SANTA CLARA COUNTY PLANNING OFFICE

Stanford University Community Plan

ADOPTED BY SANTA CLARA COUNTY BOARD OF SUPERVISORS

DECEMBER 12, 2000

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Introduction

Stanford Community Plan Issues and Policies

Stanford University is a private university located in the northwest corner of Santa Clara County adjacent to San Mateo County. Founded in 1891, Stanford has grown over time to become a highly respected institution of higher learning and research. It contains over 4,000 acres of land within the jurisdictional boundaries of Santa Clara County, the area addressed under this Community Plan. Stanford also owns lands in other jurisdictions, including Palo Alto, Menlo Park, San Mateo County, Woodside, and Portola Valley.

The unincorporated lands of Stanford within Santa Clara County are subject to the land use jurisdiction and regulatory authority of the County. The 1995 Santa Clara County General Plan serves as the principal means of setting goals and overall policy direction for physical development and use of lands within the unincorporated area. The Stanford Community Plan refines the policies of the General Plan as they apply to Stanford lands within the County.

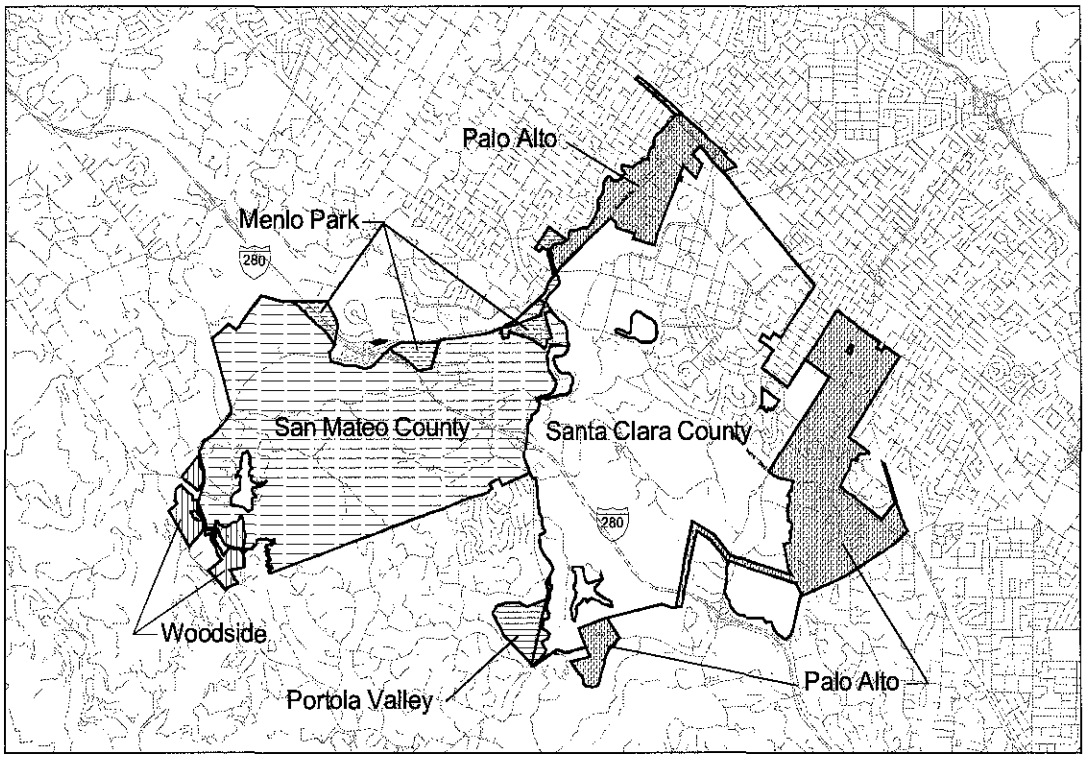

Figure Intro.1: Governmental Jurisdictions on Stanford Land

Purpose of the Community Plan and Relation to General Plan

Community Plans focus on a particular region or community within the overall general plan area of a jurisdiction. As an integral part of the overall General Plan, a community plan must be consistent with the General Plan, in keeping with the general requirement of state law that general plans be internally-consistent. To facilitate consistency, the Stanford Community Plan builds upon the basic strategies and policy framework for each element of the General Plan, tailoring the treatment of each subject to those aspects of an element most applicable and pertinent to Stanford. The Community Plan is also consistent with and furthers the implementation of associated planning instruments, such as the 1985 Land Use Policy Agreement. (For more information, refer to the Growth and Development Chapter).

The primary purpose of the Community Plan is to guide future use and development of Stanford lands in a manner that incorporates key General Plan principles of compact urban development, open space preservation, and resource conservation. Growth and development in general can have both benefits and disadvantages. The Community Plan attempts to achieve the appropriate balance between the reasonable expectations of the University to use and develop its land with the interests of the public to responsibly manage such growth.

The Community Plan is adopted as an amendment of the General Plan in the manner set forth by Government Code §65350 et seq. Any and all revisions to the Community Plan considered in the future must also be made according to the provisions of State law for adopting and amending general plans.

Organization of the Community Plan

Community Plan issues and policies are organized into seven chapters:

- Growth and Development,
- Land Use,
- Open Space,
- Housing,
- Circulation,
- Resource Conservation, and
- Health and Safety.

Each of these chapters addresses issues and policies as they pertain to Stanford lands and its regional setting. They are not intended to duplicate all aspects of the General Plan chapters or "elements" on which they are based. Instead, each chapter provides the additional focus and context beyond that provided in the General Plan in order to provide policy direction and guide decision-making for Stanford lands.

Each chapter of the Community Plan uses the same organizational structure. Within each chapter, a summary is provided, indicating the basic strategies set forth in the chapter. These strategies are overall policy approaches to various issues, and they form the framework for more detailed policies and implementation recommendations on the particular subjects which are articulated in the chapter. Strategy statements correspond with those of the relevant General Plan chapters, with modifications to reflect the particular circumstances, issues, and policies as they relate to Stanford. Following the chapter summary, each chapter contains relevant background information, followed by discussion for each strategy and its associated policies and implementation recommendations.

Implementation of the Community Plan

Prior to the adoption of the Community Plan, the principal means of guiding land use and development for Stanford lands was the "General Use Permit," or GUP. The GUP served as a form of master use permit under which Stanford received approvals for development, consistent with the provisions of the County's Zoning Ordinance. The General Use Permit will remain as the principal means for implementing the Community Plan. The GUP will contain conditions regarding review of individual projects, as well as provisions requiring certain actions, such as regular monitoring and reporting. The Community Plan also contains implementation recommendations to enact and apply zoning districts appropriate to the land use designations specified in the plan for the purpose of more specifically regulating the land use and development.

Individual projects allowed under the Community Plan and General Use Permit are also subject to the County's Architecture and Site Approval (ASA) permitting process. As such, the Community Plan is further implemented by the review and conditioning procedures of ASA. In particular, certain conditions of development approval may be employed specifically to carry out environmental mitigations required under the Environmental Impact Report prepared for the adoption of the Community Plan and GUP.

Major Policy Directions of the Community Plan

The major policy directions of the Community Plan are expressed within each chapter's major Strategies. In more general terms, the major policy directions include the following concepts and principles:

a. promote compact urban development together with conservation of natural resources;

b. allow Stanford flexibility to develop its lands within a framework that minimizes potential negative effects ("flexibility with accountability");

c. accommodate development for academic uses and housing on lands only within an Academic Growth Boundary, or AGB, while limiting the uses and development potential for lands outside the AGB to conserve open space and natural resources;

d. differentiate the major land uses within the plan area according to areas in academic use, housing for faculty/staff, and open space outside the AGB;

e. plan for and ensure that substantial new housing development occurs concurrently with approval for increases in academic space and facilities;

f. meet mobility and access needs primarily though means other than major road improvements, including appropriate integration of land use, transit services, transportation demand management, and management of the number of net new commute trips which may be generated; and,

g. achieve the various conservation, public health and safety goals by emphasizing preventive measures or avoidance of impacts, requiring mitigation for impacts that may occur, and promoting resource restoration.

In conclusion, the Community Plan represents a major evolutionary change from the development decision-making processes previously employed by the County for Stanford. It reflects a more proactive than reactive approach to land use planning for Stanford. Furthermore, it is intended to provide significantly more useful background information and policy guidance than was previously available to serve as a guide to future land use and development decision-making for Stanford University.

The Community Plan supersedes the previous Stanford Chapter contained within Part 4, Book B of the General Plan for Urban Unincorporated Area Issues and Policies, as well as the land use policies for Stanford University Lands – Campus and Stanford University Lands – Academic Reserve and Open Space in Part 3, Book B of the General Plan. As needed, the Community Plan may be amended over time to improve its usefulness and effectiveness to decision-makers, Stanford, and the general public.

Growth and Development

Stanford Community Plan Issues and Policies

Chapter Summary

This chapter of the Community Plan articulates the fundamental approach that the County will pursue when considering future growth of the University.

This plan considers Stanford lands in Santa Clara County in their entirety and identifies the portion of those lands which are most appropriate for future development. The County's intent is to channel development to achieve the primary General Plan policy directions of compact urban development and resource conservation. The primary mechanism to direct growth is the establishment of an Academic Growth Boundary that is to remain in place until a defined level of development intensity has been achieved on lands within the growth boundary.

An important aspect of overseeing growth at Stanford is the coordination of land use decision making, consultation, and policies regarding annexation. This chapter reinforces agreements which have been in place among the County, the City of Palo Alto, and Stanford since 1985 relating to the delivery of services, governmental organization and cooperation. Finally, this chapter provides a basis for continued monitoring of Stanford's development activities and mitigation of environmental impacts associated with growth and development.

Community Plan strategies for growth and development are:

Strategy #1: Promote compact development and conservation of natural resources through use of an Academic Growth Boundary.

Strategy #2: Maintain Co-operative Planning Agreements and Implementation.

Strategy #3: Mitigate and Monitor the Impacts of Growth.

Background

Location and Setting

Governmental Jurisdictions

Stanford University is located in Santa Clara and San Mateo counties, approximately 35 mile south of San Francisco and 20 miles north of San Jose California. Stanford's lands, totaling approximately 8,180 acres are located in six jurisdictions: unincorporated Santa Clara and San Mateo counties, the cities of Palo Alto and Menlo Park, and the towns of Portola Valley and Woodside (see Figure 1.1 – Government Jurisdictions). Approximately 4,000 acres containing Stanford's academic, open space and agricultural lands are located within unincorporated Santa Clara County.

Table 1.1 – Distribution of Stanford Lands across Jurisdictions

Santa Clara County	Acres	Percent of Total
Unincorporated	4,017	49%
Palo Alto	1,161	14%
San Mateo County		
Unincorporated	2,701	33%
Woodside	114	1%
Menlo Park	111	1%
Portola Valley	76	1%
Total	8,180	

Source: Stanford University

Unincorporated Stanford lands in both Santa Clara and San Mateo Counties are within different spheres of influence. Some portions of Stanford lands are within the City of Palo Alto's urban service area and sphere of influence. All unincorporated San Mateo County lands are within a city sphere of influence. Due to the unique

Government Jurisdictions

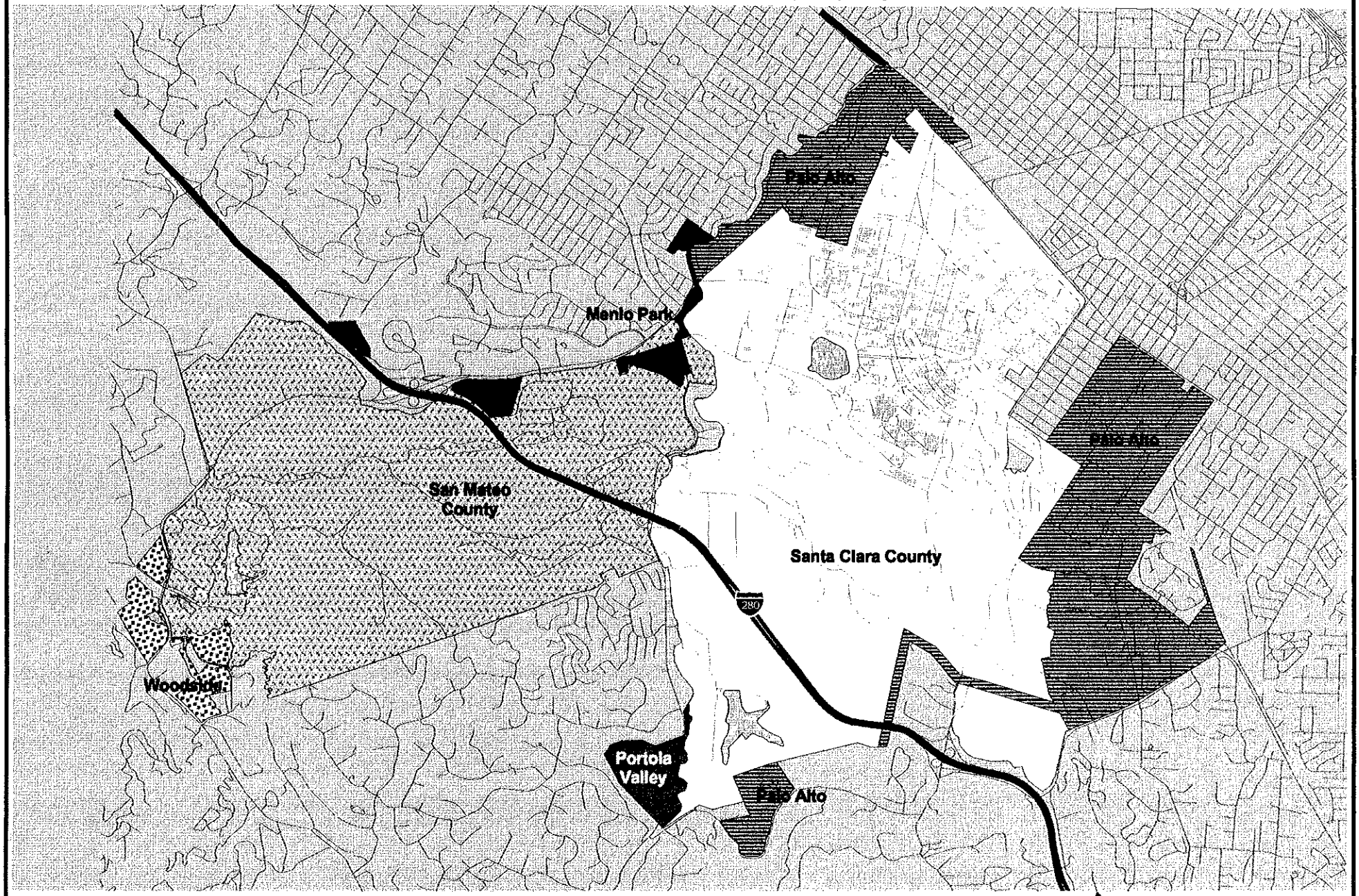

Figure 1.1

Stanford University Community Plan Adopted December 2000

nature of Stanford, the rules, regulations and policy agreements relating to urban service areas are applied differently for Stanford than for other areas of the County.

In some cases, the uses on Stanford lands differ sharply between jurisdictions, most notably for those areas that are within the City of Palo Alto. These lands are expressly intended for interim non-academic uses that support the operation of the University (see Policy Context, below). Land uses within the City of Palo Alto include the Stanford University Medical Center, Stanford Shopping Center, Stanford Research Park, and apartment complexes. Lands in the San Mateo County jurisdictions are largely undeveloped, with the exception of the Stanford Linear Accelerator Center in unincorporated San Mateo County.

Community Plan Area Physical Setting

Both developed and undeveloped areas of the Stanford campus are distinctive. Stanford is a complex and active place with a wide variety of activities taking place throughout the campus. With an array of academic buildings, housing, academic and student support services, and cultural and athletic facilities the campus has been compared by many to a fully-functional city.

The clearest geographic distinction on the Stanford campus is between the central campus, where essentially all development is concentrated, and the foothills which have remained basically undeveloped. Of the 4,017 acres of land in unincorporated Santa Clara County, approximately 1,800 acres are north of Junipero Serra Boulevard and approximately 2,200 acres are located south of the roadway.

Within these two primary areas there are several important geographic areas and sites addressed throughout the Community Plan. These locations are defined on Figure 1.2 – Community Plan Locations.

Policy Context for the Community Plan

Policies for Stanford are addressed in the Santa Clara County General Plan under the portion of the plan concerning urban unincorporated areas, recognizing the nature of the activities which take place at Stanford. However, Stanford is not subject to the General Plan strategies and policies for other urban unincorporated areas, which are "pockets" of unincorporated lands that are intended for future annexation. The Stanford University campus lands are unlike all other urban unincorporated lands in Santa Clara County in a number of significant respects in that they:

- Are used for academic and related purposes;
- Are entirely under the ownership of a single landowner that
  - is both a major employer and a major provider of housing,
  - provides many of its own urban services and facilities, and
  - has its own land use planning staff;

Community Plan Locations

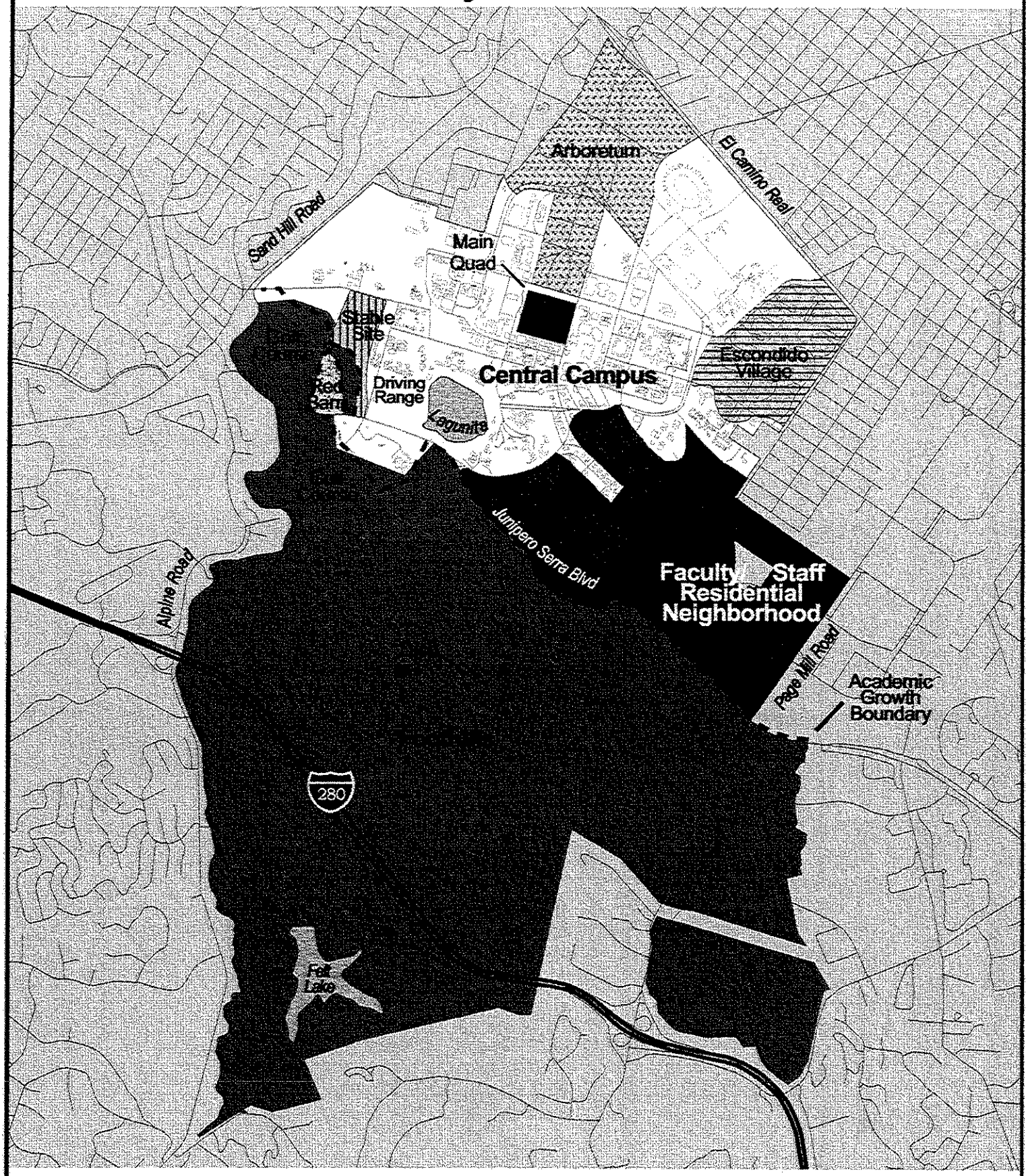

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Figure 1.2

- Have limitations on their sale (due to restrictions in the Founding Grant);
- Are the subject of unique interjurisdictional agreements involving the County, Palo Alto, and the University; and,
- Encompass a unique integrated community whose members are all related, in one way or another, to the University.

Prior to the Community Plan, Stanford's policy framework was composed of:

- Santa Clara County General Plan Land Use Map designations and policies for Stanford;
- The 1985 Land Use Policy Agreement between Stanford, the City of Palo Alto, and the County; and,
- The 1989 General Use Permit, which stipulated the allowable amount of new development on Stanford lands and the conditions under which that development could occur.

Due to Stanford's multijurisdictional setting and the need to consider issues concerning annexation as they specifically apply to Stanford, the County of Santa Clara, the City of Palo Alto and Stanford University are parties to an agreement entitled the 1985 Land Use Policy Agreement. This agreement sets forth the policies regarding land use, annexation, planning, and development of Stanford lands in Santa Clara County (see sidebar), and defines what uses may remain in the unincorporated County and what uses must be annexed to the City of Palo Alto. In essence, the Land Use Policy Agreement augments the sphere of influence by affording Palo Alto review opportunity for projects on all unincorporated Stanford lands (not just those within the delineated sphere of influence north of Junipero Serra Boulevard), and by identifying what types of uses are to remain unincorporated (see sidebar).

The Land Use Policy Agreement states that the County, the City of Palo Alto, and Stanford agree that Stanford lands "...are held in perpetual trust for educational purposes..." (Policy 1a).

The 1985 Land Use Policy Agreement also calls for maintenance of a document known as the Protocol, which outlines all adopted land use designations, regulation, restrictions, and review and referral procedures for land use and development on the Stanford campus.

This Community Plan intends to maintain and enhance the 1985 Land Use Policy Agreement. The Protocol will need to be amended according to this policy agreement to reflect the strategies and policies of the Community Plan.

1985 Land Use Policy Agreement General Policies

The general policies of the 1985 Land Use Policy Agreement outline Stanford University's uniqueness and document the agreement that all academic, open space, and agricultural uses should remain unincorporated while non-academic uses of University land should be subject to city annexation. There is an acknowledgement that the University holds its lands in perpetual trust for educational purposes and is responsible for providing its own municipal services. These policies also include agreements regarding multi-jurisdictional review procedures, which are to occur prior to any project or proposal.

Specific Policies Governing Academic Use of Stanford Lands

The Stanford Board of Trustees holds all Stanford lands for ultimate academic use. Unincorporated Stanford lands in Santa Clara County are subject to the County General Plan and Zoning Ordinance as well as other land use approvals granted by the County. Both Palo Alto and Stanford agree that neither seek annexation to Palo Alto of parcels designated for academic use.

Specific Policies Governing Non-Academic Use of Stanford Lands

The Trustees allow non-academic use of certain designated parcels to produce income to support the University and its programs. These policies define "non-academic uses," state Stanford's intent to request annexation for parcels on which any non-academic use is proposed, and describe the City of Palo Alto's review and approval procedures.

Implementation of the Policies by the Protocol

The staffs of the three parties, in cooperation, will maintain an informational document known as a Protocol. The staffs will continue to refer development applications to each other. Revisions to the Protocol are to be made by the three staffs, to reflect any adopted changes in the County land use and development regulations, and administrative practices and procedures.

In light of the multi-jurisdictional agreements, unincorporated Stanford lands are exempted by the County of Santa Clara and the Land Use Policy agreement from the following two major General Plan strategies generally applicable to urban unincorporated area:

- Unincorporated lands within city urban service areas should be annexed to the cities in whose urban service areas they are located.

- Land uses for unincorporated lands within city urban service areas should conform to the general plan of the city in whose urban service area they are located.

The needs and issues which are commonly addressed through the mechanisms of annexation, sphere of influence, and urban service area are instead addressed at Stanford through the Land Use Policy Agreement. The County normally requires most forms of new development in urban unincorporated areas to conform to the land use and density requirements of the applicable city's General Plan, with the expectation that these areas will be annexed at some point in the future. Since academic uses at Stanford are not intended for future annexation, they are not required to conform to the requirements of the City of Palo Alto. Dispensation from the Palo Alto Comprehensive

Plan through the Land Use Policy Agreement also applies to the Palo Alto Urban Service Area. By agreement of all parties, it is the County General Plan which defines the extent of urban growth at Stanford.

The creation of the Community Plan for Stanford University marks a major milestone in more than 100 years of cooperative planning between the County of Santa Clara and Stanford University. This Community Plan reflects an unprecedented level of shared commitment to the principles of quality land use planning, environmental studies, and public involvement in the planning process. Furthermore, the Community Plan represents a commitment to stewardship of a unique regional asset.

The County determined in 2000, when faced with regional growth pressures impacting the quality of life in local communities, that a more deliberate planning instrument was needed to provide the County with a policy framework for decisions regarding development at Stanford. The Community Plan identifies policies and establishes land use designations that reflect the character and resources of the various Stanford lands in unincorporated Santa Clara County. No portion of the Community Plan may be modified without the approval of a majority of members of the Santa Clara County Board of Supervisors, and modification of the AGB requires a 4/5 vote of the Board. The Community Plan offers local communities a greater specificity in the planning and decision making processes of both Stanford and ultimately the County. The General Use Permit serves within this framework as the general approval for a specified amount of development at Stanford.

The Community Plan is based on the County's analysis of Stanford's development needs in the context of the County's priorities for land use, growth and development, and other planning issues as expressed in the General Plan. This Community Plan is not intended to define the long-term development potential of Stanford's unincorporated lands, with regard to either the amount of or the location of development for the period beyond the intended planning horizon. However, the County and Stanford recognize that such an understanding may be needed in the future to provide an opportunity for serious consideration of tradeoffs in the future location of development.

General Plan Policy Direction

This Community Plan is a part of and a supplement to the Santa Clara County General Plan. It is meant to be consistent with the General Plan and refine its strategies, policies, and implementation recommendations as they apply to Stanford. The Community Plan particularly emphasizes and is based upon two fundamental and complementary principles expressed in the General Plan:

- Compact and efficient urban development; and,
- Conservation of natural resources.

Stanford University Development Trends

Ongoing expansion of academic programs and research opportunities at Stanford has also engendered a corresponding increase in building area on the campus. New development attributable to growth in academic buildings, support services, and student housing has mostly occurred since World War II; total square feet of building area on the campus (excluding faculty housing) increased almost threefold from 1960 to 2000, as shown in Table 1.2.

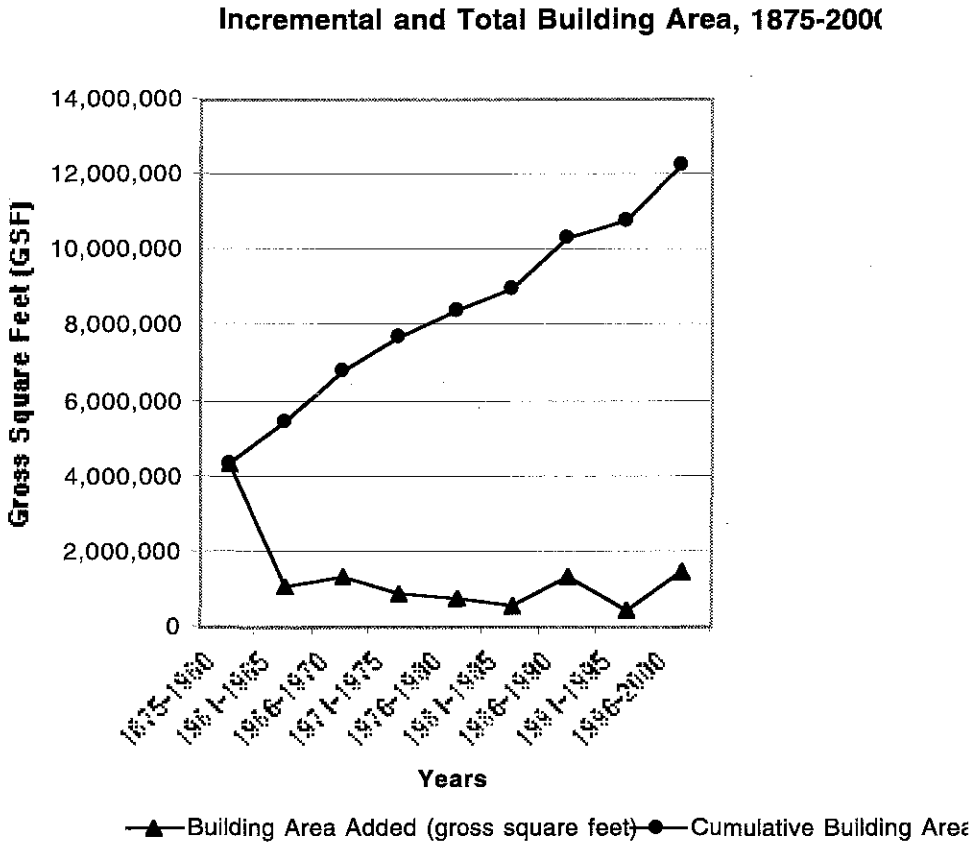
Table 1.2 – Building Area at Stanford, 1875-2000

Time Period	Building Area Added (gross square feet)	Cumulative Building Area
1875-1960	4,363,375	4,363,375
1961-1965	1,069,406	5,432,781
1966-1970	1,353,405	6,786,186
1971-1975	890,496	7,676,682
1976-1980	758,805	8,435,487
1981-1985	562,736	8,998,223
1986-1990	1,348,841	10,347,064
1991-1995	439,840	10,786,904
1996-2000	1,507,326	12,294,230
Total	**12,294,230**	

Source: Stanford University Planning Office

The existing building area on the Stanford campus includes approximately 5,900 units of undergraduate housing and 3,860 units of graduate student housing. Housing for faculty and staff, which is not included in the building area total, comprises 989 units, most of which are single family homes.

The growth rate since 1960 has represented an average annual addition of 198,200 square feet of academic uses, support facilities, and student housing. While the amount of growth on an annual or 5-year basis has fluctuated over the last 40 years, the rate of increase in cumulative building area has occurred at a relatively constant rate of approximately 200,000 square feet per year, as shown in the chart below.



While it would be infeasible to accommodate an additional 200,000 square feet annually in perpetuity, it is unclear how much additional development is appropriate. It is also unclear whether, when and to what extent Stanford may propose to develop the foothills.

Zoning and General Use Permit

The A1 zoning district applied to Stanford University requires that a use permit be granted for development and operation of academic activities at Stanford. Since the 1960s, this use permit has been in the form of a General Use Permit for the University rather than a separate permit for each building.

In 1989, the General Use Permit approved for Stanford allowed for 2,100,300 square feet of new development on the campus, including both academic uses and student

housing. Since 1989 Stanford has averaged 177,450 additional gross square feet per year, with approximately 76% of this annual development devoted to academic, athletic and support facilities and 24% for student housing.

Strategies, Policies and Implementation

Strategy #1: Promote compact development and conservation of natural resources through use of an Academic Growth Boundary.

The County General Plan promotes the use of long-term urban growth boundaries by cities to delineate areas intended for future urbanization from those not intended for future urban use. Unlike an Urban Service Area boundary, which typically indicates the areas in which a city is able and willing to provide urban services in the short term (5 years), an urban growth boundary is meant to provide adequate land to accommodate urban development for a significantly longer time period of approximately 20 years. The delineation of urban growth boundaries can promote compact urban development and conservation of natural resources by (a) channeling development within existing urban areas and (b) excluding important habitat, hazard, or open space areas from the urban growth boundary area.

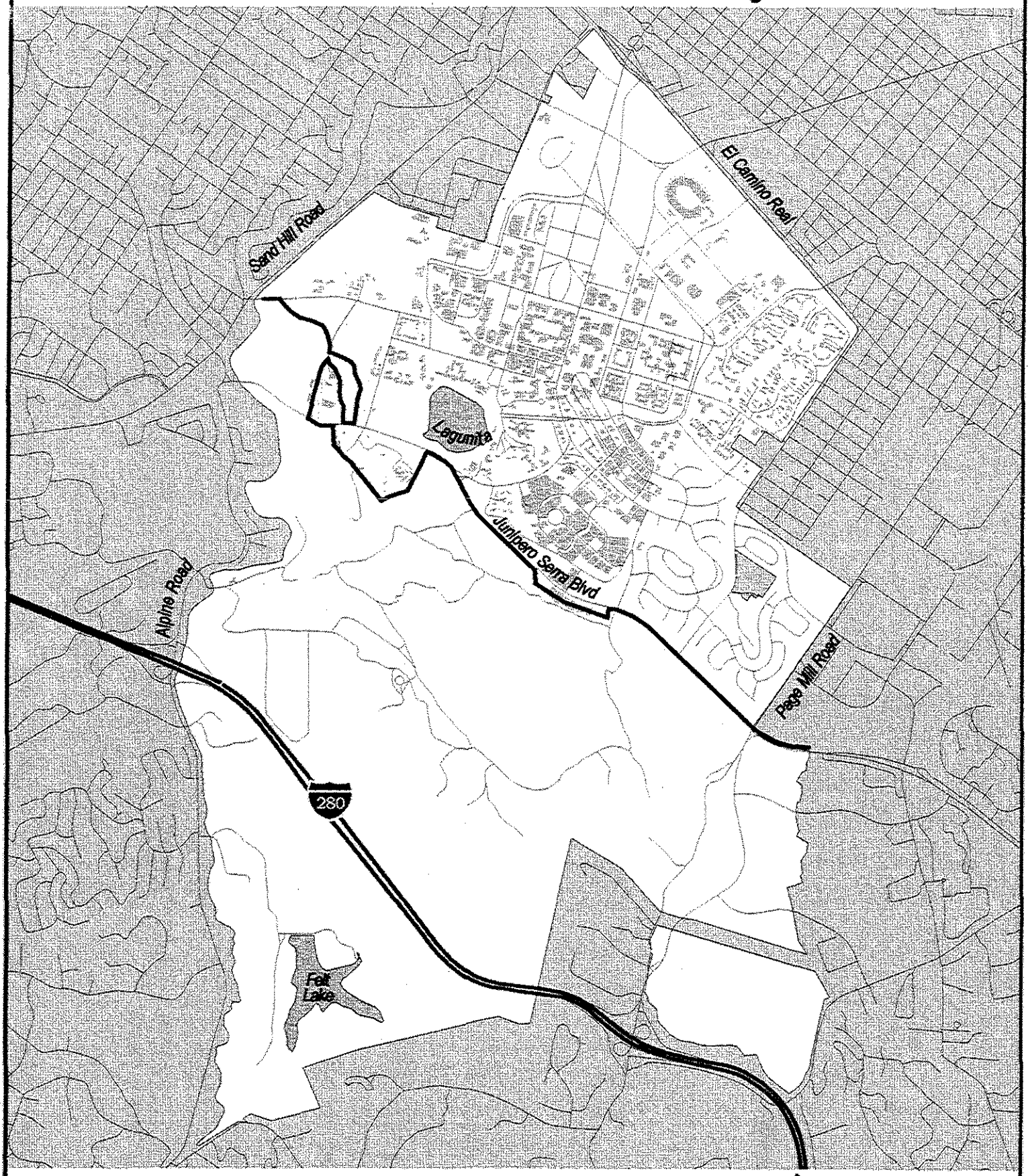
The General Plan identifies considerations for the establishment and periodic review of urban growth boundaries between the County and incorporated cities.

