University of California - Davis Sacramento Campus

2010 Long Range Development Plan

November 2010
# Table of Contents

1 | Introduction ................................................................. 1  
   Purpose and Scope of the Long Range Development Plan ............. 2

2 | UC Davis Health System .................................................. 5  
   Mission ........................................................................... 5  
   Education ....................................................................... 6  
   Research ........................................................................ 7  
   Patient Care .................................................................... 8  
   Engagement ..................................................................... 9  
   Vision and Goals .......................................................... 10  
   UCDHS Facility Locations ............................................... 11  
   Sacramento Campus ........................................................ 11  
   Other Locations ............................................................ 11

3 | Sacramento Campus Planning Context ................................. 13  
   Historical Background ................................................... 13  
   Previous Planning Efforts ................................................ 18  
   Strategic Plan .................................................................. 18  
   1989 Long Range Development Plan .................................. 18  
   Other Plans .................................................................... 19  
   Existing Campus Facilities .............................................. 20  
   Hospital ......................................................................... 22  
   Ambulatory Care ............................................................ 24  

   Education and Research ..................................................... 26  
   Support Services ............................................................. 28  
   Parking Structures .......................................................... 29  
   Transportation, Circulation and Parking ......................... 30  
   Vehicular Circulation ....................................................... 30  
   Parking .......................................................................... 30  
   Transit .......................................................................... 32  
   Pedestrian and Bicycle Circulation .................................... 32  
   Transportation Demand Management (TDM) .................... 32  
   Open Space .................................................................... 34  
   Major Open Spaces ........................................................ 34  
   Building Entries and Courtyards ....................................... 34  
   Streets .......................................................................... 34  
   Campus Edges .................................................................. 35  
   Campus Entries .............................................................. 35  
   Surrounding Districts and Neighborhoods ......................... 36  
   Utilities and Infrastructure .............................................. 38  
   Environmental Considerations ......................................... 38  
   Local Factors ................................................................... 38  
   Planning for Sustainability ............................................. 39  
   Relevant City Policies and Plans ....................................... 40  
   Sacramento General Plan ............................................... 40  
   Other Plans ..................................................................... 40
Acknowledgements

This Long Range Development Plan (LRDP) has been prepared with the participation of campus and community constituents. The UC Davis Health System began the process of preparing this LRDP in 2007 with the intention of identifying how to accommodate planned growth in enrollment and facilities. Two groups were consulted throughout the process:

The Leadership Committee responsibilities included articulating long term goals and the vision for the Health System and campus; confirming conditions, goals, and priorities; reviewing and confirming options and strategies; and approving the final plan. The committee membership included:

Claire Pomeroy M.D., Dean and Vice Chancellor
Ann Madden Rice, Chief Executive Officer
Fred Meyers M.D., Executive Associate Dean
Tom Nesbitt M.D., Associate Vice Chancellor for Strategic Technologies and Alliances
William McGowan, Chief Financial Officer
Jim Goodnight, M.D., Associate Dean for Clinical Affairs and Director of the Practice Management Group.

The Senior Management Advisory Group assisted in identifying data sources and key personnel; commented on program growth, space needs, key trends and issues; and provided recommendations on land use, site organization and other LRDP issues. Its membership included:

Mike Boyd, Executive Director, Facilities Planning, Design and Construction
Shelton Duruisseaux PhD, Executive Associate Director
Sid England, Assistant Vice Chancellor of Environmental Stewardship and Sustainability
Deb Gage, Senior Clinical Operations Officer
Bonnie Hyatt, Manager, Public Affairs
Jana Katz, Assistant Dean, Inter-professional Education
Michael Pansius, Manager, Planning
Carol Robinson R.N., Associate Director
Tom Rush, Manager, Facilities Design and Construction
Robert Segar, Associate Vice Chancellor Campus Planning, Office of Resource Management and Planning
Allan Siefkin M.D., Chief Medical officer
Ted Wandzilak, Director Sponsored Programs

Other campus groups consulted during the process included the Director’s Cabinet, Council of Deans, Council of Chairs, and the Administrative Management Group. Neighborhood and city groups consulted include the UC Davis Health System Community Advisory Board, the Stockton Boulevard Business Association, and the Neighborhood Task Force.
A team of consultants assisted with the preparation of the 2010 LRDP:

**BMS Design Group, San Francisco**
Project Management, Urban Design
Barbara Maloney
Joy Glasier
Tim Hurley

**SmithGroup, San Francisco**
Architecture, Programming
David Moore
Luminita Ruva

**Fehr & Peers, Sacramento**
Transportation Planning
Jeff Clark
Kate Binning

This LRDP is organized into four chapters. These include:

*Chapter 1: Introduction*
The Introduction chapter provides a brief description of the document, outlines its purpose, and lists the participants involved.

*Chapter 2: UC Davis Health System*
This chapter provides an overview of the UC Davis Health System, including its mission, programs, locations, and services offered. The organization's vision and goals are also included.

*Chapter 3: Sacramento Campus Planning Context*
The Planning Context provides historical background of the site and the UC Davis Health System, as well as background information regarding the character of the existing facilities, infrastructure, open space, and surrounding neighborhoods.

*Chapter 4: The 2010 Long Range Development Plan*
This chapter describes the projected population and program, and articulates principles that are intended to guide the development of the site and organization of uses and supporting facilities. It also includes the Land Use Plan that will guide future growth at the Sacramento campus.
UC Davis Health System (UCDHS) is a world leader in advancing health, dedicated to translating science into hope through an education, research and patient-care enterprise that touches millions of lives throughout Northern California and beyond. The Health System is a multifaceted, multi-site institution that includes the top-ranked UC Davis School of Medicine, newly established Betty Irene Moore School of Nursing, 645-bed UC Davis Medical Center, and an extensive network of community-based primary and specialty care clinics (see Figure 1). The Health System includes on-campus facilities in Davis and Sacramento and it includes dozens of off-campus leased facilities scattered throughout the region.

The exclusive focus of the 2010 Long Range Development Plan (LRDP) is on the UC Davis Sacramento campus (Figure 2), which represents approximately 75% of all space occupied by the UC Davis Health System.

The Health System’s research and clinical enterprise has grown dramatically during the past two decades and much of this growth occurred on the UC Davis Sacramento campus. Since 1990, total square feet on the Sacramento campus increased from 1.1 million gross square feet (gsf) to approximately 3.4 million gsf. The 2025 vision for the campus anticipates continued growth to support new research initiatives,
implementation of the Betty Irene Moore School of Nursing, and ongoing development and expansion of the clinical enterprise.

The underlying objective for the 2010 LRDP is to create a framework that helps enhance the quality of the Sacramento campus environment while providing the flexibility to support program expansion over the next 15 years.

**Purpose and Scope of the Long Range Development Plan**

A LRDP is defined as a “physical development and land use plan to meet the academic and institutional objectives for a particular campus or medical center of public higher education” (Public Resources Code of the State of California Section 21080.09). It is a comprehensive document that establishes the land use patterns and relevant policies to guide implementation of facilities and infrastructure. In this case the LRDP describes the future development of the UC Davis Sacramento campus which serves as the hub of the UC Davis Health System.
Figure 2: Sacramento Campus Location Map
The mission of the UC Davis Health System is discovering and sharing knowledge to advance health. This mission is pursued through:

1) the education of physicians, nurses, scientists and other health-care professionals,
2) research into new medical knowledge and applying it to the health challenges that face the world,
3) patient care, and
4) engagement with the local and global community.
Education

The educational mission of the UC Davis Health System involves several groups: medical students, residents and fellows, the Family Nurse Practitioner/Physician Assistant (F.N.P./P.A.) students, nurses, Master of Public Health (M.P.H.) students, and practicing health-care professionals requiring continuing medical education.

The UC Davis School of Medicine has developed a national reputation for specialty and primary-care programs.

Medical students can enroll in a fully accredited master’s degree program in public health or business administration. The school also conducts a doctoral program to train physician-scientists in ways to respond to the scientific, social, ethical and political obstacles of health care.

The new Betty Irene Moore School of Nursing will foster nursing excellence through an expansive educational model that incorporates scientific rigor and immersive, inter-professional education. It will allow nursing students and medical students to learn shoulder-to-shoulder in academic courses with common standards and practice.

Physicians in the region have access to a continuing education program that presents more than 300 seminars, workshops, on-site hospital tutorials, distance learning, online classes, special lectures and one-hour weekly and monthly medical grand rounds every year.
Research

Faculty members in the School of Medicine specialize in a wide range of basic and applied research, including studies related to cancer biology, vascular biology, genetic diseases, functional genomics, health services, infectious diseases, neuroscience, nutrition, vision science, and telemedicine. As of October 2008, extramural funding for the School of Medicine topped $167 million, up 278 percent from $60 million in 2001.

