansion to support planned new construction – School of Science (2019)
- Current configuration is challenged to support campus load

PROJECTS COMPLETED

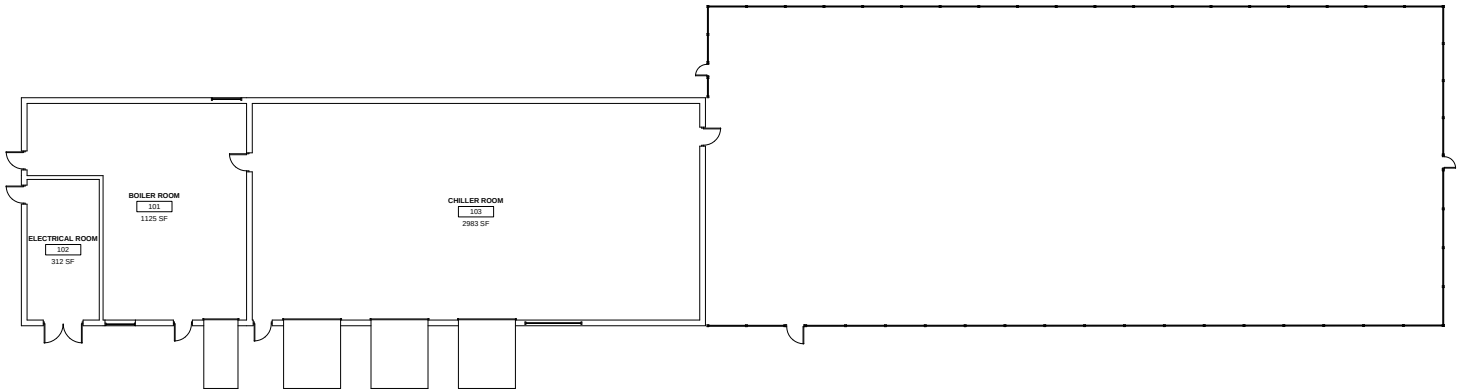
- Connected Central Plant to campus EMS (2015)
- Re-calibrated boilers (2015-16)
- Cleaned Chiller tubes (2015)
- Raised cooling tower – increased capacity approx. 20% (Spring 2017)
- Scheduled repairs to ensure plant redundancy (Spring 2017)

RECOMMENDATION

- Expand capacity to incorporate SOS, CDC, Field House, Middle College High School
- Net zero for Central Plant operation



KEY MAP



FIRST FLOOR PLAN

CONDITION SUMMARY

- Need to establish dual circuit high voltage redundancy campus-wide
- Domestic water supply required for Nursing program in AV swing space
- Large amount of grass requires irrigation

PROJECTS COMPLETED

- Replaced and upgraded SW Drive Street Lights to LED (2015)
- Replaced and upgraded campus roadway, parking lot and plaza level lights to LED (2016)
- Replaced and upgraded Parking Structure #4 lighting to LED (2016)
- Completed high voltage substation switchgear maintenance (2017)
- Repaired campus fire alarm system (2017)

FUTURE PROPOSED PROJECTS

- Upgrade Parking Structure #8 Lighting to LED (2017)
- Upgrade Stadium Lighting to LED (2018)
- Campus wide wall sconce LED upgrade (2018)
- Repair emergency lighting inverters campus wide (2018)
- Replace CDC electronic door access controls with Lenel (2018)
- Emergency generator upgrades and maintenance – Sheriff's Office and M&O (2018)
- Repair and update controls Jumbo-tron electronic sign (2018)
- Replace approx. 50 yard section of main domestic water supply LFWC (2018)
- Athletic bleacher repair and maintenance (2018)
- Storefront door replacement- LFWC and SSEC (2018)
- Connect cooling towers and irrigations system to reclaimed water (2018)
- Explore potential utility savings through LA County public utility (2018)

LANDSCAPE APPROACH:

Goals

Realign the campus to become a more responsible steward of the state's resources by focusing on efficiency, drought tolerant landscaping, minimizing potable water use, and maximizing use of reclaimed water.

Develop the open turf landscape areas facing the community in a way that balances aesthetics with resource use and maintenance costs.

Provide sustainably designed pedestrian focused pathways and gathering spaces from the campus access points and between buildings.

