





## Chapter Three

# The Campus Paradigm

“...whenever ideological convictions were strongly entrenched in the educational curriculum, architectural continuity was consistently related to the institution’s past preferences for architectural style or campus form. Whenever new educational concepts broke away from the main stream they were sure to be clothed in something new. Whenever institutions continued to hold on to the task of being the leading edge of thought, their buildings and campuses were as advanced or as retrogressive as their time.”

(Dober 1964)

In a comparison of college campuses to a city neighborhood or district, the diverse uses included on a campus are coordinated in support of the academic mission. And, as in a city, the whole of the campus is comprised of many pieces. The academic setting of a university or college is more than the sum of individual buildings or open spaces. They are a layering of lessons - passed along from Europe to America - in a long lineage of educational tradition. As noted in chapters one and two, growth of higher education in America is reflected in campus design. Periodic surges of campus construction can be linked to an influx of migration and increase in population (Dober 1964). Dober (1964) notes, “this generalization holds true for the Colonial era and for the cycle of population maturation [baby boomers], that began just after World War II”.

The purpose of this chapter is not to provide an in depth study of the history of campus planning. Rather the objective is to pinpoint, define and diagram the different campus and building form typologies by presenting research on the history of campus development. I will then introduce one of three methods used in this project.

## CAMPUS PLANNING TRENDS

**European precedents.** The medieval system of master and scholar, found in the guilds, form the basis of universities in Western civilization, setting forth the model for the Colonial college. This model can be traced back to Cambridge and Oxford. The Old World collegiate systems consisted of a grouping of separate colleges - usually endowed by wealthy benefactors - housed under a single university. The model of this university-college system was based on an even older model found at the University of Paris, both in curricula, which was firmly rooted in the dialectical analysis of the Christian doctrine, and the *modus operandi*. The students attended lectures by appointed teachers, but their housing was their own responsibility. At first, students sought lodging in the homes of the townspeople nearest the university, and then turned to renting entire buildings under the direction of a master. These hostels, or halls; are where the students ate and slept, but otherwise there was little educational framework. This room and board structure was quite common and by the mid-fifteenth century, Oxford had 70 such structures (Turner 1984). Over the next two centuries, the collection of buildings located at each

institution standardized, consisting of a chapel, a hall (for dining, lectures and other assemblies), scholars' and masters' chambers and accommodations for the head of the college, collectively forming the college. Their composition made up an enclosed quadrangle. This landscape element, shaped by the form of the buildings, created a living and learning environment that became "...the heart of the Oxford and Cambridge pedagogy" (Turner 1984; Thelin 2004).

**In America: The early years.** Nine colleges were chartered between 1636 and 1780, all with their common heritage from the Old World. The founders of the English Colonies knew the importance of education and had a desire to preserve the Old World intellectual and cultural traditions in the new. Additionally important to the founders was the feeling of permanence of the institution and the connection to the old ways in the New World. In the search for educational stability, colonists donated their homes and privately held libraries for the greater good of a growing population. Meanwhile, the English Crown intentionally held back funding for public spaces, parks, public works, cathedrals and public architecture, thinking there was no reason to invest in the vast wilderness. This included the architectural structures for higher education. The lack of funds available at this time was evident in the layout and architectural simplicity found at Harvard College (Dober 1964). Yet, this changed very quickly with the construction of a new building at Harvard, known as Old College (1638), the largest in New England. Some forty years later, Old College was replaced by the New College building (1674)

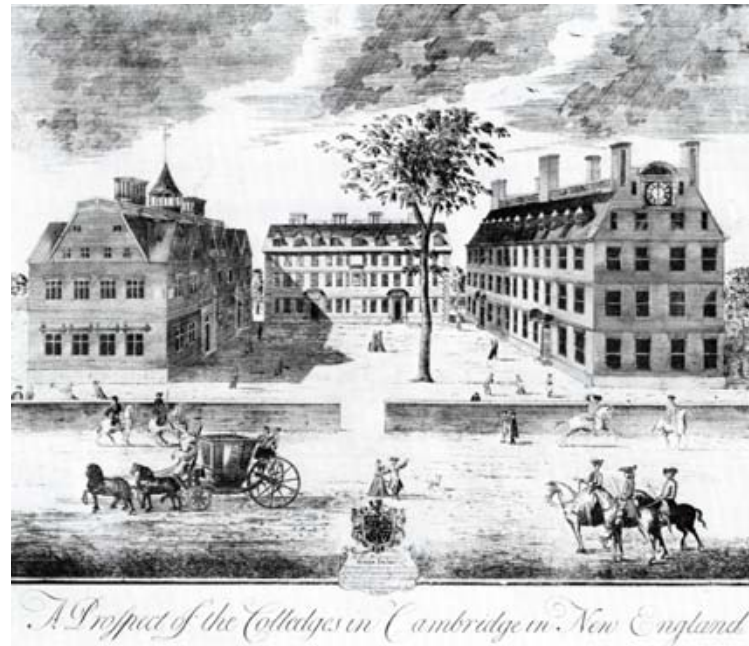


Figure 3-1  
The New College Building. "A Prospect of Colledges in Cambridge in New England." Engraved view, looking east, by William Burgis, 1726. (Massachusetts Historical Society)

with a structure that was now the largest in the Colonies (see figure 3-1). The importance of education was clearly stated through this architectural anchoring (Dober 1964; Turner 1984; Riera Ojeda 1997; Thelin 2004). In 1753, Princeton University built Nassau Hall, then, the largest building in North America (see figure 3-2). If the importance of education was doubted at this point; in any way, it was surely solidified with the construction of this building.

**A new nation.** If the first phase of establishing the college is rooted in the size and form of buildings, then the second phase is rooted in the rapid expansion of the college. This is quite apparent post-Revolutionary War. In the first three-quarters of the 1800s, 281 colleges were

founded, of which 40 then ceased to operate (Thelin 2004). As demand for education rose, the incremental addition of individual buildings created, in some cases more formal spaces, and in others, less formal. Although colleges and the United States were in their infancy, innovation was rapidly taking place. The educational model and its physi-

Figure 3-2  
College of New Jersey,  
Princeton's Nassau Hall.  
Engraved by Henry  
Dawkins, 1764. (Princ-  
eton University)



Figure 3-3  
Jefferson's University of  
Virginia. Engraved by B.  
Tanner in 1827. (Univer-  
sity of Virginia)



cal form was changing in tandem with societies changing approach to education (Dober 1964; Turner 1984; Taylor 1990; Riera Ojeda 1997; Thelin 2004; Flynn 2008). The change in curricula, educational model, form and character are encapsulated in Thomas Jefferson's concept of the "academical village" at the University of Virginia (Riera Ojeda 1997). Built between 1817 and 1829, Jefferson's academic village represents the enlightenment attitude of education and that of a new nation (see figure 3-3). It changed the focus from the chapel, in the old world, to the library, in the new, as the center of learning. The physical characteristics of the traditional campus represent a more stable world in its axial, formal and balanced arrangement. It was intended to instill educational tradition during the cultural evolution in America. Although this traditional plan was not the first mall plan in the New World, it ultimately became the exemplar and the most popular form for the American campus.

**Rapid change.** In the Colonial era, college founders thought that the placement of an institution of higher education in the country would rid the scholars of the evils of the city. But, by the mid-1800s, the appeal of nature transformed college planning. Fredrick Law Olmsted's concept of the pictorial and his emphasis of natural systems and the environment were taking hold. From 1856 through the 1890s Olmsted designed over twenty campus plans, which he incorporated serious architecture with the picturesque landscape. Examples of his designs are still evident at many schools including Stanford University in California and



