

Concept:

The university-owned site at Fulton and Bancroft is one potential location for a new research center, as proposed in initiative 1.8. The concept shown is only one possible architectural treatment for such a center, but shows how windows and shading on the north and west exposures can be designed to enhance daylighting, mitigate heat gain and reduce energy consumption.



7 CAMPUS ENVIRONS

The university does not end abruptly at the edge of the core campus. The university is an integral part of the city around it, and the campus environs are as much a part of the UC Berkeley experience as the campus itself. However, past university expansion into those environs has sometimes been insensitive to their character and livability. Future university-sponsored projects beyond the core campus shall be designed as positive and integral elements of the city fabric.

Strategic Goals

Capital investment shall enhance the campus' synergy with the city around it by:

- **ensuring new university investment in the campus environs is compatible in both scale and use with the community fabric.**
- **preserving the unique mixed-use character of the Southside and enhancing the quality of residential life.**
- **transforming the downtown blocks west of campus into a vibrant mixed-use district, including venues for the educational, cultural and public service resources of the university.**

Southside The Southside (figure 7.1) is home to 30% of Berkeley students: students comprise over 80% of its 11,000 residents. The university also owns roughly 30% of the land in the Southside, and its properties include academic, student service, cultural, recreational, and parking facilities as well as university housing. For both reasons, the Southside has always been the area of Berkeley where a positive, shared city-campus vision is most urgently required, and the lack of such a vision most acutely felt.

In 1997 the city and the university signed a memorandum of understanding (MOU), which states 'the city and the university will jointly participate in the preparation of a Southside Plan ... the campus will acknowledge the Plan as the guide for campus developments in the Southside area'. In January 2000, the city and the campus released a draft Joint Southside Plan for public review (hereafter the 'Joint Southside Plan'), which presents a shared set of goals, objectives, policies and guidelines for future investment and development in the Southside.

Policy 7.1 Ensure future university capital investment in the Southside conforms to the goals, objectives, policies and design guidelines prescribed in the 2000 Joint Southside Plan.

The Joint Southside Plan has as its overarching goals:

- to enhance the Southside neighborhood's unique social, cultural, and architectural character,
- to create a safe and appealing Southside neighborhood based on a comfortable and pedestrian-oriented environment, and
- to create a strong physical connection, one that is mutually supporting and beneficial, between UC Berkeley and the Southside neighborhood.

The emphasis on the term 'neighborhood' is intentional. Given the mixed-use character of the Southside and the constant influx of new student residents, it is important to remember that the Southside is, first and foremost, a place where people live. While the Joint Southside Plan recognizes there are many areas within the Southside suitable for new non-residential investment, it also recognizes such investment must be planned in ways to enhance the quality of life for all Southside residents.

Since the release of the Joint Southside Plan, the city has continued to review and refine its various provisions, toward their eventual adoption as an amendment to the city general plan and, subsequently, to the city zoning ordinance. As a state agency exempt from local regulations, the campus' obligation in the Joint Southside Plan is to use it to '...guide [our] planning and development efforts in the Southside ... [and] inform the New Century Plan.' Policy 7.1 affirms and supports this commitment.