To create nodes for gatherings and connect pathways in - between buildings for efficient circulation, every pathway shall be illuminated appropriately.

Strategies

- Campus water action plan utilizing an available source of reclaimed water.
- Turf reduction/replacement program.
- Landscape cultivating native and climate adapted landscape.
- Pedestrian friendly hardscape reducing heat island affect and increasing permeability.

Campus Water Plan

Use of reclaimed water with irrigation system designed in consideration of LACCD and City of Los Angeles guidelines should be used as a guide. Large and small scale rainwater harvesting and stormwater retention/infiltration, ranging from rainwater barrels to larger diversion of water to bioswales, can be implemented where viable. Reuse of cooling tower water should also be considered as cooling tower water can account for a considerable percentage of campus water use.

Turf Reduction

Individual building sites are landscaped with native or drought tolerant plant materials that reflect the design intent of that individual project, but many of the spaces in between projects and the perimeter landscape that borders Western and Imperial are comprised of turf. Strategies of wholesale replacement of large sections with ground covers or partial replacement and adding tree shade cover can be assessed.

The addition of trees can be a natural and affective way to increase shade and lower ambient temperatures. Further study of the effects of turf replacement on ambient daytime/nighttime temperatures should be made before implementing a plan.

Rebates to offset costs and understanding the potential O&M costs over time should also be considered in evaluating candidate plant types to replace turf.

A planting template that includes recommendations on; plant types, a soil management report, grouping plants by hydrozones, utilizing automatic irrigation controllers and sensors, and the development and implementation of a post-installation irrigation and maintenance schedule is a good way to approach turf replacement. A template is also a good way to test out what works for the campus in terms of viability and maintenance.

CAMPUS WATER PLAN

Is the world running out of fresh water?

Water demand globally is projected to increase by 55% between 2000 and 2050. Much of the demand is driven by agriculture, which accounts for 70% of global freshwater use, and food production will need to grow by 69% by 2035 to feed the growing population. Water withdrawal for energy, used for cooling power stations, is also expected to increase by over 20%. In other words, the near future presents one big freshwater drain after the next.

California's drought may be over after record rainfall this past year, but if the drought has taught us one thing its that as growth in California continues pressure will remain on California's water supply. LASC can benefit from and reduce the fiscal impact of rising water supply costs by investing in thoughtful projects to both reduce overall water use and make use of reclaimed water.

Source: BBC News future series by Tim Smedley, 12 April 2017

CULTIVATING NATIVE AND CLIMATE ADAPTED LANDSCAPE

Southern California is home to a unique plant palette of trees, shrubs, grasses, and ground covers that are well adapted to the local environment and when paired with complementary hardscape creates a rich environment that can be beneficial to student well being. Plantings that benefit and create habitat for birds and beneficial insects should be considered as well.

Trees - certain portions of the campus, palm court for example already have tree canopy that provides shade, enclosure, and a sense of place. Other areas of campus have few trees or shade. Specifically the central core area and perimeter street fronts (referred to as edges in 2003 MP) lack trees. The areas affected by seismic zones are also good targets for adding trees. Increasing the tree canopy in cities is one way to fight both poor air quality and urban heat islands. Adding tree shade cover in conjunction with turf replacement and reduction of asphalt in key areas can improve the campus environment and also help build upon the better developed landscape/hardscape areas around the student services, career/applied tech, Cox, SSEB, middle college HS, and child developement center.

Plant diversity can afford some protection against ravages of pests such as wood boring beetles (shot hole borer) affecting even hardy native sycamores, coast live oaks, and others. Establishing or expanding an integrated pest management plan is key to protecting both students and fauna (birds and beneficial insects) from harmful chemicals.

Demonstration gardens or arboretum within the campus and along pedestrian routes that include interactive educational elements and smaller scale spaces for student interaction and passive recreation are encouraged. These can also help to encourage further use of the campus and invite visitors. Partnership with an institution already actively engaged in cultivation can be a good way to gain access to plant materials not readily available on the commercial plant market. The campus should seek to establish or build on an existing relationships with Southern California institutions that promote the growth of native and regional landscape colonies. Arboretums are challenging to start from scratch and the potential for the college to gain and learn thru partnering can be explored.

