
California State University, Chico
Master Plan 2005



June 27, 2005



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Master Plan 2005

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Prepared by AC Martin Partners, Inc.

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APPENDIX A: WAYFINDING AND SIGN PLAN

Under Separate Cover



Message from President

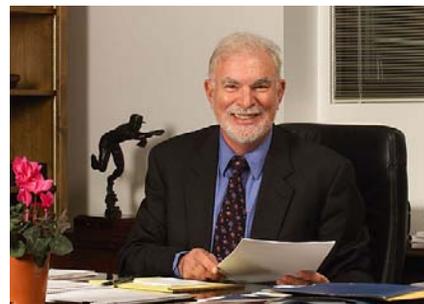
For nearly five years, California State University, Chico has been engaged in the process of updating its facilities Master Plan. Last accomplished in 1990, periodic Master Plan updates enable the University to review its vision and values and to assess their ongoing validity and achievement through the physical design and character of the campus. The 2005 Master Plan provides principles and guidelines for the physical development of the 119 acre main campus and the 800 acre University farm so that Chico State can both build upon and sustain its distinctive strengths into the 21st Century.

Closely tied to the University Strategic Plan, the Master Plan affirms a compelling set of goals, none of which are more important than building a community of learning and hope worthy of the trust that our students and the people of California have placed in us. Other important goals flow from our Strategic Plan through our Master Plan. These include accommodating and managing enrollment growth, protecting our distinctive living and learning environment as a residential campus, strengthening the extraordinary relationship the University has with its host city Chico, affirming the harmony between the natural and built environments of the campus, and reinforcing the educational experience of our students through the buildings and spaces of the campus and its extended locations.

Above all, the Master Plan communicates values. We declare our commitment to environmental sensitivity and respect and to sustainable building and living practices. We affirm openness through a barrier-free campus. We demonstrate civic engagement as a good neighbor and partner with the city of Chico, committed to building a stronger, safer and more desirable community together. We articulate a keen sense of place, psychologically, historically, aesthetically and geographically. We express confidence in our identity and pride in our story.

Yes, a good Master Plan reveals, but it also prepares. In compelling us to examine the University's defining values and characteristics, it also challenges us to consider how our identity and mission have prepared Chico State to meet the needs of an increasingly more complex workplace and pluralistic society. Thus, a successful planning effort is simultaneously both retrospective and future-focused, for it underscores the connections between what we have achieved and what we are, and what we will become. Whether examining the historical record or considering the University's next quarter century, we rely upon clarity in such matters to develop a greater sense of shared purpose, to promote institutional community, and to gain the resources and support to meet our high standards and aspirations.

California State University, Chico is pleased to present this Master Plan and the campus it envisions. We are confident that those who read it will like, and be impressed, with what we have set forth. We hope its readers will gain a better sense through this Master Plan of Chico State and feel the pride in what we have accomplished and what we mean to the people and the communities who count on us.



President Paul J. Zingg



Executive Summary



ES

ES.1 Primary Master Plan 2005 Projects

EXECUTIVE SUMMARY

CSU Chico is recognized as one of the most beautiful and student friendly campuses of the CSU System. This tradition will continue and be reinforced as the many interrelated elements of the CSU Chico Master Plan 2005 are implemented over time. The Plan provisions are designed to accomplish this in parallel with a modest growth allowance that would take the campus to a student enrollment of 15,800 FTES. Although this growth target represents only an 1,800 FTES increase over the current capacity, representing some growth in new academic space, the campus needs a

significant number of new student support type facilities in several categories such as student housing, recreation, child care and parking to address unmet current demand. Replacement of aging and inefficient academic facilities is also needed to insure an efficiently functioning campus and academic program. Given this set of existing conditions, the Master Plan accommodates a campus building plan that would see the construction of five new major academic buildings, two recreational facilities, a natural history museum, a child care center, approximately 1,300 bed-spaces of student housing and two parking structures. Other large building and infrastructure renovation



ES.2 | ATRC Master Plan of Facilities

ES

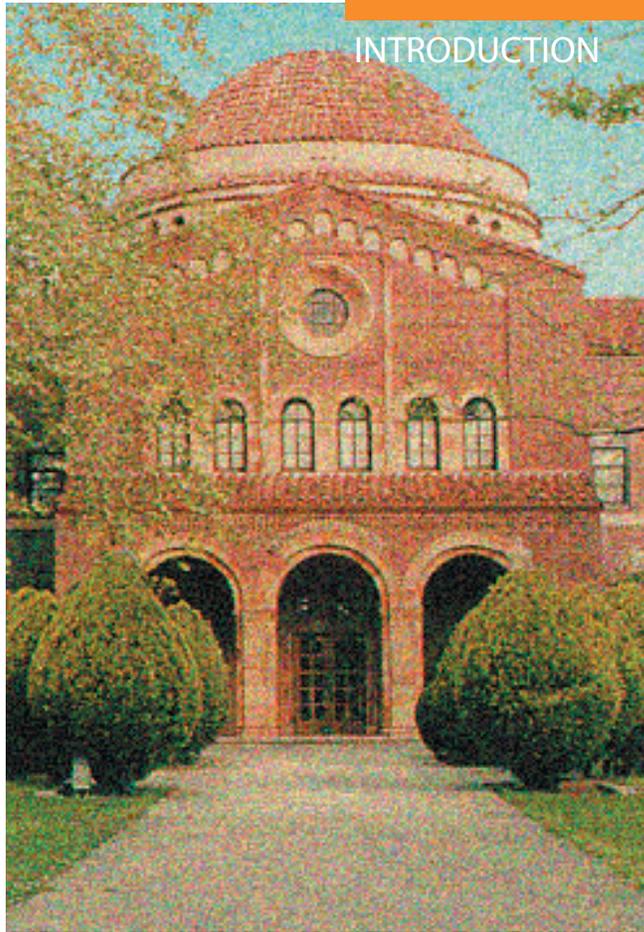
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projects are also identified. This level of commitment is dependent upon obtaining a significant quantity of non-state resources in addition to the traditional State of California capital outlay funding. Further, since CSU Chico's main campus has one of the smallest land areas among the CSU universities, fulfillment of various Plan projects will require acquisition of additional properties adjacent to the campus.

To maintain and enhance the beauty of the CSU Chico campus, the CSU Chico Master Plan 2005 identifies a number of improvements to the existing landscape and hardscape which are needed to address current visual and functional weaknesses. The Master Plan 2005 also contains a Design Guidelines section that sets forth a context for insuring that the design of new buildings contributes to a consistent architectural vocabulary for the campus, which over the years has developed utilizing brick and concrete as the predominant construction material with secondary design consistencies in the types and colors of window and door framing. These guidelines include specific recommendations related to campus lighting, site furniture and signs/wayfinding.

The Master Plan 2005 contains a separate chapter devoted to articulating a long term plan for the University Farm facility officially known as the Paul L. Bryne Memorial Agriculture Teaching and Research Center (ATRC). This 800 acre facility, that serves as a hands-on laboratory for the CSU Chico College of Agriculture as well as a center visited and used by the educational/ agricultural business communities, has developed a facility master plan identifying a wide variety of upgrades and improvements needed to bring state-of-the-art agricultural technology instruction, enhanced real life agricultural experience, enhanced student safety, better livestock security, upgraded infrastructure functionality and added site beautification to the ATRC. As the ATRC is an important meeting space for the Northern California agricultural community, the Master Plan 2005 proposes the construction of multi-purpose Conference Center and Events Center facilities to be used jointly for academic and community purposes. These latter facilities will be financed through a 50 percent matching fund arrangement with the private sector.

INTRODUCTION



Introduction

I. CONTEXT OF THE MASTER DEVELOPMENT PLAN

The CSU Chico 2005 Master Plan (2005 MP) describes the agreed upon plan and physical framework needed to accommodate growth and change on the CSU Chico Campus over the next ten to twenty years.

The State of California surpassed 35 million inhabitants in the year 2004 and continues to grow. This growth has direct implications for the California system of higher education and has affected the development of the 2005 MP. By Fall 2000, CSU Chico had reached its growth capacity of 14,000 FTES (full time equivalent students) and enrollments were expected to rise based upon the predicted state-wide rise in the number of college-aged students seeking to enter the California State University system. After considerable University discussion, and in conjunction with the California State University Chancellor's office, campus leadership proposed a CSU Chico role of accommodating a small portion of the state-wide enrollment demand by raising its physical growth capacity to 15,800 FTES.

In addition to the growth pressures placed upon the University that will necessitate the construction of new classrooms and laboratories, there is a need to replace several aging campus buildings, a need to update other facilities and a need to accommodate several expanded academic programs. The CSU Chico 2005 Master Plan addresses these basic needs as well as various specific facility needs including: the need to replace, update and expand academic facilities at the University Farm (Agricultural Teaching and Research Center - ATRC); the development of a Student Recreation Center; the need to expand CSUC-sponsored student housing and the need to add additional parking and outdoor recreation space.

Since the campus land holdings of 119-acres are very limited by California State University standards, new academic facilities, expanded student housing, outdoor recreation fields or additional parking will, in some form, require intensification of uses on-site and/

or acquisition of additional property. Both strategies have been employed in the 2005 MP.

The 2005 Master Plan also addresses a number of other issues related to the campus functional and visual environment. As the campus is noted for its elegant architecture, mature landscaping, human scale and pedestrian orientation a major goal of the plan is to maintain and enhance where appropriate those outstanding qualities of the campus. The 2005 MP addresses campus architecture, landscaping, open space, signage, lighting, bicycle storage and campus benches and trash receptacles. Further, just as the plan identifies the location and describes the essential characteristics of the new and updated buildings for the campus, it also proscribes updates and expansions to essential campus infrastructure that supports those buildings.

I.i State of California Master Plan for Higher Education

In 1954 there were two University of California campuses and 10 California state colleges. Anticipating a population boom, State leaders envisioned a new system of public higher education to match both the burgeoning population and the people's optimism and ambition to have the best in public education. In that year, the State of California adopted a Master Plan for Higher Education. This Master Plan defined three tiers of public higher education that guaranteed access to higher education opportunities for all Californians.



i.1 Kendall Hall - Administration and Historic Gateway to CSU Chico

Intro

The University of California (UC) would be the top tier, doctoral degree-granting universities with full research programs, mandated to accept the top one-eighth of graduating high school seniors. The state colleges, later to be consolidated and called California State University (CSU), would be the “teaching” universities, granting undergraduate and masters degrees. Under the Master Plan for Higher Education, the state colleges were mandated to accept the top one-third of students. The junior colleges, later to be called community colleges, would be open to all. Remarkably, the plan was embraced and faithfully implemented statewide. It continues to guide public higher education almost 50 years later. From a start of 12 total campuses in 1954, there are now 10 UC campuses and 23 CSU campuses. It is not an exaggeration to say that the 1954 Master Plan for Higher Education has produced a public higher education system that is the envy of the world, both in its quality and in the degree of access it offers to Californians.

The 1954 Master Plan for Higher Education represents a pact between the government of California and its citizens. Under this pact, if the citizens support higher education with their taxes, the State, through its three-tiered system, commits to provide access to public higher education, according to the respective missions of the three tiers. In a remarkable achievement, the State of California has kept its higher education pact with the citizens since 1954, despite a staggering rate of State population growth and changing political climates. At the UC and CSU levels, it has done so by expanding enrollment roughly in proportion to population, despite the challenge of developing 21 complete new campuses and dramatically expanding 12 existing ones in a period of only 48 years.

From the vantage point of 2005, it is clear that the pressure is building to accommodate a bulge in the population of college-age students (the so-called “Tidal Wave II,” children of the baby-boomers), as well as an increase in demand for higher education for older students. This demand is being planned for throughout the CSU system and directly affects the planning for CSU Chico. With this strong demand for higher education and the commitment made by the State to educate

the top one-third of its high school graduates in the State College system, CSU Chico has committed to help serve this need.

I.ii Mission of the University

The physical campus is a potent instrument of the educational process. The physical campus can express the University’s status in the educational and surrounding communities, embody its values, and serve as the symbol of excellence for its students, faculty, staff and visitors. The 2005 MP advances the mission of the University by providing a strategy for development of the physical campus in ways that will further its principles and reinforce its goals.

CSU Chico Mission Statement

California State University, Chico is a comprehensive university serving Northern California and other regions of the state, as well as the nation and the world, through instruction, research, and public service.

Our first priority is the education of our students by creating and maintaining selected quality undergraduate and graduate programs. We will be known for the purposeful integration of liberal and applied learning that provides our students with the knowledge, skills, and moral and intellectual virtues that form the basis for life-long learning and contribution.

We affirm the importance of scholarship and public service. We support the exploration of the frontiers of knowledge, the integration of ideas, the connecting of thought to action, and the inspiring of students.



i.2 Bell Memorial Union (BMU)

We make the results of these academic efforts available for public scrutiny by all our constituents. We will maintain extensive continuing education and public service programs that serve the needs of our varied constituencies.

The 2005 Master Plan has been created to support the CSU Chico Mission Statement in the context of the physical campus and its facilities.

II. THE GOALS OF THE CSU CHICO 2005 MASTER PLAN

The CSU Chico vision contains goals that are directly linked to the development of the physical campus which are expanded upon in this section.

“Our shared vision for CSU Chico is to be the friendliest, safest, and most attractive university in California.”

CSU System and Campus Context: The Master Plan, through accommodating the array of educational, support and cultural facilities maintained by and for the university, supports the primary educational mission of California State University, Chico within the California State University system. Further, as reiterated in the Campus Strategic Plan and as strongly voiced during the campus issues identification process, it is axiomatic that the quality of life at California State University, Chico – as expressed in the elegant campus’ physical environment, its residential character and its existing facilities – is a major resource that must be protected and nurtured as a high priority.

In particular, the Master Plan supports the five major goals of the CSU Chico Strategic Plan for the future:

1. Develop high-quality learning environments in and outside the classroom;
2. Invest in faculty and staff development;
3. Wise use of new technologies in learning and teaching environments;
4. Serve the educational, cultural and economic needs of Northern California;

5. Accountable to the people of the State of California, diversify revenue resources and manage the resources entrusted to the university.

II.i Specific Goals for the CSU Chico 2005 Master Plan

In the course of the campus forums, specific meetings with staff and consultations with the President’s Cabinet, a series of specific goals were formulated that are articulated here. Other specific goals related to the requirements of specific facilities are articulated in Chapter 3 and that in concept, identify the programmatic, spatial and other characteristics of those specific planned facilities or aspects of the physical plan.

Enrollment Growth

As indicated above, one of the principal forces behind the 2005 Master Plan is the need to accommodate current and anticipated growth. The initial stages of the 2005 MP study included extensive discussions related to campus growth in the context of achieving a balance between any enrollment increases and the quality of life at CSU Chico. On the basis of this process, and in response to the CSU system’s need to respond to the increasing demand for student enrollments, it was determined that CSU Chico would increase its enrollment cap to 15,800 FTES. Accommodating this growth on the campus thus became an important cornerstone goal of the 2005 MP.

Campus Environment

- Use open space as an organizational element.
- Promote a strong expression of landscape including a range of sizes and appropriate species of trees.
- Promote a walkable campus that provides a logical progression of spaces linking destinations.
- Preserve the natural characteristics of Big Chico Creek while permitting their visual enjoyment as viewed from the campus.
- Emphasize a scale of facilities that is compatible with human activities and perceptions.

- Promote facilities that are part of a recognizable “family” of related structures, hardscape and other environmental elements identified with CSU Chico.
- Discourage the presence of the automobile and other motorized vehicles while encouraging pedestrian and bicycle modes of movement.
- Promote built systems that respect, maintain and work with the natural environment.

Relationship with the Community

- Promote facilities that minimize aesthetic and functional conflicts with neighboring uses and facilities.
- Permit a free flow of pedestrian activity between the University and downtown Chico.

Student Life

- Provide facilities that enrich the total student experience at CSU Chico at levels commensurate with other universities competing with CSU Chico.
- Promote facilities that retain students on campus -- that reduce their need to leave the campus for various daily activities.
- Provide a sufficient number and variety of spaces on campus that promote human interaction.



i.3 | Mural on Exterior of Modoc Hall

III. PLANNING PROCESS

III.i Participation in the Planning Process

The CSU Chico 2005 Master Plan is the result of the thinking and efforts of various campus groups, students, staff, policy-level academic bodies, the City of Chico and the consultant team. Initial inputs from several campus forums receiving widespread campus opinions and perspectives about the issues facing CSU Chico over the next ten to fifteen years were conducted in the Spring of 2000. Out of these perspectives a vision for the Master Plan emerged points of which were the subject of considerable campus policy-level debate. Alternative concept plans addressing the issues, as received from the campus, were shared with the campus at large in another set of forums conducted in Fall 2000. At this point, pressing planning related issues involving the size, placement and program for a planned Student Recreation Center, a replacement/expansion Taylor Hall II project, a planned Student Services building needed to replace an aging “temporary” facility and an expanded Regional and Continuing Education Center facility postponed consideration of the Master Plan until the Fall of 2001. At that time a new series of alternative plans were circulated and discussed among policy-level campus groups. Campus discussions focusing on future housing, parking, campus police and a Natural History Museum continued until the Fall of 2004 by which time the major components of the Master Plan had been articulated and were then ratified by the President’s cabinet allowing the completion of the draft Master Plan and associated California Environmental Quality Act (CEQA) activities to proceed.

The final 2005 Master Plan is the product of input from many sources and takes into account the University’s long-range vision as well as the phasing priorities necessary for long-term fiscal planning and integration with the Chancellor’s office requirements. The final version of the Plan is to be presented to the CSU Board of Trustees for final approval in July of 2005.



Existing Campus and the Context for Planning



1.1 | Aerial View of the CSU Campus (c. 2000)

1.1 HISTORIC AND COMMUNITY SETTING

California State University, Chico lies within the City of Chico, located in the northern portion of California’s Central Valley, six miles east of the Sacramento River. Dating to its founding in 1860, the town of Chico’s location in a valley area with good soils led to its early growth as a center of agricultural production. Even today, the areas of Butte County surrounding Chico represent a leading California region for walnuts, kiwifruit, almonds and rice. In 1887 Chico was selected as the second city in California for a normal school which was to later evolve into Chico State College (1935) and then subsequently into a state university (1972).

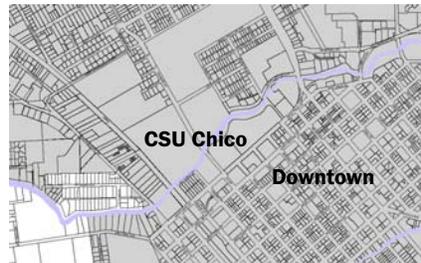
During its now 117-year history, the school increased its influence upon the town of Chico while major changes in the national and regional economy left their marks upon the local community. Today, with a City of Chico population of over 65,000, CSU Chico is the city’s second leading direct employer and a major contributor to the local economy.

The CSU Chico main campus is located on 119 acres of land located north and west of the City of Chico’s downtown. Its proximate relationship to downtown Chico allows convenient dining and shopping access for students, faculty and staff who make a major contribution to its vibrant pedestrian nature. Big Chico Creek, with its banks of riparian vegetation, winds its way through

the central portion of the campus property in a generally east-west direction. This narrow swath of land, protected by law from future development, consumes over 12 acres of property thereby subtracting land from CSU Chico's actual usable holdings. (CSUC is one of the smallest campuses in land area in the CSU system). Big Chico Creek also serves as the backbone of Bidwell Park, a large natural and recreational area that stretches for eleven miles along the creek immediately east of the Campus.

CSU Chico also maintains a functioning 800-acre farm facility located two miles south of the main campus. The Agriculture Teaching and Research Center (ATRC) basically serves as a laboratory facility where College of Agriculture students learn first-hand about agricultural production with an emphasis on crops and animals produced in Northern California.

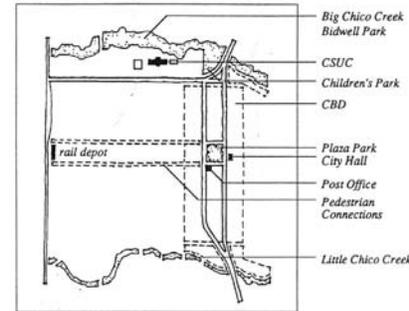
Given the major influence the University has upon the life of the City of Chico and the region, there is a clear need for CSU Chico and the local government to work together on a wide range of common issues. During the development of the 2005 Master Plan, the City of Chico and other local government officials were invited to give input into the planning process. The 2005 Master Plan EIR itself also proposes several mitigation measures designed to lessen impacts of CSU Chico upon the surrounding community. Further, there have been various proposals requiring



This City parcel map illustrates the numerous properties that surround the campus.

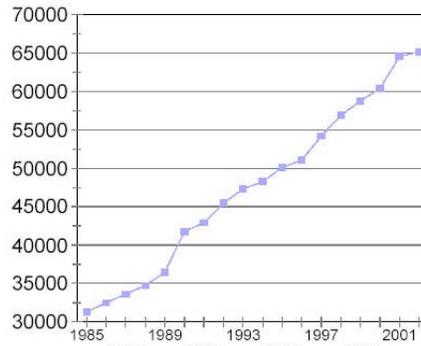
1.2 CSU CHICO AND THE COMMUNITY

CSU Chico is a major economic and cultural force in the northern Sacramento Valley region providing direct employment to over 1,800 University faculty and staff and producing an equally significant indirect "multiplier effect" upon the local economy. Added to this is the large direct economic stimulus emanating from the out-of-region student population. This economic impact has its strongest expression upon the City of Chico. Within the City of Chico the University has a significant daily influence upon the retail sales of downtown Chico.



CSU Chico is an integral part of the City of Chico's Downtown Planning Framework.

1.3 City of Chico General Plan Design Element Excerpt



CSU Chico and the City are working together as each adjust to local and regional growth.

1.4 City of Chico Population Growth 1985-2002 (Source: City of Chico)

the cooperation of both the City of Chico and the University to achieve projects that directly benefit both the community and CSU Chico. The proposed joint parking structure at Second and Normal Streets is a notable example of such a proposal (see Section 3.5.7.2 below). CSU Chico's cooperation with other institutions such as local school districts, Butte College, Shasta College and the Butte County Private Industry Council illustrate other ways the University works with local agencies to provide its educational services in a decentralized fashion, partially in an attempt to reduce vehicle trips and the negative impacts associated with them.

1.3 GROWTH OF THE UNIVERSITY: 1887 TO THE PRESENT

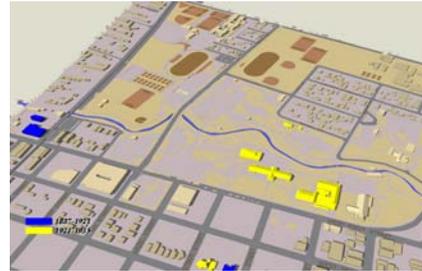
The diagrams on this page illustrate the progressive growth of the campus dating from the founding of the campus in 1887 as a normal school to the present era. The first normal school building located in the heart of the campus burned down in 1927 and was later replaced with today's brick Kendall Hall which set the tone for the family of buildings that make up the historic core of the campus (See also Section 4.3.3).



1.5 Chico Normal School (destroyed in fire, August 13, 1927)



1.6 Era 1: 1887-1921



1.7 Era 2: 1921-1935



1.8 Era 3: 1935-1964



1.9 Era 4: 1964-1986



1.10 Era 5: 1986-2001

County	Est. 1999 CSUC Student Population	Projected 2015 CSUC Student Population	Projected 2015 CSU Chico FTES
Butte	3,788	5,250	4,710
Colusa	84	79	71
Glenn	251	408	366
Lassen	121	164	148
Modoc	30	36	32
Plumas	81	90	81
Shasta	667	916	822
Siskiyou	119	138	124
Sutter	343	483	433
Tehama	400	555	498
Trinity	34	39	35
Yuba	180	235	211
TOTAL	6,098	8,395	7,530

Projected 2015 Service Area Increase in CSU Chico FTES: +2,060

1.11 CSU Chico Service Area Growth: Population Projection by Northern CA County

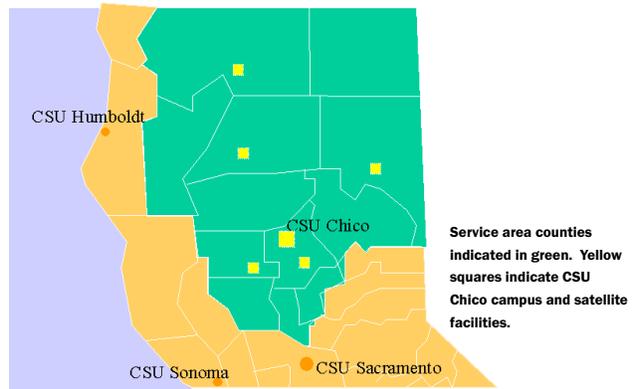
1.4 UNIVERSITY ENROLLMENT

1.4.1 The California State University (CSU) System

Projections of a “Baby Boom Echo” or “Tidal Wave II” swell in students entering universities across the nation has occupied the thinking of university planners over the past few years (see also introduction). These estimates for California State University (CSU) students have ranged from little effect on the system up to an additional 60,000 students (headcount) over the historic highs realized for the system in the 1990-1991 period. Clearly some areas of the state are growing readily where as others are less so. Strategies for absorbing the growth have included increasing facility utilization and particularly increasing summer enrollments (YRO, Year Round Operation), distance learning (satellite centers and telecommunications instruction) and construction of new campus facilities including additional campuses and expansion of existing campuses. Many of the state universities, including CSU Chico, have been viewed as sites that could absorb additional students as they entered the system. Enrollments at CSUC have in fact risen to historic levels starting in the 2000 academic year when the University entered into a period of consistently exceeding its enrollment capacity of 14,000 FTES.

