Concept:

The Arts Quad is redesigned to create an active center for the arts disciplines around it, including spaces for performances and art exhibits as well as casual conversation and study.

4 INTERACTIVE CAMPUS

The work of the university today no longer fits neatly within self-contained disciplines. Research and instruction today are increasingly team-based and multidisciplinary, and the Berkeley campus must be re-envisioned to foster the interaction and information-sharing this new culture demands. Leading edge biotechnology, infotechnology, and creative services firms understand the value of places of interaction, and design for them as a matter of course: they are just as crucial to the work of the research university.

Strategic Goals

Capital investment shall foster social and intellectual community by:

- **making spaces conducive to creative interaction a priority in new projects.**
- **creating places of interaction at key nodes of campus activity.**
- **ensuring investments in the library enhance its role as an intellectual commons.**
- **establishing a strategic program of investments in the teaching infrastructure.**
- **transforming the Sproul complex into an active 24 hour center for student life and services.**
- **completing the new campus interbuilding information infrastructure.**
- **making upgrades to intrabuilding information systems a priority in new projects.**

Places of Interaction

While the compact size of the campus encourages an interactive community, its physical design does not. Buildings on the Berkeley campus provide few interior spaces conducive to informal, unstructured interaction, although the thriving cafe in Moffitt Library shows how productive such places can be.

The same is true for exterior spaces: few places are designed and furnished to be conducive to social interaction, and even fewer have any sort of visual link to the activity within the buildings around them. This is a special dilemma for the growing numbers of faculty and students who use the campus at night: exterior spaces unlit and unobserved by active interior spaces are perceived as unsafe.

Policy 4.1 **Make spaces conducive to creative interaction a priority in new capital investments.**

Each major capital investment should include careful consideration of how intellectual community can be advanced through design. The Haas School of Business has set a new standard for how campus buildings can be designed with intellectual community in mind. The new Stanley Hall, for example, will have both a student lounge and café facing the Mining Circle.

Initiative 4.2 **Define a program of investments in places of interaction, and a sequence for implementation.**

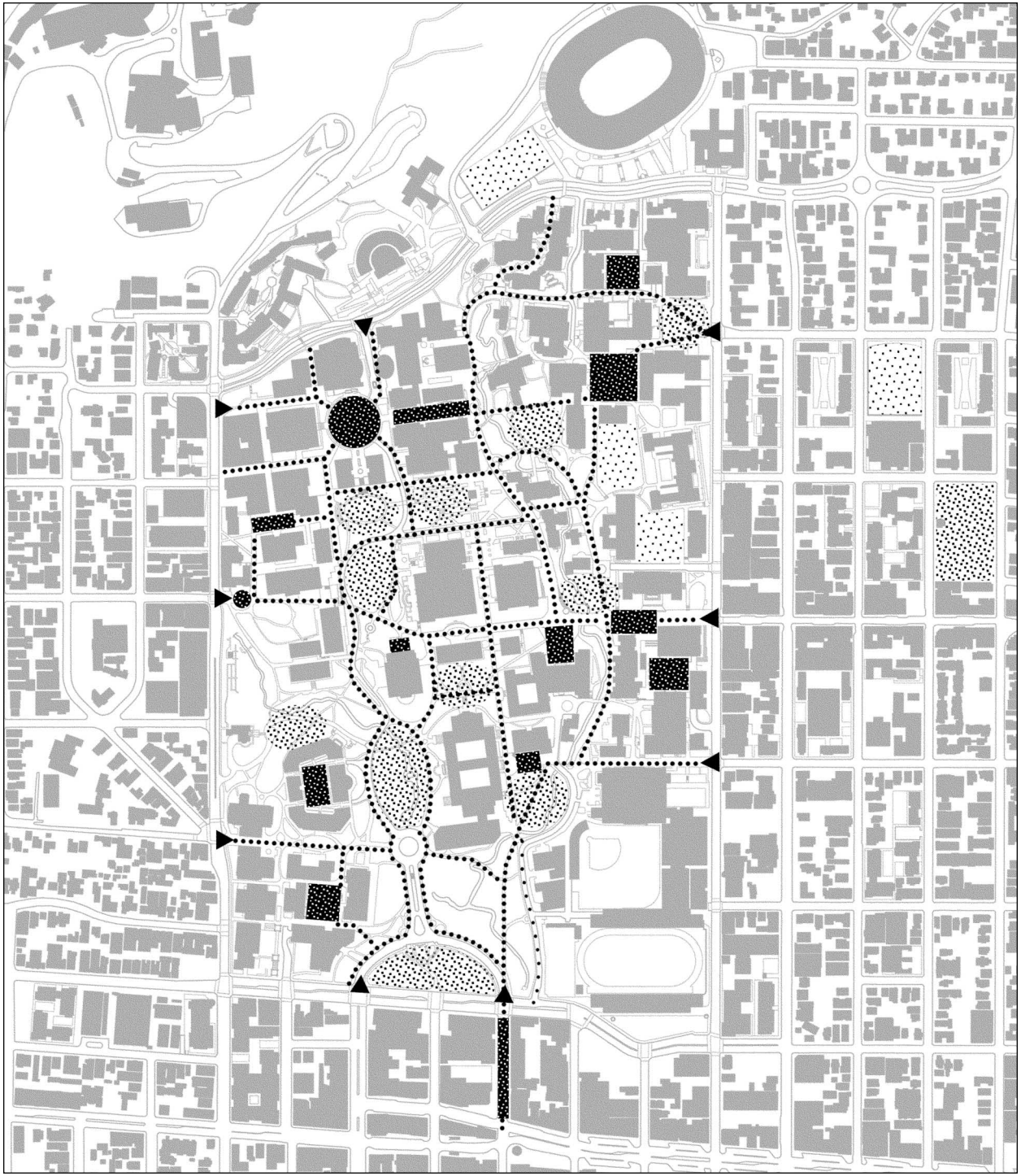
While the campus has a wide variety of open spaces, those shown in figure 4.1 have potential to be true 'places of interaction', because:

- they are located on or at the confluence of major pedestrian routes, and/or
- they are framed by multiple buildings housing a variety of academic programs.

To realize this potential, however, requires an integrated design strategy, to address the quality of the spaces themselves, and the programs and designs of the buildings around them. A comprehensive scope of landscape improvements for the campus is presented in conceptual form in the **Portfolio**: based on this scope, the Landscape Master Plan shall define a prioritized sequence of open space investments.

If the places of interaction are to become true 18- or even 24-hour centers of activity, their success depends on safe and comfortable access, particularly after dark. The Landscape Master Plan shall define standards of paving, lighting, wayfinding and furniture for major pedestrian routes.

Figure 4.1:
Places of Interaction



Places of interaction

Places of relaxation

Recreational playfields

Major pedestrian routes

Major campus entrances

Alternate night route

Policy 4.3 **Require each project facing a place of interaction to conform to the special provisions in the Design Guidelines.**

The program and design of buildings adjacent to social open spaces is as important as the design of the spaces themselves. Lower Sproul Plaza, for example, was once a far more lively and memorable place: the design of the plaza itself has not changed, but the programs housed in the buildings facing it have become more internalized.

Both interior and exterior common spaces should be designed to help make the campus a safe place to work at any hour. While we must be able to ensure the security of buildings and their contents, we should also design at least our most active common spaces so they can be open as late as demand warrants, and locate them so they observe exterior paths and places and help make them safe.

The **Design Guidelines** prescribe several key features every building facing a place of interaction should have in order to help make the place itself inviting and secure. Facades should conform to prescribed build-to lines, to frame and define the place; primary building entrances should face the place; and ground level program spaces should be transparent and active day and night.

Initiative 4.4 **Leverage new investments in the library to enhance its role as an intellectual commons.**

The library is the traditional place where students congregate to learn. In their current form, the many campus libraries offer quiet and well-equipped places for students to study, particularly those who live in group quarters where focused study is often difficult. They also provide a special kind of commons where students, although engaged in individual work, acquire the sense of being part of a community of learners that has endured for generations.

However, despite the increasingly team-based nature of both instruction and research, in general the library does not accommodate the dynamics of group study nearly as well: while rooms for groupwork are sometimes available, they are often remote from the common spaces. And of course the traditional library strongly discourages informal conversations, yet the value of the library is greatly enhanced when we include a place for them.