PAVING: *Permeable and non permeable*

- Varying types of paving including permeable concrete can be used to decrease impermeable area. In addition walks can be cross sloped to adjacent bioswale returning additional site rainwater to the aquifer.
- Path ways using a combination of concrete, DG, and turf. DG is used to extend the walkable area and reduce area of turf while both the turf and DG are permeable.

SHADE TREES: *in combination with native unmowed grasses*

Trees for shade in combination with native unmowed grasses support one another as the irrigation for the grasses water the trees and the trees provide partial shade for the grasses. Wholesale removal of turf and replacement with drought tolerant plants and or gravel & DG may increase local ambient temperature. Conservation of the eco system is as important as saving water.

Focus addition of shade trees and supporting planting in areas that are missing planting or where planting has died. Determine the causes of plant and tree failure and take steps to avoid recurrence. Replenish areas that are dominated by paving or gravelscape as beyond just shade, trees provide other societal benefits potentially including physiological well being.

CAMPUS CORE: *Increasing Landscape and reducing non permeable paving*

Focus addition of shade trees and reduction of heat generating asphalt to areas already targeted in the original master plan and various updates to become pedestrian oriented by limiting personal vehicle access. In locations where existing mature trees are located in tree wells that are insufficient in size; take steps to remedy the situation and improve the health of the tree.

Work with the responding Fire Authority to validate fire access and with Sheriff/Campus security to create well defined areas of pedestrian focused walkways with shade and lighting. In areas where trees are not growing well investigate the causes and remedy them if possible.

A mix of native and non native drought tolerant planting is already in place in certain locations. Plant groupings that thrive in the campus environment and have a required level of care consistent with maintenance goals can be encouraged.

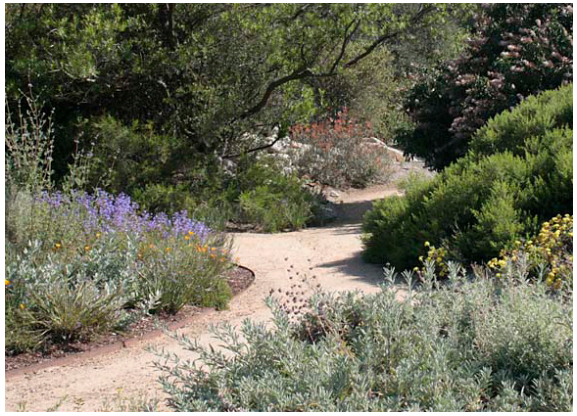
While palms are iconic of Los Angeles and have been used to good effect on campus, other trees with wider canopy can be considered where shade is desired and it does not create a security line of sight issue.

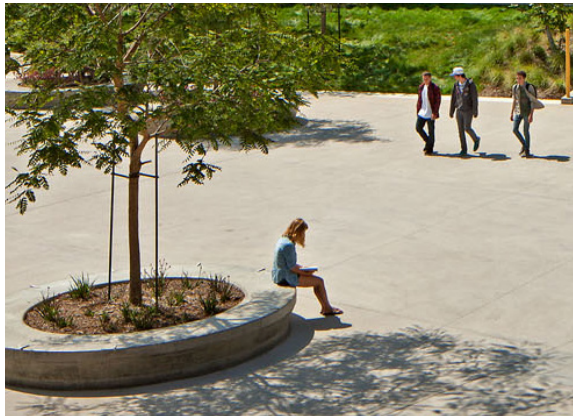
REGIONAL EXAMPLES:

- Look for local and regional examples of sustainable landscape and pedestrian friendly design. Learn from them and apply that knowledge to LASC.
- Make alliances with other institutions to gain knowledge and even resources to establish representative plantings of Southern California natives and other drought tolerant species that thrive in and support the regional ecosystem.

INFORM, EDUCATE, EMPOWER:

- Create spaces that extend the classroom outside by enhancing or developing small scale seating areas within the landscape that provide opportunities for gathering and discussion.
- Use these spaces to promote understanding of the regional environment and best practices for stewardship of natural resources.