The Community Plan applies the concept of an urban growth boundary to Stanford in the form of an "Academic Growth Boundary" (AGB). The concept of the growth boundary as it applies to Stanford is a basic one: development must occur within the AGB, with lands outside the AGB remaining in open space. The AGB is the primary mechanism for promoting compact urban development and resource conservation in the Community Plan, and it serves as the basis for associated policies throughout the plan that reinforce this basic demarcation line.

Academic Growth Boundary Location

The Academic Growth Boundary generally parallels existing developed areas (see Figure 1.3 – Academic Growth Boundary). The purpose of this selected location is to direct all new development to infill sites rather than expansion areas, allowing for a compact form of urban development that promotes use of non-auto transportation

Academic Growth Boundary



- - Academic Growth Boundary

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Figure 1.3

Stanford University Community Plan Adopted December 2000

modes and that conserves land and other natural resources. Over time, this location will primarily result in a central campus at Stanford that is developed more intensively than the campus today. The location of the AGB also allows for a variety of settings to meet different academic and research needs.

Throughout the Community Plan, areas within the AGB (generally north of Junipero Serra Boulevard) are considered "central campus" and the areas outside the AGB (generally south of Junipero Serra Boulevard) are considered "foothills" (see Figure 1.2 – Community Plan Locations).

Development Policies

Allowable development for areas within and outside the Academic Growth Boundary is defined in the Land Use chapter of the Community Plan. Different land use designations are applied in those areas that direct development to land inside the growth boundary. Essentially all uses associated with the educational and residential function of the campus are directed inside the boundary, while areas outside the boundary are reserved for open space and academic activities that require the foothill setting for their basic functioning. A major existing use which is outside the AGB is the Stanford Golf Course, which is considered an open space use under the Community Plan.

Academic Growth Boundary Timing

The Academic Growth Boundary is not meant to be a permanent planning boundary, but it does need to remain in place for a long enough period of time to ensure that development will be directed toward the central campus over the long term. The AGB will remain in the established location for a period of at least 25 years. The Community Plan requires a vote of four-fifths of all members of the Board of Supervisors to modify the AGB location during this 25 year time period, in contrast to the simple Board majority required for other General Plan amendments.

Based on the historic growth rate of approximately 200,000 square feet of additional development per year for the past 40 years, 25 years of development would total an additional 5 million square feet, excluding faculty/staff housing which is separately regulated. Adding 5 million square feet to the current total would result in a central campus building area of approximately 17,300,000 square feet, excluding faculty and staff housing. In addition to the time limitation, this amount of cumulative development is a prerequisite or "trigger" for possible modification of the AGB. No modification of the growth boundary may be proposed or approved prior to 25 years from approval of the Community Plan and total building area on the central campus reaches 17,300,000 square feet.

The land area in which this development would be located is 1,370 acres, which is the area of the central campus excluding the current and proposed future faculty/staff residential area.

This AGB threshold serves several purposes:

- It defines the point at which expansion of the portion of the campus designated for academic and related development may be considered.
- It defines the development intensity level for the Academic Campus land use designation (see Land Use Chapter) under the Community Plan.
- It provides for an adequate amount of additional building area to serve Stanford's needs over the long term.
- It specifically aims to provide a concentration of people and activity conducive to use of transit and non-automobile trips.

It is important to distinguish that the AGB modification threshold in no way serves as an approval by the County of this amount of development. Actual development and population growth proposals by Stanford, both in the form of General Use Permit applications and as applications for individual building projects under the GUP, will continue to be evaluated for their environmental and policy impacts by County staff, the Planning Commission, and the Board of Supervisors.

Accommodating all future additional development within the AGB may require exploration of new areas for development in the future, such as the area of the west campus currently expected to remain undeveloped according to the development agreement between the City of Palo Alto and Stanford for the Sand Hill Road Corridor Projects. A higher level of building intensity through increased building height may also be needed.

Concurrent with their application for a General Plan amendment in the form of a Community Plan, Stanford University filed an application with the County for a new General Use Permit, requesting 2,035,000 additional square feet of academic and support space, 2,000 housing units for students, 350 units for postdoctoral fellows, and up to 668 housing units for faculty and staff. Excluding faculty and staff housing and assuming 550 square feet per unit of student housing and 1,000 square feet per unit of postdoctoral fellow housing, this development application requests an additional 3,485,000 square feet of new building area on the campus over the next 10 years. Despite this accelerated rate of new development compared to past years, the AGB will remain in place for 25 years, indicating that growth rates would need to decline in the future. The calculations for the AGB threshold are summarized in Table 1.3:

Table 1.3 – AGB Threshold Calculations	
Land area (excluding faculty/staff residential areas)	1,370 acres
Current building area	12,300,000 square feet
Current building intensity ratio (building area/land area)	0.21
40-year annual growth rate	200,000 square feet per year
25-year growth allocation (growth rate * 25 years)	5,000,000 square feet
AGB threshold building area	17,300,000 square feet
AGB threshold building intensity (AGB threshold building area/land area)	0.29
Proposed General Use Permit development	3,485,000 square feet
Amount remaining in AGB threshold after GUP development	1,515,000 square feet

Calculations of current and future on-campus building area do not include faculty/staff housing. Development in residential areas is regulated in the Community Plan under a different land use designation that defines allowable residential density for these areas, consistent with the historical practice of excluding faculty/staff housing from the General Use Permit.

Community Plan Policies Supporting Academic Growth Boundary

The following table describes some means by which the Academic Growth Boundary, and the associated concepts of compact urban development and resource conservation, are reinforced in other chapters of the Community Plan.

Table 1.4 – Community Plan reinforcement of AGB	
Chapter	**AGB Reinforcement**
Land Use	Land Use designations within and outside the AGB
Housing	Identification of housing sites within the AGB; promotion of higher-density housing
Open Space	Protection of open space outside the AGB; promotion of balance between high intensity development and open space inside the AGB
Circulation	"No net new commute trips" standard, which promotes compact development to allow for use of transit, bikes and walking

Policies

SCP-GD 1
Establish and maintain an Academic Growth Boundary (AGB) as shown on Figure 1.3. Direct future development on Stanford lands within the AGB, consistent with the Community Plan land use designations.

SCP-GD 2
Retain the location of the AGB as shown in Figure 1.3 for at least 25 years, and until the building area of academic and support facilities and student housing reaches 17,300,000 square feet.

SCP-GD 3
Allow modification of the location of the AGB within 25 years of its initial approval only upon a four-fifths vote of the Board of Supervisors.

SCP-GD 4
The design and intensity of growth within the AGB should facilitate transit usage. There should be a mixture of uses to allow for a high degree of pedestrian and bike trips. The location of uses should facilitate non-auto trips.

SCP-GD 5
The design and intensity of development outside the AGB should be very low intensity supporting academic field research, research needing remote locations, agricultural and recreational uses.

SCP-GD 6
Incremental additional development within the AGB may only be permitted through a General Use Permit approved by the County.

Strategy # 2: Engage in Co-operative Planning and Implementation

The policies associated with this strategy articulate and reinforce the decision making and co-operative arrangements among Stanford, the City of Palo Alto and the County of Santa Clara which have been in place for several decades. These policies clearly articulate a departure from General Plan policies for other urban unincorporated areas of the county; however, because the County's intentions regarding annexation, use regulation, and service provision differ from other urban areas it is appropriate that specialized policies and consultation procedures apply to Stanford.

The 1985 Land Use Policy agreement stipulates that Stanford will provide all municipal services to unincorporated portions of Stanford lands, including contractual arrangements for services as needed. The Community Plan and new

General Use Permit create a need to ensure that service use by Stanford residents and Stanford's provision or contracting of services are consistent with one another.

The policies also reflect the County's desire to understand the University's long-term development plans so that such development may accomplish the University's academic mission in a manner consistent with quality planning practices and the County's planning objectives. The Community Plan represents a commitment to quality stewardship of a unique regional asset.

To provide for consideration of these issues, Stanford will be required prepare, at its own expense and in cooperation with the County Planning Office, a Sustainable Development Study covering all of its unincorporated lands in Santa Clara County. This study will be required to be completed during the time that the 2000 General Use Permit is in effect to ensure that both growth under the 2000 General Use Permit and future growth patterns are consistent with the recommendations of the study regarding the appropriate location and manner of development.

The Sustainable Development Study shall be based upon and meet planning principles and criteria established by the Board of Supervisors in the Community Plan and 2000 General Use Permit, as supplemented by the County Planning Office. These principles and criteria will include, but not be limited to, recognition, protection and avoidance of important natural resources including sensitive plant and animal species and their habitats, creeks and riparian areas, drainage areas, watersheds, scenic viewsheds, and geologic features such as steep or unstable slopes, and faults. The Sustainable Development Study shall identify the maximum planned buildout potential for all of Stanford's unincorporated Santa Clara County land, demonstrate how development will be sited to prevent sprawl into the hillsides, contain development in clustered areas, and provide long-term assurance of compact urban development. In the interest of maintaining hillside views, developable areas should generally be limited to those with an elevation lower than 200 feet. Coupled with new zoning that promotes clustering of development, the Sustainable Development Study will address issues of resource protection with a view beyond the 25-year time frame of the AGB.

The County may, at Stanford's expense, choose to conduct a parallel study to the Sustainable Development Study prepared by Stanford, or may choose to do additional work to supplement Stanford's study. The Sustainable Development Study will be submitted to the Board of Supervisors for approval.

Policies

SCP-GD 7
The use and development of Stanford lands in the unincorporated area of Santa Clara County shall be consistent with:

- the County General Plan, including this Community Plan;

- the County Zoning Ordinance;
- a conditional use permit known as the Stanford University General Use Permit;
- other use permits and approvals as required, granted by the County within the parameters of the Zoning Ordinance and the General Use Permit; and,
- the Land Use Policy Agreement among the County, the City of Palo Alto, and Stanford.

SCP-GD 8
Academic and related development on unincorporated lands of Stanford University within Palo Alto's urban service area shall not be required to conform to the City of Palo Alto's Comprehensive Plan.

SCP-GD 9
The provision of urban services to the academic lands of Stanford University shall be the responsibility of the University. This may be accomplished through direct provision of such services by Stanford, payment of in-lieu fees, or appropriate contractual relationships with local jurisdictions.

SCP-GD 10
Annexation of Stanford lands shall be in accordance with the 1985 Land Use Policy Agreement:

- Academic land uses, for which the University provides or obtains its own services, will not be required to annex to a city.
- Open space and agricultural uses of land will remain unincorporated.
- Other non-academic uses of University land should be subject, in appropriate cases, to city annexation, as agreed to in the Land Use Policy Agreement.

SCP-GD 11
In accordance with the adopted Land Use Policy Agreement and Protocol, provide opportunities for the City of Palo Alto to review and comment upon projects and proposals involving Stanford University that may affect the City.

SCP-GD 12
Determine and define the long-term incremental growth potential for Stanford lands, and identify the maximum planned buildout potential and all appropriate areas of potential development through completion of a Sustainable Development Study. The Sustainable Development Study shall accomplish the following:

- Demonstrate how future development will be sited to prevent sprawl into the hillsides, contain development in clustered areas, and provide long-term assurance of compact urban development; and

- Provide for protection and/or avoidance of sensitive plant and animal species and their habitats, creeks and riparian areas, drainage areas, watersheds, scenic viewsheds, and geologic features such as steep or unstable slopes, and faults.

Implementation Recommendation

SCP-GD (i) 1
Revise the Protocol, which is maintained under the stipulations of the 1985 Land Use Policy Agreement, to reflect changes in land use policies and review procedures resulting from adoption of the Community Plan and the 2000 General Use Permit.

SCP-GD (i) 2
Identify urban service levels and service needs of Stanford residents. If Stanford is not providing an appropriate level of urban services to its residents, require that Stanford either provide any needed municipal services, pay in-lieu fees, or contract with the appropriate agencies to provide them. Contractual agreements or services required by the County will recognize that individuals commonly use services independent of jurisdictional boundaries, that jurisdictions may employ policies that give priority to their residents for service use, and that service levels differ among jurisdictions.

SCP-GD (i) 3
Require that Stanford prepare and submit to the Board of Supervisors for approval a Sustainable Development Study to determine the maximum appropriate buildout and development location potential for all of Stanford's unincorporated lands. The Sustainable Development Study shall be completed and approved prior to acceptance of applications for the second 50% of the academic development allowed under the 2000 GUP. Further, the County shall not accept any further use permit applications until the Sustainable Development Study is completed. If appropriate, the County Planning Office may conduct additional work related to the Sustainable Development Study. All work associated with the study shall be conducted at Stanford's expense. The County's approval of the Sustainable Development Study shall in no way be construed as the County's agreement to or approval of the amount, type, or location of development proposed in the Study.

SCP-GD (i) 4
With respect to the foothills, the Sustainable Development Study shall identify all area(s) of potential future development. The potential development area(s) shall be consistent with the Community Plan strategies and policies, which include but are not limited to the strategies and policies relating to compact urban development, conservation of natural resources, open space protection, maintenance of scenic values, and avoidance of hazards.

Strategy #3: Mitigate and Monitor the Impacts of Growth

Growth under the Community Plan has the potential to result in impacts to the campus, surrounding communities and the natural environment. These impacts have been and will continue to be analyzed in accordance with the requirements of the California Environmental Quality Act (CEQA), and mitigation measures for those impacts have been identified. The policies and implementation recommendations in the Community Plan and the conditions of the General Use Permit incorporate both mitigation measures for environmental impacts and other policy-level considerations.

Under the General Use Permit, Stanford will be required to obtain additional approval for each individual building or project proposed. Depending on the nature of the project, each approval may require additional environmental review. Additional conditions will be required on a project-specific basis that are consistent with the conditions of the General Use Permit.

Stanford's compliance with the 1989 General Use Permit was monitored through an annual report process. The County intends to continue the requirement of an annual report. However, the County intends to prepare that report under its own direction rather than requiring Stanford to prepare and submit the report as occurred in the past. The preparation of the report shall be funded by Stanford. This report will need to track Stanford's compliance with each of the individual conditions of the General Use Permit, for topics such as transportation, building area, housing, population growth, and habitat protection. It is important that future monitoring and reporting procedures be both verifiable and understandable.

An additional aspect of monitoring will be ongoing communication between the County Planning Office and the local community regarding development at Stanford.

Policies

SCP-GD 13
Stanford University will mitigate environmental impacts of its growth and development in accordance with the conditions of the General Use Permit and mitigation monitoring program for the Community Plan and General Use Permit.

SCP-GD 14
Review Stanford's compliance with mitigation requirements and conditions of the General Use Permit through an independent, verifiable, and understandable monitoring and reporting procedure.

SCP-GD 15
Promote ongoing exchange of information between the County and the local community regarding development activity at Stanford through the creation of a Community Resource Group ("CRG").

Implementation Recommendation

SCP-GD (i) 5
Prepare annual reports to evaluate Stanford's compliance with the conditions of the General Use Permit and progress towards meeting the implementation recommendations of the Community Plan. Preparation of the report shall be funded by Stanford. The annual report shall be presented to the CRG at its first quarterly meeting each year, and shall then be submitted to the Planning Commission no later than June of each year.

SCP-GD (i) 6
Review and evaluate applications for individual building projects under the General Use Permit, and any other use permit applications, for consistency with the Community Plan, the conditions of the General Use Permit, and all other relevant County policies and requirements.

SCP-GD (i) 7
Create a CRG comprised of 8-12 persons. The CRG members shall be selected by the County Planning Office in consultation with the County Supervisor for the Fifth Supervisorial District. The CRG would meet at least quarterly and would serve as a mechanism for exchange of information and perspectives on Stanford development issues, but would have no formal role as an advisory body.

Land Use

Stanford Community Plan Issues and Policies

Chapter Summary

Land use, and the policies that govern it, contribute fundamentally to the character and form of a community. At Stanford, the combination and arrangement of land uses form a complete community that is self-contained for many of its functions, but which is also part of a larger regional setting.

At the countywide level, institutions like Stanford are designated as "Major Educational and Institutional Uses" on the General Plan Land Use Map. This Land Use Plan designation differentiates universities and similar institutions from other major categories or classifications of land use. Policy R-LU 63 of the County's General Plan states the description and intent of the institutional designation:

The Major Educational and Institutional Uses designation is applied to lands belonging to a university, religious order, or private institution, used as a place of learning, an academic reserve for future university use, a seminary, or a research facility.

With the establishment of the Community Plan, Stanford lands are further divided into a set of sub-categories of land use. Designations applied to lands within the Academic Growth Boundary (AGB) include:

- Academic Campus,
- Campus Open Space,
- Campus Residential – Low Density,
- Campus Residential – Medium Density, and
- Public School.

Two additional designations have been established to apply to lands outside the Academic Growth Boundary:

- Open Space/Field Research, and
- Special Conservation Area.

Consistent with the format of the General Plan's Land Use Chapter, the policies in this chapter provide basic descriptions of the purpose of each land use designation,

policy statements indicating the range of allowable uses, and development-related policies. Other strategies and policies for the overall form and extent of campus growth are contained in the Growth and Development chapter.

Stanford was founded as and remains a residential university, with academic, residential, athletic, commercial, and a variety of other land uses. Maintaining appropriate arrangements and inter-relationships between these uses, correlated with the transportation network, is as essential to the function and well-being of the University as an entity as it is to the function of any city. Furthermore, the built and open space environments of the campus lands complement each other and function together to define the campus' unique sense of place. As Stanford grows and changes over time and campus land use intensifies, it is important to maintain these inter-relationships and guide development in such a way that the most appropriate and optimal development locations are selected without sacrificing those qualities and areas which contribute to the quality of life on Stanford University land.

Background

Academic buildings and land uses, student and faculty/staff residences, student and community services, and other types of land uses are closely integrated on the Stanford campus. Nevertheless, Stanford does exhibit a definite land use pattern, based upon the original layout for the overall campus design (see Figure 2.1 – Generalized Campus Land Use Pattern).

- The developed portion of the campus is primarily contained between Junipero Serra Boulevard and El Camino Real.
- Uses within the central campus are in a generally concentric arrangement of residences around a core of academic buildings.
- Uses with a close relationship to one another, such as athletic facilities or science and medical buildings, are clustered together.
- Faculty and staff housing is highly concentrated in the southeastern corner of the central campus.
- Despite the intensely developed nature of most of the central campus, important and extensive open space or undeveloped areas remain.

Generalized Campus Land Use Pattern

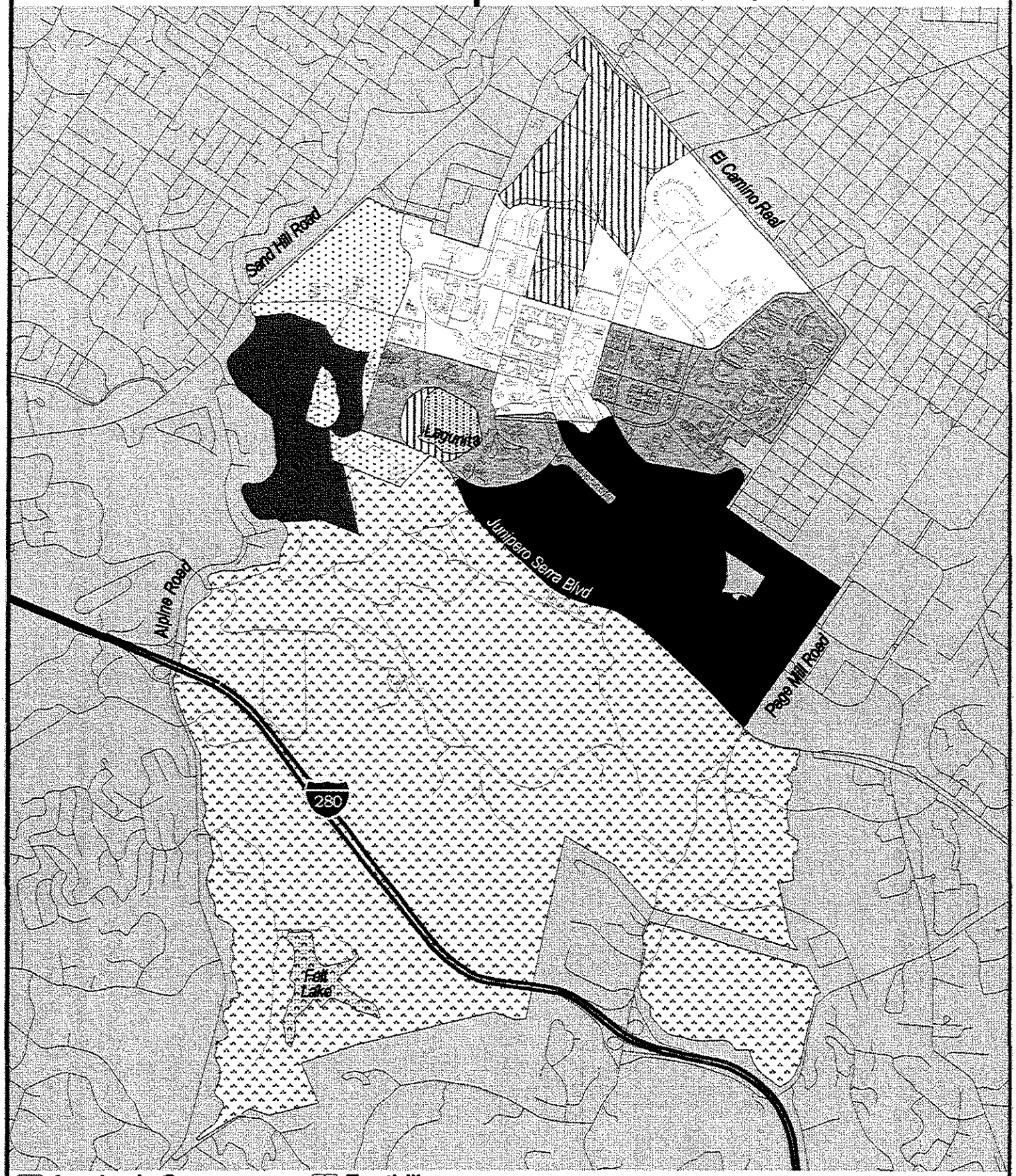


Figure 2.1

The clearest land use distinction on unincorporated Stanford land in Santa Clara County is between the developed central campus and the largely undeveloped foothills. Historically, these two areas were assigned separate land use designations, or sub-categories of the Major Educational and Institutional Uses designation, which previously served as the only differentiation in land use policy for the campus at the General Plan level. This approach provided extensive flexibility for Stanford to arrange and integrate different land uses, particularly in the central campus, but it did not recognize the many different land uses which do exist at Stanford. Nor did it necessarily provide much certainty or future guidance regarding long term land use patterns, which is the principal purpose of land use elements in general plans.

The concept contained in the Community Plan builds upon the former approach by establishing an Academic Growth Boundary (AGB) to reinforce the distinction between the urbanized campus area and the undeveloped portions of the foothill lands, while maintaining a significant amount of flexibility for the use of lands within the AGB.

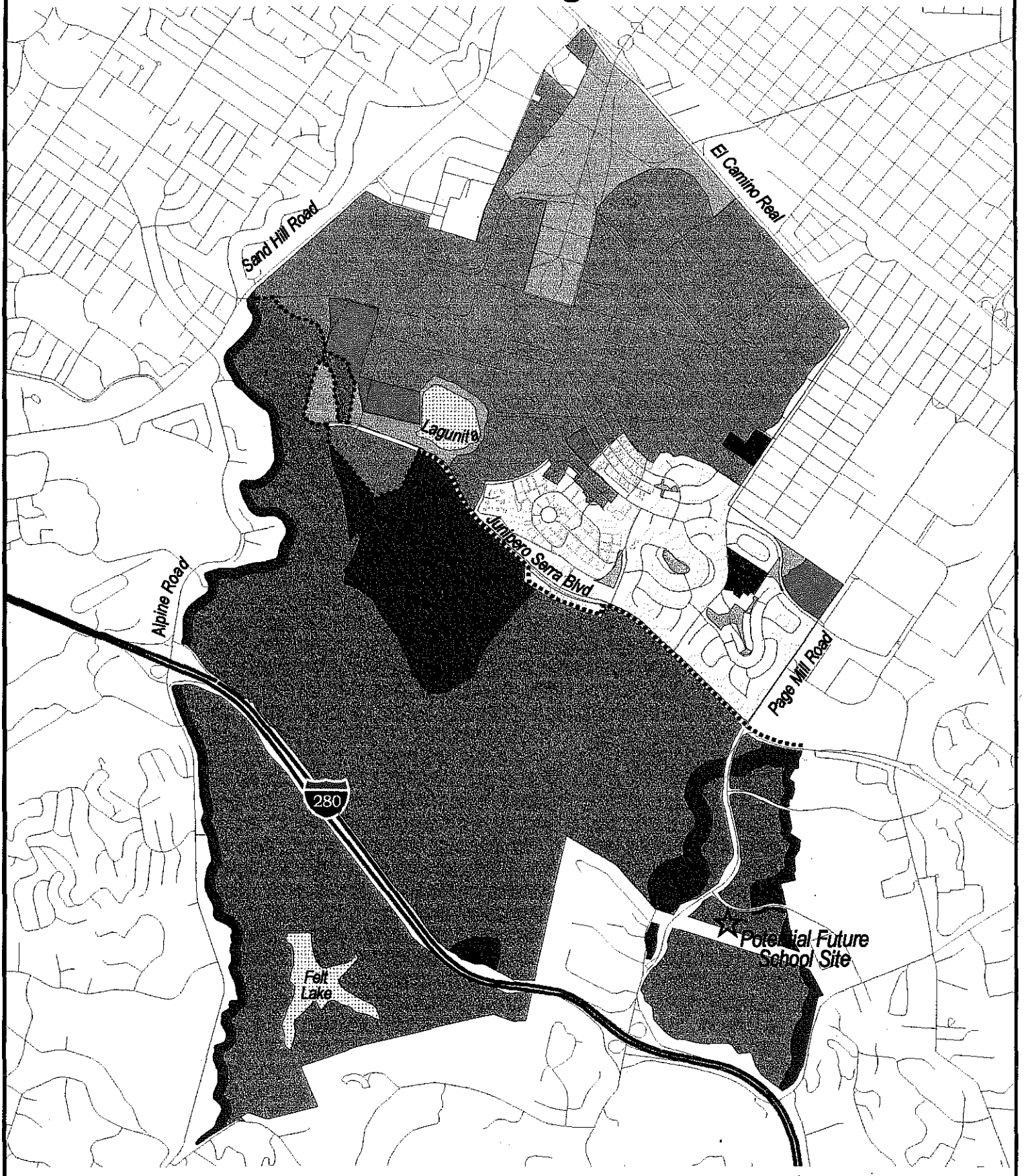
The Land Use Diagram indicating the locations of the land use designations is included as Figure 2.2 – Land Use Designations.

Lands inside the AGB

Within the AGB, the land use designations balance the need to maintain the proximity of related uses with the desire to conserve the character of some individual land uses and areas. Consequently, the concept of an "Academic Campus" land use designation, which encompasses areas with academic buildings, student housing, and student and academic support services, is retained from the previous designations. Additional designations for faculty/staff housing and for protected central campus open space are also established. A residential population density for faculty/staff housing is provide, based on an assumed household size of 2.4 persons per household as projected by ABAG. On-campus public schools are recognized as a separate land use.

Statement of standards of population density and building intensity for lands inside the AGB: As discussed in the Growth and Development chapter, the current cumulative building area on campus is approximately 12.3 million gross square feet (gsf). An additional 2,035,000 gsf of academic and academic support space and 3,018 additional housing units may be constructed through the year 2010. Population density inside the AGB is indirectly controlled through limits on academic and residential development. The current campus daytime population is approximately 21,000 and is expected to increase by 2,201 persons (1,266 graduate/postgraduate and 935 faculty/staff) over the 2000 to 2010 period. Residential population increases in the Academic Campus area (graduate students and postgraduates) are included in these totals. In faculty/staff residential areas, residential population densities are provided through the Campus Residential–Low Density and Campus Residential–Medium Density land use designations. It is not possible for the County to predict development levels or population increases beyond 2010 because no additional development proposals have been submitted by Stanford and it is unknown whether the County would approve such proposals.

Land Use Designations



- Campus Residential - Low Density
- Campus Residential - Moderate Density
- Academic Campus
- Public School
- Campus Open Space
- Open Space and Field Research
- Special Conservation
- Academic Growth Boundary

Scale 1:30,000

N

0 0.5 1 Miles

Figure 2.2

Stanford University Community Plan Adopted December 2000

Lands outside the AGB

In the past, the land use designation established for this portion of Stanford lands reflected its general open space character but also provided some potential for future academic use, as well as housing. In keeping with the concept of the Academic Growth Boundary and the Community Plan Growth and Development policies, the future use of this area is limited to field research-related activities and open space uses. Greater emphasis is placed on conserving the open space character of the land, and an additional designation, Special Conservation Areas, provides even greater protection to the most environmentally sensitive areas.

The individual land use plan designations that follow describe the uses that are allowed on Stanford lands. The designations correspond to those depicted on Figure 2.2, Land Use Designations. All allowable uses are consistent with the policies of the 1985 Land Use Policy Agreement between the County, the City of Palo Alto, and Stanford.

Statement of standards of population density and building intensity for lands outside the AGB: For lands outside the AGB, the population density and building intensity are expected to be quite low due to the nature of the uses allowed in the Open Space/Field Research and Special Conservation Area designations. The maximum allowable development on these lands through the year 2010 is 15,000 gsf. Any additional population in these land use designations is included in the population totals for lands inside the AGB.

Lands Within the Academic Growth Boundary

Academic Campus (AC)

Description and Intent

SCP-LU 1

The Academic Campus designation applies to lands in current or intended academic use. Academic use includes both facilities used for teaching or research activities and the wide range of uses which support academic activity, such as administrative offices, athletic facilities, student housing, and student and administrative support services. This designation is meant to provide Stanford with the opportunity to locate these uses in relation to one another according to the University's programmatic needs.

Allowable Uses

SCP-LU 2
Allowable academic uses include:

1. instruction and research (including teaching hospital facilities);
2. administrative facilities;
3. housing intended for students, postgraduate fellows, and other designated personnel;
4. high density housing for faculty and staff;
5. athletics, physical education, and recreation facilities;
6. support services (such as child care facilities, the bookstore, and the post office);
7. infrastructure, storage, and maintenance facilities;
8. cultural facilities associated with the University; and,
9. non-profit research institutions with close academic ties to the University.

Development Policies

SCP-LU 3
Development intensity of individual facilities may vary with the type of allowed use. Maximum cumulative development amounts are permitted through the Stanford General Use Permit, consistent with the AGB threshold amount of development (See Growth and Development Chapter). Housing for faculty and staff at densities above 15 units per acre may be developed.

SCP-LU 4
Development must be consistent with the 1985 Land Use Policy Agreement, amended as needed, with regard to allowable uses and provision of services.

Implementation Recommendation

SCP-LU(i) 1
Maintain the use of the County's A1, General Use Zoning District for areas under the Academic Campus land use designation, with allowable uses, development intensity, and conditions governed further through the General Use Permit.

Campus Residential – Low Density (CR-L)

Description and Intent

SCP-LU 5
The Campus Residential-Low Density designation applies to lands immediately adjacent to the Academic Campus area that have a low-density residential character and are used for housing University faculty and staff. These areas are an important housing resource that allows faculty and staff to live in close proximity to the academic portions of the campus. This designation applies to existing low density residential neighborhoods and to new residential areas where lower density of development is desired for compatibility with adjacent development.

Allowable Uses

SCP-LU 6
Uses within this designation shall be primarily residential, with some provision for limited commercial services oriented to the residential neighborhood. Allowable uses include:

a. Single-family housing, duplexes, and townhouses available as residences for University faculty and staff.

b. Residential support services such as child care or convenience commercial facilities at a neighborhood-serving level.

Development Policies

SCP-LU 8
Residential density up to 8 units per acre is permitted, with potential for clustering individual units to provide public or private open space. This residential density yields a population density up to 19 persons per acre.

SCP-LU 9
Residential support uses shall be of a scale consistent with and appropriate to the surrounding neighborhood.

Implementation Recommendation

SCP-LU(i) 2
Enact and apply appropriate zoning consistent with the allowable uses and development policies of this designation.

Campus Residential – Medium Density (CR-M)

Description and Intent

SCP-LU 10
The Campus Residential-Medium Density designation applies to lands immediately adjacent to the Academic Campus area that have a higher density residential character and are used for housing University faculty and staff. These areas are an important housing resource that provides housing opportunities for faculty and staff and which promote the more efficient use of land for residential development. This designation applies primarily to new residential areas which provide opportunities for a more compact development pattern than the existing single-family residential neighborhoods.

Allowable Uses

SCP-LU 11
Uses in this designation shall primarily be residential, supplemented by services oriented to the residential neighborhood. Allowable uses include:

a. Single-family housing, duplexes, townhouses, condominiums, flats, and apartments available to University faculty and staff.

b. Residential support services such as child care, recreation services, or convenience commercial facilities.

Development Policies

SCP-LU 12
Residential density between 8 and 15 units per acre is permitted, with potential for clustering individual units to provide public or private open space. This residential density yields a population density between 19 and 36 persons per acre.

SCP-LU 13
Residential support uses shall be of a scale consistent with and appropriate to the surrounding neighborhood.

Implementation Recommendation

SCP-LU(i) 3
Enact and apply appropriate zoning consistent with the allowable uses and development policies of this designation.

Campus Open Space (COS)

Description and Intent

SCP-LU 14
The Campus Open Space designation applies to open spaces essential to the historic form and character of the campus (including Palm Drive, the Oval, the Arboretum, the Red Barn area, and Lake Lagunita). It also applies to designated parks within faculty/staff residential neighborhoods and to important and substantial resource conservation areas such as wetlands or habitat conservation areas within the central campus.

Allowable Uses

SCP-LU 15
Uses must retain land in open space, and must be consistent with the individual character of each area included in this designation. These areas shall be maintained as park-like areas, unimproved open space, landscape buffers, riparian corridors, and conservation areas. Temporary activities of a limited nature that are in keeping with the open space character are also permitted. Examples include limited duration special events or general recreational activities, such as those regularly occurring in the Oval area.

Development Policies

SCP-LU 16
No new permanent, above ground buildings or structures for occupancy are permitted. Landscaping structures or features, such as walls, fences, arbors, fountains, and statues or other forms of public art, are allowed.

SCP-LU 17
Temporary structures associated with appropriate temporary activities may be allowed, such as concession stands, tents, or similar structures. However, no temporary use which results in the degradation of biological resources is permitted.

Public School (PS)

Description and Intent

SCP-LU 18
This designation applies to land intended for use as a public school.

Allowable Uses

SCP-LU 19
The use of these lands is limited to public school facilities, including appropriate buildings, parking, playgrounds, and athletics fields.