Several libraries are now completing or contemplating spatial reconfigurations: the campus should take advantage of these projects to demonstrate how the role of the library as an intellectual commons might be re-envisioned and enhanced. These findings should then be incorporated into future capital investments that offer the potential to relocate and/or reconfigure existing library venues.

Initiative 4.5 **Redevelop the Sproul complex as a 24 hour campus-wide center for student life and services.**

The Sproul complex - the upper and lower plazas and the buildings around them - merits special mention because it is the primary entry point for a sizable majority of students, as well as many faculty and visitors. It is also significant both to the history of the university and to 20th century state and national politics.

Not only does the complex suffer from decades of underinvestment, it also no longer functions well as a student center: some spaces are nearly deserted, while others are congested and mazelike, and some key student services are located elsewhere. The complex as a whole has a significant backlog of deferred renewal, and Eshleman Hall and King Union have seismic deficiencies. However, this need for investment also offers an opportunity to reprogram and redesign the complex, and to renew its original role as a campus-wide center for student life and services.

Because the Sproul complex is presently home to several advising, tutoring and counseling programs, the plans to redevelop it should be prepared in conjunction with the campus master plan for the teaching infrastructure described in initiative 4.6. In particular, the physical co-location of classrooms with support programs and spaces for individual and group study may offer significant advantages in terms of both program synergy and instructional technology.

Teaching Infrastructure

Teaching is the most fundamental form of interaction at the university. While the traditional lecture-section format will continue as the most suitable model for many types of coursework, in recent years instruction has become more and more interactive and team-based. The Academic Plan initiatives to enhance undergraduate education at UC Berkeley, which emphasize more direct student participation in research and more direct mentorship by faculty, are consistent with this trend.

However, the campus presently has no formal mechanism for locating or funding such venues. While new campus buildings do often include some new classrooms, these decisions are not informed by a comprehensive campuswide strategy. Meanwhile, many existing classrooms are underutilized, often because instructional technology is inadequate.

Moreover, the education of our students involves more than what goes on in the classroom. There are many other advising, tutoring, and counseling programs that support the teaching enterprise and play a critical role in our students' ability to excel. Presently, however, many of these programs are housed in spaces which are inadequate and inconveniently dispersed.

Initiative 4.6 **Prepare a master plan and program of investments in the teaching infrastructure.**

As proposed in the Academic Plan, this master plan should assess the current classroom supply, and determine how it should be renovated and/or augmented to meet the needs of the future, in terms of both the spaces themselves and the technology they provide. The master plan should also include an analysis of educational support programs, and determine how these should be housed and equipped to complement classroom instruction.

The plan should consider not only distributed but also centralized solutions, like the undergraduate center at the University of Washington, which combines classrooms with student services, computer labs, and spaces for individual and group study. As mentioned in initiative 4.5, this master plan should be prepared in conjunction with the plan for the redevelopment of the Sproul complex.

Information Networks

While there is no substitute for face-to-face conversation, today it is only one of the ways scholars communicate. Introduction of e-mail alone has transformed the nature of collaboration: many faculty today communicate more often with colleagues in other parts of the world than they do with those in the next office. The revolution in information technology has furnished researchers with new tools for analyzing and discovering patterns and connections in enormous sets of data, leading in turn to changes in the ways we conceptualize and approach problems.

Information technology has also begun to alter the delivery of education at UC Berkeley, although so far primarily through individual initiatives. Some instructors make their lectures available to students via the internet, and many routinely use the internet to distribute course materials and information.

Because the pace of change will only accelerate in the future, the quality of our networks is just as crucial to academic excellence as the quality of our interior and exterior spaces. Again, because the potential for creative interaction is everywhere, our first principle for information technology must be to ensure state-of-the-art connectivity for the entire campus.