**Figure 7.1:
Core Campus & Environs**

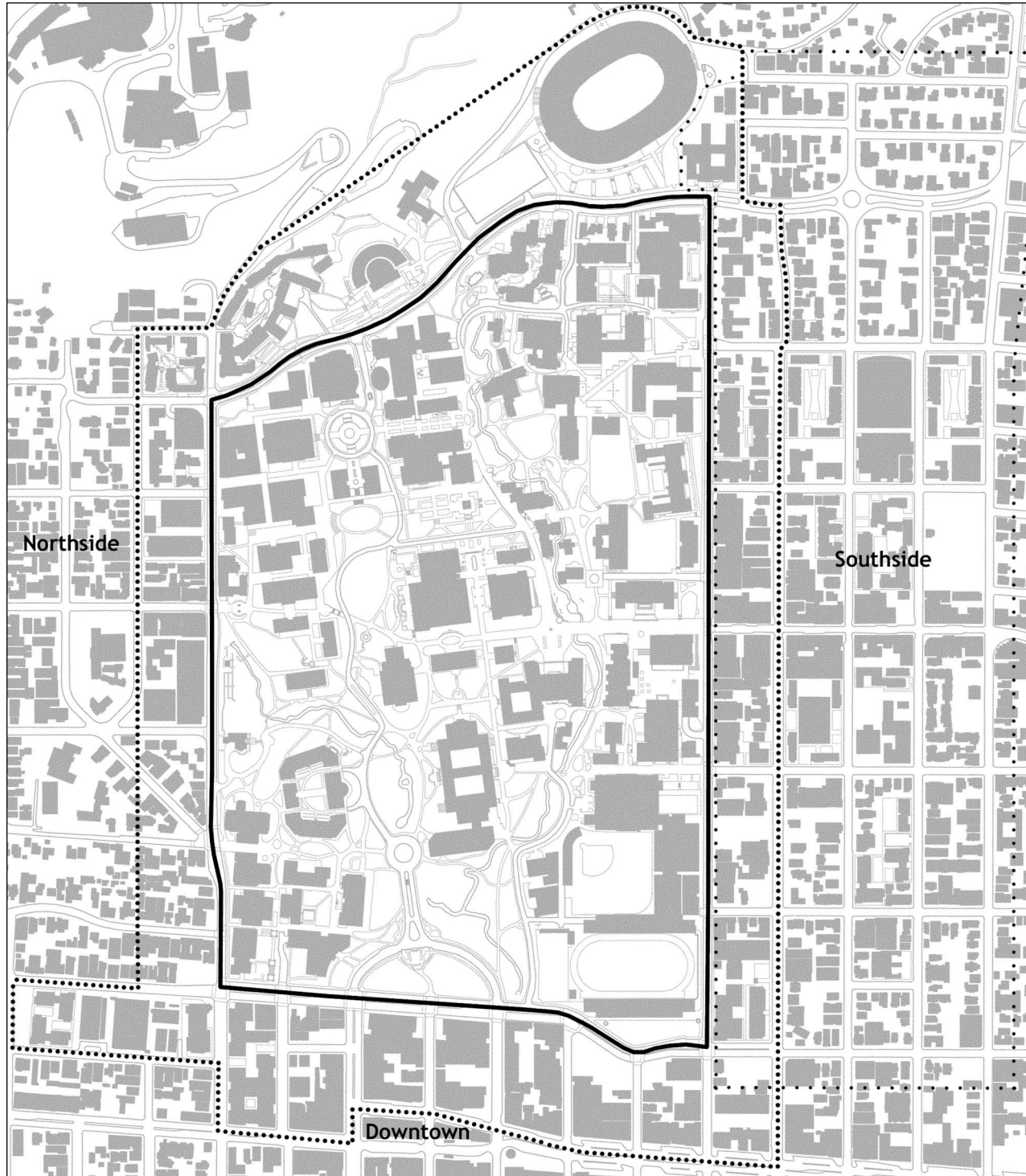
—————
Core campus

.....
Adjacent blocks

The Strategic Academic Plan states future campus growth should be accommodated primarily on the core campus and adjacent blocks, a principle reflected in the Location Guidelines in this Plan.

.....
Southside

As defined in the 2000 Joint Southside Plan



Downtown/Westside

Viewed on a map, the juxtaposition of downtown Berkeley and the grand west entrance to the campus might suggest an elegant, vibrant interface of town and gown: but this potential is largely unrealized. While the downtown BART station and bus lines from the north and west ensure a steady flow of people *through* the blocks west of campus, the *visible* university presence on these blocks consists of a parking structure, the printing plant, the bus garage, and the administrative offices in University Hall.

Policies and initiatives 1.5-1.9 establish a strategic framework for future campus investment on both the core campus and adjacent blocks. Given both its superior transit access and its established commercial character, downtown should be the primary focus of future campus investment in new research, cultural and service functions that require locations near, but not on, the core campus, as described in policy 1.7.

Moreover, these future investments should be planned not merely to accommodate the program needs of the campus, but also to invigorate the downtown *and* create an inviting, exciting 'front door' to the Berkeley campus. Two projects in particular would contribute significantly to this goal:

Initiative 7.2**Pursue construction of a downtown university museum complex and visitors' center.**

The Berkeley Art Museum, presently housed in a structure with a poor seismic rating, and the Pacific Film Archive, now in a temporary facility, would both greatly benefit from a move to a downtown site, not only for the improved visibility and transit access, but also for the synergy with other downtown cultural and retail activity, including the thriving Arts District along Addison St. The campus visitor center, now housed in University Hall, would also benefit from a location which is both more visible and more engaging.

