The Long Range Development Plan and Master Plan University of Colorado at Colorado Springs

INTRODUCTION•THE PROGRAM•LONG RANGE DEVELOPMENT PLAN• MASTER PLAN•IMPLEMENTATION

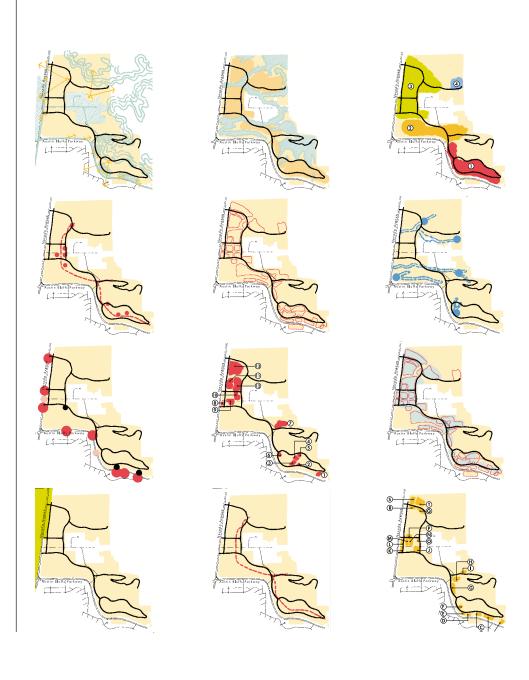


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Final Report 2 May 2000

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REFERENCE STUDIES

Institutional and Land Studies

CONTRIBUTORS

Master Plan Team
Chancellor's Steering Committee
Design Review Board
Board of Regents Capital Planning Committee
Campus Community
Master Plan Consultants

WORKBOOK

Bound separately

- A Meeting Notes and Exhibits from all Campus Worksessions
- **B** Participation Comments from all Campus Worksessions
- **C** Utilities and Drainage Memorandum
- **D** Traffic and Parking Analysis Memorandum
- **E** Parking Revenue Sources Memorandum
- F Summary of Campus Archeological Sites
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Introduction

1

THE LONG RANGE DEVELOPMENT PLAN•THE MASTER PLAN•EDUCATIONAL VISION OF THE UNIVERSITY•COLORADO SPRINGS•TRANSPORTATION CONTEXT•HISTORY AND FUTURE OF THE CAMPUS•APPROACH AND METHODOLOGY• GOALS OF THE LONG RANGE DEVELOPMENT PLAN

UCCS is a campus in transition.
Targeted as the growth campus of the University of Colorado four-campus system, UCCS seeks to strategically identify its needs and priorities.

The University of Colorado at Colorado Springs (UCCS) is a campus in transition. The University has served the region for over 35 years from the existing campus, the 80acre Cragmor zone. UCCS has embarked on transforming its 508-acre campus lands to serve the expanding demand for higher education. Targeted as the growth campus of the University of Colorado four-campus system, UCCS seeks to strategically identify its needs and priorities. This includes maximizing its potential for education and serving as an example for responsible development of its resources.

To this end, UCCS prepared this Long Range Development Plan and the Master Plan to guide its campus's long-term growth, and to meet the immediate educational demands of the region.

UCCS is committed toward becoming a dynamic, vital, growing institution as a "new generation university" - one which serves a broader range of students. Market forces will drive future enrollment, largely from the grow-

ing relationship between UCCS and the greater Pikes Peak and southern Colorado regions. The success of the University will be largely influenced by the institution's ability to respond to the growing demand of its service area. Important aspects are to attract and retain fulltime and out of state students, and to foster the flexibility and foresight to accommodate the changing needs of its clientele. UCCS's focus is to capitalize on the opportunities of the future, shedding outdated paradigms and practices.

As the only public university within the Pikes Peak region, UCCS has responded to the area's infusion of high tech industries and military installations by meeting their specialized needs. The University has established doctoral programs in electrical engineering and computer science, and offers courses in space studies. Newly established bachelors and masters programs in mechanical engineering were the result of input from the local industry.

In this role, UCCS moves

from its historic status as a commuter campus, to one infused with a residential campus community. The recent addition of the residential village within the Cragmor zone has had a significant impact on the emerging campus community, broadening the identity of the University.

THE LONG RANGE DEVELOPMENT PLAN

The UCCS Long Range Development plan (LRDP) serves as the principal policy document to guide the future conservation and development of the campus lands, in support of UCCS's educational mission.

Similar to a general plan or comprehensive plan for a city, the LRDP provides a broad vision and understanding of the campus's physical development. The plan is primarily formed by academic programmatic needs, land use, open space, and pedestrian and vehicular circulation.

The framework provided by the LRDP is flexible to be responsive to changing conditions. Specific guidance



1-1 Bierstadt Image Mountain scene paintings are evocative of the grandeur of the Colorado Rocky Mountain range, painting circa 1886.

and direction for campus site and building design will occur in detailed studies to follow the LRDP as a basis for the campus's build-out.

THE MASTER PLAN

UCCS's physical Master Plan sets forth the physical framework to guide the campus's early development, representing a growth phase on the way to the full implementation of the LRDP. The physical Master Plan encompasses elements of campus organization, land and building use, vehicular and pedestrian circulation, infrastructure, open space, relationship to the community, sensitivity to the campus site, and building design to ensure compliance with physical master plan principles.

EDUCATIONAL VISION OF THE UNIVERSITY

The two physical plans, the LRDP and the Master Plan, build upon the educational vision of the University as expressed in its Mission Statement and Vision Statement:

Mission Statement

The Colorado Springs campus of the University of Colorado shall be a comprehensive baccalaureate liberal arts and sciences institution with selective admission standards. The Colorado Springs campus shall provide selected professional programs and such graduate programs as will serve the needs of the Colorado Springs metropolitan area, emphasizing those professional programs not offered by other institutions of higher education.

Vision Statement

We will provide a public undergraduate education unexcelled in the state and selected excellent graduate programs.

COLORADO SPRINGS

The early development of Colorado Springs was based primarily on mining and the tourist/health trade. The mountain beauty of the Rockies was promoted through the paintings of Bierstadt, who considered

this area to have the powerful qualities of the Hudson Bay and Yosemite landscapes.

On Bierstadt's early trips in the mid-1800's, he produced paintings emphasizing the beauty of the high country wilderness. The character of the Rockies relayed through these paintings was referenced to the European Alps. Both Denver and Colorado Springs became principal tourist gateways for trips into the Rocky Mountain Front Range.

In 1883, the railroad lines were completed linking
Denver with Salt Lake City and points west. While the early tourist trade was principally for elite Americans, the completion of the railroad lines made the journey accessible to a larger variety of people.

The City of Colorado Springs was founded by William Jackson Palmer, a railroad magnate who provided visionary direction for its development. His vision of the "Fountain Colony" had a utopian quality. The city was planned as a 2,000-acre plat The physical
Master Plan has
three principal
objectives:

- To foster growth that effectively and efficiently serves UCCS's educational mission.
- To create a campus that is beautiful and emblematic of the institution's educational purpose, and
- To encourage social and intellectual interchange among students, faculty, staff, and the greater community.

1-2 The Beginning UCCS's Cragmor zone in the early years, circa 1971.



in a grid format, with strategic views of the adjacent Rockies, grandly scaled avenues, lavish city parks, and upright social policies.

The City and region continued to grow based on its outdoor adventure and health mecca industries, but also on the strong social foundations and institutions such as The Colorado College.

Since the 1950's, the community has been strongly influenced by the presence of the military and space age technology. The presence of the Air Force Academy and NORAD have formed an important economic base for the region. This regional emphasis on technology was a magnet for the high tech firms, such as Hewlett-Packard, to establish a local presence, Colorado Springs is now rapidly developing as an important high-tech center for Colorado. At the same time, Colorado Springs continues to be attractive for its vear round recreational activities provided by the mountains. The present population of the metropolitan area is nearly a half million people,

and the area continues to grow at a rapid rate.

TRANSPORTATION CONTEXT

The UCCS campus is located one half mile east of Interstate 25 at Garden of the Gods Road and Austin Bluffs Parkway. The existing campus and undeveloped land holdings are directly bounded by primary arterial roadway edges on both the south (Austin Bluffs Parkway) and west (North Nevada Avenue/SH85). Currently, the majority of the University's facilities and surface parking are accessed from Austin Bluffs Parkway. A secondary access from Nevada Avenue serves the Bethel College of Nursing and Health Sciences and the Four Diamonds sports complex remote parking.

Austin Bluffs Parkway is significant in the regional context as one of a limited number of facilities that cross the entire breadth of the community, east to west. Nevada Avenue provides the same class of north-south connectivity, extending south through the Central Business District to connect with SH

115, a gateway to Southern Colorado. North of the campus, Nevada Avenue terminates as a freeway on-ramp to I-25 northbound, providing high-speed connection to destinations to the north. To the east of the current UCCS main entrance, Austin Bluffs Parkway meets Union Boulevard. Proximity to this intersection provides the campus yet another interconnection to the region's major road network.

The position of the campus with respect to the regional roadway network provides favorable access via private automobile. The adjacent roadways that provide an asset with respect to accessibility, however, also pose certain liabilities. In a growing urban area such as Colorado Springs, arterial roadways are associated with increased noise generation, higher traffic volumes, intermittent congestion, and increased travel speeds. They can also render adjacent land uses vulnerable to impacts of roadway widening or new roadway construction in the continuing effort to meet ever-expanding road-



1-3 Resource GroupsResource Group sessions served to identify the goals for the LRDP and Master Plan.

way capacity needs.

In this context, the goals and responsibilities of the University can be at odds with those of local government. Whereas local jurisdictions strive to preserve and expand limited arterial roadway capacity and complete system interconnectivity; the University must effectively access its land. This is accomplished by providing convenient, potentially frequent access points to the campus, which may effect arterial roadways negatively.

Poor Public Transit

As with roadways, the campus is well positioned to be served by regional networks of on-street bikeways, offstreet trails and public transit. However, the campus is currently directly served by only two Springs Transit bus routes. The transit does not provide a viable travel option for most students, staff and faculty. The level of service currently provided by the system falls short of an attractive or workable means of traveling to and from the campus. Regional population densities and land use distribution make the community difficult to serve cost effectively. The present system is configured to attract primarily transit dependent users.

Problems with the system include poor connectivity, infrequent service and limited hours of operation. The resulting effect is the strong dominance of private automobile as the mode preference for travel to and from the campus. With this dependence on the private automobile, there is an associated burden on the University to provide adequate parking.