Initiative 4.7 **Complete the new campus interbuilding information infrastructure.**

While nearly all campus buildings are connected to the campus information network in some way, many are linked to it through ad hoc pathways such as old utility conduits. Many of these conduits are at capacity, many others are damaged or hazardous: in both cases, such conditions limit or preclude further upgrades in capability. The construction of a common interbuilding 'backbone' to replace these ad hoc pathways, and provide capacity for future growth, began in 1985: to date, 3 of the 7 elements have been completed. The campus must continue to pursue the completion of the interbuilding system as a funding priority.

Policy 4.8 Include upgrades to intrabuilding information systems in the scope, design and budget of major building renovations.

The interbuilding backbone provides service to each building, but the quality of service also depends on the intrabuilding infrastructure, the quality of which varies enormously across the campus.

The campus network was built at the advent of distributed information technology, in a relatively short period of time, and before standards were in place. As a consequence, many of our intrabuilding systems have been unable to keep up with the tremendous growth in performance demand. In response, the campus has initiated the 'riser project', a phased investment program to equip each building with a modern fiber-optic infrastructure. The riser project will ultimately provide every campus user with equal access to state-of-the-art network resources.

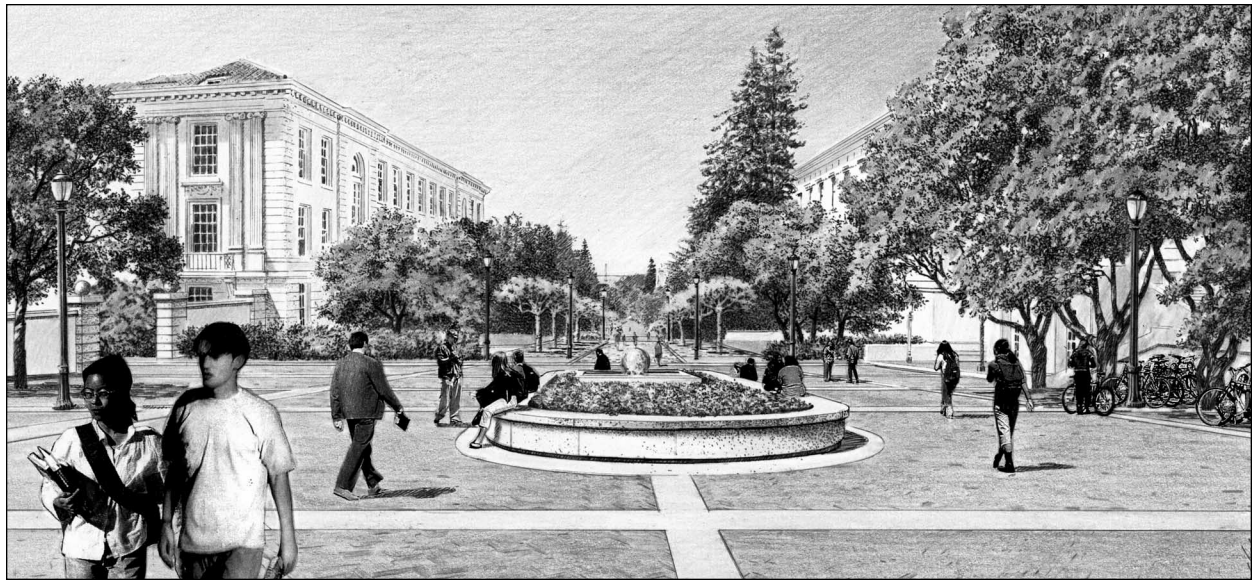
Many campus buildings require seismic improvements. Many also require extensive renovation due to the age and condition of their program spaces and systems. The campus must ensure the requisite improvements to the information infrastructure, as prescribed in the riser project, are incorporated into the budgets and undertaken in conjunction with these projects.

Policy 4.9 Provide high-speed access to the campus information network in all new university housing.

Strategic goal 8 describes a program to significantly increase the supply of university housing. While some of this housing may be constructed and operated directly by the campus, much of it is likely to be developed in partnership with private organizations. Whatever the delivery model, however, every new unit of university housing must be equipped with high-speed access to the campus network, as university-built units are now.

Concept:

Campanile Way is refurbished with new paving and lighting, and the historic landscape is restored. Service vehicles are removed to a walled court on the site of South Hall Annex, and Campanile Way is returned to the pedestrian.