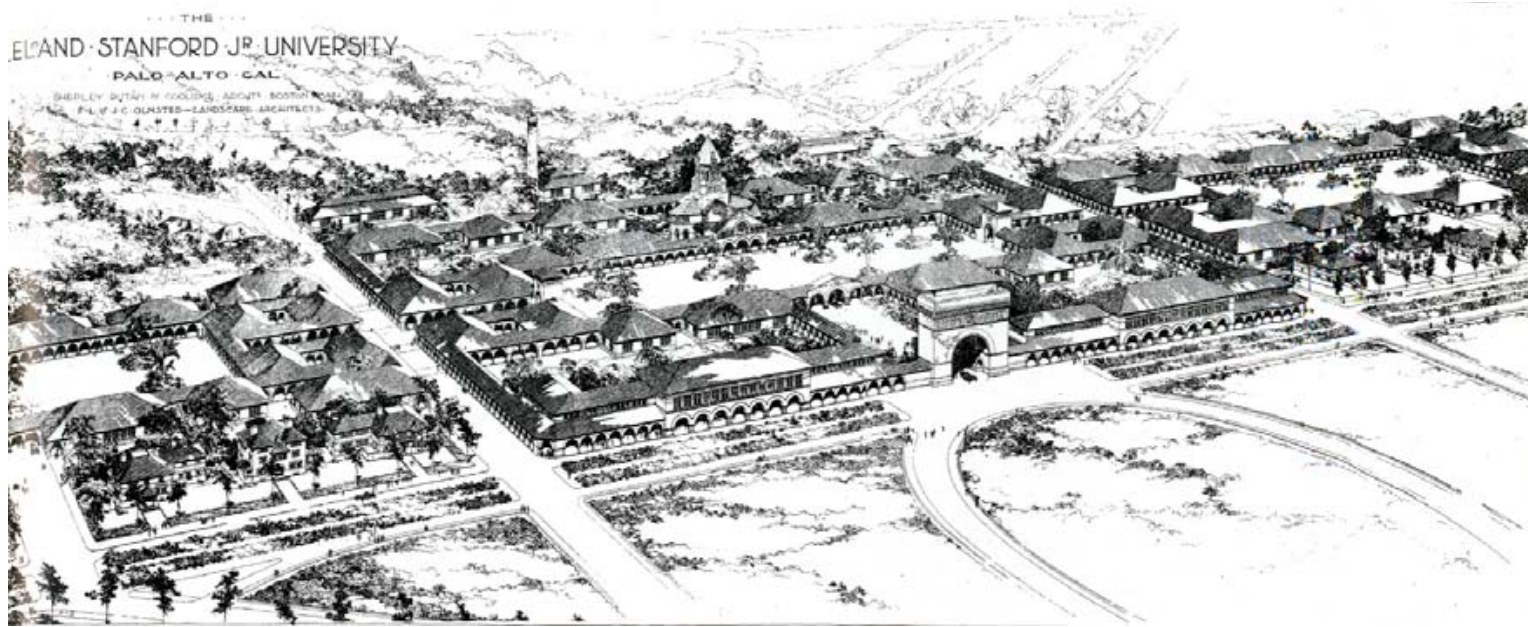


Figure 3-4  
Olmsted and Coolidge's  
master plan for Stanford  
University, 1888. (Stan-  
ford University Archives)

Cornell University in New York (see figure 3-4). Olmsted regarded his campus aesthetic as bestowing the liberal and democratic ideals of education at the time and included many of these principles in his plans. The weaving of community with the institution created less rigid (formal) landscapes and hence, created a new campus form – the naturalistic park. Olmsted gave two reasons for his divergence from the rectilinear, rigidity applied to universities of the time. The first was to arrange the academic buildings in a way that would create harmony with the characteristics of the connected neighborhood, and the second allows for the flexibility needed for future growth. And this growth came rapidly by the close of the Civil War.

**A new tradition.** The last half of the nineteenth cen-

tury saw a tripling of enrollment in thirty years – 70,000 students in 1870 to 238,000 in 1900. By the turn of the century the American university increased in size and complexity (Turner 1984). As the campus called for a more organized strategy, the notions of the picturesque slowly faded and made way for the Beaux-Arts style of architecture. The Beaux-Arts tradition was brought to the attention of the populace through Daniel Burnham's 1893 Columbian Exposition - uniting the symmetrical organization of a plan through axes, open and closed spaces, and grand vistas. The most prominent idea of the Beaux-Arts style was the overarching unity and balance it could bring to a plan that incorporated different uses on the same site. This was particularly important because of the needed ad-

ditions to buildings and expansion of the sites. At this point in campus planning, many universities had evolved from their formal beginnings and were now grasping at Beaux-Arts style as the catalyst to transform back into formality. This concept influenced many planners and schools, including Henry Hornbostel's formal plan for Carnegie-Melon University and later the University of Pittsburgh. The latter is known for its unusual rows of buildings climbing up the hilly site. This tiered effect led to the suggestion of "an academic acropolis", a "citadel of learning" (see figure 3-5). Again, the architectural style reflected much of societies values and views on life. Although an emphasis on the built form was back in the forefront, the formation of landscape elements was still of central concern and the relationship between that of the built environment and the human environment was of utmost importance.

**Accommodating growth: part deux.** American popular culture assisted with the rise of the modern university. Widespread coverage of the academic lifestyle - through

journalism, literature and branding of the school- helped create cultural norms that would bolster enrollment, camaraderie, and especially introduce the idea that socioeconomic mobility, earning power, and social standing were all attainable through a proper education (Thelin 2004). The need to accommodate this growth was met with the implementation of the overall plan – the master plan. Although the use of a plan and the implementation of planning were already widespread, it became ubiquitous in university design after Olmsted and Burnhams' collaboration on the Columbian Exposition and the Chicago Plan. This is evident from the number of plans produced and the number of buildings being erected, especially after the turn of the century (Turner 1984). The University of Illinois constructed less than one building a year prior to 1900, but would average two buildings a year from 1900-1910, and over four per year in the next decade (Leetaru). The pace of construction of other institutions nationwide is comparable. Academics note that this fast growth led to large, complex campuses that quickly supplanted the close relationship

Figure 3-5  
Hornbostel's "academic acropolis", 1908. Although the plan was not completed many of the lower buildings were constructed and are still used today. (Architectural Review, July 1908)



between professor and student. Many educators desired a return to the traditional American college - "...an intimate community of undergraduate students and teachers, with shared intellectual and social values, emphasizing the development of character or culture more than the learning of trades" (Turner 1984). The intimacy of the academic village returned, manifested in the Medieval English quadrangle. Although the Medieval quadrangle had not been a big part of the American campus, beginning in the 1910s, the intimate quadrangle reinforced the idea of the residential college – centrally located and easily governed. (see figure 3-6). The quadrangle captured the ideals of the time and helped establish collegiate traditionalism (Turner 1984).

Between World War I and World War II, the national commitment to educational accessibility to colleges and universities resulted in an increase of enrollment from 250,000 to 1.3 million people (Thelin 2004). The American campus continued to be a major source of interest and intrigue to the American people. This could be best seen when Life magazine devoted its entire June 7, 1937 issue to the American campus (chapter three cover image). The summary of this transformation is as follows:

This growth has moved the centre of educational gravity from the Atlantic seaboard to the Middle West. It has made 80% of higher education coeducation. It has changed the campus from a scholarly retreat to a new and fabulous design for four year living. It has caused col-



Figure 3-6  
Development plan for  
Princeton University  
by Ralph Adams Cram,  
1906-1911. Dark  
structures are proposed,  
light existing. (Princeton  
University Archives)

leges to expand and multiply until their mere brick and stone is worth two billion dollars [\$23.9 billion in 2000 dollars]. Behind this vast investment is tremendous faith in the benefit of higher education. This faith is a cornerstone of any democratic philosophy, the pith and kernel of what writers since Jefferson have called the American Dream.

With the onset of America's involvement in World War II, resources and participation in the development of universi-



ties and colleges waned. But, by the end of the war, another burgeoning era of college expansion resumed. With help from funding distributed through the GI Bill, and pressure on the growing youth population to further their social status, enrollment expanded rapidly and campus growth ensued. The utilitarian, factory-like campus form reflects the post-war and economic optimism about technology and the future. This continued into the 1960's with another rise in enrollment as the baby boom generation entered the realm of higher education..

## DEFINING FORM AND CHARACTER

In the relatively short history of community colleges, no era has seen the unparalleled growth of the late 1960s. At a 1967 conference sponsored by the College of Architecture and Urban Planning and the Center for Development of Community College Education at the University of Washington, the American Association of Junior Colleges presented a list of over two hundred new community colleges, all in the development process, and planning to open between 1967 and 1970. Unlike existing four-year institutions, having been constructed and invested in over time, the community college model has been developed from scratch; and in many instances, facilities capable to accommodate thousands of faculty, staff and students were constructed in a single phase. Like four-year colleges, community college designers looked to the past for precedents to generate their character and form. C. William Brubaker describes the American campus' attributes and credits their

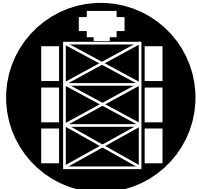
design and development to three factors:

1. Site: the landscape is vast and varied and no two locations can be exactly the same, hence no two plans can be exactly the same;
2. Education program: outside of the traditional educational components, i.e. math, history, science, etc; each school has its own needs based on community characteristics, broad social needs and niche markets, [i.e. renewable energies, gunsmithing]; and
3. Age: all four-year institutions have their own architectural form and aesthetic due to the range of time they were built and what the popular ideas of architecture were during that time. Most two-year schools were developed all at once, under the one popular form and aesthetic of the era in which it was built.