Through compromise and creativity, a tenuous balance has been achieved by the University that the LRDP and Master Plan must build upon. Shuttle service between Four Diamonds parking facilities off Nevada, to the Cragmor zone, operates on 20-minute headways. A circulator shuttle operating on shorter 15minute headways interconnects distant parking lots with University facilities within the Cragmor zone. For a campus necessarily dominated by private automobile access, parking is and will

continue to be a focus in planning for the future.

Changing Traffic Patterns

A committed roadway improvement project scheduled for full completion in 2005, promises to greatly enhance the access to the campus, while triggering favorable redevelopment of land parcels adjacent to the University on Nevada Avenue. This ambitious project will reconstruct and merge the I-25 interchanges at Rockrimmon Boulevard and Nevada Avenue, providing the direct connection of Nevada Avenue to Rockrimmon Boulevard, across I-25. This project will benefit the campus by changing the character of traffic operation on Nevada Avenue. The function and character of the Avenue will change from an interstate, to a boulevard. This will allow for development and activity to occur along Nevada Avenue which will be favorable to the University.

While the majority of UCCS students take a full course schedule, they work, on average, 32 hours a week.

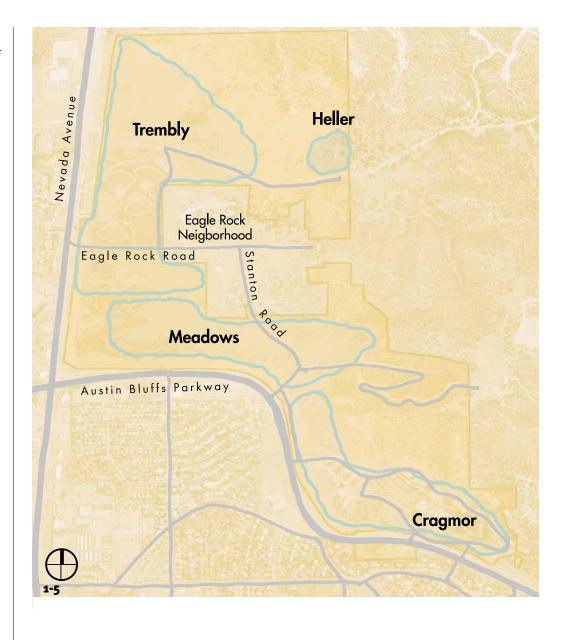
1-4 Views

The campus landscape and views of Pikes Peak and the Front Range of the Rocky Mountains.



1-5 Four Zones

The 508-acre campus has four distinct zones defined by its built and natural environment.





1-6 Campus at-Large Meetings

Campus meetings gave valued insight to the planning process.

HISTORY AND FUTURE OF THE CAMPUS

The site of the UCCS campus was originally the Cragmor Sanatorium, founded in 1914 for tuberculous patients, continuing to 1962, when it was deeded to the University of Colorado.

In 1952, the University of Colorado formed an extension in Colorado Springs. The campus relocated to the Cragmor site in 1965 when the original 80-acre campus opened to classes. In 1971, the first new building for the campus was completed, Dwire Hall, a classroom library facility.

In 1973, the University developed a campus master plan. From 1974 to 1985, an additional library classroom building, a student center, and the science and engineering buildings were completed. During this period, Virginia Trembly donated lands north of the Cragmor site, a section of which became the Four Diamonds Sports Complex. In 1982, the University acquired two remote parcels, the 480acre Howard Property, and the 210-acre Penn Mountain

Property near Fairplay, Colorado.

In 1993, Dr. Linda Bunnell Shade became the seventh chancellor of UCCS, and developed a vision for the current physical and academic growth of the University. From 1996-1997, significant additional construction was completed, with the addition of the Housing Village - the first housing for the campus, Columbine Hall - a classroom -office building, the Campus Services building, and the Family Development Center. In 1998, construction began on El Pomar Center and the expansion of the Kraemer Family Library as well as an expansion of the campus University Center.

The 508-acre campus is comprised of the original 80-acre Cragmor zone and the additional 428 acres which have been donated or acquired by the University since 1965. Located at the foot of Austin Bluffs in northeast Colorado Springs, the campus offers expansive views to the west of the Front Range of the Rockies.

Growth Campus

UCCS is designated the growth campus for the University of Colorado system. UCCS has recently experienced a rate of growth unsurpassed among Colorado's public research and four-year institutions, with a 27% growth in student FTE from 1994-2000. Other Colorado four-year institutions experienced a 4% increase during this time. The campus has nearly doubled in the capacity of its facilities in the past five years. Relative to the more established University of Colorado campuses, UCCS's campus is in its youth, and is appropriately positioned to grow considerably in support of the regional and national educational needs.

APPROACH AND METHODOLOGY

UCCS set two programmatic mandates for the campus plans:

- To determine the site's student capacity based on reasonable and responsible development;
- To provide the facilities needed for the near-term to

Known as the health mecca of the West, a significant aspect of the history of Colorado Springs is its role as a center of healing. In the early 1900's, the purity of the air, sunshine, and the healing properties of the mineral springs, formed the basis for a multitude of spas and health institutions.

1-7 Community at-Large Meetings

The community meetings provided the opportunity to discuss issues related to campus development.



Planning progressed through three phases of work: •1: Identification of Goals and Resources, Campus Character, Program Fit, andPreliminary Concepts •2: Alternative Concepts and Selection of the **Preferred** Concept •3: Final Plan

Documentation.

educate 10,000 students (headcount).

In preparation for this planning, UCCS undertook two supportive planning tasks. The first is a set of analytic drawings prepared using geographic information system (GIS) technology. The analyses addressed numerous aspects of the physical character of the campus, including soils, vegetation, topography, and hydrology. This study provided a significant information base.

In the second effort, the campus prepared a programmatic estimate of facilities required to meet the needs of 10,000 students, utilizing applicable standards set forth by the Colorado Commission on Higher Education.

In addition, an important aspect of the development of the LRDP and Master Plan, was the extensive outreach program executed by the University. This outreach program included group participation of students, faculty and staff on campus, as well as a large number of individuals from the Colorado Springs community, officials

from the City of Colorado Springs, and the Design Review Board and Regents of the University of Colorado system. Through the phases of plan development listed below, extensive meetings and worksessions were held with all of these groups, to involve them in the process, and keep them appraised of the direction being developed for the campus' future.

UCCS developed the LRDP and Master Plan in three phases that led from goals and programmatic accommodation to alternatives, finally culminating in the current plan. The three phases of the planning effort are as follows.

Phase One

Phase One began with the identification of the University's goals for the LRDP and Master Plan. The University held interviews with campus resource groups and individuals to gain an understanding of the spectrum of needs and directions for the campus's development.

Concurrent with the goal development, UCCS investi-

gated campus resources to ascertain the physical conditions, capacities, and potentials of the campus.

Phase Two

Phase Two included two rounds of concept development and assessment of alternatives, concluding with the selection of a preferred concept. The concepts holistically address campus development, while strategically identifying ways to promote connectivity and interaction among students, faculty, and staff.

Comprehensively, the alternatives addressed the campus framework and the accommodation of facility needs identified through the programming work conducted in Phase One.

Phase Three

The third phase included the documentation of the plan, summarizing findings identified in the prior phases of work, and delineating the elements that form the LRDP and Master Plan.

The documentation defines a structure for improvements while remain-



1-8 Interaction

One objective of the plan is to create opportunities for interaction throughout the University.

ing flexible to be responsive to resource allocations and phasing compatibility. The LRDP recommendations are broad in character (i.e. land use and circulation), while the Master Plan addresses greater specificity (i.e. building and open space development areas).

GOALS OF THE LONG RANGE DEVELOPMENT PLAN

The planning process for UCCS is grounded in a set of goals abstracted from worksessions held with the campus community. These goals serve as a benchmark to guide and measure the success of the campus planning and implementation.

Guide the University's transition

Guide the physical growth and change needed to improve the quality of the education and the campus environment, while maintaining the essence of the institution's original core values. As the institution grows, recognize the needs of the University's core users: resident and commuting students, researchers, faculty, and staff.

Strengthen the University's image

Form a strong clear physical identity to strengthen the University's image on and off campus.

Enhance and support partnerships with the local and world-wide community

Integrate and strategically use community, regional, state, and national partnerships (public and private) to create physical and programmatic connections between the community and the University.

Capitalize on the campus's rich natural environment

The UCCS lands form a spectacular setting for this educational institution, offering an image for the campus, a draw for students, and a variety of educational experiences. Strengthen the connection of campus buildings and outdoor spaces.

Develop the campus to enhance the campus lands, demonstrate stewardship of the land, provide for a safe - accessible campus, and acknowledge the importance

of the campus's spectacular setting.

Personalize the campus

The University has established a strong educational foundation through the quality of the comprehensive and personalized educational experience it offers. Develop the campus to create a comprehensive and personal, pedestrian-friendly environment.

Balance student and faculty needs with effective use of resources

Assess patterns of class scheduling, parking, use of University buildings, and funding to provide key services to University students, faculty, and staff while optimizing the use of University physical and financial resources.

Goals are overall and ultimate purposes, aims, or ends toward which UCCS will direct its effort in the development of the campus. Goals generally express long-term rather than short-term expectations.

The Program

2

TOTAL LEARNING ENVIRONMENT PROGRAM FOR UCCS• ACADEMIC MASTER PLAN-A STRATEGY FOR GROWTH• POPULATION•SPACE NEEDS

UCCS's program combines the strategy of the institution's educational goals and the physical capacity of the campus lands.

Developing the program for the University of Colorado at Colorado Springs entails combining the strategy of the institution's educational goals and the physical capacity of the campus lands.

Specifically, the educational program addresses the uses supporting the UCCS educational mission in relationship to the campus land's capacity. The basis of the Long Range Development Plan (LRDP) is to balance these two comprehensive elements - educational mission and campus capacity.

The 1999 campus fulltime equivalent population was comprised of 4,964 students, 346 faculty, and 275 staff. The programmatic space needs for the University were estimated for the LRDP and the Master Plan. The Long Range Development Plan estimated space needs based on the carrying capacity of the campus at build-out, expressed as a range of 15,000 to 24,000 headcount (11,600 FTE to 18,000 FTE). The Master Plan estimates space needs for a 10,000 student headcount.