SOURCES: *for information on urban forestry*

- www.treepeople.org - TreePeople inspires and supports the people of LA to come together to plant and care for trees, harvest the rain, and renew depleted landscapes. We unite with communities to grow a greener, shadier and more water-secure city at homes, neighborhoods, schools and in the local mountains. We work with volunteer leaders using our unique Citizen Forester model, and we influence government agencies for a healthy, thriving Los Angeles.
- www.fao.org - Food & Agriculture Organization of the United Nations - Large urban trees are excellent filters for urban pollutants and fine particulates. Trees can provide food, such as fruits, nuts and leaves. Spending time near trees improves physical and mental health by increasing energy level and speed of recovery, while decreasing blood pressure and stress. Trees properly placed around buildings can reduce air conditioning needs by 30% and save energy used for heating by 20–50%. Trees provide habitat, food and protection to plants and animals, increasing urban biodiversity...planting trees today is essential for future generations!
- www.cityplants.org - Los Angeles Department of Water and Power's Trees for a Green LA Program was combined with Million Trees LA to make one unified tree planting program for the city.
- www.opentreemap.org - TreeMapLA is an ambitious collaboration of nonprofits, local governments, businesses – and YOU – to map the urban forests and watersheds of Greater Los Angeles. By adding information about LA's trees and watershed solutions, and updating their needs, we create a powerful tool to learn about our urban ecosystem and its value, including specific environmental and economic benefits.

WAYFINDING AND SIGNAGE:

Assessment
The direct routes leading into the campus from the east parking structure and west entry are obvious and don't seem to lack in way finding, but once closer to the campus core direction seems less clear in finding ones way to individual buildings.

The bus drop at the north and circular drop off is similar, the path is obvious and clear, but loses clarity after reaching the palm court. The pole mounted arm signs just inside the campus from the bus stop are effective, work well along pedestrian routes, and should be emulated at other locations.

Goals
- Further develop and continue the signage already in place at the campus edges and carry that theme into the campus core to replace the existing temporary looking signage.
- Many of the buildings already have effective signage with design that fits their architecture. Replace the mixed signage currently found on some of the older buildings and is less effective or temporary looking with signage that draws on the well-designed building signage found on campus.
- Develop a plan for small scale signage promoting drought tolerant landscape and other sustainable practices found on campus to illustrate, inform, and educate.

Campus map signs
Replace the pole supported campus map signs with monument type signs that embody a unified, cohesive design style.

Individual building signage
Effective building signage unique in design to specific buildings is already in place in many cases. Continue that theme of placing complementary signage on buildings where the signage is less effective, missing, or temporary looking. The new or replacement signage should draw on the fonts, colors, and letter type styles of the unique building signage, but adapt in scale and placement to those buildings.

Signage hierarchy
Simplified version of signage model at modern airports or rail stations where direct, simple, and clear signage is used to move people quickly and efficiently. Follow a similar hierarchy to develop signage for areas on campus.

1. Primary Identification - larger monument type identifying LASC.
2. Vehicular directional - medium monument type to direct traffic to parking.
3. Pedestrian directional - pole mounted arm type to direct to specific locations.
4. Destination marker - to identify final destination on or adjacent to building entry.

Small scale signage plan
These are the signs that can identify specific plants or colonies and provide information to promote the learning experience. They can also be used to identify sustainable practices or design elements. For example; bioswales, permeable paving to retain water on site and recharge aquifers. Similar to interior building signage they should follow a unified, cohesive design style tied to the design of the campus map signs.

CAMPUS Primary Identification

COX building large letter signage:

- Scale and design are well integrated with the building and reads at both vehicular and pedestrian scale. This signage works well for the North Entry from Imperial Highway.

Primary Identification:

- Existing marquee sign at Imperial and Western is large and clearly visible from multiple directions at a distance although the material finish is faded and shows evidence of a need for maintenance.
- Refresh and update the message being conveyed.

The signal and street sign on Western Avenue clearly identify entry to the college while the existing smaller scale marquee sign adjacent to the parking structure is less effective and could be updated to better communicate school events.

CAMPUS Maps Signs

- Wayfinding up to the palm court from Campus entry and adjacent bus stop is clear and intuitive.