The Urban Design Lab agrees that Brubaker's three form generators – the unique nature of site, education program and age – influence each and every campus. By comparing research in this chapter with existing literature on the planning and design of junior and community colleges from the 1960's, the UDL has composed a series of icons based on campus characteristics and building typologies highlighted by Brubaker.

## CAMPUS CHARACTER

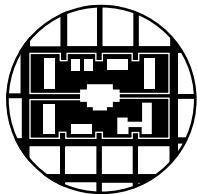
Building and landscape form dictates campus character.



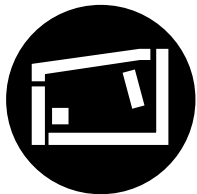
**Traditional:** axial, formal, balanced



**Naturalistic:** informal, set within the landscape



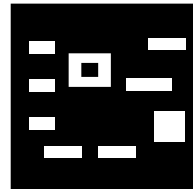
**Urban:** geometric grid, city within a city



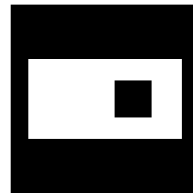
**Quadrangle:** enclosed space, surrounded by continuous structures

## BUILDING TYPOLOGY

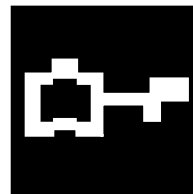
Both site and program influence building form.



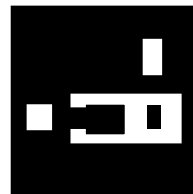
**Compartmented:** independent structures, departmental separation per structure



**Compact:** mega-structures, all in one



**Continuous:** close departmental relations, flex spaces, uninterrupted circulation



**Composite:** combination of two or three building types

## COMPARATIVE MAPPING

To better understand the design needs for the community college of the 21st century, existing community colleges, and physical characteristics of regional schools needed to be identified and compared. A modified comparative analysis method employed by Michael Southworth (1995), in his study *Walkable Suburbs*, and Ayers Saint Gross Architects (ASG), in their study titled *Comparing Campuses* (1998-2000) will be particularly appropriate. The analysis describes and evaluates the colleges by combining ASG and Southworth's comparative models looking at:

- Built form - showing the footprints of all campus structures and adjacent developments; including roads, parking lots/spaces and pedestrian pathways through figure-ground graphics.
- Access - showing distance and accessibility throughout campus shown through figure-ground graphics.
- Layout and character – expressing the quality and character of the campus.

In addition to studying the form, circulation, access and character, the analysis compares each community colleges' facts and figures to compare the proportions or scale of community college campuses:

- Campus Population: full time equivalency students (FTES), total student population, number

of faculty and staff, total campus population;

- Campus Housing facts: number of dorms and bed count;
- Campus Land Use: number of buildings, gross square footage, acreage of land holdings, floor area ratio, number of parking spaces, and acres of parking.

I will also attempt to link Brubaker's campus characteristic and building typologies from the previous section by assigning one or more icon from both the campus characteristics and building typologies to each campus.

**Community college selection.** Selection of each community college was based on characteristics that best met the ideal conditions discussed with the local community college, LCC's, representative(s). The selection process was carried out by an internet search to compile a complete list of regional community colleges in Oregon, Washington and Northern California. An examination of each schools' website excluded schools that did not have a housing component on or in association with their campus. To complete the initial selection process, a review of aerial photos was used to assess the school's land-use pattern, proximity to the urban fringe and closeness to a major highway. In the fall of 2009, twenty University of Oregon architecture, landscape architecture, and planning students made visits to thirteen community colleges. The students produced precedent studies that have helped inform the analysis

of each school. The sites were studied to glean lessons learned from them that can contribute to the creation of a framework for the planning and design standards for the 21<sup>st</sup> century community college.

In the spring of 2010, the Urban Design Lab commenced a secondary examination of the thirteen community colleges to gather the data we would need for the comparative mapping process. Four of the schools were excluded from the final selection process due to a lack of data, leaving nine case study sites to compare, which included Lane Community College for comparative purposes (see figure 3-7).

Figure 3-7

Map Key

1. Big Bend Community College
2. Butte College
3. Central Oregon Community College
4. Lane Community College
5. Oregon Coast Community College
6. College of the Redwoods
7. Shasta College
8. Sierra College
9. College of the Siskiyous





# BIG BEND COMMUNITY COLLEGE

Moses Lake, Washington

Founded: 1962

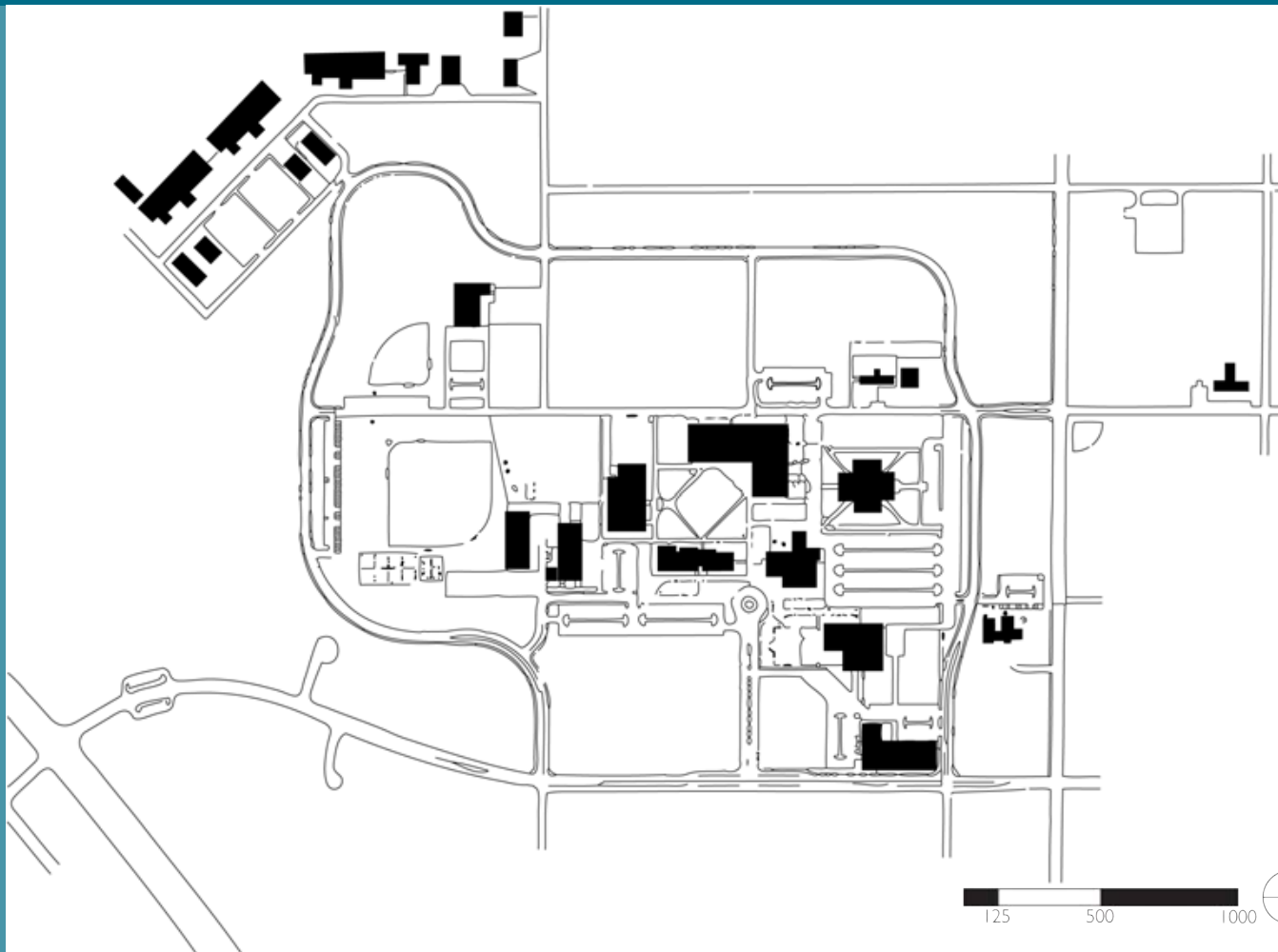
## LAYOUT AND CHARACTER

Big Bend Community College (BBCC) acquired the 159-acre former Larson Air Force Base in 1966, and in 1975, it became the permanent college campus for all programs. Grant County International Airport is located to the north of the school. To the northwest, the land is undeveloped, non-irrigated open space. And to the south lies the city of Lake Moses. BBCC is situated two blocks north of the Moses Lake's nearest residential neighborhood and directly east of Coulee Corridor, otherwise known as Route 17. The remaining land surrounding the college is predominantly agricultural.