The strategic addition of the first residential housing in 1997 created a cultural and demographic shift in the UCCS student population. Coupled with a favorable faculty student ratio, the residential village fosters a collegial atmosphere on the campus. This is a quality that the students and faculty wish to see intensified as the campus develops.

With the addition of residential housing, the percentage of traditional age students has increased. While their numbers are small in proportion to the total student body, the impact of this shift is quite significant. The residents' 24-hour presence increases demand for ancillary facilities and supportive University staff. UCCS's goal to achieve a 25% out-ofstate student enrollment emphasizes the importance of expanding the residential housing in years to come.

While the campus will shift culturally with an increased residential component, the University recognizes that this is only one component of the campus's value and strength. Equally

valued are the commuting students, who have been the historic mainstay of the campus. These commuting students are exceptional since most take full time course schedules in combination with full time or part time jobs, averaging 32 hours a week. The third component are students seeking continuing education and advanced degrees. As such, the program for the LRDP and the Master Plan seeks a balance to meet the longterm goals and the immediate needs of the institution.

The program for both the LRDP and the Master Plan supports two significant University policy statements: The Total Learning Environment (TLE) initiative, and the Academic Master Plan.

TLE PROGRAM FOR UCCS

The Total Learning
Environment (TLE) initiative is
a system wide plan that
guides all four University of
Colorado academic campuses. UCCS has produced a
TLE refinement of the overall
University of Colorado vision,
specific to this campus. The



2-1 Columbine HallAssets of this facility include technology classrooms and faculty offices.

UCCS TLE plan incorporates seven specific goals and clearly defines objectives with supporting possible strategies for implementation.

The TLE initiative serves as a fundamental policy document for the University. The document is the culmination of previous planning for the campus and its mission statement. It is an inclusive campus-wide document that reflects substantial faculty and staff participation. It formalizes and sharpens a trajectory for the campus that has been implicit for some time; many of these initiatives are already in various stages of implementation.

The seven campus TLE goals are:

- Grow responsibly in order to meet the needs of students, the community, and the state
- Provide a comprehensive, personalized, educational experience that prepares students to excel personally, professionally, and as citizens
- Enhance research, scholarship, and creative works on the campus and in the community

- Use and enhance technology to improve teaching, learning, research, and management
- Expand and strengthen community partnerships
- Model the values of diversity in the campus climate and educational programs
- Enhance the University's human, physical, and fiscal infrastructure.

ACADEMIC MASTER PLAN A STRATEGY FOR GROWTH

The Academic Master Plan, for the period 1999-2004, is an important contributor to the campus physical Master Plan. It reflects the emerging maturity of this campus as well as the current dynamic nature of the Colorado Springs region.

UCCS is maturing as an institution, adding the academic infrastructure that is required for a residential campus providing the range of degrees required by the Pikes Peak community and the State of Colorado.

Campus facilities have nearly doubled in size in the past five years, from 440,000 gross square feet (GSF) to 770,000 GSF. UCCS has

experienced enrollment growth at a rate unsurpassed among Colorado's public research and four-year institutions.

The continuing growth of the Pikes Peak region is noteworthy. Employment in Colorado Springs has experienced a 29% increase between 1993 and 1998. El Paso County, is projected to become the most populous county in Colorado near the year 2000.

The Academic Master Plan envisions six categories of program development: growth, core curriculum, building integrated programs on current strengths, local economic needs, co-curricular academic enhancement, and diversity. As new degree programs are proposed, the University will emphasize the five target industry clusters identified by the Colorado Springs Economic Development Corporation for sustained economic growth in the region.

These industry clusters are of vital significance to the greater Colorado Springs community. They include information technology, com-

The Master Plan Goals are:

- Guide the University's transition
- Strengthen the University's image
- Enhance and support partnerships with the local and the world-wide community
- Capitalize on the campus's rich natural environment
- Personalize the campus.

2-2 Housing

The new housing in the Cragmor zone has added vitality to the campus culture.



To serve 10,000 students, the space categories with the greatest need are:

- Physical, Education, and Recreation
- Academic Offices
- Classrooms
- Open Laboratories
- Research
- Athletics
- Assembly and Exhibit
- Library.

plex electronics manufacturing, sports advancements, visitors, and national non-profits. Other program nominations, such as the proposed Ph.D. in geropsychology, support the recently opened Center on Aging and will uniquely meet the projected needs in the region and the state for the evolving demographic balance.

The Academic Master
Plan builds upon the campus
Mission Statement, guided
by the campus TLE goals.
The past and current academic planning ensure that
the growth and maturing of
the campus will take place in
a coherent manner, building
on the current strong academic program.

POPULATION

Historically, UCCS primarily served as a local and regional institution. The current planned growth of the institution, combined with the new residential component on campus, positions the University to educate a broader constituency of students. The planning assumptions for this growth are as follows:

- The University will strategically increase the proportion of non-resident students (those whose legal place of residence is outside of Colorado)
- The University will seek to increase minority, immigrant, low-income, and continuing education students
- For the long range horizon, the student faculty ratio will increase to 17.5:1. The current ratio of students (FTE) to faculty (FTE) is 16:1. Growth projections assume that this student faculty ratio will remain constant through the Master Plan horizon of 10.000 student headcount.

Student Profiles

The current student profiles

- Full-time students living on campus in residence halls. Most of these students hold part-time jobs; some are not employed. Employed students typically work off campus, requiring them to commute two to three times a week. Resident students rely heavily on all campus facilities.
- Full-time students living off campus within daily commuting distance.

Most of these students hold part-time jobs; some are not employed. These students tend to limit their use of many on-campus facilities, given the lack of such facilities coupled with their tight schedules and limited "free time" on campus.

• Part time students living off campus within commuting distance.

Most of these students are employed, either full or part-time. These students have heavy demands on their time and will have limited opportunities to attend classes. They consider convenience of class scheduling and parking a high priority, and tend to enroll in classes in the late afternoon or evening.

SPACE NEEDS

The two planning horizons developed to accommodate the University space needs, the LRDP and the Master Plan, are defined as follows.

Long Range Development Plan

The space needs for the LRDP reflects the estimated program and student carrying capacity for the 508-acre



2-3 Public Art Public art will be included in the development of the campus.

Estimated Program Needs for LRDP (Based on Land Development Capacity of Educational Program) GSF/ Student FTE

	(Education	(Education and Indoor Recreation)					
			Parking	Surface		Structured	
POPULAT	ION	Unit	Unit/FTE				
Student		FTE		11,600		18,000	
		HC	1.330	15,000		24,000	
Faculty	Student:Fa	culty Ratio		17.0		17.5	
	Full Time	HC		600		900	
	Part Time	HC	0.007	80		130	
Staff	Full Time	HC	0.035	410		630	
EDUCATIO	ONAL PROGRAM	Unit	Unit/FTE				
Academic,	Academic Support,	ASF	107	1,240,000		1,921,00	
and Studen	t Union	GSF	160 ⁷	1,860,000	7	2,881,00	
INDOOR	SPORTS	Unit	Unit/FTE				
Inter-Colleg	iate	ASF	10	116,000		180,00	
		GSF	12 8	139,000		216,00	
Recreation		ASF	15	174,000		270,00	
Wellness, Intramural, Club Sports		GSF	18 8	209,000		324,00	
OUTDOO	R SPORTS	Unit					
Inter-Colleg	iate & Recreation	AA (Net	Acres)	17		15	
RESIDENT	IAL PROGRAM	Unit					
Student		Beds	25% 5	2,900		4,500	
		ASF	250	725,000		1,125,00	
		GSF	350 ⁹	1,015,000		1,575,00	
Faculty		Beds	10% 2	140		210	
		ASF	360	50,400		75,60	
		GSF	500 ⁹	70,000		105,00	
Staff		Beds	10% 2	80		130	
		ASF	360	28,800		46,80	
		GSF	500 ⁹	40,000		65,00	
	PROGRAM	Unit	Unit/FTE				
	Resident FTE Commuter	Spaces Spaces	0.75 ⁶ 0.25	2,900 3,030		4,500 4,880	
	Resident Full Time Commuter ⁴	Spaces Spaces	1.00 ⁶ 1.00	140 530		210 79	
	Resident Full Time	Spaces Spaces	1.00 ⁶ 1.00	80 370		130 56.	
Commuter Total spaces based on disaggreated forur Total spaces based on average space per Total spaces used for LRDP		orumla	0.45	7,100 6,800 7,000		11,10 10,80 11,00	

- Source: CU The Springs, FY 2001 Capital Request
 Assumes average of 1 partner/dependent
 Student faculty ratio increases from 16.5 to 17 with student FTE target of 10,000
 Assume part time faculty and staff use spaces made available in evening hours

- Assume port inter locally and soin use spaces made available in evening 5 Assume 0 (no) partners/dependents
 Assume 0.75 parking space per bed for students, 1.00 per faculty/staff
 T Educational GSF:ASF = 1.50
 Indoor Recreation GSF:ASF = 1.20
 Residential GSF: ASF = 1.40
 Source: UCCS, 1999

2-4 Estimated Program Needs for the LRDP

The program is expressed in assignable square feet (ASF) and gross square feet (GSF). The ASF is the basic space program required to support a specific use. The GSF represents the total space required, and as such, includes building lobbies, hallways, storage, restrooms, etc.

2-5 Main Hall

Part of the original buildings, Main Hall is listed on the National Register of Historic Places, and is currently under design for renovation.

2-6 Recreation

The space program identifies a significant need for additional indoor and outdoor sports and recreation facilities.





2-7 Estimated Master Plan Program Needs

The estimated program for 10,000 students (7,358 full time equivalents) identifies the need for nearly 700,000 gross square feet of additional educational facilities.