5 PEDESTRIAN CAMPUS

Because UC Berkeley is located on a hilly site in the middle of a large and intensively developed city, access to and within the campus will always be a challenge. Strategic goal 9 describes a comprehensive and balanced program of initiatives to improve access to the campus. However, the core campus itself should remain a pedestrian environment with minimal vehicular intrusion, safe and accessible to people with both full and limited mobility.

Strategic Goals

Capital investment shall both optimize access to campus programs and resources and maintain the primacy of the pedestrian, by:

- **establishing a program of strategic investments to upgrade major pedestrian routes into and within the core campus.**
- **creating a network of campus access routes that serve users of all levels of mobility.**
- **collaborating with the City and Lawrence Berkeley Laboratory on integrated landscape and access improvement programs at the campus perimeter.**
- **restricting service and delivery vehicles to designated times and routes.**
- **consolidating core campus parking in structures outside or at the edge of the core campus.**

Safe and convenient access to campus is essential. A vital intellectual community depends as much on the casual encounters that arise from well designed patterns of access, as it does on the more structured encounters of the classroom and laboratory. The growing trend toward interdisciplinary scholarship requires a campus sufficiently compact to allow for formal and informal collaboration.

The core campus is an intensively developed environment, laced with an intricate web of circulation systems that are complex and often confusing in their purpose, hierarchy, and linkages. There is a lack of signage leading to the campus, and a lack of a legible wayfinding system within it. Staging sites for construction, expected to continue unabated for many years, often exacerbate the problem by temporarily obstructing access routes within the campus.

Pedestrians

Walking, the primary means of movement in and around the campus, should be encouraged both by upgrading major pedestrian routes to make them pleasant, comfortable, and secure day and night, and by minimizing conflicts with vehicles. A comprehensive program of investments in pedestrian access is required both within the campus and at its perimeter.

Initiative 5.1 **Define a program of investments in major pedestrian routes on campus, and a prioritized sequence of implementation.**

A comprehensive program of landscape improvements for the campus is presented in conceptual form in the **Portfolio**, along with how they should be sequenced to integrate with building and open space projects. The Landscape Master Plan shall define these improvements in more detail, including their relative priorities, and standards for paving, lighting, wayfinding and furniture. The standards shall create a clear visual hierarchy of use: so, for example, routes shared by pedestrians and vehicles are easily distinguishable from pedestrian-only routes.

Initiative 5.2 **Collaborate with the City on an integrated program of access and landscape improvements at the campus perimeter.**

Hearst, Oxford and Bancroft should be envisioned as 'seams' linking campus and community, rather than borders dividing them. The campus should take the initiative with the city to develop, and seek funding for, a joint program of investments to improve the visual quality, pedestrian safety and amenity, and transit service on these streets. Specific elements may include:

- redesigned intersections to improve pedestrian safety,
- removal of curbside parking to create wider sidewalks, enhanced landscaping and/or bike lanes,
- improvements to make transit service more convenient and comfortable,
- a coherent landscape and lighting treatment along each street, and
- improved landscaping, paving and lighting at major campus gateways.

Initiative 5.3 **Collaborate with Lawrence Berkeley National Laboratory on an integrated program of safety, access and landscape improvements to Gayley Road.**

The replacement of Stanley Hall, by a new building triple its size, is only the first of several potential major building projects at the east end of the core campus. Moreover, LBNL intends to publish a new Long Range Development Plan in the near future, under which its space inventory could increase significantly. The two access routes to LBNL from the west, Hearst Avenue and Centennial Drive, both intersect the university-owned Gayley Road.

As presently configured, the narrow roadway and sidewalks are not only congested but uncomfortable for cyclists and pedestrians. The campus should take the initiative with LBNL to develop, and seek funding for, a program of investments to improve the visual quality, pedestrian safety and amenity, and transit service on this university-owned street. Specific elements of this program may include:

- a redesigned roadway to provide bike lanes and extend the historic Piedmont medians north,
- redesigned intersections to improve safety and visual quality at campus entrances, and
- a coherent landscape treatment to preserve and enhance the rustic character of Gayley Road.