The prior use has significantly defined its physical layout and character of the school. The distance between buildings discourages students and employees from walking, particularly in the winter months. Big Bend's vehicular entrances are in-line with the city grid and lead to parking lots that front most buildings. The campus is surrounded by a ring road, enforcing the dominance of the automobile on campus and disrupting the urban grid. BBCC continues to use many of the old hangars and barracks from the base. Todd Davis, head of maintenance and operations explains the campus motto regarding retrofitting old building when he said, "that there is no permanent wall." This maxim helps explain why the hangar buildings are used for automotive, aeronautics and welding courses, and the barracks are used for dormitories.

Even with the reuse maxim, many buildings are prohibitively expensive to renovate. This has led to new construction in the core of the campus. The construction has begun to centralize facilities, enhancing accessibility and concurrently updating the look and feel of the campus creating a more welcoming aesthetic.





## POPULATION

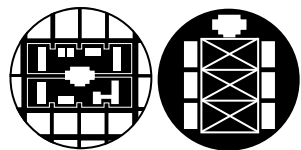
Full Time Students --- 1,914  
 Total Student Population --- 5,111  
 Number of Faculty --- 177  
 Number of Staff --- 267  
 Total Campus Population --- 5,554

## HOUSING

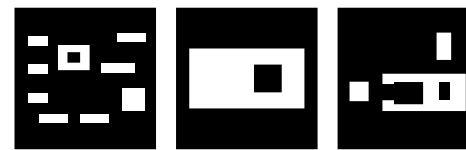
Number of Dorms --- 2  
 Bed Count --- 240  
 Type --- Renovated Air Force Barracks

## LAND USE

Number of Buildings --- 24  
 Gross Square Footage --- 462,134  
 Acreage of Land Holdings --- 159  
 Floor Area Ratio --- .07  
 Number of Parking Spaces --- 1,632  
 Acres of Parking --- 16



CAMPUS CHARACTER



BUILDING TYPOLOGY

# BUTTE COLLEGE

Oroville, California

Founded: 1967

## LAYOUT AND CHARACTER

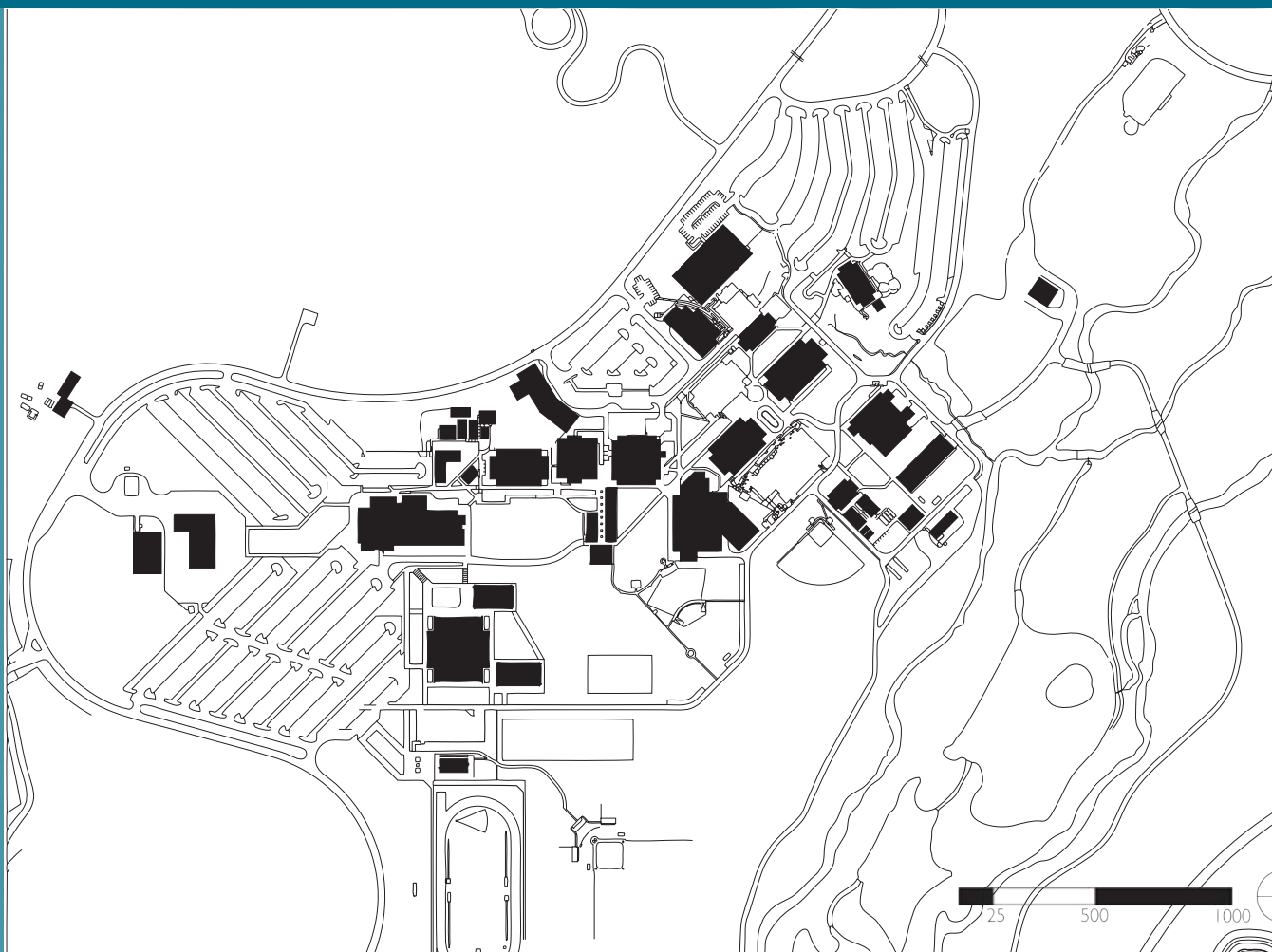
The campus is located on a 928-acre wildlife refuge located fifteen miles south-east of Chico, California and is four miles east of Highway 99. Nestled within the Sierra Nevada foothills, the campus has a large change in elevation and provides interesting views in and out of campus. Many of the buildings are built into hillsides helping to break up large open spaces into intimate, human-scaled areas. In a location where temperatures exceed 100 degrees; shaded indoor and outdoor spaces are necessary.

Due to budget cuts in the late 1970's, only partial construction of the campus was completed. Butte College has met their 250% increase in enrollment with the use of temporary portable facilities; some of these trailers have been in uses for almost 40 years. In 2001, the Butte College community created educational and facilities master plans. The plans helped facilitate the award of an \$85 million dollar bond measure and subsequent renovation of the Library (2007), the demolition of trailers as construction progressed and new buildings such as: the Public Health Center (2001); the Learning Resource Center (2004); the Arts Center (2008/\$28.7m); and the Student & Administrative Services Building (2010/\$22.3m).

As members of the American College & University President's Climate Commitment, Butte College has agreed to follow specific actions leading towards greater environmental sustainability. This is partly accomplished with over 10,000 PV generating almost 2 megawatts of DC electricity, on-site water treatment and energy plant. Butte has the largest community college transportation system in California, moving over 1,700 students a day. Despite the rural surroundings and with the help of new construction, the campus core feels quite dense and almost urban. The abundance of outdoor gathering spaces and wide sidewalks allows circulation to be unimpeded while groups congregate.