More than 775 research studies were under way in School of Medicine facilities in Davis and Sacramento in June 2009, funded by federal, state, foundation, and pharmaceutical and biotechnology sources. In addition, School of Medicine faculty members engage in innovative collaborations with the Shriners Hospital for Children, the U.S. Department of Veterans Affairs (VA) Health System, U.S. Department of Agriculture Western Human Nutrition Research Center, and the Lawrence Livermore National Laboratories. Within the UC Davis community, research collaboration occurs with the California National Primate Research Center, School of Veterinary Medicine, College of Biological Sciences, College of Agricultural and Environmental Sciences, and the College of Engineering.

The dramatic growth in research funding is the result of strategic decisions to invest in the expansion of research faculty and infrastructure, as well as a relatively favorable funding environment for medical research. These investments in research reflect a commitment to become one of the nation’s top medical research centers.
Patient Care

The UC Davis Health System is at the forefront of providing access to the latest discoveries and best treatments for patients in Northern California and beyond. UCDHS includes the UC Davis Medical Center and the UC Davis Primary Care Network. With 645 licensed beds, the Medical Center serves as a regional tertiary care center and it is inland Northern California’s largest and busiest hospital. In 2008, there were approximately 34,000 inpatient admissions and 871,000 outpatient visits to the UC Davis Medical Center and its outlying clinics. The UC Davis Health System serves approximately 6 million residents in 33 counties encompassing 65,000 square miles in Northern and Central California. It plays a pivotal role in the healthcare delivery system in this region:

- UC Davis operates inland Northern California’s only Level 1 trauma center, with comprehensive adult and pediatric emergency departments. The trauma center has been instrumental in keeping Sacramento County’s preventable death rate at or below 1 percent, less than half the national average.
- With the region’s only full-service children’s hospital, UC Davis Medical Center offers a comprehensive pediatric cardiology program in Sacramento, as well as more than 30 other children’s specialties.
- UC Davis Medical Center has the only National Cancer Institute-designated cancer center serving inland Northern California, and one of the nation’s largest clinical trials programs. It offers comprehensive care to adults and children with both rare and common cancers.
- UC Davis Medical Center has ranked among U.S. News and World Report’s top hospitals in the nation for 15 consecutive years and won the Consumer Choice Award for the ninth time in a row for best overall quality and reputation among all hospitals in the Sacramento region, based on National Research Corporation consumer surveys.
Engagement

The UC Davis Health System is an international leader in the field of telemedicine. Established in 1996, the Telehealth Program began seeking technological solutions to improving health care in rural communities. Today, UC Davis partners with many community hospitals and clinics throughout Northern California to provide residents and their physicians with access to specialized medical care and education through the use of telecommunications technology.

In November 2007, the University of California, in partnership with a coalition of government agencies, health care providers and others, received a three-year, $22 million award from the Federal Communications Commission to help develop a new California Telehealth Network. The UC Davis Telehealth Program will play a key role in coordinating this statewide effort.

The Heath System shares in a variety of collaborative alliances with the Veterans Administration, Shriners Hospital and UC Davis campus colleagues. These partnerships encompass a wide range of activities from clinical training programs to cooperative research initiatives.
Vision and Goals

The UC Davis Health System aspires to be a healthcare provider of choice for its community, offering leadership and achieving excellence in medical education, state-of-the-art research and high-quality, compassionate clinical care. As a diverse community of faculty, staff, trainees and partners, UCDHS is collaborating to shape the future of medicine through innovative scientific discovery, continuous learning and state-of-the-art clinical care.

To accomplish this vision, the organization will:

Provide learning opportunities for students to attain the skills and passion they need for success in medicine.
- Administer a dynamic curriculum to train the next generation of physicians and medical researchers.
- Expand graduate and professional postgraduate training programs.
- Encourage lifelong learning.
- Integrate state-of-the-art technologies to enhance educational programs.
- Conduct education programs to ensure a well-trained workforce.

Position UC Davis as a recognized leader in innovative research and influential discoveries in focused areas of excellence.
- Furnish resources and support innovative research programs in key areas, including cancer, vascular disease, regenerative medicine, neuroscience and telemedicine.
- Emphasize collaboration and ensure a balance of excellent basic, translational and clinical research programs.
- Establish and maintain state-of-the-art research facilities and core support services, as well as responsive research management.
- Deliver comprehensive clinical research training programs to scholars, faculty and staff members.
- Support mentoring opportunities and collaborative and interdisciplinary research opportunities for faculty and scholars.

Provide high-quality, patient-oriented services that respond to the needs of our community and attract patients from around the world.
- Develop and ensure access to programs that offer high-quality compassionate care, with a special emphasis on cancer, vascular services, trauma and emergency medicine, and telemedicine.
- Optimize clinical services through an enriching academic environment and research programs.
- Respond to national obstacles in health care.
- Strive to deliver services in a cost-effective manner.

Participate as a valued member of the community by enhancing the quality of life and the economic strength of our region.
- Contribute locally and globally through academic discovery and community service.
- Enhance relations with alumni and other community partners by encouraging involvement and support of UC Davis Health System programs.
- Stimulate the economic strength of the region through employment, investment and innovative public and private partnerships.
UCDHS Facility Locations

Sacramento Campus

The Sacramento campus is home to the UC Davis Health System – the UC Davis Medical Center, UC Davis School of Medicine, and the Betty Irene Moore School of Nursing. The majority of the Health System’s activities occur on the Sacramento campus.

Other Locations

The UC Davis Medical Group is committed to providing quality primary care throughout the Sacramento region. Additional primary care facilities are located throughout the City of Sacramento, as well as in Auburn, Citrus Heights, Davis, Elk Grove, Folsom, Rancho Cordova, Rocklin, and Roseville.

In total, UCDHS leases over 830,000 square feet of off-site facilities in the Sacramento region for clinics and offices.
Historical Background

The history of the UC Davis Sacramento campus and the Health System involves the evolution of a regional hospital and the founding and growth of a medical school within the University of California.

In 1852, Sacramento County founded a hospital to meet the health care needs of the county’s poor; in 1871 the county consolidated operations at three sites onto 22 acres adjoining Stockton Boulevard. In 1876 the county hospital was destroyed by fire, but was rebuilt on the same site, opening again in 1879. Between 1928 and 1982, significant additions were made, including the North/South Wing and the East Wing (a nursing tower and dietary, outpatient and radiology departments).

UC Davis was established in 1905. It was the third University of California campus to be founded (preceded by Berkeley and San Francisco, both in 1873). One of 10 campuses of the university, UC Davis has its main campus 17 miles west of Sacramento in the town of Davis, and in the 2008-09 school year had an enrollment of 30,403 students.

In 1965, the State of California established the UC Davis School of Medicine and the first class was enrolled in 1968. UC Davis is one of five UC campuses with teaching hospitals affiliated with a medical school.
(the others being Irvine, Los Angeles, San Diego, and San Francisco). With academic facilities located on the Davis campus, the School met part of its teaching and other program needs through an affiliation agreement with the Sacramento County Hospital. In 1978, the University of California assumed ownership of the hospital and it was renamed the UC Davis Medical Center.

Over time the Medical Center site grew in size and expanded its facilities and site as shown in Figure 4 and Table 1. It acquired portions of the former California State Fairgrounds which had occupied much of the site between 1909 and 1968. Two of the fairgrounds buildings remain - Governors Hall and the Exhibition Hall (since renamed the Institute for Regenerative Cures). Other parcels were acquired so that today the campus occupies a majority of the property between Stockton Boulevard on the west, V Street on the north, Broadway on the south, and the residential neighborhoods on the east.