The campus shall undertake a feasibility study of a downtown museum complex, including program options, site requirements, cost projections, and options for financing, delivering, and operating the project. A prime candidate for the museum complex is the site now occupied by the university printing plant and adjacent parking structure. The study shall include at least two alternatives: one in which the entire program, including replacement parking, is accommodated on this site, and another in which the program is accommodated partly on this site and partly on the university-owned land west of the University Hall tower.

The existing museum building could either be replaced, as illustrated in this plan, or it could be retrofit and renovated for other academic and/or cultural uses.

Initiative 7.3 Collaborate with other public and private Berkeley organizations to encourage a downtown hotel and conference center.

Downtown is also the logical place for a conference center, a critical and longstanding need of the campus, as well as the city and its many public and private organizations. The campus shall seek to encourage a privately developed and operated conference center: one flexible enough to serve a variety of users and events, but also large enough to meet the demand generated by both the campus and other prospective users.

Northside In general, future campus investment in the northside is not expected to be significant, due to both the lack of developable campus land and the topography and residential character of the area. The one potential exception is the Oxford Tract: the university-owned complex of greenhouses, growing fields and small laboratory buildings north of the SRBI site.

Initiative 7.4 Prepare and evaluate a longterm strategy to redevelop the Oxford Tract.

The south end of Oxford Tract is now (2002) being redeveloped with a new building to house a mix of academic and support functions. The scarcity of large, developable sites in close proximity to the core campus makes a critical analysis of options for the balance of the Oxford Tract imperative. The campus shall formulate, and assess the academic effects of, strategies to relocate the current Oxford Tract occupants and redevelop the site at a density comparable to the core campus.

Concept:

The drawing at right shows how student housing might be designed on a typical site along a transit street. The concept shown is only one possible architectural treatment for such a project, but it shows how institutional character can be overcome with articulated volumes, creative use of conventional exterior materials, and active spaces at street level.



8 HOUSING INITIATIVES

Our best student and faculty candidates increasingly cite the scarcity of good, reasonably priced housing as a primary factor in their decisions whether or not to come to UC Berkeley. Of those who do, many find themselves living miles from campus, isolated from university life and culture outside the work day. The problem is particularly acute for students: expanding the supply of student housing close to campus is necessary not only to help ensure all students are adequately housed, but also to provide the community of peers and mentors, and the access to campus resources, they need to succeed.

Strategic Goals

Capital investment shall improve the housing supply and strengthen intellectual community by:

- assuring two years of university housing to entering freshmen who desire it, and one year to entering transfers who desire it.
- assuring one year of university housing to entering graduate students who desire it.
- maintaining the current supply of university housing suitable for student families.
- partnering with developers to further expand and improve the rental housing supply.
- providing up to 3 years of university housing to new untenured ladder faculty who desire it.
- assuring high quality child care for the children of students, faculty and staff.

A UC Berkeley education is much more than what the student experiences through formal instruction. The few hours a week one spends in the classroom provides only the raw material for personal discovery. Our extraordinarily rich and diverse campus community provides the real-world 'laboratory' within which each student examines, evaluates, and incorporates the classroom experience into her own personal growth. Adequate student housing is a critical and indispensable aspect of this community.

However, in addressing this need, we should not look to the traditional residential cloisters of the liberal arts college. Students come to UC Berkeley because they seek the far more open and dynamic atmosphere of a large research university, and the social and cultural variety of a great metropolis. Rather, in our case, the role of student housing is to provide a base of educational and personal support within the stimulating, but often overwhelming, challenge of the Berkeley experience.

Lower Division

The nature of this role, however, evolves as students progress through their education. For lower-division students, who are new to both independent living and the intense demands of university coursework, group housing in close proximity to the educational resources of the core campus is the most desirable solution. As well as convenience to campus, campus-operated housing also provides its residents with a wide range of on-site counseling, mentoring and academic support programs. Research indicates campus housing has a strong positive influence on academic performance, critical thinking ability, and personal autonomy.