				1998			Master Plan	!
POPULATION		Unit						
Student		FTE		4,768	1		7,358	
		HC		6,562	1		10,000	
Faculty Full & Part Time		HC		375			573	
Staff Full & Part Time		HC		801			1,089	
			Existing	Guideline	Surplus/	Existing	Guideline	Surplus/
			Exising	Goldenne	(Deficit)	Exising	Goldenile	(Deficit)
EDUCATIONAL PROGRA	M.	Unit						
Academic, Academic S	upport,	ASF	328,392	* 582,218	(253,826)	396,995	859,018	(462,023
and Student Union		GSF	492,588	873,327	(380,739)		# 1,288,527	(693,035
			,		(===,===,	2.2,	.,	(,
Indoor Sports								
Inter-Collegiate		ASF	0	74,100	(74,100)	0	74,100	(74,100
		GSF	0	88,920	(88,920)	0	88,920	(88,920
Recreation		ASF	10,159	64,682	(54,523)	10,159	109,673	(99,514
Wellness, Intramural, Cl	ub Sports	GSF	12,191	<i>77</i> ,618	(65,428)	12,191	131,608	(119,417
RESIDENTIAL AS	SF/Bed							
Residence Halls		Beds	600	600	0 2	600	600	0
	250	ASF	150,000	150,000	0	150,000	150,000	0
		GSF	210,000	210,000	0	210,000	210,000	0
Apartments		Beds	0	0	0	0	600	(600
	360	ASF	0	0	0	0	216,000	(216,000
		GSF	0	0	0	0	302,400	(302,400
GSF OF EDUCATIONAL	PROGRAM/	FTE	106	218	(112)	83	205	(123
PARKING PROGRAM								
Student Resident FT Commuter	E	Spaces 0.75 ⁸ Spaces 0.25		450 1,528			450 2,388	
Faculty		Spaces 1.00 ⁸		375			573	
Staff		Spaces 1.00 8		801			1,089	
Total spaces based on disa		mula	2,349	3,154	(805.0) (603.9)	2,349	,	(2,151 (2,151
Total spaces based on aver NOTE: Source: Paulien Associates, 1 Source: UCCS, 1999 Educational GSF-ASF = Indoor Sports GSF-ASF = Residential GSF: ASF =	age space pe	r HC 0.45	2,349	- 3,154		2,349	* 4,500	

13



2-8 Sea of Parking Parking lots within the existing Cragmor zone overwhelm the view of the campus buildings.

campus at build-out.
Significant considerations in developing the potential campus carrying capacity included:

- 190 assignable square feet (ASF) allocated for each fulltime enrollment student
- Of the 508 acres, approximately 260 acres are available for development due to constraints of the land
- Average density of development assumes buildings of three to five stories
- Managed circulation and parking system which promotes use of the shuttle system and pedestrian circulation
- Providing 0.45 parking spaces (on average) for each student headcount
- Residential expectations of a 25% target of all FTE students; 10% target of all FTE faculty and staff
- Developing a sports program.

Together, these considerations estimate an overall program demand. The program presented on the accompanying table reflects these factors balanced with the ability of the campus lands (capacity) to support

the educational program respectively.

The LRDP presents the built-out campus capacity in a range to reflect the type of parking that might be accommodated. The lower side of the range limits campus parking to primarily surface lots, resulting in a capacity of 15,000 headcount (11,600 FTE). The higher end of the range increases based on a mix of surface, deck, and structured parking; resulting in a capacity of 24,000 headcount (18,000 FTE).

Master Plan

Currently, UCCS has approximately 481,000 assignable square feet (ASF) of building space. Seven percent of the University's space is in transition with the construction of the new library, and renovations of the existing library and University Center. Analysis of Fall 1998 data, prepared by Paulien & Associates (March 2000), indicates there is a need for approximately 289,000 ASF at the base year (1998), and 664,000 ASF at the target of 10,000 headcount. The campus presently has 41% of the calculated needed guideline space, which will increase to 47% once the library expansion is completed. There are shortages in all space categories of academic space, academic support space, and auxiliary for the base year. Some of this shortage, 24%, is attributed to the desire for expanded housing facilities. Paulien & Associates' study utilized appropriate Colorado Commission of Higher Education standards.

This analysis indicates the need for significantly expanded facilities in the near-term for the UCCS campus. The space needs analysis included all space regardless of its quality.

Parking capacity is the defining element of UCCS's instructional and student capacity. Currently, the State of Colorado limits the University's ability to fund parking facilities. As the value of the campus lands and the need for additional facilities increases, this policy may be adjusted to allow alternative funding sources.

The Long Range Development Plan

3

LONG RANGE DEVELOPMENT PLAN•LAND USE DESIGNATIONS•

An important objective of the long range development plan is to seamlessly join the three primary campus development zones.

University of Colorado at Colorado Springs (UCCS) has a spectacular setting. The campus is located at the eastern base of the Front Range of the Rocky Mountains. The expansive vistas of Pikes Peak and the Front Range are viewed throughout the campus. Austin Bluffs, comprised of significant rock formations, such as Pulpit Rock, frame the campus's northern and eastern edge. The lands are characterized as rolling hill and valley-like terrain with the site generally rising to the rock formation bluffs and vistas to the west.

Of the 508 campus acres, 80 acres comprise the existing Cragmor zone. In contrast to the highly developed Cragmor zone, 428 acres of the campus lands are largely undeveloped and form a significant asset for the University and the region. Adjacent to Nevada Avenue, the Four Diamonds Sports Complex consists of four softball diamonds and a soccer field, currently leased by the City of Colorado Springs.

The Beth El College of Nursing and Health Sciences occupies temporary facilities east of the sports fields. The Heller zone, a small compound envisioned to serve as a humanities/art center, retreat, or small conference center in the future, occupies a remote site in the northeast area of the campus.

With broad expanses of gently sloping prairie at the low elevations, the topography rises dramatically to the bluffs, forming steep and challenging terrain. Varying in size, natural drainages traverse the broad prairie flowing down toward Nevada Avenue and Austin Bluffs Parkway. The drainages are heavily vegetated and contribute appreciably to the visual character of the campus. Within the process of defining the campus open space, the drainages played an important role in forming the landscape character of the campus.

Grasslands of undisturbed native prairie, pineoak woodlands and riparian zones in the ravine drainages are the dominant vegetative ecosystems. There are no year-round water elements.

While the developed and

undeveloped lands are contiguous, they are physically separated by parcel boundaries and perceptually separated by the topography. One important objective of the planning is to seamlessly join these properties.

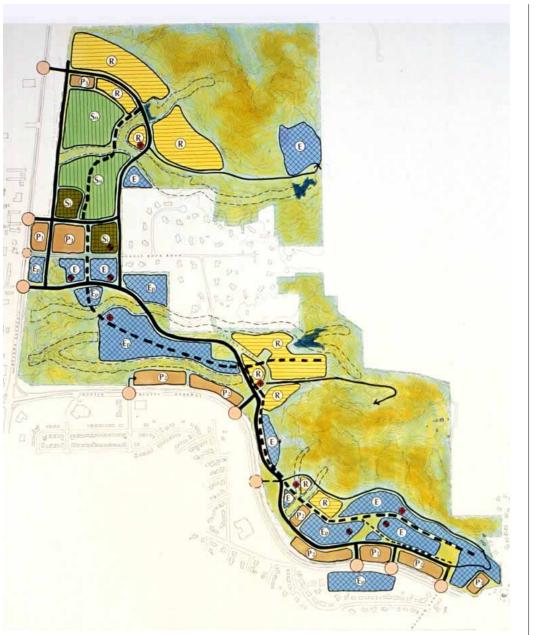
LONG RANGE DEVELOPMENT PLAN

The Long Range Development Plan (LRDP) utilizes a framework of open space defined by the site's natural drainages to form the physical image of the campus. The plan integrates development of educational, residential, recreation, and sport uses. The Master Plan for the Cragmor zone (providing for near-term needs) will improve the campus through the development of new facilities, and the creation of a new campus open space (see Chapter 4).

The land use organization for the LRDP extends
University residential and educational uses beyond the Cragmor zone to the north on the currently undeveloped University lands. This includes development of an existing meadow area (south



3-1 Campus Landscape The landscape of the campus is open prairie, rising to craggy tree-covered bluffs.



3-2 The Long Range Development Plan



Educational



Educationalwith parking



Residential



Indoor Sports



Outdoor Sports



Parking Types

1 Surface

2 Decked

3 Structured



Campus-serving Community Uses



Campus & Publicserving Community Uses



Primary Pedestrian Circulation



Main Vehicular Circulation



Campus Entries



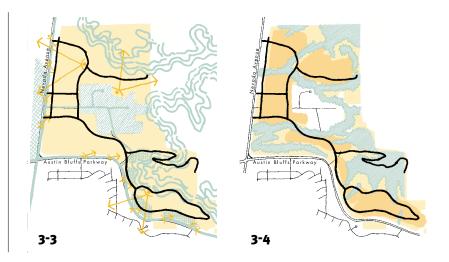
Drainages

3-3 Campus Character

Varying topography, rising bluffs to the east, open meadows, and dense campus development characterize the existing campus lands.

3-4 Sustainable Planning

Topography, soil type, drainages, and vegetation delineate the areas of the campus available for development.



The concept for campus growth encourages new construction to blend with the existing topography, limiting the amount of grading to specific areas of development.

of the Eagle Rock neighborhood), ultimately completing itself with high public uses to be located in proximity to Nevada Avenue. These public uses will include indoor and outdoor recreation facilities and an arts complex, offering potential partnering with public and private entities. Residential areas, comprising 25% of the campus's student population and 10% of the campus's faculty and staff, are located adjacent to the educational uses and north of the sports fields. An internal circulation system (shuttle, pedestrian, and bicycle) provides future access to these uses.

Sustainable Planning

Recognizing the importance of the campus environment, the approach to development promotes sustainable practices. These include blending new construction with the existing topography, limiting grading to specific areas of development, and protecting and enhancing the natural drainage ravines. The campus open space system, consists of all campus lands not included in the drainages

and the land use designations. The open space combined with the drainages provides an expansive visual base for the campus, extending the quality of the natural environment into the surrounding properties.

Campus land use reflects the University goals. The organization of the use is based on the linear nature of the campus property and constraints formed by the drainages. The pedestrian and vehicular circulation system will link the three primary campus zones. Travel distances on the campus will be considerable, making necessary the use of shuttle systems and bicycles. Class scheduling will be configured in recognition of distance between the educational zones.

Educational land use forms the center of these zones, with residential uses strategically located in pockets to encourage a village atmosphere. Additionally, the LRDP identifies locations for campus community uses and community-wide uses to foster social and intellectual interaction.

LAND USE DESIGNATIONS

Land use on campus is organized by the following designations of developed uses: educational, educational with parking, residential, indoor recreation, outdoor recreation, community uses, and parking types. The campus open space consists of the total remaining campus lands to be conserved by the University.

E Educational

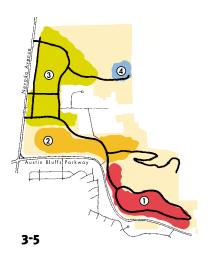
All uses to support the University academic programs including instruction, labs, library, administration, faculty offices, ancillary uses, student services, health, childcare and campus land-scape such as quadrangles or courtyards. Smaller parking areas are included within these defined zones.