Today, the Sacramento campus (see Figure 5) encompasses 142 acres, more than two dozen buildings, and about 3.4 million gross square feet of facilities (excluding parking structures). With completion of the Education Building in 2007, all teaching activities of the School of Medicine remaining on the Davis campus were relocated to Sacramento. Research is the primary activity continuing on the Davis campus in a variety of facilities and disciplines.
Figure 4: Sacramento Campus Property

LEGEND
- Existing Buildings
- Property Acquired
- Date Acquired
### UC Davis Health System

<table>
<thead>
<tr>
<th>Building Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Tower</td>
<td>1982</td>
</tr>
<tr>
<td>Original Kiwanis Family House (demolished)</td>
<td>1984</td>
</tr>
<tr>
<td>Administrative Support Building</td>
<td>1987</td>
</tr>
<tr>
<td>Parking Structure I</td>
<td>1990</td>
</tr>
<tr>
<td>Trauma Nursing Unit</td>
<td>1990</td>
</tr>
<tr>
<td>Cancer Center</td>
<td>1991</td>
</tr>
<tr>
<td>Medical Records Building</td>
<td>1991</td>
</tr>
<tr>
<td>Children's Surgery Center</td>
<td>1991</td>
</tr>
<tr>
<td>Broadway Building</td>
<td>1992</td>
</tr>
<tr>
<td>Governor's Hall</td>
<td>1992 (acq)</td>
</tr>
<tr>
<td>Research Building I</td>
<td>1992</td>
</tr>
<tr>
<td>Research Building II</td>
<td>1992</td>
</tr>
<tr>
<td>Exhibition Hall (Inst. for Regenerative Cures)</td>
<td>1992 (acq)</td>
</tr>
<tr>
<td>Facilities Support Services</td>
<td>1994</td>
</tr>
<tr>
<td>Fleet Services Facility</td>
<td>1994</td>
</tr>
<tr>
<td>Patient Support Services Building</td>
<td>1995</td>
</tr>
<tr>
<td>Imaging Research Center</td>
<td>1996</td>
</tr>
<tr>
<td>Research III</td>
<td>1997</td>
</tr>
<tr>
<td>Student Fitness Center</td>
<td>1997 (acq)</td>
</tr>
<tr>
<td>Central Plant</td>
<td>1998</td>
</tr>
<tr>
<td>Ronald McDonald House</td>
<td>1998</td>
</tr>
<tr>
<td>Lawrence J. Ellison Ambulatory Care Center</td>
<td>1998</td>
</tr>
<tr>
<td>Parking Structure 2</td>
<td>1998</td>
</tr>
<tr>
<td>Sherman Building</td>
<td>1998 (acq)</td>
</tr>
<tr>
<td>Davis Tower</td>
<td>1999</td>
</tr>
<tr>
<td>Courtyard by Marriot</td>
<td>2001</td>
</tr>
<tr>
<td>M.I.N.D. Institute</td>
<td>2003</td>
</tr>
<tr>
<td>Education Building</td>
<td>2006</td>
</tr>
<tr>
<td>New Kiwanis Family House</td>
<td>2006</td>
</tr>
<tr>
<td>Same Day Surgery Center</td>
<td>2007</td>
</tr>
<tr>
<td>Surgery and Emergency Services Pavilion</td>
<td>2010</td>
</tr>
<tr>
<td>Telemedicine Resource Center</td>
<td>In Constr.</td>
</tr>
<tr>
<td>Cancer Center Phase 2</td>
<td>In Constr.</td>
</tr>
<tr>
<td>Parking Structure 3</td>
<td>Pending</td>
</tr>
</tbody>
</table>

### County Hospital

<table>
<thead>
<tr>
<th>Building Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housestaff Facility</td>
<td>1916</td>
</tr>
<tr>
<td>Pathology Building (demolished)</td>
<td>1921</td>
</tr>
<tr>
<td>Boiler Plant (demolished)</td>
<td>1925</td>
</tr>
<tr>
<td>Main Hospital</td>
<td>1929</td>
</tr>
<tr>
<td>Camellia Cottage (demolished)</td>
<td>1931</td>
</tr>
<tr>
<td>Main Hospital Additions</td>
<td>1950</td>
</tr>
<tr>
<td>Primary Care Facility (Cypress Building)</td>
<td>1954</td>
</tr>
<tr>
<td>Professional Building (demolished)</td>
<td>1963</td>
</tr>
<tr>
<td>Main Hospital Additions</td>
<td>1964</td>
</tr>
<tr>
<td>Pathology Support Building</td>
<td>1968</td>
</tr>
<tr>
<td>Pathology Support Building</td>
<td>1968</td>
</tr>
</tbody>
</table>

(acq): indicates building acquired in that year
Figure 5: Sacramento Campus 2007
Previous Planning Efforts

Strategic Plan

The UC Davis Health System Strategic Plan, completed in 2007, identifies a Framework for Success focusing on four areas of excellence: education, research, patient care, and community engagement. Four focus areas include cancer, neuroscience, infectious disease, and vascular disease.

The Framework for Success includes the following goals:
- Create a culture endorsed by faculty, students and staff that stimulates success.
- Engage faculty, students and the community by communicating aspirations and accomplishments.
- Ensure that high quality resources – talented faculty, staff and students; well-equipped physical facilities; financial resources and programmatic support – are available.

1989 Long Range Development Plan

The previous Long Range Development Plan was approved in 1989. It was completed in response to anticipated demands for growth of facilities and enrollment. Five objectives were identified:
- Improve site organization
- Improve site circulation
- Correct existing physical deficiencies
- Provide for site development that would be compatible with the neighborhood
- Allow for future growth.
The 1989 LRDP’s Land Use Plan (see Figure 6) shows the land use zones, including:

- Administrative & Parking
- Hospital
- Ambulatory Services
- Central Utilities
- Mixed Use
- Instruction & Research
- Administrative Support
- Specialized Clinical Services
- Plant and Support Services
- Future Development.

Since 1989 many changes have occurred at the Sacramento campus including major expansions to the hospital, additions of other new clinical facilities such as Ellison Ambulatory Care Center, construction of Shriners Hospital directly across X Street at Stockton Boulevard, construction of three research buildings, and the addition of several parcels of land.

The 1989 LRDP has served the Sacramento campus well since it was prepared, clearly identifying land use zones that have been successful in informing facility siting decisions. In addition, the plan established the basis for a circulation framework that has also guided the siting and configuration of new facilities and infrastructure systems.

Other Plans

Subsequent to preparation of the 1989 LRDP, several other plans and studies were prepared and have provided guidance for the implementation of facilities and site improvements. These plans included:

- 1993 Urban Design Study, which incorporated planning for 25 acres of land recently acquired and suggested organizational concepts for the campus.
- 1994 Landscape Master Plan, which expanded on concepts in the Urban Design Study, further describing approaches to the open spaces and landscapes of the campus.
- 1998 Medical Center Master Plan and 2001 Medical Center Master Plan Review Study, which explored opportunities for expanding the hospital.
- 2004 UC Davis Health Systems Parking Study, which proposed a 5-year parking plan for the campus.
Existing Campus Facilities

The Sacramento campus encompasses an area of 142 acres, with approximately 3.4 million gsf of facilities (excluding parking structures), and has five general facility types: hospital, ambulatory care, education and research, administrative and support services, and parking (see Figure 7).

The UC Davis Health System is continuing to explore additional land acquisitions which will allow the campus the flexibility to respond to long term opportunities. Potential future acquisitions might include the Marian Anderson School on 49th Street and the Department of Justice building on Broadway. If acquired, these would be the subject of an amendment to this 2010 LRDP.
Figure 7: Existing Facilities

LEGEND
- Study Area Boundary
- Hospital
- Ambulatory Care
- Education & Research
- Administrative & Support Services
- Parking Structure
- Buildings not Owned By UCDHS

SACRAMENTO CAMPUS PLANNING CONTEXT
Hospital

The hospital occupies the northwest corner of the site, in the location of the original County Hospital. It includes not only the Main Hospital, but also the Trauma Nursing Unit, Children’s Surgery Center, Cypress Building, Housestaff, Medical Records, Patient Support Services, Pathology Support Building and Police Building. Parking Structure 1 as well as various surface parking lots serve the hospital area.

The hospital is located adjacent to Stockton Boulevard and is readily accessible by patients and visitors. However, the incremental nature of its growth and development over time have resulted in a complex arrangement of hospital and supporting uses. The new Pavilion project, slated for completion in 2010, will consolidate operating rooms, surgical intensive care units, emergency department, and dietary operations. A new main entry will be included off X Street, near Stockton Boulevard and a new parking structure will be added to the west of the visitor entry, at the corner of X Street and Stockton Boulevard on the site of Parking Lot 2, accessible from the entry and drop-off area.

The hospital facilities will require a variety of replacements and/or additions in coming years. These are prompted by 1) deficiencies in older buildings in the quality of the spaces for modern medical uses, or 2) modifications that will be required to bring existing facilities up to current seismic codes.

Existing facilities in the hospital area, excluding the parking structure, total 1,887,850 gsf.
The new Pavilion project includes a new facade for the hospital facing X Street.

The hospital, viewed from X Street near Stockton Boulevard, with the Pavilion on the right.
Ambulatory Care

The ambulatory care facilities are located in the northeastern and eastern portion of the campus and encompass major clinical facilities: the Laurence J. Ellison Ambulatory Care Center, Cancer Center, M.I.N.D. Institute, Clinical Trials Modular Buildings, Imaging Research Center, Same Day Surgery Center, M.I.N.D. Institute Wet Lab, Ronald McDonald House, and Kiwanis House. Parking Structure 2 is located in this area immediately east of Ellison Ambulatory Care. The area includes various surface parking lots.