Initiative 8.1

Provide two years of university housing to entering freshmen who desire it, and one year to entering transfers who desire it.

University operated group housing, with common study and social areas, enables new students to focus on their academic endeavors, while also providing venues for integrated service programs. To ensure these new undergraduate students have the best possible access to the academic life and resources of the university, this housing should be located within a mile of the center of campus, and should provide every resident with high-speed access to the campus information infrastructure.

UC Berkeley presently assures one year of university housing to entering freshmen and transfer students. However, university housing also offers significant advantages to second-year students, many of who are not yet declared majors and, therefore, are not yet fully integrated into the on-campus academic community. For these students, the residential community continues to play a valuable role in both mentor and peer support.

New undergraduate housing should include apartments for graduate students or faculty in residence: while formal advising and guidance programs are critical, new students also benefit from the informal experience-sharing and mentoring that graduate students and faculty who live on site can provide. New undergraduate housing should also include flexible spaces for lectures and seminars, as well as for group study: these spaces and events should be open to non-resident as well as resident students.

Upper Division & Graduates

As they progress, students gravitate toward affinity groups based on their major fields of study or other shared interests. They also continue to mature and to acquire the social experience required to live as independent adults. By the third year, it is no longer necessary for the university to take as direct a role in creating a residence-based intellectual community. However, it is essential to assure these students continue to have access to suitable and reasonably priced housing.

Such housing is particularly important for first-year graduate students. Not only does the cost and scarcity of housing in this market make it more difficult for all our students to focus on and excel in their academic endeavors: in the case of first year graduate students, it also makes it far harder to recruit them in the first place. For graduate students, apartments are the right solution, not only because older students tend to prefer a less structured environment, but also because conventional apartments offer a wider range of delivery options, including partnerships with private developers.

Initiative 8.2 Provide one year of university housing to entering graduate students who desire it.

To ensure these new graduate students have access to the academic life and resources of the university, this housing should be located within a mile of the center of campus or within a 20 minute transit trip of campus, by campus-operated shuttle or public bus or rail. In the latter case, it should be located within a short and safe walk of the nearest transit stop. New graduate housing should provide every resident with high-speed access to the campus information infrastructure.

Initiative 8.3 Partner with private and not for profit developers to continue to expand and improve the rental housing stock available to students.

Our first objective in these partnerships should be to assure suitable and reasonably priced housing for all first year graduates. Because all first year graduates may not avail themselves of this option, the balance of units should be made available to other upper division and graduate students.

The ambitious goals described above for both graduates and undergraduates would have a significant positive impact on student housing, by reducing demand on the private market. However, even once these goals are achieved, we should continue to monitor market conditions in relation to demand, and seek new housing initiatives that could make a significant contribution to intellectual community and the quality of student life.

Faculty & Staff There is substantial anecdotal evidence to indicate UC Berkeley is at a severe disadvantage in competing for the best faculty and staff candidates due to housing and child care cost. The university has already begun to address the long-term housing needs of faculty through its down payment and mortgage subsidy programs. However, these programs do not address the need for good rental housing, particularly for new faculty hires.

Initiative 8.4 Provide up to 3 years of university housing to new untenured ladder faculty who desire it.

This housing may be separate or co-located with the graduate student housing described above. In either case, it should be located within a mile or within a 30 minute transit trip of campus. If units remain after new faculty hires are accommodated, they should be made available to new postdocs and other staff. Longer-term housing solutions for faculty and staff, i.e. beyond 3 years, should be achieved through improved financial subsidy programs, not the direct provision of housing.

Child Care The campus has begun to address long-term child care needs through a new 125 space facility planned for the Southside. However, this facility is only a first step: roughly 200 children were on the waiting list in 2002, and nearly half of the 200 we now accommodate are in poor facilities. The UC Task Force on Child Care Policy and Programs has surveyed both internal and external best practices, and recommends that child care programs be recognized as a key factor in recruiting, retaining, and ensuring the productivity of students, faculty and staff.

Initiative 8.5 Include consideration of child care in future university housing projects.

Each new university housing site should be evaluated for its potential to include a child care facility: for example, in ground floor spaces which are often less suitable than upper floors for residential use.