## POPULATION

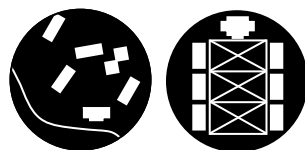
Full Time Students --- 10,812  
 Total Student Population --- 21,1833  
 Number of Faculty --- 746  
 Number of Staff --- 323  
 Total Campus Population --- 22,902

## HOUSING

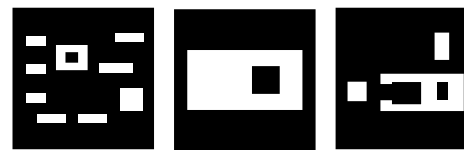
Number of Dorms --- n/a  
 Bed Count --- n/a  
 Type --- off campus

## LAND USE

Number of Buildings --- 36  
 Gross Square Footage --- 740,000  
 Acreage of Land Holdings --- 928  
 Floor Area Ratio --- .02  
 Number of Parking Spaces --- 2,172  
 Acres of Parking --- 217



CAMPUS CHARACTER



BUILDING TYPOLOGY



# CENTRAL OREGON COMMUNITY COLLEGE

Bend, Oregon

Founded: 1949

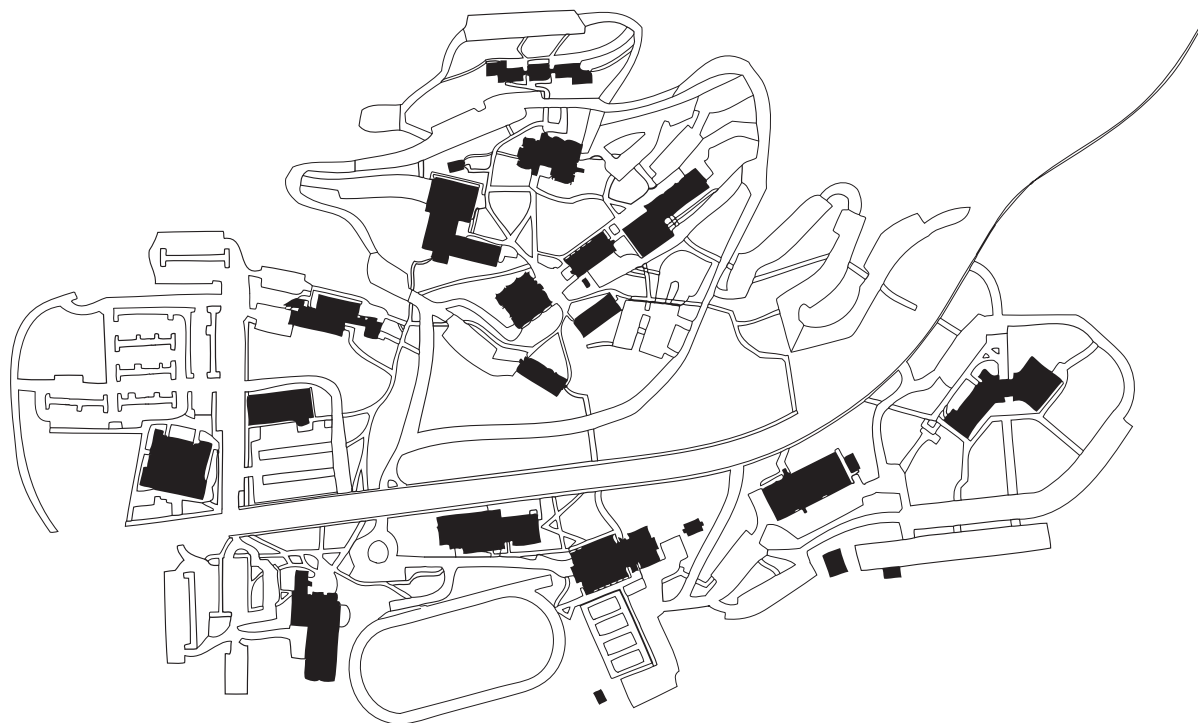
## LAYOUT AND CHARACTER

Central Oregon Community College (COCC), voted most beautiful campus by Newsweek in 1960, lies in the high desert of Bend, Oregon. COCC is surrounded by single-family homes on all sides and is bisected by its main access road, NW College Way. Initial planning for the campus focused buildings near the summit of Aubrey Butte, where the slope is the fairly steep. This allowed COCC to take advantage of the magnificent views, but also created accessibility issues the school has been coping with ever since.

The upper campus - the steeper of the two – has more accessibility and way-finding issues than the lower campus, creating greater dependency on the automobile and auto related issues like parking and carbon monoxide emissions. Although many of the lots are smaller, they disrupt pathways, obstruct views and disburse outdoor social spaces. The sprawling organization of the upper campus diminishes the sense of a unified campus.

The lower campus, on the other hand, is flatter and offers COCC opportunities to address some of these issues. Recent planning efforts on the lower campus include a pedestrian thoroughfare along NW College Way that could create a better pedestrian experience; and a new campus center building that has created gathering and social space previously lacking, while focusing on a friendlier centralized campus core.





## POPULATION

Full Time Students --- 4,160  
 Total Student Population --- 17,487  
 Number of Faculty --- 256  
 Number of Staff --- 184  
 Total Campus Population --- 17,926

## HOUSING

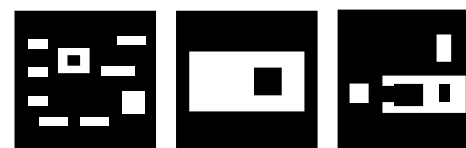
Number of Dorms --- 1  
 Bed Count --- 102  
 Type --- Traditional

## LAND USE

Number of Buildings --- 22  
 Gross Square Footage --- 434,000  
 Acreage of Land Holdings --- 201  
 Floor Area Ratio --- .05  
 Number of Parking Spaces --- 1,908  
 Acres of Parking --- 19



CAMPUS CHARACTER



BUILDING TYPOLOGY

# LANE COMMUNITY COLLEGE

Eugene, Oregon

Founded: 1964

## LAYOUT AND CHARACTER

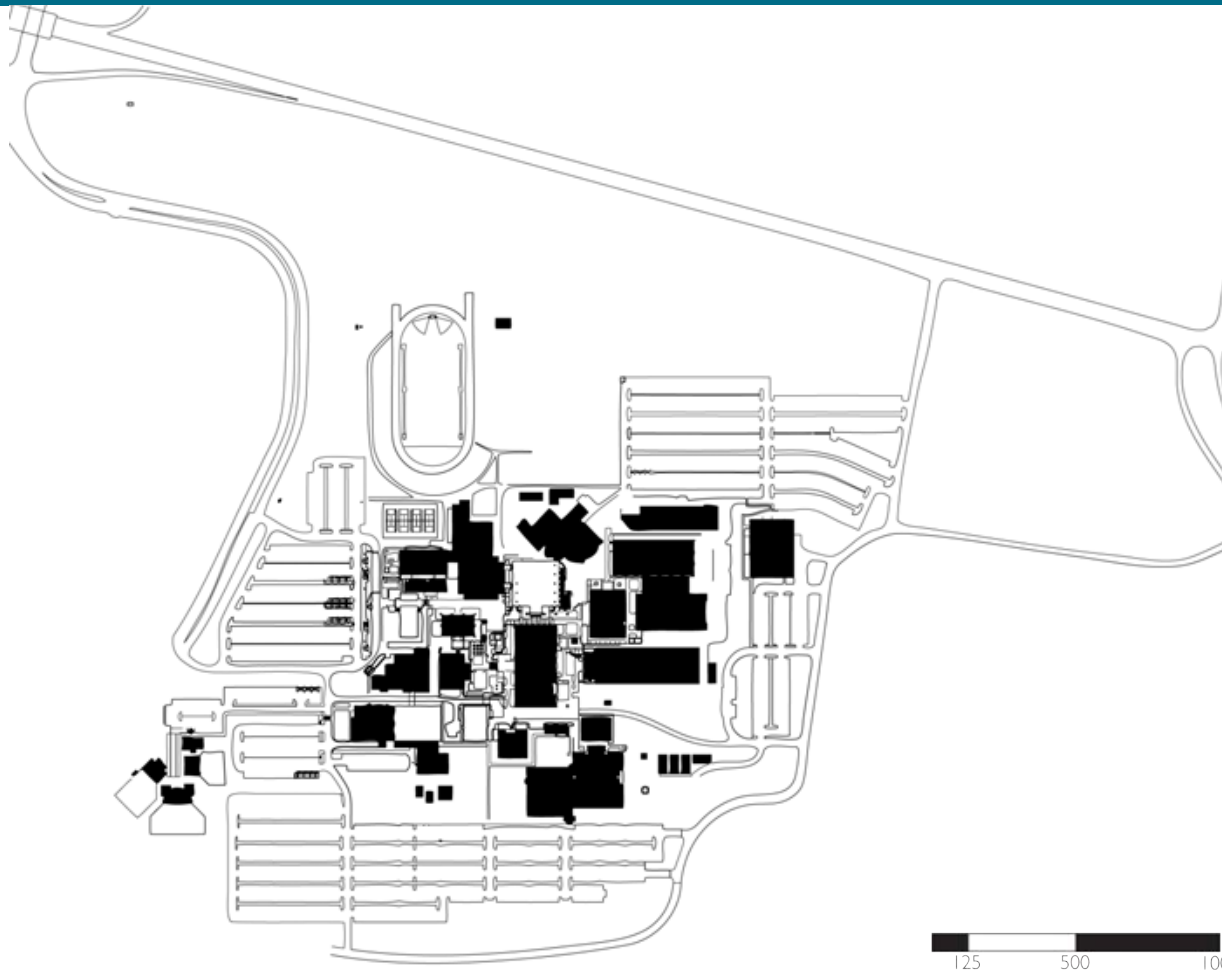
Nestled in the south hills of Eugene, Oregon, Lane Community College (LCC) is home to over 36,000 students. LCC sits in the Russell Creek Basin and is surrounded by a mixed deciduous forest to the south and west. To the north lies a vast wetlands with 30th Avenues bisecting. Interstate - 5 (I-5) runs north south to the east with two parcels of land separating it from the main campus. Just beyond the wetlands are large lot single family homes, some commercial and light industrial business. LCC exists today much as it did when it was first constructed with several new buildings surrounded by a vast sea of parking.