The Cancer Center is planned for expansion in the near term, and will include outpatient adult and pediatric infusion services. Longer term expansion plans include expanded radiation oncology services. In addition, it is anticipated that additional ambulatory care facilities, specialized clinics and institutes will be added over time in the vicinity of the ambulatory care facilities.

Considerations for site planning in this area include the importance of careful building siting to provide appropriate adjacencies to neighborhoods to the north and west.

The square footage of ambulatory care facilities is currently 621,250 gsf (excluding the parking structure).
The M.I.N.D. Institute Entry is accessed from 50th Street.

Ronald McDonald House provides family housing for young patients.
Education and Research

The education functions of the Sacramento campus have recently been centralized in the Education Building, completed in 2007. Located at the intersection of X and 48th Streets, the new building includes a medical library, two large auditoriums, classrooms, student support spaces, and the offices of the dean and other administrators. Now the heart of the educational activities, it also includes a campus bookstore, cafe and a small outdoor courtyard with seating suitable for lunching or studying. Nearby to the east is the Administrative Support Services Building. The telemedicine facility will be added immediately to the east, between the Education Building and the Administrative Support Services Building.

Research Buildings I, II, and III are located south of the Education Building, north of 2nd Avenue. The Institute of Regenerative Cures occupies the former State Fair Exhibition Hall adjoining Stockton Street just north of Broadway. Governors Hall, just east, is currently vacant.

The education and research facilities are surrounded by existing surface parking lots or vacant land.

The square footage of these facilities combined is 474,196 gsf.
The Administrative Support Building is located east of the Education Building on X Street.

Governor’s Hall, east of the building housing the Institute for Regenerative Cures, was built as part of the California State Fair.

Research III Building, one of three similar buildings, is located on 45th Street.

Looking north from 2nd Avenue on the parking lots and vacant lot where future education and research facilities may be located.
Support Services

There are a variety of buildings housing services that support the functions of the hospital and other facilities of the Sacramento campus. The Central Plant, Facilities Support Services Building, and Fleet Services Facility are located south of 2nd Avenue and total 145,848 gsf. There is room in this area for further expansion of the Central Plant and for consolidation of fleet, additional facilities offices, and related services. Since the major utility corridor and lines emanate from this area, these facilities will remain as located today.

Other campus support facilities are located at the periphery of the campus and include the Courtyard Hotel, located behind the Glassrock Building, south of Y Street; the Medical Student Fitness Center at Stockton Boulevard and T Street; the Sherman Building on Stockton Boulevard; and the Broadway Office Building, located on Broadway opposite 50th Street.
Parking Structures

Two parking structures are currently located on campus; the first, Parking Structure 1, lies immediately west of the hospital, and the second, Parking Structure 2, adjoins Ellison Ambulatory Care Center. These structures primarily provide patients and visitors with convenient access to key destinations.

Parking Structure 3, approved but not yet in construction, will also serve the hospital and will be located on the site of Parking Lot 2. In the future, additional structures will be developed as the campus grows and surface lots become building sites.
Transportation, Circulation and Parking

Vehicular Circulation

The Sacramento campus is well-located for regional access via the freeway system, metropolitan light rail and bus transit, and the pattern of local surface streets (see Figure 8).

The four primary vehicular entries into campus are:
1) Stockton Boulevard at Colonial Way (Parking Structure 1),
2) Stockton Boulevard at X Street,
3) Stockton Boulevard at Y Street, and
4) Broadway at 50th Street.

The major vehicular circulation routes within the campus include east-west running X and Y Streets, and north-south running 48th, 49th, and 50th Streets.

As of Fall, 2007, the estimated daily population (students, staff, faculty, patients, visitors, and others) visiting the campus is 8,136. The majority arrive by car. The current mode split for daytime employees is:
- Drive alone = 88%
- Carpool/vanpool = 4%
- Transit = 4%
- Bike = 3%
- Walk = 1%

Approximately 80 percent of employees arrive at the campus between 6:00 AM and 9:00 AM, with a similar percentage departing between 3:00 PM and 6:00 PM. Although the Medical Center is a 24-hour facility, the full-time and part-time faculty and staff exhibit arrival and departure behavior similar to other commercial establishments as verified through entry and exit counts taken at major campus parking lots. Arrival and departure characteristics of patients and visitors demonstrate a more uniform pattern, as compared to pronounced peaks of employee travel. There is a small peak of visitor travel activity between 6:00 PM and 8:00 PM corresponding with evening visiting hours.

Parking

The Sacramento campus serves a variety of population groups including patients, visitors, staff, faculty, students, medical interns and residents, and vendors. The parking needs of each of the groups present challenges in planning the campus facilities.

Parking is accommodated on the Sacramento campus in two parking structures and several surface lots (see Figure 9). The main hospital is served by Parking Structure 1, providing approximately 600 spaces. Parking Structure 3 has been approved just south of Parking Structure 1. This structure will add approximately 1,200 parking spaces near the hospital. Parking Structure 2 serves the Ellison Ambulatory Care Center and contains approximately 800 spaces. The remaining buildings on campus have adjoining surface parking lots.
Figure 8: Existing Transportation Network

LEGEND
- Study Area Boundary
- Existing Building
- Arterial Street
- Major Street
- Secondary Street
- Major Campus Entry
- Existing On-street Bike Route
- Proposed On-street Bike Route
- Proposed Off-street Bike Route
- Regional Transit Light Rail
- Regional Transit Bus Route
Transit

The Sacramento campus operates the Med-Transit shuttle service which connects various locations within the campus area. Two routes – internal and perimeter – provide service to and from the buildings and parking lots, as well as connecting to the 39th Street Light Rail Station. In addition, Med-Transit operates a shuttle between the Sacramento and Davis campuses.

Several regional transit bus lines serve the campus, with most routes running along Stockton Boulevard. The Sacramento Regional Transit District (RT) provides bus transit service on Stockton Boulevard via the 50E and 38 routes and on T Street north of the campus on the 37 route.

The Sacramento RT light rail line runs north of campus, with stops at 39th and 48th Streets. These light rail stations are less than a 1/2-mile distance (10 minute walk) from the Sacramento campus. The campus provides a shuttle bus service between the 39th Street light rail station and the main hospital.

Pedestrian and Bicycle Circulation

The Sacramento City/County Bikeway Master Plan defines a network of existing and proposed on-street and off-street bikeways throughout the city and county. Access to the campus is achieved along bicycle routes from the west on 2nd Avenue, from the north on 39th, 48th and 51st Streets, from the south along Stockton Boulevard (ends at Broadway), and from both east and west along Broadway. Within the campus, X Street and 48th, 49th and 50th Streets have on-street bike lanes, and 2nd Avenue is listed as a proposed bikeway.

Bike lockers and/or racks are located at nearly every building on the Sacramento campus.

Transportation Demand Management (TDM)

The campus currently has a robust TDM program for employees called the Commuter Choice Program. The TDM program consists of incentives for carpooling, vanpooling, riding transit, biking and walking. Over 600 employees take advantage of the Commuter Choice program. Approximately 12% of campus daytime employees use an alternative mode. Less than 1% of the patients and visitors arrive in alternative modes.
Figure 9: Existing Parking

LEGEND

- Existing Buildings
- Existing Parking Lots
- Existing Parking Structures
- Number of Parking Spaces
Open Space

Major Open Spaces
Cancer Survivors Park, completed in 2002 lies at the intersection of 2nd Avenue and Stockton Boulevard, and includes native plantings, grassy areas, seating, and sculptures. To the west of the Facilities Support Services Building, and running north/south, lies a naturalistic open space that includes native and drought-tolerant species. While not intended or designed to be heavily used, it is a welcome visual amenity and serves as an attractive pathway through this area of the campus.

Building Entries and Courtyards
Within the hospital complex, courtyards adjoining the Patient Support Services Building and the North/South Wing serve as quiet outdoor spaces for patients, visitors, and staff. Elsewhere on campus, there are courtyards and outdoor seating between the existing Research Buildings, next to the Education Building, and adjacent to both the Ellison Ambulatory Care Center and the M.I.N.D. Institute. Several of these open spaces and courtyards include significant outdoor art pieces.

The areas adjoining some building entrances, notably at the Patient Support Services Building, Ellison Ambulatory Care Center, M.I.N.D. Institute, and the Education Building include seating areas and special landscaping.

Streets
Other important open spaces on campus are associated with streets. Many campus streets have been improved with landscaped setbacks and street trees which
SACRAMENTO CAMPUS PLANNING CONTEXT

The M.I.N.D. Institute courtyard is an example of an attractive building courtyard, suited to the Sacramento climate.

The Ellison Ambulatory Care Center courtyard is an example of a well-designed courtyard used by visitors and staff.