Development Policies

SCP-LU 20
Stanford and the appropriate school district shall make every effort to develop school sites in an efficient manner consistent with the environmental setting of the site.

SCP-LU 21
Stanford and each school district shall seek and promote opportunities for cooperative use of facilities, as appropriate.

SCP-LU 22
If Stanford land used for a public school is no longer required for school use at any time in the future, it may be converted to another use by the University if redesignated for the intended use through the General Plan amendment process.

Lands Outside the Academic Growth Boundary

Open Space and Field Research (OS/FR)

Description and Intent

SCP-LU 23
The Open Space and Field Research designation applies to undeveloped lands outside the Academic Growth Boundary. These lands are important for their environmental resources and for their role in creating an open space setting for the campus and the region. They also serve as a resource for field research and research-related activities dependent on the undeveloped foothill environment.

SCP-LU 24
Lands within the Open Space and Field Research designation are not eligible for uses other than those permitted under the policies of this land use designation except through a General Plan amendment to change the land use designation of the property. If any lands are proposed for a land designation which is intended to be applied only to lands within the Academic Growth Boundary, the proposed amendment must include a modification of the AGB. Proposals to modify the AGB must be in accordance with the applicable policies governing its amendment contained within the Growth and Development Chapter; therefore, no such General Plan amendment may be considered within 25 years of approval of the Community Plan and cumulative development of at least 17.3 million square feet within the AGB.

SCP-LU 25
This designation does not include lands in which special biological resources or hazards exist and which are inappropriate for development under County, State, or Federal laws, regulations, or policies (see Special Conservation Areas designation).

Allowable Uses

SCP-LU 26
Allowable land uses within the Open Space and Field Research designation include:

a. field study activities;

b. utility infrastructure in keeping with the predominantly natural appearance of the foothill setting;

c. grazing and other agricultural uses;

d. recreational activities which are consistent with protection of environmental resources (*e.g.*, not construction or operation of a new golf course) and with appropriate policies regarding foothill access;

e. specialized facilities and installations that by their nature require a remote or natural setting, such as astronomical or other antennae installations or structures accessory to field study activities; and,

f. environmental restoration.

Development Policies

SCP-LU 27
No permanent buildings or structures are allowed, other than utility infrastructure and a limited number of small, specialized facilities or installations that support permitted or existing activities, or require a remote, natural setting and cannot be feasibly located within the AGB.

SCP-LU 28
Existing non-conforming uses within this designation, such as the golf course, may continue indefinitely. Remodeling or reconstruction of existing facilities after a natural disaster may be allowed, but no further expansion is permitted. Modification of the configuration of the golf course generally within its existing boundaries is permitted.

SCP-LU 29
Allowable development shall be clustered as feasible, primarily in areas with low environmental sensitivity, to preserve expanses of open space, environmentally sensitive areas, and scenic vistas.

Implementation Recommendation

SCP-LU(i) 4
Enact and apply appropriate zoning consistent with the allowable uses and development policies of this designation. Incorporate the clustering model of the County's Hillsides General Plan designation and Hillside zoning district in the development standards for this new zoning district.

Special Conservation Areas (SCA)

Description and Intent

SCP-LU 30
The Special Conservation Areas designation applies to lands south of Junipero Serra Boulevard which is deemed unsuitable for development due to natural resource constraints. Accordingly, no physical development other than that which supports conservation efforts may occur in these areas. It may include areas with the following environmental constraints:

a. Steep or unstable slopes;

b. Seismic or other geologic hazard zones;

c. Riparian areas extending 150 feet from the top of creek banks; and,

d. Sensitive habitat areas, particularly for special status species.

Allowable Uses

SCP-LU 31
The use of these areas is limited to conservation activities and habitat management, field environmental studies, and appropriate agricultural uses. Recreational use may be allowed if it is consistent with the particular environmental constraints of an area. Access for recreational use may be restricted.

Development Policies

SCP-LU 32
No new permanent development in the form of buildings or structures is allowed, other than construction, modification, and maintenance of improvements to support conservation efforts. Existing non-conforming uses are allowed to remain, in accordance with the County's requirements for non-conforming structures.

SCP-LU 33
Stanford shall prepare a Special Conservation Plan for the Special Conservation Areas. The Special Conservation Plan shall be submitted to the County Planning Office for approval. The plan will provide management guidelines addressing the following goals:

- habitat management within the area for 25 years;
- control of invasive, non-native species;

- control of erosion;
- avoidance of undisturbed areas;
- public safety;
- appropriate access; and
- minimization of human-caused impacts.

The plan will contain measures specific to California tiger salamander, red-legged frog, and steelhead habitat; riparian habitat; and geologic and seismic hazard areas. The plan will consider such activities as resource conservation, construction of facilities to support conservation activities, access, vegetation management, and best management practices for Stanford lessees located in the Special Conservation Areas.

Implementation Recommendation

SCP-LU(i) 5
The County Planning Office will review and comment on any proposed program or policy for recreational access to lands within the Special Conservation Areas designation.

SCP-LU(i) 6
Review planned activities in Special Conservation Areas in a manner consistent with the provisions of the Special Conservation Plan.

SCP-LU(i) 7
Enact and apply appropriate zoning consistent with the allowable uses and development policies of this designation.

Housing

Stanford Community Plan Issues and Policies

Chapter Summary

Housing is a countywide issue of concern that has taken on particular importance in the northern portion of Santa Clara County, where Stanford University is located. Countywide, housing supply and affordability issues have been of paramount importance for decades. The housing situation in the area surrounding Stanford has somewhat different implications for the University and its students, faculty and staff than it does for other area residents. The effect of the housing market on Stanford is of particular concern to the County and the University for several reasons.

- The University has a large population of graduate students with very limited incomes who are at a severe disadvantage in the local rental market. Hospital residents and postdoctoral fellows also have incomes substantially lower than the area's median income.

- Faculty and staff must compete for rental and ownership housing with other area residents. Unlike other Santa Clara County industries, where an individual employer is likely to compete with other local employers for workers, Stanford is competing for its faculty and staff with other universities which are generally located in areas with more affordable housing markets. Stanford considers the housing market as a primary obstacle in its recruiting and retention efforts for graduate students, faculty and staff.

- Students, faculty, and administrative staff must often commute very long distances to their classes and jobs at Stanford if they cannot find affordable housing close to the campus.

In the century since its inception, Stanford University has taken steps to address the housing needs of its students and faculty many times, due to the limitations of the housing market and Stanford's nature as a residential university. However, as housing supply and affordability trends within Santa Clara County and the Stanford area worsen, it is in the interest of both Stanford University and the public to ensure balance between housing demand and supply as it pertains to Stanford University's development.

Stanford lands represent one of the most important opportunities in the County to improve the balance between jobs and housing, due to the potential to provide housing on Stanford lands for designated University populations. While this

housing is directly accessible only to Stanford students, faculty and staff, it also benefits the wider community by augmenting the local housing supply. To that end, development of additional housing on the campus is a fundamental policy direction of this Community Plan.

One of the primary means of expediting the construction of needed housing identified in the Community Plan is a linkage policy that requires housing to be developed concurrent with or prior to further academic development. The linkage policy is essential for mitigating housing impacts of anticipated development as well as meeting transportation-related goals for net trip generation described in the Circulation Chapter.

The following strategies are included in the Stanford Community Plan to address Stanford's housing needs and to indicate the overall policy direction for Stanford with respect to housing issues:

Strategy # 1: Increase the Supply and Affordability of Housing

- Sub-Strategy 1A: Plan for a More Adequate and Balanced Housing Supply
- Sub-Strategy 1B: Facilitate and Expedite Needed Residential Development
- Sub-Strategy 1C: Augment Affordability Programs and Funding

Strategy # 2: Balance Housing Needs with Neighborhood Conservation

Background

Housing Demand and Supply - Regional and Historical Context

The issues of housing supply and affordability at the countywide level are discussed extensively in the Housing Chapter of Book A of the General Plan. Housing issues have been at the forefront of the county's planning issues for decades. At the heart of this issue is the matter of jobs/housing imbalance, a multi-faceted problem which involves inadequate numbers of dwelling units to serve all those who work and wish to reside in the county, housing which is not affordable to many households, and significant and increasing distances between housing and job locations at a countywide and regional level. These problems are particularly acute in the northern portion of the county and the southern portion of San Mateo County, which have long been particularly job-rich areas. The adverse social, economic, and environmental effects of this general imbalance are well-recognized, and are compounded with each cycle of major economic growth.

Housing in the Stanford Area

Stanford students, faculty, and staff who seek housing in the Stanford area encounter some common themes: high housing costs and relatively few housing units available

for sale or for rent. The communities that surround Stanford include Palo Alto, Menlo Park, Atherton, Woodside, Portola Valley, Los Altos Hills, Los Altos, and Mountain View. High household incomes, good school districts, climate and geographic location, amenities, and other factors make the Stanford area one of the most desirable and in-demand locations of any in the Bay Area.

Within this general area, the jobs/housing imbalance that is characteristic of Silicon Valley and Santa Clara County generally is most acute. When the last Census was conducted in 1990, Santa Clara County had 861,000 jobs and 540,000 housing units. In very rough terms, assuming 1.56 workers per household, the County estimated there was a gross deficit of 12,220 units. By 1999, that deficit increased to approximately 20,000 units (California Department of Finance and California Employment Development Department).

The Midpeninsula subregion as a whole has a substantial imbalance between jobs and housing. According to the Association of Bay Area Governments Projects 2000, incorporated cities from Redwood City in the north to Mountain View in the south are estimated to have 2.33 jobs for every household. The two cities in this area with the highest ratio of jobs to households are Palo Alto (3.92 jobs per household) and Menlo Park (2.52 jobs per household), followed closely by Mountain View (2.42 jobs per household). This imbalance between jobs and housing acutely affects both the local housing market and traffic congestion.

These basic calculations are intended to convey only an approximate indication of the severity of the jobs/housing imbalance. They address only those units needed by those employed in the county, not including students and retirees. Even as the Silicon Valley economy experiences certain fluctuations in growth trends, vacancy rates in the county remain low. Furthermore, availability of for sale housing remains far below demand.

Since the mid-1990s, Silicon Valley has seen one of its most impressive economic growth cycles in the last 50 years. For example, in Palo Alto and Menlo Park, the number of jobs increased by approximately 12,000 between 1990 and 1999, while the number of housing units increased by only 1,060 during this time, with new jobs outnumbering new housing units by a factor of almost 12:1 (California Department of Finance, ABAG Projections 2000). Furthermore, the incomes and wealth creation associated with the high technology industries in the area have resulted in unprecedented ability and willingness to pay what the market will bear for housing prices in these highly desirable communities. Collectively, scarcity of housing, prosperity, and desirability have been and will continue to be potent factors in the housing situation for the Stanford area.

All of the aforementioned factors have contributed to a decline in overall affordability of housing over time. Median advertised rents in local newspapers in the Stanford area in 1999 ranged from $650 for a studio or rented room to $2,500 for a 3-bedroom apartment or home. The median advertised rent for two-bedroom units was $2,400 per month. Median prices of for sale housing are also higher in Palo Alto than for Santa Clara County overall, and the same is true for Menlo Park relative to San Mateo County's median home price.

The housing supply and affordability concerns that are experienced countywide have a particularly strong effect at Stanford due to the high housing prices in the area around Stanford, the large population of students with relatively low income, and Stanford's need to compete for faculty with universities in more affordable parts of the country. Additional housing on the campus not only provides housing near jobs and augments regional supply, it also contributes to regional commute trip reduction and enables Stanford to meet trip generation goals.

To help mitigate the impacts associated with the high cost of housing on the Midpeninsula, the City of Palo Alto has implemented an inclusionary zoning ordinance that requires new housing developments to offer a specific number of units at below market rates or make a cash payment in lieu of developing the units. In addition, Palo Alto has instituted a program that requires developers of new nonresidential projects to make affordable housing impact payments based on square footage to a fund used to develop below market rate housing. All development on Stanford lands that occurs within the City of Palo Alto is subject to these requirements unless otherwise exempt.

Current Campus Housing Types

There are currently two main types of housing on the Stanford campus: student housing and faculty/staff housing. Student housing for undergraduates and graduate students is closely integrated with the campus core, reflecting the University's programmatic emphasis on an educational environment that extends to the residences. The student housing is comprised of dormitories and apartments. Undergraduates primarily live in dormitories, and remain on campus only during the academic year.

Graduate students live primarily in apartments, and often occupy their apartments year-round for multiple years while they obtain their degrees. Graduate student housing is mostly concentrated on the east side of campus, primarily in the 3,200 person Escondido Village. Approximately 75% of graduate student residents are single students, while the remainder are couples or students with children.

The number of students residing on campus has increased since the 1989 General Use Permit was issued. Some of the increase was due to the addition of housing units, and some was due to increasing the number of students housed in existing facilities.

Table 3.1: Number of Students Residing on Campus

Students	1988-1989	1998-1999	Net Change	% change
Undergraduate	5,492	5,839	347	6%
Graduate	2,930	3,515	585	20%

Source: Stanford General Use Permit Annual Report #11

Stanford guarantees on-campus housing for all of its approximately 6,500 undergraduates who wish to live on campus. Ninety-three percent of undergraduates currently choose to live on-campus. The University also currently provides graduate student housing for 46% of graduate students. With the addition of 483 units in Escondido Village in 2000-01, this percentage will increase to fifty percent.

On-campus housing opportunities are also available to active faculty, retired faculty, surviving faculty spouses, and senior staff. Currently, 989 on-campus units are available to faculty and staff. Most of these homes are on long term ground leases, whereby the occupants lease the land from the University but own the home itself. Twenty-five percent of the campus homes are multiple-family dwellings and 3 percent are attached townhomes.

The Community Plan provides for a substantial increase in the supply of faculty and staff housing eligible to University employees. In addition, a new rental housing complex of 628 apartments at Stanford West, with priority for Stanford faculty and staff, is now under construction on Sand Hill Road in Palo Alto. A senior housing complex with over 388 units has also been approved. Detailed Stanford priority criteria have been developed for the Stanford West Apartments and seniors projects in order to address Stanford's housing needs. Stanford has also identified several other potential residential development sites on its lands in other jurisdictions.

The coordinating mechanism for faculty and staff housing is a full-time faculty/staff housing office that is responsible for counseling and assistance in locating housing, developing and implementing loan assistance and subsidy programs, and facilitating sales of on-campus homes to eligible faculty and staff. Stanford establishes eligibility requirements for such programs after consultation with the Faculty Senate and approval of the Board of Trustees.

Although Stanford provides opportunities for a substantial number of faculty and senior staff to live on the campus, there is a growing imbalance between the number of senior and retired faculty residing on campus and the number of their more junior colleagues who live on the campus. In 1989, 22% of the residents of faculty/staff housing were emeriti. By 1999, that percentage had increased to 34% of the total. In 1999, 50% of emeriti and 40% of full professors lived on campus, but only 14% of assistant professors and 25% of associate professors were campus residents (Faculty Housing Development Proposals, January 1999). As housing in the faculty subdivision is increasingly occupied by senior and retired faculty, less housing is available for new and junior faculty.

Housing Affordability Programs

The University has a variety of housing assistance loan programs intended to address the difference in the cost of home ownership in the Stanford area and areas in proximity to other major research universities. The programs are currently made available to over 2,900 Stanford employees. There are 964 loans outstanding with a balance of $135.8 million. Three hundred and twenty-seven new loans were initiated in 1998-1999, and individuals may obtain more than one type of loan.

Despite the assistance programs, housing in the Stanford area remains unaffordable to many eligible faculty and staff. According to the Faculty Staff Housing Office in January 1999, an associate professor earning the median salary who has a working spouse and who takes advantage of all of the available assistance programs can afford a house that costs approximately $575,000. This amount exceeds the current median price in Santa Clara county, but it is significantly less than the median housing price for homes on the campus and in the surrounding area. Stanford has recently provided special housing supplements and loans to faculty for recruitment and retention, totaling $9 million in 1997-98, when the assistance programs have been insufficient. In 2000, the Provost initiated a faculty task force to consider housing affordability issues and the effectiveness of the current assistance programs.

Housing Supply and Needs

As a residential university, Stanford provides a substantial amount of housing and housing assistance compared to other employers in the County. The following is a general assessment of the extent of housing supply and assistance provided. Stanford's housing programs meet the needs of the different campus populations to varying degrees.

- **Undergraduates**. Stanford's commitment is to provide four years of on campus housing to undergraduates who choose to live on campus. Approximately 93% of the undergraduates choose to live on campus, all of whom are provided with housing.
- **Graduate students**. Stanford currently houses 46% of its approximately 7,000 graduate students on campus, which will increase to 50% with the completion of the housing in Escondido Village. An additional 700 students are housed in subsidized off-campus apartments, with planned increases for 2000-2001. There is substantial demand for additional on-campus graduate student housing, as evidenced by the growing number of students who cannot be assigned on-campus housing in a given year. For example, in 1999, over 1,071 students were denied opportunity for on campus housing through the allocation system referred to as the "lottery." In 2000, despite the addition of 480 new units, the number of unassigned students decreased only slightly, to 985. In addition, many graduate student rooms and apartments are accommodating more students than they have in the past. Stanford intends to construct 1,900 additional graduate student housing units under this Community Plan.
- **Medical residents/postdoctoral fellows.** This group is largely not addressed by current housing programs and, due to low salaries, is at a significant disadvantage in the local housing market. The University currently provides 72 units for medical residents at the Welch Road apartments in Palo Alto. It proposes to construct several hundred additional units for residents and postdoctoral fellows under the Community Plan.
- **Faculty/senior staff.** Currently, 30% of active faculty live on the campus, with many more taking advantage of the various housing assistance programs. Recruitment of faculty is a very strong force behind Stanford's interest in developing substantial amounts of additional faculty housing. The

Community Plan creates the opportunity for up to 668 additional units of faculty and staff housing.

- **Other staff.** Of Stanford's approximately 7,000 staff members (including Medical Center and Stanford Linear Accelerator Center (SLAC), approximately 650 are eligible for on-campus housing or for housing assistance programs at this time (Faculty Staff Housing Office). When completed, the Stanford West housing project will provide 628 rental units for faculty and staff on a priority basis.

Planned New Campus Housing

Under the General Use Permit associated with the Community Plan, the University intends to add 2,200 students, faculty and staff to its overall population. The Community Plan identifies locations for residential development that would allow between 2,655 and 3,022 additional housing units to be constructed on Stanford land. At this ratio, Stanford will add 1.36 housing units for every additional person added to the campus. This ratio represents an improvement in housing supply for new population compared to the 1989 General Use Permit. Under the 1989 General Use Permit, Stanford housed 1.03 additional people for every person added to the campus population. This rate of housing production stands in strong contrast to that of the region, where one housing unit was created for every 9 jobs in northwest Santa Clara County and for every 7 jobs in southern San Mateo County during the 1990s (Silicon Valley Manufacturers Group Housing Solutions report, 1999).

Strategies, Policies and Implementation

Strategy #1: Increase the Supply and Affordability of Housing

The Stanford campus provides one of the most significant opportunities for substantial amounts of new housing development in Santa Clara County. This strategy expresses the fundamental objective of the Community Plan to increase the general supply of housing on campus. Sub-strategies similar to those contained within the Housing Chapter of the General Plan for countywide housing issues elaborate on the principal strategy. These involve planning for housing, expediting the actual construction of needed housing, and augmenting affordability programs.

Sub-Strategy # 1A: Plan for a More Adequate and Balanced Housing Supply

Planning for a more adequate and balanced housing supply involves both supplying more housing types that meet various Stanford population needs as well as providing housing that is more affordable to the target populations. Strategy 1A

emphasizes the importance of designating lands for housing development, as a necessary precursor to actual development. The diversity of the Stanford community and the groups in need of housing requires a multifaceted approach to housing development that enhances Stanford's already varied housing stock.

Specifically, the Community Plan provides for increased housing supply to students and faculty, the two groups which have traditionally been the priority populations for campus housing. The Plan also provides more balance in priorities for various populations, such as increased housing for medical residents and postdoctoral fellows, who have traditionally not been served by campus housing.

This Community Plan further recognizes the differing characteristics between student housing areas and faculty/staff housing areas. Student housing consists of dormitories and apartments that surround the academic portions of the campus. Its occupants are more transitional, with students moving on a frequent basis and heavily involved in activities throughout the campus. The nature of this housing is reflected in its inclusion in the Academic Campus land use designation, which allows for flexibility in the location and use of new student housing by not separating it from the academic uses.

Within the Academic Campus land use designation, this plan identifies several locations for new student housing, particularly in Escondido Village and an area near existing student housing known as the "Searsville Block" that is currently occupied by 13 faculty homes. Other potential sites are also identified near existing student housing areas. The Community Plan also defines locations along Quarry Road for medical resident and postdoctoral fellow housing.

In contrast to the student housing areas, the faculty/staff residential areas more closely reflects a traditional residential neighborhood. The density of most single family portions of the area is generally 3-5 units per acre, although some lots exceed one acre in size. There are two multi-family condominium complexes of approximately 15 units per acre and one complex of attached townhomes. Faculty and staff housing on the campus is almost entirely owner-occupied.

In recognition of the residents' interest in maintaining the character of the faculty/staff residential area, the Community Plan contains separate land use designations for these portions of the campus to distinguish them from the academic core area. These two land use designations for low- and medium-density housing allow up to 8 and 15 units per acre, respectively (see Land Use Chapter). Higher density faculty/staff housing is a permitted use in the Academic Campus land use designation.

With these designations, the Community Plan emphasizes higher densities than that characteristic of existing single family areas in an effort to use land more efficiently and promote production of more affordable housing. The plan also identifies two major sites for new faculty/staff residential neighborhoods at the medium density designation. The first is located on a field northeast of the Red Barn and is known as the "Stable Site." The second is located on the existing driving range near Lake Lagunita.

Developing substantial amounts of additional housing will require development of significant undeveloped sites and/or intensification of use in existing housing areas through redevelopment. Opportunity sites for housing development are identified under this strategy in the table below and should be the focus of future housing development on the campus. The housing sites as shown in this plan do not preclude the identification of other locations for housing inside the AGB in the future, particularly within the Academic Campus land use designation. The Community Plan may also be amended to identify other areas appropriate for housing development over time, to facilitate housing development.

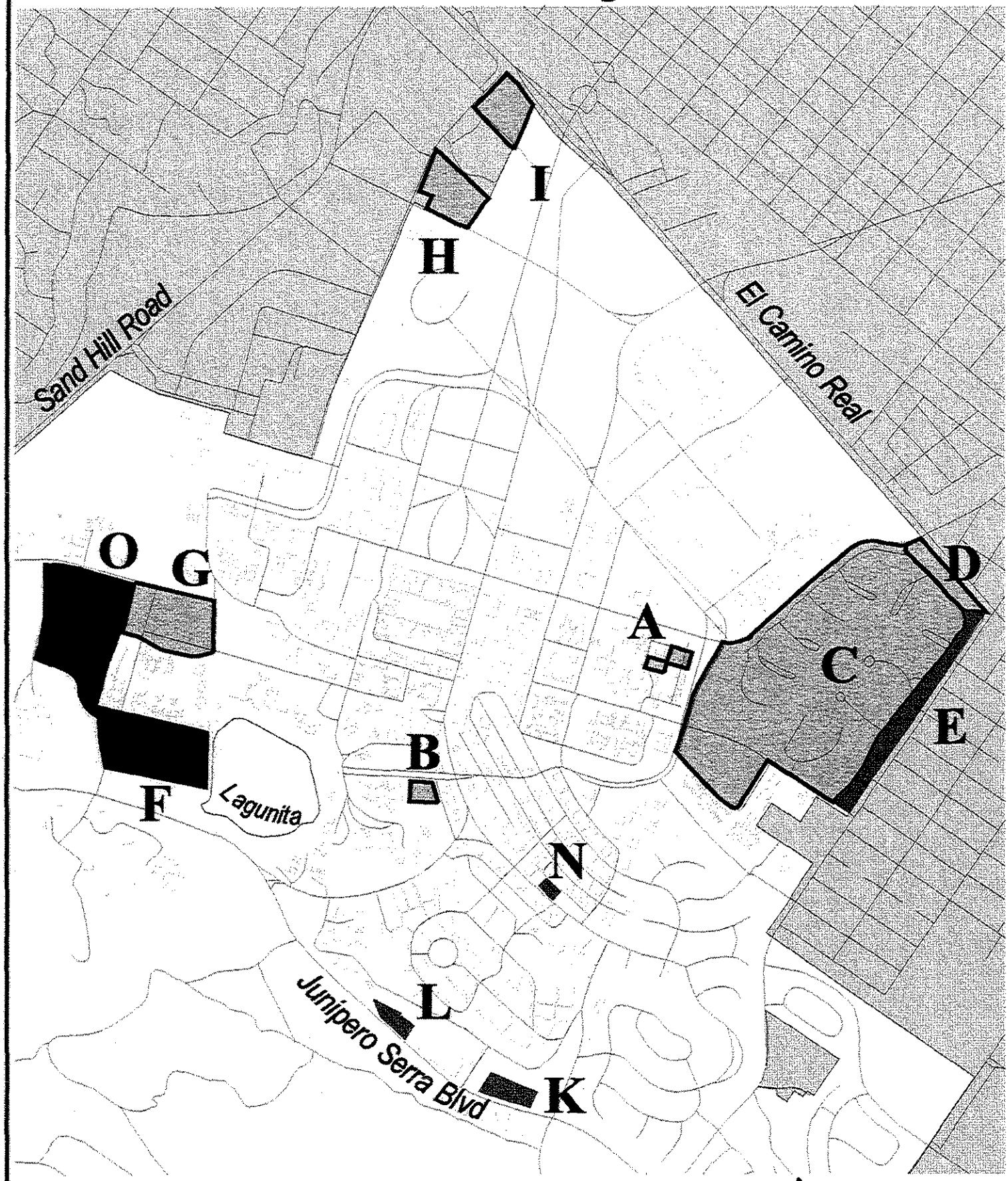
Table 3.2: Proposed Housing Development Potential and Sites

Code	Location	Acres	# Units	User Population
A	Manzanita	1.6	100	Undergrad
B	Mayfield/Row by Florence Moore area	1.3	125	Undergrad/Graduate
C	Escondido Village: Infill	116.5	1,145	Graduate
D	Escondido Village: El Camino Real Frontage	4.3	250	Graduate
E	Escondido Village: Stanford Avenue	9.4	9-75	Faculty/Staff
F	Driving Range	17.5	102-195	Faculty/Staff
G	Searsville Block W/removal of units	12.8	380 (-13)	Graduate
H	Quarry and Arboretum	8.0	200	Postgrad/Hospital Residents
I	Quarry & El Camino Real	6.2	150	Postgrad/Hospital Residents
J	The Lower Knoll	---	---	
K	Lower Frenchman's	2.2	2-18	Faculty/Staff
L	Gerona/Junipero Serra Blvd.	1.5	1-12	Faculty/Staff
M	Dolores	---	---	
N	Mayfield	1.3	1-9	Faculty/Staff
O	Stable Site	24.8	200-372	Faculty/Staff
	Totals (15 sites)	**220.4**	**2,652 to 3,018**	

Note: Previously identified sites including the Lower Knoll and Dolores sites have been eliminated from consideration. The 200 units of potential housing in the Lower Knoll site have been transferred to within the Escondido Village: Infill site (site C).

The Driving Range (site F) has been converted from graduate student housing as originally identified to faculty/staff housing to compensate for a reduction in the size of the Stable Site (site O). The 350 units identified for the Driving Range site have been transferred to Searsville Block (site G) and Escondido Village: Infill (site C).

Potential Housing Sites



Faculty /Staff (Low Density)
Faculty /Staff (Moderate Density)
Undergraduate/ Graduate Students and PG/HR's

Scale 1:16,500

N

0 1000 2000 3000 Feet

Figure 3.1

Stanford University Community Plan Adopted December 2000

Potential housing increases by resident category are described in Table 3.3:

Table 3.3: Planned Housing and Sites

Planned Housing	Sites
New housing for 2,000 single students, including: • apartments or group housing for 1,900 graduate students or postgraduate fellows, and • 100 dormitory spaces for single undergraduate students.	Escondido Village Mayfield/Row Searsville Block area Manzanita Quadrangle (undergrads)
350 apartments for hospital residents and postdoctoral fellows	Arboretum and Quarry Rd. corner Quarry Rd. and El Camino Real
313 to 668 new units for faculty and staff, depending on the mix and densities	Stable site on West Campus Driving Range Escondido Village: Stanford Ave. area Sites in existing campus residential neighborhoods (Mayfield, Lower Frenchman's, Gerona/Junipero Serra Blvd.

Policies

SCP-H 1
Promote a variety of housing types and supply adequate to meet the needs of faculty, staff, students, postgraduate fellows, and hospital residents.

SCP-H 2
Designate sufficient campus land at appropriate densities for student, faculty, and staff housing, as identified in Table 3.2 and Figure 3.1, Proposed Housing Development Potential and Sites.

SCP-H 3
Maintain student and postgraduate housing as an integral part of the academic areas of the campus.

SCP-H 4
Develop housing at densities that make more efficient use of land and enhance the affordability of housing.

Implementation Recommendation

SCP-H (i) 1
Ensure that student, postgraduate, and hospital resident housing are included as a permitted use within the Academic Campus areas.

SCP-H (i) 2
Subsequent to the adoption of the Community Plan, enact zoning districts and regulations that provide for low-density development of faculty housing (1-8 units/acre), with appropriate development standards, as a permitted use within the Campus Residential-Low Density areas of Stanford.

SCP-H (i) 3
Subsequent to the adoption of the Community Plan, enact zoning districts and zoning regulations that provide for medium-density faculty housing development (8-15 units/acre), with appropriate development standards, as a permitted use within the Campus Residential-Medium Density areas of Stanford.

Sub-Strategy # 1B: Facilitate and Expedite Needed Residential Development

Once residential development sites are planned, the timing and enabling of housing construction are important considerations. Designating land available for potential housing development alone provides only the basis for housing development. Additional mechanisms at both the plan and implementation levels are needed to ensure that designated sites are developed in a timely manner. A variety of tools are available to facilitate and expedite needed residential development.

Linkage Policy

The principal means for assuring that additional housing supply is constructed in a timely manner is referred to as a "linkage policy" in the Community Plan. This policy requires that Stanford construct significant proportions of the potential housing units identified within the Housing Chapter of the Community Plan prior to or concurrently with approved increases in academic space.

To implement the linkage policy, the General Use Permit, which serves to implement the Community Plan, would contain specific provisions to the effect that approval of proposed increases in academic space may be granted only on condition that a specified amount and type of housing supply has been or will be constructed concurrently. Such mechanisms ensure that approvals for new academic space do not exacerbate already significant housing supply and affordability deficiencies in the regional housing market. A linkage policy also ensures that Stanford can achieve stringent transportation-related Community Plan goals and standards.

The County acknowledges that there are a number of contingencies which can affect the feasibility of completing housing development within a specific time period. Funding, competing academic priorities, and other factors obviously play a role. It is also important for the County to acknowledge its responsibility for housing development in approval of housing proposals. However, in light of overall housing trends and County General Plan policy, it is essential that the County assure that housing development proposed in the Community Plan be constructed in manner concurrent with academic development approved through the life of the General Use Permit. Approval of significant new non-residential development without such assurances could exacerbate housing shortages by adding population without augmenting housing supply. Furthermore, existing General Plan policies on the subject call upon all jurisdictions to address the continuing imbalances between employment-related land uses and housing. Providing housing commensurate with new academic development is therefore consistent with the policies of the Countywide Growth and Development Chapter and Housing Chapter of the General Plan.

Streamlining Permit Applications and Approval Processes

Other means of facilitating housing development include streamlining of environmental review and permitting processes. The concept of a Community Plan and General Use Permit afford the opportunity to minimize subsequent environmental review of individual projects by means of a program-level EIR to provide initial CEQA review for anticipated projects. Time savings may also be achieved in the permitting of individual projects by coordinating to ensure that applications for Architecture and Site Approval or for building permits are as complete and adequate as possible upon submittal. Other streamlining mechanisms are aimed at facilitating the planning and approval of new housing; these would include measures allowing consideration of General Plan amendments for additional areas within the AGB to be designated Campus Residential without first gaining Board of Supervisors approval of consideration of the amendment, as is required for other types of General Plan amendments. The Board would retain authority for final approval of the General Plan amendment.

Housing in Other Jurisdictions

Although Santa Clara County does not control the use of Stanford-owned land that is within incorporated cities or San Mateo County, the County recognizes both the need for housing created by uses on these lands and the opportunities for housing that appropriate development and redevelopment of these lands presents. Any housing on Stanford lands in any jurisdiction augments the regional housing supply and therefore contributes to the balance of the area's housing supply. The Community Plan policies are meant to encourage housing development on all appropriate Stanford lands, regardless of the jurisdiction.

Policies

SCP-H 5
Recognize the connection between expansion of academic facilities and the resultant increase in housing demand, as well as the immediate need for additional on-campus housing to meet address current demand.

SCP- H 6
Through the General Use Permit, permit development of additional on-campus housing, including housing for designated very low-, low- and moderate-income persons and faculty, staff, students, postgraduate fellows, and hospital residents.

SCP - H 7
Require that new housing development occur commensurate with population growth and academic development approvals on campus. Through the General Use Permit, establish conditions to require construction of needed housing prior to or concurrently with approval for increases in academic space.

SCP - H 8
Streamline the review and approval of housing projects to the extent possible consistent with County standards, land use policy, and State law.

SCP - H 9
Support Stanford's efforts to develop housing on land in other jurisdictions, particularly housing specifically targeted to Stanford faculty, staff, students, and other affiliated persons. Consider Stanford-developed housing in other jurisdictions eligible to meet quantified housing development requirements on a case-by-case basis.

Implementation Recommendations

SCP-H (i) 4
Determine through the General Use Permit appropriate housing/academic linkage requirements based on the amount of approved academic construction.

SCP-H (i) 5
Maintain current practices, such as pre-design consultations, and develop new mechanisms which would help streamline and facilitate County review and permitting processes. Examples include electronic plan submittal pilot programs, together with better means of assuring that changes in building plans are consistently incorporated in all mechanical, electrical and plumbing plans.

SCP-H (i) 6
Allow County Planning Office consideration of applications for General Plan amendments to create additional Campus Residential areas inside the AGB without

requiring that the Board approve the consideration in the annual General Plan amendment review process. The Board will retain authority for final approval of the General Plan amendment, after considering the Planning Commission's recommendation.

SCP-H (i) 7
Allow County Planning Office consideration of applications for General Plan amendments to remove areas from the Campus Residential designation without requiring that the Board approve the consideration in the annual General Plan amendment review process, if Stanford is able to demonstrate that it will meet all quantified housing provision requirements. The Board will retain authority for final approval of the General Plan amendment, after considering the Planning Commission's recommendation.

Sub-Strategy 1C: Augment Affordability Programs and Funding

For housing to meet the needs of its target population, its price must be consistent with the income of the intended residents. Affordability needs vary greatly with the population served; housing can be considered "affordable" by accepted regulatory agencies but can still be too expensive for specific populations. Graduate students and postdoctoral fellows at Stanford are two groups whose incomes are substantially below the County median used to calculate affordability for purposes of government-sponsored housing assistance programs.