1.4.2 Northern California and the CSU Chico Service Area

Approximately 55 percent of CSU Chico students list their area of permanent residence as outside the twelve northern California counties that comprise the primary service area. This underscores the popularity of the campus statewide. By applying the current proportion of CSUC students that live in the CSU Chico service area to the service area population and applying that proportion to estimated future population of the service area, an estimate can be derived for the future number of students coming from the service area. This estimate was performed using the 12 CSUC service area counties for which population



1.12 CSU Chico Primary Service Area

projections were available for the year 2015 as provided by the California Department of Finance. Adjustments were made to equate the future student populations to Full-Time Equivalent Student (FTES). This resulted in an estimate of potential growth in CSU Chico FTES of 2,060 by the year 2015.

1.4.3 FTES Targets for CSU Chico

Based on the potential growth of the CSU Chico service area and the general statewide demands associated with the “Baby Boom II” phenomenon, an agreement was made to raise the campus physical capacity of CSU Chico from 14,000 to 15,800 FTES. This increase in capacity implies that there will be an additional need for academic space. Although the average space requirement for CSU system facilities is as identified in the table “Projecting Future Academic Space Needs,” projections of future space needs for the campus were developed based on taking the estimated future departmental needs and applying CSU space standards to each of the types of spaces identified. Translating the required spaces into actual campus space needs also involved factoring in the removal of substandard capacity spaces and/or the conversion of one space type to another to arrive at the total future space required to achieve the future campus physical capacity associated with 15,800 FTES. The proposed State supported academic facilities that once built would essentially result in attaining the new campus FTES capacity are described in Section 3.4.1.

Projecting Future Academic Space Needs	
Average Space Need, All CSU Academic Facilities	75 ASF/ FTES
Classroom/Laboratory Related Facilities:	46.5 ASF/ FTES



1.13 CSU Chico’s New Campus Planned Physical Capacity Target: 15,800 FTES



Photo Credit: Instructional Media Center CSU, Chico



1.14 CSU Chico Campus
 (Campus historic core indicated
 by terra cotta colored buildings)

1.5 EXISTING CONDITIONS ANALYSIS

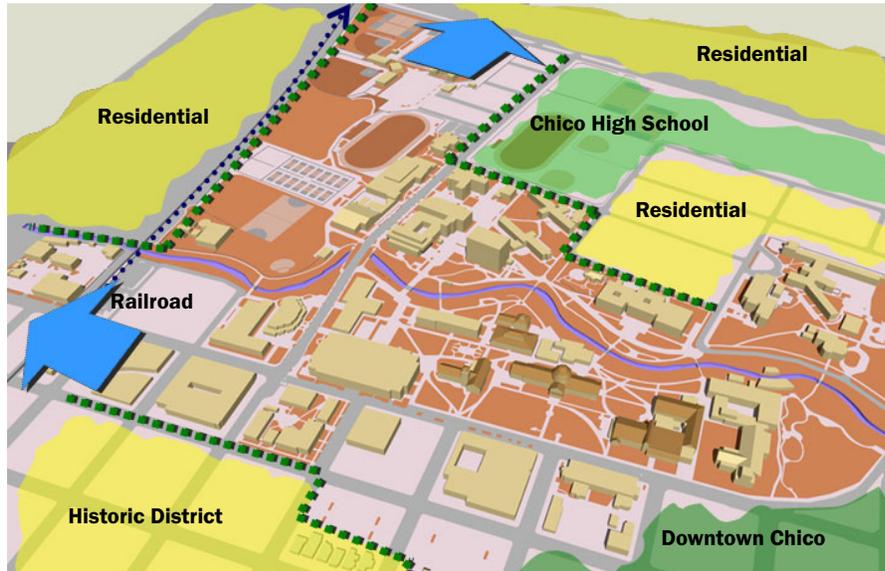
1.5.1 The 1990 Physical Master Plan

1.5.1.1 Major Features

In 1990 a master plan of facilities was adopted by the California State University Chancellor’s Office setting the maximum capacity for CSU Chico at 14,000 FTES. This capacity was quickly realized in the early 1990’s but enrollments subsequently declined during the mid 1990’s. The campus FTES capacity was again attained in the year 2000 when enrollments statewide rose as part of the demographic “Baby-Boom II” phenomena. Statewide planning for this next wave of student enrollment has become one of the key forces underlying the thinking for the CSU Chico 2005 Master Plan as elaborated in this document.

1.5.1.2 10-Year Attainment and Changes in Campus Needs

The 1990 CSUC Master Plan identified a number of facility needs, most of which have been retained and/or readdressed in the 2005 Master Plan, such as the Student Services Center, a replacement of Taylor Hall, a new and expanded Child Care Facility and a significant classroom/laboratory facility for the northeast section of the campus (Modoc II). The only major state-funded project from the 1990 Master Plan that has been fully funded and constructed is the expanded Physical Education facility now referred to as Yolo Hall. Another important feature of the 1990 Master Plan was the indicated intent to purchase the properties comprising the Rio Chico neighborhood north of First Street and west of Cherry Street for the construction of surface parking. This area is surrounded by CSU Chico land and as such represents a logical opportunity purchase with a view toward increasing the size of available CSUC



1.15 Surrounding Land Use

land resources for future campus use. The Rio Chico site, with its location adjacent to the existing campus and to the Big Chico Creek, is suitable for several types of campus uses/facilities including parking, recreation, academic and/or housing.

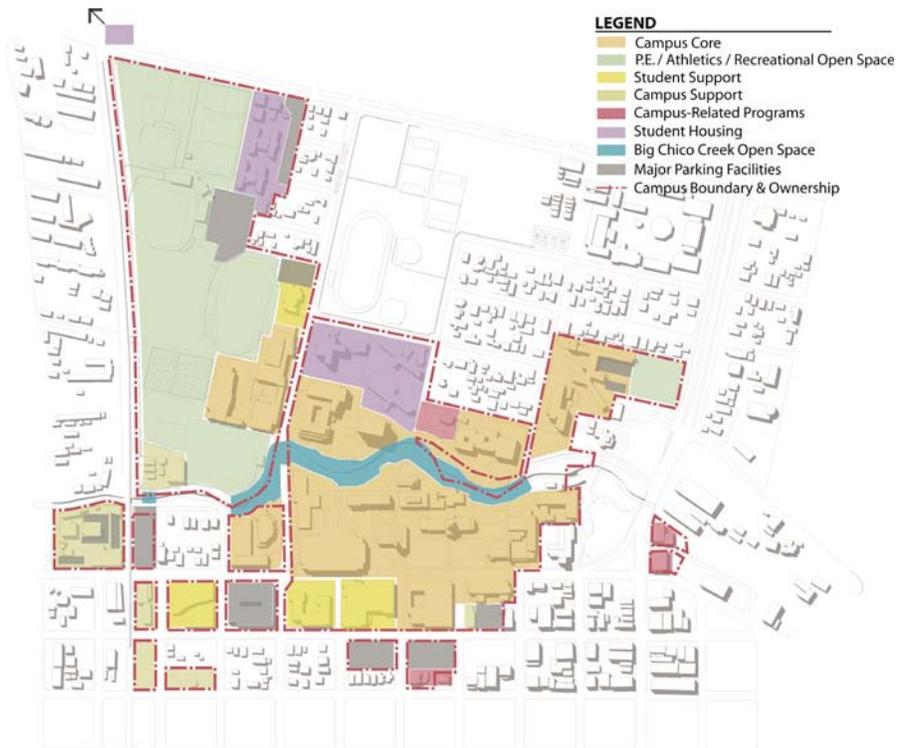
The 1990 Master Plan had also identified interest in the campus' purchase of the College Park neighborhood located west of Warner Street and immediately east of the University-owned Konkow / Meechoopda / Esken student residential complexes. The 1990 Master Plan had proposed that the College Park properties be developed as a large surface parking facility serving the northern parts of the campus. The 2005 Master Plan identifies College Park as a location for the development of additional University constructed student housing (see Section 3.5.1.2).

1.5.2 Campus Boundaries and Edge Conditions

Over the years, as the City of Chico has grown, all properties surrounding the campus have been built upon and have become part of a larger, denser Chico urban fabric. Today, the campus directly abuts, or is adjacent to,

several residential neighborhoods, Downtown Chico, a railroad-related industrial area and various institutional users. The adjacency of Downtown Chico to the southeast is of benefit to the campus as discussed below in Section 3.5.7.2, as it presents opportunities for the development of programs mutually beneficial to the City and University such as the shared joint parking structure initiative.

Similarly, the City of Chico mixed-residential and railroad industrial areas, to the south and southwest of the campus and part of the City's historic district, represent areas for potential targeted University acquisitions for specific University or University-related needs -- as has occurred with the University acquisition of the Ella Caroline Sapp Hall Alumni House on Normal Street and the University warehouse facilities (Buildings R and S) on Cherry Street. Also to the southwest of the campus is the small residential enclave referred to as the Rio Chico Block. This block of older housing is surrounded by University property and, with acquisition, represents a logical area for future parking and/or other CSU Chico programming. (See Sections 3.4.8 and 3.5.4 for a summary of the potential development of the Rio Chico block.) The western edge of the campus is largely defined by the Union Pacific Railroad tracks and the Highway 32



1.16 Existing Land Use

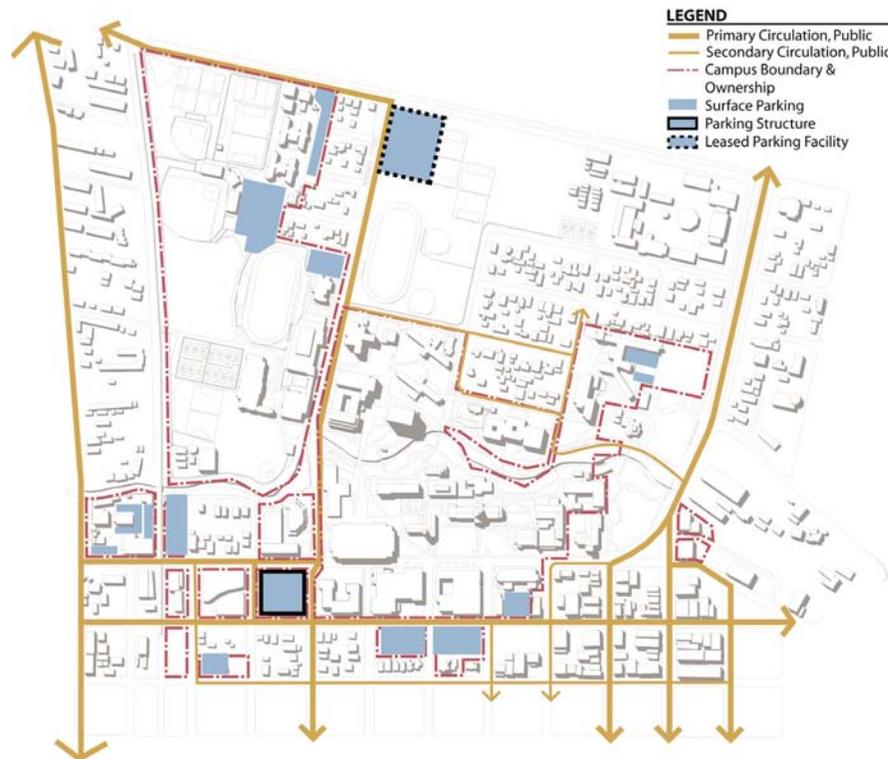
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mixed-residential area immediately beyond. This area, even given the tracks as a barrier, also represents some potential for future use by the University. Within a block's distance northwest of the campus on the west side of Nord Avenue lie residential areas that contain CSU Chico's University Village student housing complex. Immediately south of West Sacramento Avenue, a small residential area east of the existing CSUC Konkow, Meechoopda and Esken residential halls is referred to as College Park and is viewed as an important area for the development of additional University-sponsored housing (see Section 3.5.1.2). The remaining northern boundaries of the campus are adjacent to Chico High School and a small, four block, well-maintained residential neighborhood. To the far eastern edge of the campus, the campus directly interfaces with the Bidwell Mansion State Park, Children's Park and the Bidwell Memorial Presbyterian Church.

1.5.3 Land Use and Functional Organization

The existing CSU Chico campus land uses can be considered in terms of a generalized functional classification as depicted on the Existing Land Use exhibit on this page. The campus core devoted to most academic and administrative activities includes classrooms, laboratories, the library, faculty and staff administrative offices. It is the largest and most central campus use and almost exclusively pedestrian in orientation. The other large land areas on the campus are devoted to the outdoor Physical Education facilities and the student housing areas. Both of these areas are located directly adjacent and accessible to the campus core but in peripheral areas where their specialized environments can maintain their own character: their need for organized and often publicly oriented activity in the case of the outdoor PE areas and their more private residential orientation in the case of the student housing areas.



1.17 Vehicular Circulation and Parking Diagram

Student support facilities are generally dispersed around the periphery of the campus where students living off-campus can more easily access them and likewise parking areas are also located at the campus periphery where they can be accessed by students, faculty, staff and visitors without bringing auto traffic into the campus pedestrian-oriented core. The largest campus support area on the campus is the corporation yard located north of First Street and immediately west of the railroad tracks. Lastly, the Big Chico Creek water course and Resource Conservation Area, comprised of some five campus acres, is a major element in the campus environment as it traverses the entire campus in the east-west direction. (See also Section 3.3.)

1.5.4 Access, Parking and Vehicle Circulation

The CSU Chico campus, with the principal exception of Warner Street, exists as an island of campus land accessible from the periphery by the City of Chico public

street grid. Major access streets include 2nd Street along the southern portion of the campus, Esplanade running north and south which provides major access from the east, Highway 32 which acts as a major north/south route serving the western portions of the campus and West Sacramento Avenue that is used to access northern parts of the campus and as a link to Warner Street, the other major north/south street providing access to the campus.



1.18 CSU Chico Parking Structure at 2nd and Ivy Streets



1.19 Campus Open Space and Pedestrian Circulation Routes

Surface parking lots and the Second and Ivy Street parking structure are located on the periphery of the campus and likewise, with minor exceptions, are linked directly to the major access streets described above.

1.5.5 Open Space and Pedestrian Circulation

Even with its relatively small campus acreage, CSU Chico has a developed network of open spaces and pedestrian pathways that provide a framework for the placement and linkage of campus buildings, facilities and points of interest. In general there are five major types of open spaces on the campus which in turn are interconnected and/or traversed by pedestrian paths:

1. **Primary Pedestrian Spine** system of concentrated pedestrian activity interconnecting major campus activity centers;
2. **Quad and mall** spaces formed by campus building groups and connected and

integrated with the primary pedestrian spine system;

3. **Sports fields** which are concentrated on the western side of the campus;
4. **The Big Chico Creek** riparian zone which meanders across the center of the campus visually and functionally dividing the campus along an east-west axis;
5. **Ancillary active open space** often consisting of building fore courts, building court yard type spaces and small lawns located off major pathways.

Figure 1.19 illustrates the location and extent of these five major types of open space at CSU Chico.

1.5.6 Bicycle Circulation and Parking

Around 30 percent of CSU Chico students use bicycles as their primary form of travel to the campus, only slightly fewer than use the automobile (35 percent). Bicycle riding

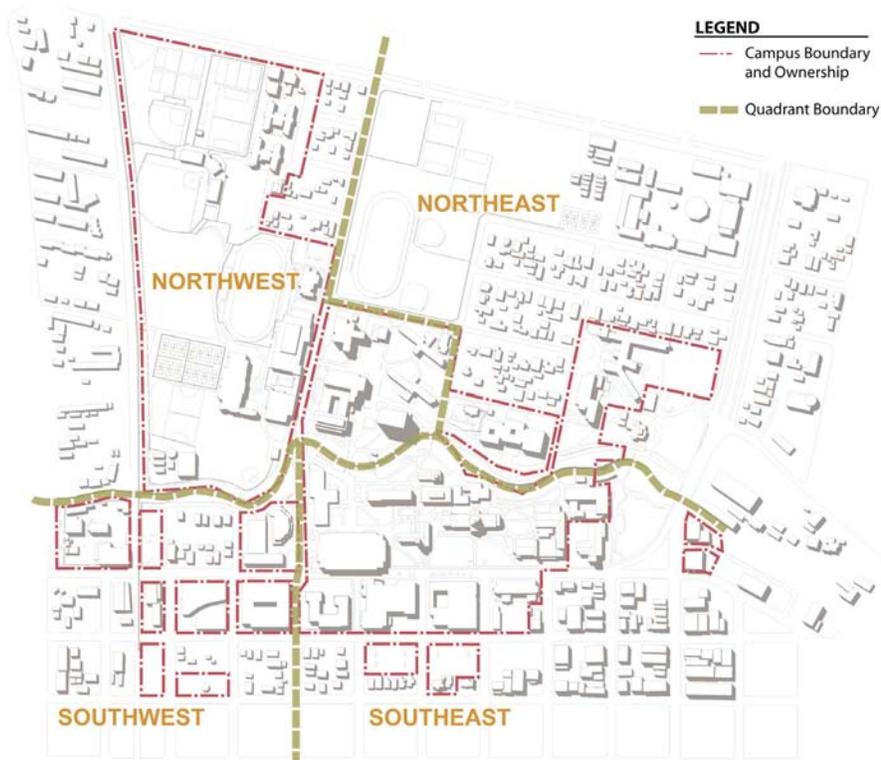


1.20 Principle Bicycle Routes and Campus Bicycle Parking Facilities

contributes to the student environment by allowing freer communication among riders and pedestrians, by reducing noise impacts upon the campus environment sometimes introduced by automobile traffic and by the enhanced aesthetic-healthful experience it brings to the rider. On the negative side, by allowing bicycles into the campus, pedestrian environment problems are created related to the storage of bicycles and related to conflicts that arise between riders and pedestrians. The Spring 2000 CSU Chico Bicycle Survey recorded 4,934 bicycle parking places on the CSU Chico campus. This represents about 1.1 spaces per estimated regular bike user and assuming an average parking space at about 20 SF, constitutes over two acres of bicycle parking facilities on the campus. The parking spaces are distributed throughout the campus and are generally associated with classroom facilities and other major student destinations like the Library and the Student Union (BMU). Some bicycle parking areas, such as the Siskiyou East (388 spaces), Whitney Hall East (292 spaces) and

Tehama Hall East (182 spaces) areas, are large facilities that detract from the aesthetic quality of potential landscaped open space that could be created if the bicycles were concealed, consolidated or if suitable storage space could be found elsewhere.

Bike rules related to walking bikes on campus grounds have generally reduced pedestrian conflicts but conflicts between vehicles on public streets and cyclists continue. In 1996, the City of Chico Police Department estimated that the rate of collisions involving pedestrians and bicyclists was nearly twice the state average. This led to the City's application for a Safe Alternative Transportation Grant which has been used for educational and enforcement efforts in an attempt to reduce injury and fatal collisions by 30 percent. City of Chico planning policies also promote dedicated Type 1 and 2 bicycle facilities (bike trails and bike lanes) in various opportunistic situations as a strategy that helps reduce potential vehicle/cycle conflicts.



1.21 Campus Quadrants Diagram

1.5.7 Campus Quadrants

The CSU Chico campus is naturally divided into north and south campus areas by Big Chico Creek and into east and west areas by Warner Street.

This basic scheme creates four campus quadrants that will be used to focus discussions about Master Plan proposals considered in Chapter 3. The Northwest Quadrant has been modified to group together all the functionally related areas containing student housing east of Warner Street into a combined Northeast Quadrant. See diagram on this page.

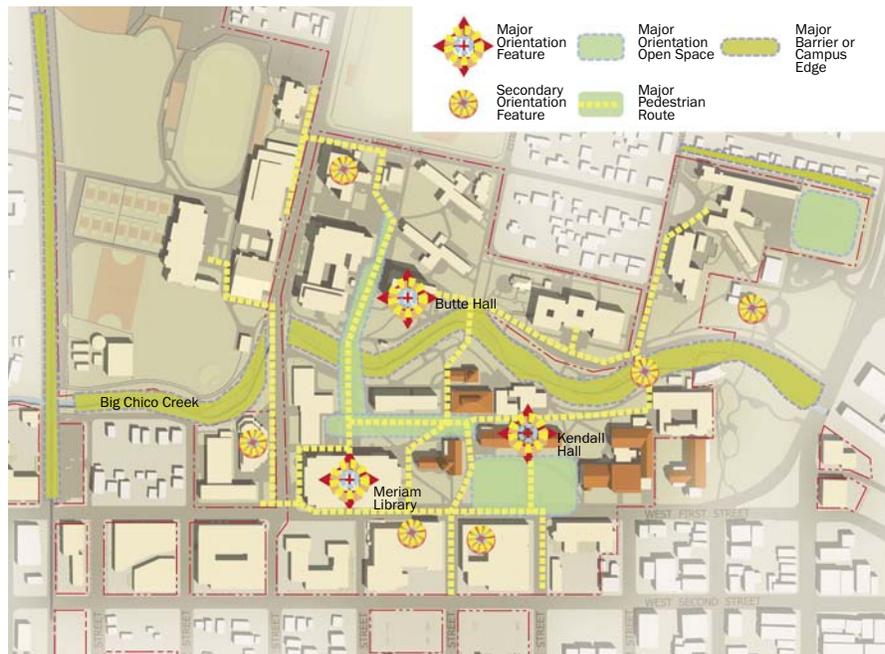
1.6 THE VISUAL ENVIRONMENT

California State University, Chico is considered one of the most beautiful and pleasant campuses in the CSU system making it a wonderful place to study, work and interact with other persons. The pleasant visual



1.22 The George Peterson Rose Garden: Enhancing the Pedestrian Experience

environment is one reason that the campus is extremely popular with students from outside the area. An understanding of the CSU Chico visual environment, its protection and enhancement are therefore important themes for discussion and inclusion in the master plan.



1.23 Visual Analysis Diagram

The most outstanding qualities of the CSU Chico campus include the collection of historic and architecturally rich buildings; a heavily landscaped environment, including a large number of elegant specimen trees; a generally logical arrangement of buildings around a system of open spaces and pathways; a compact, walkable, relatively automobile-free campus and a close proximity to a vibrant pedestrian-oriented downtown. Notwithstanding these strengths and visual resources, there are areas of the CSU Chico campus that exhibit weak visual and/or functional characteristics that detract from the overall impression the campus presents. A review of the campus strengths and weaknesses is given below. The identified weaknesses are addressed in subsequent sections of the 2005 Master Plan document including sections on Landscape Improvements (landscape and hardscape) (Section 3.2), Lighting (Section 4.5), Site Furniture (Section 4.6), Signs (Section 4.4) and Design Guidelines for New Facilities (Section 4.3).

The accompanying Visual Analysis graphic attempts to illustrate the most impressionable visual features of the CSU Chico campus: the landmarks, pathways,

open spaces and major edge features. In this analysis, because of their size, mass and/or architectural character, major buildings such as Kendall Hall, Butte Hall and the Meriam Library become of primary importance as visual orientation/navigation landmarks in the environment. Similarly, other visually “attractive” buildings, open spaces or other strongly visual elements of the environment become secondary orientation features or important features in a more local context. Examples of these types of secondary orientation features include the “Three Women” sculpture in front of Colusa Hall, O’Connell Technology Center as the most



1.24 The “Three Women” Sculpture



1.25 Pedestrian Spine Open Space
North of Meriam Library

imposing structure on the west part of the campus and the Big Chico Creek foot bridge near the Physical Science Building as it is the most important campus link at the east edge of the campus. The entire Big Chico Creek and its associated tree-lined banks at once form a visual barrier, edge and common linear element that is visible from almost any vantage point on campus – thus making it a major orientation feature of the campus.

1.6.1 Landscape Systems

The grounds and landscape environment at CSU Chico consist of a network of pathways and green spaces that generally link, frame, visually unify, surround and modulate the buildings and other facilities of the campus. Additionally, many of the campus open spaces serve as settings for study, recreation and public art. Although much of the campus landscape presents a visually strong image and provides for a functional network of pedestrian pathways, some components of campus landscape system can be improved upon.

One major feature of the CSU Chico open space-landscape system is the Big Chico Creek with its heavily vegetated river banks. This approximately 50-foot landscape zone effectively divides the campus into northern and southern areas currently mutually accessible at some seven locations along its ¼ mile stretch through the campus. Big Chico Creek probably acts as a greater visual barrier across the campus than an actual barrier to pedestrian travel. Due to the dense vegetation along the stream banks one can not see beyond the creek and thus it becomes a kind of edge to both the northern and southern portions of the campus. Where the creek crosses the pedestrian 'mall', linking the Meriam library with the northern housing area around Whitney, Lassen and Shasta Halls, it obscures vista views between these important destinations of campus activity.

As the Big Chico Creek vegetation had obscured views across the campus, other mature tree plantings have likewise made some buildings difficult to see, hiding architectural features and diminishing the visual use of buildings as potential navigation aids. In both of these generic situations an enhanced program of tree trimming and appropriate replacement upon tree death or infirmity is called for. A first step in this process was the development of a tree inventory substantially completed in the 1992-93 period.

Development of a CSU Chico Landscape Improvement Plan is delineated in Section 3.2. This plan further explores and seeks to improve the system of open spaces, landscape systems and pedestrian and bicycle pathways on the campus.



1.26 CSU Chico's Rich Landscape
Heritage

Photo Credit: Instructional Media Center



1.27 Mature Trees on the CSU Chico
Campus: A Strong Part of the
Pedestrian Experience

1.6.2 Lighting

Site lighting is currently provided by several types of fixtures placed throughout the campus. Generally, though not optimally, these fixtures are perceived to provide sufficient illumination for pedestrian circulation along the critical paths. A notable exception is lighting within the creek area where lighting levels are deemed insufficient due to denser vegetative screening, and inherently, creating an environment of vulnerability.