The Facilities Support Services Building entry courtyard includes pedestrian amenities such as benches.

Campus Edges
The campus adjoins residential neighborhoods on the north and east. Along the northern edge on V Street, west of 45th Street, some campus buildings have been set back from the property line and landscaping added to create an attractive green edge. The few campus buildings that lie on the eastern edge are set back from the adjoining properties by at least 40 feet.

Stockton Boulevard and Broadway are the more urban campus edges. The Stockton edge is occupied by major buildings (the hospital, Shriners) as well as parking lots and low scale structures (the Institute for Regenerative Cures). On the secondary Broadway edge much of the frontage is occupied by other public facilities (Department of Justice, State Employment Development Offices) or their parking lots.

Campus Entries
The primary entries to the campus lie at Stockton and X, Y and 2nd Streets, and Broadway at 50th Street. The Stockton entries are generally attractive with landscaping associated with existing buildings (the UC Davis Medical Center as well as Shriners Hospital) while the Broadway entries at 50th (a primary entry) and at 49th (a secondary entry) are not as well signed or landscaped.

provide a visual amenity and shade. However, other streets are not yet improved with these plantings and consequently are not as attractive for walking in the hot summer months. While the campus continues to add street trees, it does not yet have the abundance of large shade trees that is so characteristic of Sacramento’s downtown neighborhoods.
Surrounding Districts and Neighborhoods

The 142-acre Sacramento campus is located 2.5 miles southeast of downtown Sacramento, on Stockton Boulevard between V Street and Broadway.

Forming its western boundary, Stockton Boulevard, a major urban corridor, is lined mostly with one- to three-story office buildings and a small amount of retail; taller buildings include Shriner’s Hospital and the Glassrock Building. The UC Davis Health System currently leases several buildings along the corridor.

The Elmhurst neighborhood north of V Street and northeast of campus is a residential neighborhood consisting primarily of single-family homes. To the west of Stockton Boulevard is the North Oak Park neighborhood, also largely residential, with a mix of single-family and multi-family residences. These neighborhoods can be characterized as pre-World War II traditional neighborhoods. Multi-family residential uses predominate in the Fairgrounds neighborhood to the southeast of the campus.

Between the southern edge of the campus property and Broadway are located several public institutions and offices, including Marian Anderson School, and County and State office buildings. These public office uses continue south of Broadway as well. The Broadway Office building located at Broadway and 50th Street, is owned by the UC Davis Health System and houses administrative offices.
Figure 10: Existing Off-Campus Land Uses

Source: County of Sacramento
Utilities and Infrastructure

The Sacramento campus has an extensive utility infrastructure. The central co-generation plant provides normal and emergency electrical power, chilled and hot water for heating and cooling, and process steam to most campus buildings. The Central Plant uses natural gas provided by Pacific Gas & Electric Company. The Plant is designed to accommodate some growth in utility demand. The campus owns and operates its own telecommunications infrastructure.

Sanitary sewer and storm water drainage systems are connected to the City of Sacramento utility systems. Solid waste is separated into appropriate waste streams. Medical waste and hazardous chemical and radioactive waste is packaged and labeled, and categorized for shipment to appropriate off-campus disposal sites.

Potable water is provided by connection to the City of Sacramento domestic water system. The campus owns and operates two wells which supply irrigation water to all campus grounds.

Environmental Considerations

Local Factors

Climate

Sacramento has a Mediterranean climate characterized by cool, wet winters and hot, dry summers. Humidity is typically high during winter but low during summer. The average year has 73 days with a high over 90 °F. During summer, the delta breeze blowing from the San Francisco Bay Area into the Central Valley cools down the region during the evening. Rain tends to fall only between mid-October and April, with an average of 58 days of annual rain, and resulting in an average yearly precipitation of 17.93 inches. On average, 96 days of the year have a fog, mostly in the morning. The fog season runs from October to March.

Biological Resources

The Sacramento campus is almost entirely developed with either buildings, parking lots, roads, or landscaped areas, leaving no suitable habitat for sensitive species and no wetlands. While it is unlikely that the site is used as a migratory wildlife corridor, trees on the site provide suitable nesting habitat for common birds known to occur in the area. In addition, the City of Sacramento recommends retention of trees and protection of “heritage” trees. Ongoing campus activities to protect trees and to increase tree plantings throughout campus are supportive of these conditions.
Planning for Sustainability

*University of California Policy on Sustainable Practices*

The University of California Policy on Sustainable Practices is a system-wide commitment to minimize the University’s impact on the environment and reduce the University’s dependence on non-renewable energy sources. In compliance with the policy, UC Davis is preparing (2009) a Climate Action Plan, which will include both the Davis and Sacramento campuses.

The University of California Policy on Sustainable Practices promotes the principles of energy efficiency and sustainability in the following areas:

- Green Building Design
- Clean Energy Standard
- Climate Protection Practices
- Sustainable Transportation Practices
- Sustainable Operations
- Recycling and Waste Management
- Environmentally Preferable Purchasing Practices
- Food.

*Sacramento 2030 General Plan Goals and Policies on Sustainability*

The Sacramento 2030 General Plan places a strong emphasis on sustainability. The General Plan is based on the city’s Smart Growth principles, and features goals and policies that foster sustainable development and address climate change. These goals and policies run through each of the General Plan’s ten citywide elements.

Some of the goals and policies most relevant to the UC Davis Sacramento Campus LRDP are listed below. Note that this is not an exhaustive list but rather a sampling of those most relevant to the LRDP.

- Sustainable Development Patterns
- Sustainable Building Practices
- Heat Island Effect
- Transportation Demand Management
- Integrated Pedestrian System
- Water Conservation Programs
- Zero Waste
- Renewable Energy
- Energy Efficiency Improvements
- Stormwater Best Management Practices (BMPs)
- Urban Forest.
Relevant City Policies and Plans

The University of California, as a state institution, functions as its own land use planning agency and is not required to conform to local planning regulations. However, like other UC campuses, the Sacramento campus endeavors to work cooperatively with local agencies in order to be a positive presence in the City of Sacramento.

Sacramento General Plan
The 2030 General Plan sets a new direction for the future of Sacramento, based on the city’s Smart Growth Principles. Between now and 2030, the City of Sacramento is expected to grow by approximately 200,000 residents and 150,000 jobs. The 2030 General Plan promotes Smart Growth as a way to accommodate this population increase while improving the quality of life in the city. The Sacramento 2030 General Plan was adopted by the City Council on March 3, 2009. The guiding vision of the General Plan is that Sacramento will be the most livable city in America. Six themes underlie and support the vision. The six themes are:
- Making Great Places
- Growing Smarter
- Maintaining a Vibrant Economy
- Creating a Healthy City
- Living Lightly-Reducing Our Carbon Footprint
- Developing a Sustainable Future.

The General Plan emphasizes compact growth, infill development, and intensifying development near transit and mixed-used activity centers. It endorses land use patterns and densities that foster pedestrian and bicycle use, and takes steps to reduce carbon emissions that contribute to climate change. The General Plan emphasizes that planning and developing a truly sustainable future depends on a healthy environment, strong economy and social well-being of Sacramento residents.

Acknowledging the scale and intensity of activity on the Sacramento Campus, the General Plan has designated the campus an “Urban Center Low” land use. This land use designation is applicable to smaller urban centers found throughout the city. Typically located near light rail stations and/or arterials, these areas are encouraged to have a mix of employment-intensive uses, retail and housing.

The General Plan designates the Stockton Boulevard Corridor as “Urban Corridor Low.” This policy is intended to encourage “multistory structures and more intense uses at major intersections, nodes of intense mixed-use development that are bordered by lower-intensity single-use residential, retail, service, and office uses.” Guidelines for this type of corridor suggest an urban form with buildings aligned along the sidewalk and with entries directly on the street frontage, building heights ranging from two to six stories, and pedestrian-oriented uses such as sidewalk cafes located at street level. Allowed uses include horizontal and vertical mixed use, as well as single use retail, service, office and residential.

Other Plans
Several studies and plans have been commissioned by the City to improve the condition of the Stockton
Boulevard and Broadway corridors. These have been led by the Sacramento Housing and Redevelopment Agency and include the Broadway/Stockton Urban Design Plan completed in 1998, and the Broadway + Stockton Boulevard Beautification Master Plan, completed in 2001. The plans include conceptual urban design, infrastructure investment and land use options for Broadway and Stockton Boulevard in the Oak Park and Stockton Redevelopment areas, as well as detailed streetscape proposals for the major corridors.