Disabled Access

As indicated in figure 4.1, a network of 'major pedestrian routes' on campus has emerged based on key destinations and historic patterns of travel. However, some of these routes include segments which are not accessible for those with impaired mobility.

Initiative 5.4 **Define a strategy to achieve a network of campus access routes that serves all campus users.**

A study to identify obstacles to disabled access to and within campus, and define initiatives required to mitigate them, is now under way. The results of this study shall be incorporated into the design of both individual projects and the program described in initiative 5.1.

Vehicles on Campus

While the core campus is often described as a 'pedestrian' environment, in fact it is crawling with a wide variety of vehicles: not just campus vehicles, but service and maintenance trucks, package service vans, construction vehicles and private cars. Not only do they pose a hazard to pedestrians, particularly on busy routes such as Sather Road and Campanile Way, they also cause paving and landscape damage which the campus has very limited funds to repair. As the campus becomes more and more congested due to both growth and construction activity, the unregulated flow of private vehicles through the core campus must be managed more assertively.

Policy 5.5 **Restrict private service and delivery vehicles to designated external and internal routes, and admit them to internal routes by permit only from 8 am to 5 pm.**

Many campus buildings can be served via short access roads directly from city streets: these are shown as 'external routes' in figure 5.1. In general, these external routes do not cause serious conflicts. Vehicles on internal routes, however, not only interfere with major pedestrian routes and places, but also degrade the serenity and historic quality of the heart of campus. Access to internal routes should be limited to two points, east and west gate, and should be by permit only from 8 to 5, to minimize vehicular movement on campus during peak times of instruction.

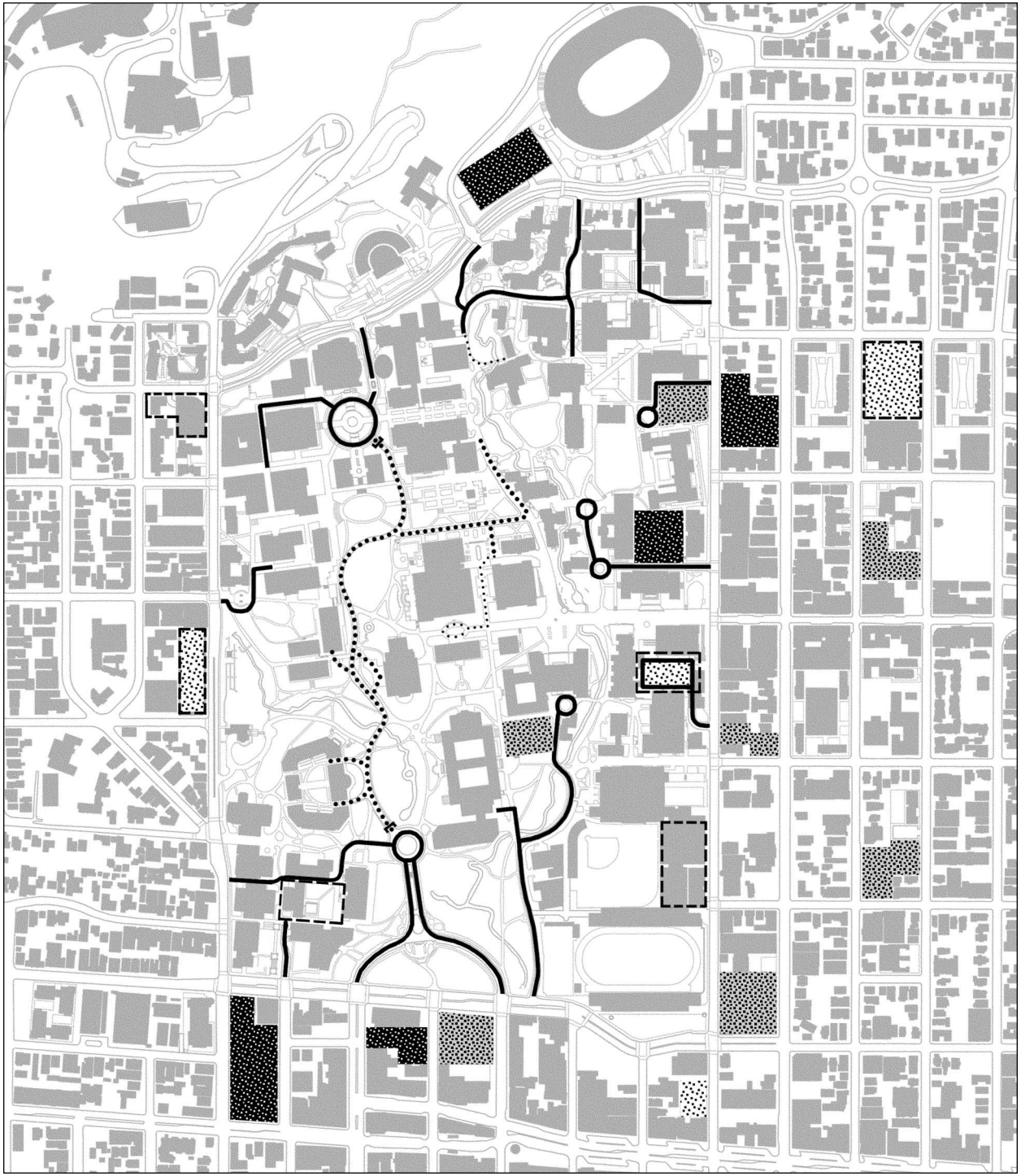
Policy 5.6 **Restrict curbside and other surface parking outside designated lots to time-limited loading and service vehicles with permits.**