LCC is located less than one quarter mile from I-5 and has two entrances, two of them located directly off 30th Avenue. The westerly most entrance has a serpentine boulevard that directs faculty, staff, students and visitors directly to one of many parking lots and the secondary 30th Avenue entrance is closer to I-5. A potential third entrance, although on maps was never realized and would split off from Eastway Drive at the intersection of Eldon Schafer Road, which could run perpendicular to I-5 and connect with McVay Highway.

The college is built into a slope and therefore quite terraced. The design of the campus attempts to ameliorate this site constraint by tiering the campus into the hillside. The buildings were constructed in the Brutalist style of architecture, in French, beton brut, literally meaning raw concrete. Lane Community College is challenging to navigate and although set within a beautiful setting, is not aesthetically pleasing.







## POPULATION

Full Time Students --- 13,316

Total Student Population --- 5,111

Number of Faculty --- 628

Number of Staff --- 478

Total Campus Population --- 38,005

## HOUSING

Number of Dorms --- no

Bed Count --- n/a

Type --- n/a

## LAND USE

Number of Buildings --- 23

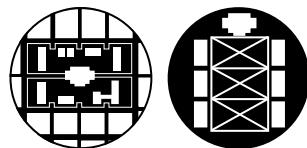
Gross Square Footage --- 1,141,011

Acreage of Land Holdings --- 330

Floor Area Ratio --- .08

Number of Parking Spaces --- 3,230

Acres of Parking --- 32



CAMPUS CHARACTER



BUILDING TYPOLOGY



# OREGON COAST COMMUNITY COLLEGE

Newport, Oregon

Founded: 1987, New Campus 2009

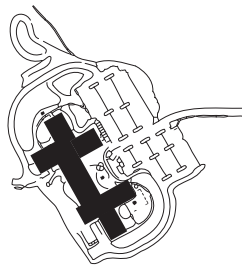
## LAYOUT AND CHARACTER

Oregon Coast Community College (OCCC) has a brand new campus located in the coastal town of Newport, Oregon. It is nestled in the woods above the Yaquina River and surrounded by lush coastal forest. A bond measure passed in May 2004 funded the facilities. Prior to the transition to the permanent campus, OCCC leased facilities in town.

Currently, there is a single building that has been in operation since October 2009. The new building was constructed larger than the current services require, ensuring future growth. There is one entrance to the OCCC campus with one large parking lot capable of holding 200 vehicles.

OCCC is located next to Wilder, a mixed-use development that is under construction. The college and Wilder are developing simultaneously and with each other in mind. To create a more cohesive, livable environment the two entities have partnered to create a node of shops and conveniences that both the college community and the residents' of Wilder can enjoy. An Aquarium Science building, in the construction documentation stage of design, is the next building in the works at OCCC.





## POPULATION

Full Time Students --- 500  
 Total Student Population --- 2,300  
 Number of Faculty --- 44  
 Number of Staff --- 40  
 Total Campus Population --- 2,384

## HOUSING

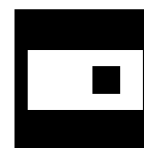
Number of Dorms --- planned  
 Bed Count --- n/a  
 Type --- n/a

## LAND USE

Number of Buildings --- 1  
 Gross Square Footage --- 80,000  
 Acreage of Land Holdings --- 25  
 Floor Area Ratio --- .07  
 Number of Parking Spaces --- 200  
 Acres of Parking --- 2



CAMPUS CHARACTER



BUILDING TYPOLOGY

# COLLEGE OF THE REDWOODS

Eureka, California

Founded: 1964

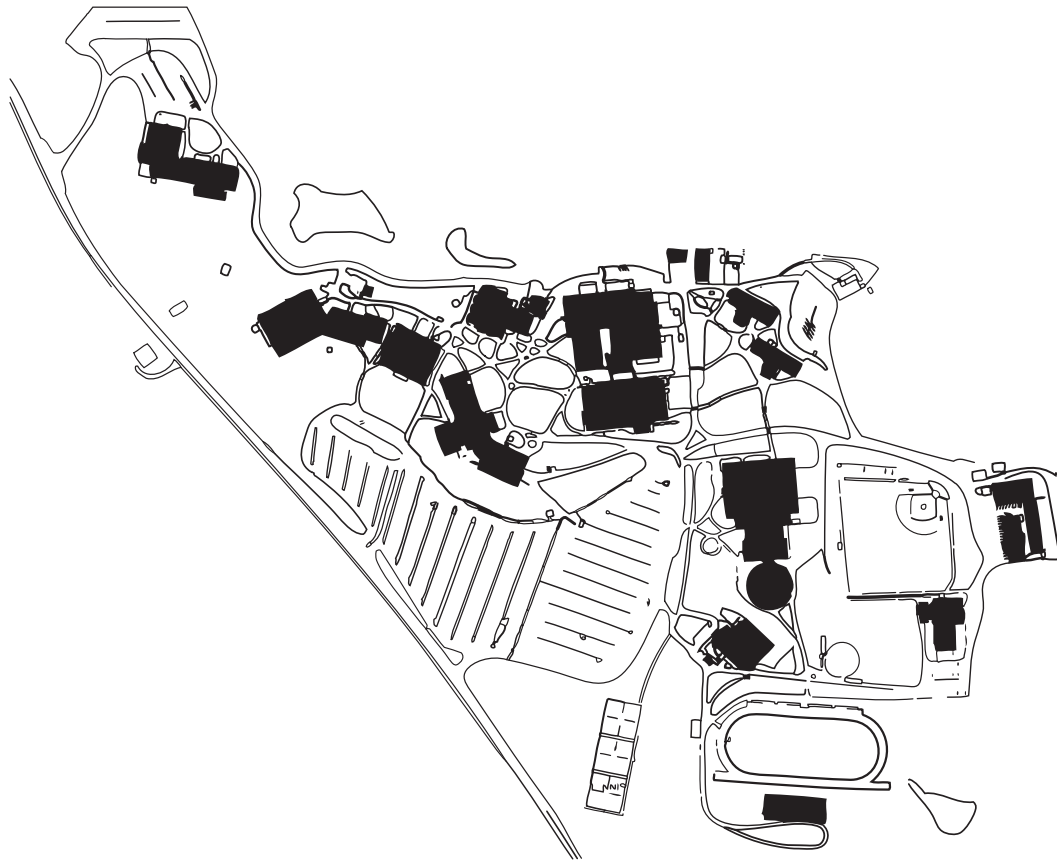
## LAYOUT AND CHARACTER

The campus is located on a 334-acre site, approximately seven miles from the city of Eureka. Nestled below the redwood forest, the campus has expansive views to the water. College of the Redwoods has been developed over time and creates a cohesively designed environment.

A modern Learning Resource Center, constructed in 2002, fits well aesthetically with the older facilities and surrounding campus. The rolling topography of the existing campus, along with the spread-out facilities, creates a campus that is somewhat difficult to navigate.

There are three entrances to the Eureka campus, all from Tompkins Hill Road. The majority of parking is located on the south side of the campus with some smaller lots on the north side. A new entry drive and pedestrian drop-off was developed in 2009, which improved access to the campus and to the proposed new Student Services/Administration/Theatre building.