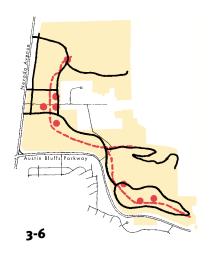
Ep Educational with Parking

All uses included in **E** with the additional note of the opportunity to provide parking below buildings.

R Residential

All uses which support the University residential program





3-5 Campus Zones

The four campus zones are the Cragmor (1), Meadows (2), the Trembly (3), and the Heller (4).

3-6 Centers of Activity Activity areas along the pedestrian spine will foster campus community and public interaction throughout the campus.

including residences, common space, courtyards, and parking.

Si Indoor Sports

All athletic and intramural sports and recreation facilities to be housed indoors.

SO Outdoor Sports

All exterior athletic and intramural sports and recreation fields, courts, and facilities.

P Parking Types

- 1 Surface Parking
- 2 Decked Parking (two levels only)
- 3 Structured Parking (seven to eight levels)
 The parking types are defined as noted above. The decked parking is sited to take advantage of the sloped topography, allowing for access on two levels without the use of a connecting ramp. The structured parking facilities are prudently sited to capitalize on shared public-private opportunities.

Campus-serving Community Uses

Campus facilities located within the residential uses to be shared by the campus community.

Community-serving Uses

Community facilities located throughout the campus to be shared by the campus and regional community.

Primary Pedestrian Circulation

The pedestrian spine runs through the core of the educational centers while forming a connection between the three primary zones.

Main Vehicular Circulation

The campus loop road provides access to all areas of campus, and forms an efficient circulation system.

Campus Entries

The eight campus entries provide gateways for vehicular, bicycle, and pedestrian access.

Drainage

Drainages are protected throughout the campus development.

FOUR CAMPUS ZONES

The LRDP defines four campus zones, each of which contains a variety of land uses anchored by educational use. The four zones are the Cragmor (existing campus), the Meadows, the Trembly, and the Heller. The existing character of the campus lands greatly influenced the definition of these zones. The zones are described in further detail below.

Cragmor

The Cragmor zone is densely developed, primarily for educational uses. The Master Plan concentrates near-term development in this zone, creating a focus and image for UCCS. A prominent campus green will be created in the center of the Cragmor, providing a central meeting space. The pedestrian spine will traverse this green to integrate the space with the larger campus context. Natural drainages crossing the Cragmor zone will be enhanced as was recently accomplished in the construction of the residential village.

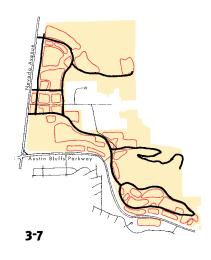
A framework of open space defined by the site's natural drainages form the physical image of the campus, integrating educational, residential, and sport uses.

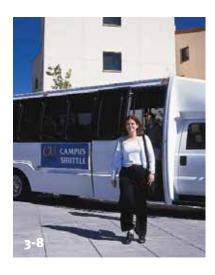
3-7 Campus Circulation

The campus loop road system will connect the three primary zones accommodating vehicles, shuttles, bicycle, and pedestrian use.

3-8 Shuttle

The shuttle service now operating on campus will be greatly expanded as the growth of the campus extends north.





All university and college campuses are complex and continually evolving to meet the changing needs of each institution. UCCS's campus has particular challenges that relate largely to the physical constraints of the campus land.

Meadows

The Meadows zone will have a natural character, emphasizing its relationship to the wooded ravines, campus meadows, and undulating topography. This zone will be primarily educational. Framed by two major drainages, the buildings will form a compact development. Running through the center of the development will be a large green and the pedestrian spine. The edges of the developed area will be carefully blended with the natural vegetation and topography.

Trembly

The Trembly zone will have an urban character, consisting of educational and recreational uses, the Arts Complex, and a residential component. The mixed use within this zone will form a meeting place, serving both the University and regional community. The primary new campus entrance, accessed from Nevada Avenue, will serve this zone. The building sites are large to support the uses, and form a cardinal grid encircled with campus roads. The University sports

fields lay adjacent and to the north of the building sites.

Heller

Located in the northeast area of campus, the Heller zone contains residential structures and a studio. The intent of the plan is to preserve the remote quality of the area, using the buildings and grounds to host small groups of the campus community and its guests.

TRANSPORTATION

The linear geometry of the campus lands, the location of the Eagle Rock neighborhood, and the significant topography of the site present challenges for long range transportation infrastructure development. In coordination with the LRDP, the following transportation goals were established:

- Develop an internal roadway system to interconnect campus facilities without the need to access public roads (Austin Bluffs and Nevada), and does not encroach on the Eagle Rock neighborhood.
- Provide a reasonable quantity of parking to serve the

targeted educational program.

- Provide a reasonable level of shuttle service to limit travel time.
- Provide a pedestrian network throughout the campus which is compatible with vehicular and shuttle system.

The campus community's reliance on the private automobile as the primary mode of access to the campus accentuates the importance of providing adequate parking. Based on a review of parking ratios at peer institutions, and planning and zoning standards, parking ratios were established for use in developing the LRDP and Master Plan (see Workbook section D).

A full range of options were explored including surface parking, decked parking, structured parking, and parking integrated with buildings. All of these options are employed within the LRDP to fulfill the future enrollment needs of the University. In addition, off-campus parking served by the campus shuttle may be employed in the future to supplement the enrollment as needed.



3-9 Eagle Rock Neighborhood

While not dependent upon the Eagle Rock Neighborhood, the LRDP allows for future use of the area should the opportunity and financial ability become available. The addition of this land area would result in a campus of 36,000 students (26,000 FTE), increasing the campus's student capacity by approximately 50%.

PLANNING DETERMINANTS -KEY ELEMENTS OF THE LRDP

UCCS faces challenges to create a cohesive campus. Acknowledging the significance of these constraints, a University analysis prepared by Design Workshop, (1998), delineated the impediments to the development of the campus. The analysis indicated the heightened need to address the physical quality of the campus with a sensitive approach. The challenges met in designing this approach formed planning determinants for the LRDP.

Physical and Social Relationship to the City

The campus is located outside of downtown Colorado Springs, and is perceived as being remote from the central business district. This 'distance' tends to foster a separation between the University and the City. As the University and the City expand, the relationship between the two entities will benefit the entire community.

Additionally, the campus surrounds the 88-acre residential community of Eagle

Rock. The LRDP recognizes the need for sensitive and appropriate development adjacent to this community.

Land Use Zoning

The University of Colorado is designated as state land and is not subject to local zoning. The following parameters of zoning provide contextual reference for the campus.

The land use surrounding the campus consists of residential, commercial, light industrial and special use. These uses depend greatly on the major vehicular corridors of Austin Bluffs Parkway and Nevada Avenue. The location of the campus along these corridors, and the physical constraints of the topography, have placed development and access limitations on campus lands. This limited access favors internal development of the campus while offering future connections to the campus from Nevada Avenue.

The current zoning patterns within the context area, tend to concentrate the industrial and commercial zones along the major transportation corridors, particularly Nevada Avenue. The University will pursue further discussions with the City of Colorado Springs to join in a study of the redevelopment of the north Nevada Avenue corridor. With the status of the Avenue changing from an interstate to a city avenue, the potential opportunities for commercial or educational partnerships should be explored.

Land use to the south and east of the campus is zoned primarily residential. A portion of the undeveloped property to the northeast is under consideration for community open space, providing a means to protect the natural features within the district.

The developed land within the existing campus is zoned SU (Special Use). The entire campus and the properties to the north and east, lie within the Hillside Overlay zone, which helps to protect the natural features, rock outcroppings, and existing vegetation; an imperative in the development of this land.

Climate

The climate of the Colorado Springs region is generally

The LRDP does not depend upon acquiring any property in Eagle The University, however, will consider acquisition of individual properties nearby the campus, should they be offered for sale or otherwise become available. Clearly, acquisition of any property depends on the institution's financial ability.

3-10 Drainages

Campus drainages provide a system for storm water flows, wildlife habitat, recreational areas, and aesthetic character for the University. The blue dots in this diagram indicate areas designed for water retention or detention as appropriate.



Existing circulation in the Cragmor zone is severely constrained. Limited by entrances from Austin Bluffs Parkway, a heavily traveled arterial, users must pass through parking lots as they traverse the campus. In addition, the campus lands beyond the Cragmor zone must be accessed from public roads off Nevada Avenue.

mild and dry, but has the potential to be severe. Wind, freeze-thaw conditions, and relative comfort zones are important aspects of planning in this climate. The annual precipitation is low, approximately 16 inches. Most moisture is received in the springtime, with some summer thunderstorms. The orientation of campus buildings, play fields, outdoor spaces, and roads should be designed to maximize solar gain and wind protection.

Topography and Slopes

Campus elevations range from 6,200 to 6,700 feet. While there are broad expanses of gently sloping prairie at the low elevations, the topography rises dramatically to the bluffs, forming steep and challenging terrain. There is a minimum of land with slopes less than 10%, a condition generally required to accommodate large building footprints, parking lots, and sports fields. The planning included extensive grading analysis to reduce the need for large scale grading and to create a universally accessible environment.

Drainages

Large natural drainages traverse the campus lands. These drainages add beauty and character to the campus, while serving the important role of managing storm water flows. The plan retains and enhances the drainages, as they serve a significant role in the determination of campus character. In order to further manage the storm runoff, the LRDP proposes three detention/retention areas, which will be managed for irrigation needs. Additionally, two drainages will be joined as they meet Nevada Avenue to take advantage of the existing system's capacity.

Soils

The campus lands consist of a variety of soil types, including "hot soils", a term used to denote expansive soils that are less stable when saturated. Development in these hot soil zones requires specialized structural and architectural considerations. Most of the soils are suitable for the support of spread footing foundations and slab on grade floors. Deep founda-

tions or modification of the surficial soils may be appropriate for structures more than two stories high, of heavy framing, or subject to high live loads. In the southeast portion of the campus lands, drilled pier foundations and structurally supported floors will be required due to more expansive soil and bedrock. (CTL/Thompson, Geologic and Geotechnical Investigation, 1998)

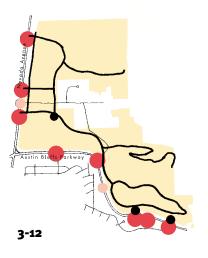
Cultural Sites

The campus contains a large number of cultural sites from varying historic and prehistoric periods. The planning for the LRDP protects the sites within the development zones, for their historic and educational significance.