Along 1st Street, and within the historical core around Taylor Hall, a traditional fluted post and acorn fixture is utilized. Throughout much of the core several types of contemporary orb fixtures are used. These are post mounted on a raised concrete foundation. More recent additions especially along the campus perimeter utilize unobtrusive ‘shoebox’ type fixtures. Along the campus / City of Chico edges, streets and intersections are lit primarily with utilitarian cobra style street fixtures.



1.28 | The Campus Light Standard for the Historic Core Area

1.6.3 Site Furnishings

Outdoor furnishings around the campus include: benches, trash receptacles, bike racks, planter pots, seatwalls, non-fixed tables with umbrellas and chairs, pin-up

kiosks, and trellis structures. Most of these elements have been added to the campus over time and in some cases, as in the instance of the kiosks, trash receptacles and benches, have probably been the subject of various attempts at unifying their appearance campus wide. Some of the older fixtures (kiosks, benches) have endured much use, wear and consequent repair and need to be replaced. Some of the newer furnishings are stylistically incongruous with their older cousins. With the development of the Master Plan, existing site furnishings will become obsolete and out of place in many areas. The use of consistent associative style of site furniture along with lighting and signage will enhance the cohesiveness of the campus as a whole.



1.29 | Campus Kiosks: Dated and in Poor Condition

1.6.4 Signs

A family of painted-incised-letter wood signs are used throughout the campus to identify major buildings and facilities. These have deteriorated with time and recall imagery common to state park facilities instead of a structured learning environment where a more formal updated, although understated, image is probably warranted. Various wall and special purpose signs have also been added over time to the campus environment which now differ in design and condition. Section 4.4 and the Appendix provides a basic sign plan for CSU Chico that addresses the current weaknesses in the campus sign and way finding system. The sign plan describes the locations and approach for replacing major campus signs.

1.6.5 Building Architecture, Materials and Finishes

Section 4.3, Design Guidelines for New Facilities, discusses the basic building/architectural vocabulary that has developed over time on the CSU Chico campus. Much of the architectural character is defined through the use of concrete and brick building materials that contribute to an impression of overall campus unity. These will continue to be used on future buildings as described in Section 4.3.



Photo Credit: Instructional Media Center CSU, Chico



1.30 Brick and Concrete – Campus Identity Materials



1.31 Major Campus Buildings
(CSU Chancellor's Office Numbering System)

- | | |
|---|---|
| <ul style="list-style-type: none"> 1. KENDALL HALL 2. AYMER JAY HAMILTON BUILDING 4. AYRES HALL 5. SISKIYOU HALL 6. GLENN HALL 7. ALVA P. TAYLOR HALL 8. PHYSICAL SCIENCE 9. ACKER GYMNASIUM 10. COLUSA HALL 11. STUDENT HEALTH CENTER 13. WHITNEY HALL 14. RECREATION AND LEARNING CENTER 16. LAXSON AUDITORIUM 19. TRINITY HALL 20. SHURMER GYMNASIUM 21. MODOC HALL 22. BELL MEMORIAL UNION 23. PLUMAS HALL 25. VESTA HOLT HALL 26. BOILER-CHILLER PLANT 27. PERFORMING ARTS CENTER 28. LANGDON ENGINEERING CENTER 29. BUTTE HALL 30. BUILDING S - WAREHOUSE RECEIVING | <ul style="list-style-type: none"> 31. BUILDING R - WAREHOUSE 39. YOLO HALL 50. CONTINUING EDUCATION 51. SELVESTER'S CAFE 52. LASSEN HALL 53. SHASTA HALL 54. MERIAM LIBRARY 63. UNIVERSITY CENTER 71. KONKOW HALL COMPLEX 72N. MECCHOOPDA HALL 72S. ESKEN 73. ALBERT E. WARNER'S RECEPTION CENTER 75. SIERRA HALL AND ANNEX 78. DEEN HOUSE 80. CORPORATION YARD/FACILITIES MANAGEMENT AND SERVICES 91. PARKING STRUCTURE 92. TEHAMA HALL 95. O'CONNELL TECHNOLOGY CENTER 100. STUDENT SERVICES CENTER 112. SAPP HALL 200. 35 MAIN STREET - CENTER FOR ECONOMIC DEVELOPMENT 201. 25 MAIN STREET |
|---|---|

1.7 BUILDING CONDITIONS

1.7.1 Building Conditions and Life Cycle

Of the twenty major academic and academic support buildings at CSU Chico, some 15 of them (or 75 percent) were built in the post-World War II era since 1949. Ten of these buildings were built in the 1949 to 1969 period – placing these facilities in the 30 to 50 year age range. With the aging of the CSU Chico inventory of buildings has come the need for a variety of repairs and upgrades to facilities. In some cases, given the level of investment needed to return the facilities to useful life, coupled with the greater potential for increasing the academic program gains associated with a particular building site, it is now reasonable to consider demolition of such facilities to make way for more efficient structures. Structures in this category include Taylor Hall (1960), the Aymer Jay Hamilton Building (1949), Siskiyou Hall (1957) and Whitney Hall (1969).

Year Structures Built, 1900-2000

Years	Number of Structures	Percent
1900-1909	0	0
1910-1919	0	0
1920-1929	0	0
1930-1939	3	15
1940-1949	2	10
1950-1959	5	25
1960-1969	5	25
1970-1979	3	15
1980-1989	0	0
1990-1999	2	10
TOTAL MAJOR STRUCTURES	20	100

1.33 Age of Major Structures

years); elevators and conveying systems (25 years); HVAC–equipment and controls (30 years); HVAC–distribution systems (50 years); electrical equipment (25 years); plumbing fixtures (30 years); fire protection systems (40 years); built-in equipment & specialties (25 years); interior finishes: walls, floors, doors (15 years); painting public areas (15 years). A summary of the estimated deferred maintenance backlog, 5-year recurring maintenance and other upgrade costs for the major CSUC buildings requiring the most attention (requiring more that \$ 2 million in associated maintenance costs) is given in the table below.

1

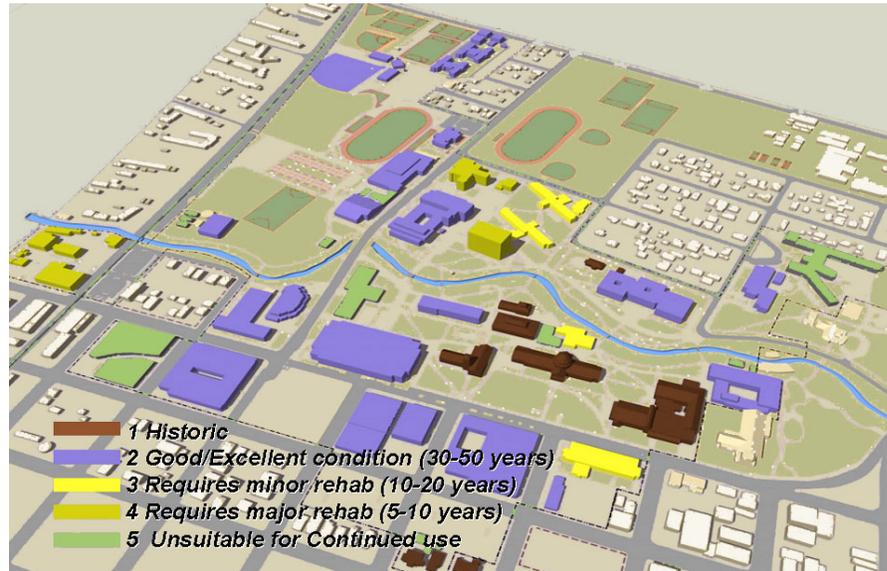
18

In 2005 Pacific Partners Consulting Group conducted an analysis of all CSU Chico campus buildings in an effort to develop a predictive model for budgeting the recurring maintenance associated with major building subsystems. The building subsystems analyzed included those items with replacement and/or major maintenance requirements that typically recur on a cyclical basis ranging from 15 to 50 years depending on the subsystem. The analysis also estimated on a building by building basis the amount of accrued differed maintenance for all the subsystems. The specific subsystems considered with their related lifecycle were as follows: roofing (25 years); building exteriors, doors, windows [hard] (30 years); building exteriors, doors, windows [soft] (20

Glenn Hall is one of the Many Buildings Constructed in the 1950 to 1970 Period, Now Requiring Significant Rehabilitation and Upgrades.



1.32 Glenn Hall



1.34 Building Condition and Life Cycle
(CSU Chico Analysis)

Buildings with Highest Estimated Deferred and 5-Year Projected Maintenance Costs

Major Building	Maintenance Cost ¹
Miriam Library	\$ 15,768,000.
Holt Hall	\$ 14,002,000.
Butte Hall	\$ 6,779,000.
Physical Science Building	\$ 6,515,000.
Performing Arts Center	\$ 6,458,000.
Langdon Engineering Center	\$ 4,271,000.
Acker Gymnasium	\$ 4,229,000.
Kendall Hall	\$ 3,946,000.
Glenn Hall	\$ 3,391,000.
Plumas Hall	\$ 3,338,000.
Taylor Hall	\$ 2,525,000.
Laxson Auditorium	\$ 2,434,000.

¹ Estimated Deferred and 5-Year Projected
Source: Pacific Partners Consultant Group, September 2004

The Pacific Partner’s model forecast for future building renewal costs associated with all building subsystems, indicated that all factors combined will create a major peak in yearly renewal expenditures starting in about the year 2018 and extending to about 2023. During this peak period yearly maintenance costs would exceed \$ 6 million before declining to a range roughly equal to current levels.

1.7.2 Substandard Facilities

A number of existing CSU Chico buildings and facilities are substandard in terms of their physical condition and/or their functional capacity to house instructional or other academic programs. A building with a substandard physical condition may exhibit deficiencies in one or more building systems such as structure, roofing, flooring, lighting, finishes, utilities or heating, ventilating, and air conditioning (HVAC) systems. A functionally substandard building may suffer from mismatched room sizes relative to use, outmoded laboratories, insufficient lighting or lack of basic instructional support/technology systems.



1.35 Potential Development Sites

Major substandard facilities in need of rehabilitation, upgrades or expansions include Butte Hall, the Physical Science Building and Glenn Hall.

Facilities proposed for mid-term or long-term replacement include: the Aymer Jay Hamilton facility (AJH), Taylor Hall, Siskiyou Hall and University Center (UC).

1.7.3 Student Recreation

There are extremely limited opportunities for both indoor and outdoor student recreation at CSU Chico. Currently, students must utilize indoor court and outdoor Physical Education field facilities during limited times when these facilities are not being used for academic programs. The CSU Chico 2005 Master Plan proposes the construction of a student recreation center and the long-term acquisition of nearby properties to address the lack of accessible recreational resources available to CSU Chico students. See Sections 3.5.2, 3.5.3 and 3.5.4.

1.7.4 Child Care

CSU Chico-sponsored child care availability is extremely limited for students faculty and staff of CSUC. An Associated Students (AS) Children's Center located in the aging Aymer Jay Hamilton building (AJH) has a licensed capacity of 55. The CSU Chico Master Plan 2005 anticipates removal of AJH to create a large combined site for the development of a new academic building (Modoc II), a 118-child capacity children's care center and a natural history museum. Please see Section 3.4.6, 3.5.5 and 3.5.8.

1.8 OPPORTUNITIES AND CONSTRAINTS

Given the various goals and needs for the CSU Chico campus, an analysis was undertaken to identify the potential ways of physically accommodating the needs on campus property. Since the CSU Chico campus has significantly smaller property assets when compared with campuses of a similar size, the analysis also examined

properties nearby the campus that could potentially be acquired to help meet identified campus needs. The locations on or nearby the campus property with the potential for future campus development are identified on Exhibits 1.34 and 1.35. Because of the pressure on the land to accommodate more at CSU Chico, the potential development sites either assume: 1) removal of aging and/or inefficient campus structures, 2) conversion of surface parking lots to new uses and/or more intense parking (structured); or as in the case of potential acquisition, 3) the conversion of isolated islands of aging industrial or residential property into new campus related uses.

The analysis also examined a number of constraints intrinsic to the campus that might limit the potential of accommodating programmatic or growth related projects on the CSU Chico site. The following matrix explores some of the major features of the CSU Chico campus and summarizes their opportunity and constraint characteristics in terms of their relationship to the major goals and needs of the campus as articulated in the Introduction.



1.37 Rio Chico Neighborhood

Surrounded by the Campus the Rio Chico Neighborhood Has Long Been Viewed as A Natural Area for CSU Chico Acquisitions

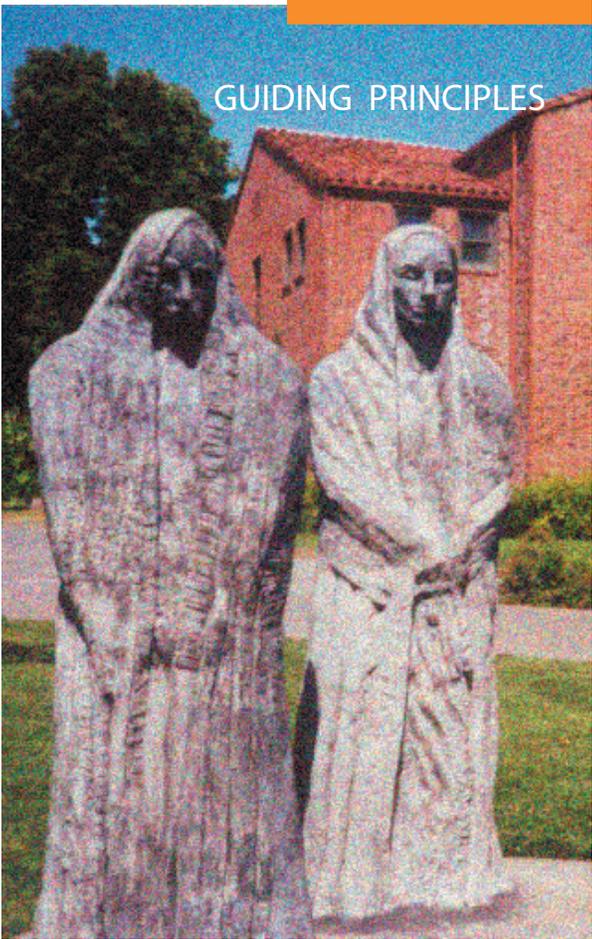


1.36 Properties for Potential Acquisition (orange) and Better Utilization (olive): Concentrated in the Areas Southwest of the Campus.

Campus Feature	Opportunity	Constraint
Campus Proximity to Downtown Chico on the Southeast	Continue to integrate campus with the Chico community to take advantage of dining, shopping and parking opportunities	Increases the potential for pedestrian/cyclist/vehicular conflicts.
Big Chico Creek	Preserve natural habitat and visual resource on campus; reinforce as a consistent orientation feature in campus environment	Pedestrian movement and visual penetration across the riparian stream banks is limited.
Small compact campus by CSU standards	Maintain and foster intimacy among the campus community.	Restricted number of building sites. New development generally implies one or more of the following: 1) intensification of activity on a particular site—often associated with higher costs; 2) building upon already scarce playfield and surface parking facilities; 3) acquisition of new property that often requires significant investments for clearance and/or renovation.
Residential campus	Reinforces campus community. Relies upon more healthy pedestrian and bicycle modes of transportation—reduces the need for auto parking, reduces traffic, noise and pollution from automobiles.	Requires careful attention to pedestrian and bicycle safety issues in areas where transportation modes intersect.
Union Pacific rail line along the west boundary of the campus.	Its presence acts to depress the value of neighboring land facilitating acquisition potentials.	Forms a pedestrian barrier along most of its length. Introduces environmental noise impacts that limit the range of appropriate campus related uses in close proximity to the rail line.
Established institutional and residential uses bordering the north portions of the campus	Potential sharing of facilities—parking (Chico High School and Bidwell Mansion) and recreation (Chico High School play fields). Reinforce campus residential nature and uses by placing appropriate facilities in proximity to residential areas north of W. Mansion Avenue.	Limits campus uses bordering these uses to the north; restricts any campus expansion in a north to northeast direction.
Aging stock of major campus buildings	Building and facility upgrades can rectify existing functional and aesthetic problems resulting in better integrated campus facilities after renovation and retrofitting activities.	Older structures generally require significant repairs and upgrades to insure continued life.

1.38 Opportunities and Constraints Analysis Summary

GUIDING PRINCIPLES



Guiding Principles

2.1 PRINCIPLES GUIDING THE PLAN

Several campus organization and design principles are commonly used to create an aesthetically pleasing, balanced and functional campus. These principles are the guides that help planners layout the campus and conceptualize the needed facilities in such a way that satisfies the vision and goals as delineated in the Introduction section of this document.

The primary principles guiding the development of the 2005 Master Plan are listed here. The physical layout and character of the CSU Chico campus and other campus examples are presented and further described below in the sections identified in parenthesis.

- Open space as campus organizing tool (2.1.1)
- Campus character defined by mature landscape (2.1.2)
- Spaces formed by building edges (2.1.3)
- Varying architectural styles harmonized by landscape (2.1.4)
- Integration of campus and community (2.1.5)
- Campus designed to reinforce educational mission (2.1.6)
- Sustainability (2.1.7)



2.1 | Lawn as an Occasional Outdoor Classroom

2.1.1 Campus Designed to Reinforce Educational Mission

Important principles:

- Gathering places promote chance and structured interactions between students and faculty
- Pedestrian and bicycle oriented campus core reduces noise and distractions related to motorized vehicles and promotes face to face interaction
- Quadrangles, malls and other central open spaces are 'crossroads' where people see and meet each other acting to create familiarity among students, faculty and staff.
- Various areas of the campus provide forums for the exhibition of student and public art and performance.
- Campus plaque identified biological specimen trees and Big Chico Creek as a connection with a natural ecosystem provide links with the natural sciences.



2.2 | On-Campus Patio Dining Areas As Major Focal Points For Social Interaction



2.3 | Fine Arts Sculpture Garden



2.4 Campus Botanical Specimen Tree (*Ginkgo biloba*)



2.5 Identification Plaque of Specimen Tree Shown Above (*Ginkgo biloba*)



2.6 Kendall Hall - Trinity Hall - Laxson Auditorium Green

2.1.2 Open Space as Campus Organizing Tool

Campus open spaces form the outdoor spaces that visually frame buildings and that provide the functional space for pedestrian movement and outdoor activity. They together with the campus buildings form the framework in which all campus activity occurs and as such are an integral part of the overall campus concept. The campus open spaces and pedestrian network:

- Define and interconnect the campus -
 - often in rectangular grids linked by a pedestrian pathway system;
- Create the variety of open spaces created by asymmetry, architectural style and landscape;
- Create a variety of spatial experiences
 - Small to large
 - Public to private
 - Outside to inside



2.7 Main Campus Mall Looking East Towards Kendall Hall

One of the most heavily used open spaces at CSU Chico. The Mall is formed by Meriam Library, Siskiyou Hall, Glenn Hall and the Big Chico Creek.



2.8 Meriam Library North Mall

2.1.3 Campus Character Defined by Mature Landscape

Mature landscaping enriches the campus environment in many ways such as enveloping the campus experience with nature, creating open space focal points, defining precinct edges or evoking a sense of permanency. Mature landscape:

- Links CSU Chico with the past including connections to the natural environment of Big Chico Creek and to the tree planting activities of John Bidwell;
- Adds to making CSU Chico into a unique 'place' in Chico and Northern California;
- The "Big Chico Creek" as a major natural feature and as a campus precinct boundary;
- Evokes permanency and suggests that education is part of a process that extends back into time.



2.9 | Mature Landscape



2.10 | Specimen Tree in Large Open Space

2.1.4 Open Spaces Formed by Building Edges

Campus buildings are intentionally placed to form the sides of open spaces. Building wall planes and doorways can be used to reinforce spatial characteristics and direct pedestrian movement. In general the building form helps:

- Enclose quadrangles
- Define vistas
- Direct pedestrian movement
- Reinforce the use and character of the space



2.11 | Laxson Auditorium Frames Main Campus Entry Green



2.12 | Performing Arts Center

Building Materials Unify
Campus Buildings

2.1.5 Varying Architectural Styles Harmonized by Common Building Materials and Landscape

Campuses such as CSU Chico may have buildings representing a range of styles built over a period of years. Differences in building type are visually reduced and moderated by the use of common building materials and by the presence of landscaping especially trees which modulate the building facade.

Design principles and characteristics:

- Common building materials and colors
 - Red brick walls
 - Potential limited use of concrete for building columns, surrounds, lintels, planter seat walls
 - Iron and steel railings, low fencing, trash receptacles/surrounds.
 - Curved red tile roofs, gable and hip types in historic core area
- Modernistic to modern with classical forms and elements as stylistic constants.
- Landscaping, particularly trees, forms a softening contrast and frame to campus buildings contributing to the unification of the overall visual environment.



2.13 CSU Chico Historic Core



2.14 Modernist Architectural Style Integrated into Campus by Large Trees

2.1.6 Integration of Campus and Community

Many colleges and universities are located in close proximity to city activity centers making them part of the local public, civic, cultural and economic life that define the urban atmosphere. CSU Chico borders and blends into the commercial and residential fabric of downtown Chico where students, faculty, staff and the public interact on a daily basis.

Key characteristics of CSU Chico:

- Historic relationship with downtown and residential neighborhoods
- CSU Chico Campus as integral part of the Chico community
- Mutual support: CSU Chico purchases from Chico economic sector—residents and businesses enjoy the academic and cultural resources of the University
- Close proximity of CSU Chico with downtown Chico promotes pedestrian travel drastically reducing local automobile trips.



2.15 City of Chico Downtown



2.16 City of Chico Downtown: Steps Away from the CSU Chico Campus

2.1.7 Sustainability

Important principles:

- Comprehensively incorporate sustainable design approaches into the design of all physical campus elements and systems including campus site layout, circulation plans and systems, landscape and hardscape systems, building design and campus infrastructure.
- Harmonize the human built environment with natural systems and processes in such a way that non-renewable natural resources are conserved and that the natural environment maintains its capacity for healthy growth and regeneration.
- Where possible utilize construction materials that have been recycled, are made of renewable natural resources, that minimize the use of non-renewable natural resources and that minimize negative impacts upon the natural environment.
- Design new and renovation projects to achieve LEED (Leadership in Energy and Environmental Design) certification. Using the LEED checklist as a guide will help insure that basic design approaches are addressed in the planning and design process. The range of major LEED categories for consideration in design include: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation and design process. (See also Section 3.6.3)



Photo Credit: Bidwell Mansion State Historic Park

2.17 | **Historic Photograph of Big Chico Creek c. 1895**



Photo Credit: Instructional Media Center

2.18 | **Big Chico Creek Today**



CSU Chico, along with other local institutions and organizations is working to conserve and protect Big Chico Creek as an important biological, visual and recreational resource.

THE CSU CHICO
2005 MASTER PLAN



The CSU Chico 2005 Master Plan



3.1 | Proposed Land Use

3.1 THE BIG PICTURE: THE CAMPUS PHYSICAL FRAMEWORK FOR NEW AND UPGRADED FACILITIES

3.1.1 Achieving Anticipated Growth

As explained in section 1.4.3, CSU Chico has set a future campus development course that will see it attain moderate growth reaching a new campus physical capacity of 15,800 FTES. This growth target with its associated need for campus space and facilities will be realized through three primary physical accommodations: 1) intensified use of existing campus spaces through construction on remaining open space areas; 2) intensified use of existing campus spaces through the removal of low density and aging facilities and replacing them with modern higher capacity facilities; and 3) through the acquisition of adjacent lands to add to the campus land assets available for campus

related development. In all the plan for the main campus anticipates the construction of 6 new state-supported buildings, non-state supported student housing, child care, student recreation and parking facilities, as well as a range of renovation projects for buildings and infrastructure. Additional facilities are planned for the University Farm, known as the Agriculture Teaching and Research Center (ATRC) as covered in detail in Chapter 5.

3.1.2 Proposed Land Use

To accommodate the long term development program, the CSU Chico proposed land use plan as depicted on this page has been changed slightly from the existing land use plan (Exhibit 1.16) to reflect the infill and adjacent land acquisition pattern of achieving growth and change as described above. In general, new acquisition areas will mirror the



The proposed Taylor II academic replacement building is illustrated at the right; Kendall Hall is indicated in the center of the sketch.

3.2 | **Artist's Rendering of the Campus Gateway Area to be Formed at 2nd and Normal Streets (Viewed Looking North Along Normal)**

3

2

adjacent neighboring use and areas within the current campus holdings will not change in use but will in reality accommodate additional usable space through the replacement of existing one or two floor structures with multi-level structures. This intensification of the same use in the same location includes the proposed conversion of existing surface level parking areas into multi-level parking structures in two locations.

The academic core of the campus will remain very pedestrian oriented expanding only slightly at the margins to include the Child Care, Natural History Museum and Rio Chico projects.