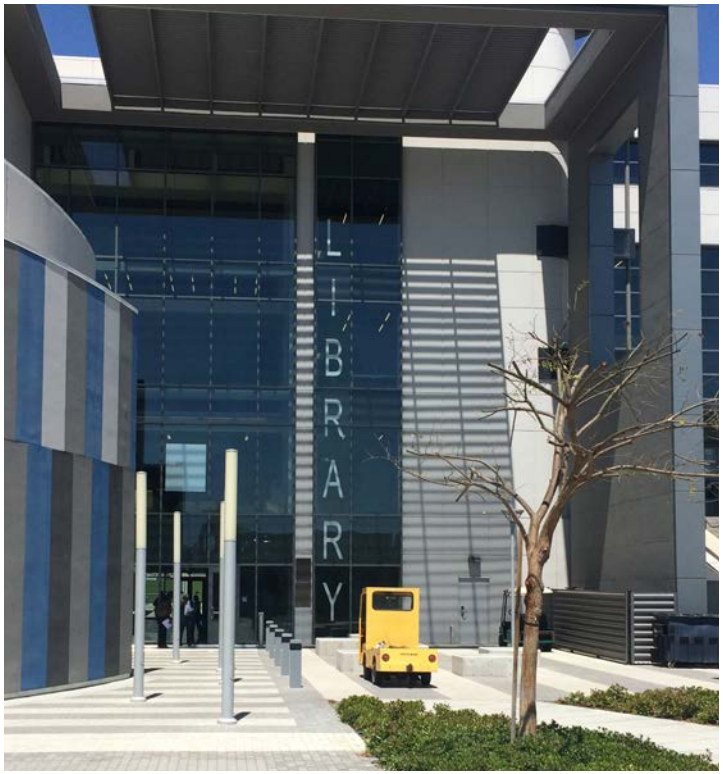
- Circular court provides good campus identity, but could benefit from campus map signage. The existing sign is further in and will be affected by the SOMS building.

Existing campus map signage.

BUILDING SIGNAGE:

Signage as a part of the architecture:

- Effective and well integrated building signage unique to individual building. Easily visible both immediate to the building and from further distances.
- Subtle, but effective building signage unique to the building and well integrated with the building design and approach to the entry. Can be made sufficiently effective with clearer directional and campus map signage.



Effective building signage unique to the building and its use. Two directional and effective on its own from a further distance this sign helps to create a people space in front of the building.

Somewhat obscure, but effective building signage unique to the building and its use. Can be made sufficiently effective with clearer directional and campus map signage.

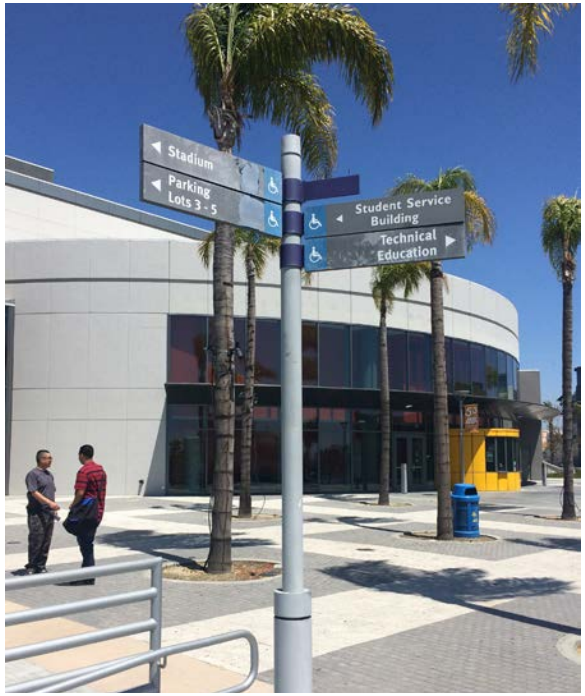
Smaller scale building signage:

- Its placement and scale make it less readily noticeable until you are much closer to the building. This sign is more reliant on clearer directional and campus map signage.

Temporary building signage:

- When replacing with permanent the design and scale should complement the existing architecture as much as possible. Placement should be chosen based on visibility and approach direction. Directional and campus map signage should be located in conjunction with permanent signage locations.

DIRECTIONAL SIGNAGE:



Pedestrian scale directional signage:

- Existing directional signage is pedestrian scaled, effective, and has uniform design representative of the campus. They can be updated as new buildings and or locations on campus are needed to be identified.