All of the plans noted are supportive of and consistent with existing campus land uses and with the further intensification of programs on the Sacramento campus.
This 2010 Long Range Development Plan (LRDP) for the UC Davis Sacramento campus, which provides the primary setting for the UC Davis Health System, builds upon the plans and strategies embodied in the 1989 LRDP and other, subsequent planning. Importantly, it shares the basic goals of that previous LRDP: to provide a flexible, attractive campus environment capable of accommodating current and future operations and facilities associated with a world-class medical institution.

The 2010 LRDP is intended to provide a general land use plan that will allow the UC Davis Health System to achieve its education, clinical, research and engagement goals. It is also intended to help direct the ongoing creation of an attractive campus environment, which is mindful of local and global issues including sustainability.

This section includes:
1) a discussion of planned program and enrollment growth,
2) planning principles and concepts that will guide planning for future development, and
3) a land use plan with land use definitions.
Program Development

The following is a brief summary of the goals and underlying assumptions regarding the projected growth of the health services programs at the Sacramento campus between 2010 and 2025. Realization of these goals will allow UCDHS to “shape the future of medicine through innovative scientific discovery, continuous learning, and state-of-the-art clinical care.” (See page 10 vision and goals.)

**GOAL #1: Provide the facilities and infrastructure required to facilitate continued growth of the research enterprise**

During the past five years, research funding obtained by UC Davis School of Medicine has more than doubled. This dynamic growth is the by-product of strategic investments in priority areas. To sustain the level of research activity and to achieve national prominence, investments will be made in people, facilities, equipment and information technology infrastructure in key areas, including the UC Davis Cancer Center, the Institute for Regenerative Cures, and the Clinical and Translational Science Center. At the same time, the organization will continue the development of Sacramento-based research programs with strong collaborative linkages to the Davis campus basic science departments, schools and colleges.

Long range plans at the Sacramento campus include the phased construction of approximately 560,000 assignable square feet (asf) of new research space. This would support approximately 250 research-focused faculty and 2,200 research assistants, technicians, PhDs, graduate students and support staff.

**GOAL #2: Support growth in medical student enrollment and the implementation of major educational initiatives, such as the School of Nursing and the School of Public Health**

**Medical Student Enrollment**

The America Association of Medical Colleges projects a shortage of 124,000 physicians nationwide by 2025. Growth in future demand could double if visit rates by age continue to increase at the same pace they have in recent years—with the greatest growth in utilization among those 75+ years of age. A report prepared by the Field Research Corporation (May 2006) entitled “The California Health Care Workforce of Tomorrow” projected that California will face a shortfall of approximately 17,000 doctors by 2015 due to retirements and the aging of the physician workforce.

Another indicator of shortages is the poor geographic distribution of health care professionals. Many urban neighborhoods and most rural communities have major difficulties recruiting and retaining adequate numbers of health care personnel to meet local needs. Fifty-one of California’s 58 counties have at least one designated Health Professional Shortage Area (HPSA). The poor, the chronically ill, the un- or under-insured and those living in HPSAs are particularly hard hit by lack of access to quality, affordable health care.

In 2008, UC Davis expanded its average class size from 93 students to 105 students as part of the Rural PRIME initiative. Rural-PRIME is part of the University of California’s “PRograms In Medical Education” or PRIME, and is designed to produce physician leaders who are trained in and committed to helping California’s underserved rural communities.
One of five programs within the University of California designed to address medically underserved populations in California, the UC Davis Rural-PRIME was created to train the best and the brightest medical students for a fulfilling career in a rural community. It is an opportunity that offers a range of experiences, from public health and community service to the use of leading-edge medical technologies like telemedicine. Rural-PRIME creates a new model for non-urban medical practice, one that utilizes advanced technologies to provide up-to-date health care knowledge while also preserving the positive aspects of smaller, more remote clinics.

Further increases in medical student enrollment must be approved by the UC Regents and the California Legislature. For planning purposes, UC Davis plans to increase the average class size to 150 students by 2025 to address the need for additional physicians in California and elsewhere. In conjunction with the projected increase in medical students, the School of Medicine has assumed that there will be a proportional increase in the number of interns, residents and fellows.

Betty Irene Moore School of Nursing
California’s nursing workforce crisis is serious and growing. The state currently ranks 49th in the nation in the number of nurses per capita. In 2005, predictions estimated that California would have a shortfall of 60,000 registered nurses by 2020. A more recent federal study issued in April 2006 predicts that California will face a shortfall of 116,600 by 2020. A major barrier to increasing nursing school enrollments statewide is the significant shortage of nursing faculty. These shortages are expected to increase as growing numbers of current faculty plan to retire over the next 10 years.

With these challenges in mind, the Betty Irene Moore School of Nursing at the University of California, Davis, was established. This new program is dedicated to producing nurse leaders of the future capable of improving patient care, patient safety, and health outcomes. The vision is to create a school that will leverage UC Davis’ strength in intensive and immersive interprofessional curriculum, resulting in nurse graduates who are an expansive force of change in health care. Additional educational and faculty office facilities will be required as the nursing program is rolled out.

Current projections anticipate that total enrollment will top out at approximately 450 students. Of these, an average of approximately 350 students will be located on the UC Davis Sacramento campus and the balance will be in Davis and/or elsewhere for preliminary coursework.

School of Public Health
Shortages in the number of public health professionals have become particularly acute. The greatest demand, particularly in rural counties, is for epidemiologists, health educators, public health nurses, environmental health scientists, clinicians, microbiologists, program administrators, and nutritionists. In June 2005, the University-wide Health Sciences Committee issued its full report entitled “Health Sciences Education: Workforce Needs and Enrollment Planning.”

A follow-up to this initial report entitled “A Compelling Case for Growth” was submitted to President Dynes by the Advisory Council on Future Growth in the Health
The Health System will continue to evaluate the potential implications of developing a School for Public Health on or near the UC Davis Sacramento campus. For planning purposes, it has been assumed that the School of Public Health would be comparable in size to the projected enrollment of the School of Nursing and that it should be sited in the Education and Research area.

GOAL# 3: Provide additional inpatient and outpatient capacity to meet community health care needs and to support the organization’s teaching, research and community engagement missions

For the School of Medicine to continue to contribute to the evolution of academic medicine, clinical program scope and services offered by the Health System must continue to progress in concert with academic program requirements, advances in technology and changes in the health care needs of the UCDHS service area.

In aggregate, the population of the 33-county service area of the Health System is projected to grow from 6.1 million in 2009 to 8.1 million by 2025, an increase of 32%. For planning purposes, the Health System has assumed that the demand for inpatient and outpatient services will increase at the same rate as the population of its regional service area. This translates to an annualized growth rate of approximately 1.8%. While this is somewhat faster than the 1.1% historical annual growth rate for inpatient services between 1989 and 2009, the intent is to provide sufficient flexibility for the organization to achieve increases in market share for selected inpatient and outpatient services identified in the organization’s strategic plan (e.g., Cancer and Vascular Medicine).
Summary Program and Population Projections

The following tables and figure illustrate the anticipated growth in population (Table 2) and program (Table 3, Figure 11) currently envisioned by the Health System at the Sacramento campus as needed to support the program growth described in the preceding section.

Existing and Proposed Facilities Space

Population growth is shown for the Health System population, including:

• Students
• Faculty and academic personnel
• Interns, residents and fellows
• Staff.

Growth projections are also shown for visitors, who include:

• Inpatient visits
• Outpatient visits
• Emergency visits
• Visitors and others, such as attendants, vendors and volunteers.

Space projections are shown by function (hospital, ambulatory care, etc.). Included are information and projections of existing space to remain, existing space/buildings to be demolished due to obsolescence, and projected needs for new space/buildings to support program growth and change.
Table 2: Existing and Projected Average Daily Population

<table>
<thead>
<tr>
<th></th>
<th>Existing (2008/9)</th>
<th>Projected Increase</th>
<th>Projected (2025)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health System Population</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCDHS Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5,517</td>
<td>1,747</td>
<td>7,264</td>
</tr>
<tr>
<td><strong>Faculty &amp; Other Academic Personnel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (Includes increased research staffing)</td>
<td>1,013</td>
<td>2,146</td>
<td>3,159</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>435</td>
<td>1,075</td>
<td>1,510</td>
</tr>
<tr>
<td><strong>Interns, Residents &amp; Fellows</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>628</td>
<td>202</td>
<td>830</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>7593</td>
<td>5170</td>
<td>12763</td>
</tr>
</tbody>
</table>