3.1.3 Vehicle Circulation and Campus Entries

3.1.3.1 Vehicle Circulation

Implementation of the CSU Chico Master Plan 2005 will have minor effects upon the general vehicular circulation system that serves the campus. In general, the Master Plan identifies the closure or potential closure of three street segments in the

southern part of the campus that would enhance the pedestrian nature of the central campus as it expands slightly into the fabric of the City of Chico. In the first instance the eventual incorporation of the Rio Chico area into the campus would allow the full or partial closing of First Street between Ivy Street and Orange or Cedar Streets creating a westward extension of the campus' First Street pedestrian mall to the Rio Chico academic facility and Wildcat Activity Center sites. The Master Plan conceives of a semicircular gateway pedestrian plaza at First and Cherry Streets as the primary access to these facilities linking them directly into the campus core. Further, First Street would then interlink an entire series of major existing or planned student and academic facilities along First Street including: The Meriam Library, Bell Memorial Union, the planned Student Services Building, Kendall Hall, Laxson Auditorium, the Performing Arts Center, the proposed Taylor II academic facility, the proposed Rio Chico academic facility, the proposed Aquatics Center, the proposed Wildcat Activity Center, Langdon Engineering Center and the First Street parking structure. Since currently the First Street parking structure utilizes First Street as an access to eastbound traffic on Second

Street, retaining a one-way access eastbound lane on First may be the appropriate configuration for the Ivy-Cherry segment of First Street. If First Street was closed entirely to vehicular traffic, a traffic signal at Second and Cherry would probably be warranted.

The second proposed street segment closure would occur along Normal Street between Second and Third Streets to allow for the development of a new parking structure to further serve the south part of the campus (Please note a second alternative parking structure configuration would not necessitate closure of Chestnut Street). Thirdly, the short street, Rio Chico Way would most likely be eliminated as part of the proposed Rio Chico academic and Aquatics Center projects identified below in the Master Plan.



3.4 | First Street Today

Comprehensive streetscape improvements for the First Street Mall are a high priority campus project

A new pedestrian plaza is proposed at Cherry and First Streets. It would serve as a terminus of an improved First Street pedestrian 'mall' as well as an entry area to the proposed Wildcat Activity Center and the Rio Chico Academic/Aquatic Center facilities.



3.3 | Artist's Rendering of New Pedestrian Plaza at Cherry and First Streets

3.1.3.2 Campus Entries

Because several new facilities are planned to occur at the perimeter of the campus, the campus will have new faces to the community in these areas, requiring landscaping and sign enhancements. Additionally, in some locations enhancements will be needed for pedestrian and/or vehicular interfaces. The series of planned improvements to First Street including the Wildcat Activity Center and the Rio Chico academic facility will form a new pedestrian entry/gateway at First Street in the vicinity of the railroad tracks

necessitating appropriate landscaping, signage and building articulation. At the east end of First Street, the planned Taylor II academic building and the eastward extension of the First Street landscape improvements (delineated in Section 3.2.3), a similar visual and pedestrian gateway will occur. Similarly, with the addition of the Student Services Center at Second and Ivy Streets, a new campus identity point will occur.

The planned publicly oriented Natural History Museum to be developed in the Bidwell Mansion area of the campus, will be visible from Esplanade giving the University a new exposure along this major community artery and therefore will necessitate architectural design direction, appropriate landscaping and signage to properly present the site to the community as well as integrating it into the campus. Lastly, the construction of a new parking structure facility within the campus along Second Street will create yet another CSU Chico facility interfacing with the community fabric, requiring sensitively articulated vehicular access as well as pedestrian and visual integration for its success. The architectural, landscape and functional integration of the above mentioned facilities is treated separately in the Design Guidelines, Landscape Improvements and Sign Plan sections of the Master Plan, Sections 4.3, 3.2 and 4.4, respectively.



The proposed Taylor II academic replacement building is illustrated at the left.

3.5 | **Artist's Rendering of an Improved Campus Gateway Area at First and Salem Streets**

3.1.4 Open Space and Pedestrian Circulation

The CSU Chico Master Plan 2005 proposals will result in two principal qualitative changes to the open space and pedestrian system of the campus. In the first instance, each major building project will reinforce and create new smaller open spaces to the campus usually as court yard or fore court spaces created by the building layout. These spaces will be pedestrian accessible and will consist of a balance of hardscaped and landscaped areas. Secondly, new and enhanced pedestrian pathways and associated open space corridors will occur in several areas of the campus. Most notable will be the enhancements to the existing First Street 'mall' area as well as its extension westward as the Wildcat Activity Center student recreation facility and the Rio Chico Academic/Aquatics Center projects are eventually built. Other campus pedestrian spines will need selected landscape, hardscape, signage and street furniture improvements to provide better pedestrian support through the placement/replacement of new benches, light standards, building and directional signs and consolidated/improved

bike storage areas. These improvements will also improve the visual character of some areas as will selective landscaping revitalization, removal and/or planting. See also Sections 3.2 and 4.4, 4.5 and 4.6.

3.1.5 Campus Residential Communities

The CSU Chico Master Plan 2005 accommodates a significant increase in the amount of University controlled student housing, proposing the construction of up to 1,298 new bed spaces which would represent a 75 percent increase over the current number of spaces offered by the University. The new housing would be concentrated on the existing campus housing areas adjacent to Whitney Hall – potentially including removal of Whitney Hall and its replacement with a new housing project—and on to be acquired sites in the College Park neighborhood immediately east of Esken, Meechoopda and Konkow Halls. The type of student housing proposed will meet the space, amenity and individual and group study needs of today's student population. Further, with the proposed housing plan a modern food service

facility would be constructed offering several types of meal plans being built in conjunction with an indoor/outdoor patio dining facility. To assist in the accommodation of the expanded housing, a new parking structure is envisioned on the southern portion of the proposed College Park acquisition area. Further, the ultimate development plan for the College Park area is seen as a potential location of a second phase campus child care facility. (See also Sections 3.5.7.2 and 3.5.5 below).

3.1.6 Ancillary and Support Facilities

CSU Chico depends upon a well organized and strategically located group of support services that serve and maintain the campus infrastructure such as buildings, grounds and utilities that protect campus users and assets. Important physical facilities that fulfill this mission include the Maintenance/Corporation Yard facility, the Central Boiler-Chiller Plant, Reynolds and Stiles Warehouse/Receiving and the Campus Police.

The maintenance/corporation yard facility is located on First Street at Highway 32 and bordered on the north by Big Chico Creek and on the east by the railroad tracks. This facility serves most of the campus' maintenance needs including repair, Facilities Management & Services (FMS) central supply, hazardous materials storage and service vehicle parking. The largest buildings of this facility were built in 1920 with several smaller structures dating to the 1962-1966 period. The CSUC Master Plan 2005 proposes that these facilities remain in their present location with a realization that the relatively large consolidated site may have some other potential campus use in the distant future. In this light, industrial oriented properties to the south along the Union Pacific Railroad tracks are seen as potential future sites for development of FMS facilities.

The Central Boiler Chiller Plant facility located in the extreme southwest corner of the Physical Education playfield area bordering Big Chico Creek on the south, includes the campus boiler chiller and thermal storage equipment. With the development of various new campus buildings and to take advantage of future co-generation potentials, additional



3.6 | George Peterson Rose Garden

land adjacent to the Central Plant will need to be reserved for the accommodation of the expanded central plant facilities.

Currently the campus utilizes two aging warehouse facilities to store and receive various campus supplies and items. These facilities, Building S/Stiles Warehouse (34,491 GSF; 1950) and the Building R/Reynolds Warehouse (44,323; 1930) together make up a city block that is identified in the CSUC Master Plan 2005 as the site for the development of a student recreation center, referred to as the Wildcat Activity Center (WAC). As part of the plan to develop the WAC, additional warehouse space in reasonable proximity to the campus would have to be acquired, developed and/or leased.

The present Campus Police facility consists of a temporary relocatable structure located on a small site at the northeast corner of Second Street and Normal intersection. This facility must be relocated once the Taylor Hall II project begins construction. Over the long term the CSUC Master Plan 2005 provides for a new police facility to be located on the ground floor of the proposed Siskiyou II academic building where it would enjoy central campus access. A minimum 12-space dedicated police vehicle parking lot would be located to the north of the Siskiyou II facility. See also Section 3.4.7, below.



3.7 | Landscape Improvement Areas

3.2 LANDSCAPE IMPROVEMENTS

3.2.1 Design and Planning Principles

In establishing the open space/landscape Master Plan, the following points are intended to further form a cohesive spatial experience and promote a strong campus identity unique to CSU Chico:

- Establish a strong network of pedestrian and vehicular connections.
- Recognize and further articulate a hierarchy of spaces and their connections as outlined in Exhibit 1.19.
- Recognize the contextual relationship within the City of Chico with concern for campus edge treatments and the City interface.
- Develop landscape design which reinforces cultural roots of the campus and its setting – the Bidwell legacy and Chico’s agrarian past.
- Promote the safety, security, and welfare for all campus users.

- Promote a positive collegiate learning environment.
- Minimize vehicular use within the Campus. Encourage alternatives to automotive use.
- Provide for an easily maintainable low life cycle cost landscape based upon sound and sustainable ecological systems.

3.2.2 Landscape Context

Along with the design and planning principles outlined above, a set of landscape improvements are conceptualized within an open space framework which draws upon natural and cultural contextual cues: Big Chico Creek, the surrounding fabric of the City of Chico, the rich architectural past, and the horticultural heritage of the Bidwell estate. When overlaid onto the open space plan this rich context starts to define direction for the planned articulation of concrete, furniture, soil, and plant material. The spines are an extension of the urban grid, quad spaces promote collegiate tradition and academia,

the interstitial wooded green spaces speak to being maintained in the form of an arboretum, and Big Chico Creek to be further rehabilitated and integrated as a greater remnant of riparian ecology.

Development periods of various campus segments present today, further creates a variable for how the landscape should be developed. There is an inclination (and perhaps a mandate) to perpetuate the style and substance of the historic core within that general precinct, while the potential for introducing change into those areas dominated by the more recent period of development (within the last 50 years) tends to be viewed as a reasonable adaptation. That said, future site development shall respond, in various degrees of sensitivity toward style and context, to the University's demands of changing curriculum and enrollment.

3.2.3 Landscape Improvements

Exhibit 3.7 identifies several landscape improvement areas that will require generic types of landscape treatments associated with new construction and/or landscape upgrades needed to transform areas in need of enhancement to bring them up to current standards or to move them towards the long term Master Plan 2005 vision for CSU Chico.

Apart from the landscape additions associated with new building construction and building renovations the several areas of significant landscape upgrade include:

- **First Street Upgrade.** Create a more pedestrian friendly promenade fully integrated with adjacent uses and connections to the town and campus. Elements include: reprofiled concrete walkways to achieve a uniform pedestrian experience and proper drainage, special paving at intersections, street tree planting, seatwalls, planters, street furnishings, signage, art, upgraded lighting, and relocated bike parking.
- **Pedestrian Spine from Meriam Library North to Legion Avenue.** Elements include: paving upgrades, reconfigured gathering spaces, street furnishings (benches, trash receptacles, bike racks/screening), new plantings, lighting upgrades, planters, seat walls, and public art.
- **Second Street Streetscape Upgrade** to improve newly expanded campus edge. Improvements in collaboration with City of Chico include: street tree planting program, upgraded lighting, entry signage, some street furnishings. The pedestrian 'paseo'/walk areas would include enhanced paving similar to the treatment already in place at First and Warner Streets
- **Big Chico Creek Restoration.** Ongoing creek restoration. Thinning and/or eventual elimination of exotic plant species within riparian zone.
- **Open Space South of Modoc Hall.** Selective removal of old trees. Redevelop green spaces. Maintenance of the existing ground sculpture.
- **Open Space in Triangular Area East of Butte Hall.** Selective removal of old plant material to bring more light into this space. Reconfigure hardscape, replant, add site furnishings and lighting.

Landscape Improvements will Include Maintenance and Infrastructure Upgrades Such as Irrigation to Preserve the Campus Heritage.



3.8 | The Campus East Mall Area as viewed from Meriam Library (Glenn and Colusa Halls in the Background)

3.2.4 Landscape Design and Vegetation Management Practices

Besides the projects outlined above, landscape design and implementation practices are to be applied campus wide ranging in scope from vegetation management to the redesign and construction of specific campus areas. Goals for vegetation management in the CSU Chico campus setting include the following:

Maintenance

Tree/ shrub pruning and removal to promote plant health, reduce frequency of maintenance, and promote a better environment for plant material to thrive. Maintenance practices need to be evaluated and standardized to achieve a consistent or prioritized level of landscape care.

Ecology

Promote symbiotic relationships through plant selection compatible with water, light, soil and climatic requirements. Ensure that plant choices account for growth and natural or artificial vegetative succession over time, especially with the Master Plan's goals. Promote and establish zones (such as the Big Chico Creek corridor) to be propagated and maintained as, indigenous to the regional ecology, the more recent diverse horticultural groupings promulgated by Bidwell, or perimeter street planting as set fourth by City of Chico standards and guidelines.

Security and Safety

Ensure that visibility is created and maintained so that there are few visual barriers and that use areas on campus are 'defensible' spaces. Ensure that low branches do not interfere with vehicular and pedestrian flow.

Visibility

Plant, remove and/or culture plant trees, shrubs and ground covers to reinforce sight lines and paths of travel. Plant to articulate the Master Plan's primary and secondary circulation and use hierarchies. Use planting order and hierarchy to emphasize circulation and ease way finding.

Unity

Select thematic planting to articulate the CSU-Chico campus as a place and environment of higher learning. Planting of this nature could be implemented in strategic locations, for example entries, spines and plaza areas.

Additional campus areas identified for consideration of landscape modification are highlighted in Exhibit 3.7.



The CSU Chico campus is characterized by mature landscaping. In some areas trees and other vegetation has coalesced into a dense canopy restricting view corridors and/or blocking night lighting. Some trees have reached their life expectancy or are susceptible to disease. A plan of selective management of the CSU Chico 'Campus Forest' is proposed as a way of improving the functionality and appearance of the campus as well as maintaining overall vegetative health.

3.9 The CSU Chico Mature 'Campus Forest'

3.3 THE PLAN AND THE NATURAL ENVIRONMENT

There are several ways that the CSU Chico Master Plan relates directly and indirectly to the natural environment. In all cases these relationships involve the conservation of natural resources. The most visible relationship the campus has to the natural environment is represented in the presence of Big Chico Creek which has been designated by the City of Chico as a Resource Conservation Area (RCA). The creek and its related riparian habitat, which flows through the center of the campus, occupies approximately 12 acres of land. Much of this habitat has been altered by the invasion of non-native species, a situation that is being slowly addressed through a restoration project of non-native species removal and replacement with appropriate native plantings. The creek connects the campus with the Sierra foothills to the east, with the Sacramento River and ultimately with the Pacific Ocean to the southwest. Among the better known species that may

directly or indirectly depend upon the health of the Big Chico Creek include the Bald Eagle and the winter run Chinook Salmon. The City of Chico General Plan calls for 100 foot protective buffer/non-development set-back zones from the top of creek banks to insure space for open space corridors. These corridors would permit low-impact recreational use activities such as bike and pedestrian pathways in these corridors.

CSU Chico also hosts the Bidwell Environmental Institute which manages several land preserves for the primary purposes of protection, enhancement, research, and education. These land areas include the 3,950-acre Big Chico Creek Ecological Reserve, the 300-acre Butte Creek Ecological Reserve, and the 80-acre Eagle Lake Field Station.

Other ways in which the master plan supports the conservation of natural resources is through its plan components and programs that lead to greater conservation of energy with secondary reductions in atmospheric pollutants. These plan components are covered in more detail in other sections of the Master Plan: promotion of pedestrian and bicycle alternatives to internal combustion vehicle use, Section 3.5.7.3, Sustainability and a LEED Campus, Section 3.6.3 and Strategic Energy Plan—heating/cooling/lighting of campus facilities, Section 3.6.4.



Photo Credit: Instructional Media Center

3.10 Big Chico Creek Riparian Area



3.11 Infrared Aerial Photo of CSU Chico and Downtown Chico

CSU Chico Tree Cover is Clearly Visible in the Upper Portion of the Image. (Red tones indicate vegetation.)

3.4 PROPOSED STATE-SUPPORTED ACADEMIC FACILITIES

3.4.1 State-Supported Facilities

Various types of university facilities are eligible for funding under CSU State guidelines. These are the core academic facilities needed to support the education of the California State University student population. Various types of essential utilities and support infrastructure are included in the state-funded category. Generally, facilities, primarily or exclusively used by students for non-instructional or administrative purposes and/or used principally by the community, are not supported through CSU system funding.

A graphic summary of state and non-state projects that comprise the major campus investments anticipated in the CSU Chico 2005 Master Plan is depicted in Exhibit 3.13.

3.4.1.1 State-Supported Instructional Space Needs

With the anticipated increase in campus physical capacity growing from 14,000 FTES to 15,800 FTES, a commensurate need in instructional spaces will be warranted (+1,800 FTES capacity). In general, based upon the CSU Chancellor’s Office ASF/FTE model, CSU Chico would need an additional 83,700 ASF of instructional space (1,800 x 46.5 ASF/FTES) to service its students (approximately 128,700 GSF based on an average building efficiency of 65 percent).

Most of this new net instructional space would be needed in the areas of classrooms (lecture), laboratories and offices. Actual projections of needed academic spaces, developed by CSU Chico, anticipate a series of new facilities, removal of substandard facilities and minor reassignments of existing space categories. The majority of the needed spaces have been configured as proposed new buildings that occur on the 2005 Master Plan Summary map and as further described below.

3.4.1.2 Special State-Supported Facilities Needs

Technology: Changing communications, work place and learning/teaching technologies will require upgrades to most CSU Chico building facilities. In particular, additional existing classrooms and laboratories will need to be converted into “smart” classrooms connecting students with a host of distributed information and learning potentials. Likewise, key facilities such as the Meriam Library may continue to require technology upgrades as new and diversified learning models are implemented. The \$13 million Telecommunications Infrastructure Initiative (TII) project currently underway will provide the backbone connectivity for the campus upon which existing and subsequent classroom upgrades will connect. By 2002, over 50 CSUC classrooms were considered at some level to be “smart classrooms”—some having basic “smart” components like overhead projectors, a VCR and/or network computers – to others with fuller capabilities made possible with data projectors, student laptop connectivity to the University network, Internet and/or room monitors and screens.

Similarly, CSU Chico has set goals to increase the contribution of satellite centered and distance learning to its total delivery of educational services as expressed in FTES. This will require technology upgrades for on campus facilities needed to deliver those services and will impact the configuration of satellite facilities.

Physical Education: With the construction of the new Physical Education facility, Yolo Hall, outdoor field space was diminished by approximately 2.2 acres, reducing the total PE-related acreage to about 32.1



3.12 Yolo Hall Physical Education Facility

acres. The CSU State standard for outdoor physical education facilities for universities with enrollments of 15,000 (or similar to the planned enrollment of CSUC) is 34 acres.

Acker Gymnasium and the campus pool (see also Section 3.4.8 below) both require repairs, upgrades and/or replacement to improve their efficiency, functionality and appearance.

3.4.2 Proposed State-Supported Academic Facilities

The 2005 Master Plan proposes the development of five new state-supported facilities, one major renovation project and two future land acquisition projects. The acquisition projects are identified as “reserve sites” for a future academic facility (Rio Chico area) and for additional campus student housing and parking (College Park area). These projects are needed as part of the overall strategy for growth and replacement/renovation of substandard facilities.

The proposed 2005 Master Plan projects include:

Classroom/Laboratory Facilities

1. Butte Hall Rehabilitation
2. Taylor Hall Replacement (Taylor II, replacement facility)
3. Modoc II (new facility)
4. Siskiyou II (replacement facility)
5. Rio Chico Physical Education Facility/ Aquatics Center (new non-state funded facility)

Other Academic Facilities

1. Student Services Center (replacement/consolidation facility)
2. Outdoor Physical Education Facilities

3.4.3 Butte Hall Rehabilitation

Proposed Rehabilitation:
 48,538 ASF
 88,874 GSF

Butte Hall, built in 1972, is in need of extensive modifications related to asbestos

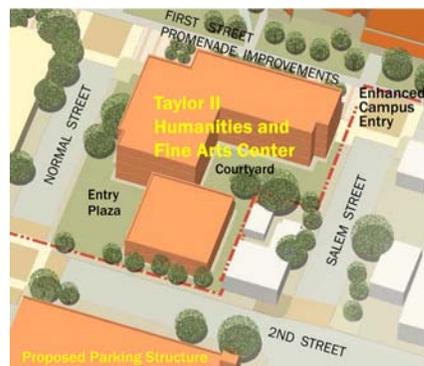
removal and mitigation, HVAC renovation, and electrical systems totaling an estimated \$ 20,652,000. in improvement costs. A capital improvement project for the rehabilitation of Butte Hall has been included on The CSU Chico 5-Year Capital Outlay Program for the 2009-2010 period. Because of the extensive nature of the rehabilitation project which will affect all seven floors and multiple building systems, temporary academic space will be needed during the construction period to house the displaced academic programs.

3.4.4 New Facilities

Taylor Hall Replacement (Taylor II)

67,000 ASF
 98,529 GSF

The current Taylor Hall was constructed in 1965 and today exhibits numerous building system deficiencies, including those related to electrical, mechanical, ADA accessibility and fire life safety. Taylor Hall is occupied by the College of Humanities and Fine Arts which, as the largest program on campus, is programmed for continued growth and has many special needs that its current program space does not provide. Additionally, various academic programs have grown beyond the physical space capacity of Taylor Hall and in various other buildings in which they are located. For instance, many office and classrooms related to these programs are currently situated in temporary modular buildings.



3.14 Proposed Taylor II College of Humanities and Fine Arts Facility

To address these inadequacies it is proposed to replace the obsolete Taylor Hall with a new and expanded building to meet the projected instructional needs of the College of Humanities and Fine Arts.

The Taylor Hall Replacement project will address several of the University's strategic plan goals by providing a high-quality learning environment with the latest in instructional technology, that is safe for students, faculty and staff, and cost effective to operate and maintain. In keeping with this campus' unique role in Northern California, and consistent with CSU Chico's Strategic Plan, the College of Humanities and Fine Arts provides the majority of Music, Theatre and Fine Arts resources for the entire region. This new building will greatly enhance the College's ability to meet these strategic goals.

At its core, this project is planned to provide additional faculty office, lecture/instructional laboratory and instructional activity space which will include dance and music practice, recording studio, and recital hall space for the College of Humanities and Fine Arts (HFA) and its departments of Art, English, Philosophy, Foreign Languages, Music and Theatre.

This project will replace the existing Taylor Hall with a new 1 or 2 and 4-floor building forming courtyard, fore court and entry court spaces around the perimeter. In particular, entry court and/or transition spaces would likely occur at the First Street/Normal Street and Second Street/Normal Street corners. Building architecture would be compatible with surrounding structures including the historic core following the 'Design Guidelines for New Facilities' articulated in Section 4.3. Building massing would decline from a four-floor configuration on the First Street mall side to a planned one to two-floor configuration in the vicinity of Second Street. All interior spaces would be designed to modern standards and would include state-of-the-art classrooms and laboratories.

This project, along with the Student Services Center (see below), will replace several temporary facilities totaling 28,738 ASF. Because of its location in the heart of the Southeast Campus Quadrangle, where

all of the College of Humanities and Fine Art's facilities are located, it will also be the best opportunity to provide the College of Humanities and Fine Arts with its full complement of entitled facilities.

Further, because the current Taylor Hall architecture is out of place with the surrounding buildings and as the building helps form the downtown Chico gateway to the campus, replacing it with a new more compatible structure will give CSU Chico a new public face and vastly improve the visual appearance of the campus and its interface with the City of Chico.

3.4.5 Student Services Center

79,960 ASF
122,422 GSF

There is a large array of student services functions and offices serving the CSU Chico student. Currently, these are located in several scattered temporary and borrowed permanent facilities that are either substandard or that must yield their space to their primary intended users. Existing spaces are located within Meriam Library where they are temporarily occupying space needed by the Library itself, within the Aymer Jay Hamilton facility (AJH), a substandard facility planned for removal, within Sierra Hall, a small on-campus facility planned for administrative office users and within portions of Kendall Hall, the University's main administration building that is planned to receive other University administrative functions.

A new 4-floor Student Services Center is currently in design that would consolidate the student services functions on the one



3.15 Artist's Concept of Planned Student Services Center

Student Housing

Parking Structure

P.E. Pool
(Replacement Project)

Siskiyou II
(Academic Building)

Aquatics Center
(AS Recreation)

Rio Chico P.E.
(Academic Building)

Wildcat Activity
Center
(AS Recreation)

Student Services Center

Regional Continuing
Education Center
(Building Retrofit)

Alternative Site for
Parking Structure

Butte Hall
(Building Rehabilitation
and Upgrade)

Student Housing

Modoc II
(Academic Building)

AS Child Care Center

Northern California Natural
History Museum

Selvester's Cafe (Expansion)

Taylor II (Academic Building)

Parking Structures



block site immediately south of the Meriam Library and west of the Bell Memorial Union. The building layout will feature a courtyard oriented towards the Meriam Library/First Street Mall, as well as an entry court where the structure forms a natural south entry to the university along Ivy Street. The building architecture will feature significant façade base and entire facades with brick veneer, the differentiation of façade units into classical 'base', 'middle' and 'top' units and façade articulation creating visual interest and human scale.



3.16 Modoc II Project Concept

3.4.6 Modoc II

Proposed Building:
37,980 ASF
58,400 GSF

Originally completed in 1950 as a public school structure, the Aymer Jay Hamilton facility (AJH), located in the northeastern end of the campus, is a relatively small, inefficiently configured one-story building in poor condition. Removal of the structure to create a site for a two to three floor modern classroom laboratory facility is seen as a

way of partially obtaining the classroom laboratory space anticipated as part of CSU Chico's growth to a 15,800 FTES campus. The site created by the removal of the AJH facility would also create additional space for a phase 1 child care center (118 children capacity) potentially constructed in association with the adjacent existing Modoc Hall. The entire site, when coupled with adjacent open space and parking lot facilities, would also provide space for a proposed Natural History Museum (a non-CSU-funded facility).