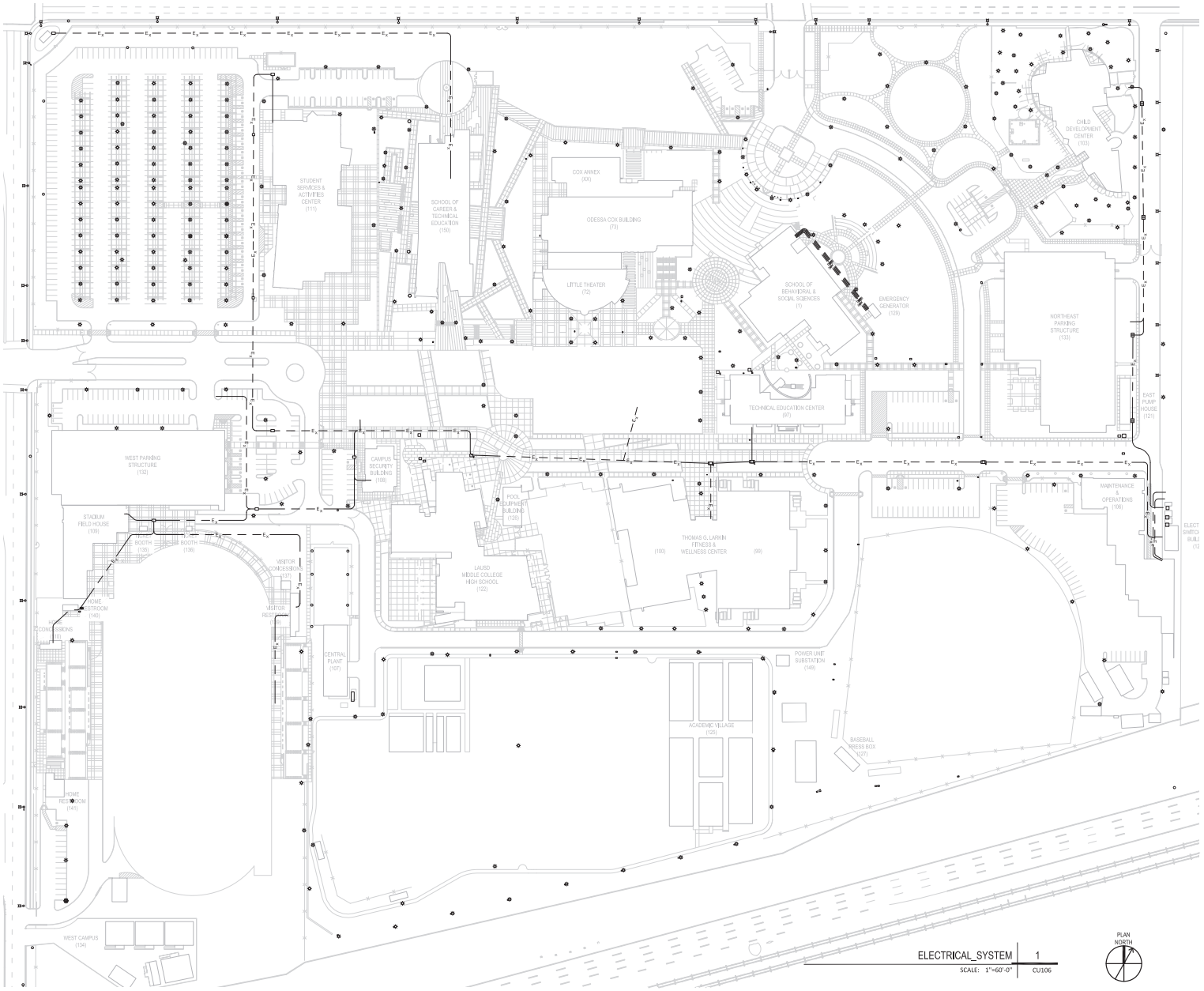
IDENTITY SIGNAGE:

Existing campus identity signage is pedestrian scaled, effective, and has uniform design representative of the campus.