**Visitors**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>486</td>
<td>154</td>
<td>640</td>
</tr>
<tr>
<td><strong>Outpatient Visits (UC Davis Sacramento Campus only)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (Annual visits/248 days)</td>
<td>2,520</td>
<td>1,129</td>
<td>3,649</td>
</tr>
<tr>
<td><strong>Emergency Visits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (Annual visits/365 days)</td>
<td>154</td>
<td>48</td>
<td>202</td>
</tr>
<tr>
<td><strong>Attendents &amp; Visitors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (1 visitor/inpatient + 0.5 attendant/outpatient)</td>
<td>1,746</td>
<td>719</td>
<td>2,465</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>4,906</td>
<td>2,050</td>
<td>6,956</td>
</tr>
<tr>
<td><strong>Total Average Daily Campus Population</strong></td>
<td>12,499</td>
<td>7,220</td>
<td>19,719</td>
</tr>
</tbody>
</table>
### Table 3: 2025 LRDP Facilities Space Projections

<table>
<thead>
<tr>
<th>FACILITIES</th>
<th>2010 EXISTING SPACE</th>
<th>PROJECTED INCREASE</th>
<th>2025 SPACE PROJECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Space</td>
<td>1,887,850</td>
<td>1,887,850</td>
<td></td>
</tr>
<tr>
<td>Existing Space to be Demolished</td>
<td>(527,960)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Space</td>
<td>1,700,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal for Hospital Zone</td>
<td>1,887,850</td>
<td>1,172,040</td>
<td>3,059,890</td>
</tr>
<tr>
<td><strong>Ambulatory Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Space</td>
<td>621,250</td>
<td>621,250</td>
<td></td>
</tr>
<tr>
<td>Existing Space to be Demolished</td>
<td>(18,912)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Space</td>
<td>798,995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal for Ambulatory Care Facilities</td>
<td>621,250</td>
<td>780,083</td>
<td>1,401,333</td>
</tr>
<tr>
<td><strong>Education and Research</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Space</td>
<td>474,196</td>
<td>474,196</td>
<td></td>
</tr>
<tr>
<td>Existing Space to be Demolished</td>
<td>(6,303)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Space</td>
<td>1,146,379</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal for Education and Research Facilities</td>
<td>474,196</td>
<td>1,140,076</td>
<td>1,614,272</td>
</tr>
<tr>
<td><strong>Support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Space</td>
<td>407,867</td>
<td>407,867</td>
<td></td>
</tr>
<tr>
<td>Existing Space to be Demolished</td>
<td>(3,867)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Space</td>
<td>91,303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal for Support Facilities</td>
<td>407,867</td>
<td>87,436</td>
<td>495,303</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>3,391,163</td>
<td>3,179,635</td>
<td>6,570,798</td>
</tr>
<tr>
<td><strong>Parking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Parking Spaces (including leased)</td>
<td>6,389</td>
<td>6,389</td>
<td></td>
</tr>
<tr>
<td>Parking Spaces to be Demolished or Abandoned (Not Leased)</td>
<td>(2,429)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Parking Spaces</td>
<td>5,975</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Parking Spaces</strong></td>
<td>6,389</td>
<td>3,546</td>
<td>9,935</td>
</tr>
</tbody>
</table>
Planning Principles

Expansion of the Sacramento campus will require that functional considerations that are particularly crucial to the efficient operations of the hospital and clinics, be balanced with the opportunity to create a more attractive Health System campus that is a good neighbor and important institution within the Sacramento area.

Six planning principles have been identified and are illustrated on the following pages. These principles are intended to guide physical development of infrastructure and facilities. Their primary goal is to:

Create a Framework that Improves the Quality of the Campus Environment while Providing the Flexibility to Support Significant Growth

The planning principles are also intended to:

- Reinforce the Health System’s image as a world-class academic health center and support the vision and strategic plan.
- Provide an environment that helps attract and retain a diverse mix of patients and outstanding faculty, students and staff.
- Create a more campus-like feeling where appropriate with quality open space.
- Respect neighborhood concerns.
- Identify and mitigate adverse environmental effects.
- Complement and support the vision for the City of Sacramento.

Principle #1:  
Ensure Appropriate Facilities Adjacencies

Facility adjacencies help create efficiencies in operations and in the movement of patients, visitors, students, faculty, and staff. Recognizing existing major building investments, new facilities will be located in reasonable proximity to the current primary UCDHS mission-related uses (see Figure 12):

- Education and Research
- Hospital
- Ambulatory Care.

Education and Research

Education and research facilities are central to the mission of the Sacramento campus and currently include the Education Building, the three research buildings, the Institute for Regenerative Cures, and the Administrative Support Building. Significant growth is anticipated in these types of uses, with new facilities anticipated for new schools as well as substantial growth in research space. The education function will remain at the center of the Sacramento campus site, generally bounded by X, 47th, and 48th Streets and 2nd Avenue, providing good access to the hospital and ambulatory care facilities. To the south there is significant land available for future research facilities, which will enjoy good proximity to the existing research buildings and the teaching facilities of the academic uses. Other uses that would be appropriate in proximity to education and research would be those that support daily student life, and provide amenities for the entire campus population, such as food services and dining, bookstore, lounges and recreation facilities.
Hospital

The hospital is projected to undergo substantial renovation and growth in the short to long term. Maintaining critical operations and adjacencies is particularly important for the hospital activities and will require detailed study of programming and phasing. The current hospital, with the recently completed Pavilion, occupies a compact site surrounded largely by parking, service roads and various small support structures. It is anticipated that the hospital will be able to expand strategically within this general area, thus maintaining crucial adjacencies. The addition of Parking Structure 3 directly to the southwest of the primary hospital entry will ensure that visitors and patients have convenient access.

Ambulatory Care

Ambulatory care uses at the Sacramento campus include the Cancer Center, Ellison Ambulatory Care Center, the M.I.N.D. Institute, Ronald McDonald House, and the Kiwanis Family House. These facilities occupy sites that wrap from the hospital around the northeast and east sides of the campus. Throughout this area there is sufficient land to accommodate additional facilities of this type as well as staff and visitor parking. Sites in this area are easily accessed by the main internal roads. New facilities will include off-site leased clinics and offices that will be returned to the Sacramento campus, and well as future ambulatory care facilities and allied institutes.
Principle #2: Improve Campus Open Space and Landscape Character

While the Sacramento campus has a number of attractive open spaces and landscaped areas, the campus falls short of being the welcoming environment that it might be. For instance, the campus lacks a large green quad or other major open space typically associated with an academic institution. Also, the site does not yet capture the special nature of “the City of Trees” that characterizes the City of Sacramento, especially the downtown, State Capitol area, and downtown neighborhoods.

The planned program growth at the campus provides an excellent opportunity to improve the open space character of the campus (see Figure 13). Components will include:

- Improve the open space environment to create a comfortable, more campus-like character in the Education and Research District.
- Create a large, multi-purpose open space in the Education and Research District, suitable for a variety of uses such as graduation ceremonies and informal recreation.
- Create two new pedestrian malls connecting primary destinations of students, faculty and staff: the hospital, the education and research area, and the ambulatory care facilities.
- Continue strong landscape treatment of major roads to provide shaded sidewalks for pedestrians and an image similar to the great Sacramento downtown streets.
- Establish a landscape edge around the campus that will buffer neighbors from campus facilities and operations and provide a green campus image appropriate to a campus of the University of California.

Figure 13: Principle #2 Improve Campus Open Space and Landscape Character
Principle #3: Provide Convenient Access to and within the Campus

Providing convenient access to and connections within the campus is crucially important to the successful operations of UCDHS.

Although the campus is well-served by transit (light rail, bus and shuttle), use of these modes is not always possible. Patients and visitors are the most difficult group to encourage using alternative modes of travel. This is generally because the population changes frequently, arrives and leaves at different times, and can come from outside the Sacramento region. The staff, students, and faculty can be influenced to adjust their mode of travel and there are programs in place to reduce single occupant travel to campus.

As a result, for patients in particular, easily accessible, conveniently located parking is essential. In order to provide this access, patient destinations, whether at the hospital or in the clinics and other care facilities on the campus, will be readily identifiable and accessible via the Health Sciences Boulevard, comprising X Street, 48th and 50th Streets. Major destinations will face this boulevard, with patient drop-offs convenient to primary building entries (see Figure 14). Parking will be readily identifiable and easily accessed nearby.

Within the areas of education and research, parking will move to the periphery in order to support a more pedestrian-friendly, auto-free environment similar to a traditional higher education campus. This will allow the creation of new open spaces - a quad and malls - within this zone.
Service access will be provided away from primary pedestrian spaces in order to minimize conflicts with pedestrians.

The campus will continue to incorporate alternate means of transportation to and from the campus with a particular focus on the commute habits of faculty, staff, and students. The campus will support improved transportation options such as working with RT to improve bus and light rail service to and near the campus, and identify potential improvements to campus-operated shuttle systems. The campus will implement appropriate alternate mode use incentives such as discounted transit passes; carpool matching services; preferential parking for carpools, vanpools and low emissions vehicles; and flexible car share programs for the campus. The campus will also implement parking management policies, such as pricing, to encourage use of alternate modes. Finally the campus will encourage students in particular to live in close proximity of the campus to facilitate daily commuting.