3.17 Artist's Rendering of the Proposed Siskiyou II Building with a Bicycle Parking Area Enclosed in Low Hedges Shown in the Foreground

The Siskiyou II project would accommodate academic growth as well as a ground floor Campus Safety facility.



3.18 Siskiyou II Concept (looking north from Meriam Library)

3.4.7 Siskiyou II

43,430 ASF
66,150 GSF

At the present time, the aging, single-story, non-descript Siskiyou Hall building occupies the site where the new Siskiyou II building is planned. The existing Siskiyou Hall was built in 1957 as an industrial arts instructional facility. The building does not efficiently utilize the site and is also more expensive to maintain per square foot than a modern, efficient multi-story building. The new building will provide more usable square footage for the campus in a smaller footprint.

The Siskiyou II replacement facility is conceived as a four floor classroom/laboratory building with a ground floor University Police facility. The four floor classroom/lab building would be oriented to the main campus east-west mall and to the open space corridor extending north from the Meriam Library helping to visually define those spaces. The



3.19 Rio Chico Academic and Aquatics Center Concept

proposed University Police facility would be oriented to the service road north of the Siskiyou II facility where from this central campus location it would have direct access to Warner Street as well as direct access to the service routes linking all the CSU Chico facilities east of Warner. This campus police facility would maintain some walk-in access to the campus along the mall and/or Warner Street with the bulk of the facility lying to the north of the Siskiyou II structure. A minimum of 12 dedicated screened from public view parking places would also be placed to the north of the building tied into the service road.

3.4.8 Rio Chico Physical Education and Aquatics Center Facilities

Physical Education Facility (PE III):
46,400 ASF
71,000 GSF

The site currently occupied by a small residential neighborhood known as Rio Chico due to its adjacency with Big Chico Creek is surrounded by land owned by the University and has been considered a prime site for acquisition to provide needed land for University programs. The Rio Chico neighborhood contains several single family residences of historic value leading to a CSU Chico Master Plan 2005 proposal to retain in place or relocate any historic structures to nearby historic residential neighborhoods as part of any acquisition and development concept for the site.



3.20 Chico Outdoor Athletics

As the Rio Chico area is bordered on the south by First Street it lies adjacent to the planned Wildcat Activity Center and is connected by pedestrian bridge directly to the campus Physical Educational fields and facilities, it has natural potential as a site for future physical educational, athletic and recreational activities. Using projections for future space needs based upon a 15,800 FTES campus, there is a long term need for approximately 80,000 ASF of Physical Education oriented and other academic space that could be accommodated on the Rio Chico site. This potential academic space yield for the site has been reduced in the Master Plan 2005 to accommodate a recreational Aquatic Center facility. The development concept for the site could if necessary retain the existing historic structures on site. The Master Plan 2005 therefore indicates the joint development of the Rio Chico site (including the CSU Chico owned surface parking lot to the west) with the following facilities and features:

- Physical Education facility that would accommodate additional basketball, multipurpose and/or other specialized indoor courts, aerobics, dance and fitness rooms as well as showers, small classroom and office spaces;
- A recreationally oriented Aquatics Center facility that could share locker and shower facilities with the PEIII project.
- Open space plaza at the southeast corner of First Street and Cherry Street forming part of a conceptualized western terminus of an extended First Street pedestrian mall;
- Limited surface parking and service access between the west end of the proposed facility and the Union Pacific Rail Road tracks;
- Potential retention on site of existing historic structures.
- Pedestrian access to the CSU Chico core PE program area via the existing pedestrian bridge over Big Chico Creek.

3.4.9 Outdoor Physical Educational Facilities

State Standard for 15,000 Enrollment
 Campus: 34 Acres
 Existing Campus: 32.1 Acres
 Needed Acquisition: 2.2 Acres

As a result of CSU Chico’s limited land assets, Outdoor Instructional Physical Education space has been used as the only available sites for the recently constructed Yolo Hall Physical Education II project. The outdoor Physical Education space needed for playfields and other facilities has therefore fallen below the state standard allotment of 34 acres for a CSU campus of an enrollment of 15,000. Further, additional outdoor field space will be lost with the future expansion of the Central Plant facility which lies at the south end of the field area. The Master Plan proposes the acquisition of about five acres in proximity to the locus of the existing Physical Education program. The most appropriate sites lie west of the railroad tracks along Highway 32. In addition to the needed outdoor PE space, CSU Chico has identified the need for 38 acres of additional athletic and recreational-related open space (see Outdoor Recreation below, Section 3.5.2) some of which could also be purchased in the Highway 32 corridor or other nearby locations to create a grouping of interrelated outdoor educational, athletic and recreational facilities.

3.4.10 Land Acquisitions

Figure 1.34 identified two of the largest land parcels adjacent to the campus needed to implement important components of the CSU Chico 2005 Master Plan: the College Park and Rio Chico areas which are needed for future student housing and Physical Education facilities. Additional land parcels will be needed to provide for future parking and outdoor recreational facilities. Land for small surface parking facilities may be acquired in the downtown Chico areas southwest of the campus and on either side of the Union Pacific tracks. Some of these same areas could potentially be developed as sites for various campus maintenance functions, campus warehouse facilities lost to the development of the Wildcat Activity Center or possibly structured parking.

Properties suitable for the development of much needed outdoor student recreational facilities have in general been identified west of the Union Pacific tracks and east of Highway 32/Nord Avenue (see also Opportunities and Constraints, Section 1.8).

Additionally, all concepts for the development of Rio Chico area would either retain existing historic structures or potentially relocate them to historic residential areas of downtown Chico. CSU Chico would be involved in this process including the potential purchase of home sites to receive the relocated structures. All actions would be coordinated with the City of Chico Planning Department.

3.5 PROPOSED NON-STATE-SUPPORTED FACILITIES

3.5.1 Non-State-Supported Facilities Conditions and Needs

3.5.1.1 Summary

The California State University system does not provide direct funding support for various university facilities that are primarily for non-academic or community use. Important university facilities in this category include university-sponsored student housing, student recreational facilities, child care and parking facilities. These are all of particular and growing importance to CSU Chico as CSU Chico is both a residential campus and one that, to a greater or lesser degree, seeks to provide the types of facilities that attract students from outside its core service area to complete its enrollment mission - approximately 55 percent of CSU Chico students listed areas outside of the CSU Chico service area as their area of permanent residence.

3.5.1.2 University-Sponsored Housing: Building Community, Supporting Student Learning

Given the existing levels of unmet demands for university-sponsored housing coupled with the inadequacy of the Whitney Hall dormitory which represents an on-campus capacity of 496 students, the CSU Chico 2005 Master Plan proposes the significant expansion of university-sponsored housing to a level of about 1,800 students (beds).

Currently, approximately 1,731 students are accommodated in University-sponsored residence halls and apartments. There is additional demand for on-campus housing that cannot be met in existing facilities; similarly, an increase in student enrollments is expected to increase the demand for housing and therefore the housing shortfall. In conjunction with the Housing Planning Committee, a study of CSU Chico Housing and Food Services was conducted in 2002 to provide alternatives for increasing student housing capacity and for replacement of the existing dining facility in Whitney Hall in order to increase the capacity of the dining facility, which is currently operating with out-of-date equipment and is serving three times as many people as its original design intent. A review of existing documents and reports on the housing and food service facilities indicates that the cost of renovating Whitney Hall to meet the necessary seismic and code upgrades would reach \$13.3 to \$14.3 million, including renovation of the food service facilities. Given that these costs would not result in an increased housing capacity, it is recommended that Whitney Hall be eventually replaced or renovated, and that a new food service/dining facility be included as a component of any new student housing project in the Whitney Hall area. (This study also addressed the need for facilities to increase the campus residential parking capacity.)



3.21 CSU Chico Student Housing: Builds Community

As a general principle, CSU Chico seeks to improve the quality of life on the campus through its residential programs. Further, the University recognizes that significant learning takes place in non-classroom settings and that strong residential programs can foster academic achievement as well as social and personal responsibility by generating the mentoring relationships and friendship bonds that serve to transmit the university's values.

The residential program is a particularly potent tool for socializing first-year students, the primary consumers of university-sponsored housing. Small-scale residential programs can work to break down the scale of the university campus into smaller social groupings in which individual students readily develop the networks that help socialize them to the expectations, requirements and norms of university life. When coupled with a strong Student Recreation Center program that provides both scheduled and informal activities, small-scale housing provides the foundation for a healthy student life-style.

There are a number of other advantages to the University of a campus housing program that incorporates small-scale facilities. Research results indicate that freshmen who have lived in small, community-model housing are more likely to return to the university in their sophomore year than students housed in large dormitory settings. In addition, parents' concerns about safety and security can be addressed by small university-sponsored residential programs which counteract the sense of anonymity often inherent in a large university setting. These factors, in turn, serve to maintain the housing service revenue base by keeping residential buildings full, and can reduce the need for on-campus parking.

Housing Configuration

On the basis of a review of existing student housing models, a dormitory-cluster model (Exhibit 3.22) was chosen as the most effective way of creating small-scale residential communities on the sites identified for expanded University-sponsored student housing. The recommended housing model includes common space—lounge, kitchen, toilet facilities—shared by

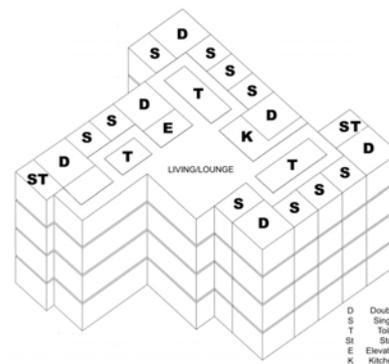
groups of 20 students in single and double sleeping rooms. This configuration, which accommodates Resident Assistants and other staff where required, encourages the formation of group bonds and social networks and serves to break down the institutional scale of a university residence.

Housing Sites

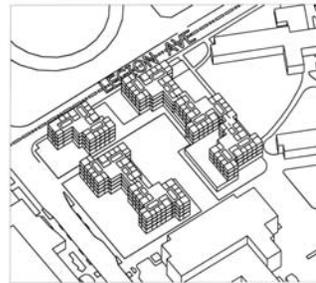
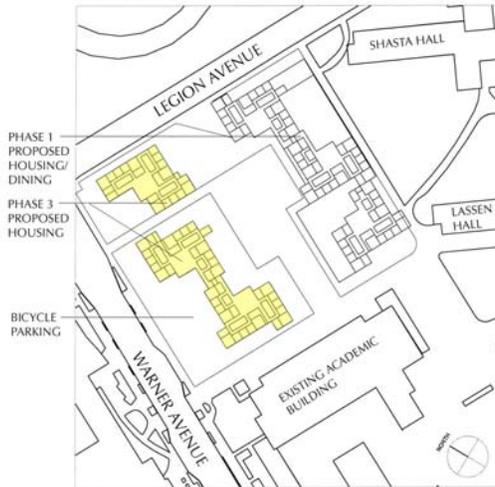
After investigating seven possible sites for housing, it was determined that, to strengthen and reinforce the University's existing northwest precinct residential community, the most appropriate sites were the re-use of the Whitney Hall site and further development of the College Park site, adjacent to Esken, Meechoopda and Konkow Halls. The College Park development will require the University to acquire additional existing residential properties in the neighborhood. Parking capacity for residential needs is included in the development vision for the College Park site.

Residential Food Service

An assessment of the Whitney Hall food service by Cini-Little and the Cornyn-Fasano Group indicates that this 25-year old facility should be completely renovated or replaced. Consisting of a kitchen/food preparation area, a storage/loading dock area, a servery and a dining facility. The report indicates that the space is too small to prepare and serve meals for the current 1,561 meal-plan consumers, and that both the equipment and the market concepts are outmoded, thus limiting an expansion of the food services.



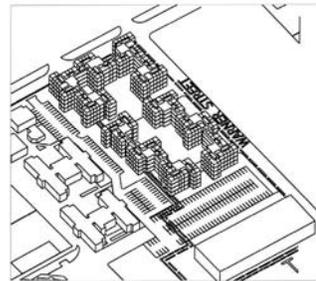
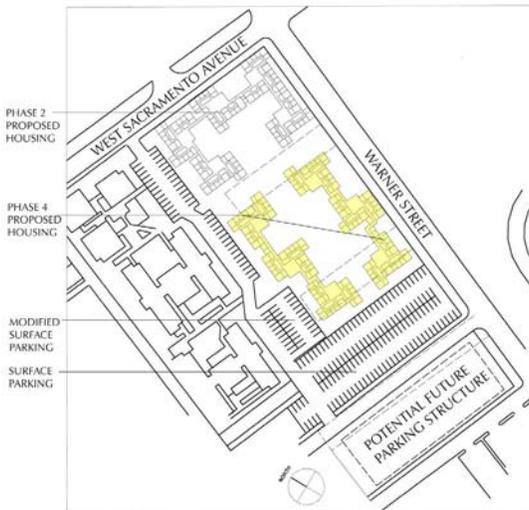
3.22 Proposed Dormitory Cluster Student Housing Model



3.23 Whitney Site and Proposed Site Plan

Whitney Site Development Summary:

- Provides 136-196 new bed-spaces (replaces 74% of Whitney housing on site)
- Provides 10,900 gsf new and replacement student life/recreation space
- Allows pedestrian passage to north without comprising residents' privacy and security
- Provides view into dining facility from pedestrian pathway to encourage faculty, staff and non meal-plan resident
- Patio dining helps activate courtyard
- Creates ample open space for informal recreation without hampering student privacy



3.24 College Park Site and Proposed Site Plan

College Park Site Development Summary:

- Provides 370-502 new bed-spaces
- Provides 6,300 gsf new student life/recreation space
- Creates informal recreation/open space for existing and new residences
- Two buildings can be phased separately
- Creates residential precinct with existing residence halls
- Allows pedestrian passage through site to activate open spaces

3.5.1.3 Master Plan Housing Recommendations

Given the documented deficiencies of the Whitney Hall structure and the costs required for its upgrade, as its primary recommendation, the Housing Master Plan suggests that Whitney Hall be demolished and the site re-built with a new student housing project. It should be noted that the university upon further investigation may ultimately chose to demolish and replace or totally renovate the Whitney Hall facility. This decision can be delayed pending additional confirmation studies while the other student housing construction plans continue. Accordingly, the approach to increasing University-sponsored housing capacity is a phased plan on the Whitney and College Park sites that allows for new bed-spaces and dining facilities to be constructed to replace Whitney's capacity before the existing structure is demolished. Exhibits 3.23 and 3.24 show site plans and analyses of the residential buildings that make up the Housing Master Plan.

The Master Plan recommendations for campus housing are based upon the dormitory-cluster model described above. The complete Plan with Whitney replacement provides for up to 1,298 new bed-spaces on the two sites, which would bring the campus total to 3,029 rentable bed-spaces. The Plan would be developed in four phases, and each phase incorporates both housing and adjacent open space for informal recreation activities.

Housing buildings are four stories high to maximize the capacity of the sites and to make the best use of existing and newly-acquired properties on a campus where land is scarce. Each housing building incorporates within it space for student life/recreation including office space, living/learning centers, recreational facilities, laundry/storage and custodial facilities.

Residential Food Service Recommendations

The Master Plan proposes incorporation of a new 23,000-gsf facility on the ground floor of the first new 4-story residential building recommended for the Whitney site,

to be constructed in Phase 1 of the Housing Master Plan. The facility recommended in the Cornyn Fasano Group Report is sized and equipped to prepare and serve up to 6,500 meals per day to a maximum of 2,200 meal plan participants and cash customers. Projected market concepts include display cooking, grill, sandwich/soup/deli service, ethnic food stations, and a mini-convenience operation; these concepts are based on popular food types and formats and are set up to encourage cash business as well as appealing to food plan consumers. The site plan for the Whitney site accommodates a dining patio and allows for the interiors of the dining facility to be visible to students passing by and through the building.

Residential Parking Recommendations

New housing capacity will increase requests for residential parking while at the same time replacing surface parking with housing buildings. The Master Plan housing proposals include parking spaces in surface lots and parking structures to accommodate student residents; these parking facilities are concentrated on the Stadium Lot and East Stadium block sites. The Master Plan phasing recommendations show how these parking facilities can be used to address the campus-wide need for general parking during the near-term, before all planned housing is built. The Master Plan suggests that the existing bicycle parking at Whitney be replaced on the re-built Whitney site in open space perimeter areas not dedicated to pedestrian thoroughfare or emergency vehicle access.



3.25 | Whitney Hall

3.5.2 Outdoor Recreation

CSUC's outdoor athletic/Physical Education facilities are essentially dedicated to instructional purposes and not generally available to students and faculty for recreational use. Likewise, indoor PE facilities are reserved first for instructional use but are also in high demand for intramural and recreational use. This lack of dedicated recreation-oriented facility space at CSUC represents a weak link in the provision of quality of life at the campus. In this light, it should be noted that CSU, Chico effectively competes for student enrollments with other California State Universities that do provide a wider range and availability of recreational resources for their students. The needed facilities include various outdoor intramural (now referred to as "recreational sports") fields, indoor intramural courts and indoor recreational courts, fitness facilities and a recreational pool.

In 1999, the Vice President for University Advancement and Student Affairs directed an administration and faculty task force to project current and future needs for student recreational and intramural sports fields and facilities. This group, utilizing planning criteria provided by the National Intramural-Recreational Sports Association (NIRSA), projected that the following facilities totaling over 38 acres would be needed to address CSU, Chico's recreational needs:

Outdoor Recreational Program	Needs/Preliminary
Intramural Fields (15 fields) and Jogging Path	20.3 Acres
Pavilion/Locker Rooms/Administrative Offices/Restrooms	.4 Acres
Sports Fields (6 fields) and Outdoor Skating	8.7 Acres
Open Recreation (New and expanded needs)	9.3 Acres
TOTAL	38.6 Acres

3.5.3 Wildcat Activity Center (Student Recreation Center)

An analysis completed by Brailsford & Dunlavey, a consultant group specializing in initial needs analysis/programming of student recreational facilities, has identified the need for a CSU Chico student indoor recreational facility with the overall floor space characteristics indicated in the table provided here.

Subsequently, Brailsford & Dunlavey, working in conjunction with the CSU Chico Associated Students and the University administration,

Indoor Recreational Program	Needs/Preliminary
Student Recreational Center	75,000 to 130,000 SF
Optional Natatorium (25 to 50 Meter Pool)	12,000 to 20,000 SF

identified a specific recreational program that was desired and deemed fundable through bonding to be paid down through additional student assessments. The enabling student referendum was defeated partially based on a large assessed fee.

The current student recreation center concept is envisioned as a two-level, 120,000 SF indoor recreation center to be placed on University-owned sites, bordered by First Street, Cherry Street, Second Street and the railroad right-of-way on the north, east, south and west, respectively. This location is close to the existing CSUC parking structure and to the Rio Chico site, programmed for future acquisition for development of Physical Education facilities and a recreational Aquatics Center.



3.26 Wildcat Activity Center (ASCSU Chico Student Recreation Center)

3.5.4 Aquatics Center

Deteriorating pool walls, filtration, mechanical and electrical systems have rendered the current campus pool facility inadequate for continued Physical Education instruction, therefore, necessitating its replacement. Given campus land asset availability, it has been determined that replacement on a site that includes its current P.E. location is appropriate. In addition to a P.E. replacement facility, there has been considerable interest from the Chico School District and the greater Chico community for a pool that could serve both the instructional and recreational needs of these groups. In addition to the pool itself, the pool facility would need to be supported with bathrooms, showers, locker rooms and other related facilities. These associated support facilities could be built into a pool facility or the pool itself could be built in conjunction with the WAC or other planned facility possessing the needed showers and lockers. The basic program for a recreationally oriented Aquatics Center with adjoining outdoor covered and uncovered activity spaces suitable for gatherings and passive recreation is outlined in the table below and in Section 3.4.8.

Aquatics Center Preliminary Program	
25 to 50 Meter Pool (7 –9 lanes)	12,000 to 20,000 SF
Associated Showers, Locker Facilities, Bathrooms, Office, Storage, Mechanical	15,000 SF



A New Larger Capacity AS Child Care Center is Planned

Photo Credit: California Department of Education

3.27 AS Child Care

3.5.5 Child Care

There has been a long-term interest in creating additional child care facilities within close proximity to the campus. The current facility, the Associated Students Children’s Center, located in the Aymer Jay Hamilton building (AJH), at the outer northeast edge of the campus, has a licensed capacity of 55 children. It is recognized that this facility only meets a fraction of the current and projected demand for child care based on the following factors: 1) past studies of the need for child care services; 2) the length of the current waiting list for child care and development services for 0-5 year-olds; 3) after-hour (primary school) child care is currently not available; and 4) changing student demographics suggest that a greater number of students with children are attending and will continue to attend CSUC in future years.

A child care expansion option analyzed in a 1997 study prepared by Lionakis-Beaumont Design Group, proposed the construction of a new 118 child capacity facility in the general location of AJH and adjoining intramural play field. It was estimated that this facility would serve approximately 25 percent of the total campus demand for such a facility/ facilities – which equates to a demand for facilities able to accommodate 472 children. The facility proposed in 1997 would require approximately 43,000 SF of building and a slightly larger amount of outdoor space including associated parking. A first phase of this building program requiring 21,500 SF of building and approximately an equal amount of outdoor open space was proposed and has been included as a component of the proposed Modoc II building project.



3.28 Child Care Center Concept

Child Care Center Space Needs	
Estimated Total Campus Need (472 Children), Building Indoor Area	172,000 SF/ 137,600 ASF
Estimated Total Campus Need (472 Children), Outdoor Areas	177,200 SF
Estimated Minimum Project Need for Child Care, Building (AS, Modoc II site)	21,500 SF/ 17,210 ASF
Estimated Minimum Project Need for Child Care, Outdoor Area (AS, Modoc II site)	22,150 SF

A second phase project could potentially be incorporated into the long term student housing proposal for the development of the College Park site. See Section 3.5.1.2.

3.5.6 Regional and Continuing Educational Facility

The Regional and Continuing Education (RCE) program, presently located in a modestly sized but historically elegant Center for Continuing Education Building (CCE), will remain in its current facility while expanding into the neighboring Colusa Hall facility to the south where it will occupy the entire structure. This new space will be used for seminars and have a small kitchen facility. The seminar space will be configured to allow flexibility with regards to the number and size of seminars possible. Its central location on the campus makes it a sought after location for summer and weekend learning programs with the added potential of utilizing partially vacant nearby student housing, when available, to house RCE participants.



3.29 Colusa Hall: New Home to the RCE Program

3.5.7 Circulation and Parking

3.5.7.1 Vehicular Access and Circulation

Based on a Fall 1998 Voice Response Registration Survey (VRRS), about 35 percent of CSU Chico students arrive to the campus by private automobile or motorcycle. A small percentage arrive by carpool. These students, by definition, are supported in their mode of arrival by the existence of affordable parking in proximity to the campus. The amount and location of student parking is of major importance to those students who must use private autos; and it is assumed, is a factor in regulating the number of students who choose to walk or bicycle to school to save time, money and inconvenience over choosing to drive to the campus. The large number of students who bicycle and walk to campus, an estimated 58 percent, contribute to the pedestrian, small scale atmosphere so much enjoyed by CSU Chico.

Modes of Campus Arrival		
Student Response	Percent	Equivalent Students
Usually Walk	28	4,107
Usually Bike	30	4,400
Bus/Carpool	6	880
Automobile/Carpool	35	5,234
Total	100	14,668

Source: Voice Response Registration Survey (VRRS), Fall 1998

Student parking areas are distributed at the periphery of the CSU Chico campus with the largest two concentrations lying north of the campus in the vicinity of the College Park neighborhood, with over 700 spaces, and in the southwest margin of the campus, with over 900 spaces. Many of the northern spaces are associated with students who stay in CSUC-sponsored campus housing who do not drive to school but use their auto occasionally.

Based on these concentrations of student parking, coupled with the City of Chico road network, it is assumed that when nearing the campus most students arrive using the following road facilities:



3.30 | Parking Structure Concept for the East Stadium Block Site

- From the North: Esplanade, Highway 32, 1st Avenue
- From the Northwest: Highway 32, Warner Street
- From the Southwest: Dayton Road, Ivy Street, 8th Street, Hwy 99
- From the South: Park Avenue/ Main Street; Ivy Street
- From the Southeast: 8th Street, Ivy Street

When planning for the arrival of students to the campus by vehicle, and while considering ways of reducing conflicts between vehicles and pedestrians and bicyclists, it is important to study the functioning of these roadway facilities

3.5.7.2 Parking Facilities

Currently, there are some 2,143 non-motorcycle parking spaces at CSU Chico. Most of these spaces are distributed in surface lots around the perimeter of the campus with major concentrations in the extreme northern part of the campus, where they are associated with student housing and athletic facilities, and in the southwest portion of the campus, where the 646-space Second/Cherry Streets parking structure provides easy access to a core activity area of the campus anchored by the Library and Student Union.

In the Fall of 2004, Kaku Associates developed a parking needs assessment for CSU Chico. The study found that in addition to a total number of on-campus 2,210 parking spaces (including motorcycles and excluding

automobile spaces temporally unavailable) there were at least 305 curbside and City of Chico Lot No. 7 off-campus spaces that CSUC users utilize. Together this represents an observed need of about 2,515 spaces. Kaku Associates estimated that another 10 to 20 percent latent demand would be associated with auto use at CSU Chico which would bring the total estimated current campus parking demand into the 2,765 to 3,015 space range. To accommodate the future campus enrollment target of 15,800 FTEs, Kaku Associates estimated that a total of 3,220 spaces would be needed. Finally, by also factoring in an estimate of the spaces that would be lost to the campus (420) as a result of Master Plan projects and as a result of relinquishing the leased parking facility at West Sacramento Avenue and Warner Street (Lot AD) a total future parking need of 1,430 new net spaces was identified.