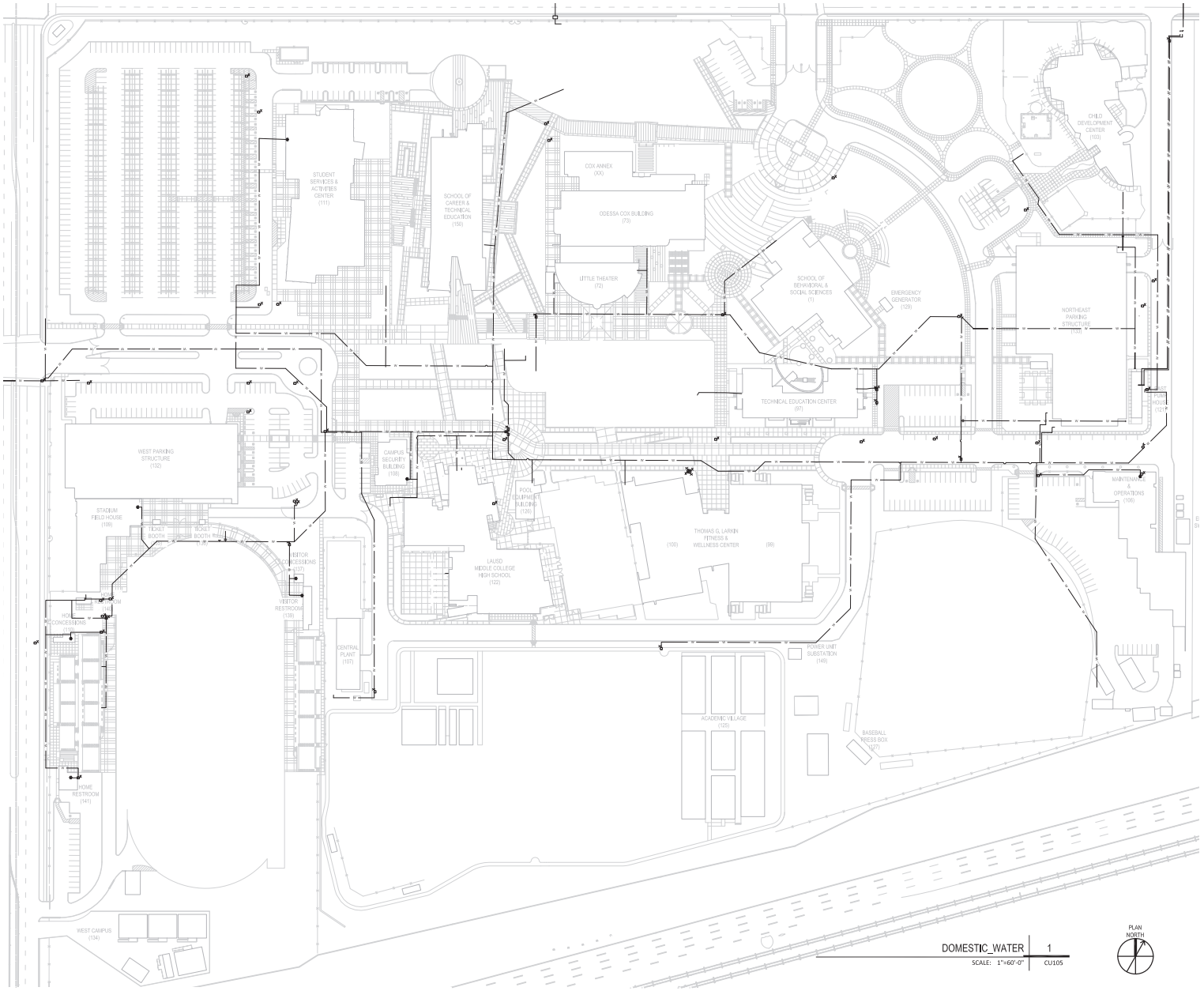
SMALL SCALE Educational and informative signage:

Small scale signage intended to educate and inform.