Circulation

The LRDP adds an internal circulation system to accommodate the campus shuttle, public transportation, private vehicles, bicyclists, and pedestrians. This system links the various areas of the campus and facilitates access to the parking areas. Additional campus entrances are introduced to distribute





3-11 Adjacent Arterials

Two major arterials form edges for the campus, Nevada Avenue, and Austin Bluffs Parkway. While these roads provide access, they create noise and traffic impacts.

3-11 Campus Access Points

The eight primary campus access points form gateways for the campus, while distributing the traffic flows evenly through the zones.

the points of access.

Circulation spines through the campus educational centers emphasize a pedestrian environment by limiting use to pedestrians and bicyclists.

Access

The basis and operation of each existing campus access from Austin Bluffs Parkway and Nevada Avenue were evaluated in planning the facilities layout. Near and long term traffic operation scenario analysis (based on forecast site and non-site traffic) confirmed that adequate signal progression can be achieved on Nevada with the addition of two new signalized access points. The analysis designated these points as north of the Garden of the Gods /Austin Bluffs arterial intersection. The existing and proposed intersection spacing also allows signalization of the current Four Diamonds access. The spacing of signalized intersections will be resolved with the regional addition of the Nevada/Rockrimmon arterial. The provision of an easement across the railroad tract (property not owned by the

University) will be necessary to achieve the northernmost Nevada Avenue entrance.

Along Austin Bluffs, adequate operation of individual intersections and effective coordination of the signal system can be achieved. This signal coordination includes retaining the two existing access points and adding a third at Mallow Road (requiring a re-grading of Austin Bluffs Parkway to meet signalized intersection grade approach criteria). Each of the cited access points on Nevada and Austin Bluffs is existing as a curb cut, if not currently developed. Approval for new traffic signals would be at the discretion of the City of Colorado Springs.

Based on a general evaluation of the roadway geometric design, grade and curvature/grade, related sight distance problems were identified in several existing and proposed access intersections. The CITTI access, while provided with a median cut, has already been restricted by the University to right-in/right-out status. This has reduced accidents on

Austin Bluffs. Similarly, the City has requested the closing of the current Lodge construction access following completion of the library addition. This location cannot operate safely unless the geometry is improved to support better sight distance. The LRDP recommends closure of this access point to the public, while allowing access for emergency vehicles.

Parking

While the plan will foster a reasonable level of alternative modes of access, the majority of campus users will drive to campus, creating a significant demand for parking.

Recognizing the nearterm limitations of funding, the LRDP expresses the campus's student capacity as a range. This range is determined by a surface parking scheme, and a mixture of surface, decked and structured parking scheme. In addition, a strategy for parking revenue sources was generated to facilitate the development of parking structures on campus (see Workbook Section E).

The campus and region are highly dependent on the automobile, lacking significant public transit facilities. The campus's location outside of the Central Business District. heightens the challenge of connecting to the community of Colorado Springs through the use of public transportation.

3-11 Campus Landscape
The campus offers a
variety of spectacular
landscapes to be enjoyed

through recreational use.



Infrastructure

Utilities and roads will following the designated routes of vehicular internal circulation the University expands.

Connections for all utility systems are readily available on or adjacent to the campus. Existing utility easements such as the high power electric lines along Nevada Avenue and the water main adjacent to Austin Bluffs Parkway, were taken into account in the siting of new campus facilities.

Deed Restrictions

The plan recognizes the majority of the undeveloped campus lands have varying land use limitations, based on the provisions in the deeds and wills related to land transfer to the University. The parcels have restrictions and covenants in order to emphasize the use of the land for educational purposes. The LRDP utilizes the campus lands for the allowed educational uses and appropriate related functions (see Workbook Section G for a table that lists restrictions and covenants by parcel).

Funding

Limited State funding and a limited endowment requires UCCS to go beyond traditional funding sources to support campus growth. The LRDP identifies and locates facilities to maximize their potential for shared public and private facilities.

Master Plan

4

THE CRAGMOR ZONE IN TRANSITION•
THE STRATEGY•
CREATING THE CAMPUS ENVIRONMENT

Since its opening in 1965, the Cragmor zone has well-served the University. Today the demands of its users challenge the campus environment as their numbers increase and characteristics change. How UCCS addresses these needs in the Master Plan will set the future tone and direction of the University.

The Master Plan addresses the near term needs of the University of Colorado at Colorado Springs (UCCS) to serve 10,000 students. The educational facilities needed to serve these students will require nearly 700,000 gross square feet (GSF) of new construction. In addition, over 200,000 GSF of indoor sports facilities and 600 more beds of housing are required.

The need for these new facilities offers the University the opportunity to clarify the physical environment for the Cragmor zone, while rationalizing the circulation and open space system. An additional opportunity is to establish a presence for the campus in the Trembly zone as it fronts Nevada Avenue.

THE CRAGMOR ZONE IN TRANSITION

Since its opening in 1965, the Cragmor zone functioned well to serve the commuting student. Today the campus is challenged to meet the demands of its users as their numbers increase and characteristics and related needs change. How UCCS addresses these demands in the Master Plan will set the tone and direction of the University in its transition.

The Cragmor zone consists of 80 acres, of which approximately 14 acres are developed or are suitable for development These developable acres currently accommodate the majority of the existing campus development - 31 buildings, roadways, and parking. The majority of the buildings support educational use, with a recent addition of the housing complex, which includes 600 beds and related facilities. While land remains available for development, the majority of the Cragmor zone is designated as open space due to the steep terrain.

Today, the Cragmor zone falls short of being functionally and visually effective for the University. Buildings designed and built in the 1970's are becoming functionally antiquated and lack the architectural scale and detail evidenced in recently developed buildings.

Student parking, located adjacent to the campus edges in large parking lots, dominates the views in and

out of the campus. The incomplete pedestrian and vehicular road systems force pedestrians and drivers to travel through parking lots to arrive at their destinations. This is problematic from a safety point of view, and causes a sense of disorientation. There is a lack of open space elements internal to the Cragmor, which is an important aspect of all campus environments.

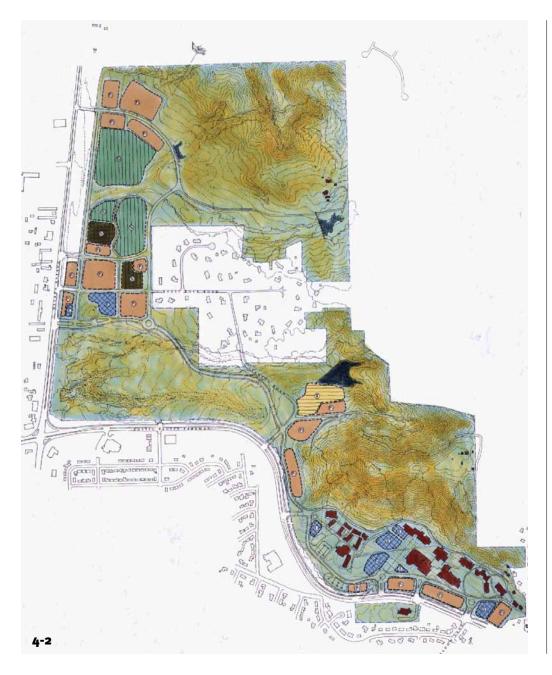
Recent construction of the residential village, and the new classroom and faculty office building, have begun to address the needs of today's UCCS students. This new construction, however, has served to exacerbate the inadequacy of the parking. New facilities, constructed in place of parking lots, have forced parking beyond the traditional confines of the immediate campus. There is a need to compensate for the loss of parking lots due to the construction.

The urgency to address new parking for the campus has resulted in the development of temporary lots, scarring the hillsides. Additionally, the new dynamic of residen-



4-1 Campus Focal Points

The Cragmor zone currently lacks a strong campus focal point.



4-2 Master Plan

The Master Plan concentrates the majority of new classrooms, labs, and faculty offices within the Cragmor zone while placing public uses within the Trembly zone. An internal roadway system will facilitate movement within the campus. Refer to Chapter 5 for a table describing the capacity of each development area.



E *Educational*



Educational with parking



Residential



Indoor Sports



Outdoor Sports



Parking Types

1 Surface

2 Decked

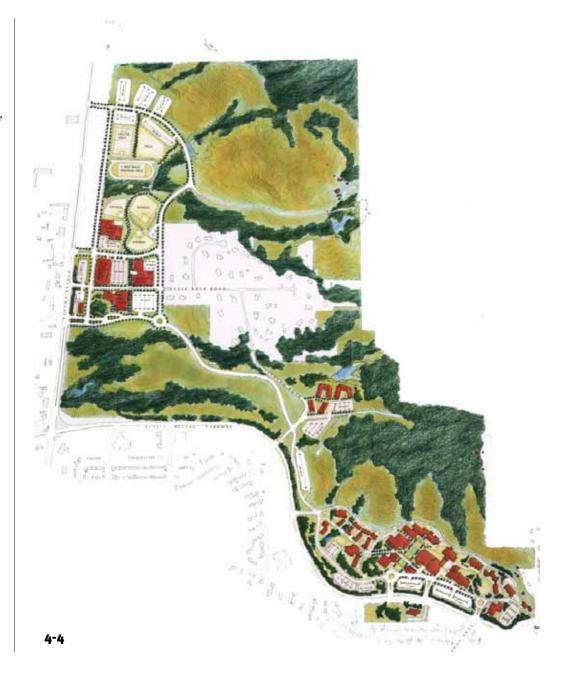
 ${\bf 3}$ Structured

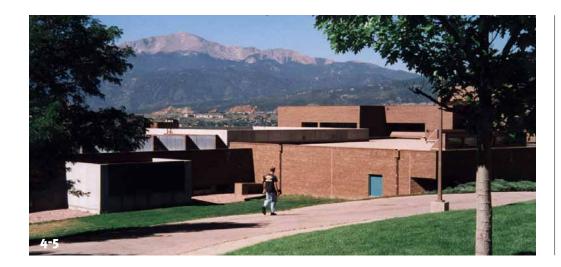
4-3 New Campus Focus A major new open space will be created within the Cragmor zone.