Near-Term Objectives

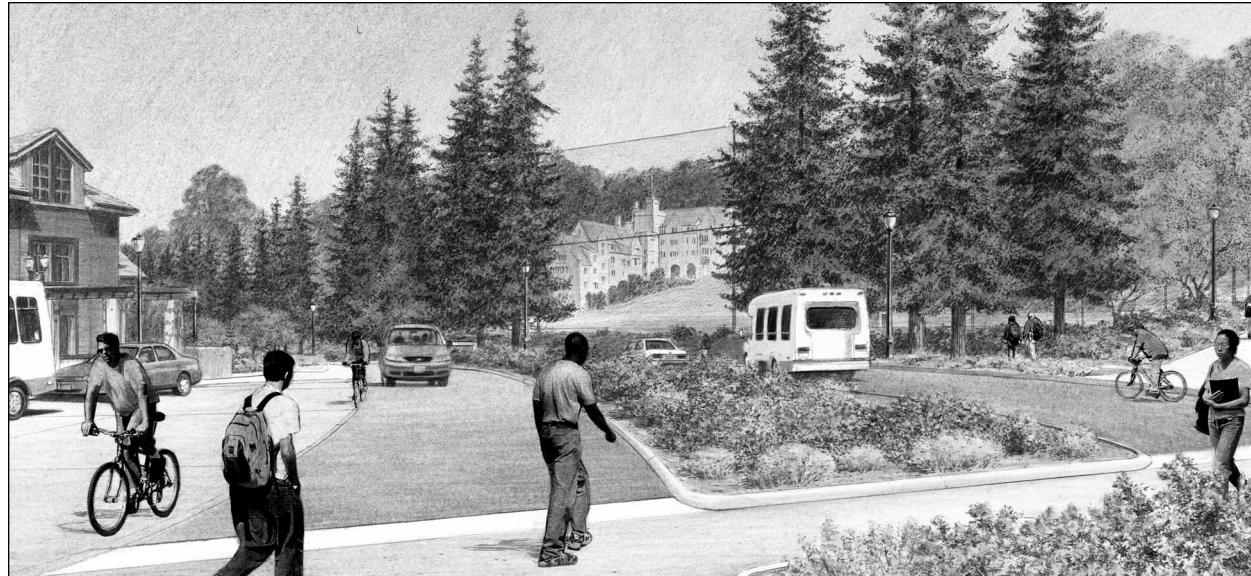
The goals described in the above initiatives are ambitious and long-term: not only do they require a substantial investment of capital, but only a fraction of the new units required can be accommodated on land presently owned by the university. While the actual pace of construction must be responsive to the dynamics of both housing demand and financial resources, the campus has endorsed in principle a set of objectives to be pursued within the timeframe of the 2020 Long Range Development Plan:

- By the end of 2020, increase the inventory of single undergraduate beds to equal 100% of entering freshmen and 50% of entering transfers and sophomores.
- By the end of 2020, increase the inventory of single graduate beds to equal 50% of entering graduate students.
- By the end of 2020, increase the inventory of faculty apartments to 300% of the average number of new untenured faculty hires per year.
- Maintain the current number of university housing units suitable for students with children.

Note: The term 'university housing' as used in the above initiatives and objectives includes housing developed and managed by the campus, as well as housing developed and managed by others under the provisions of a campus ground lease.

Concept:

Gayley Road north of Memorial Stadium is realigned and redesigned to accommodate wider sidewalks, bike lanes, and continuation of the historic Piedmont Avenue medians. Landscaping is rustic and informal to reinforce the role of Gayley as the seam linking the campus to the hills.



9 ACCESS INITIATIVES

Convenient access to campus is crucial to the life and culture of the university: faculty and students depend not only on the library and other resources of the campus, but also on the community of peers and mentors it provides. However, as our residential patterns have become more dispersed, and the roads more congested, the difficulty of travel to campus has become a disincentive to on-campus presence. This trend is destructive to both individual scholarship and intellectual community, and the campus must strive to reverse it.

Strategic Goals

Capital investment shall improve both the convenience and the experience of access to campus by:

- ensuring housing and access strategies are integrated and synergetic.
- collaborating with the city and transit providers to improve transit service to campus.
- completing and implementing a campus bicycle plan to encourage bike use.
- achieving drive-alone rates under 50% for faculty/staff and under 10% for students.
- achieving a balance of parking permit holders and permit spaces through trip reduction and limited parking construction.
- replacing and consolidating existing parking displaced by new construction.