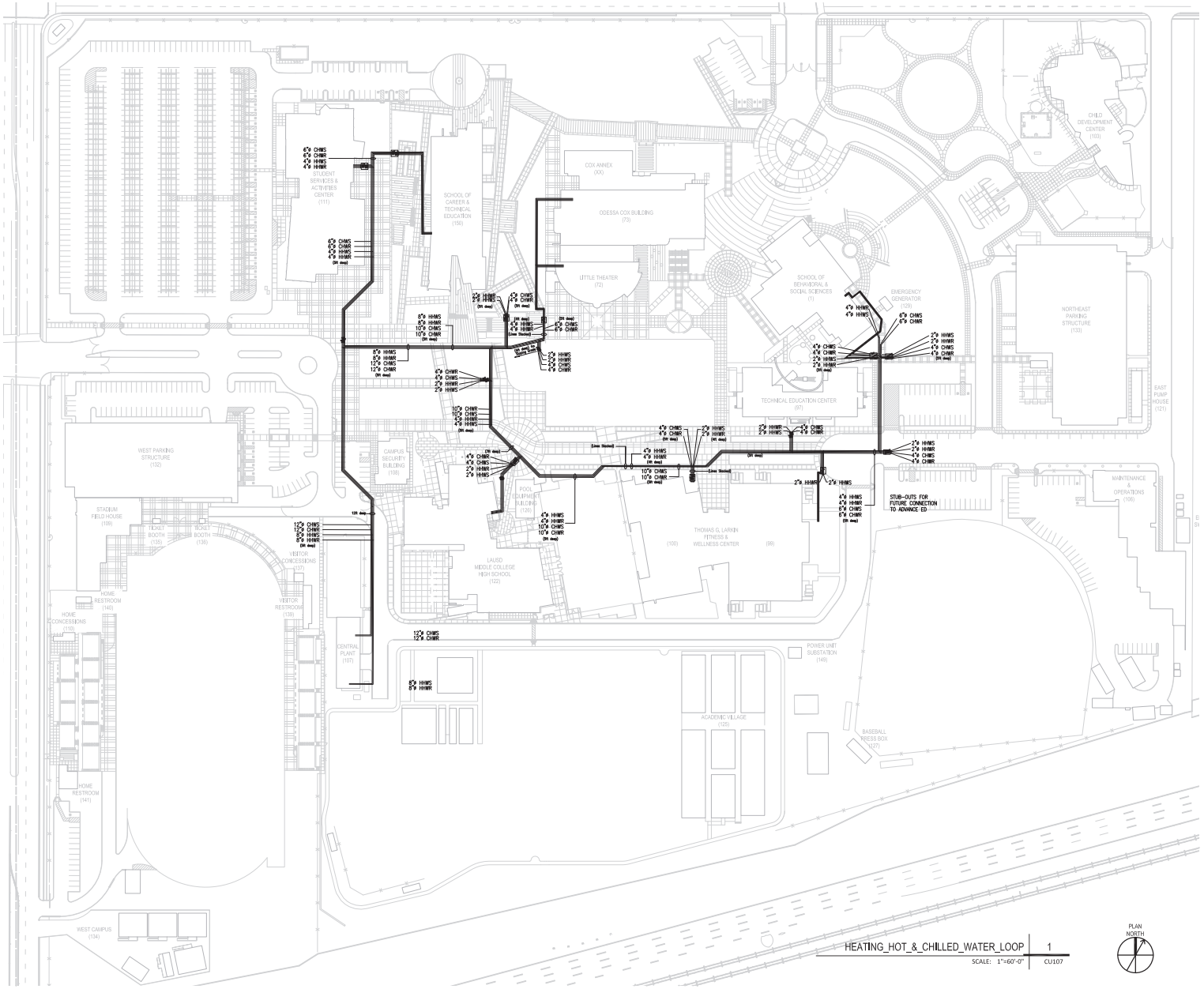
UTILITIES MAP
ELECTRICAL SYSTEM



UTILITIES MAP
WATER



UTILITIES MAP
ELECTRICAL SYSTEM



CITATION

1. LASC: Summary of Assignable and Support Space by Building, 01.24.2017
2. Fusion Assessment Report; LACCD FCI Report, 01.11.2017
3. LASC Institutional Self Evaluation Report, 2016
4. LASC 2015-16 Space Inventory Campus Map
5. Los Angeles Southwest College College Facilities Maps
6. Fall 2016 College Profile
7. Don't gravelscape L.A. - LA Times article June 3, 2015
8. Go ahead, water your lawn - LA Times arcticle September 18, 2015
9. Will replacing thirsty lawns with drought tolerant plants make L.A. hotter - LA Times arcticle August 2, 2016