In the long term, there should be no surface parking on campus for other types of vehicles. Surface parking lots on the core campus and adjacent blocks should be replaced over time by new buildings and open spaces, some of which may incorporate replacement parking below grade.

However, surface parking can not be entirely eliminated. Repair, maintenance, and specialty construction vehicles require parking near every building on campus, since the tools and supplies in their trucks must be readily available. Loading zones for both passengers and deliveries are also required, although one zone can often serve multiple buildings: but, as on city streets, those zones should have time limits.

As an interim measure, an exception to this policy should be made to accommodate blue spaces for disabled persons. However, the disabled access plan now in preparation (see above) will investigate more effective ways to provide disabled access, such as clusters of blue spaces off campus combined with van service to campus buildings.

Figure 5.1:
Vehicular Circulation



External route

Internal route

Limited access route

Major existing parking facility

Enlarge existing parking facility

New parking below grade

Replace existing parking below grade

Access gate to internal route

Policy 5.7 **Consolidate commuter and visitor parking in structures outside, but within walking distance of, the core campus.**

Parking located in the interior of the core campus not only encourages vehicular traffic on campus, it is a poor use of scarce and valuable land. In general, campus parking, except for those spaces described in policy 5.6, shall be consolidated in structures at the perimeter or within walking distance of the core campus.

Construction Access

Construction access and staging are necessary elements of the ongoing capital program. These areas and access routes must be developed in a coordinated manner, planned for continued use by multiple projects, and designed to anticipate long-term landscape and open space improvements

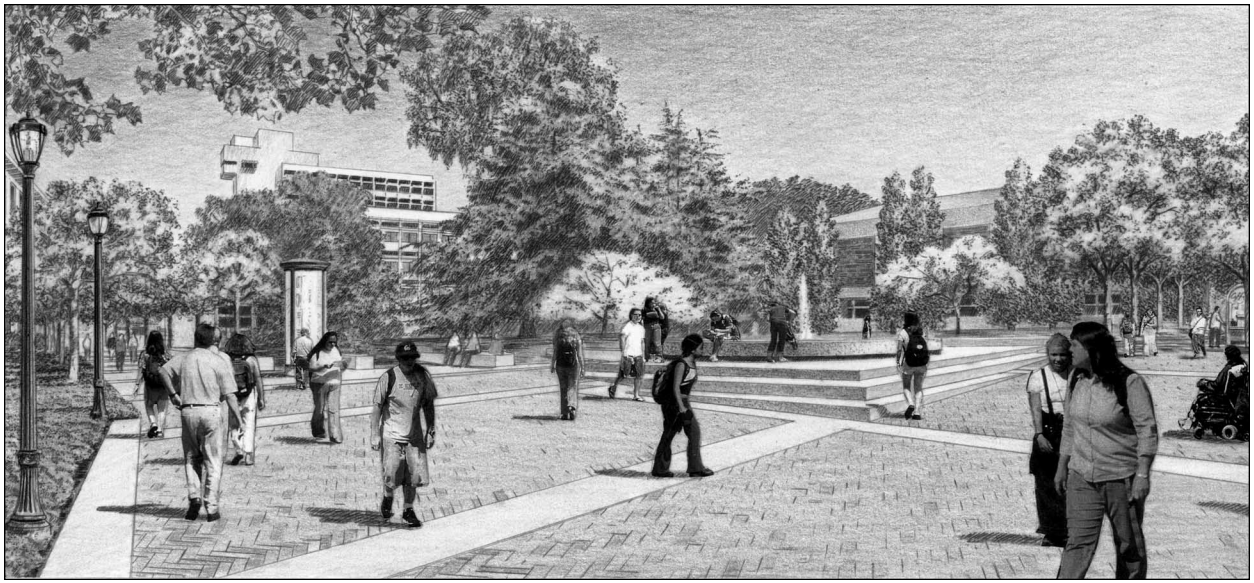
Policy 5.8 **Prepare and maintain a master plan for access and staging of projects under construction.**