Because UC Berkeley is located in a large and intensively developed city which largely predates widespread auto use, access to the campus will always be a challenge. However, while for some the automobile is the only feasible option, the university must continue to encourage and enable alternative modes of access: both to provide our students, faculty, staff and visitors with a full range of options, and to preserve the livability of the campus environs.

Walking Over 50% of students walk to campus, as do nearly 10% of faculty and staff. However, due partly to the increasingly dispersed pattern of residence among both groups, surveys indicate walking as a primary mode of access is in decline. This is unfortunate, since walking is the mode with the least impact on the campus environs: in fact, the presence of people on the streets is beneficial to city life. But although walking itself has no cost, it does require a residence within a safe and comfortable walk of campus.

Policy 9.1 Ensure campus housing and access programs are integrated and synergetic.

Strategic goal 8 outlines a program of initiatives to significantly increase the supply of affordable student housing within a mile or a 20 minute bus ride of campus: surveys indicate for most students a mile is a reasonable walking distance. These housing initiatives must be linked to the campus access strategy, to ensure the resources we commit to new housing also serve to reduce the demand for drive-alone trips: for example, by prohibiting campus parking permits for residents of university housing, and by marketing new housing to the 25% of graduates and 10% of undergraduates who now live more than 5 miles from campus, and are therefore most likely to commute by car.

Transit While cost and dependent care are often cited as reasons why people drive to work, in our 2001 faculty/staff survey only 9% and 10%, respectively, selected these reasons. Convenience at 37%, and travel time at 30%, were by far the most oft-cited reasons why faculty and staff drive rather than use transit or other alternate modes.

These findings suggest that, while the campus must ensure reasonably priced transit options exist, cost-based incentives are unlikely to yield substantial further reductions in drive-alone trips. In fact, survey data suggest two thirds of the growth in *student* transit ridership over the past five years represents commuters who formerly walked or biked to campus.

The campus shuttle system is a key element in any program to encourage transit use. BART riders in particular depend on the shuttles to get them from the downtown BART station to campus destinations. However, shuttle service - for both campus and LBNL - and transit service are challenged by the congestion and traffic conflicts on the streets around campus.

Initiative 9.2 Collaborate with the city and transit providers on strategies to improve transit service to campus.

If significant numbers of drivers are to be shifted to transit, convenience and travel time must be improved. However, while minor improvements might be achieved through operational measures, significant improvements require major long-term capital programs.

AC Transit is presently studying major capital investments in transit service from the south to the campus and downtown Berkeley. As a major transit destination, the campus is a key participant in this process. While several design options are presently under consideration, the eventual solution may involve realignments of traffic flow on south-side streets and/or the introduction of dedicated transit lanes. The campus shall continue to collaborate with the city and AC Transit on transit improvements to optimize their benefit to the campus.

Bicycles Bikes are a very low-impact mode of access to campus, particularly for those who live beyond walking distance, and should be strongly encouraged by both campus and city. However, a serious program requires investment in secure, well-located bike parking, well-designed and well-connected routes, and on-site amenities to support and promote bike commuting.

Policy 9.3 Complete the comprehensive Campus Bicycle Plan, including a strategy for implementation.

The Campus Transportation Committee is now preparing a plan to encourage bike use as a primary mode of access to campus. A draft set of policies and initiatives, now under campus review, includes:

- bike-friendly design guidelines for new and renovated facilities,
- a campus bike circulation plan to ensure both bike and pedestrian safety,
- secure and adequate bike parking convenient to all buildings,
- campus amenities to encourage bike use, such as lockers and showers,
- outreach programs to encourage bike use and promote bike safety, and
- special policies to protect natural areas from bike-related impacts.

Parking The demand for commuter and visitor parking on and around campus is far greater than the current supply, and this demand could increase if enrollment grows. While the campus must continue to encourage alternatives to the drive-alone commute, an adequate supply of parking is critical to the mission of the university.

By California standards, the campus has an exemplary record of promoting alternatives to the automobile. The 2001 survey indicated only 51% of faculty and staff, and only 11% of students, drive alone to campus: these percentages compare to the estimate of 46% for all commuters to campus and downtown Berkeley presented in the 2001 city/university TDM study.