All of Stanford's graduate student housing is affordable to the target population according to the standards related to area median income supplied by the federal government. The income range of this population requires that housing be priced accordingly or it could not be occupied by graduate students. As a result, construction of new housing for this population is subsidized by the University. Planning for this housing must consider the affordability implications for both the graduate students and the University.

The postgraduate fellow/hospital resident housing program, largely new to the University through the Community Plan, also serves a population earning substantially less than the area median income. When the proposed undergraduate, graduate student housing, and postdoctorate housing are considered together, these 2,350 units—78% of all proposed housing under the Community Plan—should be affordable to its population.

Promotion of housing affordability is somewhat more complex for faculty and staff housing as it has been developed by the University. One mechanism for promoting housing affordability is to reduce the cost of each unit through higher density, which is planned for most of the new housing under this plan. However, housing prices themselves are difficult to control, particularly for ownership housing. While Stanford can set the price for the initial housing offering, resale prices will reflect market forces without price controls. One approach to meeting this challenge would involve increasing the supply of on-campus rental housing for faculty and staff.

Stanford could therefore control future rental prices and could retain a portion of such rental housing for designated populations.

Stanford's residential assistance programs are an important mechanism to make housing more affordable for eligible participants purchasing homes. The eligibility requirements for these programs reflect the University's educational objectives in their availability to faculty and senior staff. Other staff members, many of whom are in need of more affordable housing, are not currently eligible for the programs or for on-campus housing. In a related matter, provision of rental housing subsidy is another unmet housing need.

As indicated above, the University's primary means of promoting housing affordability to faculty and staff is in the form of subsidies and direct financial assistance. Increasing assistance levels to those for whom assistance has traditionally been provided, such as faculty, or extending financial assistance to those who have not previously been eligible for such programs will require a substantial increase in funding to those programs. The County supports increasing the funding of such programs by Stanford to the maximum extent feasible.

Policies

SCP-H 9
Provide financial assistance for housing to faculty and staff, and consider expanding programs to include rental assistance.

SCP-H 10
Promote the affordability of housing by:

a. Requiring Stanford to provide a sufficient level of affordable housing on campus to meet the affordable housing needs generated by new academic development on its unincorporated lands or make an appropriate payment in lieu of providing the housing; and,

b. Encouraging Stanford to extend housing assistance and on-campus residence eligibility to populations which have previously not been served.

Implementation Recommendation

SCP-H (i) 8
Stanford shall provide a number of affordable housing units equal to 15% of the units needed to house the non-student population increase associated with the development. One-third of these units shall be made available to persons of very-low income; one-third of these units shall be made available to persons of low income; and one-third of these units shall be made available to persons of moderate income. For rental units, the units shall be made available to persons in each group at a rate not to exceed 30% of the income for the respective group. For for-sale units,

the units shall be made available to persons in each group at a rate not to exceed 40% of the income for the respective group. The dwelling units shall be located on Stanford lands and shall be made available to persons who are not undergraduate students, graduate students, post-graduate fellows or medical residents associated with Stanford or its affiliates. Compliance with this affordable housing requirement shall be ensured for at least 50 years.

SCP-H (i) 8
For each new academic development project built by Stanford, identify an appropriate payment that Stanford may elect to pay in lieu of compliance with SCP-H (i) 6. This payment shall be equal to the affordable housing payment (also known as the below market rate program payment) charged by the City of Palo Alto when the development project is built. If the City of Palo Alto does not have such a payment at that time or Stanford challenges the payment as unreasonable, the County will determine the appropriate payment based upon a study funded by Stanford and undertaken by or under the direction of the County.

Strategy # 2: Balance Housing Needs with Neighborhood Conservation

The residential character of both the faculty/staff neighborhoods and the student housing areas contributes to the quality and experience of the campus and the lives of its residents. Residential neighborhoods are characterized not only by the houses or apartments they contain, but by their range of uses and the visual character and feel provided by the density, infrastructure, and landscaping. Easy access to complementary services and transportation facilities can help reduce the need for automobile trips and enhance the residential quality of life.

Some important discussion topics regarding the residential character of the campus have been raised by various groups of campus residents.

- Existing residential neighborhoods present opportunities to expand the range of uses in easy walking distance of residents. Places to shop for food, eat, gather, and engage in recreational activities could have the dual benefits of reducing the need to travel off campus and enhancing the quality of life for residents. For example, graduate students have expressed a desire for retail and recreational opportunities convenient to their residential areas. Child care is also a valued amenity that can directly serve neighborhood residents. Due to the potential of such amenities to reduce automobile trips, policies promoting an appropriate mix of such uses are also included in the Circulation Chapter.

- Parks and open spaces in the faculty/staff areas are a valued recreational amenity for many residents. These spaces are considered neighborhood institutions but have had no formal protection from development in the past. For more detailed discussion of parks, refer to the Open Space Chapter.

- Faculty and staff campus residents are concerned about the potential for development at higher densities than existing areas within their neighborhood. The concerns about neighborhood compatibility need to be balanced with global concerns about housing supply and affordability. The creation of more specific land use designations for faculty/staff housing areas can help achieve certainty regarding future development potential in these neighborhoods, which can be further reinforced with corresponding zoning.

These considerations are also applicable to new residential areas, which provide enhanced opportunities for the creation of a balanced range of uses in neighborhoods.

The importance of balancing housing needs with neighborhood conservation also extends to the off-campus environs of Palo Alto and Menlo Park located immediately adjacent to many of the potential sites for new or more intensely developed housing on the periphery of the campus. With respect to potential new or additional housing along the Palo Alto and Menlo Park interfaces, community members have raised concerns about maintaining compatibility with existing neighborhoods and preservation of campus open space that serves as a buffer between the University and the surrounding community. As with the concerns expressed by campus residents, the concerns of off-campus residents, too, need to be balanced with the larger concerns about housing supply and affordability.

Policies

SCP-H 11
Promote location of housing near compatible and neighborhood-serving support uses and facilities, such as child care, shopping, and recreation, and promote inclusion of such neighborhood-serving facilities in housing areas, as appropriate.

SCP-H 12
Plan housing areas and facilities to take maximum advantage of existing and planned transportation services and facilities.

SCP-H 13
Recognize and enhance the character of existing residential areas for faculty/staff and students.

SCP-H 14
Balance concerns about the compatibility of new housing development in existing neighborhoods with the need for increased housing supply and improved affordability.

SCP - H 15
Provide and maintain parks and related facilities in Campus Residential areas (see Open Space Chapter).

SCP - H 16
Balance concerns about the compatibility of new housing development on the campus periphery with existing off-campus neighborhoods with the need for increased housing supply and improved affordability.

SCP - H 17
Balance concerns about the maintenance of buffers between the University and Menlo Park and Palo Alto with the need for increased housing supply and improved affordability (see Open Space Chapter).

Implementation Recommendation

SCP-H (i)9
Adopt zoning that allows appropriate non-residential uses in both faculty and student housing areas.

SCP-H (i) 10
Adopt zoning consistent with the General Plan designations for Campus Residential-Low Density and Campus Residential-Moderate Density (see Land Use). This zoning may incorporate height limits, floor area ratios, and setbacks for appropriate compatibility with adjacent off-campus neighborhoods in Palo Alto and Menlo Park.

SCP-H (i) 11
Identify opportunities for creation of childcare facilities, commercial services, recreational facilities, or other types of support services in residential development and redevelopment.

SCP-H (i) 12
Encourage and, as appropriate, require support facilities to serve residential areas through both the General Use Permit and through subsequent review of individual projects.

SCP-H (i) 13
Review development applications for projects on the campus periphery for provision of adequate landscaping elements to separate and buffer adjacent uses and to retain the quasi-rural feel of the campus where it abuts the surrounding community.

Circulation

Stanford Community Plan Issues and Policies

Chapter Summary

One of the greatest challenges that jurisdictions throughout the Bay Area have faced as they try to alleviate local congestion is the degree to which the existing patterns of land use and development undermine efforts to reduce dependence on the single-occupant automobile. The objective of circulation systems is to allow for access and mobility; congestion impedes achievement of this objective.

The Stanford University campus is a unique setting in which many of the limitations found elsewhere of land use, density, transit accessibility, and mechanisms for coordinated problem-solving are reduced, creating opportunities for walking, bicycling, and transit use unknown throughout much of Santa Clara County.

This chapter of the Community Plan attempts to capitalize on the transportation potential of Stanford and its surrounding communities, primarily through a standard of "no net new commute trips" for the unincorporated Santa Clara County portion of Stanford University. The plan defines this standard as no additional trips above a measured base level during the peak commute time in the campus commute direction.

The "no net new commute trips" standard is a challenging one that is much more stringent than any standard applied elsewhere in the county. Meeting this standard will require a combination of approaches that together form a comprehensive system allowing people to function without cars on a daily basis:

- **Land use.** On-campus housing will reduce the need for new commute trips to the campus. The availability of convenient support services on the campus is also crucial for reducing automobile trips.
- **Transportation Demand Management.** The innovation and effectiveness of Stanford's current transportation demand management (TDM) programs are widely recognized, but new opportunities may need to be identified in order to continue meeting the "no net new commute trips" standard. While most TDM programs are directly commute-related, non-commute alternatives also need to be provided in order to allow workers to commute without cars and still be able to meet their daily needs.

This Community Plan chapter also recognizes that, while commute trip reduction is a priority, in some cases other mechanisms may be needed to address non-commute

congestion or inadequacies in the street system. System expansion may also be needed if Stanford is unable or unwilling to meet the "no net new commute trips" standard. Such mechanisms may include intersection or street widening.

The Community Plan strategies for Circulation are:

Strategy #1: Achieve "no net new commute trips" through land use and transportation demand management.

Strategy # 2: Alleviate local congestion in the context of commute trip reduction.

Strategy #3: Alleviate local congestion during special events.

Background

As congestion grows throughout the Bay Area, employers, government agencies, and the general public are increasingly concerned with the inability of existing roadways to meet current and future needs. While expansion of roads and intersections can help temporarily ease congestion, better use of the existing system through less use of single-occupant automobiles is a corresponding effort that can avoid many of the social and economic costs of added roads.

The closely integrated nature of the uses within the Stanford area and the wide range of activities that take place on and around the campus have made traffic congestion a fact of everyday life in the region. Increasing intensity in the use of land has led to substantial concerns about traffic levels in the area immediately surrounding the University. On a more regional level, long-distance commutes from distant counties have become more common as rising housing prices and increasing demand for a fixed amount of housing force local employees to live farther from their workplaces. Commuters in ever-increasing numbers spend more time on freeways each day.

The increasing intensity of development on and around the Stanford campus can potentially be offset by the high level of transportation accessibility in the area. Many locations, including the campus, have a number of amenities that make it possible to move to and around the area without using cars, thereby decreasing the potential for local congestion. These amenities include:

- A well-integrated mix of land uses, with employment and service opportunities in close proximity to housing;
- An environment that is pleasant and accessible to pedestrians and bicyclists; and,
- A variety of convenient transit services accessing major activity centers (see sidebar).

Circulation Systems Supporting Stanford

Stanford students, employees and visitors regularly use road networks and systems administered by a variety of agencies in the travels to and from the campus:

Transit

- CalTrain serving north-south Peninsula travel and the cities of San Francisco and San Jose operated by the CalTrain Joint Powers Board, with Palo Alto stations at University Avenue and California Avenue. Both stations are highly accessible to residential and employment areas and are heavily used; the University Avenue station is ranked second and the California Avenue Station is ranked eighth of the system's 32 stations in terms of ridership.
- Regional bus routes operated by Santa Clara Valley Transportation Authority, with four routes in the area and San Mateo County Transit (SamTrans), with eight routes in the area.
- Marguerite free shuttle system operated by Stanford University serving both intra-campus routes and off-campus destinations such as the University Avenue and California Avenue Caltrain stations and downtown Palo Alto.

Roadways

- Local and arterial street, bicycle, and pedestrian network maintained by surrounding cities.
- Interstate 280, US 101, and State Route 82 (El Camino Real) maintained by the California Department of Transportation (Caltrans).

The Community Plan strategies, policies and implementation measures for circulation focus on enhancing those amenities to allow for new development to occur without corresponding increases in commute traffic to the campus.

Stanford's Land Use and Circulation System

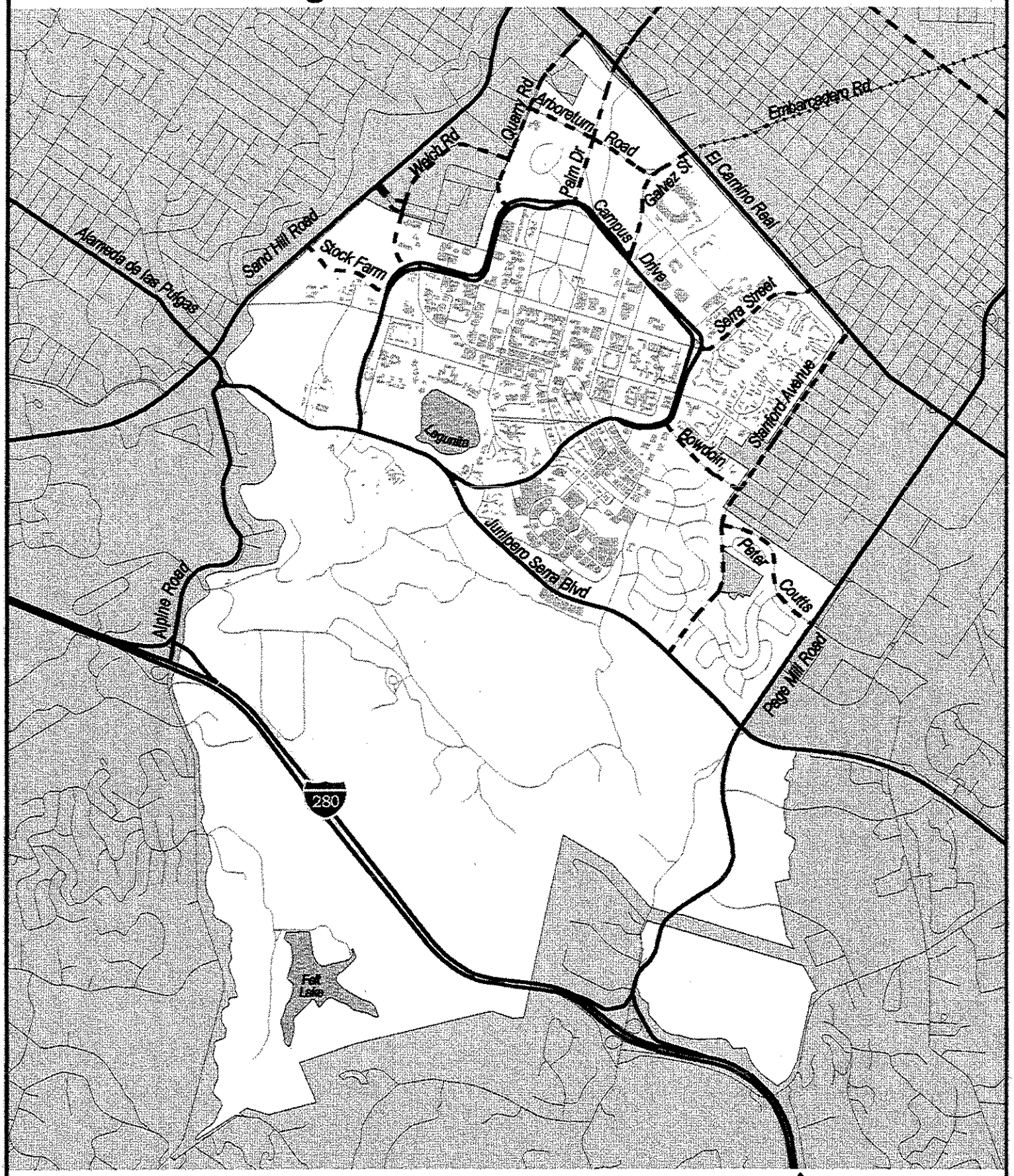
Stanford's circulation system operates within the context of a larger regional system (See Figure 4.1 – Regional Circulation Context). Local campus roadways provide links between academic facilities and between on-campus residences and academic facilities. Collector roadways on the campus operate as a traditional street network, providing connections from local on-campus roadways to the collectors and arterials surrounding the campus.

Traffic Congestion and Stanford University

Traffic congestion is of major concern throughout Santa Clara County. In addition to the inconvenience of traffic congestion, extensive use of single-occupant automobiles poses serious threats to the environment, requires extensive amounts of land to accommodate automobiles, and is expensive for both individuals and the public.

Some of the streets around Stanford carry significant amounts of traffic each day, with daily traffic volumes reaching or exceeding 20,000 cars on several important campus access roads such as Embarcadero Road/Galvez Street, University Avenue/Palm Drive, Sand Hill Road, and Alpine Road. The most heavily traveled roadway in the campus vicinity is El Camino Real (SR 82), which is used by over 40,000 cars each day on the portions of

Regional Circulation Context



Freeways
Arterials
Residential Arterial
Collector Streets
Local Streets

Scale 1:30,000

N

0 0.5 1 Miles

Figure 4.1

the road adjacent to the campus and over 50,000 cars each day to the north and south of the campus. The traffic throughout the area has been and will continue to be attributable to both Stanford and other traffic generators in Palo Alto, Menlo Park, and other surrounding jurisdictions.

Stanford University has the potential to be a major contributor to traffic in the area. The current average daytime population of the campus, which includes students, faculty and staff on unincorporated lands, is approximately 21,000 persons. The resident population of the campus is approximately 12,400, of which eighty-four percent are estimated to also work or attend classes on the campus. This reduces the potential of campus residents to contribute to commute traffic (Community Plan/General Use Permit Draft Environmental Impact Report). In addition, there are an estimated 24,000 people employed on other portions of Stanford lands, including the Stanford Research Park, the Stanford Shopping Center, and the Stanford University Medical Center.

In the past, Stanford has been subject to special conditions on its General Use Permit that were meant to limit the impact of growth in the unincorporated portion of Stanford on traffic congestion. The 1989 General Use Permit contains a "no net new commute trips" goal as a condition of approval, which required increases in population to be offset by increased TDM participation and additional on-campus housing.

Over the last decade, this goal has helped encourage Stanford to both add housing for over 1,200 new campus residents and to enhance a TDM system that today includes a free shuttle bus system, pay parking, car- and vanpool incentives and programs, and cash incentives. Stanford initiated many of these efforts without the additional incentive of the General Use Permit. In 1990, when the General Use Permit trip reduction requirement had been in place for less than one year, only 55% of Stanford students, faculty, and staff commuted alone to work compared to 78% of all the workers in Santa Clara County.

A variety of mechanisms can be used to alleviate local congestion:

- **Land use approaches**, particularly location of places of work, residence, and services in close proximity to one another, reduce the need for automobile use to meet basic daily needs. With sufficient intensity and combination of uses, non-auto trips are convenient and have a greater possibility of occurring than in a low-density, single use development pattern. A close integration of different uses can reduce the overall number of vehicle miles traveled on a regional level and the amount of time that individuals must spend commuting.

- **Transportation Demand Management** refers to the combination of incentives and programs used to make it possible and desirable for people to use alternatives to single-occupant vehicles during commute hours.

- **Roadway system improvements**, which include efforts such as intersection and street widening, are necessary for a functioning street system and can reduce congestion and associated social and environmental impacts in specific locations. This approach does not reduce automobile trips or vehicle miles traveled.

In addition to the University's contribution to routine commute hour congestion, the hosting of special events during non-peak hours contributes to both on- and off-site congestion. The University frequently uses its public safety personnel and others to direct traffic entering and leaving the campus during special events. This approach helps mitigate, but does not avoid the congestion resulting from the large number of visitors who arrive and depart from the campus within a relatively short timeframe.

Strategies, Policies and Implementation

Strategy #1: Achieve "no net new commute trips" through land use and transportation demand management.

Commute trip reduction concepts expressed in the 1989 General Use Permit have been adopted as a standard in this Community Plan, with direct measurement of commute trips rather than use of a formula to measure compliance. The standard of "no net new commute trips", as articulated in this plan, establishes a goal that there be no additional automobile trips over the calculated baseline in the peak commute direction during peak commute hours. This standard is at the core of the transportation approach expressed in this plan, and is the basis of its policies and implementation recommendations.

Stanford proposes to add 2,200 students, faculty and staff through 2010 and to construct several thousand housing units for Stanford students, faculty and staff. This added population creates the potential to create additional traffic throughout the local area. The concept behind "no net new commute trips" is that the added population should create no additional transportation impact in the commute direction during commute times.

Achievement of this standard will require a comprehensive system that makes it possible for individuals to meet their transportation needs without using a car. Such a system involves both land use solutions to bring a variety of uses together and thereby reduce the number of activities that require car use, as well as a range of alternative means of transportation that can meet a variety of needs. Although the strategy is focused on commute trip reduction, options for those without cars will need to be provided at non-commute times as well to make it possible for individuals to function throughout the day without their cars.

In the past the County has not required any single solution for commute trip reduction, but instead allowed Stanford the flexibility to achieve commute trip reduction within the overall goal. The monitoring system allowed for both land use and transportation demand management approaches. While the Community Plan calls for a more direct monitoring system than was used under the 1989 General Use Permit, it maintains the County's role of establishing the overall standard and allowing Stanford to use a variety of mechanisms as appropriate to meet the standard.

Land Use and Trip Reduction

An important land use pattern that supports non-auto transportation is the location of housing close to jobs and services. Stanford is a residential university, allowing students and faculty to live in close proximity to one another and to the academic facilities on the campus. Integration of academic, residential and supporting land use, and the concentration of uses in the central campus are strategies for supporting travel alternatives to the single occupant vehicle. One reason behind the Community Plan's emphasis on on-campus housing is the potential to reduce commute trips by locating more housing close to the University's jobs, classrooms and laboratories.

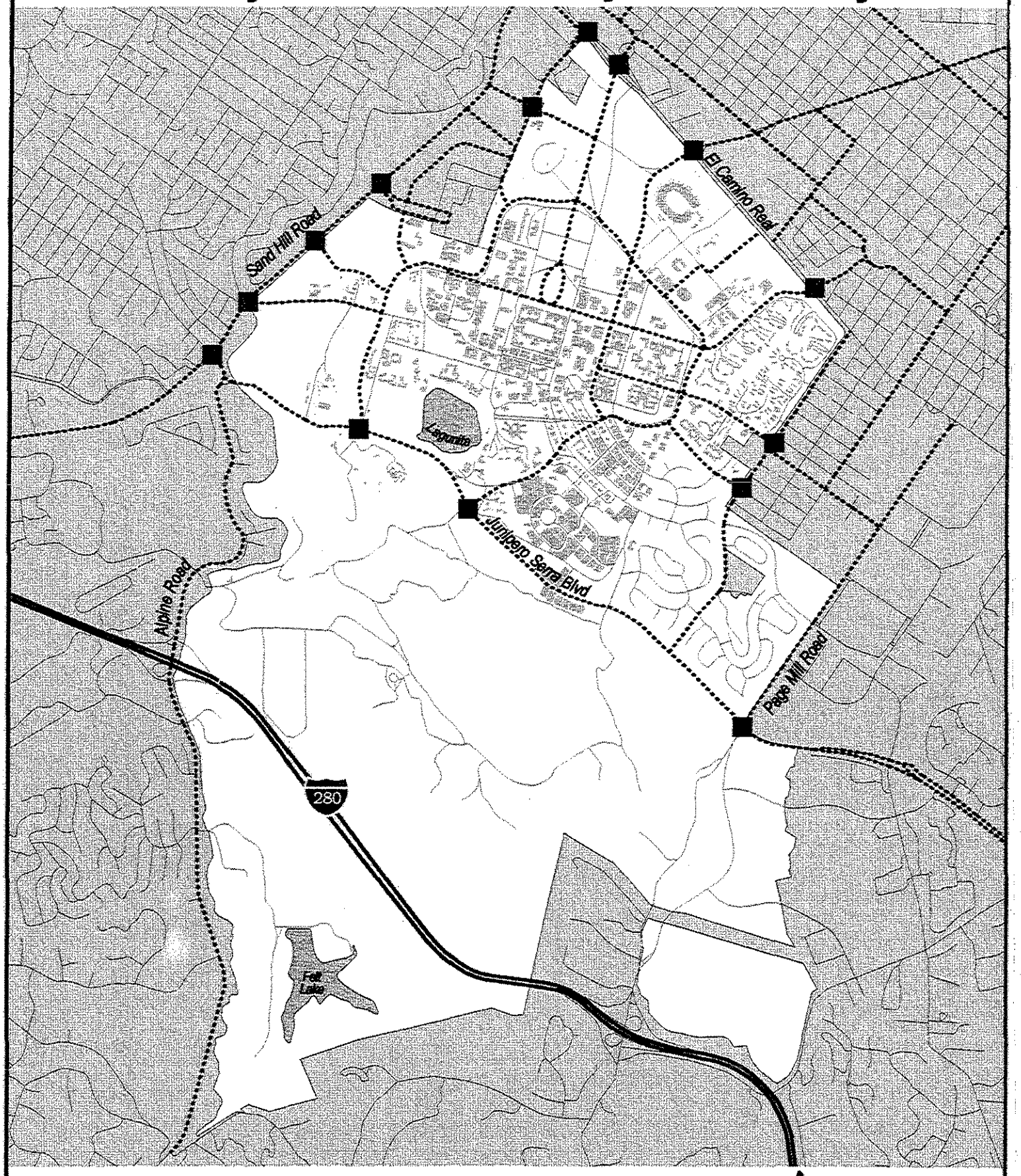
The existing concentration of uses in the central campus allows for a circulation system that is well integrated with the campus land use pattern, enhancing the ability of those on campus to use travel alternatives. Comprehensive pedestrian and bicycle circulation systems and transit services to, from, and throughout the campus contribute to the ease with which people are able to move about without an automobile (see Figure 4.2 – Primary Pedestrian Pathways and Bikeways and Figure --4.3, Local Transit Services).

While uses within the campus are well-concentrated, the campus as a whole is relatively isolated from many service destinations within the surrounding communities. This separation between the campus and the adjacent cities is partially by design—the Arboretum, which separates Stanford from downtown Palo Alto, was an important component of Leland Stanford's original campus layout. In other cases, the isolation results from the nature of the uses that border the campus, such as the Stanford Research Park and Stanford Shopping Center. These uses are important destinations, but they are relatively inaccessible to pedestrians and are not commonly used on a daily basis by campus residents. The Community Plan has identified housing sites in areas which currently separate the developed portions of the campus from Palo Alto; from a transportation standpoint, development of these sites which are convenient to on- and off-campus activities and to transit services could be valuable.

Transportation Demand Management

The range of transportation alternatives that can be provided by the private and public sectors to reduce congestion through peak hour trip reduction is collectively known as Transportation Demand Management (TDM). The Santa Clara County General Plan TDM goal calls for use of transportation modes other than the single-occupant automobile by 2010, or an average vehicle ridership of 1.33. According to

Primary Pedestrian Pathways and Bikeways



■ Primary Community Connections
---- Pathways and Bikeways

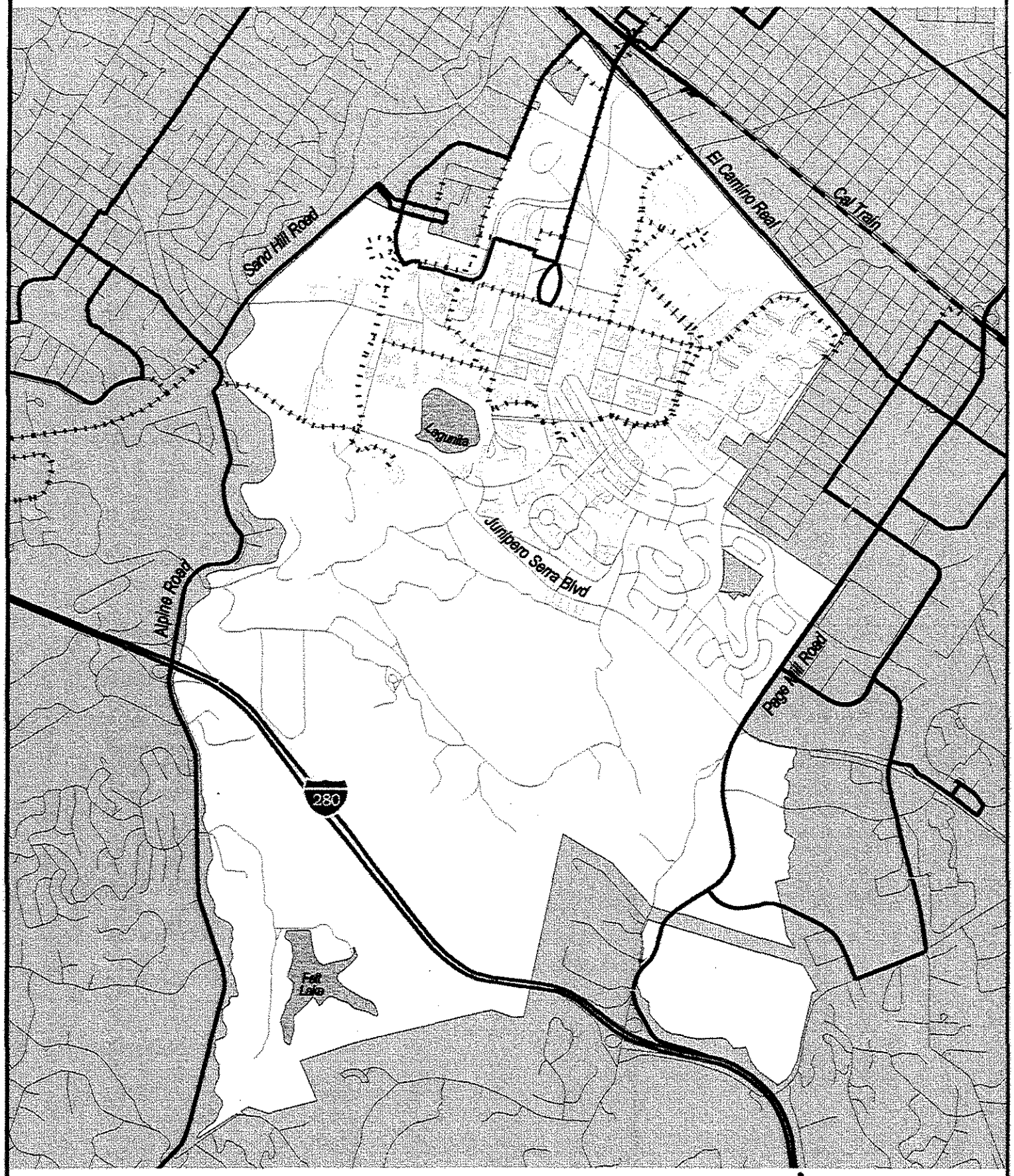
Scale 1:30,000

N

0 0.5 1 Miles

Figure 4.2

Local Transit Services



··· Marguerite
— Local Transit Services
— Local Streets
— CalTrain

Scale 1:30,000
N
0 0.5 1 Miles

Figure 4.3

Current Stanford Transportation Demand Management (TDM) Programs

Marguerite Shuttle System

- Free local shuttle bus system
- Service to two train stations, El Camino bus stops, Palo Alto and Menlo Park shopping districts, as well as on-campus travel
- Weeknight and weekend service

Carpool/Vanpools

- Full-time Stanford Employee Transportation Coordinator
- Preferential and reduced-rate parking for carpools
- Over 500 separate carpools
- Vanpools to San Francisco, San Ramon, Berkeley, Oakland, Santa Cruz, and Modesto

Bicycle Support

- $650,000 in bicycle capital improvements for new bike racks, commuter bike enclosures, bike paths, and clothes lockers over the past five years

On-Campus "Transportation Store"

- Sales outlet for CalTrain, VTA, and SamTrans tickets and passes
- 1,700 transit passes sold annually
- Transit schedules for all major public transit systems
- Promotion of TDM programs

Parking Demand Management

- Parking fees
- Participants in the "Clean Air Cash" program receive cash for not purchasing a parking permit
- Parking restrictions

Guaranteed Ride Home Program

- "Safety net" for emergencies
- Provides free taxi rides or car rentals

Looking Ahead - Options Under Consideration

- Increased Marguerite frequencies and expanded services off-campus
- Universal Transit Pass
- Satellite/remote parking with shuttle connections to campus
- Car-sharing program

the 1990 Census, 78% of all commute trips in the county were made in single-occupant automobiles. Because of the unique nature of the population, activities, and opportunities for mixed land uses on the campus, Stanford can and does achieve a much higher rate of alternative transportation mode use. Stanford's TDM program is the most extensive in the county, and it includes services ranging from informational pamphlets to a free shuttle system running throughout the campus and to major off-campus destinations (see sidebar). TDM at Stanford goes well beyond basic programs that make other transportation modes more available or easier to use; for example, Stanford is the only major employer in the northern portion of the County that charges employees for parking, and has recently instituted a policy prohibiting a portion of campus residents (freshman students) from keeping cars on campus. The current system under the General Use Permit of maintaining a "performance standard" (i.e., no net new commute trips) without mandating specific TDM programs has allowed Stanford to modify its programs as the University's needs change over time and as Stanford learns more about the effectiveness of individual measures.

Currently, state law restricts the County's ability to impose TDM requirements. It is the County's intent that the no net new commute trips standard be enforced to the fullest extent

allowed by law.

Parking

Anecdotal evidence indicates that some transportation demand management programs, particularly parking fees and shortages, can affect neighborhoods adjacent to the campus through parking "spillover." However, oversupply of parking on the campus could undermine efforts to encourage alternative transportation mode use. Any negative external impacts of individual transportation demand management strategies will need to be considered and balanced by the University and the County.

Parking is currently available on the Stanford campus at a ratio of 1.03 spaces per student, faculty and staff (including Medical School students and faculty), with a non-residential ratio of 0.52 spaces per student, faculty and staff. On-street and residential parking serving faculty housing is not included in this total. Provision of on-campus housing can help reduce the need for additional commuter-oriented parking, as on-campus residents should not regularly need parking places in commuter lots. The Community Plan does not encourage expansion of the current parking supply to a degree that would substantially change current parking ratios on the campus, particularly as the potential impacts of a limited parking supply can be addressed through other means (such as residential parking permit programs in neighborhoods near the campus).

Off-Campus Trip Reduction Efforts

Recognizing the extreme challenge for Stanford to meet the "no net new commute trips" standard in the future, the Community Plan provides an additional mechanism for trip reduction efforts by the University through policies and implementation programs that recognize Stanford's future participation in trip reduction efforts that occur in other jurisdictions. Examples of such efforts might include a park and ride facility at the western end of the Dumbarton Bridge developed in cooperation with the Cities of Palo Alto and East Palo Alto that could help reduce traffic along the University Avenue corridor, or a comprehensive trip reduction program for the Stanford Research Park operated in conjunction with the City of Palo Alto and the Research Park leaseholders and employers.

The Community Plan provides the opportunity for the County Planning Office to recognize Stanford's participation in such effort as an appropriate credit toward the "no net new commute trips" standard. The Plan provides for such recognition because:

- Stanford's current rate of alternative transportation mode use is high, and additional efforts may prove to have reached the point of "diminishing returns" with regard to their effectiveness. In contrast, other workers in the region may prove to be more receptive to TDM programs because there are fewer programs now available to them.