Parking Needs	
Supply or Demand	Number of Spaces
Current On-Campus Supply	2,143
Estimated Campus-Utilized/City of Chico Spaces	305
Sub-Total, On and Off-Campus Observed Need	2,515
Current Observed Need with 20 Percent Latent Demand (LD)	3,015
Estimated Future Need Including LD and Growth	3,220
Estimated Future Losses of Campus Inventory	420
Estimated Total Future Requirement	3,640
Approximate Increase Over Existing On-Campus Supply	1,500

Notes: From Kaku Associates. Parking Needs Study. June 2004. Figures rounded.

Due to the extremely limited amount of land available on the CSU Chico campus for any type of new facilities, addressing the need for parking will generally involve selected strategies that may involve any combination of the following measures: 1) Acquisition/leasing of additional land for parking facilities; 2) Intensification of parking through the development of parking structures; 3) Alternative transportation strategies that reduce the need for campus parking. The 2005 Master Plan continues the strategies that have been used and planned for CSU Chico in the past: development of peripheral

parking facilities through construction of parking structures and through property acquisition for additional surface parking facilities – while recognizing the importance of promoting alternative transportation modes, especially the bicycle.

Ideally, new parking structures would be placed at the periphery of campus based on the following principles:

- Locate near a major north/south route connecting the facility with the greater Chico area;
- Located and designed so as to minimize conflicts with pedestrians and cyclists;
- Locate so as to distribute traffic impacts onto road facilities with additional capacity;
- Locate to support new or planned activities that would create specific parking demands (e.g.. The Student Recreation Center);
- Design to minimize the visual impact upon surrounding facilities and properties.

As described elsewhere, the Master Plan 2005 promotes the acquisition of industrial land to the southwest of the campus along the rail line for use as surface parking or other campus use. The Master Plan analysis focused on a limited number of sites suitable for the construction of parking structures that would contribute in a significant way towards the satisfaction of current and future parking demand. The most promising sites possessed several advantages to the University and to the Chico community as well. Due to existing traffic patterns, an attempt to distribute automobile trips across the street network serving the campus, an interest in developing



3.31 Cyclist in Front of O’Connell Technology Center

parking structures of an efficient design and an interest in serving various anticipated specialized user groups on the campus (e.g. student housing, athletic events), a strategy emerged to develop two parking structures in separate peripheral area of the campus, each separated from the existing parking structure. These two proposed structures, in principle, could serve future users in the southwest and north campus areas. The locations explored and incorporated into the Master Plan include a 1,643-space 4 level structure to be developed in the southern portion of the future College Park area of campus and a 1,436-space 4 level structure along Second Street built upon some combination of campus and City of Chico land. The City of Chico proposal includes the joint development of the City owned surface lot at Normal and 2nd Street as an integrated bus center and parking structure facility.

3.5.7.3 Bikeways and Bicycle Parking Areas

As described in Section 1.5.6, CSU Chico’s major use of the bicycle has led to a proliferation of bicycle parking areas being dispersed throughout the campus in an



3.32 Bicycle Storage Facility Along Warner Street



3.33 Bicycle Parking Plaza with Hedge Screening (see text for discussion)

attempt to both locate them in proximity to major student activity areas, to find adequate physical space for them and to place them in areas that minimize their visual impact. The current situation is one in which many of the larger bicycle parking areas some which are located in highly visible areas are less than attractive. With the implementation of the CSU Chico Master Plan 2005 projects, however, there will be opportunities to relocate and reconfigure bicycle parking as part of the site development work of nearly each proposed project. In particular, the First Street 'mall' improvements project and the Siskiyou II building project will involve the reconfiguration of large numbers of bicycle parking areas. The Wildcat Activity Center, Siskiyou II and the Whitney site student housing projects also represent significant opportunities to create new bike parking facilities and areas.

One design approach for reducing the visual impact of bicycle parking consists of placing bike parking areas and related ground mounted bicycle racks, within landscape hedge 'enclosures' effectively screening and softening their appearance. One such installation is illustrated in Exhibit 3.33. These screened areas can become a series of smaller (20 bicycle) areas grouped along a linear campus edge, walkway or against a building. Similarly, groups of these smaller bicycle parking areas each with its own hedge can be arranged into a larger area taking on an alternating pattern of parking area and hedge. Two level enclosures and wall mount vertical bike racks are other methods of storing bicycles that have the potential for reducing the space required for the bicycles while reducing their visual impact in the campus environment.



3.34 | Natural History Museum Concept

3.5.8 Northern California Natural History Museum

Although all California State Universities are required to have a science museum of an initial size of 3,000 square feet, CSU Chico has identified the benefit of creating a larger 11,000 square foot (ASF-assignable square feet) facility to be used by CSU students, public schools and the larger community as well. The Northern California Natural History Museum (NCNHM) would serve as a display space for existing University collections and for traveling exhibits of interest to the University scientific program and to the general public. The adopted mission statement sets the goals for the institution as a place to “Explore, Celebrate, and Conserve” the stunning biological, geological, and natural heritage of Northern California.’ The NCNHM would also be configured to promote research for students and faculty. A site for the facility that would maximize CSUC student use and permit community access has been identified on University-owned land adjacent to the Bidwell Mansion Historic Park, accessible from Esplanade. Surface parking would need to be part of the plan to permit direct community access.

The Museum, as planned, would be built in two phases. The NCNHM would be divided into five main areas:

Entrance Hall. This area will have a high ceiling to accommodate major displays, a gift shop, ticket counter, and public restrooms.

Class and Meeting Room. This will be multi-use space of approximately [1,050] assignable square feet. The space will



Photo Credit: Northern CA Natural History Museum

3.35 | The Northern California Natural History Museum

be equipped to allow both classroom and laboratory use by students as well as being a meeting space for a variety of functions.

Exhibit Wing East. This [2,500] assignable square foot space will involve revolving exhibits and special events.

Exhibit Wing West. This [2,500] assignable square foot space is planned for a permanent exhibit related to the various regions of California.

Administration Wing. This area will provide office space for the Museum Director and two assistants along with general storage for the complex.

Outdoor Exhibit/Activity Area. An entry fore court and/or outdoor plaza would be incorporated into the NCNHM design serving as a location for a passive exhibit, public art installation and/or interpretive area (e.g. natural vegetation area).

Purpose and Justification: Situated on the northeast side of the campus, immediately adjacent to the City of Chico and the Bidwell Mansion State Historic Park, the proposed Northern California Natural History Museum at CSU, Chico would serve a diverse population and a variety of functions. The facility would provide tours for local primary and secondary schools, as well as visits by the general public and tourists. The museum would also allow University faculty and students unique opportunities to study and research not only the permanent exhibits but traveling exhibits from around the world.



3.36 The Northern California Natural Environment

The Northern California Natural History Museum is Planned for Development at CSU Chico

The Natural History Museum would be developed to allow students at the University to have a hands-on laboratory to learn skills and techniques in museum operation and curatorship. The Museum would become the home to various collections currently owned by CSU Chico, new materials, as well as collections entrusted to the Museum for future exhibition.

3.5.9 Turner Art Gallery

This project proposes construction of a 6,000 square foot art gallery within the Taylor II academic project (See also Section 3.4.4) which would include display space, work space and storage space for the Janet Turner Print Collection. Display space would be provided to exhibit works from the Turner Collection, as well as exhibits from other artists and collections. A work area would be provided to allow matting and framing of exhibits.



3.37 Example Print from Turner Collection

Janet Turner was a distinguished print maker and professor at CSU Chico who, for many years, collected prints from around the world which were used in her classroom. The extensive print collection was donated to the University several years ago with the stipulation that the collection be protected and displayed to students and the community.

3.5.10 Faculty Housing

With the escalating prices for housing that have occurred throughout California, the ability for universities in the California State University system to recruit new professors

has been negatively impacted – as a large proportion of new faculty salaries must be expended on housing. One solution pursued by many universities in the system has been to offer new professors various options for the subsidized lease of university owned faculty housing. CSU Chico has been impacted by this trend and will be studying strategies for providing expanded housing options for its junior faculty.



Photo Credit: NOAA

3.38 Various CSU Chico Infrastructure Systems: In Need of Upgrades and Expansions

3.6 THE INFRASTRUCTURE PLAN

The 2005 Master Plan indicates the general location, scale and nature of new and upgraded facilities anticipated for the CSU Chico campus.

New infrastructure will be needed to serve planned new buildings and other facilities. Upgrades will be needed to meet evolving needs, such as telecommunications and classroom technology, and to achieve cost savings related to maintenance and energy savings.

3.6.1 Physical Utilities Plan

This project will expand the utility infrastructure systems to complete the existing campus utility infrastructure. In addition, the existing utility infrastructure will be renovated to improve its reliability and

efficiency. CSU, Chico is severely hampered by the lack of sufficient utility infrastructure to support the current and planned facilities efficiently and cost effectively.

Specific modifications and improvements to the utility infrastructure can be achieved as the campus seeks to fulfill the following utility specific goals:

Cooling

- Expand cooling capacity (chilled water generation and storage) by improving building efficiencies (coils and VAV).
- Expand the central plant to accommodate additional chillers, towers, and a chilled water storage tank.
- Extend the campus-wide underground distribution system to areas that are not adequately served and to serve planned new facilities.

Heating

- Extend the campus-wide underground steam distribution system to serve planned new facilities.
- Upsize and repair undersized and deteriorated sections of existing underground steam piping.

Power

- Extend the campus-wide 12KV distribution system to load centers not presently served.



3.39 Central Plant Expansion Area

- Reallocate buildings to different 12KV circuits to balance the load and make power available for areas master planned for new construction.

Emergency Power

- Provide emergency power (UPS) for buildings currently without service.
- Increase the capacity of existing emergency systems to support building critical functions.
- Correct fuel and air pollution issues for existing generators.

Natural Gas

- Replace the antiquated and undersized natural gas distribution system with a fully underground campus-wide system.

Central Plant Expansion

The CSU Chico Central Plant facility located in the southwest corner of the play fields area of campus will be the site of new and upgraded equipment needed to serve campus growth and achieve energy efficiency and savings. All new major campus buildings will be served by new and extended underground heating and cooling distribution lines tied to the Central Plant facility. An expansion area to the north of the existing Central Plant is indicated as the logical area for Central Plan expansion.

Domestic Water

Domestic Water needs are met by several water mains installed and maintained by the local water utility, CAL WATER. The exiting



Photo Credit: Instructional Media Center

CSU Chico, the First CSU Campus to Set LEED Certification Goals

3.40 Sustainability: A Major Goal for CSU Chico

CAL WATER mains are adequately sized and appropriately located through out the core area of the campus. In the perimeter areas, the focus of significant building expansion in Master Plan 2005, CAL WATER seems to have adequate mains available for domestic and fire suppression needs, but this will need to be validated on a building by building basis as new construction projects are initiated.

Sanitary Sewer

Several campus sewer trunk lines are antiquated, in poor condition and/or undersized and should be replaced -- and where appropriate -- upgraded to service future building projects. These sewer trunk lines include the line adjacent to Modoc Hall/ AJH and the lines serving the Performing Arts Center, Siskiyou Hall, Colusa/Glenn Halls and Kendall/Laxon/Ayres.

Irrigation

- Provide a second source (new well) to correct capacity, distribution, and pressure issues.

Storm Drains

- Install pollution mitigation devices required by newly issued EPA/State of California requirements.

3.6.2 Roofing

The following roof replacements are planned as part of the Infrastructure Plan:

Building	Last Roofed	Area (GSF)
Plumas Hall	1983	36,334
Glenn Hall	1978	12,618
Siskiyou Hall	1990	27,618
Acker Gymnasium	1980	35,532
Sapp Hall	1965	4,100
Ayres Hall	1932	23,944
Selvester Hall	1990	9,486

These infrastructure projects have the capacity to provide significant savings to support the campus operations budget through reduced maintenance and energy costs. (See also Section 1.7.1)



3.41 | A Better Campus and Community Environment Through Sustainable Design

3.6.3 Sustainability and a LEED Campus

In 2002, CSU, Chico became the first CSU campus to commit and apply for LEED (Leadership in Energy and Environment Design) certification on the new Student Services Center building. All new campus construction and major renovation work is planned to meet LEED standards. As LEED certification continues to gain acceptance as both an environmental and economical choice for building, facility design and construction it is expected that additional “up-front” design, material and equipment costs often associated with LEED eligible projects will diminish as a result of market response and economies of scale.

As an initial implementation of the LEED certification goal, the new CSU Chico Student Services Center has been submitted for LEED evaluation and anticipates a Gold or Silver certification based upon the sustainable design features incorporated into the building’s design.

3.6.4 Strategic Energy Plan

In the year 2001, Enron Energy Services North America, Inc. (EESNA), in conjunction with the CSU Chancellor’s Office, completed an assessment of the CSUC energy use characteristics, physical energy-related infrastructure and planned capital projects with a view towards identifying strategies for reducing overall energy use and related costs. The study, Strategic Energy Plan (SEP), proposed five major strategies for achieving energy reductions on the CSUC campus over a ten year horizon and analyzed

the estimated impact of implementing those strategies. Although the implied investments in energy infrastructure improvements were considerable, ranging from \$11 million for renewal/deferred maintenance to \$38 million, a number of significant suggested sub-projects had simple payback periods of under five years. The five energy strategies are summarized here:

- 1. Energy-Related Improvements Associated with New Construction:**
With proposed new construction projects there is an opportunity to adopt higher energy efficiency standards for both fixed and non-fixed equipment. As time goes on, newer technologies are expected to yield higher efficiencies at decreasing costs. CSUC can adopt higher standards for energy efficiency for facility design and equipment during the related project phases of the CSU new facility development process.
- 2. Energy-related deferred maintenance projects:**
There are a number of deferred maintenance projects related to HVAC equipment, electrical equipment and central heating systems that, if implemented, would result in significant energy savings.
- 3. Energy-Related Improvements Associated with Facility Renewal Projects:**
Similar to Strategy 1 above, there will be the opportunity to introduce higher energy efficiency standards as part of the planned renewal/remodel/rehabilitation projects anticipated for CSUC. CSUC can adopt higher standards for energy efficiency for facility systems and equipment applied to renewal projects. By virtue of the size (88,874 GSF), age (year built, 1972) and needed improvements to Butte Hall, the proposed reconstruction/renewal project for this facility represents an opportunity to construct high efficiency energy systems into the building.
- 4. Energy Efficiency Upgrades and Projects Related to Existing Infrastructure:**
A number of energy conservation devices, approaches to achieving

energy savings with existing systems and energy equipment replacement strategies have been effectively used at CSUC. Expanded and additional improvements are obtainable with further investments. This strategy represents the area with the greatest potential for energy savings at CSU Chico. The proposed energy efficiency projects include improvements to the central heating/cooling system, energy efficient lighting retrofits, occupancy sensors/controls and various HVAC upgrades and improvements.

5. Energy Management Plan:

This strategy focuses on improving the monitoring and control of energy use at CSUC. The ability to monitor and control electric and gas loads in the context of facility demands and utility pricing structures is useful in managing energy use and costs. The back bone of this approach is an Energy Management and Control System (EMCS) coupled with an Energy Information System (EIS) and the appropriate sub-system meters and controls.

As cited above, Strategy 4, Energy Efficiency Upgrades and Projects Related to Existing Infrastructure, represents the area of greatest potential savings in terms of yearly savings at CSUC. The estimated payback period for the set of improvements identified by the Enron study was 4.3 years; the associated yearly savings were over \$1 million. Strategy 1 would also result in significant savings but the Enron analysis was based upon an earlier estimate of the assumed completion of several future construction projects. The estimate did include Taylor II, Student Services Center and a major classroom/lab facility. Strategy 5, the Energy Management Plan, had both the lowest investment cost (est. \$100,000) and the fastest payback period of 2.37 years.

3.6.5 Telecommunications Plan

In 2001, CSU Chico embarked on a major telecommunications modernization program designed to bring enhanced data communications to classrooms, offices and study facilities across the CSU Chico campus. The Technology Infrastructure Initiative (TII) is a state-wide program of the California State University system that better ties each of the 23 state campuses together and that provides an enhanced baseline standard for each CSU campus data network. The TII project developed a campus-wide plan that seeks to provide and upgrade both hardware and software systems needed to improve data flow throughout the campus environment in support of student learning, teaching, distance education, administration, operations and the public outreach. Further, the planned TII system is meant to provide the flexibility to allow future accommodation of emerging technologies – largely through the promotion of technology infrastructure design guidelines and standards.

The CSU Chico TII connects all major state-funded campus facilities with 100 Mb/s (Megabits per second) very fast pathways for data and video communication.



Classroom and laboratory computer station and network are an essential but enduring baseline component of the campus learning environment. The TII project will upgrade campus capabilities while allowing for future technologies integration.

3.42 Computer Laboratories and Classrooms

THE IMPLEMENTATION PLAN



The Implementation Plan

4.1 FUNDING THE MASTER PLAN

4.1.1 State-Supported Capital Programs

A number of the CSU Chico state supported projects identified in the CSU Chico Master Plan 2005, have been or will be, as a result of Master Plan 2005, submitted to the California State University Chancellor's office (CSUCO) for inclusion on the State's 5-Year Capital Outlay program. These projects will then be considered for state funding based on statewide and individual campus priorities as evaluated by the Governor and Legislature.

4.1.2 Non-State-Supported Programs

CSU Chico like other universities of the CSU system although largely supported by state funds, can at some level be considered a state-assisted university. In 1998, the CSU Board of Trustees set a goal for CSU campuses to obtain on a yearly basis an amount approximately equal to 10 percent of their annual General Fund revenues from outside sources. Following from this and earlier precedents, various non-state supported projects identified in CSU Chico Master Plan 2005 including those related to parking, housing, child care and student recreation will generally be paid out of student fees from Associated Student accounts and/or with assistance from the CSU Chico University Foundation. The funds obtained by the Associated Students generally consist of basic student fees and user-related fees, whereas those obtained by the University Foundation are generally gifts.

Campus Improvements Sponsorship Program

There are a number of campus improvement projects that are traditionally funded by non-state sources. Often these projects are significant in scope tending to limit the

potential for participation to a few large donors and/or institutions. By dividing these larger projects into a number of discrete components that can be more easily funded, the potential donor audience can be increased and a wider based interest can be fostered. Under this concept, major projects such as the First Street pedestrian improvements (see Section 3.2.3) or campus gateways and signs (see Section 3.1.3) can be recomposed as a set of smaller projects including elements such as trees, benches, lighting, special pavers or signs. Other related project costs such as utility infrastructure, pavement removal and grading could be absorbed into the unit cost for each of the items. Some sort of unobtrusive recognition plaque could be affixed to the donated item. To provide donations, a hand-out summary plan indicating the type, location and suggested donation for each item could be developed and made available at various gatherings, events, forums or presentations where campus sponsorship would be discussed.



4.1 Proposed Siskiyou II Academic Building

Project Description	Projected ASF or Other Space	Projected GSF	Estimated Completion Date
California State University Funding			
Student Services Center	79,960	122,422	2006/07
Utility Infrastructure	NA	NA	2008
Taylor II Replacement Building	67,000	98,529	2009/10
Butte Hall Renovation	Renovation	Renovation	2011/12
Education/Classroom/Faculty Office Renovation-Phase II	Renovation	Renovation	2012
Agriculture Teaching and Research Center Renovation/Expansion	Renovation	Renovation	2012/13
Physical Science Building Renovation	Renovation	Renovation	2013/14
Modoc II Classroom/faculty Office/Lab Building	37,980	58,400	2016/17
Siskiyou II and Campus Security Facility	43,430	66,150	2018/19
Rio Chico/PE III Academic Building <i>(Configuration of space TBD)</i>	46,400	71,000	2021/22
Non-State/Non-CSU Funded Projects			
Regional Continuing Education (RCE) Expansion	TBD	TBD	TBD
Northern California Natural History Museum	11,000	15,700	TBD
Student Housing (Whitney Hall and College Park Areas)	1,298 New Bed Spaces	NA	TBD
Salem-Normal-2nd Street Parking Structure	1,436 Spaces	NA	TBD
AS Child Care Center	17,210	21,500	TBD
Wildcat Activity Center (WAC)	85,400	120,000	TBD
Aquatics Center	10,500	15,000	TBD
East Stadium Block Parking Structure	1,643 Spaces	NA	TBD

NA Not Applicable or Not Available
TBD To be determined

4.2 CSU Chico Long-Range Capital Program

4.2 PHASING PLAN

Construction of the constituent projects that make up the Master Plan is dependent upon a series of issues related to demands for the facility in question, funding, staffing and sequencing to facilitate construction. Of these factors, funding often presents the factor most difficult to predict and subject to change. The largest capital projects identified in Master Plan 2005 are dependant upon State funding, student funds, CSU Chico non-profit funds, various private donor sources or as potentially the case for the proposed Second Street Parking Structure, through a partnership arrangement with the City of Chico. Figure 4.2 attempts to place the largest capital projects in projected order of development. Due to the issues noted above, the farther into the future one projects the construction of a project, the less certain the project completion date and even the details of project scope becomes.



The CSU Chico Master Plan 2005 identifies some twelve major new buildings for the campus (orange buildings) to be funded through a variety of sources: State of California, student fees, private donors and in one case a potential public partnership with the City of Chico. The dark red buildings depicted here represent the red tile roofs of the older buildings comprising CSU Chico's historic core.

4.3 CSU Chico Master Plan 2005 Projects

4.3 DESIGN GUIDELINES FOR NEW FACILITIES

The existing structures on the CSU Chico campus have been designed and built over a seventy-year period. They reflect a range of architectural styles, degree of architectural detailing and relative size and mass. In contrast to this, has been a fairly consistent tradition of the use and architectural expression of brick and concrete for CSU Chico buildings. These factors suggest that the design goals for future campus buildings should be directed to include an expression of the traditional building materials of brick and concrete, but that stylistic architectural guidelines not be included. Following this overall approach centering on design with appropriate building materials, coupled with appropriate landscape (see also Section 3.2), will help insure that new structures are visually integrated into the CSU Chico campus context.

4.3.1 Building Forms

There are several forces at work on the Chico campus that will influence building form: 1) limited total campus land assets which, other things being equal, suggests higher buildings. Building height should, however, not be so high as to drastically reduce the ease of access to the buildings' floors from ground level, which would imply that the typical new academic building should be about three floors in height; 2) Buildings themselves play a key part in the creation of campus open spaces, forming the visual and functional limits of the outdoor space. Therefore, buildings should be used to create and reinforce existing campus open spaces. This concept extends to the basic building floor plan which can take on an "L" or "U" shape to create a system of generally rectangular ground floor open spaces; 3) Building placement should also reinforce and not interrupt important pedestrian pathways. Buildings will become permanent visual landmarks in the environment assisting pedestrian navigation and wayfinding. Architectural building forms may be used to create or reinforce vista or visual focal points and should add to the aesthetic fabric of the campus.



Photo Credit: Instructional Media Center

4.4 Tahama Hall: A Modern Building Referencing Historic Materials and Forms

4.3.2 Building Materials

Brick: Over time, a recognizable range of building materials has become predominant on the CSU Chico campus, particularly as represented in some of the most handsome brick structures: Kendall Hall, Trinity Hall and Laxson Auditorium. Other types of brick materials, different in color, size and texture from those of the Kendall Hall group, have also been used and now form part of the campus vocabulary from which new buildings should follow.

Concrete: Likewise, many CSUC structures were designed with a portion of the building façade exposed as concrete. Exposed concrete should continue along with the brick as the material/color choices for new structures to be added to the CSU Chico campus.

Metal: Metal door and window frames and other architectural elements such as



4.5 Campus Brick, Window/Door Framing Materials and Color

The brick buildings of the historic core have set the tone for the use of brick as a defining characteristic of the campus influencing the character of subsequent buildings such as the Langdon Engineering Center constructed in 1967.



4.6 | Langdon Engineering Center



4.8 | Historic Core

overhead structures, sills, exterior window shades, projecting rafters, hand rails, decorative fences and/or screed lines used on existing CSUC buildings exhibit a range of colors/coatings/treatments including: natural aluminum, galvanized gray, brown anodized and painted steel (tan, red). In recent years, campus leadership, in conjunction with architectural input, determined that a brown anodized finish would be an appropriate contrasting metal finish when used with the other contextual brick and concrete architectural materials.