However, Berkeley is a densely developed city, with roadways largely designed around the eastbay's once-extensive light rail network rather than the private auto. Even these numbers of drive-alone commuters, therefore, place a severe strain on city roadways, as well as campus and other public and private parking resources.

Policy 9.4 Invest in new commuter and visitor parking as part of a comprehensive program of transportation demand management.

Given the expense of structured parking, the limited capacity of city streets to accommodate more vehicles, and the environmental and resource consequences of increased automobile use, the campus must pursue a balanced, responsible strategy of transportation management. Investments to increase parking supply should be balanced with trip reduction incentives and improved parking management.

Initiative 9.5 Achieve and maintain drive-alone rates of under 50% for faculty/staff and under 10% for students.

These percentages are slightly lower than those indicated by our most recent surveys, and represent reasonable targets given our already high levels of participation in alternate modes, and the increase in demand that could be generated if enrollment grows. Our strategy to achieve these percentages should focus on the most likely alternate modes for each submarket, based on residential location. As described in policy 9.1, the integration of this strategy with housing initiatives is critical.

Initiative 9.6 Achieve and maintain a balance of commuter and visitor permits with commuter and visitor spaces.

Presently, the campus does not limit the number of parking permits it issues to commuters and visitors. As a consequence, the number of permit holders exceeds the number of parking spaces available to them. In general, it is necessary to come to campus very early in the day to obtain a space, and it is not possible to leave during the day and expect a space to be available upon one's return. While this is not a serious constraint for those who work regular hours and spend those hours entirely on campus, it is for those, including many faculty and staff, whose work entails flexible schedules and/or multiple worksites.

Moreover, those permit holders who drive alone and are unable to find a campus parking space must park elsewhere, either in a public or private facility or on the street. While the campus can not prevent commuters from driving alone, we should at least strive to bring the demand generated by permit holders and the campus supply of permit holder spaces into balance, through a comprehensive strategy of trip reduction incentives and new parking construction.

Policy 9.7 Replace and consolidate existing campus parking displaced by new construction.

Initiative 9.6 can not be realized if existing campus parking is displaced without replacement. The framework for growth described in strategic goal I includes, and in fact depends upon, existing surface lots being replaced by new buildings and open spaces. In order to maintain the campus parking supply, these displaced spaces must be replaced on site or elsewhere, and the scope and budget for each such project shall include those replacement spaces. The strategy to replace this parking should also be designed to consolidate it, not only to improve operations but also to reduce congestion caused by multiple-lot searches for available space.

Near-Term Objectives

While the actual pace of implementation must be responsive to the dynamics of both transportation demand and financial resources, the campus has endorsed in principle a set of objectives to be pursued within the timeframe of the 2020 Long Range Development Plan:

- By the end of 2012, achieve a net increase of 1100 campus commuter and visitor spaces, including attendant spaces, over the 2002 totals.
- By the end of 2012, achieve 5% reductions in the percentages of student and faculty/staff drive-alone commuters from 2001 survey data.

10 SUSTAINABLE CAMPUS

As one of the world's great research universities, UC Berkeley has a special obligation to serve as a model of how creative design can both minimize resource consumption and enhance environmental quality. Each new capital investment at UC Berkeley has the potential to advance the state of the art in responsible, sustainable design, and thereby contribute to our mission of public service.

Strategic Goals **Capital investment shall embody the principles of responsible, sustainable design, including:**

- **preserving and restoring the integrity and biodiversity of natural systems.**
- **minimizing energy use in travel to and within the campus.**
- **minimizing building energy use and peak energy demand.**
- **minimizing water use and maximizing on-site conservation and reuse.**
- **minimizing the use of nonrenewable energy and material resources.**
- **optimizing the use, and adaptive reuse, of existing facilities.**
- **accommodating growth on infill sites served by existing infrastructure.**
- **maximizing the productive life of new facilities through durable, flexible design.**
- **creating environments that enhance human health, comfort, and performance.**

These principles shall be achieved by:

- **addressing the principles of sustainable design in the analysis of alternate solutions**
- **ensuring this analysis reflects the true net life cycle costs of those alternate solutions, including known future costs.**
- **ensuring every new project is shaped by design and performance guidelines that incorporate the principles of sustainable design.**

The goals for sustainable design are not separate and discrete. On the contrary, they are interdependent, and require an holistic approach to design. Window size and placement, for example, affects both thermal performance and lighting requirements: whether the windows are sealed or operable affects both thermal performance and air quality. Therefore, while standard criteria can be very useful as a *framework* for analysis, sustainable design ultimately depends on the collaborative efforts of a multidisciplinary project team. This holistic approach is particularly critical during the feasibility phase of the approval process, where alternatives are evaluated and the optimal solution is defined.