- Both Stanford's resources and the resources of neighboring cities may be more effectively leveraged in combination with one another than if they are devoted to independent and potentially competing programs.

- Cooperative measures that address traffic on streets around the campus may be of as much or more benefit to surrounding communities than measures directed only at Stanford residents and employees.

The County Planning Office will need to carefully monitor Stanford's participation and the effectiveness of such programs, and may choose to grant Stanford commute trip credit towards achievement of the "no net new commute trips" standard for such efforts.

Policies

SCP-C 1
Apply a "no net new commute trips" standard for campus-related trips in the commute direction during peak hours to the fullest extent allowed by law.

SCP-C 2
Within the overall pattern of land uses on the campus, promote a development pattern that supports reduction in automobile dependency through the following approaches:

- New academic and residential development shall occur within the Academic Growth Boundary.

- Support services for campus residents and employees should be accommodated in close proximity to residential and academic facilities.

- New development should be located near existing transit services, particularly if extension of transit service to the new facilities would otherwise be infeasible or impractical.

SCP-C 3
Encourage addition of housing in locations convenient to jobs on Stanford land in other jurisdictions, such as near the Stanford Medical Center.

SCP-C 4
Enhance pedestrian and bicycle access to and through the campus.

SCP-C 5
Permit and encourage regular modification of Stanford's Transportation Demand Management (TDM) program to allow for changes in user needs and in available services over time.

SCP-C 6
Continue to regulate parking supply as a mechanism for transportation demand management, while avoiding "spillover" of parking into neighborhoods adjacent to the campus. Over time, require Stanford to maintain a consistent level of parking in proportion to students, faculty and staff, as compared to the current ratio of 1.03 spaces per student, faculty and staff member.

SCP-C 7
In addition to meeting the no net new commute trips standard, encourage Stanford to reduce automobile travel at non-commute hours and in non-commute directions, such as traffic associated with lunchtime activities by employees or travel by families of on-campus residents.

SCP-C 8
Credit participation in off-campus trip reduction efforts that benefit the streets surrounding the campus towards Stanford's achievement of the "no net new commute trips" standard.

Implementation Recommendation

SCP-C (i) 1
Adopt and maintain zoning regulations that allow for a mix of land uses in academic and residential areas in order to reduce the need for automobile use on and off the campus.

SCP-C (i) 2
Locate supporting services such as day care and convenience retail in new and existing graduate student and faculty/staff residential neighborhoods. Particularly review for provision of support services in applications for substantial new residential development.

SCP-C (i) 3
Review development project applications for access to and integration with the overall system of pedestrian bikeways and pathways on the Stanford campus. Particularly consider this issue for development along the Quarry Road corridor with regard to enhancement of pedestrian access to the Palo Alto Intermodal Transit Center

SCP-C (i) 4
Establish a system for direct, independent, and verifiable monitoring of Stanford's level of achievement with the "no net new commute trips" standard through the annual monitoring procedure.

SCP-C (i) 5
Review the Transportation Demand Management system on an annual basis and consult with Stanford, and adjacent communities as appropriate, to ensure that new

needs or opportunities are considered. Incorporate the following considerations into the review process:

a. TDM strategies should serve to reduce the number of cars entering the campus during the morning peak hour and leaving during the evening peak hour.

b. Programs serving intra-campus or off-peak travel should be primarily aimed at making it possible for employees and residents to conduct their daily activities without a car.

SCP-C (i) 6
Encourage Stanford to identify opportunities and develop proposals for participation in off-campus trip reduction efforts. Assess the expected effectiveness of the proposed programs, and apply trip reduction credits to the annual calculation of Stanford's compliance with the "no net new commute trips" standard.

Strategy # 2: Alleviate local congestion in the context of commute trip reduction.

The Community Plan emphasizes on-campus housing and commute trip reduction as mechanisms to alleviate the potential effects of development at Stanford on the local street system. These approaches are meant to reduce congestion at a regional level, by making it possible for more Stanford students and employees to live within walking or biking distance of their place of work, and to reduce Stanford's contribution to peak traffic levels.

However, growth which occurs under the Community Plan will still affect the local street system. The addition of residents and employees to the campus community will increase the number of people in the area, creating more potential for congestion due to non-commute related trips. Spouses of Stanford-affiliated campus residents commute away from the campus to reach their workplaces. Special events at the campus during evenings and weekends have created and will likely continue to create traffic congestion on streets that access the campus.

While the increased traffic resulting from these activities does not outweigh the benefits of on-campus housing and commute trip reduction, the potential for this added traffic to inconvenience local residents needs to be considered and addressed accordingly. Current General Plan policies indicate that where local level of service impacts are unavoidable, particularly at locations that already have a poor level of service, making system-wide improvements (such as transit enhancements) that provide regional benefits is an appropriate response. However, in some situations street system alterations such as widening roads or adding dedicated turning lanes at intersections may also be needed. In many locations surrounding the campus, such alterations may either be infeasible or undesirable. This Community Plan recognizes that the County cannot by law require Stanford to implement TDM programs. Therefore, intersection improvements may be needed if Stanford is unable or unwilling to achieve the goal.

Congestion Management

The balance between land use and congestion is coordinated through the Congestion Management Program of the Santa Clara Valley Transportation Authority (VTA). The Congestion Management Program (CMP) works to maintain service levels on a designated network of roadways in the county. The CMP recognizes the potential for development in congested areas to create traffic that exceeds service level standards, particularly in locations that are highly accessible to transit and therefore desirable for higher density development, and sets direction for land use planning in these areas to focus on expanded capabilities for alternative transportation modes.

Following the direction set by the VTA, the County General Plan emphasizes the concept of transportation demand management and the tradeoffs between local and regional congestion (see Circulation chapter of the Santa Clara County General Plan). As a goal, the General Plan calls for 35% of all trips to occur in ways other than the single-occupant automobile. Stanford has far exceeded this goal for many years. The "no net new commute trips" standard is a much more stringent approach that reflects the unique opportunities for trip reduction on the campus.

System Capacity Expansion

Local congestion can be reduced in two primary ways: reducing the number of cars or expanding a street or intersection to allow more cars to pass through it more easily. Although the County's preferred approach at Stanford is to pursue trip reduction, there are some situations where system expansion may be needed in order to alleviate "bottlenecks" that would indicate system problems and contribute unduly to the social and environmental costs of traffic congestion. In the Stanford area, traffic can be attributed partially to University activities and partially to other traffic generators, both on and off Stanford-owned land. When system expansions are needed, Stanford's responsibility for contributing to the cost of the projects needs to be considered.

When considering the need for changes to individual intersections as a strategy for reducing congestion, the standards of the appropriate local jurisdiction with regard to acceptable levels of congestion and the point at which the contribution of Stanford's traffic will be significant are applicable.

At Stanford, the "no net new commute trips" standard should be adequate to reduce the effects of growth at Stanford from impacting the transportation network. Expansion of system capacity that involves modification of intersections is in most cases considered a mechanism to mitigate traffic impacts if Stanford is unable or unwilling to achieve the "no net new commute trips" standard.

The following policies and implementation recommendations emphasize a set of priorities for consideration when considering roadway modifications:

- **Maintain the street hierarchy.** Efforts to increase through traffic capacity should be focused on appropriate streets that serve as important intra-campus or off-campus linkages.

- **Use the internal campus street system.** As much as possible, the internal campus street system rather than roads bordering on areas outside the central campus should be used. The campus road system should be maintained and upgraded as needed to accommodate appropriate trips.

- **Recognize surrounding land uses.** Streets should be designed and operated in a manner consistent with the types of development they serve. This issue has been of particular concern to campus residents directly on Junipero Serra Boulevard.

- **Consider jurisdictional priorities.** Different jurisdictions affected by Stanford traffic have different priorities for street expansion. Coordination between the County, Stanford, and the appropriate jurisdiction is needed to determine the most appropriate strategy for addressing the congestion.

- **Maintain a proportional approach.** Stanford should be responsible for its fair share of necessary expansion of off-campus roads and intersections.

- **Think beyond cars.** Modifications and system improvements for transit, walking and bicycles can complement Stanford's on-campus transportation demand management efforts in reducing trips and congestion.

Policies

SCP-C 9
Maintain consistency with the procedures and adopted policies of the appropriate jurisdiction when evaluating local intersection service levels and defining mechanisms for addressing impacts.

SCP-C 10
Modify street and intersection capacity and configuration in a manner consistent with the street hierarchy and surrounding land uses.

SCP-C 11
Prioritize use and improvement of the internal campus circulation system over roadways on the campus edges.

SCP-C 12
Consult with jurisdictions surrounding the campus regarding the potential non-commute traffic impacts of new development and activities at Stanford, and work with the jurisdictions to reduce potential effects on neighborhoods surrounding the campus.

SCP-C 13
Identify opportunities to improve access and circulation for pedestrians, transit and bicycles instead of or in addition to system expansions that accommodate automobiles.

Implementation Recommendation

SCP-C (i) 8
Require street system expansions on the campus that will ease traffic flow and internal circulation, particularly in situations where such capacity expansion would make on-campus routes preferable to off-campus roadways.

SCP-C (i) 9
If Stanford does not meet the "no net new commute trips" goal for new development on campus, require Stanford's contribution toward intersection improvements at impacted locations or equivalent funding toward other transportation impact mitigation efforts, to a degree proportional to the effect of the new development on future traffic levels. If Stanford does not either meet the no net new commute trips goal or contribute proportional funding toward intersection improvements or equivalent funding for transportation mitigation efforts, do not grant additional development permits until Stanford meets the established requirements.

SCP-C (i) 10
Negotiate renewal of agreements with the City of Palo Alto for the management of traffic associated with special events.

SCP-C (i) 11
Cooperate with the Congestion Management Agency in implementing deficiency plans, where needed, for Congestion Management Program system roadways and intersections in proximity to the Stanford campus.

SCP-C (i) 12
Consider redesign of Junipero Serra Boulevard in order to reduce speeding, enhance bicycle, pedestrian and motorist safety, recognize the needs of residents taking access from the street, improve migration opportunities for the California tiger salamander, and maintain the scenic character of the roadway, without substantially affecting traffic volumes. Pursue redesign through cooperative efforts among the County, Stanford University, and local residents, as well as other agencies as appropriate.

SCP-C (i) 13
Work cooperatively with surrounding jurisdictions to develop solutions to regional transportation problems.

Strategy # 3: Alleviate local congestion from special events.

Stanford hosts a variety of special events. While generally not held during peak commute hours, these events draw large numbers of visitors to campus. Because these visitors tend to arrive in a compressed timeframe, they often overwhelm the local transportation infrastructure. The Community Plan addresses these impacts with the following policies and implementation recommendations.

Policies

SCP-C 14
Identify opportunities to promote the use of public transit for special events at Stanford.

SCP-C 15
Work with neighboring jurisdictions to manage special event traffic.

SCP-C 16
Provide advance notification of events expected to draw large crowds to on-campus residents and the surrounding community.

SCP-C 17
Consult with jurisdictions surrounding the campus regarding the potential non-commute traffic impacts of new development and activities at Stanford, and work with the jurisdictions to reduce potential effects on neighborhoods surrounding the campus.

Implementation Recommendation

SCP-C (i) 14
Require Stanford to institute a special events hotline and website that on-campus residents and the general public can contact for information regarding upcoming special events.

SCP-C (i) 15
Require Stanford to provide the public with notice of special events in two newspapers of local circulation in the Palo Alto and Menlo Park area.

SCP-C (i) 16
Negotiate renewal of agreements with the City of Palo Alto for the management of traffic associated with special events.

Open Space

Stanford Community Plan Issues and Policies

Chapter Summary

Open land is a defining feature of Santa Clara County, and a resource that is becoming increasingly valued with the expansion and intensification of urban areas. At Stanford, formal open lands and natural open spaces define the visual character of the campus and frame the academic core. Open spaces, particularly the foothills south of Junipero Serra Boulevard, are visible almost everywhere on the campus and from many locations in surrounding communities.

Preservation of open space and the natural character of undeveloped lands is a prominent goal of the Santa Clara County General Plan policies. The Academic Growth Boundary will serve to define lands which are to be retained as open areas from those areas which should be targeted for future development.

The strategies, policies and implementation recommendations in this chapter create a framework for open space protection based on a differentiation of open lands according to their location within or outside the AGB:

- Outside the AGB, land is to remain undeveloped except for uses associated with research activities that require a remote or foothill setting for their functioning. Recreational use of the areas outside the AGB is promoted through dedication of trails consistent with the Countywide Trails Master Plan.

- Future development should be targeted to areas inside the AGB. While some areas inside the AGB that are currently undeveloped are suitable for future development, others are to be preserved as important elements in the campus layout, as biological resource areas, or as recreational resources. On the whole, a balance between development, open space, and recreational facilities will need to be achieved.

This Community Plan seeks ways to maintain these open lands in a manner consistent with both County goals and policies and Stanford's interests as a private property owner. To that end, this chapter incorporates land use strategies that preserve the character of these lands and conservation of all of their resources into the future, while retaining them under university ownership.

Strategies for open space preservation include:

Strategy #1: Locate additional development inside the Academic Growth

Boundary

Strategy #2: Balance recreational use and environmental objectives

Strategy #3: Plan for parks and open space land within the Academic Growth Boundary

Background

Open space at Stanford performs a multitude of functions beneficial to both the University and the community at large, including:

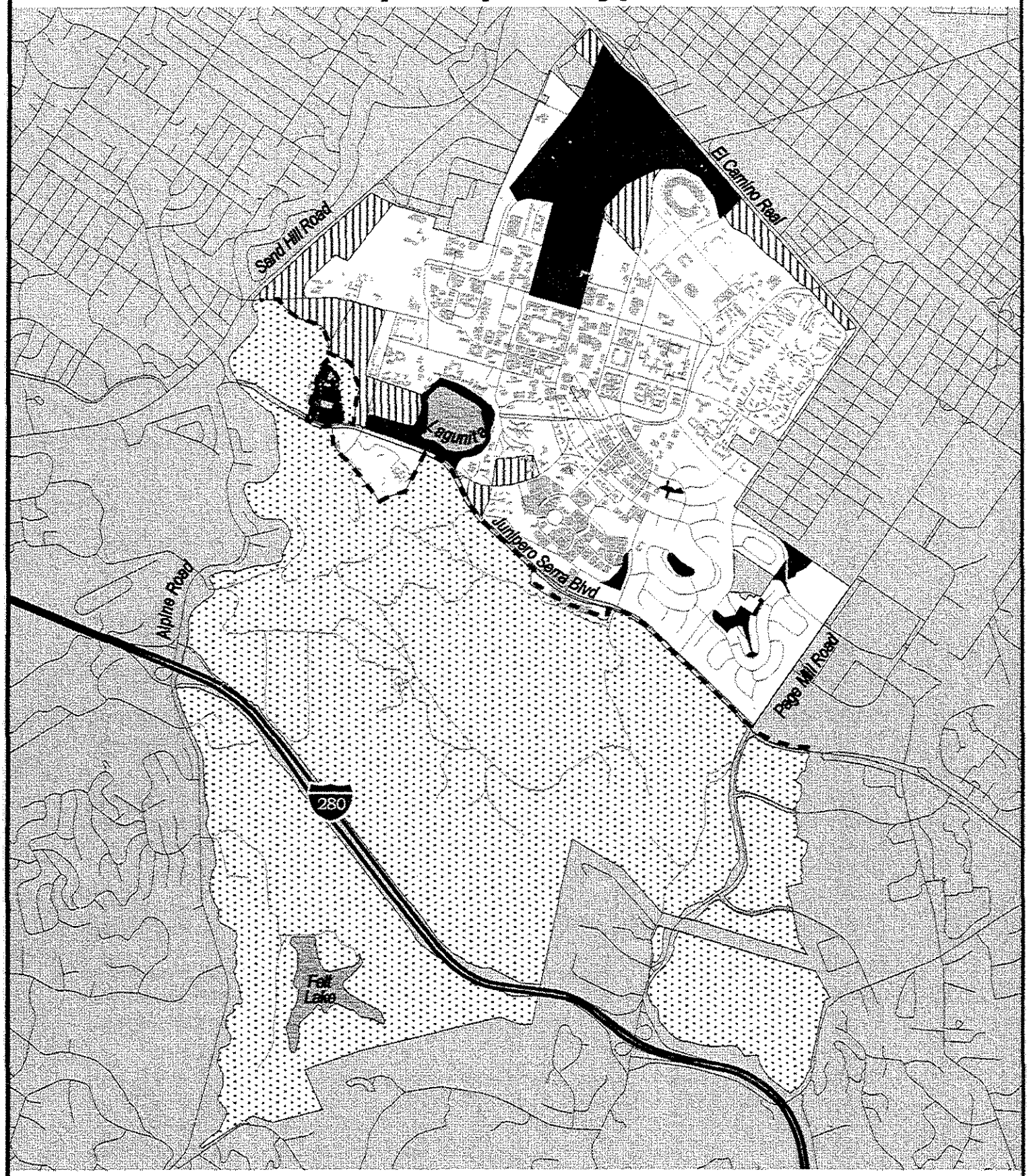
- preservation of natural habitats,
- protection of sensitive species of animals and plants,
- protection of watersheds and flood control,
- preventing development in hazard areas,
- preservation of scenic vistas,
- provision of respite areas and recreational opportunities, and
- buffers to define urban form.

At Stanford, open space serves the additional purposes of supporting teaching and research and preserving the beauty and character of the campus.

Types of Open Space

The concept of "open space" applies to several types of land that serve a variety of purposes. At Stanford, open lands are located in both relatively flat areas within and bordering the central campus and in the foothills south of Junipero Serra Boulevard. Lands outside the Academic Growth Boundary (AGB) are to remain undeveloped except for field research purposes. Within the AGB, some undeveloped lands are intended and targeted for future development while others are meant to remain as open space that helps define the built university and is a key element in the campus design (see Figure 5.1 – Types of Open Spaces).

Open Space Types



- - Academic Growth Boundary (AGB)
Open Space outside AGB
Open Space within AGB
Undeveloped Lands

Scale 1:30,000

N

0 0.5 1 Miles

Figure 5.1

Stanford University Community Plan Adopted December 2000

Open Space Outside the Academic Growth Boundary

Current Use and Setting

Stanford's lands outside the Academic Growth Boundary consist of undeveloped lands known as "the foothills," comprising approximately half of the Community Plan area and two-thirds of the University's total 8,180 acres. The future of these lands has been an issue of ongoing concern for both Stanford and the community.

These lands, which extend southwest of Junipero Serra Boulevard across I-280 and into San Mateo County, are comprised of grasslands, oak woodlands, and riparian areas. The area is largely undeveloped and used for low-intensity research agricultural leases, and recreation. It is also home to utility installations and the eighteen-hole Stanford Golf Course. The Stanford Linear Accelerator Center, and the 1,200-acre Jasper Ridge Biological Preserve are in San Mateo County.

Past land use policies for the foothills have included a General Plan designation of Academic Reserve and Open Space (which limits allowable uses to low-intensity activities in keeping with the character of the land). In addition, all land south of Junipero Serra Boulevard was included in Special Condition Area C under the 1989 General Use Permit, which required individual use permits for development in this area.

Other jurisdictions with Stanford lands have established land use policies for undeveloped Stanford foothill lands. Most of the undeveloped land in San Mateo County is designated Institutional/General Open Space/Future Study in the San Mateo County General Plan. The City of Palo Alto maintains three scenic easements on a portion of Coyote Hill in the Stanford Research Park south of Foothill Avenue. One easement will expire in 2002, while the others have expiration dates of 2010 and 2041 and are automatically extended by a year each January 1 unless the University gives the City notice of non-renewal.

By providing undeveloped settings for research and teaching, foothill open space at Stanford directly supports specific academic programs. Astrophysics, conservation biology, civil and environmental engineering and art are examples of academic programs directly supported by opportunities provided by open space in the foothills.

Competing Concerns and Priorities: Open Space Protection and Recreational Use

The Stanford foothills are recognized throughout the Midpeninsula as a valuable open space resource. However, the potential for future development of these lands has been a contentious issue for several decades. Stanford's internal policies call for the maintenance of land for future academic use.

On the regional level, the Stanford foothills are a functional component of the open space system that forms a visual and environmental backdrop for northern Santa Clara County. A combination of county and city parks, publicly-owned watersheds, and preserves owned by the Midpeninsula Regional Open Space District north and

south of Stanford lands create a chain of open space along the ridges of the Santa Cruz Mountains. Conversely, Stanford's immediate surroundings in the foothills include land which is primarily in residential use in Los Altos, Los Altos Hills, Palo Alto, Portola Valley, and Menlo Park, making the Stanford foothills a rare example of open space adjacent to the urbanized area. The extensive development that has occurred in these jurisdictions has caused many of these neighbors to place a high value on guarantees for long-term or permanent protection of the Stanford foothills.

Recreational use of Stanford land is enjoyed by residents of the Stanford campus and neighboring communities. The close proximity of the Stanford foothills to the developed areas of the Midpeninsula make it a popular destination. Use of these lands is allowed by permission of the University. Recreational use of the foothills raises several associated issues:

- While the foothills are a popular recreation destination and used in the manner of a park by many visitors, they are not publicly owned or operated. Stanford does not provide the amenities that are normally associated with public trails and does not patrol the area to prevent visitors from leaving designated trails or manage the land as a recreation area. As a result, recreational use may contribute to trail and environmental degradation.

- Trail user parking is a particular concern to residents of the neighboring faculty/staff subdivision. As a result, Stanford instituted a residential parking permit program in this neighborhood and trail users have been parking along Stanford Avenue, which is a County-maintained road. As a result of continued resident concerns, the speed limit has been reduced and the County has modified the road to manage parking and reduce erosion, but has continued to allow public parking along portions of the street.

- Visitor access to environmentally sensitive areas, particularly riparian areas which are home to special status species, has the potential to result in degradation of habitat and direct impacts on animals, as well as adverse effects on research, education, and restoration efforts.

Maintaining natural resources in the foothills will require achievement of a balance between environmental protection and access to open space.

Open Space within the Academic Growth Boundary

Current Use and Setting

Inside the AGB, open spaces and undeveloped areas serve a variety of purposes:

- **Campus-defining open space.** Open spaces help define the form of the main campus. Major on-campus open spaces include the Oval, Palm Drive, the Arboretum, and Lake Lagunita. Several of these spaces serve additional

purposes, such as storm water detention in the Arboretum and California tiger salamander habitat in Lake Lagunita.

- **Undeveloped central campus land.** Undeveloped tracts of varying size remain north of Junipero Serra Boulevard, primarily on the west side of the campus and in the faculty subdivision. Some of these areas are planned for future residential development while others could provide opportunities for new academic buildings.

- **Athletic fields.** Stanford maintains extensive athletic facilities, including playing fields located primarily in two areas (near El Camino Real and in the western portion of the campus near Sand Hill Road). These playing fields are programmed for use through the Department of Athletics, Physical Education and Recreation.

- **Recreational facilities.** Formal and informal recreation facilities such as Wilbur field and playgrounds in Escondido Village and the faculty subdivision are provided to serve campus residents. The golf driving range and the Stanford Golf Course (located outside the AGB) provide recreational opportunities to both Stanford students and others.

- **Buffer**. Undeveloped tracts along the Palo Alto and Menlo Park borders on Sand Hill Road, Stanford Avenue, and El Camino Real currently provide a buffer between the urban core of the University and the surrounding communities. Some of these areas are planned for future residential development while others will continue to provide a buffer.

Open Space Protection Policies

In the past, open space protection at Stanford has occurred through General Plan land use designations and through conditions of the 1989 General Use Permit. The General Plan designation of Academic Reserve and Open Space limited allowable uses to low-intensity uses compatible with the character of the land and its resources. North of Junipero Serra Boulevard, this General Plan designation was applied to the golf course, the portion of the Arboretum north of Campus Drive, and all of the land bordering El Camino Real.

Three Special Condition Areas identified in the 1989 General Use Permit area were also located in the central campus area. The Arboretum, the El Camino Real setback, and the lands on the west side of campus bordering Sand Hill Road were placed in these Special Condition Areas, which required a separate use permit for development rather than allowing development under the General Use Permit. No restriction was placed on the types of uses that may be applied for in these special condition areas, other than those restrictions imposed by the Academic Reserve and Open Space land use designation.

Many of the open spaces and undeveloped areas in the central campus are within the area subject to the 1989 General Use Permit. Potential development in the GUP area

requires Architecture and Site Approval (ASA) and is only limited by the cumulative population and square footage thresholds of the GUP.

Separate from the 1989 General Use Permit, the City of Palo Alto and Stanford entered into a development agreement in 1997 for projects along Sand Hill Road inside the City limits which also affects the land along Sand Hill Road that is located in the unincorporated portion of the County. Among many other stipulations, this agreement specifies that no use other than athletic fields may be developed along Sand Hill Road from Junipero Serra Boulevard to Pasteur Drive and east to Campus Drive West. The exception to this arrangement is that housing may be developed east of Fremont Road in the area known as the Stable Site. This agreement is in effect until 2020. The development agreement resulted from a negotiation between Stanford and the City of Palo Alto and involves an agreement by Stanford not to pursue certain activities rather than a condition or limitation imposed by the County. This development agreement may be modified at the mutual consent of Stanford and the City of Palo Alto.

Competing Concerns and Priorities

The open spaces within the AGB are subject to a variety of development pressures. While some of the areas are viewed as undeveloped lands which could be appropriate for future development, others provide important resources as open lands within the urban setting. Competing concerns and priorities for some of the open lands within the AGB include:

- The Arboretum is seen by many as the initial defining landscape at the main entrance of the university and as an open space buffer from the urban environs of Palo Alto. Given its altered natural state (replacement of much of the original oak woodlands with eucalyptus forest), it is seen by others as a potential location for future university expansion preferable to the foothills and other areas of critical habitat.

- Lake Lagunita is the most critical and highest value habitat of the California tiger salamander at Stanford. Undeveloped lands surrounding the lake have been identified as potential future sites for housing and expansion of the academic campus.

- Residential development in the faculty/staff subdivision is proposed in areas which currently serve as informal recreation areas for residents.

- While existing athletic facilities and recreational areas for students are not generally proposed for development at this time, the Academic Campus designation applied to much of this area does allow for the future development of these open areas through the definition of allowable uses.

- Development of faculty/staff housing could require relocation of the Driving Range to a site adjacent to the golf course.

- Faculty/staff and student housing proposed on the Stanford Avenue and El Camino Real frontages which currently serve to buffer development on Stanford's campus from the surrounding community.

Strategies, Policies and Implementation

Strategy #1: Locate additional development inside the Academic Growth Boundary

From the County's viewpoint, maintenance of the open space in the Stanford foothills is a central strategy for meeting the General Plan objectives of resource conservation and compact urban development. Concentration of academic development inside the AGB allows for retention of the open space character of the land outside of the AGB, while continuing to meet the University's land use objectives.

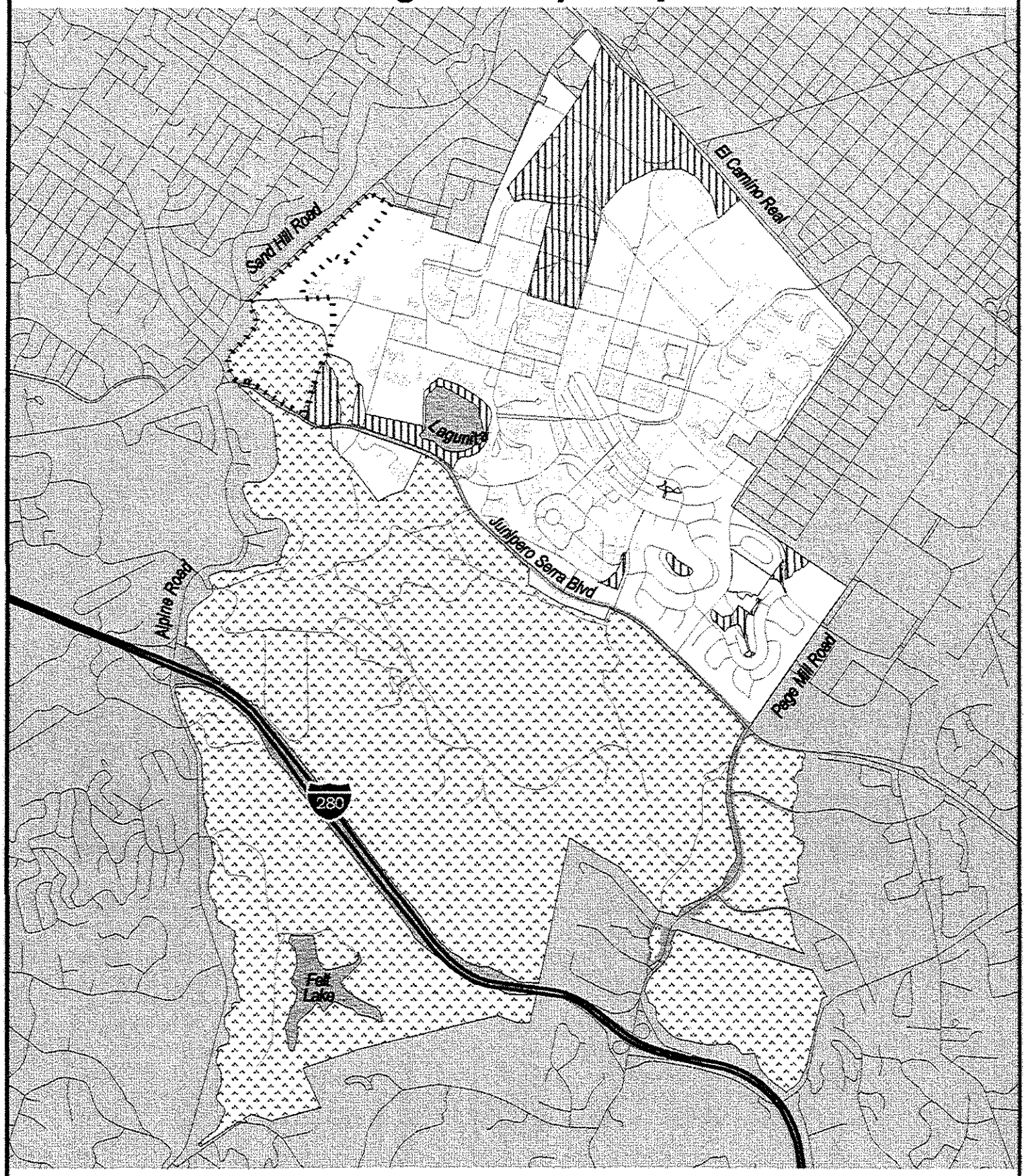
This strategy incorporates open space into the overall campus development approach, recognizing the area outside the AGB as an integral part of the campus environment that balances and moderates the intensity of the academic core. Efforts to preserve the foothills will require additional concentration and intensification of the central campus core. Conversely, maintaining the central campus as the focus of all new development will allow the foothills to remain in their natural state. The implementation measures discuss mechanisms for achieving long-term open space protection in the foothills that build on the overall land use strategy. Such measures include conservation easements in critical habitat areas and identification of opportunities to secure Stanford's commitment to open space protection.

This plan recognizes the need to protect open space in the Stanford foothills through the "Open Space and Field Research" land use designation, which allows for activities that support research and teaching requiring a remote or foothill setting for their functioning. Locations which are categorically not suited for development, such as habitats for rare species and geologic hazard areas, are designated Special Conservation and are completely restricted in terms of use and development.

This strategy and the associated policies and implementation recommendations reflect those policies articulated elsewhere in the Community Plan, particularly in the Growth and Development, Land Use, and Resource Conservation chapters. The policies are reiterated here to emphasize their value from the perspective of open space preservation.

Figure 5.2 – Designated Open Space, indicates those open space lands formally protected through Community Plan land use designations or other existing arrangements.

Designated Open Space



Open Space and Field Research/Special Conservation Areas

Campus Open Space

Sandhill Road Development Agreement (Open Space Area)

Scale 1:30,000

N

0 0.5 1 Miles

Figure 5.2

Policies

SCP-OS 1
Locate development inside the Academic Growth Boundary, allowing lands outside the boundary to continue as open space.

SCP-OS 2
Allow only field research and other uses that require a remote or foothill setting for their functioning in areas outside the Academic Growth Boundary. Do not permit any new development that is not associated with such uses (see Land Use Chapter).

SCP-OS 3
Identify and delineate Special Conservation areas where no development would be permitted (see Land Use Chapter).

Implementation Recommendation

SCP-OS (i) 1
Prioritize and use infill sites and areas with potential for redevelopment within the AGB as locations for new development.

SCP-OS (i) 2
Require easements as appropriate in Special Conservation areas. Locate easements in areas which serve critical habitat needs.

SCP-OS (i) 3
Identify and pursue opportunities to remove existing obstacles to development within the Academic Growth Boundary in exchange for easement protection of lands outside the AGB.

Strategy #2: Balance recreational use and environmental objectives

Through its Countywide Trails Master Plan, the County has created the mechanisms to provide a comprehensive trail system throughout Santa Clara County. The plan articulates County policies for the location, management, dedication and use of trails. Because Stanford lands border on a number of designated preserves and parklands, the Trails Master Plan identifies trail linkages in the regional trail system which cross Stanford lands. These trails are intended to provide links between developed urban areas and open space in the foothills and baylands. The Community Plan incorporates trails in accordance with the Countywide Trails Master Plan. The Trails Master Plan identifies the following linkages on Stanford lands; actual alignments of these links must be designed to protect sensitive habitat areas, and on-going

academic, agricultural, and residential uses. (See Figure 5.3 – County Trails Master Plan Designated Trails):

- Route S1 is shown as a "sub-regional route on other public lands" in the Matadero Creek/Page Mill Road corridor and is partially on a public road. The alignment follows Matadero Creek and Old Page Mill Road in the Stanford Community Plan area.

- The connector route C1, in the San Francisquito/Los Trancos Creek corridors, is designated as a "trail route within private property." The alignment generally follows the creeks and Alpine Road.

Some of these trails, in whole or in part, currently exist on Stanford land. The Los Trancos Creek and Arastradero Recreational trails have been in place for a number of years, and a portion of the San Francisquito Creek trail has been designated within the City of Palo Alto.

Development associated with the General Use Permit creates a need and an opportunity for trail dedication on Stanford land.

The actual alignment, design, and development of trails on Stanford land will need to comply with all relevant County policies. Creation of trails on Stanford land should be coordinated among the six jurisdictions in which Stanford lands are located, as well as the Midpeninsula Regional Open Space District.