The plan shall include policies regarding contractor and sub-contractor parking and designated routes and time restrictions for construction materials delivery, to be incorporated into construction contracts and information presented to prospective bidders.

Note: *This section deals with topics related to* ***circulation*** *within and around the core campus. The topic of* ***access to campus*** *is covered in strategic goal 9.*

Concept:

College Plaza is refurbished with new paving, planting, lighting and signage. A formal allee of trees frames the entry route to campus, and the fountain is redesigned as the focus of a gracious and comfortable place to meet.



6 CITY INTERFACE

First images are powerful. Prospective students, faculty and staff, conference visitors, and potential donors all form strong and lasting perceptions based on what they experience as they approach and enter the campus. Campus edges and entrances should reinforce our image as a proud and well managed university, committed to excellence in all aspects.

Strategic Goals

Capital investment shall improve the campus' image and its synergy with the city around it by:

- **ensuring future projects at the campus perimeter are compatible in both scale and use with the campus environs.**
- **establishing a program of investments to upgrade key campus entrances.**
- **developing a continuous 'green edge' to unify and beautify the campus perimeter.**

Campus edges and entrances should create a positive first image of both the campus itself and its synergy with the city around it. New buildings at the campus perimeter should create a graceful transition in scale to adjacent blocks, and new university buildings on adjacent blocks should be compatible in both scale and use with the city fabric.

Policy 6.1 **Ensure projects at the campus edge conform to the special setback, height and use criteria prescribed in the Design Guidelines.**

Projects at the city interface should be designed to enhance its visual and experiential quality, and to create a graceful transition in scale to the city environs. The **Design Guidelines** prescribe special criteria to create a campus edge more coherent in design and more responsive to its urban context: the Landscape Master Plan will define a common palette of landscape materials and typical details.

Initiative 6.2 **Define a program of investments to enhance key campus entrances, and a prioritized sequence of implementation.**

The primary entrances to the campus urgently require improvement. While the west crescent remains a grand and beautiful space, many of the other entrances, such as Sproul Plaza and East Gate, show the wear and cumulative damage from years of neglect. A comprehensive program of landscape improvements is presented in conceptual form in the **Portfolio**: the Landscape Master Plan will further define these improvements, and their relative priorities.

Initiative 6.3 **Collaborate with the city on an integrated program of access and landscape improvements to create a 'green edge' at the campus perimeter.**

Hearst, Oxford and Bancroft should be envisioned as 'seams' linking campus and community, rather than borders dividing them. The campus should take the initiative with the city to develop, and seek funding for, a program of investments to improve the visual quality, pedestrian safety and amenity, and transit service on these streets. Specific elements of this program may include:

- redesigned intersections to improve pedestrian safety,
- selective parking removal to accommodate landscaping, wider sidewalks and/or bike lanes,
- a coherent landscape and lighting treatment along each street, and
- improved landscaping, paving, lighting and transit/shuttle stops at major campus gateways.