4-4 Master Plan Illustrative

The Master Plan Illustrative provides a more detailed view of the potential development pattern envisioned for the near-term campus improvements.





4-5 Front Range ViewsThe campus offers many spectacular views of the Front Range.

tial users on the campus has made the issue more imperative to address.

THE STRATEGY

Interviews early in the planning process with students, faculty, and staff revealed their desire to increase and enhance their interaction and proximity to one another. Faced with the option of developing beyond the existing Cragmor zone, they consistently directed the process to maximize the development on the Cragmor zone first. The strategy developed for the Master Plan addresses this issue of proximity and the opportunity to improve the Cragmor zone. New buildings will be strategically located in a manner to create a new campus image and focus, establishing an identifiable sense of place for the entire campus community.

CREATING THE CAMPUS ENVIRONMENT

The Master Plan is the first phase for the eventual buildout of the LRDP. The goal of the Master Plan is to create a comprehensive, functional, and enjoyable campus environment. To achieve this, the plan designates campus uses and facilities to enhance the intensity of development on the Cragmor zone.

Transportation

The Master Plan rationalizes campus facilities through several objectives. One objective addresses transportation, focusing on creating a logical progression toward achieving the goals of the LRDP. This entails development of logical new access points and internal roadway segments to support near-term facilities. Parking is reorganized in a singular band along the southern edge of the Cragmor zone, coordinated with distinct gateways and points of pedestrian entry. This reorganization of the campus entries, roadways, and parking facilities, promotes the formation of the academic core as a pedestrian environment.

As funding is a critical component of the LRDP goals achievement, parking could initially be constructed as surface lots to be transitioned to future structures.

Improved Campus Identity

New educational facilities cascading down from the existing engineering building will create a terraced open space and an improved identity for the University. The pedestrian spine, completed through the Cragmor zone, will facilitate circulation and further encourage campus and community interaction. The concentrated development of new facilities in conjunction with the significant new campus open space element, will foster an ease of access for the campus community. This will serve to improve the campus's identity, internally and externally.

Nevada Avenue

Additional near-term facilities will be located adjacent to Nevada Avenue in the Trembly zone, where a new campus entrance will be created. While this entrance will be supplemented with additional access points with the development of the LRDP, it will serve as the formal entrance for future campus development. The entrance is planned as a procession

4-6 Pedestrian SpineThe pedestrian spine will be completed in the Cragmor zone, and extended through the entire campus to connect the Cragmor, Meadows, and Trembly zones.



through a natural wooded ravine, ascending towards the campus development of buildings blended with the natural environment.

The new indoor recreation facilities and arts complex, adjacent to Nevada Avenue, will encourage public access. These facilities are envisioned to be used by both the campus community and the greater community of Colorado Springs, thereby forming an additional center and focus for the campus.

Parking

Parking will be accommodated predominantly by surface parking (located in areas targeted for future development) as indicated by the LRDP. The University foresees the development of one parking structure made feasible by its proximity to the arts complex and indoor sports facilities.

Residential

The Master Plan envisions a moderate amount of new residential development located just north of the Cragmor zone. In addition to being sited in a spectacular area of the campus, this resi-

dential area will begin to form a bridge to future land uses. As the campus progresses towards the LRDP buildout, the land uses will eventually connect the entire campus.

To guide the University in implementation, the Master Plan identifies 13 development areas (Chapter 5).

Implementation

5

REVIEW AND UPDATE•PHASING THE LRDP-PREPARATION OF MASTER PLANS• PLANNING AND DESIGN OBJECTIVES•NEXT STEPS

The success the Long Range Development Plan and the Master Plan for UCCS is dependent upon the success of the implementation process.

The success of achieving the goals of the Long Range Development Plan (LRDP) and the Master Plan for the University of Colorado at Colorado Springs (UCCS) is dependent upon the success of the implementation process. A successful implementation process will strategically and proactively involve interest and advisory groups to further inform University decision-makers. Physical planning and design objectives will guide the University as it develops from master plans to the LRDP and ultimately to the built environment, including its management, maintenance, and operation.

The University will periodically review and update the LRDP as well as the current and future master plans for the campus. Moreover, as a significant presence in the region, the University will seek to create strategic alliances with the City of Colorado Springs, and with the private sector, to assure the success of the plan and that of the campus context.

REVIEW AND UPDATE

The UCCS Office of Facilities Planning and Construction serves as the steward of the LRDP and master plans. As such, this office will proactively seek direction from UCCS decision-makers and advisory bodies to facilitate proper review and guidance of the plan. As appropriate, this guidance will be provided by the Board of Regents of the University of Colorado, including the University's Design Review Board.

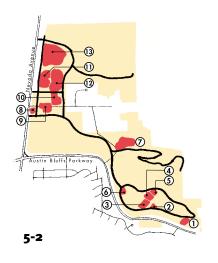
The LRDP and master plans will require regular review, evaluation, and comprehensive update, to remain viable documents guiding the decisions pertaining to UCCS's campus physical environment. Regular review is important, first to assure accuracy and currency with the built projects and, most importantly, with the University's educational vision. The University, at its discretion, but not likely more than every ten years, will undertake a thorough review and update of the LRDP. Amendments to the LRDP will take place in the intervening years.

In addition, the University will prepare master plans for the Trembly zone and the Meadows zones of the campus. These plans will be strategically linked to planning horizons based on student headcount (e.g.15,000; 20,000, etc.)

The LRDP and Master Plan updates and revisions will involve a standing Master Plan committee. The administration, along with the advice of the Design Review Board, will make periodic reviews and recommendations to the Capital Planning Committee of the Board of Regents. Further, the process would benefit by continued meetings with the surrounding community and the City of Colorado Springs.

As each project develops on the campus, UCCS should appoint an advisory committee representative of the user groups to advise the University in regards to program, design, and implementation. Additionally, a UCCS decision-making group will meet early in the process to assure each project's adherence to the goals of the LRDP and the appropriate master plan.

1	Educational	80,000		
2	Educational	30,000		
3	Educational	110,000		
4	Educational	150,000		
5	Educational	75,000		
6	Educational	46,000		
7	Redsidential		600	
8	Educational	35,000		
9	Performing Arts Center	100,000		
10	Recreation Center	120,000		
11	Athletics Center	90,000		
12	Outdoor Sports Fields			14.5
13	Physical Plant	54,000		
	Total	836,000	600	14.5



5-1 Master Plan Development Capacity

The 13 development areas address UCCS's near term needs at 10,000 headcount, and are strategically aligned to the LRDP.

5-2 Master Plan Development Locations

The development areas will serve to unify the existing Cragmor zone and establish a permanent presence on Nevada Avenue.

In summary, UCCS will appoint two committees to internally guide its decision-makers in planning and design for the campus.

LRDP and Master Plan Committee

• Permanent committee to periodically review and guide these policy documents – the LRDP and master plans and to review capital improvement projects as they relate to the LRDP and Master Plan

Capital Improvements Committee

 Temporary body appropriately organized for each major capital improvement project to review these projects as they relate to user needs.

Representatives of the Office of Facilities Planning and Construction and the UCCS administration will serve as members of these committees.

Design Review Board

All design and planning projects developed by UCCS are guided and reviewed by the Design Review Board. The Design Review Board acts as

the advisory body to review all design projects developed within the University of Colorado system. The charge to the Design Review Board includes:

- Review and advise appropriate campus officials on the facilities portion of campus master plans and development of land use plans, with particular concern for aesthetic and physical characteristics of the individual campus
- Provide direction on the early identification of projects (scope, program planning goals) for the University campus
- Review campus facilities and environs
- Review major capital improvement projects, with consideration of the complicated nature of providing architectural and landscape architectural services.

PHASING OF THE LRDP-PREPARATION OF MASTER PLANS

The LRDP, representing a range of 15,000 - 24,000 student headcount (11,600 to 18,000 FTE) will be built within an unspecified time

frame. This development includes a significant addition of educational and residential programs, as well as the completion of the campus loop road, parking facilities, and the pedestrian spine.

The LRDP recognizes four zones of campus development: Cragmor, Meadows, Trembly, and Heller. The LRDP calls for educational facilities to be developed within the Trembly and Meadows zones, with residences bridging the campus educational uses and the adjacent lands. One other significant element to be completed within the LRDP is the addition of a physical plant facility northwest of the Eagle Rock neighborhood.

This document contains the Master Plan that addresses the completion of the Cragmor zone and initial development of the Trembly zone. The preparation of master plans and guidelines for all of the campus zones will be needed to guide development beyond the current Master Plan for 10,000 student headcount.

The master plans for each zone will require comprehen-

The LRDP and Master Plan will require regular review and comprehensive updates to remain viable documents, guiding decisions pertaining to UCCS's physical environment.

5-3 Grading

The LRDP identifies areas of development to minimize grading, and to protect the campus's natural drainages. Areas of grading are indicated in green, and the red outlines identify areas of campus land uses.



The preparation of master plans and guidelines for all of the campus zones will be needed to guide development beyond the current Master Plan for 10,000 student headcount.

sive planning and design guidelines distinctive to each zone's uses and land character. The spectacular setting of the campus lands demands thoughtful and considered development as the campus grows. The character of the land should provide inspiration and guidance to development occurring upon it.

Earthwork and grading will be minimized on the site. Development adjacent to the drainages will have natural grades maintained to the extent possible. Where it is necessary to grade for buildings, parking lots, and roads, final contours will be carefully shaped to reflect the character of the particular campus zone.

Master Plan Development Areas

To guide the University in implementation, the Master Plan identifies 13 development areas. The University will utilize this information to guide development locations to meet near-term program needs.

Planning and Design Objectives

The following planning and design objectives set forth guidance for the physical development of the campus. These objectives relate to the physical planning goals of the LRDP.

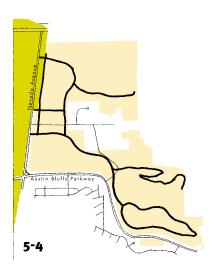
Protect and enhance the major drainages

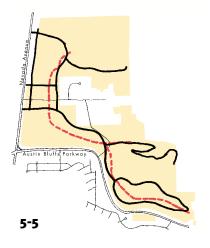
The campus ravines are areas of unique beauty, essential to the effective drainage of storm water from the basins located above the campus. Their vegetation supports wildlife and reduces erosion. Where vehicular or pedestrian paths must cross the ravines, bridges will be utilized, their design to be light and graceful to harmonize with the setting. All development along the drainages will be set back a minimum of 50 feet on either side of the drainage way centerline. Plantings will be blended with the natural terrain. The University will establish additional plantings along the drainages to create a continuous band of planting as illustrated in the LRDP.