Policies

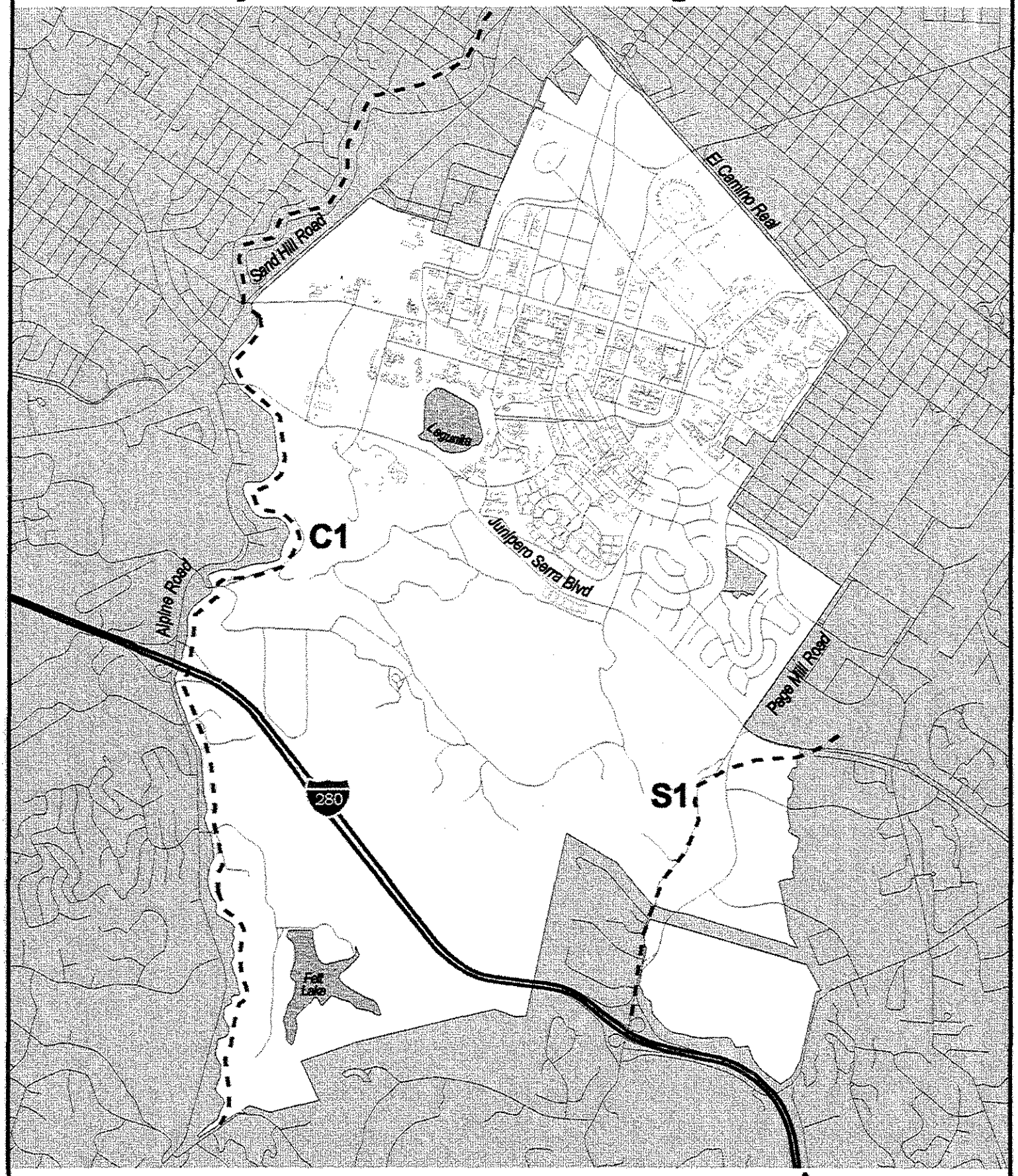
SCP-OS 4
Require dedication of trails on Stanford land as specified in the Countywide Trails Master Plan, consistent with environmental objectives, academic uses and with the priorities of the County Parks and Recreation Department.

SCP-OS 5
Protect sensitive habitat areas, areas used for academic purposes, and areas under active agricultural use in the alignment and design of trails.

SCP-OS 6
Plan for, design, and develop trails on Stanford lands in a manner consistent with the policies articulated in the Countywide Trails Master Plan.

SCP-OS 7
Minimize impacts of recreational activities on academic and environmental resources.

County Trails Master Plan Designated Trails



- - Sub-Regional Trail Routes from County Master Plan

Scale 1:30,000

N

0 0.5 1 Miles

Figure 5.3

Stanford University Community Plan Adopted December 2000

SCP-OS 8
Encourage Stanford to work with the community to allow public access to trails not included in the County Trails Master Plan in a way that minimizes impacts on academic and environmental resources.

Implementation Recommendation

SCP-OS (i) 4
Coordinate efforts among Stanford and local agencies to define more precise trail alignments for the trails crossing Stanford lands as described in the Countywide Trails Master Plan, and to determine terms for trail development, maintenance, and liability.

SCP-OS (i) 5
Restrict access to sensitive habitat or hazardous areas, locations under ecological restoration, and research sites.

SCP-OS (i) 6
Develop programs to protect and restore overused or misused recreational areas.

Strategy #3: Plan for parks and open space land within the Academic Growth Boundary

The interplay between buildings and open space is an important distinguishing visual feature of the Stanford campus. The Stanford campus continually presents contrasts between intensive development and open space, and between formal and defined open space settings and informal, natural areas that evoke Stanford's natural setting.

The Community Plan identifies the areas within the AGB as the location for future development, maintaining the foothills as open space. As development of the academic core intensifies, treatment of open space areas becomes increasingly important for maintenance of the essential character of Stanford. In addition, implicit in the stated objective of maintaining Stanford as a residential campus is the provision of all of the physical elements of a complete residential community. Planning for expansion of the basic academic facilities should include open space necessary for a balanced environment.

The competing concerns for open space on the campus, and the need to protect significant open spaces, is the basis behind the Campus Open Space land use designation. Undeveloped lands or open spaces which are not specifically protected through the Campus Open Space designation are addressed through Community Plan policies that will help ensure the availability of adequate amounts of open land for recreational use and to balance built areas. Figure 5.2 – Protected Open Space, indicates those open space lands formally protected through Community Plan land use designations.

Recognizing the different types and roles of central campus open space, the Community Plan stipulates a variety of measures for protecting and enhancing these spaces:

- **Form-giving open space features**: Historic or form-giving open space features which are essential to the character of the campus are designated Campus Open Space in the Community Plan (see Land Use Chapter). This designation also applies to areas within the Academic Growth Boundary which are essential to the habitat value of critical natural areas located within the AGB.

- **Parks in residential areas**: Areas which have long been used as parks and playgrounds in the faculty/staff subdivision are a valued amenity for the resident community and are also designated Campus Open Space in the Community Plan. These designated Campus Open Space areas within and adjacent to the faculty/staff subdivision total 18.4 acres. This space can be considered adequate for a population of 3,680 according to the 5 acres per 1,000 residents standard recognized by the State of California as the maximum amount of park area that can be required in a new subdivision. The current estimated population of the faculty/staff subdivision is 2,262, projected to be 2,387 in 2010. Parks in new faculty/staff subdivisions will also be provided at the 5 acres/1,000 residents standard.

- **Athletic fields**: Athletic and recreational facilities also function as open space. The designated athletic facilities, intramural playfields, and informal fields near residences directly support academic and residential programs and are included in the Academic Campus designation. Community Plan policies call for provision of adequate outdoor athletic facilities to support the student population.

- **Buffers**: Undeveloped land on the periphery of campus both defines the gateway to the campus and provides a buffer to the surrounding community from the University's development. These buffer areas carry a variety of land use designations. Many of the important frontages are designated Campus Open Space. Others with some potential for development are designated Residential or Academic Campus. Community Plan policies call for the need to balance new development with the importance of maintaining adequate open space buffers along the interfaces with neighboring off-campus communities.

Policies

SCP-OS 9
Identify and preserve significant open space through use of the Campus Open Space designation in order to maintain the quality and character of the central campus.

SCP-OS 10
Require Stanford to maintain recreational open space to meet existing and future recreational needs of the Stanford community.

SCP-OS 11
Balance concerns about the maintenance of buffers between the University and Cities of Palo Alto and Menlo Park with the need for increased housing supply and improved affordability (see Housing Chapter).

Implementation Recommendation

SCP-OS (i) 7
Identify, protect, and restore historic campus open space features essential to the organizing principles of the campus plan.

SCP-OS (i) 8
Require Stanford to provide sufficient campus parks and open space in the areas designated Campus Residential, at the rate of 5 acres for 1,000 population.

SCP-OS (i) 9
Review development applications for continued provision of recreational and athletic facilities convenient to student residences and in adequate amounts to serve student needs.

SCP-OS (i) 10
Incorporate open space in redevelopment of the core campus.

SCP-OS (i) 11
Review development applications in the Academic Campus land use designation for continued provision of buffer between development on the campus and surrounding off-campus communities.

SCP-OS (i) 12
Develop appropriate setback requirements as part of the new zoning for the Campus Residential – Low Density and Campus Residential – Moderate Density land use designations.

Resource Conservation

Stanford Community Plan Issues and Policies

Chapter Summary

Stanford contains a great wealth of natural resources which the Community Plan aims to preserve and protect in a manner that balances conservation and development of the campus. Resources include plant and wildlife species, creeks and other special habitat areas, water resources, historic and prehistoric resources, and visual resources. All types of resources contribute to the natural and built environment of the campus.

Many types of resources are protected through various state and federal laws. The policies and implementation recommendations in this chapter reinforce, enhance, and supplement these mandated resource conservation approaches for the particular natural and built environment of Stanford lands.

This chapter of the Stanford Community Plan addresses a range of resource conservation subjects, and each has a subsection of the chapter devoted to it. These subsections include:

- Habitat and Biodiversity,
- Water Quality and Watershed Management,
- Heritage Resources, and
- Scenic Resources.

Other Resource Conservation topic areas are discussed in the County of Santa Clara's General Plan, including Water Supply, Agricultural Resources, Mineral Resources, Solid Waste Management, and Energy Resources, in sufficient detail to guide activities at Stanford.

Community Plan strategies for resource conservation are:

Habitat and Biodiversity

Strategy #1: Improve Current Knowledge and Awareness of Habitats and Natural Areas

Strategy #2: Protect the Biological Integrity of Habitat Areas and Adequately Mitigate Impact

Strategy #3: Encourage and Promote Habitat Restoration

Water Quality and Watershed Management

Strategy #4: Reduce Non-Point Source Pollution

Strategy #5: Enhance and Restore Wetlands, Riparian Areas, and other Habitats that Improve Watershed Quality

Strategy #6: Prepare and Implement Comprehensive Watershed Management Plans

Heritage Resources

Strategy #7: Inventory and Evaluate Heritage Resources

Strategy #8: Protect Heritage Resources Through Avoidance, Adaptive Reuse and Sensitive Planning and Design

Scenic Resources

Strategy #9: Employ Growth and Development Policies That Conserve Scenic Resources

Strategy #10: Maintain and Enhance the Scenic Values of Urbanized Area Settings

Background

While the concept of resource conservation encompasses a diverse set of topics that involve both the built and the natural environment, there are common themes that bring these issues together. These themes are expressed in the General Plan but are discussed in this Community Plan to provide a sense of their application to Stanford and the importance of resource conservation in the overall approach to development on University lands:

- **Value**. Stanford's resources discussed in this chapter all provide a variety of types of values to both the Stanford community and the wider area. For example, species and habitats have value from both the ecological viewpoint and for scientific research purposes. Historic buildings house Stanford's academic programs and also enhance the physical identity of the University and the wider community.

- **Stewardship**. The concept of stewardship involves recognition of the value of natural and heritage resources, leading to active efforts to preserve and enhance the quality of the environment and its resources. Stanford's preservation of the vast majority of its foothills is an example of stewardship, particularly in times when the University actively chose not to develop this land. As pressure to grow increases, stewardship becomes both more difficult and more important.

- **Challenges.** Challenges to effective resource conservation stem from the increasing demands on natural resources presented by growth at the University and elsewhere, from the limited capacity of the environment to absorb impacts from human activity, and from the need for cooperative, regional action to implement effective measures.

The General Plan advocates a set of overall strategies for resource conservation efforts, which include:

1. Improving and updating current knowledge of resources;
2. Emphasizing pro-active, preventive measures to avoid impacts
3. Minimizing or compensating for impacts which do happen;
4. Restoring resources where possible; and,
5. Evaluating the effectiveness of mitigation measures employed.

Strategies and policies for various subjects as they relate to Stanford's lands are based upon these overall strategies, but may be tailored or limited to the specific resources and circumstances involved with Stanford lands.

One advantage for resource conservation at Stanford is the tremendous amount of knowledge that has been gathered and activities that have been initiated over the years. These measures are discussed more fully for each topic area.

One of the most important tools available to local government in the area of resource conservation is the California Environmental Quality Act (CEQA), which requires that the significant environmental impacts of development projects be recognized and mitigated as appropriate. At Stanford, the County has taken the approach to require comprehensive environmental review of potential impacts associated with the issuance of the General Use Permit. This analysis is then supplemented by additional environmental review of the impacts of each new project.

Habitat and Biodiversity

Background

Stanford's natural setting is an asset to both the University and the region. The diversity of local flora and fauna, and close proximity of the main campus to relatively unspoiled areas, allow for laboratory activities, teaching, and research to be closely linked to field-based studies, providing Stanford with academic opportunities unique among its peer institutions. The large acreage in open space supports

relatively uninterrupted habitat and wildlife corridors connecting to publicly-owned open spaces in the region. On lands which are not owned by Stanford and are not under public ownership, extensive development has occurred, leading to habitat fragmentation and increasing local interest in maintaining Stanford as open lands.

Protection of species depends on protection of the habitats in which they live. Stanford's lands support a rich array of native biological communities including riparian oak woodland, other oak woodlands, and annual grasslands. A number of species and biotic communities found on Stanford lands are protected by one or more local, state, or federal statutes such as the federal Endangered Species Act (ESA), the California Endangered Species Act, and the federal Migratory Bird Treaty Act. These species are collectively referred to as "special status species" and include:

- Two species which use creeks on Stanford lands as habitat, the California red-legged frog and the steelhead trout, are listed as "threatened" under the ESA. These species can be protected through use of buffers along creeks and protection of water quality. Another important consideration for creek species is the effect of water use from creeks for irrigation and other purposes.

- Several other species found at Stanford are candidates for protection under the ESA, most notably the California tiger salamander (CTS). Because there is the most immediate conflict between this species and both ongoing activities and proposed new development, the salamander is the subject of extensive effort; issues related to the CTS are described in more detail below.

- Trees in the riparian forest, oak woodland savanna, and central campus provide breeding and foraging habitat for a wide variety of birds, including several species of special concern such as the Cooper's hawk, sharp-shinned hawk, golden eagle, and loggerhead shrike. The Land Use designations and Open Space chapter policies are in part intended to conserve the resources of these areas for the habitat value they provide.

Stanford has engaged in a number of efforts over time to preserve habitats and biodiversity. These endeavors include:

- Planting of over 1,700 new oaks and other native trees as part of a reforestation program in both the foothills and the central campus.

- Steelhead trout restoration projects in San Francisquito Creek, in conjunction with the State Department of Fish and Game, CalTrout, and Santa Clara and San Mateo counties.

- Establishment of the 1,200-acre Jasper Ridge Biological Preserve in San Mateo County in 1973. The preserve is used for fieldwork in biological studies by Stanford students and faculty and researchers from other institutions.

- Creation of experimental breeding ponds for use by CTS in the foothills in order to reduce the number of salamanders exposed to traffic hazards as a result of crossing Junipero Serra Boulevard to reach Lake Lagunita.

- Maintenance and preservation of the oaks and other trees in the central campus through sensitive building design, incorporation of natural areas in the central campus setting, and relocation of mature trees displaced by building projects.

An important aspect of these conservation activities is the opportunity to learn from these efforts. As an academic institution and long-term landowner, Stanford is able to monitor and test different methods of habitat conservation and restoration in search of the most effective strategies. In addition to the Jasper Ridge Biological Preserve, Stanford faculty, students, and researchers have long-term research and teaching interests in San Francisquito Creek, Los Trancos Creek, Matadero Creek, and the oak woodlands and annual grasslands.

The oak reforestation program is perhaps the best-known habitat restoration program on the campus, involving Stanford, nonprofit organizations, and numerous volunteers from the campus and neighboring communities. This program was initiated by Stanford in the early 1980s, following the preparation of a Vegetation Management Plan in 1983 which found a lack of young oak trees and a decline in mature trees in the natural areas on the campus. After several years of operation in the foothills, the reforestation program has been extended to the Arboretum, and it has also involved reintroduction of native understory shrubs, grasses and forbs (broadleaf herbs) in addition to oaks. This continuing program has yielded many lessons and insights that have been used to modify techniques for planting and maintenance. The oak reforestation program is an excellent example of comprehensive land stewardship and management that restores habitat and contributes to the knowledge of the natural environment.

California Tiger Salamander

The CTS is a state species of special concern and a federal candidate for listing as threatened or endangered. Lake Lagunita and the surrounding undeveloped lands provide both aquatic breeding and terrestrial habitat for CTS. Stanford's population is the only remaining known population of this species on the San Francisco Peninsula. The rarity of this population and the fact that the salamander habitat is located in potential development areas create a particularly high level of interest in the potential effects of development under the Community Plan on this species.

The CTS has very particular life cycle needs which require extensive habitat preservation and management, in both developed and undeveloped areas. CTS breed in Lake Lagunita, where seasonal filling makes water available for a period of time that coincides with the amphibian's breeding cycle. After hatching and developing to their terrestrial form in water, juvenile salamanders migrate to upland habitats up to one kilometer or more from the breeding site, where they live in holes created by ground rodents. These estivation sites are located both north and south of Junipero Serra Boulevard. Adult salamanders return to their breeding ponds with the first heavy rains of winter. Aquatic breeding sites and usable upland habitat, particularly within 500 meters of the lake, comprise the salamander's crucial habitat needs.

Primary threats to the CTS at Stanford are:

- Traffic mortality due to crossing of Junipero Serra Boulevard during migration;
- Impacts from activities associated with development, such as trapping in utility boxes and harm to individuals from landscape maintenance; and
- Loss of habitat from new development.

In 1998, a Management Agreement for the California Tiger Salamander was signed by the U.S. Fish and Wildlife Service, the California Department of Fish and Game, the County, and Stanford. The CTS Management Agreement identified mechanisms to reduce the impact of these threats on the CTS, particularly addressing a defined zone around Lake Lagunita known as the CTS Management Zone. The agreement was required as a condition of approval for construction of the Lyman graduate student residences near Lake Lagunita, as a mitigation for the impacts on the salamander associated with that project and other identified projects within the Management Zone. The Management Agreement allows for additional mitigation of projects in the Management Zone which are not covered by the agreement, which would include all development associated with the new General Use Permit.

Some of the primary strategies have included efforts to make developed areas inaccessible to salamanders, modification of management practices, and the creation of several experimental breeding ponds in the foothills to reduce the population's reliance on Lake Lagunita. While Stanford hopes to increase use of the foothill breeding ponds over the long term, the success of these ponds has not been established. The University also intends to construct a tunnel crossing under Junipero Serra Boulevard to reduce traffic mortality. Protection of Lake Lagunita and habitat around the lake will remain as an important aspect of salamander management in the future.

Strategies, Policies and Implementation

The Community Plan incorporates the major habitat preservation concepts or strategies included in the General Plan, namely, acknowledging habitat and biological resources, preserving habitat, mitigating impacts, and restoring habitat. The plan implements these concepts through restrictions on development in the foothills to only those activities which support academic activity based on the foothill setting and through emphasizing development in the central campus that is sensitive to the natural resources affected by the development.

Strategy #1: Improve Current Knowledge and Awareness of Habitats and Natural Areas

This strategy acknowledges the need for accurate and up-to-date information on local biodiversity in order to conduct successful conservation and land use planning. Stanford maintains an evolving database on many levels of local biotic diversity. In particular, data on the distribution and condition of protected species and plant-defined biological communities, such as serpentine grasslands, are incorporated into the database on an annual basis and should be transmitted to the County as well. Stanford is also conducting ongoing studies investigating the impacts of non-native species on local ecosystems. The policies associated with this strategy call for continued data collection and information transmission to the County.

Policies

SCP-RC 1
Maintain and update inventories and maps of important biological resources on Stanford lands, including protected species, species considered at risk of local extinction, and habitat types (biotic communities), for use in conservation efforts, land use decision making, and monitoring of resource status.

SCP-RC 2
Allow field research and other academic activities related to improving knowledge and understanding of habitat resources to occur in areas south of Junipero Serra Boulevard.

Implementation Recommendation

SCP-RC (i) 1
Require Stanford to prepare California Natural Diversity Database records for species of concern.

SCP-RC (i) 2
Transmit natural resource map updates to the County using the County's current electronic map format standards.

Strategy #2: Protect the Biological Integrity of Habitat Areas and Adequately Mitigate Impacts

Protection of existing natural resource areas is an essential component of successful conservation planning. At Stanford such protection involves the management and

long-term commitment to the preservation of environmentally significant areas, particularly in the foothills.

The question of what habitat areas are "sensitive" and most in need of protection is not a simple one. Habitats for some special-status species under state or federal law are clear candidates for protection. Such habitats at Stanford include Lake Lagunita, other breeding ponds, and the upland habitat (undeveloped land within 500 meters of breeding sites) for the California tiger salamander. It also includes the creeks and their riparian surroundings which support steelhead and red-legged frogs. While much of this habitat area is located in the foothills which will remain largely undeveloped, some areas around Lake Lagunita on the north side of Junipero Serra Boulevard are within the Academic Growth Boundary (AGB). This area is viable salamander habitat and should be considered a sensitive area for management purposes.

While location of development and activities outside of the most sensitive habitat areas is important, appropriate management within already developed areas and in locations used for agriculture and recreation is also critical to the protection of species and habitats. For example, there is concern about the effects of recreational activity in the foothills in terms of erosion and effects on habitat and wildlife. Unlimited access to the creeks in these areas could pose a threat to the special status species in such aquatic environments. Resource management of some of these areas can be particularly challenging in areas that are not directly controlled by the University, such as on agricultural leaseholds on undeveloped lands.

California Tiger Salamander

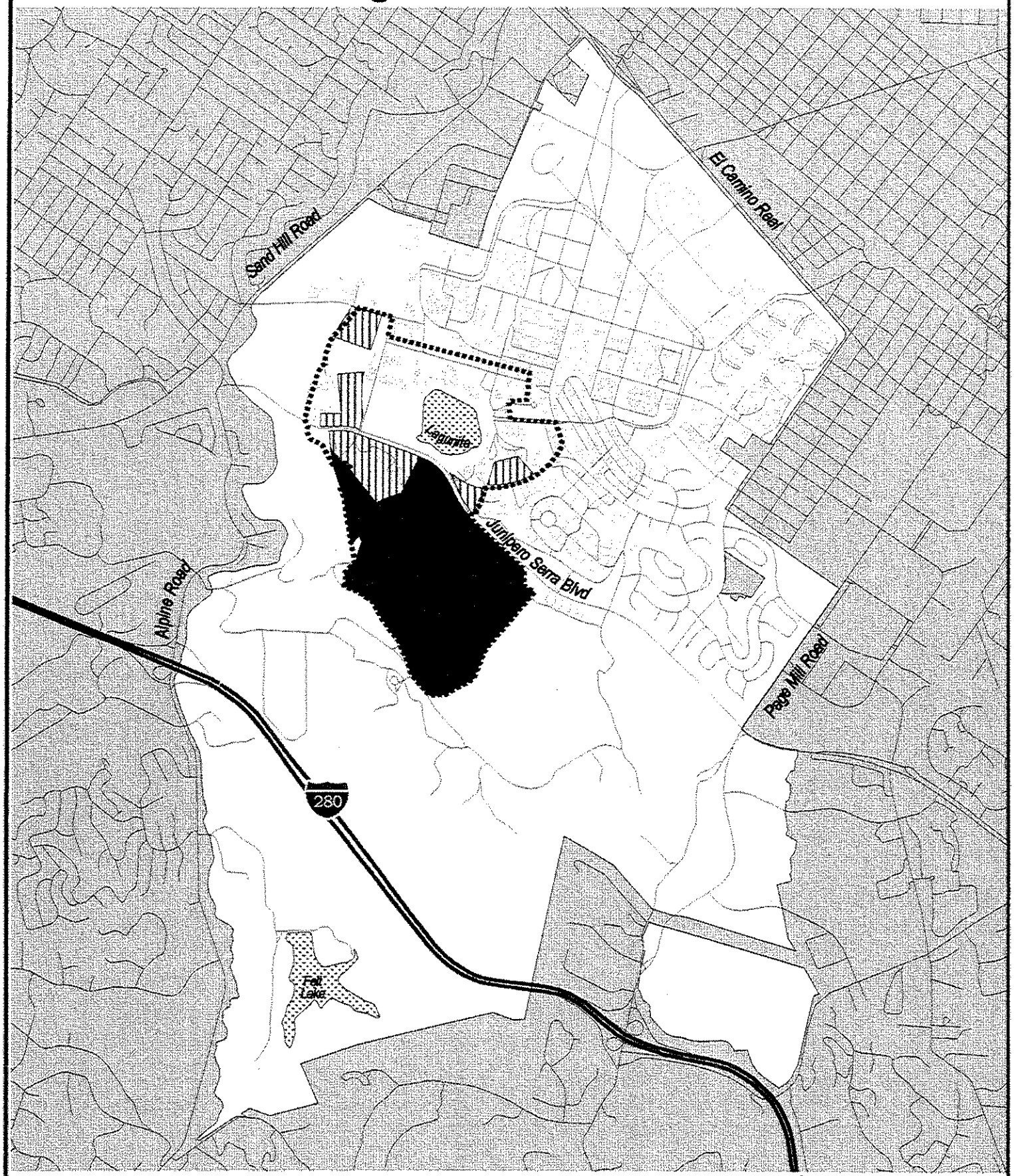
Measures to protect habitat for the CTS under the Community Plan will minimize development in the most crucial habitat areas over the long term. These areas are undeveloped lands within 500 meters of CTS breeding sites, without intervening development that fully blocks salamander access. Specifically, existing prime habitat includes Lake Lagunita and its undeveloped environs and the Lower Knoll, with undeveloped lands south of JSB also serving as important habitat (See Figure 6.1 – California Tiger Salamander Habitat). While the Driving Range is adjacent to the lake, recreational activities have prevented it from acting as prime salamander habitat.

The primary tools to protect prime habitat are long-term conservation easements and creation of new salamander habitat through addition of viable breeding ponds. The AGB itself is an important tool for CTS habitat protection in that it will prevent development in some portions of the CTS habitat area.

If the CTS is listed as a threatened or endangered species by the U.S. Fish and Wildlife Service in the future, Stanford will be required to obtain incidental take authorization and prepare a Habitat Conservation Plan if any development or activities that affect the salamander are proposed.

The policies associated with this strategy emphasize both avoidance of disturbance to sensitive habitat areas and mitigation of any impacts that do occur.

California Tiger Salmander Habitat Areas



Special Conservation Zone

Occupied California Tiger Salamander Habitat within AGB

California Tiger Salamander Management Zone

Scale 1:30,000

N

0 0.5 1 Miles

Figure 6.1

Stanford University Community Plan Adopted December 2000

Policies

SCP-RC 3
Assure the protection of habitats for special status species in approving the location and design of new development. Avoid habitat areas for these species in the location of development whenever feasible.

SCP-RC 4
Protect and maintain habitats, natural areas, and wildlife corridors in development and redevelopment.

SCP-RC 5
Protect habitat areas through use of the Open Space and Field Research, Special Conservation, and Campus Open Space land use designations, and through use of the Academic Growth Boundary. If land use designation changes or AGB relocation is proposed, conduct detailed studies for presence of special status species and their habitat prior to decision making.

SCP-RC 6
Require Stanford to mitigate any impacts on special status species or other biological resources that result from land use and development through:

a. Mitigation measures that have proven to be effective which shall be implemented prior to commencement of site preparation and construction activities as appropriate.

b. Mitigation measures such as provision of new habitat areas which shall be monitored and, if necessary, revised over time to ensure the viability of these measures as mitigation.

SCP-RC 7
Maintain and restore riparian buffer zones along creeks as described in Santa Clara County General Plan policy R-RC-37.

SCP-RC 8
Monitor and evaluate the recreational use of sensitive habitat areas and limit if necessary the recreational use of areas supporting significant, but less sensitive, natural resources.

Implementation Recommendation

SCP-RC (i) 3
Establish guidelines for review and approval of research and teaching activities in habitat areas, particularly in those areas which support special-status species.

SCP-RC (i) 4
Develop and implement a program for monitoring and managing recreational activities in the foothills with regard to the habitat impacts of these activities.

SCP-RC (i) 5
Participate in the preparation and implementation of a Habitat Conservation Plan for Stanford lands, if such an effort is initiated by Stanford or the U.S. Fish and Wildlife Service.

SCP-RC (i) 6
Require long-term habitat protection measures in appropriate locations as mitigation for development in habitat areas that support special-status species or that are protected through local, state, or federal regulations.

SCP-RC (i) 7
Require replacement of trees greater than 12 inches in diameter which are removed at a 1:1 ratio of replacement to removed trees. For oaks which meet this criteria, require relocation of trees or replacement at a 3:1 ratio.

SCP-RC (i) 8
Develop guidelines for the location, siting and review of proposed construction projects that minimize impacts to natural resources.

SCP-RC (i) 9
Identify opportunities to conserve water used for irrigation and other purposes in order to limit use of water from creeks.

Strategy #3: Encourage and Promote Habitat Restoration

Just as protection of existing natural resources is a critical element to successful resource conservation planning, so too is habitat restoration. After well over 200 years of occupation by European settlers and their descendents, and more than 8,000 years of occupation by Native Americans, Santa Clara County, including the Stanford area, has been modified significantly by humans. Habitat loss, habitat fragmentation, and habitat modification have all occurred on a large scale in the region, with most changes occurring in the last 150 years. For example, the Stanford foothills, which are considered an important natural resource, are primarily comprised of non-native grasses and have been substantially altered through cattle grazing. Both foothill areas and flatlands in areas surrounding Stanford lands have been extensively developed.

Habitat restoration is also a potential mitigation measure for development in sensitive habitat in other locations.

The policies associated with this strategy encourage continued habitat restoration as part of a comprehensive approach to habitat preservation and management.

Policies

SCP-RC 9
Establish priorities for the restoration or rehabilitation of sensitive habitat areas and include habitat restoration as a key component of conservation management and planning.

SCP-RC 10
Stanford shall continue and support efforts to enhance habitats and populations of protected native species, including, but not limited to:

a. reduction of non-native invasive species;

b. wetland creation efforts, particularly to increase breeding sites for the California tiger salamander; and

c. the oak reforestation program in the foothills, the Arboretum, and in other natural areas.

Implementation Recommendation

SCP-RC (i) 10
Coordinate wetland preservation for flood control purposes with habitat restoration efforts.

SCP-RC (i) 11
Encourage location of facilities and trails out of sensitive habitat areas and areas undergoing habitat restoration.

Water Quality and Watershed Management

Background

Healthy watersheds with good water quality are a critical component of resource conservation because watercourses are home to many of the campus' sensitive species, and because the quality of the watershed affects the larger San Francisco Bay ecosystem. Activities on Stanford lands have the potential to affect the quality of creeks and their associated riparian habitats, creating lasting impacts on both terrestrial habitat and water quality and species.

Stanford lands are included in two watersheds: the San Francisquito and the Matadero (see Figure 6.2 – Watershed Boundaries). The San Francisquito Creek system, including San Francisquito, Los Trancos, Corte Madera, Sausal, and Bear creeks, and the Searsville Reservoir, is the larger of the two and is located in the west and north portions of the University. Stretches of this system form the boundary between Santa Clara and San Mateo Counties. Stanford has three water diversions in this watershed: the Searsville Dam, a recently redesigned pumping facility located at the Stanford Golf Course near Junipero Serra Boulevard, and the Felt Lake diversion on Los Trancos Creek (at Arastradero Road).

The Matadero system encompasses the eastern areas of the University and consists of Matadero and Deer creeks. This watershed is located entirely in Santa Clara County. The Stanford portion of this watershed in unincorporated Santa Clara County is in natural streambeds with substantial existing riparian vegetation. Downstream portions of the system are maintained in artificial channels. Stanford has no water diversions in this system.

Portions of Stanford lands also contain a groundwater recharge area, which crosses the central campus (see Figure 6.3 – Groundwater Recharge Area). This area is referred to as an "unconfined" zone where groundwater recharge is not generally precluded by soils and geologic features. As additional development occurs in this portion of the campus, there is less opportunity for infiltration and recharge of the aquifer through ground percolation and more runoff into creeks and storm drain systems. Drainage design and detention pond systems can offset increases in impervious surfaces, ensuring opportunities for recharge.

Stanford participates in a regional Joint Powers Agency (JPA) for the San Francisquito Creek Watershed, along with the Cities of Palo Alto, Menlo Park, and East Palo Alto, the County of San Mateo, and the Santa Clara Valley Water District. This JPA focuses on both habitat protection and flood control in the watershed. It grew from the Coordinated Resource Management and Planning (CRMP) process for San Francisquito Creek. Watershed management and planning in Santa Clara County is conducted under the auspices of the Santa Clara Valley Water District (SCVWD).