## POPULATION

Full Time Students --- 7,518  
 Total Student Population --- 14,084  
 Number of Faculty --- 332  
 Number of Staff --- 211  
 Total Campus Population --- 14,627

## HOUSING

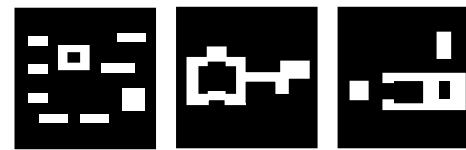
Number of Dorms --- 2  
 Bed Count --- 160  
 Type --- Traditional

## LAND USE

Number of Buildings --- 24  
 Gross Square Footage --- 449,1948  
 Acreage of Land Holdings --- 334  
 Floor Area Ratio --- .03  
 Number of Parking Spaces --- 1,500  
 Acres of Parking --- 15



CAMPUS CHARACTER



BUILDING TYPOLOGY



# SHASTA COLLEGE

Redding, California

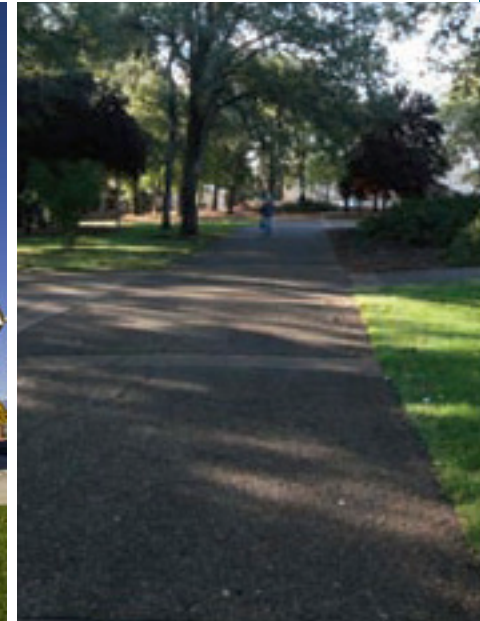
Founded: 1950

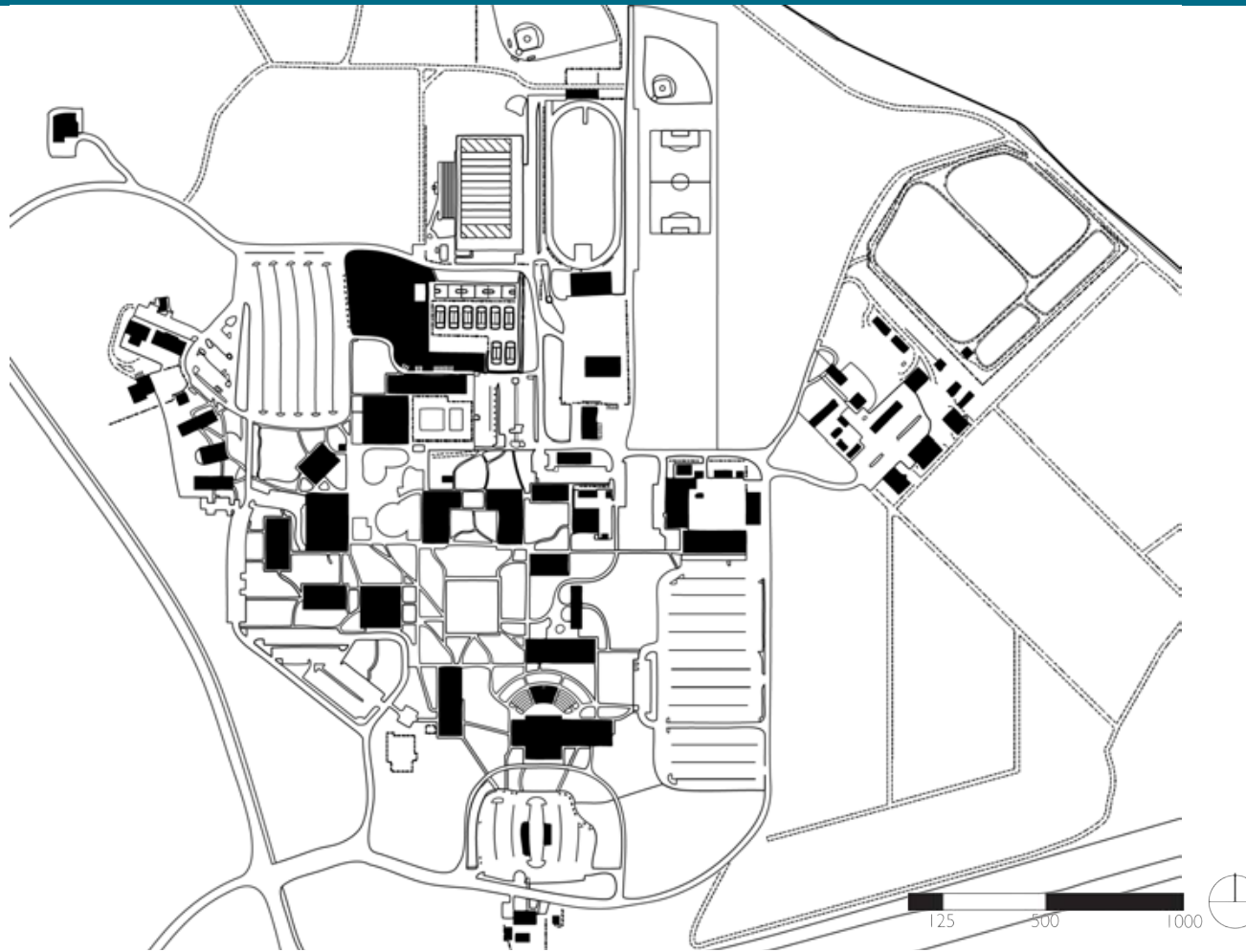
## LAYOUT AND CHARACTER

Shasta College (SC) is located approximately two miles from the city of Redding. The Shasta College campus was originally a fur and trading center of the Wintu Indians, later owned by a soldier and his family after the Mexican-American War. Shasta College grew so rapidly that, in 1964, voters approved a bond issue for construction of a 337-acre campus at the current main campus location.

The college is relatively flat. The southern edge abuts Highway 299 and is approximately three miles from Interstate 5. The area surrounding SC is predominantly large lot, single-family neighborhoods.

There are two entrances onto the campus, both from Old Oregon Trail leading to three large parking areas located on the north, east and south sides of the campus, with some smaller lots throughout. The campus is spread out with accessible pathways that weave from building to building. In 2005, a \$1.5 million Early Childhood Educational childcare center and instructional facility opened. Their latest project also includes a new Health Sciences and University Center Building completed in the fall of 2007. Despite the vast timeframe that the campus had been developed, the overall campus fits seamlessly.





## POPULATION

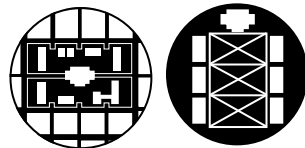
Full Time Students --- 3,760  
 Total Student Population --- 12,885  
 Number of Faculty --- 425  
 Number of Staff --- 251  
 Total Campus Population --- 13,561

## HOUSING

Number of Dorms --- 2  
 Bed Count --- 120  
 Type --- Traditional

## LAND USE

Number of Buildings --- 28  
 Gross Square Footage --- 364,674  
 Acreage of Land Holdings --- 337  
 Floor Area Ratio --- .02  
 Number of Parking Spaces --- 2,400  
 Acres of Parking --- 24



CAMPUS CHARACTER



BUILDING TYPOLOGY

# SIERRA COLLEGE

Rocklin, California

Founded: 1936 (Placer Junior College)

## LAYOUT AND CHARACTER

Sierra College is a rural campus located near the foothills of the Sierra Nevada Mountains at the edge of suburban Rocklin, California. The campus is approximately twenty miles from the State Capitol along Interstate 80. Sierra's origins date back to the beginning of junior colleges in California. Founded in 1914, Placer Junior College was Sierra's forerunner.

The campus is bound on three sides by Sierra College Blvd to the east, Rocklin Road to the south, and Interstate 80 running diagonally from the southwest to the northeast. The surrounding land to the south is predominantly suburban neighborhoods; to the east, open scrub brush; and to the west, strip mall development along I-80 and a mix of light industrial and residential.

Sierra College has three main entries leading to three large parking lots and several small parking lots scattered throughout campus. A large unpaved, gravel parking area sits across Rocklin Road. The campus is developed on a gently sloping hillside with 70 acres of nature trails to the north. The pathways are very accessible leading to a variety of open spaces and buildings. Several new buildings have been added recently.