Equally respect the landscape and buildings

The landscape has dramatic visual impact and creates continuity for UCCS. The LRDP utilizes and enhances the existing landscape to create vistas, provide for a variety of spaces, form connections between the campus zones, in addition to its use as an important educational tool. To create a strong landscape framework for the campus, the majority of existing wooded areas will be preserved and enhanced.

Moreover, the development of exterior spaces will relate to the intended program of the space. The areas adjacent to the educational use will be used more intensively than those which are on the edges of the development zones. Landscape spaces for more intensive use will be designed to provide for both active and passive activities. These spaces will occur at a variety of scales; quiet and intimate, large and active, and natural.





5-4 Targets of Opportunity

Opportunities exist to guide development along the Nevada Avenue corridor to benefit the City and the University.

5-5 Pedestrian SpineThe pedestrian spine will link the Cragmor,
Meadows, and Trembly zones.

Create a unique University image

The perimeter of a campus creates the visual image of a university. To emphasize the character of UCCS, a naturalized campus edge will be established, providing a open and vegetated image for the University. Existing vegetation will be used to the degree possible to create this edge, and the other areas will be supplemented with land-scape improvements.

Form campus - community connections

Pursue appropriate physical connections to the community adjacent to the campus. While the arterials surrounding the campus on the south and west edge of campus do not provide for direct connections to the community, the desire for these connections exists. The LRDP encourages campus - community connections along Nevada Avenue, as future development of Nevada makes this connection appropriate and feasible.

Offer inviting and effective entrances

The vehicular and pedestrian entrances to the campus are the "front door" to the University. The entrances must be equally effective for important first-impressions and everyday use. The entrances will provide for functional circulation patterns, be visually appealing, and include proper signage for wayfinding. New campus gateways will be added along Nevada Avenue, adding to those which exist along Austin Bluffs Parkway. The entrances have been strategically placed to support campus areas of educational use, allow access from two sides of the campus, and facilitate vehicular flow within the campus. The entrances will be pedestrian and vehicular friendly, creating an inviting presence for the campus and regional community.

Coordinate parking shuttle strategy and screen facilities

The success of the parking and circulation system will be determined by the success of UCCS's management of

the system. Parking will be permitted and controlled to specific areas. The LRDP purposely locates parking facilities in relation to campus entrances, educational and residential uses. Parking will intercept users and coordinate with the campus shuttle system to provide an efficient system for campus circulation. Parking facilities for the residential buildings are conveniently located for residents. While on campus, residents will use the shuttle service or pedestrian paths for campus travel. The LRDP identifies the intensity of development of each parking facility to maximize its use, funding potential, and to promote positive views into the campus.

Prioritize the pedestrian

The existing pedestrian spine will be completed through the Cragmor zone and extended through all future campus development. In addition to the pedestrian spine, the design of the campus roads provides adjacent lanes for bicyclists and pedestrians. A primary objective is to design all pedestrian

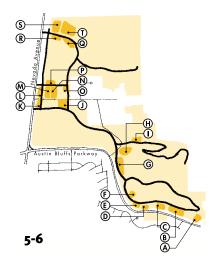
The existing pedestrian spine will be completed through the Cragmor zone and extended through all future campus development.

5-6 Master Plan Parking Locations

Parking locations are strategically located to the educational and residential centers.

5-7 Master Plan Parking Capacity

The Master Plan parking strategy utilizes a balanced combination of surface lots, decks, and structures.



No.		Parking Type	Spaces
A	New	Surface	140
В	Reconfigured	Surface	230
c	Reconfigured	Surface	153
D	New	Surface	96
E	Existing	Surface	102
F	Existing	Surface	85
G	Reconfigured	Surface	246
н	Reconfigured	Surface	205
- 1	Reconfigured	Surface	160
J	New	Surface	320
K	New	Surface	65
L	New	Surface	110
M	New	Structured	1,290
N	New	Surface	240
0	Reconfigured	Surface	120
P	New	Surface	120
Q	New	Surface	200
R	New	Surface	200
S	New	Surface	200
T	New	Surface	180
	Sasaki Associates, 2000	Total	4,462

Stewardship of the campus resources requires the University to continually inform the campus community and its neighbors. The success of these efforts will be tested daily by the satisfaction of the campus users, and the identity and pride it brings to the University, the City of Colorado Springs, and the State of Colorado.

paths, whether the spine or adjacent to campus roads, to be universally accessible. Wherever topography does not allow this, alternative means of universal access will be provided.

Use appropriate plant materials

In naturalized areas of the campus, use native and drought tolerant species for campus revegetation to conserve water and emphasize the natural character of the landscape. The removal of existing trees will be avoided except where appropriate or necessary. Layers of a tree canopy, shrubs, and grasses should be established to promote diversity, provide for wildlife habitat, and protect the land

In highly developed areas of the campus, the University will utilize plant materials appropriate to withstand the intensive use. Deciduous tree canopies will be encouraged for pedestrian areas. Use grasses in areas appropriate for "pick-up" recreation by the students. Other areas, to the most reasonable extent possible, should promote the

use of native and drought tolerant species.

Protect the night skies

The choice and placement of exterior lighting should avoid the use of point source light fixtures to minimize intrusive glare and obstruction of the views of the night skies.

Personalize building development

Building development will be sited and formed to create a personal human scale. To the degree possible, create and orient building massing to invite solar gain with the largest exposure to the southeast, and protect users from the winds, which move from the north to the south. Courtyards sited on the southern side of the building benefit from the solar gain.

NEXT STEPS

The development of the LRDP and the Master Plan entailed a broad consensus based process informed by a variety of educational, technical, social, and political concerns. The University has the opportunity to move forward in stewarding the campus's

development based on the foundation of this process and the resulting LRDP, and the Master Plan.

The LRDP and the Master Plan are not static documents. Stewardship of the campus resources will require the University to continually inform the campus community and its neighbors of the intent and the progress of the plans' implementation. Such dialogue will be useful to all parties to inform and test the plans; assuring that the direction remains current with the educational vision, goals, and objectives of UCCS.

The success of these efforts will be tested every day by the satisfaction of the campus users and the identity and pride it brings to the University, the City of Colorado Springs, and the State of Colorado.

References

A Boundary Survey of the Trembly Parcel, The Heller Parcel, The Watson Parcel, The Regents Parcel, The Railroad Lease Parcel and The North Railroad Tract for the University of Colorado at Colorado Springs; Rocky Mountain Land Services, 1998

CU - Colorado Springs University Plan; Professors Bob Keeley and Joan Ray, Co-chairs, University Planning Team, 1997

Drainage Facility and Vegetation Inventory of the North Undeveloped Campus Property for the University of Colorado at Colorado Springs; Kiowa Engineering Corporation, 1998

Intensive Cultural Resources Survey Cragmor Campus, University of Colorado at Colorado Springs; Anthropology Department, UCCS, 1999

Legal Analysis of Land Titles for Certain Parcels, University of Colorado at Colorado Springs; Norman Palermo - Attorney, 1998

Master Plan Level Geologic and Geotechnical Investigation, North and West Property of University of Colorado at Colorado Springs; CTL/Thompson Consulting Engineers, 1998

Space Needs Analysis, University of Colorado at Colorado Springs; Paulien & Associates, 2000

The Academic Master Plan; University of Colorado at Colorado Springs 1999-2004, 1999

Total Learning Environment Campus Plan; University of Colorado at Colorado Springs, 1999

University of Colorado at Colorado Springs, Campus Master Plan Design Guidelines, Acurix Design Groupe, 1996

University of Colorado at Colorado Springs, Phase 1A Inventory of Existing Land and Facilities "A User's Guide"; Design Workshop, 1998

University of Colorado at Colorado Springs, Conceptual Campus Development Plan; Lamar Kelsey, 1999

Contributors

MASTER PLAN TEAM • CHANCELLOR'S STEERING COMMITTEE • DESIGN REVIEW BOARD • BOARD OF REGENTS CAPITOL PLANNING COMMITTEE • CAMPUS COMMUNITY • MASTER PLAN CONSULTANTS

UCCS	MASTER PLAN TEAM	Richard Blade President of Faculty Assembly Jonathan Bregman Campus Planner Steve Chambers Institutional Research Howard Dutzi Structural Engineer Jim Henderson UCCS Ace Fellow, Colorado College Larry Hiatt Physical Plant Julia Hoerner Visual & Performing Arts, Professor Emeritus UCCS Tom Huber Geography & Environmental Studies, Professor Judith Rice Jones Library Lamar Kelsey Architect Kathleen King Facilities Planning & Construction Randall Kouba Admissions & Records Susan Szpyrka Public Safety William E. Meyer Student Co-executive Tom Ostenberg Facilities Planning and Construction Ken Rebman Associate Vice Chancellor- Academic Affairs Kee Warner Sociology, Associate Professor Donna Wilson President of Staff Council Robert Wonnett Student Auxiliary Services
UCCS	CHANCELLOR'S STEERING COMMITTEE	Linda Bunnell Shade • Chancellor Cleve McDaniel • Vice Chancellor for Administration & Finance John Pierce • Vice Chancellor for Academic Affairs Pam Shockley • Vice Chancellor for Student Success Martin Wood • Vice President of University Advancement Tom Ostenberg • Facilities Planning and Construction Tom Hutton • University Relations
UC	DESIGN REVIEW BOARD	John Prosser • President, Design Review Board Eldon Beck • Design Review Board Cab Childress • Design Review Board Jerry Seracuse • Design Review Board James Topping • Associate Vice President, Controller, CU System

UCCS BOARD OF REGENTS CAPITAL

PLANNING COMMITTEE

Regent Bob Sievers, Chair Regent Maureen Ediger Regent Tom Lucero

Regent Jerry Rutledge

UCCS CAMPUS COMMUNITY

Participation of Campus Resource Groups, Campus Community, and the Community-at-Large referenced in Workbook Section A

CONSULTANTS

MASTER PLAN CONSULTANTS

Sasaki Associates

Perry Chapman Janne Corneil Albert Cruz Tim Deacon Julia Monteith Robert Sabbatini Christina Wong

Thomas and Thomas

Rob Gray Jim Houk Parry Thomas

DMJM

Maureen Paz de Araujo Wes French Debbie Van Orden Clyde Pikkaraine