Strategies, Policies and Implementation

The strategies, policies and implementation recommendations related to water quality and watershed management reflect the General Plan's comprehensive approach to this issue. These focus on reducing pollution sources and maintaining streamside environments rather than on treatment of polluted water. Comprehensive watershed management requires coordination among a multitude of

Watershed Boundaries

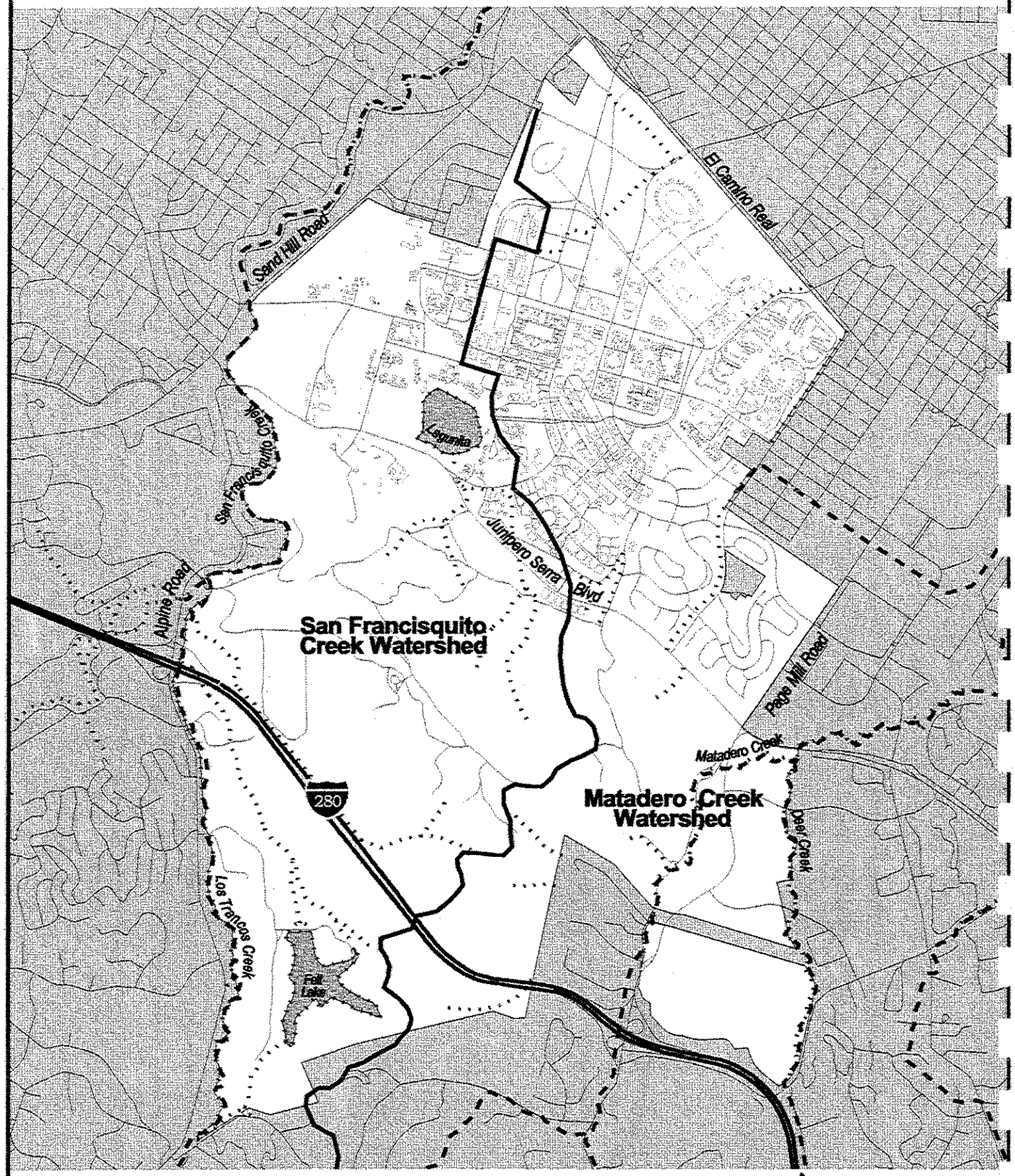
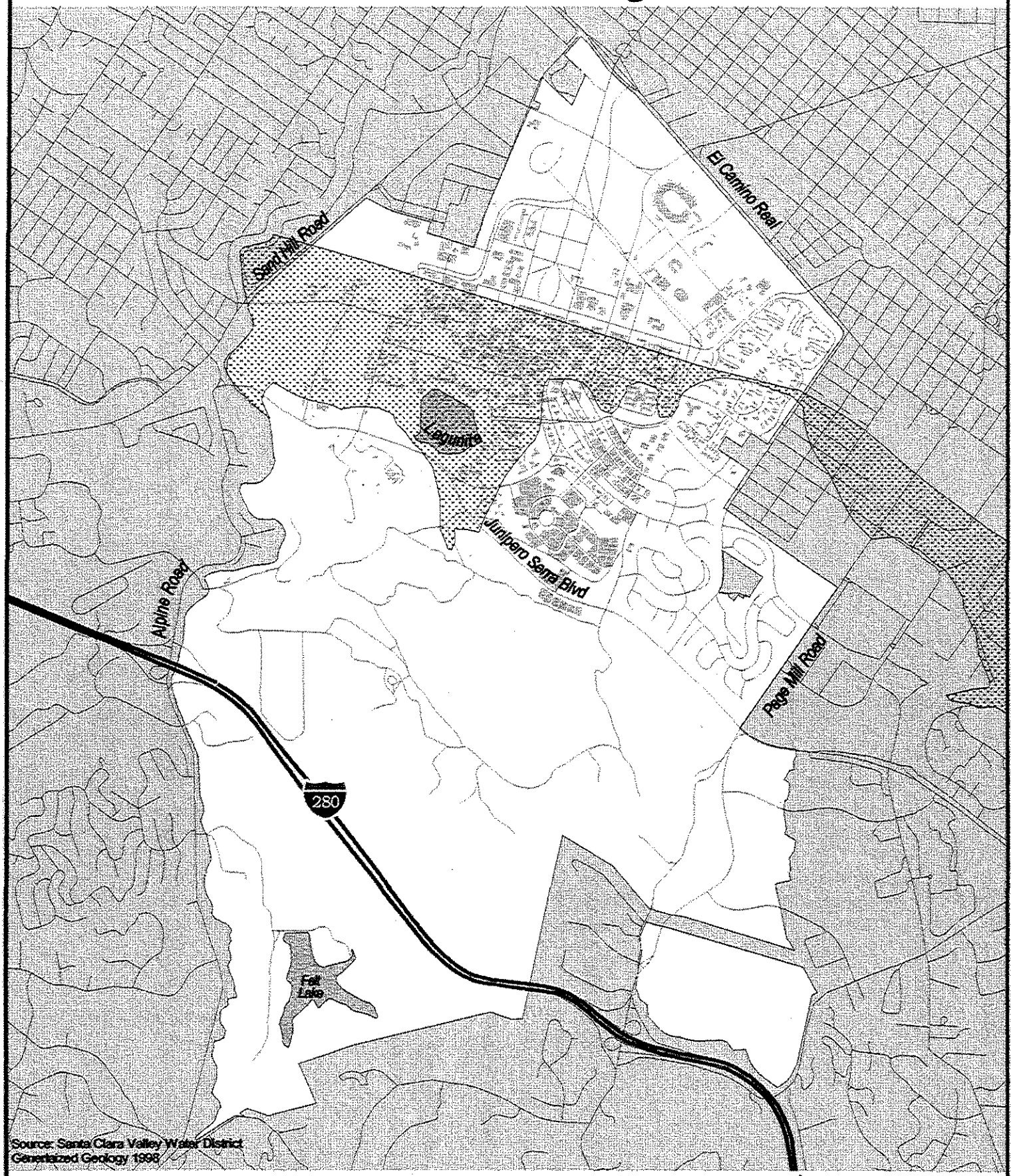


Figure 6.2

Groundwater Recharge Area



Unconfined Zone
(where groundwater recharge can occur)

Scale 1:30,000

N

0 0.5 1 Miles

Figure 6.3

landowners and jurisdictions. As a major landowner with a variety of uses on its lands, Stanford is an important contributor to the overall health of watersheds in which it lies.

Strategy #4: Reduce Non-Point Source Pollution

Non-point source pollution has been identified as a major regional problem, accounting for approximately half of the contaminants discharged into San Francisco Bay. This type of pollution stems from a variety of sources on the campus, such as streets, parking lots, agricultural waste and runoff, erosion, and chemical or other waste from research activities. Stanford and the County's efforts to reduce non-point source pollution are diverse, ranging from public education to development and implementation of best management practices.

Agricultural activities on leased lands owned by the University have been a particular source of water pollution. These activities are under the influence of Stanford as a landowner, but not the direct control of Stanford as an operator. As landowner, Stanford has the ability to require water pollution prevention practices as terms and conditions of its leases.

Policies

SCP-RC 12
Continue the use of appropriate best management practices to reduce non-point source pollution in agricultural, recreational, and academic areas and for construction activities, and include these practices as terms and conditions of leases of Stanford lands.

SCP-RC 13
In planning for new development and redevelopment, utilize site, building and landscape design features which serve to reduce non-point source pollution.

SCP-RC 14
Promote and participate in interjurisdictional efforts to identify and reduce non-point source pollution and to develop economically viable best management practices for improving water quality.

SCP-RC 15
Emphasize groundwater recharge through natural percolation and filtration over increased runoff to storm drains and creeks.

Implementation Recommendation

SCP-RC (i) 12
Develop education programs for relevant University personnel and for campus leaseholders on water quality issues.

SCP-RC (i) 13
Conduct regular maintenance on existing storm water systems.

SCP-RC (i) 14
Incorporate conditions within approvals for new development to minimize sources of non-point source pollution and employ best management practices as mitigations.

Strategy #5: Enhance and Restore Wetlands, Riparian Areas, and other Habitats that Improve Watershed Quality

A critical feature of efforts to improve regional water quality is the existence of functioning wetlands and surrounding vegetated areas. Wetlands and associated vegetated areas act to reduce erosion, absorb runoff, and reduce the intensity of flood events. Natural areas contribute to water quality of both surface water features and underground aquifers. This function adds to the County and Stanford's interest in the protection of riparian areas through streamside buffers and in the protection of central-campus wetlands, particularly in the Arboretum and around Lake Lagunita.

Policies

SCP-RC 16
Assist Stanford in identifying and implementing agricultural and other land management practices that promote native species and that contribute to erosion control.

SCP-RC 17
Avoid development in riparian areas and wetlands.

SCP-RC 18
Maintain native plant communities south of Junipero Serra Boulevard and in Campus Open Space areas such as oak woodland, chaparral, and riparian trees and shrubs that serve to prevent soil erosion and creek bank collapse.

SCP-RC 19
Enhance seasonal wetlands in the Arboretum.

SCP-RC 20
Continue to seasonally fill Lake Lagunita and create seasonal wetlands habitat, creek flow permitting.

Implementation Recommendation

SCP-RC (i) 15
Where appropriate during development and redevelopment, Stanford shall be required to relocate structures, roads, and trails away from creeks and in a manner that minimizes the addition of impermeable surfaces.

SCP-RC (i) 16
Incorporate flood control features such as detention basins into new development. Design and engage in flood control activities for entire drainage areas rather than on project-by-project basis for each new campus facility.

Strategy #6: Prepare and Implement Comprehensive Watershed Management Plans

The primary goal of watershed management planning is greater assurance of water quality, with the important additional benefits of habitat and natural resource protection. Because watershed management issues are complex and involve multiple parties, efforts have increased in the last several years to approach water quality issues from a comprehensive watershed management approach. One such ongoing endeavor is the Watershed Management Initiative for Santa Clara County, in which numerous jurisdictions and stakeholders have worked together over time to address watershed management and water quality collectively from a comprehensive perspective.

Stanford's participation in the preparation and implementation of watershed management plans is important due to the amount of land owned by the University and the variety of activities and resources on University lands. In order to manage watersheds on Stanford lands and to contribute to regional planning, Stanford contributes scientific information and participates in regional planning efforts such as that of Joint Powers Authority for San Francisquito Creek Watershed.

Policies

SCP-RC 21
Support and encourage Stanford's participation in regional watershed management planning and implementation for watersheds including Stanford lands.

Implementation Recommendation

SCP-RC (i) 17
Stanford should continue to participate in region-wide watershed conservation and management activities (e.g. Coordinated Resource Management Program and the Joint Powers Authority for San Francisquito Creek).

Heritage Resources

Background

Heritage resources at Stanford include those features which reflect and embody the campus history. Many of these features are central to the visual and functional form and character of the campus. While many equate heritage resources with historic buildings only, these resources encompass a range of features that contribute to the campus heritage, including archaeological sites from prehistoric and historic times as well as major landscape features.

Archaeological Sites

Archaeological sites are an important link to the past and source of understanding of the area's history. Archaeological sites at Stanford reach as far back as remains indicating a human presence 7,600 years ago. Resources on the Stanford campus include sites from the local Muwekma Ohlone culture and their ancestors, as well as nineteenth- and earlier twentieth-century archaeological deposits associated with Spanish, Mexican, early American, and Stanford history.

Stanford faculty and students have conducted archaeological digs on campus since the 1920s. In 1986, the Campus Archaeology program made the first effort to systematically investigate the entire 8,180-acre land holding. More than 50 prehistoric archaeological sites relating to the ancestors of the local Muwekma Ohlone culture, primarily along the creeks at the campus edges, were identified during that process. Historic records have also been investigated to ensure documentation of deposits associated with European settlers and their descendants. It is customary not to include maps of archaeological sites in plans in order to help protect the integrity of the sites. Stanford makes efforts to protect these ancient sites and has designed development to avoid or to permit and mitigate potential impacts to prehistoric resources.

The University created an 11-acre archaeological preserve along San Francisquito Creek in 1986 that encompasses one of the oldest prehistoric sites on the campus. A

conservation easement was dedicated over this preserve in conjunction with the City of Palo Alto's development agreement for the Sand Hill Road projects in 1997.

Prehistoric sites are generally protected from development disturbance by the Community Plan land use designations and Academic Growth Boundary. In the event that future development does occur that affects prehistoric sites, such as in the golf course, protective measures would be required. Ecological restoration and flood control in creeks also pose a threat to archaeological resources, which should be considering in the planning and implementation of such efforts.

Historic Structures and Sites

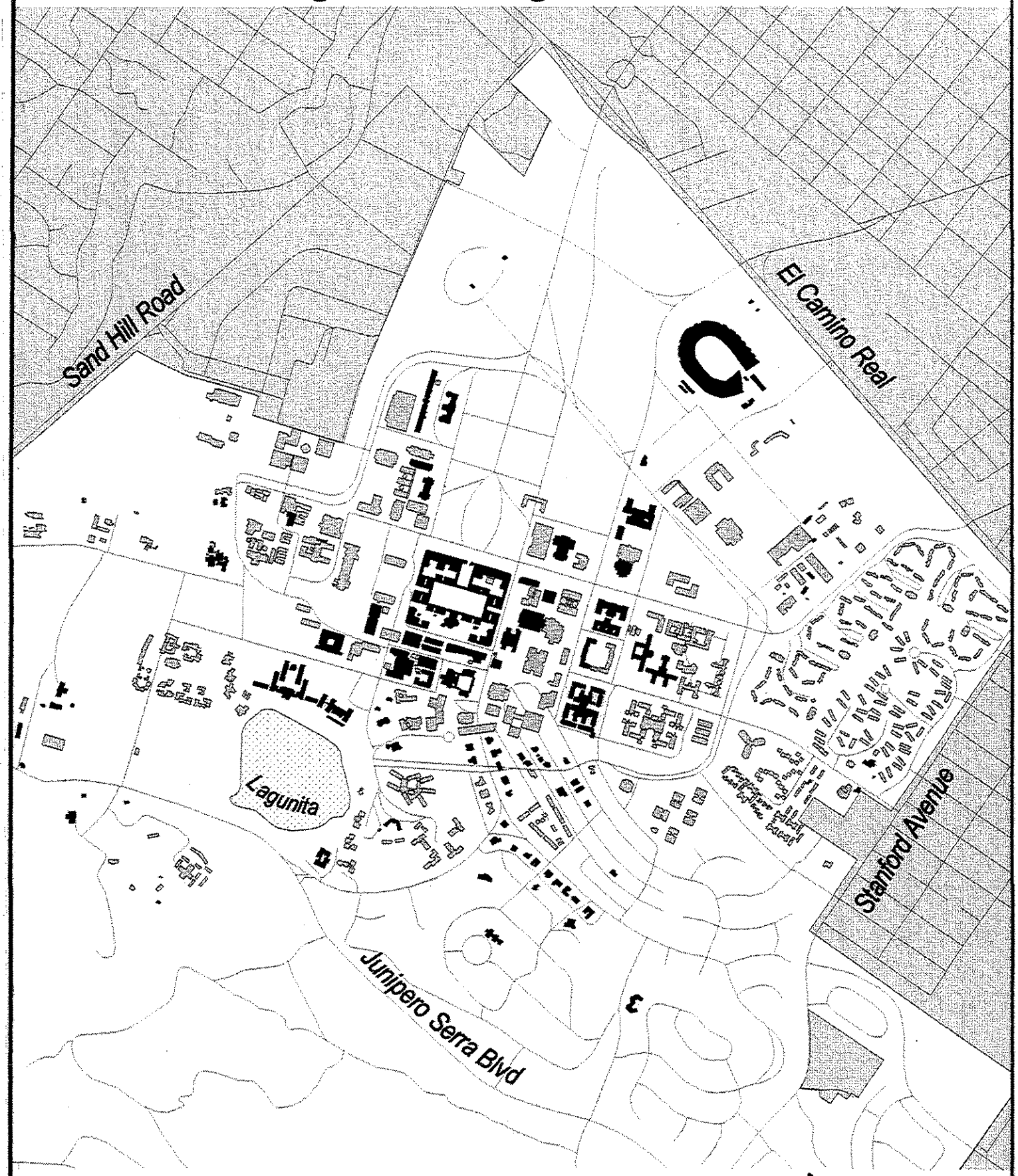
The Stanford University campus contains a number of significant historic structures and sites associated with the Stanford family and the University, as well as with the previous occupants of the land. Stanford's academic facilities include more than 200 structures that meet the minimum age criteria for being potentially historic, i.e., constructed more than 50 years ago. (See Figure 6.4 – Age of Existing Structures). In addition to these resources related to Stanford's history over the past 120 years, the University lands contain a small number of older structures dating from the 1860s and 1870s, prior to the establishment of the Stanford Palo Alto Stock Farm and the University.

The University established a Historic Values Subcommittee, an advisory group to the University Committee on Land and Building Development, in 1987 to evaluate the significance of campus buildings and landscapes. The Historic Values Subcommittee maintains a Historic Values Index (HVI) to inform their recommendations on historic structures and features. The HVI has been in use since 1986 as a mechanism for evaluating the relative historic value of campus features in order to guide land use and building projects. To date, 94 buildings or other features (such as Palm Drive) have been evaluated for placement on the HVI Cumulative Evaluation Index. Inclusion on the index is based on five criteria: age, aesthetic quality, uniqueness at Stanford, importance in Stanford history, and importance to the external community. Structures more than 50 years old are evaluated for inclusion on the HVI.

The University has included reports on the activities of the Historic Values Subcommittee, as well as projects relating to historic structures, in the Annual Report required by the 1989 GUP. While the Historic Values Index provides important information about the local significance of campus structures, the Index is not an official listing or register of historically important resources. Some campus buildings do appear on federal, state, and county lists of historic resources, including the Santa Clara County Heritage Resources Inventory. (Figure 6.5 – Listed Historic Structures).

The County's Heritage Resources Inventory is a publication of the Santa Clara County Historical Heritage Commission. Stanford projects which involve properties included in the County's Heritage Resources Inventory are referred to the Historical Heritage Commission for review and comment, and potential impacts on any historic resources are also considered in the environmental review process associated with a

Age of Existing Structures

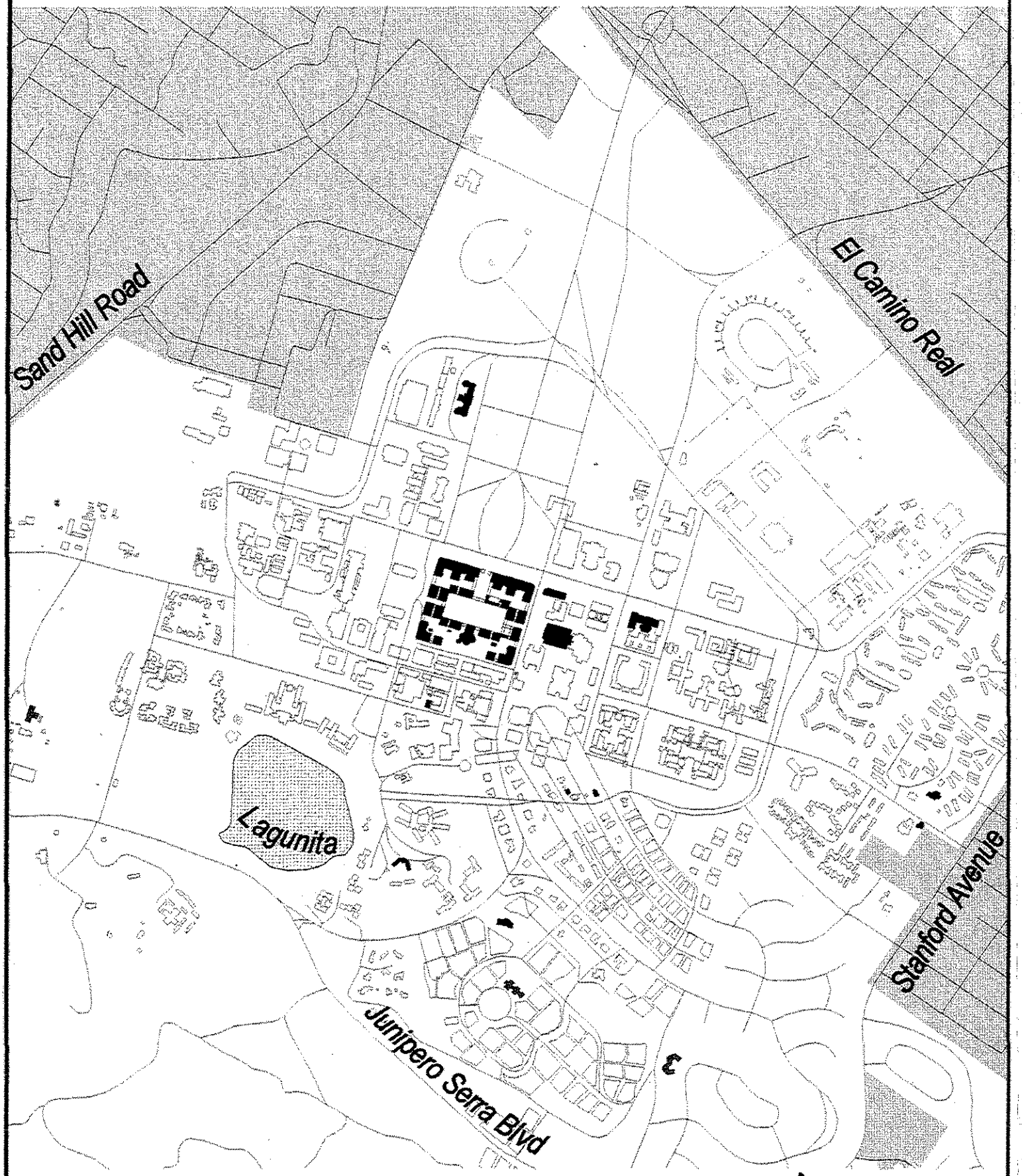


Buildings older than 50 years
Buildings less than 50 years

Scale 1:16,000
N
0 1000 2000 Feet

Figure 6.4

Listed Historic Structures



National Register of Historic Places
County Heritage Resources Inventory

Scale 1:15,000

N

0 1000 2000 Feet

Figure 6.5

Stanford University Community Plan Adopted December 2000

development proposal. The County is currently reviewing its process for evaluation and protection of historic resources.

As with other resource conservation issues, the strategies for conservation of historic resources call for inventorying and evaluating the resources involved, preventing and minimizing impacts, and restoring and enhancing resources, as appropriate.

Strategies, Policies and Implementation

Strategy #7: Inventory and Evaluate Heritage Resources

The key architectural and landscape elements that define the character of the campus should be identified and evaluated for the purpose of ensuring their protection in future planning.

The County's primary mechanism for identifying and evaluating heritage resources is the Historic Heritage Commission and the Heritage Resources Inventory. Campus features which are highly rated in Stanford's Historic Values Index are not necessarily included in the County's inventory. Each must be individually considered and included within the County's Heritage Resources Inventory by action of the Board of Supervisors. Evaluating Stanford's historic resources for inclusion in the Heritage Resources Inventory will be an important ongoing aspect of the conservation of these resources.

Policies

SCP-RC 22
Maintain informational databases and formal inventories of heritage resources as the basis for local decision-making regarding historic buildings, archaeological and paleontological sites, heritage trees, and landscape features.

Implementation Recommendation

SCP-RC (i) 18
Stanford shall inventory, map, and monitor the status of archaeological and paleontological resources on Stanford lands and prepare and update archaeological site records for transmittal to the California Historical Resources Information System.

SCP-RC (i) 19
Review existing and potential historic resources at Stanford for possible inclusion on the County's Heritage Resources Inventory, including heritage trees.

Strategy #8: Protect Heritage Resources Through Avoidance, Adaptive Reuse, and Sensitive Planning and Design

Heritage resources can be protected in a variety of ways. Of primary importance are land use planning and site design that incorporate historic features, heritage trees, and archaeological resources in ways that avoid the need for relocation or destruction of the resource. Another involves the careful review and consideration of alternatives to the potential loss of a resource when plans or individual development proposals conflict with heritage resource preservation.

One opportunity for heritage resource conservation is adaptive reuse of historic structures rather than demolition when a building becomes obsolete. Stanford has employed both adaptive reuse and avoidance in site design in numerous cases over time.

For example, Encina Hall, a designated historic structure, was one of the first dormitories on the campus. It was used for administrative offices, and is now being converted for academic use. The Stanford Museum (now the Iris and Gerald B. Cantor Center for the Visual Arts) was extensively restored in conjunction with construction of a new building to expand the facility. Stanford's record of historic preservation has been acknowledged through the Governor's Award for Excellence in Historic Preservation in 1999, an Honor Award from the National Trust for Historic Preservation in 2000, and many national awards for individual restoration projects.

While it is common to recognize, acknowledge and restore important historic buildings, the preferred approach for archaeological resources is to allow the sites to remain undisturbed and leave their locations undisclosed.

The General Plan recognizes the importance of preserving heritage resources as well as the difficulties and financial burdens of adapting older structures to modern use. The challenge for Stanford and the County in the future is to plan for preservation and provide incentives rather than disincentives for adaptive reuse.

Policies

SCP – RC 23
Protect heritage resources, including sites, structures, and trees in campus development through careful campus land use planning, individual project design, project review, use of appropriate guidelines, and other implementation measures.

SCP-RC 24
Protect the integrity of significant archaeological sites and other heritage resources. Ensure the confidentiality of archaeological site locations in conformance with state laws.

SCP – RC 25
Take into account the need to protect archaeological and paleontological resources in any environmental enhancement activities involving creek restoration and flood control.

SCP-RC 26
Give priority to the avoidance or adaptive reuse of historic structures over demolition whenever possible.

Implementation Recommendation

SCP-RC (i) 20
Require adequate background information and site plans to assist in evaluation of potential impacts to heritage resources resulting from project development.

SCP-RC (i) 21
Acknowledge and make use of the information contained within the University's Historic Values Index, as appropriate, when considering individual project applications.

SCP-RC (i) 22
Identify appropriate incentives and seek opportunities to encourage preservation of historic structures on the campus.

Scenic Resources

Background

The Stanford University campus and its associated undeveloped lands are a significant visual resource on the northern edge of the County. The largely undeveloped hillsides, natural streams, landmark architecture, and landscape setting of the central campus are important to the quality of life in this area of the county.

Central Campus

Stanford is making substantial efforts to improve the visual character of the central campus through a return to the concepts behind the original campus plan, which called for a series of interconnected quads in a formal setting. Recently, the University has focused on emphasizing the major axes crossing the campus and on enhancing the natural landscape and creating contrasts between formal landscaped areas and more natural settings. Additional efforts have been made to translate the

campus architectural vernacular of sandstone, red tile roofs, and arcades to a contemporary use in new campus buildings.

Open spaces in the central campus also contribute significantly to Stanford's visual character; both major spaces like the Arboretum or Lake Lagunita and small open and landscaped settings are integral to the campus.

Foothills

While the central campus is a setting that is generally experienced only by those actually on the campus, the undeveloped foothills are an important component of the regional setting that help define the visual character of the surrounding communities. Strong limitations on foothill development espoused and established in this Community Plan will help protect the predominantly natural appearance of the foothills. If appropriate development does occur consistent with the Open Space and Field Research land use designation, screening or other strategies that minimize the impact of any new structures or developed areas can be incorporated in project design and mitigations.

The strategies for protection of visual resources differentiate between the open space and the central campus built environment, reflecting the differences in these two visual environments and in appropriate protection mechanisms.

Strategies, Policies and Implementation

Strategy #9: Employ Growth and Development Policies That Conserve Scenic Resources

The land use designations adopted in the Community Plan afford significant protection for lands both in the Campus Open Space areas and in the Open Space and Field Research areas beyond the limits of the Academic Growth Boundary. The natural streams which cross the campus are protected by riparian buffer zones, as discussed in the Habitat and Biodiversity and Water Quality and Watershed Management sections of this chapter. In addition, the Community Plan provides for parks and recreational open space in the Open Space chapter. These land use policies are reflected in the Land Use Designations, described in the Land Use chapter.

Policies

SCP-RC 27
Protect the scenic and aesthetic qualities of the natural setting of Stanford lands in the County by means of appropriate land use designations, growth management tools, and careful review of individual development projects.

SCP-RC 28
Emphasize development within the Academic Growth Boundary (see Land Use and Growth and Development chapters).

SCP-RC 29
Ensure adequate screening and reduction of visual impacts of any development in designated open space areas through the development review process.

Strategy #10: Maintain and Enhance the Scenic Values of Urbanized Area Settings

The Community Plan includes measures designed to protect open space and historic landscape elements on the central campus, as well as significant architectural landmarks contributing to the scenic quality of the area. In addition to the policies described above in the Heritage Resources section, the Campus Open Space land use designation has been adopted in part to protect the scenic character of major campus open spaces (see Open Space Chapter).

The County's role in enhancing the scenic character of the central campus is review through the Architecture and Site Approval. This review ensures adequate and integrated landscaping and screening, when appropriate. Through the University Architect/Planning Office the University takes the lead role in defining the character of the campus built environment.

Policies

SCP-RC 30
Preserve and enhance attractive, scenic urban settings on the Stanford campus and within Stanford's residential areas.

SCP-RC 31
Preserve significant historic landscape elements within the fabric of the campus' architecture and design.

SCP-RC 32
Maintain elements of the native landscape in Campus Open Space areas and throughout the developed portion of the campus.

SCP-RC 33
Maintain sign standards to ensure that signs are harmonious with the character of scenic area.

Health and Safety

Stanford Community Plan Issues and Policies

Chapter Summary

This chapter of the Stanford Community Plan addresses a range of public health and safety issues. It includes policies that are intended to minimize potential human or environmental injury and property damage.

This chapter refines the Strategies identified in the County's General Plan Health and Safety chapter for the following sections that require further refinement for Stanford lands:

- Air Quality,
- Geological Hazards,
- Flooding,
- Hazardous Materials,
- Emergency Preparedness and Response,
- Noise, and
- Law Enforcement.

Other Health and Safety topic areas discussed in the County's General Plan include Aviation Safety, Fire Hazards, Health and Safety Facilities Planning, and Waste Water Disposal. These subjects do not require refinement in the Stanford Community Plan because the strategies, policies, and implementation recommendations contained in the General Plan are in sufficient detail to guide Stanford land use.

The overall strategies or public policy approach to addressing Health and Safety issues involve prevention, mitigation, or minimizing risk, and preparedness. These overall strategies provide a framework for understanding the more detailed policies that have been developed with respect to natural hazards, for example. Where most applicable, these strategies also provide the basic framework for public policy with regard to the Stanford Plan.

It should be further noted that with regard to sanitary waste water disposal, the University maintains a sanitary sewer collection system that serves all areas of the main campus. The campus sewer system consists of approximately 46 miles of sewer lines. The Stanford sewer system connects to the Palo Alto sanitary sewer system and the sewage is treated at the Palo Alto Regional Water Quality Control Plant (RWQCP). The City of Palo Alto operates the RWQCP for the communities of Palo Alto, East Palo Alto, Los Altos Hills, Mountain View, and Stanford University.

The Community Plan contains the following strategies for health and safety:

Air Quality

Strategy #1: Manage Campus Growth and Land Use for Cleaner Air

Strategy #2: Emphasize Transportation Alternatives and Transportation Demand Management to Reduce Vehicle Emissions

Strategy #3: Control Sources of Particulate Emissions

Geologic Hazards

Strategy #4: Design, Locate, and Regulate Development to Avoid or Withstand Hazards

Flood Hazards

Strategy #5: Design, Locate, and Regulate Development to Avoid or Withstand Hazard

Hazardous Materials

Strategy #6: Manage Hazardous Materials Safely and Efficiently

Emergency Preparedness and Response

Strategy #7: Adequately Plan for Risk Reduction, Immediate Disaster Response and Post-Disaster Recovery

Noise

Strategy #8: Prevent or Minimize Excessive Noise

Law Enforcement

Strategy #9: Provide Law Enforcement Oversight

Air Quality

Background

Air quality is a regional concern that requires regional participation for improvement. Air quality is affected by emissions from automobiles, industrial facilities, construction, and other activities; the effects of these activities on air quality is further influenced by weather, wind and topography. Pollution created in one location has the potential to affect air quality many miles away. Air quality is measured and described through concentrations of pollutants, and is evaluated based on state and federal standards for a variety of pollutants.

Pollutants of the greatest concern in the San Francisco Bay Area, and which are most applicable to Stanford, are ground-level ozone (O_3) and respirable particulate matter (PM_{10}). The Bay Area is "non-attainment" for O_3 according to state and federal standards and is "non-attainment" for PM_{10} according to state standards.

Ozone is produced primarily from motor vehicle emissions and is the primary component of smog. The concentration of ozone can primarily be reduced through reductions in automobile use that stem from location of homes, jobs, and services in close proximity to one another and through use of alternative transportation or alternative fuels.

Respirable particulate matter is a combination of pollutants that includes dust, pollen, ash, smoke, and other similar pollutants. While some forms of PM_{10} result from natural processes, others can be reduced or avoided through "best management practices" that reduce dust from construction activities and through control on industrial emissions.

For more detailed information on air quality issues, refer to the Countywide Health and Safety Chapter, Book A, of the General Plan.

Stanford University's four primary sources of air pollution are:

- **Motor vehicle exhaust.** Stanford's Transportation Demand Management (TDM) program is meant to reduce use of automobiles, leading to corresponding reductions in the emission of pollutants. The same strategies that are applicable county- and region-wide for reducing motor vehicle use are applicable to Stanford as well: coordinated land use patterns that allow for reduction or elimination of automobile trips and measures to facilitate the use of alternative transportation modes. Programs to encourage these methods are in place and will be continued at Stanford. Electric, hybrid, and other alternative-fuel vehicles are other options for automobile emission reduction.

- **Cardinal Cogeneration Power Plant (Cardinal Cogen).** Cardinal Cogen is a combined-cycle power plant on the Stanford campus providing steam, chilled water, and electrical power for the core campus and the Medical Center. The plant burns natural gas, with its major emissions being nitrogen oxides (NOx) and carbon monoxide. The plant is permitted through the Bay Area Air Quality Management District; by granting this permit, the District indicates that the equipment should meet all air quality standards. The permits are held by Cardinal Cogen, which is a wholly-owned subsidiary of General Electric.

- **Facility maintenance and laboratory activities.** Stanford produces intermittent, low-volume emissions of odorous and/or toxic substances resulting from various facility maintenance and research activities. Stanford currently reduces these emissions through various operational procedures.

- **Construction.** Construction projects on campus create particulate matter pollution during ground disturbance. Stanford utilizes procedures to control particulate matter during construction projects and from equipment exhaust which have been identified by the Bay Area Air Quality Management District (BAAQMD).

Strategies, Policies and Implementation

Strategy #1: Manage Campus Growth and Land Use for Cleaner Air

The strategies and policies for managing campus growth, together with the Land Use Designations of the Community Plan are consistent with the fundamental approach to improved air quality outlined in the General Plan. By focusing future campus development within the Academic Growth Boundary, emphasizing higher density of residential development, locating new residential development close to related academic facilities, and providing neighborhood commercial services and amenities close to residential development, land use patterns can contribute greatly to the success of related strategies to manage travel demand and reduce dependency on the automobile.

Policies

SCP-HS 1
Limit campus growth and development to lands within the Academic Growth Boundary in order to minimize cumulative impacts on air quality.

SCP-HS 2

Within the Academic Growth Boundary, emphasize concepts of appropriate integration of land uses, compact campus development patterns, and more efficient, higher density residential development to reduce automobile dependency and promote use of alternative transportation modes.

Strategy #2: Emphasize Transportation Alternatives and Transportation Demand Management to Reduce Automobile Dependency and Vehicle Emissions

Closely linked to growth management and land use patterns, provision of travel alternatives and transportation demand management (TDM) are also instrumental in reducing vehicle emissions and improving air quality. The subjects of transportation alternatives and TDM are most thoroughly addressed in the County's General Plan within the Transportation Chapter and Air Quality Section of the Health and Safety Chapter. Additional information on Stanford's use of these strategies is also provided in the Circulation Chapter of the Community Plan.