## POPULATION

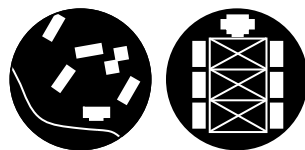
Full Time Students --- 5,429  
 Total Student Population --- 42,214  
 Number of Faculty --- 976  
 Number of Staff --- 300  
 Total Campus Population --- 43,490

## HOUSING

Number of Dorms --- 2  
 Bed Count --- 144  
 Type --- Traditional

## LAND USE

Number of Buildings --- 50  
 Gross Square Footage --- 600,000  
 Acreage of Land Holdings --- 300  
 Floor Area Ratio --- .05  
 Number of Parking Spaces --- 2,500  
 Acres of Parking --- 25



CAMPUS CHARACTER



BUILDING TYPOLOGY

# COLLEGE OF THE SISKIYOU

Weed, California

Founded: 1957

## LAYOUT AND CHARACTER

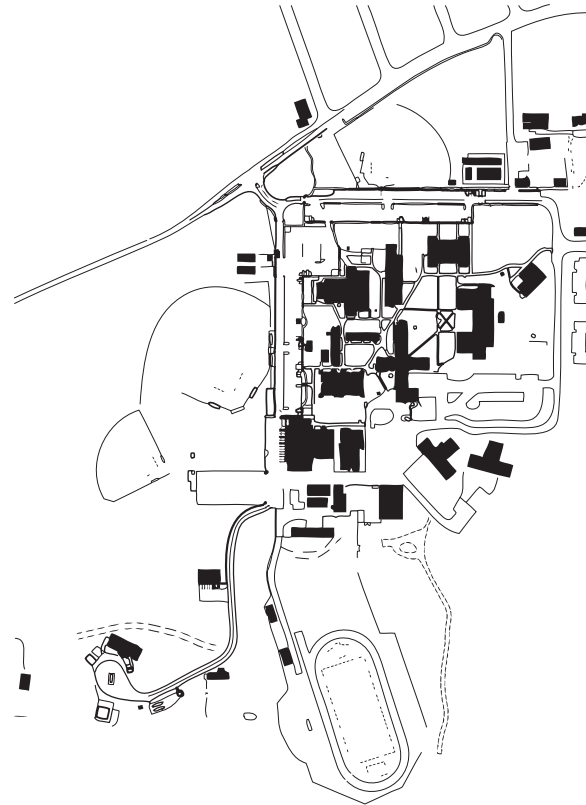
College of the Siskiyous (CS) is a small campus on relatively level ground for the area. The campus is located on the southwest side of Interstate 5, opposite of the nearest town, Weed. To the south and east of the campus lie several buttes, while a mix of single-family homes and multifamily apartments lie to the east and north side of campus.

The campus has two main entrances to the north and east. The campus core is planted with grass between the buildings with appropriate pedestrian pathways. Parking surrounds the campus with recreation fields beyond. Though the campus seems quiet and low key it is actually quite attentive in its attempts to work with the newest ideas of working towards a sustainable future. The facilities directors are acting as leading stewards to drive the college in this direction.

There are multiple opportunities for enjoying the great outdoors in this lush region. Just beyond the edge of the housing there is natural forest and wildlife areas with nature trails.







## POPULATION

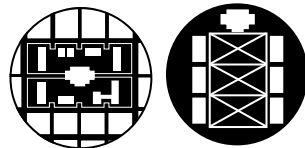
Full Time Students --- 1,246  
 Total Student Population --- 4,564  
 Number of Faculty --- 248  
 Number of Staff --- 102  
 Total Campus Population --- 4,914

## HOUSING

Number of Dorms --- 2  
 Bed Count --- 136  
 Type --- Traditional

## LAND USE

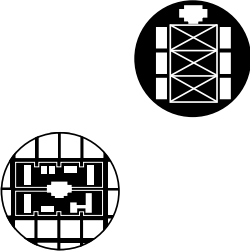
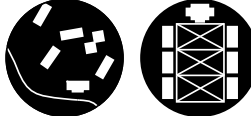

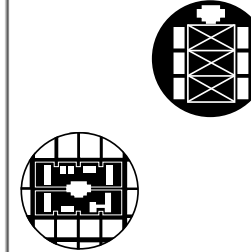

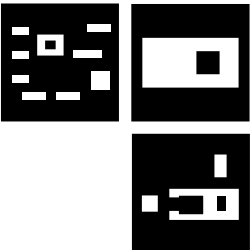
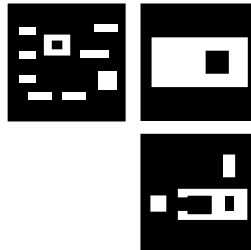
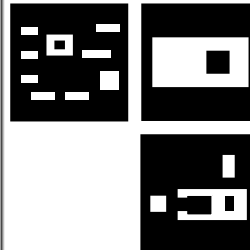
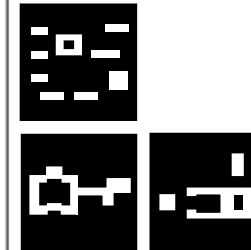

Number of Buildings --- 23  
 Gross Square Footage --- 226,303  
 Acreage of Land Holdings --- 268  
 Floor Area Ratio --- .02  
 Number of Parking Spaces --- 434  
 Acres of Parking --- 4


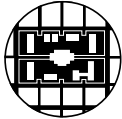
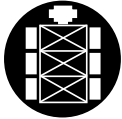

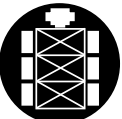

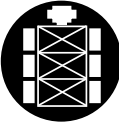
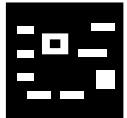
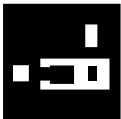
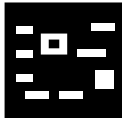
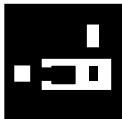
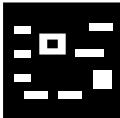

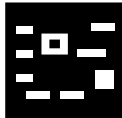



CAMPUS CHARACTER



BUILDING TYPOLOGY

	Big Bend	Butte College	Central Oregon CC	Lane CC	Oregon Coast CC
Location	Moses Lake, Washington	Oroville, California	Bend, Oregon	Eugene, Oregon	Newport, Oregon
Founded	1962	1967	1949	1964	1987
Full Time Student (FTES)	1,914	10,812	4,160	13,316	500
Total Student Population	5,111	21,833	17,487	36,899	2,300
Faculty	177	746	256	628	44
Staff	267	323	183	478	40
Total Campus Population	5,554	22,902	17,926	38,005	2,384
On-Campus Housing	2 dorms, 240 beds	off campus	1 dorm, 102 beds	no	planned
Number of Buildings	24	36	22	23	1
Building (gsf)	462,134	740,000	434,000	1,141,011	80,000
Land (acres)	159	928	201	330	25
Floor Area Ratio (FAR)	0.07	0.02	0.05	0.08	0.07
Parking Spaces	1,632	2,172	1,908	3,239	200
Parking (acres)	16	22	19	32	2
Campus Typology  Traditional, Naturalistic, Urban, Quadrangle					
Building Typology  Compartmented, Compact, Continuous, Composite					

College of the Redwoods	Shasta College	Sierra College	College of the Siskiyous
Eureka, California	Redding, California	Rocklin, California	Weed, California
1964	1950	1936	1957
7,518	3,760	5,429	1,246
14,084	12,885	42,214	4,564
332	425	976	248
211	251	300	102
14,627	13,561	43,490	4,914
2 dorms, 160 beds	2 dorms, 120 beds	2 dorms, 144 beds	2 dorms, 136 beds
24	28	50	23
449,948	364,674	600,000	226,303
334	337	300	268
0.03	0.02	0.05	0.02
1,500	2,400	2,500	434
15	24	25	4
	 	 	 
 	 	 	 

## CONCLUSION

Studying community college form has helped the Urban Design Lab understand how these educational villages have formed. Many of the case studies were designed and developed in the 1960s. Each campus has its own unique setting - high desert, lush forest, or old military base - but each share the designation of being located at the fringe of a city in the county they serve.

All of the campuses have a predominant campus characteristic and most have a secondary. An example is Big Bend Community College. It sits at the edge of town, yet the streets and buildings fit into the urban grid. The newer section of campus starts to create a more traditional campus setting; linking buildings with walkways - creating a city, within the city. Every campus, except Oregon Coast Community College has the same building typology: compartmented and one other; developing towards a composite as growth and expansion occur.

The ratio of people to parking spaces ranged from 3.4:1 to 17.4:1 with a mean of 10.1. LCC fall just above the average with 11.7:1 All the schools have low Floor Area Ratios; LCC the highest.