Policy 10.1 Address the principles of sustainable design in the range of options analyzed at the feasibility phase.

Policy 1.1 requires the campus to consider a range of alternate solutions at the feasibility phase of the approval process. The scope of this analysis shall include alternate strategies to address the goals of sustainable design. For example, while our objective for every future campus project should be to achieve at least the equivalent of base level LEED certification (policy 10.4), certain projects may have the potential to achieve a higher level. On the other hand, for some other projects even the base level may not be feasible.

Policy 10.2 Base the options analysis on the life cycle cost of alternate solutions, including the discounted cost of future expenditures.

Sustainable design also depends on analyses based on true life-cycle costs. While the best environmental solutions often have a lower life-cycle cost, their initial capital cost is often greater. For example, building systems that are more efficient and more durable also tend to be more expensive, but they also consume less energy, require less maintenance, and have longer useful lives. Policy 1.2 requires the campus to evaluate alternate design solutions based on their life cycle costs, including the discounted costs of future expenditures: the policy is repeated here because it is critical to an effective program of sustainable design.

Moreover, it is also essential to consider initial capital cost in the context of the building as a whole, since an upgrade in one system can sometimes reduce the cost of others. For example, investing in a high-performance window system may reduce the required capacity, and thus the capital as well as the operating cost, of the HVAC system.

Policy 10.3 Ensure each new project conforms to the criteria prescribed in the Design Guidelines.

While the feasibility of some sustainable design features depends on the particular characteristics of the project, many have little or no cost: for example, orienting and configuring building volumes and composing building facades to optimize energy performance. The Design Guidelines include several such provisions, which shall be incorporated into the design of every campus project.

Policy 10.4 Utilize the LEED Green Building System to rate each new building which is subject to the project approvals process.

Establish the base level of LEED certification as the objective for each new building, but strive for higher levels where feasible.

Many institutions have adopted the LEED (Leadership in Energy & Environmental Design) system as their reference standard for sustainable design: the University of Oregon, for example, requires all new construction projects to achieve the equivalent of base level LEED certification. Other institutions have taken a more customized approach: the Minnesota Sustainable Design Guide, for example, draws upon the LEED system and other sources to create guidelines that reflect the priorities of the Minnesota region as well as general principles of sustainable design.

The LEED system offers a reference standard that is well established and well supported by the design industry. It is also generic: it does not address particular building types or physical environments. As a research university, with a wide range of laboratories and other specialized buildings, UC Berkeley may be best served in the long run by a set of performance guidelines more specific to our unique facility inventory and our temperate, semi-arid climate.

However, given the intensive pace of new construction and renovation on the Berkeley campus, it is imperative that the Berkeley campus begin now to incorporate the principles of sustainable design into every new project. The LEED system is our best option today, and the campus should adopt it as an interim reference standard while we simultaneously investigate a more customized approach.

Initiative 10.5 Based on the campus experience with the LEED system, consider refinements to better address the specific characteristics of the facility inventory and the physical environment at UC Berkeley.

Health & Construction The seismic improvements program, in combination with other capital investments to renew the facility inventory and accommodate new academic programs, has led to an unprecedented volume of construction on the campus. While these concerns had previously been addressed on a project by project basis, the scope of the current effort requires a campuswide strategy for the resolution and future prevention of such impacts.

Initiative 10.6 Implement a campuswide strategy to minimize the health impacts of construction.

The campus Health & Construction Work Group is presently preparing a set of guidelines for how such impacts should be averted or, if unavoidable, how they should be mitigated. The guidelines will address:

- relocation of building occupants during construction, including those mitigations to be undertaken when relocation space is not available,
- construction practices to minimize health-related impacts,
- improved communications to both affected occupants and the campus at large, and
- health-promoting features to consider for inclusion in new construction and renovation projects.