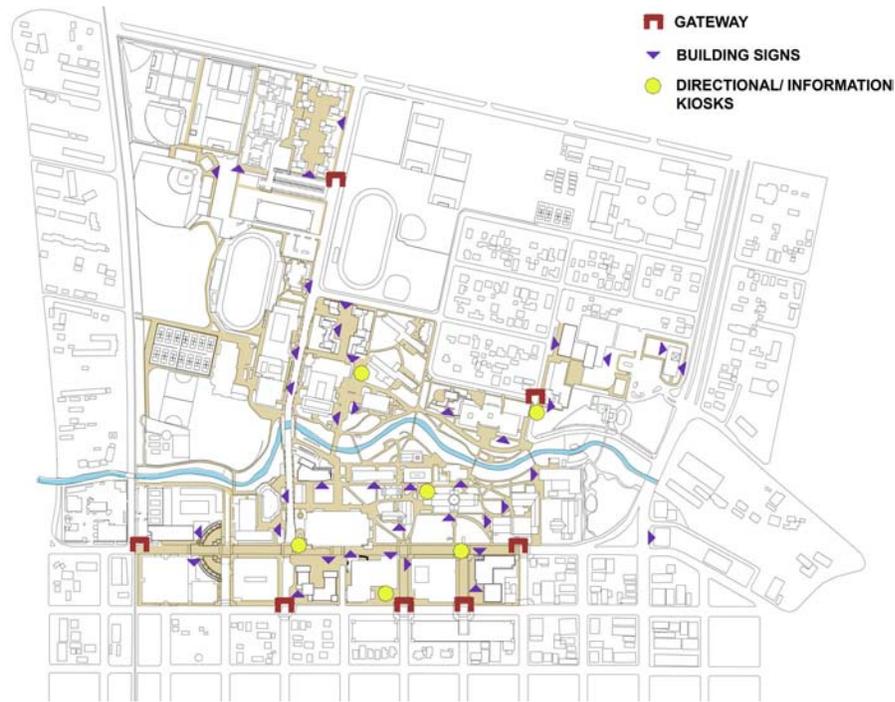


4.7 | Campus Historic Roof Material: Curved Red Clay Tiles

4.3.3 Historic Core

Any in-fill buildings proposed for the historic core (see illustration) should complement the historic core buildings in terms of building forms, materials and colors. The following guidelines apply:

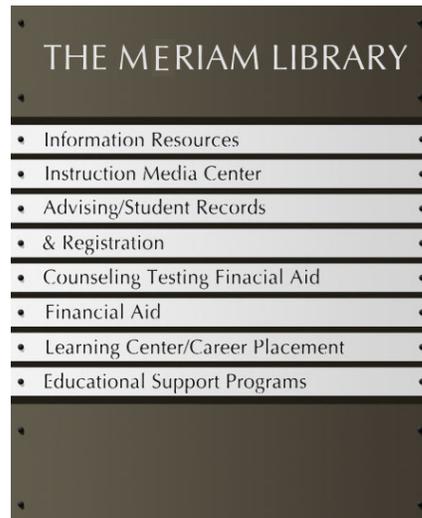
- Principal roofs shall be of a gable design with eaves and pitch similar to the nearest neighboring historic core structure.
- Roofs shall be constructed of curved tiles of a color similar to the nearest neighboring historic core structure.
- Principal gable ridge line heights shall not exceed that of the nearest neighboring historic core structure.
- Walls shall be constructed of brick of a type and coursing similar to that of the nearest neighboring historic core structure.
- Windows and doors should complement those found on neighboring historic core structures in terms of general size, proportion (Height/width ratio), spacing and window division. Window surrounds and/or other unique window features expressed on neighboring core buildings should be considered when designing an in-fill structure.
- Building trims, wall moldings, and window/door frames should be of a material and color similar to that of neighboring historic core structures.
- Metal door and window frames and other architectural elements such as overhead structures, sills, exterior window shades, projecting rafters, and hand rails shall match in color and be of a similar design character as the nearest neighboring historic core structure.



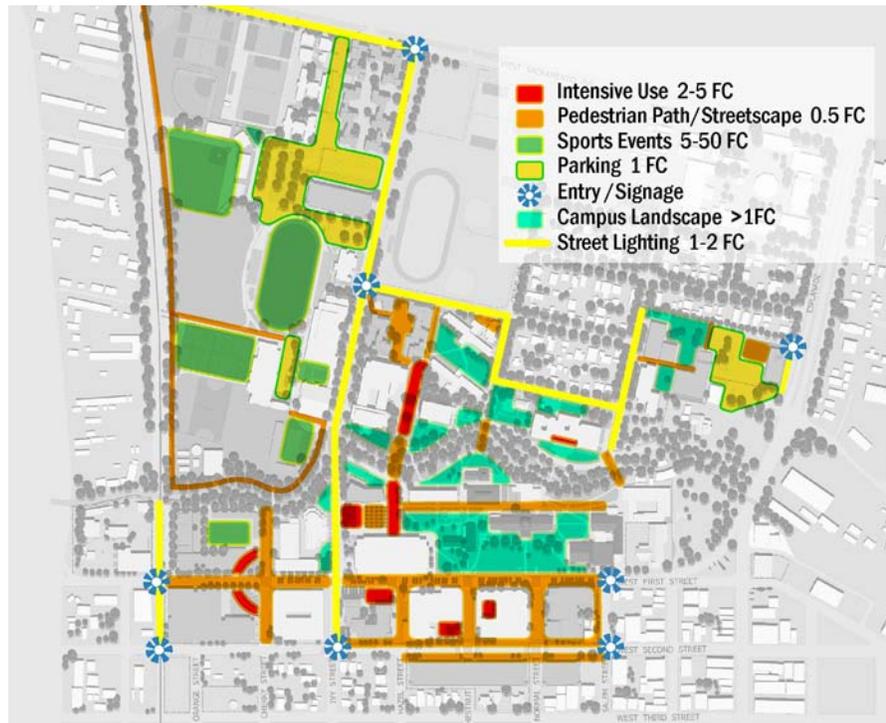
4.9 Sign Location Plan

4.4 THE SIGN PLAN

Concurrently with Master Plan 2005 preparation, AC Martin Partners, in conjunction with a consultant graphic designer from CSUC's Department of Communication Arts, developed a system of building and campus identification signs as a replacement of the wooden, and many times deteriorated, signs that had been developed over the last 30 to 40 years. A hierarchy of signs were developed based on arrival sequence to the campus that includes an entry signs mounted on a low brick walls at primary campus entries, free standing building identification signs to be located in front of major campus buildings and building identification/principal building occupants signs to be mounted on building walls at the building primary entry. A Sign Location Plan is illustrated here as Figure 4.7. The Sign Plan itself is included in the Appendix.



4.10 Building Wall-Mount Sign Concept



4.11 Campus Lighting Level Zones

4.5 THE LIGHTING CONCEPT

Like other components such as site furniture, landscape design, and signage, lighting is an element that contributes to campus identity. It must meet the functional requirement of providing sufficient illumination for campus users to feel safe and should meet municipal and state codes mandating minimum lighting levels. Lighting fixtures should also provide an aesthetically pleasing appearance, day and night, and integrate well with the landscape and architectural character of the campus. Additionally, the campus lighting system needs to respond to various conditions and intensities of use.

Exhibit 4.7, based upon current needed lighting upgrades and on the future campus growth patterns, identifies the appropriate campus lighting levels given in Foot Candles (FC).

Guidelines for Lighting:

Specific considerations for lighting are:

- All primary and critical pedestrian routes between buildings, parking, campus edges and outdoor activity areas need to be

illuminated during the hours of darkness. Lighting levels should correspond to minimum standards and be designed for higher levels to illuminate active areas within the campus core and building entries.

- Appropriate fixture selection and light placement shall minimize light pollution and enhance natural color rendition. All lighting shall utilize refractive lenses and be shielded to reduce glare into buildings and neighboring areas.
- Lighting design shall be appropriate to spatial and pedestrian scale. Walkway lighting fixtures should in most cases not be mounted higher than 20'.
- Lighting fixture selection shall be related in style to architectural features, associated site furnishings, and related to a family of fixtures (i.e. fixture color, lamp color temperature, mounting method, etc.).
- Recognize that there may be a long transitional period where existing fixtures may co-exist with the new lighting scheme due to budget and construction phasing. An interim strategy for instance, may be to paint older fixtures to match the new design standard.

4.6 THE SITE FURNISHINGS CONCEPT

As with the lighting concept, several 'families' of outdoor furnishings may be utilized to play upon the period character of various parts of the campus and enhance the ambiance of these areas. To simplify and unify the furnishing palette, selection of these families should be limited to two: traditional and contemporary. However, materials and color scheme for these elements should be comprised of one palette. (Certain specialized elements, as with signage, such as the information kiosk should be limited to one choice.)



4.12 Potential Bicycle Rack System



4.13 Bench with Historic References and Made with Recycled Materials

Guidelines and Considerations for Site Furnishings:

- Furnishings shall be provided to support and stimulate collegiate and social activity in appropriate areas.
- Consideration for locations shall be integral with the overall Master Plan layout, pedestrian circulation plan, primary areas of current and anticipated activity (or inactivity), Lighting Plan, and the Landscape Plan.
- Material choices shall be responsive to factors such as climate and climatic conditions – excluding certain materials from consideration. For example, metal seating surfaces may get uncomfortable during hot summer and fall days.
- Consideration should be given to utilizing site furniture made from recycled materials.
- Selection shall be responsive to ease of maintenance and shall be theft/vandal resistant.
- Site built furnishings such as seat walls shall be responsive or integral to adjacent structures and architecture.

Refer to exhibits 4.12 through 4.14 for furnishings selection.



4.14 Trash Receptacle with Classic Lines; One that Recedes into the Background.

4.7 ADDITIONAL STUDIES

The CSU Chico Master Plan 2005 delineates in general but comprehensive form the major projects, programs, guidelines and systems needed to move the physical campus towards a configuration that will help CSU Chico achieve its mission and fulfill its physical development visions. It serves as a basis to inform subsequent architects, landscape architects, civil engineers, other professionals, the CSU Chancellor's Office and CSU Chico administrators who will be involved in Master Plan implementation, about the most important features, their locations and defining characteristics to be included in the future development of the campus. In this way the Master Plan informs the ultimate construction of the campus.

Similarly, subsequent to the directions established by CSU Chico Master Plan 2005, will come additional studies, plans, designs and implementation efforts needed to support the actual construction and operation of the CSU Chico facilities. A listing of most important additional studies and plans is included here.

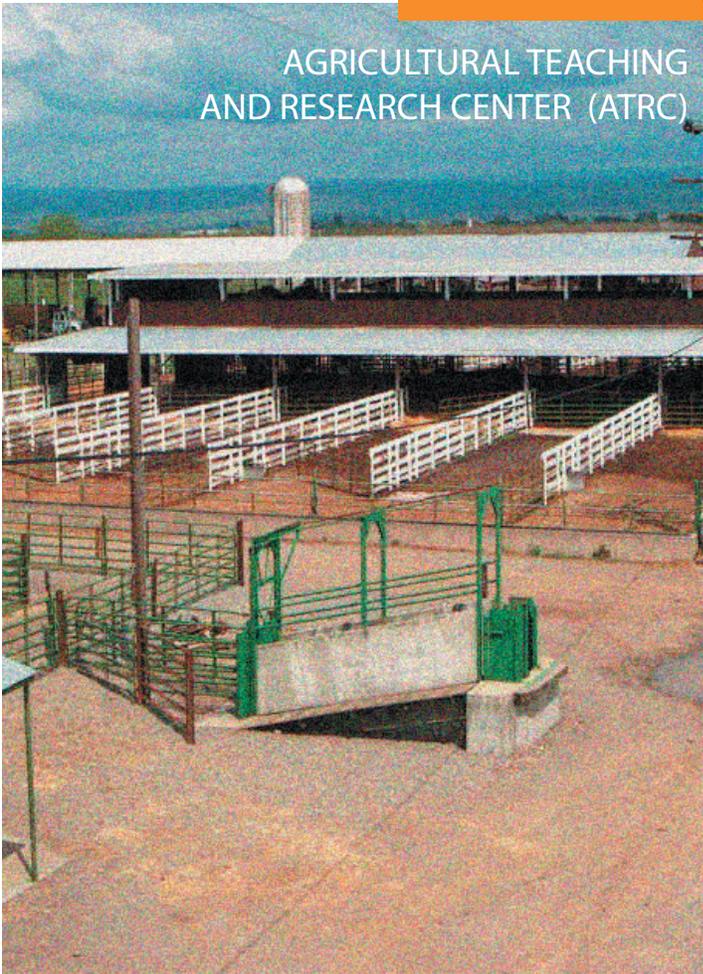
- Architectural design plans and specifications of each future campus building
- Civil engineering design plans for parking, pathways, drainage, water, sewer systems
- Landscape design planting and irrigation plans
- Americans with Disabilities Act (ADA) Campus Access Plan
- Signage implementation plan (s)
- Power and lighting design plans
- Heating and cooling distribution design plans
- Telecommunications implementation plans
- Parking management plan
- Maintenance plan

Because the CSU System support for campus improvements are generally targeted for new academic buildings and associated infrastructure, special plans may be needed to obtain and guide the development of non-state funded projects. These plans may be for projects needed for such things as comprehensive improvements to major campus landscape areas, for the acquisition of additional recreational land or for the development of public-private projects. Examples of these type of plans would include those needed for the proposed 1st Street Improvement Project, for obtaining land for needed recreational facilities or for a proposed applied research facility affiliated with the University as a project promoted by the CSU, Chico Research Foundation.



4.15 CSU Chico Master Plan 2005: Step One Towards Ultimate Construction

AGRICULTURAL TEACHING
AND RESEARCH CENTER (ATRC)



Agricultural Teaching and Research Center (ATRC)

INTRODUCTION

The ATRC Master Plan is included here as a chapter in the CSU Chico 2005 Master Plan as it is a specialized and detached activity area of the CSU Chico campus essentially operating as a teaching laboratory of the CSU Chico College of Agriculture. The ATRC also represents a unique working farm facility demonstrating the best agricultural practices for use in the Northern California region.

DESCRIPTION OF THE ATRC

The Paul L. Byrne Memorial Agriculture Teaching and Research Center (ATRC) serves as the primary location for practical teaching and research activities of the CSU Chico College of Agriculture. Its facilities also serve a range of additional functions, including hosting agricultural events of interest to the larger Northern California agricultural community, serving as a educational site to K-12 schools desiring to expose students to the fields of agriculture and serving as a site for various third party research, testing and staging activities. Established in 1960, through the efforts of Senator Paul L. Byrne, the 800-acre ATRC consists of extensive acreage devoted to field, tree crops and pasture and a core working "farm" area



ATRC.1 | Aerial Photo of ATRC with Core Activity Area Towards the Upper Left

with a comprehensive array of plant and animal facilities, including those dedicated to support, farm equipment maintenance, storage, processing, propagation, teaching, training and research activities.

Since its earlier incorporation into the CSU Chico agriculture program, various ATRC facilities have passed their intended and useful life or are inadequate to conduct the teaching mission that they serve. Further, as the science and practice of agriculture has progressed, some facilities are not suited to the demonstration of current and emerging agricultural technologies and are therefore in need of upgrading or replacement. In many cases, entirely new facilities are needed to provide the student with the hands-on exposure needed to operate in the modern agricultural environment. Over the last several years, College of Agriculture faculty and staff have identified a number of facility needs that would improve the functioning of the ATRC in anticipation of securing state and/or private funding. These needs were generally identified on a facility-by-facility basis examining both upgrades and replacement of existing facilities and the construction of new facilities to meet new programmatic needs. At the same time, it was realized that the overall functional organization of the ATRC site, the best locations for anticipated new facilities and the identification of future potentials for meeting emerging needs, needed to be addressed on a master plan basis where all facilities and projected programmatic needs could be considered together in a comprehensive context.

EXISTING CONDITIONS

The 95-acre core area of the 800-acre ATRC is composed of several working animal and plant crop farm units, administrative and teaching areas, public gathering, maintenance, storage and agricultural by-product facilities. The principle animal units include those for swine, beef, dairy and sheep. Plant science facilities include a horticultural area, a crop laboratory,

ATRC



ATRC

ATRC.2 | ATRC Core Area Existing Conditions

various silage processing facilities and grain and grain storage facilities. Several parking areas serve specific functional areas and/or buildings with the largest parking area centrally located adjacent to the pavilion facility which hosts agricultural events. Adjacent to the administrative office, which is utilized by ATRC staff and College of Agriculture faculty, a small area has been set aside for mobile homes which are occupied by students who are gaining experience in attending to a working farm environment. The core area also contains support infrastructure such as a well, pump house and weather station.

In addition to the ATRC's function as the primary hands-on teaching site for the CSU Chico College of Agriculture, the ATRC is used on a regular basis by K through 12 schools, agricultural clubs, agricultural industry groups and the general public. Depending on the purpose and event, these users may require parking, meeting and resting facilities over and above those required by the students, faculty and staff of the ATRC. In particular, K-12 students

regularly arrive in buses which currently use the main parking lots, the ATRC circulation roads and their shoulders during their daily visits. Currently, there is no central visitor's center or receiving area with related support services such as restrooms.

The above mentioned student housing arrangement is considered inadequate from the viewpoint of total student capacity, condition of housing area (which consists of an asphalt parking pad with hook-ups for mobile trailers) and general amenities conducive to student study and food preparation capabilities.

An ATRC core area site plan illustrating the current location of major facilities is provided above (ATRC.2).

Existing Fields

An aerial photograph with major field descriptions is illustrated on the next page (ATRC.3).



ATRC

ATRC.3 | EXISTING LAND ASSETS: CSU Chico Agricultural Teaching and Research Center (ATRC)

Condition of the ATRC Facilities

As the ATRC has grown over a period of years from its founding in 1960, a number of the existing facilities have reached their useful life span, are inadequate in today's agricultural environment, are inadequate for today's instructional requirements and/or are in locations that are less than optimal from a functional perspective. These factors are the driving force behind the development of this current Master Plan.

ATRC Facility Issues

As alluded to above, many of the primary facilities of the ATRC are inadequate for housing and performing the teaching related functions needed to effectively operate the CSU Chico College of Agriculture's core academic program. In some cases, the existing facility is in need of major repair and renovation to restore its functionality and/or safety. In other cases, there is a lack of the type of modern instructional facility needed to integrate into the curriculum the training in contemporary and emerging agricultural



ATRC.4 | **Oblique Aerial View of ATRC Core Area Looking West**

ATRC

4

technologies, particularly in the areas of animal and plant genetics, agricultural commodity and feed storage, pesticide and waste management. Infrastructure at the ATRC facility is also inadequate in several key areas including roads, electrical distribution, integrated data and voice networks and irrigation. Lastly, as a publicly-oriented facility dating to the early 1960's, the ATRC needs considerable attention directed to improvements to the visual environment where existing landscaping, fencing and signs are either in a deteriorated condition or non-existent.

Specific facility issues include:

- Key animal facilities of all the major programmatic areas of swine, beef, dairy and sheep raising are in need of significant repairs, upgrades and/or expansions necessary to meet their intended programmatic goals.
- The ATRC program calls for, but lacks, a state-of-the-art Demonstration and Research facility with integrated capabilities in advanced animal care, genetics, reproduction and nutrition; plant science; soils science and training in advanced agricultural production systems and tools.
- The ATRC lacks a functional and aesthetically pleasing conference center where outside groups can learn about the diverse training and the variety of projects conducted at the ATRC and where seminars can be held.
- The ATRC lacks a facility for exploring innovative marketing strategies for agricultural products produced at the ATRC to improve the economics of the various units and to provide students with hands-on opportunities related to market analysis and agricultural business planning.
- The ATRC lacks a sufficiently large, centrally located, easily accessed and properly equipped animal feed storage facility.
- The ATRC lacks a pesticide storage facility that meets current Safe Drinking Water and Toxic Enforcement Act (Proposition 65) standards.
- The ATRC student employee living area is inadequately equipped (restroom and utility infrastructure) and visually unattractive.
- Inadequately sized, protected and secured equipment storage facilities that compromise the maintenance and security of valuable agricultural equipment.
- A degraded and inadequate horticultural facility which includes non-climatically controlled, deteriorated green houses, inadequately sized and configured teaching and office areas, and insufficient storage areas for seed and plant materials.

- The ATRC lacks a sufficiently large and flexibly configured space to host agricultural events such as livestock contests and industry shows and demonstrations.

There are a number of issues related to the condition of infrastructure on the ATRC facility which are summarized as follows:

- The existing liquid agricultural waste pond-leach field facilities (particularly as related to the dairy and swine unit) are both unlined and undersized to meet the needs of the ATRC. An updated, more ecologically balanced, system conforming to the Safe Drinking Water and Toxic Enforcement Act (Proposition 65) for handling these wastes and converting them to useful products is needed.
- Existing and future ATRC facilities need to be integrated with each other and the main campus telecommunications networks.
- Many of the ATRC roads are unpaved leading to excessive dust generation which, in turn, has affected plant health and viability.
- Additional hedge rows are needed to reduce wind impacts upon ATRC fields.
- Various field irrigation and well systems need upgrades.
- Replacement fencing and new fencing in various areas is needed for animal control, to enhance bio-security to protect livestock and crops and to present a better image of the farm to the community.
- The existing overhead electrical system owned by the University is antiquated. An updated underground system has been planned with a proposal to turn the existing system over to Pacific Gas

and Electric (PG&E) in exchange for the upgrades and a long-term maintenance arrangement.

- Inadequate outdoor lighting for evening events and security.
- Landscaping, especially in the form of roadside trees and shrubs, is needed to beautify much of the ATRC core area which is the focus of public visitation and where the primary image of CSU Chico is generated.

THE ATRC VISION

Enhanced Instructional Capabilities, Accommodating Long-term Growth and the Integration of Public Activities.

College of Agriculture Mission

The Mission of the College of Agriculture has been articulated as follows:

Through collaborative strategic planning efforts involving the faculty, staff, and industry, the mission of the California State University, Chico College of Agriculture is to create, share and disseminate knowledge of integrated agricultural and environmental systems to students, industry and society.

The College of Agriculture has set the following goals for its entire program. These same goals apply in a global sense to the ATRC facility.

The College of Agriculture will provide:

- Dynamic leadership in advancing agriculture, natural resource management and environmental sciences, and related areas;



ATRC.5 | 32 Deteriorated and Outdated Buildings



ATRC.6 | Existing Parking Area



ATRC.7 Existing ATRC Core Area Infrastructure

- A positive work environment for all employees and students;
- A team approach to program development and delivery;
- A balance between basic and applied research, teaching, and service, as well as between disciplinary and interdisciplinary programs;
- A standard of excellence in teaching, research, and service; and
- A commitment to diversity in personnel, services provided, and clientele served.

Future ATRC Capacities

As a general goal, the College of Agriculture has set an ultimate student target of about 500 students to be enrolled in College of Agriculture majors. This represents an approximate 33 percent increase over the current student enrollment which is about 375. In general, it implies some

overall growth in the number and/or size of instructional and parking facilities at the ATRC. The long-term needs of the ATRC, as articulated in the Capital Outlay program (see below) to be submitted to the California State University system for the funding of the various ATRC projects, reflects future student growth, the need to augment the capacity of existing facilities inadequately sized to serve present student loads and new and/or improved facilities to meet current and projected programmatic needs.

LONG-TERM DEVELOPMENT PLAN

Introduction

Several specific new facility needs and facility upgrades have been studied by the College of Agriculture and ATRC staff and are in various stages of consideration by the University and/or alternative funding



ATRC.8 | ATRC Project Summary



sources. Although the majority of the projects identified in the ATRC Master Plan are eligible for state funding as part of the standard College of Agriculture academic requirements, there are some projects that will be augmented by or provided by non-state funding. Projects to be funded in full or part by the State of California are described in detail on the following pages.

The ATRC Master Plan anticipates several major and minor projects to be implemented over an extended period. The College of Agriculture has identified those projects which are to be given priority in light of the current programmatic needs and essential facility upgrades needed to insure that the ATRC can fulfill its mission. Further, the plan prioritizes projects based on a physical phasing plan that, in some cases, dictates that a first replacement project be built in a new location in order to make space for a second project to be placed on the site of the first.

The ATRC Master Plan is summarized here in the accompanying graphic plan (ATRC.8).

The group of phasing diagrams illustrated on Page 8 depict the proposed demolition, construction and relocation activities

envisioned for implementation of the Master Plan proposals. Although some parts of the plan could be implemented in a different sequence, some projects are linked to the construction of other projects.

To accomplish the plan as illustrated will require the removal of some 32 outdated, non-functional and/or unsafe facilities, the renovation and updating of five existing buildings, the construction of eight new state-of-the-art facilities and the development of infrastructure and utilities to support the operation of each facility in its proposed location.

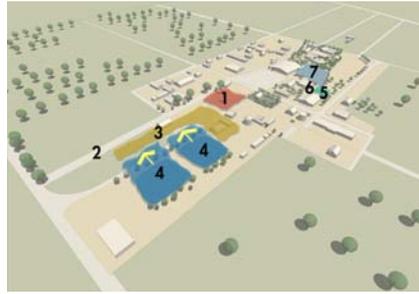


USDA photo by Tim McCabe

ATRC.9 | Northern California's Agriculture



ATRC.10 Existing ATRC Core Facility



ATRC.11 Proposed Phase I Projects:

1. Agricultural Demonstration and Research Facility
2. New Road Extension
3. Expanded and Improved Commodity Storage Area
4. Expanded, Lined and Ecologically Updated Agricultural Waste Ponds
5. New Equipment Storage Facility
6. New Pesticide Seed Fertilizer Building
7. New Student Employee Living Area



ATRC.12 Proposed Phase II Projects:

8. Existing Dairy
- 8a. New Dairy Unit
9. Renovated Swine Unit



ATRC.13 Proposed Phase III Projects:

10. Renovated Beef Unit
11. Renovated Sheep Unit
12. Meat Laboratory Upgrades
13. New Horticulture Facilities



ATRC.14 Proposed Phase IV Projects:

14. New ATRC Conference Center
15. ATRC Events Center



ATRC.15 Completed ATRC Master Plan (see also Figure ATRC.8)



ATRC.16 | Illustrative ATRC Plan (see Figures ATRC 10-15 for Numeric References)

ATRC

Summary of California State University Capital Outlay Projects for ATRC		
	Project Includes Academic and/or Other Programmatic Upgrade	Project Includes Regulatory Upgrade
New, Major Reconfiguration and/or Relocated Facilities		
Agricultural Demonstration and Research Facility	•	
New Dairy	•	
Commodity, Grain and Hay Storage	•	
Pesticide, Seed and Fertilizer Building	•	•
Equipment Storage Facility	•	
Swine Facility	•	•
ATRC Conference Center	NA	
ATRC Events Center	•	
Renovated and Expanded Facilities		
Meats Laboratory Upgrade		•
Waste Management System	•	•
Beef Unit Additions and Upgrade	•	
Sheep Unit Additions and Upgrade	•	•
Ornamental Horticulture Unit Additions and Upgrade	•	
ATRC Infrastructure Additions and Improvements		
Roads	•	
Irrigation System Upgrade and Expansion	•	
Fencing		
Pavilion Foyer		
Arboretum and Student Employee Living Area	•	
Electrical System		

Relationship to the California State University Capital Outlay Program

The following chart lists all of the proposed Master Plan projects that will be submitted to the California State University for inclusion into the state capital projects list. These projects are listed here by major type including: New, Major Reconfiguration and/or Relocated Facilities; Renovated and Expanded Facilities; or Infrastructure Additions and Improvements. These projects are further identified as projects that involve an upgrade to the College of Agriculture academic and/or operational program and those that include or are required to bring the ATRC activity into compliance with existing governmental regulations.