**Principle #4: Improve Pedestrian Connections throughout the Campus**

All areas of the campus will be improved for better pedestrian access. The open space system of the connecting malls will provide the backbone of the connection system. Pedestrian walkways and tree-lined sidewalks will provide additional connections and will ensure easy and efficient ways to move throughout the campus without needing to drive (see Figure 15).

These pedestrian connections will be treated consistent
Principle #5: Provide Attractive Campus Entries and Edges

Patient access will be focused at two street entry points: Stockton Boulevard and X Street, and Broadway and 50th Street (see Figure 16). These entries will provide access to the Health Sciences Boulevard, and will simplify access for patients at all clinical destinations. Access to parking for the hospital will also be from Stockton Boulevard and from the hospital main entry drop-off area.

In order to minimize impacts on surrounding neighborhoods, access to the campus for general traffic from V Street will be limited to only one location at 49th Street. Other existing entry points at 45th and 48th Streets will be closed to general traffic with only service or emergency vehicles allowed.

Students, faculty and staff will access the campus from the two patient entries, but will also be able to with the prevailing downtown Sacramento landscape of shade trees, with low water use but attractive groundcovers and other plantings.

Building entries will be aligned to support these pedestrian connections and to make using them the most efficient way to move around campus. Amenities such as benches, good lighting and signage will support this system.

As noted in the preceding section, patient access will be designed to be clear and convenient, requiring minimal walking and with parking located in close proximity to the hospital and other destinations.

Principle #5: Provide Attractive Campus Entries and Edges

Patient access will be focused at two street entry points: Stockton Boulevard and X Street, and Broadway and 50th Street (see Figure 16). These entries will provide access to the Health Sciences Boulevard, and will simplify access for patients at all clinical destinations. Access to parking for the hospital will also be from Stockton Boulevard and from the hospital main entry drop-off area.

In order to minimize impacts on surrounding neighborhoods, access to the campus for general traffic from V Street will be limited to only one location at 49th Street. Other existing entry points at 45th and 48th Streets will be closed to general traffic with only service or emergency vehicles allowed.

Students, faculty and staff will access the campus from the two patient entries, but will also be able to
enter more directly to destinations and parking along Stockton Boulevard at 2nd Avenue, at or near 3rd and 4th Avenues, and at 49th Street and Broadway. This will help to reduce traffic within the campus and support a pedestrian orientation.

The Sacramento campus directly adjoins residential neighborhoods along the north and east sides. On these edges, wherever possible, the campus will maintain a landscape buffer. As explained in the following 2010 Land Use Plan section, buildings on the campus edges will be limited in height. In combination with the landscaped setbacks, this will provide a visual and physical transition from the smaller-scaled residential neighborhoods to the campus. In the Hospital land use along V Street, some existing buildings currently within the 40 feet buffer may remain.

Principle #6: Continue to Plan and Operate a Sustainable Campus

The University of California has been a leader in its sustainability practices. The Board of Regents directed the UC President to create a Policy on Sustainable Practices in 2003 which set ambitious goals to advance environmental practices. This policy continues to be updated. Recent reporting indicates that UC has achieved great advances in important areas of energy and waste. In addition UC has received recognition as a national leader in the full spectrum of sustainability areas and is considered among the top tier of “green universities.” The University is committed to developing a long term strategy for meeting the State’s goal of a reduction of greenhouse gas (GHG) emissions to 2000 levels by 2014, is further pursuing the goal of reducing GHG emissions to 1990 levels by 2020, and is developing an action plan for becoming carbon neutral. UC Davis is preparing a Climate Action Plan for its Davis and Sacramento campuses. This plan will set specific targets and timelines for sustainable planning, design and operations. In the meantime, the Sacramento campus will continue its efforts to meet or exceed goals set by the Policy, through actions such as building design and operations, support of alternate modes of transportation, and the use of drought tolerant and native plant materials.

Use of photovoltaics and other renewable energy sources will help reduce GHG emissions.
2010 LRDP Land Use Plan

The Land Use Plan (Figure 17) is the embodiment of the principles described earlier, and indicates the proposed pattern of development of the Sacramento campus in coming years. Five primary land use categories are shown and are intended to indicate the predominant use in each area; secondary or support uses are allowable in these areas. Each land use category shown in the plan is defined below.

Education and Research

This land use includes two highly interrelated uses: the academic heart of UCDHS and the laboratories that support the research endeavor. The area includes various existing and planned schools (Medicine, Nursing and Public Health), which include classrooms, lecture halls and offices. The research laboratories will consist of labs, offices and associated support space. Ancillary support facilities, such as administration, dining, recreation, and open space are also allowed in this land use.

Building heights will be limited to five stories above grade.

Hospital

The Hospital land use encompasses the area currently occupied by the hospital and includes adequate land area for long term expansion of that facility. The hospital area will continue to provide for patient care, nursing, clinical services, surgery and affiliated uses. In addition, ancillary support uses, such as administrative, police and security, open spaces, utility structures, dining and food service, and patient and visitor lounges are allowed in this land use area.

The Hospital land use will include a limited amount of surface parking. Two parking structures will immediately adjoin the hospital, providing convenient access for patients and visitors.

The landscape buffer along V street in the hospital area will be a minimum of 40 feet. Beyond the 40 foot buffer, building heights will be limited to three stories to a distance of 100 feet from the property line. Heights may increase to six stories beyond 100 feet from the property line, and 14 stories beyond 180 feet from the property line. Some existing buildings currently within the 40 feet buffer may remain.

Ambulatory Care

The Ambulatory Care land use includes a range of facilities oriented to the daytime or outpatient visitor. Existing uses include the Cancer Center, Ellison Ambulatory Care Center, and the M.I.N.D. Institute. New ambulatory care facilities and other clinical, research uses are projected for this area.

Complementary uses such as temporary family stay facilities (Ronald McDonald and Kiwanis Houses), skilled nursing facilities, and assisted living facilities are allowed. In the event that UCDHS finds the development of student, faculty and staff housing to be feasible and desirable, such housing could be located in the ambulatory care area.

Over time, existing surface parking will be consolidated into nearby structures, although several large parking lots are likely to remain in this area.
Along the residential edges of the ambulatory care area, the landscape buffer will be a minimum of 40 feet. Beyond the buffer, building heights will be limited to three stories above grade to a distance of 100 feet from the property line. Heights may increase to five stories beyond 100 feet from the property line.

Support Services

Support uses include those facilities that support the day-to-day operations of the Sacramento campus. Allowed uses in the support land use zone include utility structures, administrative offices, hotel, and fleet maintenance, repair and storage. Current facilities include the Central Plant, the Facilities Support Services Building, Fleet Services, the Courtyard Hotel, the Stormwater Storage building, and administrative services and administrative uses (the Broadway Office Building).

Surface parking may continue in this area or may be consolidated into nearby parking structures.

Building heights will be limited to four stories above grade.

Major Open Space

The Major Open Space land use designation encompasses only major malls and quads envisioned for the Sacramento campus; smaller courtyards, plazas and quads would be developed throughout the campus in conjunction with new building development. Major open spaces are designated as a separate land use zone to indicate the importance of their location and approximate configuration.

Primary open spaces will include the main quad, located in the center of the education and research area as well as two major malls that will serve to link the hospital, education, research and clinical/ambulatory uses with one another. The primary open spaces are intended to be designed to include major pedestrian walkways, gathering spaces, and locations for special events such as graduation ceremonies.

Landscape Buffer

The Landscape Buffer zone provides a setback between the campus and adjoining neighborhoods to the north and east. The buffer is intended to be a minimum of 40 feet wide and attractively landscaped.

Parking Structures

As the campus grows, much surface parking will be consolidated into parking structures strategically located to ensure easy access by patients, visitors and campus staff while minimizing potential pedestrian-vehicular conflicts. Other uses permitted within parking structures, in limited quantities, include ground floor retail (in the structure along Stockton Boulevard) and support services such as parking administration offices. Parking lots of approximately 100 spaces are likely to remain in all of the land use zones except open space and the landscape buffer. ADA, service and short term parking will also be provided throughout the campus adjoining individual buildings as appropriate.

Parking structures will conform to the height limitations noted above for the various campus land use zones.
Figure 17: 2010 LRDP Land Use Plan

LEGEND
- Study Area Boundary
- Existing Buildings

LAND USES
- Hospital
- Ambulatory Care
- Education & Research
- Support
- Major Open Space
- Landscape Buffer
- Parking Structure

THE 2010 LONG RANGE DEVELOPMENT PLAN