Policies

SCP-HS 3
Maintain and enhance the use of transportation alternatives and demand management to the extent allowed by law for the purpose of reducing automobile dependency, reducing trip generation, and reducing vehicle emissions.

SCP-HS 4
Promote the use of alternative fuel and propulsion systems for shuttle vehicles, other transit vehicles, construction and fleet vehicles.

Implementation Recommendation

SCP-HS(i) 1
Consider a program that would credit the use of electric, "hybrid" gas and electric, or other reduced-emission vehicles toward the "no net new commute trips" standard.

Strategy #3: Control Sources of Particulate Emissions

Particulate emission sources range from earthmoving and construction equipment to gasoline-powered leaf blowers, wood-burning fireplaces and charcoal grills. Each contributes to various types of pollutant emissions to varying degrees. Primary emphasis for Stanford involves the reduction of construction-related emissions.

Trucks, earthmoving equipment, and construction activities can introduce particulate matter and dust that have localized impacts as well as cumulative impacts in the region. There are a variety of best management practices intended to reduce the amount of particulates generated by these sources. Potential air quality impacts from significant construction projects are typically addressed within the environmental assessments and conditions applicable to each development project. The latter often involve best management practices as defined the Bay Area Air Quality Management District for such purposes.

Policies

SCP-HS 5
Reduce particulate matter pollution originating from road and building construction. Require all best management practices and feasible control measures through project conditions and mitigations, as appropriate.

Implementation Recommendation

SCP-HS (i) 2
Require Stanford to use appropriate best management practices and other feasible mitigation for the reduction of particulate matter pollution during construction.

Geological Hazards

Background

The Stanford campus is located on the boundary between the San Francisco Bay alluvial plain to the northeast and the foothills of the Santa Cruz mountains to the south and southwest. The western boundary of the Community Plan area lies approximately 2 miles east of the San Andreas fault.

Earthquake Faults

Earthquake faults are the contact areas between major plates of the earth's surface. The San Andreas fault is the contact surface between the North American plate on the east and the Pacific plate to the west. Over many millions of years, the relative movements of these two plates have deformed bedrock units which have, in turn, been eroded differentially, resulting in the northwest-trending ridges and valleys present in Santa Clara County and throughout the Coast Range. Continued

movement of the Pacific plate northwards relative to the North American plate causes strain to accumulate in the bedrock, which is periodically released by fault rupture along the San Andreas and other related faults nearby, producing earthquakes of various magnitudes.

While the San Andreas fault is the most well-known fault in the vicinity of the University, other related faults which are also sources of seismic activity in the area. These include the Hayward, Calaveras, San Gregorio, and Monte Vista/Berrocal faults.

Stanford has been substantially affected by earthquake activity in the past, including the 1906 earthquake which originated on the San Andreas fault (Richter magnitude 8.25) and the 1989 Loma Prieta earthquake (magnitude 7.1), which occurred on a fault subordinate to the San Andreas. The 1906 earthquake completely destroyed several major unreinforced masonry buildings on the campus. While no buildings collapsed during the 1989 earthquake, moderate damage was widespread, and repairs to campus structures are still underway after 10 years, at a cost of many millions of dollars.

Several small faults have been mapped on Stanford lands, including the Frenchman's Road, Stanford, San Juan Hill, and Basalt Quarry faults (see Figure 7.1 – Geologic Features). These faults are all 2.5 miles or less in length. The degree of activity of these faults is not known with any certainty, and they are subject to investigations prior to development approvals within their fault zones.

Stock Farm Monocline

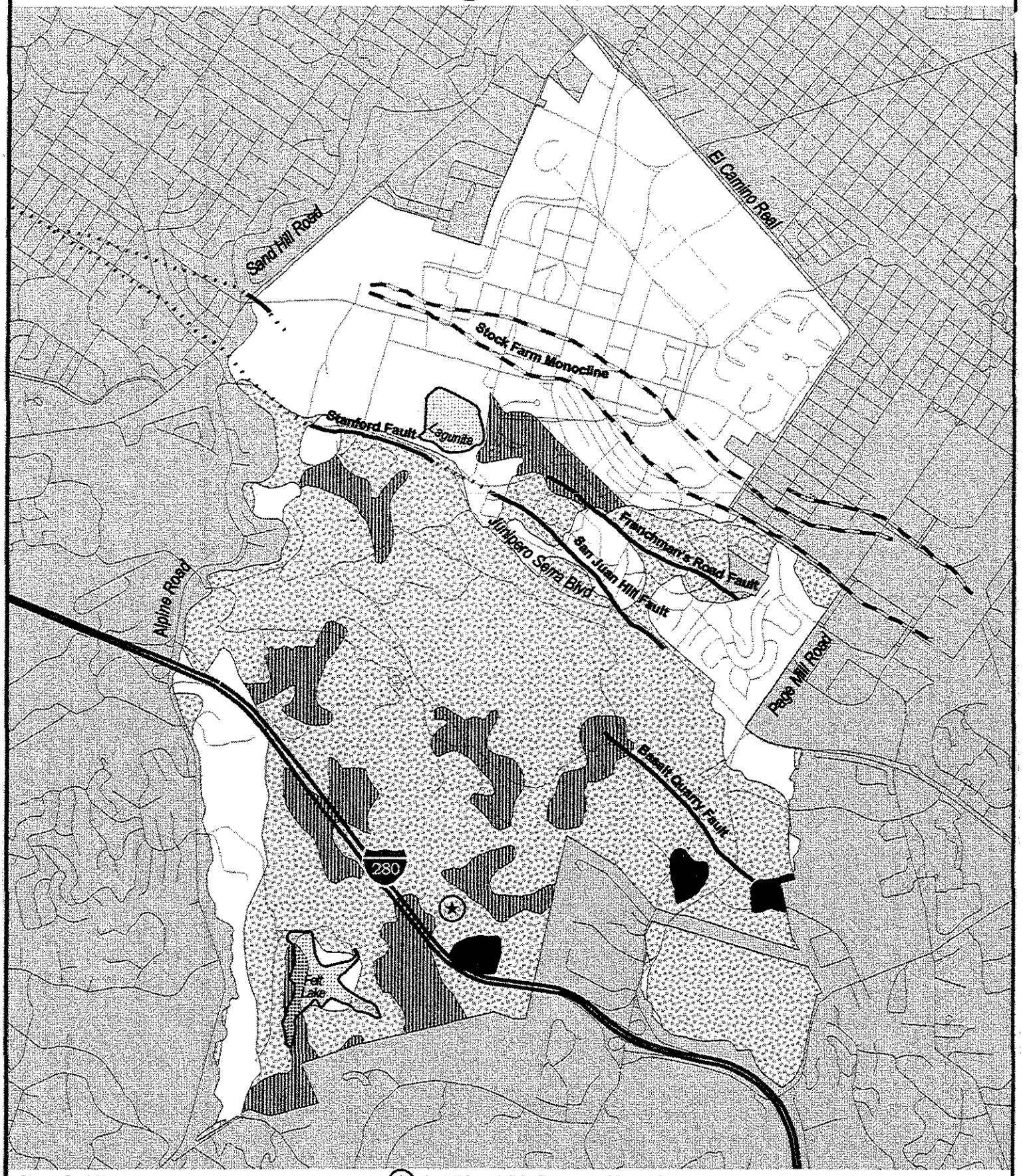
Another geologic feature of concern on the Stanford campus is the Stock Farm Monocline. The monocline is a northwest-trending feature indicated by a northeast-facing slope located between Page Mill Road and Campus Drive West. It has been studied extensively and judged to be an active fold in the geologic strata. An underlying "blind" thrust fault is believed to produce the folding, but it is not certain whether the thrust fault is capable of generating earthquakes.

Although no surface deformation has been detected on the monocline as a result of the 1906 or 1989 Loma Prieta earthquakes, it is considered capable of having minor ground deformation along its lower hinge in association with a strong earthquake originating on the San Andreas fault. Several inches of bending and compression are possible over a zone up to 100 feet wide, according to the 1995 Dames and Moore report. Consequently, a "zone of special consideration" has been established along the lower hinge of the monocline where it crosses the Stanford campus, and special requirements were established for all projects within the Monocline Zone, subject to review by the County Geologist.

Seismic Hazards and Slope Stability

Seismic hazards include ground shaking, surface rupture, ground deformation, liquefaction, and differential settlement. Shaking intensity is a measure of the effect

Geologic Features



Slope Stability
- Stable (slope 0-5%)
- Generally Stable (slope 5-15%)
- Generally to Marginally Stable (slope >15%)
- Unstable

Small Landslide Deposits: Unstable

Faults
- Faults
- Faults- concealed
- Monocline

Scale 1:30,000

N

0 0.5 1 Miles

Figure 7.1

Stanford University Community Plan Adopted December 2000

of an earthquake at a specific location. The intensity of ground shaking depends on several factors including:

- the amount of energy released during the earthquake (magnitude)
- the distance between the source fault and the site (attenuation)
- the type of geologic material underlying the area (amplification).

Slope instability, which can also be related to seismic activity, is the other primary geologic hazard that potentially affects Stanford land. Landsliding can occur when soils rich in clay minerals are saturated with water, reducing the shear strength of the soil and underlying rock. Modifications of topography or drainage can also destabilize slopes and lead to landsliding. Earthquakes can also cause landsliding in areas prone to slope instability. Areas with high landslide potential in the foothills portion of Stanford lands are shown on the map of Geologic Features.

Measures for Hazard Reduction and Management

The areas of Stanford land in the County that might be subject to greatest slope instability are located outside the Academic Growth Boundary. Land uses within these areas have been restricted by the Land Use designations and policies included within the Community Plan, consistent with the General Plan. In particular, the "Open Space and Field Research" designation applied to most of the land area in question limits allowable land uses and minimizes the potential risk to people and property from seismic and geologic hazards. "Unstable" slope areas are designated "Special Conservation Areas" in the Community Plan Land Use Map (see Figure 2.2).

Following the Loma Prieta earthquake in 1989, the University prepared the Earthquake Risk Management Report of 1990. The report recognizes the risks from earthquakes on the Peninsula Segment of the San Andreas Fault, outlines ways to strengthen potentially hazardous buildings and improve organizational preparedness, and establishes institutional goals during and following an earthquake nearby.

The University's seismic strengthening and replacement program has resulted in the investment of approximately $250 million in nearly 100 seismic rehabilitation programs since 1989. The work includes the retrofit of approximately 45 hazardous unreinforced masonry (URM) buildings by the year 2000 to conform to the Santa Clara County URM Ordinance. Stanford's seismic strengthening program meets the requirements of the Uniform Building Code (UBC) and all current amendments.

Strategies, Policies and Implementation

The strategy of the Community Plan for geologic hazard mitigation involves the adequacy of the design, location, and review of individual development proposals within areas of the campus designated for academic and residential development.

Given the considerable amount of state and local regulation concerning seismic safety for building and development, policies of the Community Plan essentially reiterate existing General Plan policies, with particular geologic review requirements for Stanford lands in the Stockfarm Monocline "zone of special consideration."

Otherwise, the policies of the Growth and Development, Land Use, and Open Space chapters of the Community Plan serve to significantly limit the potential use and development of areas outside the Academic Growth Boundary such that the risk of exposure to natural hazards is low. The information provided within the Community Plan, General Plan, and the maps and inventories of the County Geologist, including the County's Geologic Hazard Zone Maps are utilized in land use and development permit decision-making processes. Lastly, educational programs or efforts related to natural hazards for Stanford campus residents and employees are described in the Emergency Preparedness and Response section of this chapter.

Strategy #4: Design, Locate, and Regulate Development to Avoid or Withstand Hazards

Campus areas designated for academic use and development north of Junipero Serra Boulevard are generally not subject to significant slope stability problems or greater ground-shaking intensities than other similar areas within the region. The primary means of assuring adequate building safety are the provisions of the County's Geologic Ordinance, state law, and adherence to applicable provisions of the Uniform Building Codes.

Policies

SCP-HS 6
Avoid significant geologic hazard areas, such as unstable slopes, in locating new development. For projects proposed within areas of concern, provide geologic reports of investigations which quantify the risks and recommend mitigation measures. Such reports must be reviewed and approved by the County Geologist.

SCP-HS 7
Through the development review process, ensure compliance with all applicable County ordinances and other laws, regulations, and codes for seismic evaluation and the design of new and existing buildings and campus infrastructure.

SCP-HS 8
Designate such lands with significant geologic hazards Special Conservation Areas in the Community Plan Land Use map.

Implementation Recommendation

SCP-HS(i) 3
Refine geologic hazard maps based on the results of reports submitted to and reviewed by the County Geologist.

Flood Hazards

Background

Watersheds

Stanford lands in Santa Clara County are primarily located in the San Francisquito and Matadero creek watersheds, and contain several creeks, reservoirs, and dams (see Figure 6.3 – Watershed Boundaries).

The San Francisquito Creek watershed encompasses 40 square miles. Stanford lands in unincorporated Santa Clara County comprise approximately 1,800 acres or about 8 percent of the watershed, of which 510 acres are developed. The watershed extends from the ridge of the Santa Cruz Mountains to San Francisco Bay and is characterized by a wide variety of both developed and undeveloped areas across five municipalities and two counties. Both San Francisquito and Los Trancos Creeks on Stanford lands are within the watershed, as well as Felt Lake, Searsville Lake, and Lake Lagunita.

Stanford lands in other jurisdictions that are within the San Francisquito Creek watershed include all land in San Mateo County, which is largely undeveloped with the exception of the Stanford Linear Accelerator Center (SLAC) and the Stanford Hills residential neighborhood. These lands also contain several agricultural leaseholds and the 1,200-acre Jasper Ridge Biological Preserve. The northern portion of Stanford's land in the City of Palo Alto, which contain the Stanford Medical Center, the Stanford Shopping Center, and several residential complexes are also in this watershed. All told, Stanford lands comprise approximately 21% of the total watershed land area.

Approximately 2,100 acres of the project area are located in the Matadero Creek Watershed. This watershed encompasses the eastern portion of Stanford lands and includes Matadero, Arastradero, and Deer Creeks. The watershed also contains the Stanford Research Park and residential and commercial areas in Palo Alto. The Barron Creek watershed, which is located to the southeast of the Matadero Creek watershed, drains portions of Los Altos Hills, the Stanford Research Park, and the

Barron Park residential neighborhood; this creek ultimately drains to the Bay through Matadero Creek.

Approximately 100 acres of the Community Plan project area lies within the Arastradero Creek Watershed. Arastradero Creek flows in a southerly direction.

Storm Drainage System

The University campus storm drain system consists of a number of systems working together to manage storm water runoff. The system's main working components are more than 800 catch basins, approximately 40 miles of pipeline, and 6 miles of open soil drainage ditches. Stanford also has runoff detention areas in topographically low areas, such as the Arboretum and the Oval. Once storm water is collected in the drainage network, it flows by gravity from the campus to Matadero Creek or San Francisquito Creek. Storm water flows to Matadero or San Francisquito Creek, in many cases through the City of Palo Alto's storm drainage system, before joining San Francisco Bay.

Hazard Potential

Like many other issues addressed in the Community Plan, flood hazards and flooding are multijurisdictional in nature, in that the manner in which development and drainage are handled in one location can have substantial effects on other property owners or communities. Primary hazard potential involves creek overflow and storm drainage system overflow.

No portion of the Community Plan project area is located within the 100-year flood zones defined by the Federal Emergency Management Agency (1996 data). However, flooding may at times occur due to extraordinary events. For example, flooding has occurred on the campus and downstream of Stanford as recently as February 1998, when prolonged and steady rainfall caused San Francisquito Creek and local storm drainage systems to overflow. Overall, an estimated 11,000 acres of land in Palo Alto, Menlo Park, and East Palo Alto were flooded due to the creek overflow, resulting in an estimated $28.1 million in damage, according to the Santa Clara Valley Water District.

Regional and local flood hazards also include inundation due to dam failure. The University coordinates with the California Department of Water Resources, Division of Safety of Dams, to inspect the dams yearly for structural integrity and proper maintenance.

Effective flood control requires extensive cooperation of government agencies, landowners, and land users. Stanford, as the owner of extensive amounts of land within the watersheds, has the potential to affect downstream flooding and flow along San Francisquito and Matadero Creeks. Stanford is working with the Cities of Palo Alto, Menlo Park, and East Palo Alto on Coordinated Resource Management Planning (CRMP) for the San Francisquito Creek Watershed, resulting in a Watershed Master Plan. The Community Plan policies and implementation recommendations are based on this plan and those of the County General Plan.

Strategies, Policies and Implementation

Strategy #5: Design, Locate, and Regulate Development to Avoid or Withstand Hazards

Policies and implementation have been included to address two different flooding issues: (1) possible flooding and storm drainage issues on and near the campus that could result from campus activities, and (2) the effect of campus activities on the hydrology of the watersheds and creeks.

One effect of the Community Plan's growth and development-related policies, which encourage compact development and infill use of campus lands, will be the intensification of land use within the Academic Growth Boundary. More development and associated parking and streets will increase impervious surfaces over time, with the potential to marginally increase creek flooding and stormwater flooding on campus as well as downstream flow within the watersheds. The Community Plan therefore focuses on accommodating all increased peak drainage flows on site until storm water can be accommodated within local streams and creeks after the time of peak flows.

Policies and implementation specific to maintenance of riparian corridors are included in the Resource Conservation chapter.

Policies

SCP-HS 9
Require Stanford to design development and infrastructure improvements, including storm drainage detention facilities, to accommodate runoff from future development so as to achieve no increase in peak flows.

SCP-HS 10
Stanford shall maintain and enhance surface and subsurface drainage systems.

SCP-HS 11
Stanford shall control erosion from future development in order to limit sediment from reaching the storm drain system and creeks, to avoid hydrological impacts.

Implementation Recommendation

SCP-HS (i) 4
The State Division of Safety of Dams shall continue to annually inspect Stanford dams for structural integrity and encourage repairs as needed.

SCP-HS (i) 5
Review proposed Stanford projects and require best management practices (BMPs) for reducing erosion at construction sites.

SCP-HS (i) 6
Provide public education/information on erosion and drainage issues for university project managers and leaseholders.

SCP-HS (i) 7
Construct and maintain storm drainage detention facilities and other improvements as needed to ensure no net increase in downstream flows.

Hazardous Materials

Background

Transportation, use, storage and disposal of hazardous substances are governed through numerous state and federal legislative measures. While the regulations originate with federal and state government, the County plays a role in enforcing these regulations within its jurisdiction. The County Department of Environmental Health is a primary agency responsible for addressing hazardous materials, along with the Planning, Building, and Fire Marshal's Offices.

At Stanford, hazardous materials are used in the academic areas and the Medical Center in teaching, research, and patient care programs. Hazardous materials are addressed through a variety of programs and procedures by both the County and the University.

Stanford University's Department of Environmental Health and Safety (EH&S) oversees the collection, recycling, and disposal of chemical, biomedical, and low-level radioactive wastes generated by laboratories, shops, and studios at the University. These waste types are managed under the University's Hazardous Waste Program.

Hazardous Materials Management Plans for campus buildings are prepared, regularly updated, and submitted to Santa Clara County Environmental Health

Department's Hazardous Materials Compliance Division. In addition, Stanford requires that employees involved in hazardous materials handling receive appropriate training.

Stanford's EH&S oversees the campus Environmental Safety Facility, which currently operates as a "generator" facility that can provide interim storage for hazardous waste for less than 90 days. This facility is regulated by Santa Clara County Department of Environmental Health. The Environmental Safety Facility also contains a waste incinerator, which is currently licensed and operated to incinerate a small volume of low-level radioactive wastes containing tritium and carbon-14 when necessary. Since 1994, the incinerator has been operated less than 1 or 2 days per year.

Over time, Stanford has focused increasingly on off-site rather than on-site waste disposal. Hazardous wastes that are shipped off-site are packaged, marked, labeled, manifested, and transported in accordance with applicable governmental regulations to a permitted disposal facility. In the area of waste reduction, waste generating processes have been evaluated in laboratories producing larger volumes of waste to determine options to reduce sources and to minimize wastes.

EH&S reviews proposed plans for new campus facilities and for remodels to address health, safety, and environmental risks associated with activities conducted in the buildings, in accordance with applicable environmental and health and safety laws, codes, and regulations. Building plans are also reviewed by the County's Building Inspection Office and Fire Marshal's Office for compliance with applicable codes.

The County reviews building design and occupancy standards based on a reported inventory of chemicals or other hazardous materials which are to be stored and used inside a building. Over time, the use of the building and the needs of its occupants changes, creating a risk of unsafe circumstances whereby more or different materials are being used in a building than the design and construction allow. The inventory of materials in a building is reviewed at the time that any building permits are reviewed and issued and through regular inspections by the County Fire Marshal's Office. It is important that the inventory of materials in a building remain consistent with the building construction. Obsolescence in building design is a major factor behind the continuing redevelopment of the campus.

Strategies, Policies and Implementation

Strategy #6: Manage Hazardous Materials Safely and Efficiently

The strategy for hazardous material management and its associated policies focuses on issues of oversight and emphasizes compliance with the significant existing array of regulations and laws governing hazardous materials. It also incorporates a broadly

recognized need to find substitute materials and reduce volumes of hazardous materials as much as possible to reduce risk levels.

Policies

SCP-HS 12
Employ all feasible measures to safely and effectively manage hazardous materials and wastes and to site hazardous wastes treatment facilities.

SCP–HS 13
Ensure compliance with all federal, state, and local regulations concerning hazardous waste management and disposal.

SCP-HS 14
Evaluate, as required under the California Environmental Quality Act, the potential health risks and effects of buildings proposed by Stanford in which hazardous materials will be used.

SCP-HS 15
Encourage the substitution of less hazardous materials and/or use of smaller volumes of hazardous materials, while maintaining amounts necessary to support University activities.

Implementation Recommendation

SCP-HS (i) 8
Collaborate with Stanford and other regulatory agencies to develop appropriate standards for review of possible health risks from air emissions of future Stanford laboratory facilities.

SCP-HS (i) 9
Require the implementation of good laboratory practices to prevent release of odorous and toxic air contaminants.

SCP-HS (i) 10
Stanford shall provide adequate training for staff and students to segregate incompatible chemicals, use earthquake protection for chemical storage areas, and employ secondary containment.

SCP-HS (i) 11
Support Stanford's provision of an integrated waste management program to manage collection of chemical, radioactive and biomedical waste, and ensure environmentally protective disposal.

SCP-HS (i) 12

Prepare Risk Management Plans for compliance with California Accidental Release Prevention Laws as needed, or reduce/substitute quantities of materials to levels below that which requires such plans.

Emergency Preparedness and Response

Background

In Santa Clara County, the first responsibility for emergency response lies with the individual jurisdictions. Under the provisions of the 1985 Land Use Policy Agreement, Stanford functions in this case as a jurisdiction, with its own plans and programs for emergency response, preparedness, and prevention. The County's role is to collaborate with Stanford in ensuring adequate emergency response and to consider emergency-related issues in review of development applications from Stanford.

Emergency Preparedness at Stanford

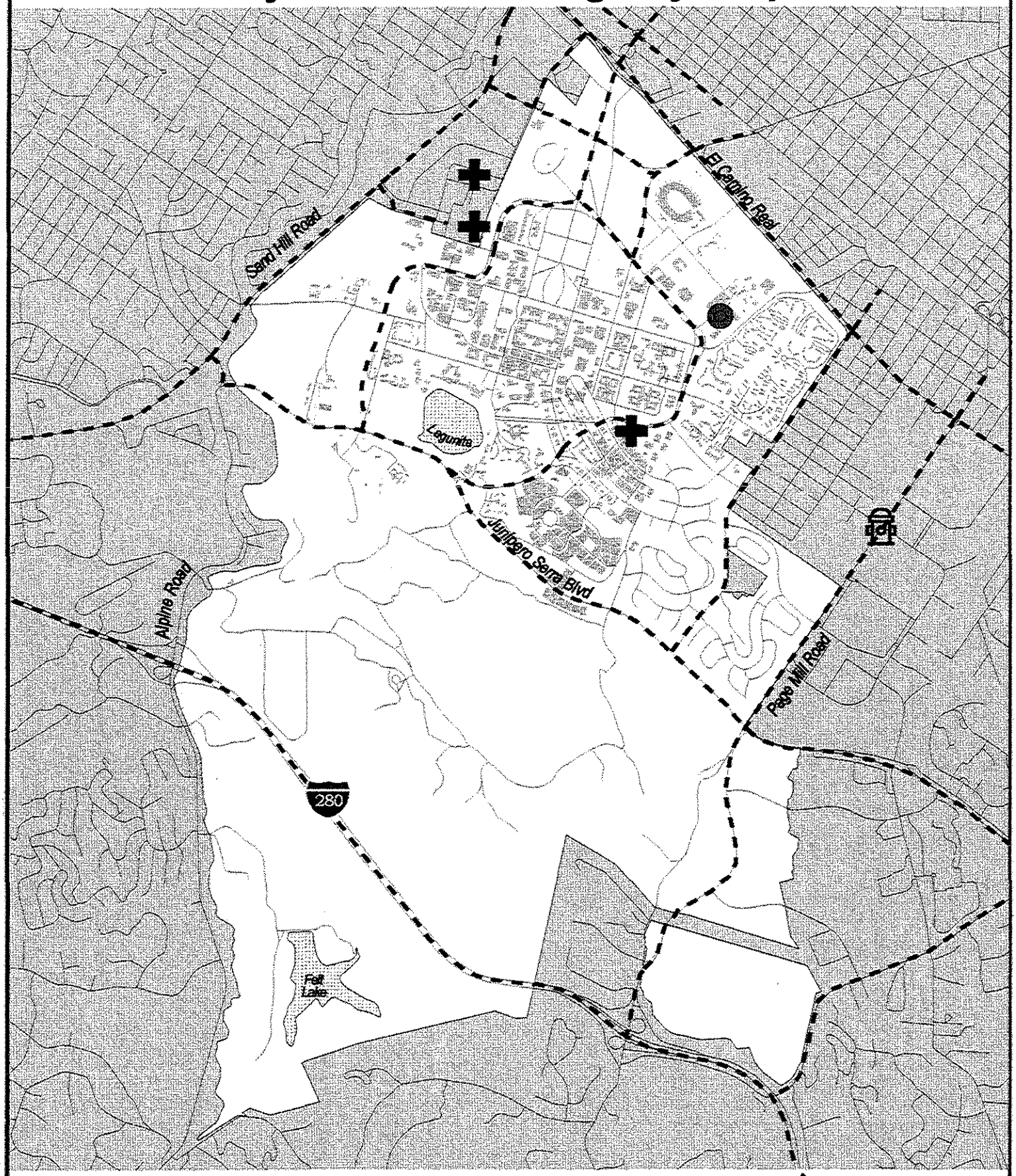
Emergency preparedness addresses the response to, and recovery from, natural and human-induced emergencies. Stanford University emergency plans include the Stanford Emergency Plan, Cabinet Emergency Planning Guidelines, and Department Emergency Planning Guidelines. These documents provide a management framework for responding to major emergencies that may threaten the health and safety of the University community or disrupt its programs and operations.

The plans address a variety of types of emergency situations, including earthquakes, fires or explosions, hazardous material releases, extended power outages, floods, and mass casualty events. In accordance with these emergency plans, the University maintains supplies to support post-disaster recovery. For example, the University currently stores emergency food supplies for on-campus residents, and maintains water reservoirs to increase the emergency water supply.

The Stanford Emergency Plan establishes an Emergency Management Team (EMT) that ascertains the scope of an incident and advises the University President. EMT emergency response actions are guided by the University's overriding emergency priorities: 1) protect life safety, 2) secure critical infrastructure and facilities, and 3) resume the teaching and research program.

Figure 7.2, Primary Access for Emergency Response, illustrates current major access routes within the campus, the location of existing fire and police facilities, and major evacuation routes.

Primary Access for Emergency Response



Hospital/Health Care
Fire Station
Primary Evacuation Routes
Police and Fire Station

Scale 1:30,000
N
0 0.5 1 Miles

Figure 7.2

Stanford University Community Plan Adopted December 2000

Strategies, Policies and Implementation

Stanford University engages in emergency prevention, preparedness, and response through its plans and programs. In addition, the Stanford Hospitals and Clinics are an important regional resource for the surrounding area in the case of an emergency that results in injuries and casualties. The County and Stanford should continue to work as partners in the emergency response arena, with each entity assuming the appropriate responsibilities. The County's role in the emergency process includes:

- Review of development projects in the Planning, Building Inspection, and Fire Marshal's Offices and in the Department of Environmental Health to ensure avoidance or reduction of risks associated with the location, access to, or design of new buildings or the use of hazardous materials.
- Ongoing inspection of facilities for code compliance.
- Application of appropriate land use designations or building requirements in areas more prone to hazard.
- Support for Stanford's emergency response efforts through implementation of the Santa Clara County Emergency Plan, prepared and implemented through the County Office of Emergency Services.

Strategy #7: Adequately Plan for Risk Reduction, Immediate Disaster Response and Post-Disaster Recovery

This strategy and the associated policies emphasize a multifaceted approach to reduction of risk, emergency response, and recovery. Like many aspects of the Community Plan, disaster preparedness and response is in many ways a multijurisdictional issue that requires efforts on the part of Stanford, the County, and other jurisdictions. Community Plan strategies and policies are largely implemented through existing programs, efforts, and procedures. However, in the event of certain types of emergencies, particularly earthquake and fire, most households and businesses are individually under-prepared for the aftermath of a significant disaster.

Policies emphasize the continuation of existing programmatic efforts by Stanford for emergency preparedness and response, while also promoting the potential for improving coordination and preparedness for faculty, staff, and student residents of the University. Improved neighborhood coordination, campus-wide preparedness, and communication capabilities will enable Stanford's many populations to cope with the effects of a major disaster, such as an earthquake, more effectively.

Policies

SCP-HS 16
Coordinate with Stanford and local jurisdictions in both reducing general risk levels and preparing for emergency response.

SCP-HS 17
Stanford shall prepare and maintain effective and feasible emergency plans for disaster response and recovery.

SCP-HS 18
Consider emergency prevention and ability for emergency response in review of development projects on the campus with regard to access, seismic risks, flooding, fire, and other emergency issues.

SCP-HS 19
Stanford shall promote coordination at the neighborhood level and within campus student housing areas to achieve improved earthquake or other disaster preparedness and response capabilities.

SCP-HS 20
Stanford shall provide training and general public education for faculty, staff, and students regarding improved emergency preparedness and response.

Implementation Recommendation

SCP-HS(i) 13
Periodically assess emergency preparation and recovery plans for adequacy.

SCP-HS(i) 14
Conduct emergency drills, training, and simulations on a periodic basis to enhance preparedness and make needed improvements to emergency response plans.

Noise

Background

The overall purpose of addressing noise in general plans is to limit the exposure of the community to excessive noise levels. Various kinds of noise generators, such as airports, roads, and train corridors, are identified, evaluated, and the noise levels

generated are used to guide various kinds of land use planning and development decision-making processes.

Noise on or near the Stanford campus can affect both the campus population and residents of surrounding areas. Stanford lands inside the Academic Growth Boundary, like the surrounding area, are urbanized and contain a variety of noise sources. The most notable sources include transportation-related uses such as arterial roadways, railroad tracks, and airplanes, as well as construction projects and miscellaneous sources.

Noise sources on the campus include traffic on major campus streets and adjacent arterial roadways, construction noise, and operational noise sources, such as mechanical equipment, delivery vehicles, and garbage pickup. Noise sources also include athletic events at the University's outdoor athletic facilities, including Stanford Stadium and Sunken Diamond; performances and other events at Frost Amphitheater; and Life Flight emergency helicopter landings and takeoffs at Stanford University Medical Center. Noise from these sources is intermittent and often seasonal. Its potential for impact on off-site residences is a direct function of the responsible operation of these facilities.

Growth at Stanford has the potential to increase noise on the campus and in the surrounding area through an increase in traffic and through additional construction-related noise. It also increases the campus population which may be subject to sources of excessive noise.

As part of the Community Plan environmental review process, noise sampling sites were evaluated for noise levels and projected noise levels were evaluated for potential significance by year 2010. The sites selected represent potentially noise-sensitive uses. None of these sites, including on-campus and off-campus locations along major arterial roads, were considered to result in significant and excessive noise generation. Of all the possible sources of excessive noise, construction and operational sources are considered substantial enough to warrant special efforts to minimize noise and the impacts to humans and the natural environment.

Santa Clara County regulates noise under the standards identified in the County noise ordinance and noise element of the General Plan. The ordinance applies to all unincorporated lands, including those at Stanford University. Off-site noise impacts are evaluated at property lines, not within the campus lands.

Strategies, Policies and Implementation

Strategy #8: Prevent or Minimize Excessive Noise

The effects of noise can be reduced through either minimizing or eliminating the noise itself or through land use and development that reduces the effect of noise. Some of the means of minimizing noise conflicts include:

- Reducing activities which create noise. Trip reduction at Stanford helps reduce roadway noise both on and off the campus.
- Locating noise sources away from sensitive noise receptors (such as residences) or, conversely, locating sensitive receptors away from noise sources in new development.
- Design and construction of buildings in a manner that reduces interior noise levels.

Policies

SCP-HS 21
Identify potential noise-producing uses and determine needs for mitigation using applicable County, local, and other government standards when evaluating proposals for new Stanford facilities.

SCP-HS 22
Locate new land uses and development projects to conform with County noise compatibility standards for land uses.

SCP-HS 23
Minimize noise from construction equipment and other operational sources, through engineering solutions, hours of operation, delivery schedules, and the location of specific noise sources as far away from sensitive receptors as possible.

Implementation Recommendation

SCP-HS(i) 15
Provide noise buffers as needed and control excessive noise sources from future facilities.

SCP-HS(i) 16
Ensure compliance with the County noise ordinance and other applicable standards.

SCP-HS(i) 17
Require that Stanford design and construct new buildings with soundproofing materials as necessary and appropriate.

SCP-HS(i) 18
Require that Stanford maintain a hotline that members of the public can contact to register noise complaints.

Law Enforcement

Background

The Stanford University Department of Public Safety historically has provided law enforcement services for the University under authority delegated by the County Sheriff. However, the County Sheriff is ultimately responsible for law enforcement on Stanford's unincorporated lands. The County and the Sheriff have the responsibility to ensure that the Stanford University Department of Public Safety is staffed with qualified personnel, provides necessary law enforcement information to the Sheriff, maintains an appropriate reporting relationship with the Sheriff's office, and complies with state laws and regulations regarding public access to law enforcement information.

Policies

SCP-HS 24
The Stanford University Department of Public Safety shall be permitted to undertake law enforcement activities on unincorporated Stanford lands if it enters into an agreement with the County Office of the Sheriff setting forth the terms and conditions under which the Stanford University Department of Public Safety will be authorized to undertake law enforcement activities.

Implementation Recommendation

SCP-HS(i) 19
The County Office of the Sheriff and Stanford will develop and maintain an agreement setting forth the conditions under which the Stanford University

Department of Public Safety is authorized to undertake law enforcement activities on campus. The issues addressed in the agreement shall include, but not be limited to, adequate qualifications and training of Stanford University Department of Public Safety personnel, appropriate reporting relationships between the Stanford University Department of Public Safety and the Sheriff, complete and timely submission of law enforcement information to the Sheriff, and compliance with legal requirements regarding public access to law enforcement information.