Third Party Assistance

As a facility that supports agricultural instruction, demonstration and research, the ATRC is naturally tied to a range of agricultural industry and institutional organizations that visit, use and support the ATRC in various ways. It is anticipated that various forms of private support will be received that will augment and/or provide resource support for ATRC facilities as described here.

Both the ATRC Conference Center and the ATRC Events Center projects are expected to be funded in part through private industry related grants. In the area of infrastructure, it is anticipated that the Pacific Gas and Electric company will assume ownership of the antiquated ATRC electrical distribution system and will be responsible for the implementation of needed upgrades including distribution under-grounding, capacity upgrades, new facility service and security lighting.



USDA photo by Bill Tarpenning

ATRC.17 | The ATRC: Used by Many Public and Non-Profit Organizations Such as 4H Clubs

The College of Agriculture has an advisory and fund raising group for the proposed ATRC Conference Center and Events Center projects that will assist in conducting a capital fund raising campaign to fund these components of the ATRC Master Plan. Butte Community College will support the development of the Agricultural Waste Management System project and additional support may come from the Natural Resources Conservation Service. The U.S. Bureau of Reclamation, California State University, Fresno (Fresno State) and the California Public Utilities Commission have come together under the auspices of Fresno State to fund the irrigation components of the Master Plan. ATRC farm income will be used to fund various electrical infrastructure upgrades.

Finally, it is hoped that other future, as yet to be determined, improvements to the ATRC facility such as various infrastructure systems, facility upgrades and equipment installations may be undertaken in full or in part by the private sector.

SPECIFIC DESCRIPTIONS OF MAJOR DEVELOPMENT PROJECTS

AGRICULTURAL DEMONSTRATION AND RESEARCH FACILITY

Estimated Floor Area: 10,400 GSF

Summary:

The ATRC will accommodate laboratory and demonstration activities for over 25 Agricultural Sciences classes with a collective enrollment of 1,250 students annually.

Major Program Components:

- Laboratory facilities to accommodate lab sections of 24 students each
- 24 station computer laboratory
- Small mediated conference room
- Open laboratory for classroom related student research
- Two instructional activity areas
- Restrooms and shower facilities

Discussion and Justifications:

Existing facilities housing some of the anticipated College of Agriculture class sections are old temporary buildings that are becoming increasingly difficult to maintain. In addition, rapid changes in all fields of the plant and animal sciences have resulted in remarkable developments in these diverse disciplines. Technological advances have also revolutionized both plant and animal management systems. Facilities to effectively demonstrate these technologies are essentially nonexistent at the Agriculture Teaching and Research Center (ATRC), making it virtually impossible to incorporate much of the new scientific advances in soil, plant and animal science. The new facility will enhance the current curriculum with on site laboratory activities and demonstrations that can be conducted in conjunction with “in-field” sampling. For example, students learn to identify plant disease in Plant Pathology classes where diseased plant tissue is collected in the field and brought into the laboratory for DNA extraction. Once the DNA is purified, a specific DNA probe is applied to identify the specific pathogen involved, thus confirming the diagnoses and more accurately addressing the problem with the correct intervention method. Students learn how to apply this new technology to improve

production practices and overall efficiency. A majority of these new techniques require special laboratory safety equipment options such as exhaust hoods and eyewashes to satisfy environmental health and safety regulations. The new demonstration center will provide the necessary safety features to facilitate the incorporation of new technological advances.

An agro-ecosystems simulation lab would allow investigation and testing of concepts in sustainable agriculture. Gross and histological anatomy, surgical and non-surgical embryo transfer, soil/water relationships, environmental toxicology, and integrated pest management are a few of the disciplines that could be more effectively integrated into the existing curriculum with an appropriate demonstration facility located on-farm.

NEW DAIRY

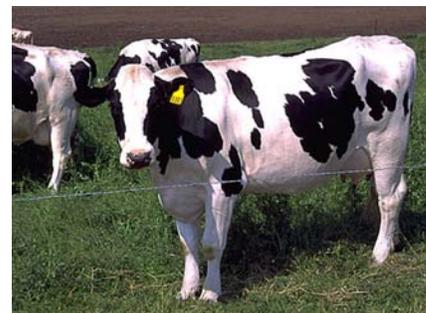
Estimated Floor Area: 17,600 GSF

Summary:

This project is designed to upgrade and relocate the dairy facility next to the new lagoon waste water system, a more logical location for the unit with the highest waste management needs.

Major Program Components:

- Free-stall system, traditional milk production facility
- Demonstration 50-acre grass-fed organic dairy



USDA photo by Bill Harpenning

ATRC.18 | The ATRC Dairy: Supporting Several College of Agriculture Courses and Enjoys Support from Five Major Industry Partners

ATRC

- Self-locking stanchions to facilitate artificial insemination and embryo transfer
- Two separate milking systems comprising 12 state-of-the-art, computerized, automated milking machines
- Bulk tank milk storage units
- New well, pump, fencing, and a set-sprinkler system integrated with the ATRC Supervisory Control and Data Acquisition (SCADA) system to support organic milk production

Discussion and Justifications:

The project provides an excellent learning laboratory linked to a fully integrated curriculum, an up-to-date working example of how production agriculture functions in a fully integrated form. This is a program that the College of Agriculture can uniquely offer students in the State of California, a truly integrated agricultural experience that covers each step of the production process. From an integrated perspective, students will experience first hand how nutrition affects the level of production and reproductive efficiency; how management strategies can affect incidence of specific disease, the cost of production and ultimate profitability. The move toward alternative practices is timely as there has been tremendous growth in the organic sector of production agriculture. The challenge to farmers/ranchers and researchers alike, is to develop value-added products that can provide a higher return per unit of product to offset the higher costs of production incurred by small-scale agriculture and/or alternative production practices.

Organic dairy farming may provide a model for small to mid-sized dairy farmers. Indeed, the organic fruit and vegetable industry has grown at an amazing rate due to consumer demand for less intensive methods of food production. Information derived from this project will provide valuable information for educational purposes and for industry, where future producers can experience these management scenarios first-hand, creating additional partnerships with industry, and thereby improving the CSU Chico image within the community.

COMMODITY, GRAIN AND HAY STORAGE

Estimated Floor Area: 75,000 GSF

Summary:

Construction of a larger, more efficient and integrated, covered concrete drive-through commodity storage building with eight storage bays.

Major Program Components:

- Eight, 25-foot-wide and 30-foot deep storage bays
- Dump pit where grain can be unloaded and moved by auger
- Eight, 75 ton grain bins with dryer devices
- Open-span, covered concrete slab for hay storage
- Uncovered concrete slab for silage bag storage

Discussion and Justifications:

At present, the ATRC does not have adequate feed storage facilities with the current facilities configured in such a way as to make their efficient use impossible. In the past, the ATRC has lost thousands of dollars in hay and grain due to the lack of proper storage facilities. Livestock rations are now ground and formulated at various locations with portable equipment that increases the chance for error in livestock rations. Production based courses, animal management and many of the ATRC research projects require a modern and accessible feeds and storage facility to ensure accuracy in ration formulation and to decrease waste.



ATRC.19 | **The Commodity Storage Facilities: Completely Reconfigured and Upgraded by the ATRC Master Plan**

PESTICIDE, SEED AND FERTILIZER BUILDING

Estimated Floor Area: 5,875 GSF

Summary:

Replace the existing chemical storage building with a combined pesticide and fertilizer storage complex.

Major Program Components:

- 500 gallon capacity dry sump for collecting and re-circulating spilled spray material
- 12-inch stem wall to insure containment in case of a spill
- Covered slab for parking spray equipment
- Lockers, safety showers and eye washes
- Structure with cement flooring for fertilizer and seed storage

Discussion and Justifications:

The existing pesticide building meets few of Proposition 65 regulations. Replacement of this building, relocation to a more suitable site, and consolidation of the seed and fertilizer storage into the same facility will allow for better inventory and control of these supplies. Increased regulations concerning storage, handling, and use reporting of agri-chemicals dictates the need for this facility. It is critical that the College of Agriculture be a model in regulation compliance and best practices related to on-farm chemical use.

EQUIPMENT STORAGE FACILITY

Estimated Floor Area: 15,000 GSF

Summary:

A pole barn structure with mounded gravel floor designed to protect valuable research and farm equipment from rain and sun.

Major Program Components:

- 30 ft. x 500 ft. covered storage space
- Mounded gravel floor

Discussion and Justifications:

Currently, the facilities available to cover and protect valuable equipment are limited. Leaving equipment exposed to the elements increases maintenance costs and can

negatively impact research protocols and critical production activities. Equipment maintenance is critical to ensure that tax dollars are used efficiently.

SWINE FACILITY

Estimated Floor Area: + 2,430 SF

Summary:

Comprehensive swine facility renovation project with significant new facility expansions to include the following elements: gestation/breeding barn with a small lab for artificial insemination, breeding facilities, office, student apartment with laundry room and shower, automated gutter flush for waste management and an automatic feeding system.

Major Program Components:

- 40 sow (group pen) gestation/breeding barn with attached small lab for artificial insemination and breeding facilities (renovate existing buildings and expand by 1,040 SF).
- 12-crate farrowing barn with attached office and associated two-bedroom student apartment with one kitchen and bath unit, laundry room with shower. (Renovate Bldg. 21 and expand by 1,215 SF)
- Develop environmentally controlled nursery barn (Renovate Bldg. 22 and expand by 180 SF)
- Automated gutter flush for waste management
- Automatic feeding system
- Automatic watering and waste removal system
- Tenderfoot flooring and stainless steel construction

Discussion and Justifications:

The ATRC swine unit is a major component of the College of Architecture's academic program providing a hands-on laboratory where students can gain a solid understanding of stock breeding, animal husbandry and marketing. The swine facility has also been the focal point of the CSU Chico community outreach program, bringing in over 500 4Her's and scores of FFA students on Swine Day to learn about swine production and project pig management. The swine facility



also produces animals of suitable quality for the Junior College Livestock contest and both the FFA and 4H Field Day. The current swine facilities are over 30 years old and in need of significant renovation to upgrade the unit for the production of sufficient numbers of animals for the academic curriculum, meaningful research and the many outreach functions that require quality animals. The current facilities have limited utility for research projects that demand environmental control and genetic consistency. The proposed facility will be constructed to current industry standards with regard to space requirements, animal comfort and bio-security.

ATRC CONFERENCE CENTER

Estimated Floor Area: 7,000 GSF

Summary:

The flexible use ATRC Conference Center will facilitate professional meetings ranging from 30 to 300 persons.

Major Program Components:

- Multi-use, divisible meeting room
- Full kitchen
- Offices
- Farm marketing laboratory for ATRC agricultural products
- Reception area
- Full restroom facilities

Discussion and Justifications:

Both the Conference Center and the Event Center will be available to industry when not reserved for academic functions. Industry funds will be solicited to finance 50% of construction costs, where sponsors will be recognized through nameplates or plaques. Large donors will be considered for potential signature status where the facility will be named accordingly.

The farm marketing laboratory, to be housed within the Conference Center, will provide a facility to help students better understand the issues surrounding the preparation and sale of agricultural products. This facility, within the Conference Center, will expose students to the marketing of products raised at the ATRC partly through accessing non-traditional, niche and internet-web based markets. The farm marketing laboratory

would also provide the public with information on the ATRC and on agriculture in general. It is expected to help to enhance the image of the College of Architecture within CSU Chico and the community.

ATRC EVENTS CENTER

Estimated Floor Area: 45,000 GSF

Summary:

The ATRC Event Center, with a capacity for 2,000 people, consists of an open floor and a clear span metal building.

Major Program Components:

- Portable bleachers with an announcer's booth will be centrally located above the bleachers
- Concession stands and restrooms
- Large foyer for ticket sales or registration
- Appropriate lighting and a sprinkler system
- Sound system, staging and portable pens

Discussion and Justifications:

A facility of this scope would provide an excellent setting for a number of ATRC laboratory activities. It will provide a site capable of housing various field laboratories regardless of the weather. The Event Center will also be an important venue that would allow ATRC hosting of a wide range of events that will serve 4H and FFA programs in Northern California. This facility would provide an ideal setting for industry-based farm equipment shows, equine events, team ropings, cattle shows and large expositions. These functions would enhance undergraduate education programs, provide leadership training and create a setting for a high degree of interaction between students and industry leaders.



RENOVATED AND EXPANDED FACILITIES

MEATS LABORATORY UPGRADE

Estimated Floor Area: NA

Summary:

The project calls for the replacement of the corral/pen structure behind the existing meats laboratory with an updated product-safe facility that will provide a site for quarantine of all off-site livestock needed for FFA and 4H Field Days.

Major Program Components:

- A wall between the front entrance and the stairwell to the classroom
- Replacement of the existing air conditioning unit (including ducting and vents)
- Modern refrigeration unit in processing room

Discussion and Justifications:

The current meats laboratory is 30 years old and in need of upgrades to insure compliance with new Federal and State inspection regulations. As one of the most heavily regulated facilities at CSU Chico, the meats lab also requires specific upgrades inside the facility to ensure product safety. A large, stainless steel wall, with viewing windows is needed between the front entrance and the stairwell to the classroom, creating a barrier between incoming traffic and the federally inspected processing room. This wall will decrease the chance for bacterial contamination occurring from the influx of students in and out of the laboratory. Secondly, the existing air conditioning unit does not keep the room temperature below 45 degrees Fahrenheit – the standard needed to prevent bacterial growth on raw product as it is being processed. Moreover, the current ducting system and vents blow debris and/or contaminants into the room creating another avenue for bacterial contamination. A new refrigeration unit will eliminate both problems and provide for compliance with USDA recommendations.

WASTE MANAGEMENT SYSTEM

Estimated New Expanded Floor Area: N/A

Summary:

The existing agricultural by-product ponds or lagoons will be enlarged and sealed to facilitate greater water handling capacity, to prevent ground water contamination, to meet EPA regulations and to more efficiently recycle farm produced nutrients.

Major Program Components:

- Agitator and pump, to feed the irrigation system for each lagoon
- Suitable waste-water capturing system for each unit
- Anaerobic digester for each unit
- A covered storage facility and additional pad space for composting

Discussion and Justifications:

Confined animal waste is not problematic if it can be converted into value-added products like energy, compost and nutrient-rich irrigation water for crops. All three of these conversions will be demonstrated with a state-of-the-art agricultural waste management system. The proposed system complements an integrated curriculum and supports the ATRC shift toward sustainable, economically viable, forms of organic farming. The conversion systems to be used are all based on microbial bioconversion, i.e., anaerobic organisms will convert waste into energy and aerobic organisms will convert biosolids into soil amendments – all natural and all from currently available technologies that have a solid foundation of data to support their feasibility. As a public university, it



ATRC.20 Existing Agriculture By-Product Ponds

The existing agricultural waste ponds are both undersized and unlined. The ATRC Master Plan calls for upgrading the facilities to include the employment of current technology to increase the usefulness of pond by-product streams.

is important that the ATRC practice and model sustainable, environmentally friendly, agricultural practices. This requires careful thought to waste end-use. This project will clearly demonstrate waste conversion into value-added products, ending the perception that waste is a liability. Importantly, the project will place the ATRC in full compliance with clean air and water legislation, demonstrating to industry a facility that meets new EPA regulations without losing income or profitability.

- Laboratory with bull collection unit, artificial insemination breeding boxes, donor flushing facility and a dustproof, environmentally controlled embryo handling room
- Holding pens with a cement, nonskid floor
- New water well and pump to support irrigation of 100-acres of pasture
- New sprinkler set systems connected to the ATRC SCADA irrigation control systems for 14 pasture acres
- New fencing for irrigated pasture

BEEF UNIT ADDITIONS AND UPGRADE

Estimated Floor Area: N/A

Summary:

Upgrade Beef Show Barn by expanding the existing classroom to hold 24 students. Upgrade existing limited artificial insemination barn with new artificial insemination/embryo transfer building. Enhanced pastures through new well pump, sprinkler and fencing improvements. Improve the alley and general barn lighting.

Major Program Components:

- Renovate Building 23 by remodeling the existing student apartment to accommodate two large bedrooms
- Upgrade preview barn with upgraded classrooms, office facility, electrical system and lighting.
- Demonstration site for assisted animal reproduction
- Upgrade feeding facility for recipient/donor cows.

Discussion and Justifications:

The Beef Unit is used extensively in the laboratory component of the Animal Science curriculum. Several students are needed for late evening and weekend calving and breeding. On site living quarters are necessary to accommodate extended hour animal care. The proposed facility renovations would provide the necessary infrastructure critical to implementing the latest in assisted reproductive technologies, techniques critical to rapid genetic improvement. Bull handling facilities are especially important for student safety. Embryo transfer, embryo and semen freezing technology is also critical to the educational program. A dust-free, secure facility is needed to ensure embryo quality for USDA inspection for embryo export. Improvements to this unit will enhance the learning environment for students and also facilitate the incorporation of new scientific advances in assisted reproductive technology and irrigation technology. Currently, there is no infrastructure to facilitate integration of these new advances into the agricultural curriculum. Improvements in irrigated pasture land are needed to optimize beef production.

ATRC



ATRC.21 Eastern Portion of Existing Beef Feed Lot with Pastures Beyond

SHEEP UNIT ADDITIONS AND UPGRADE

Estimated New Expanded Floor Area: +925 SF

Summary:

Complete renovation and upgrade of corrals, gates, and fencing to accommodate 300 head. Replace substandard electrical wiring in Building 36. Rebuilding and expansion

of maternity barn increasing its size from 3,075 SF to 4,000 SF. Convert utility room into artificial insemination/embryo transfer room.

Major Program Components:

- Renovate student apartments
- Convert utility room into artificial insemination/embryo transfer room
- Renovate corrals, gates, and fencing (upgrade scale, sorting chute and foot bath facilities)
- New electrical wiring throughout
- Computer and networking infrastructure
- Rebuild and expand maternity barn (+925 SF)
- Mechanical feeding system with feed mixer
- Improvements to Sheep Management Center

Discussion and Justifications:

The sheep unit is one of the most extensively used units at the ATRC. Many of the animal health, reproduction, and nutrition laboratories conducted at the ATRC are facilitated by the sheep unit, as are many of the reproductive studies that require large numbers of animals for statistical purposes. The large numbers of sheep used at the ATRC necessitate a safe and efficient handling facility that will reduce animal stress and improve the staff and student labor efficiency.



USDA photo by Ken Hammond

ATRC.22 **The ATRC Sheep Unit: Directly Supports Many of the College of Agriculture Courses in Animal Health, Nutrition and Reproduction**

ORNAMENTAL HORTICULTURE UNIT ADDITIONS AND UPGRADE

Estimated Additions to Floor Area:
1,500 GSF

Summary:

The Horticulture Headhouse (Building 7) will be renovated to regain its original functionality. The Horticultural area will be reorganized and two conservatory type greenhouses, to replace existing deteriorated facilities, will be constructed.

Major Program Components:

- New conservatory-type glasshouses
- New walk-in cold boxes
- Two new offices
- State-of-the-art environmental controls for greenhouses

Discussion and Justifications:

The existing greenhouses have been virtually useless for several years due to degradation of the fiberglass glazing. The proposed new facility will be state-of-the-art, environmentally controlled, and will restore a portion of the capacity needed to supply plant propagation space. Restoration of the horticulture meeting space to its former status as a functional headhouse will be essential to expand this particular program to meet the needs of local feeder schools with environmental horticulture programs. ATRC efforts to expand the plant science program will require the corresponding facilities. A functional headhouse provides a central meeting location, a site for soil mixing, fertilizer preparation, transplanting, pruning, etc. The headhouse area would also be used for classes, outreach activities and a variety of research projects including genetic investigations of plant disease resistance and control of invasive exotic weed species.

SECURITY

There are a number of security issues related to the development of the ATRC. In addition to the need for fencing and gates for the public entrance and for key on site ATRC facilities, there are real needs to secure both livestock and crop areas from contamination potentially conveyed through the visitor contact. Visitor protocol is, and will be, both communicated verbally by ATRC



staff and through posted warnings. As a general intent, all visitors will pass through a central visitors' office to be located in the ATRC Conference Center, where they will be briefed on security procedures while visiting the ATRC facilities. Signs directing visitors to this check-in point, as well as posted bio-security warnings, will be part of the signage needs of the ATRC. See also Beautification and Wayfinding below. Security lighting will be integral to the future development of the ATRC and is currently under study as a capital project to be coordinated with the electrical distribution system upgrades to be implemented by Pacific Gas and Electric Corporation (PG&E). See also below.

OTHER INFRASTRUCTURE

Several infrastructure items are in the process of development or will need further study prior to adoption into the Master Plan. These are briefly described here.

Security, Driveway and Pathway Lighting

An overall plan for lighting will need to be coordinated with the proposed ATRC facilities and the electrical distribution plan under development by PG & E. With this plan in place, in many cases, there will probably be an opportunity to add lighting incrementally to an overall ATRC lighting system as each major capital improvement plan is implemented. Conversely, other sections and/or components of the lighting plan may require separate funding projects. The lighting will be needed for both safety and security purposes and, at a minimum, should light auto circulation driveways, major visitor pathways, and parking facilities.

Telecommunications Infrastructure Initiative

The state-wide Telecommunications Infrastructure Initiative (TII), developed by the California State University system, is being implemented across all CSU Chico campus facilities including the ATRC. The project will upgrade the ATRC to a common CSU/CSU Chico data transmission standard capacity of 100 Mb/s (Megabits per second) capable of greatly enhanced data and video transmission. Composed of both copper pair and fiber-optic cabling, the ATRC local network is designed to be carried in a series of underground ducts centered on the current farm office as a main entry point tied to the CSU Chico main campus network. The system can be extended as new buildings are added to the ATRC network.

BEAUTIFICATION AND WAYFINDING

In addition to the major capital projects that address the academic and major functional needs of the ATRC, there are a number of aesthetically-oriented improvements that are needed that will enhance the appearance of the facilities and add to the overall visitor experience. Most of these projects can be further characterized as beautification and/or wayfinding (signs) projects intended to visually unify, beautify and/or serve as environmental guides to the ATRC visitor. Many of these improvements will be developed as site-related components of an overall major capital project. In some cases, the aesthetically-oriented improvements may best be implemented as separate projects targeted to address a particular issue.

These improvements are identified in Figure ATRC.23 which also shows the needed improvements in relationship with the major capital projects identified above and with the ATRC principal circulation system – the vantage point from which the ATRC is viewed and visited. In general, the improvement concepts call for selected landscaping improvements to visually strengthen the entry drive experience, to screen unattractive areas, to shade parking facilities and to otherwise enhance the appearance of the facility. No attempt is made to specify the appropriate species for these landscaping improvements but there is an interest to

ATRC

Power would be underground, new security lighting added and various roads/parking areas paved as part of the ATRC infrastructure upgrades.



ATRC.23 | ATRC Infrastructure



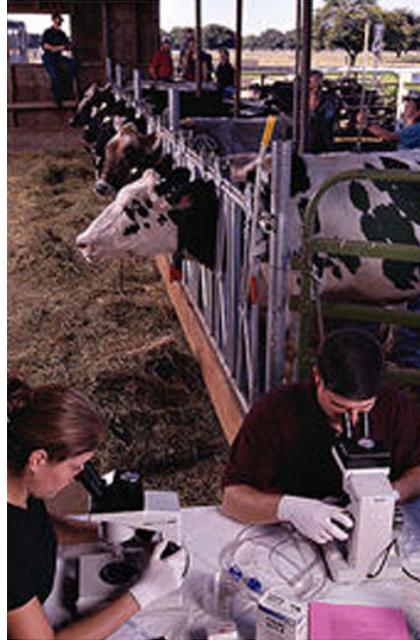
ATRRC

ATRRC.24 | ATRRC Beautification Plan

utilize drought-tolerant plant materials wherever possible. Further, the conceptual approach to the ATRC entry road calls for the planting of fruit/nut bearing trees common to Northern California agriculture in formal rows flanking the entry drive – creating a ceremonial entrance into the ATRC starting at Hegan Lane.

The beautification concept plan also calls for the standardization of corral fencing to help visually unify the ATRC facility. A similar fence and gate system could be used at the main entrance to further unite the ATRC facility.

Finally, there is a need to create a series of new, clearly conceived signs to help identify key ATRC facilities, and to lead visitors to and through the ATRC facility. The concept plan here only starts to anticipate the family of signs needed to address the needs of the ATRC. The actual design of the signs would borrow major elements from the CSU Chico main campus family of signs to further reinforce its connection with the parent institution. See also Chapter 4.



ATRC.25 | **Farm Science Students**

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Appendix A

APPENDIX A Wayfinding and Sign Plan (Separate Document)

