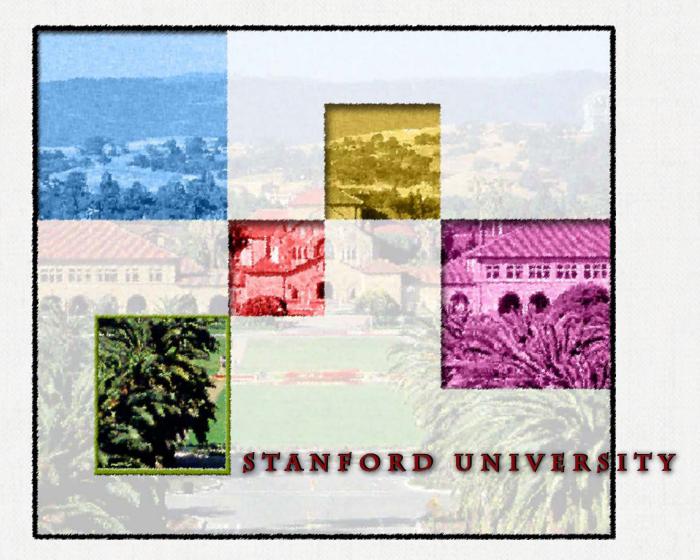
GENERAL USE PERMIT 2000

ANNUAL REPORT Nº. 20





COUNTY OF SANTA CLARA PLANNING OFFICE JUNE 2021

STANFORD UNIVERSITY | GENERAL USE PERMIT 2000 | ANNUAL REPORT No. 20

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The Stanford University, General Use Permit (GUP) 2000 Twentieth Annual Report (AR 20) provides public documentation that summarizes development at Stanford University and required environmental mitigation activity within the unincorporated Santa Clara County, for the monitoring period from September 1, 2019, through August 31, 2020. This report documents both new projects approved during the reporting period and the status of ongoing projects. Section I provides an introduction and context to the AR 20. Information on project status and a summary of development through the AR 20 reporting period is provided in Section II. Section III provides a summary of GUP compliance. Details and illustrations of projects that received Architecture and Site Approval (ASA) during this reporting period are provided in Section IV. Section V describes anticipated development, Section VI provides information on other significant information in the reporting period, and Section VII provides information on references and the project team.

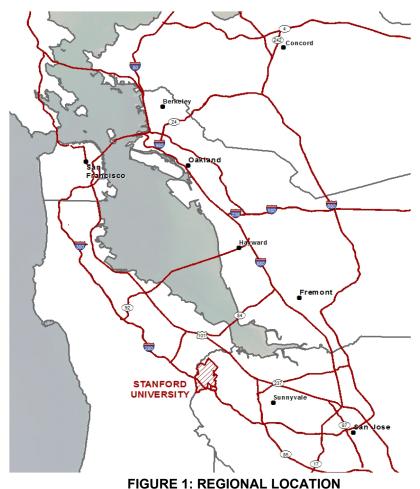
Appendices A, B, C, D, E, and F contain information on campus maps, GUP conditions and additional compliance details, summaries of cumulative development on campus, traffic monitoring results, sustainable activities initiated and ongoing by Stanford University and a summary of Stanford's approved Alternate Means Programs, respectively.

The production team for this annual report endeavored to make this report user friendly. If you have comments or questions about the format, you may forward your comments to the County of Santa Clara Planning Office. For the 20th annual reporting period Charu Ahluwalia was the project manager for the County of Santa Clara Planning Office, for the Stanford University environmental mitigation monitoring and reporting program.

Specific questions regarding this report or the Stanford Community Plan, General Use Permit or the Environmental Impact Report may be directed to: Charu Ahluwalia, Associate Planner (email: <u>charu.ahluwalia@pln.sccgov.org</u>).

I. Introduction

Stanford University owns 8,180 acres of land, including 4,017 acres within unincorporated Santa Clara County that are subject to the land use jurisdiction and regulatory authority of the County. Please see Map 1 in Appendix A, which shows governmental jurisdiction on Stanford lands. Stanford University is a private institution and is subject to local zoning controls and project approval procedures. Stanford University land in Santa Clara County includes the academic campus, residential areas, and most of the foothills east of Alpine Road.



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County of Santa Clara guides future use of these lands through (1) the General Plan, (2) the Stanford Community Plan (CP), (3) County Zoning Ordinance, (4) other County ordinances and policies, and (5) the 2000 General Use Permit (GUP).

In November 1999, Stanford University submitted a Draft CP/GUP Application to County of Santa Clara. As a result of an extensive public review process, significant changes were made in the proposed CP/GUP. Santa Clara County, the lead agency under the California Environmental Quality Act (CEQA), prepared a Program Environmental Impact Report (EIR) to disclose the significant environmental effects of development pursuant to the CP/GUP. In December 2000, the County Board of Supervisors certified the EIR and approved the Final CP/GUP (2000 GUP).

The 2000 GUP replaced the 1989 GUP. It is the permit under which Stanford continues its academic and support uses, and authorizes the University to develop the following facilities:

- Academic and academic support facilities (an additional 2,035,000 net square feet (sq. ft.) plus the square footage remaining under the 1989 GUP)
- Childcare or community centers (an additional 40,000 sq. ft.)
- Temporary trailers and surge space (up to 50,000 sq. ft.)
- Parking structures and lots (2,300 net new parking spaces)
- Housing (3,018 housing units, increased to 4,468 housing units in 2016)

The Board approval of the 2000 GUP and the EIR resulted in mitigation measures. The EIR identified mitigation measures, which were formally adopted in the Mitigation Monitoring and Reporting Program (MMRP).

GUP Condition D.2 requires Stanford to implement the identified MMRP mitigation requirements as follows:

"If at any time the County Planning Commission determines that Stanford is not in compliance with one or more conditions of the General Use Permit, it may take corrective action as provided in the County Ordinance Code including, but not limited to, suspension of any future development approvals until such time as the conditions are met. Failure of Stanford to comply with aspects of the Mitigation Monitoring and Reporting Program adopted for the GUP or any specific projects approved under the GUP for which Stanford is responsible shall also constitute a violation of these GUP conditions for which corrective action may be taken as described above."

This Twentieth Annual Report (AR 20) documents Stanford's development activity and compliance with both the conditions of the 2000 GUP and any specific conditions associated with proposed building projects. It covers the period from September 1, 2019, to August 31, 2020. Activities or projects that occurred after August 31, 2020, are beyond the scope of this Annual Report, but will be

presented in the next Annual Report that will cover activities between September 1, 2020, and August 31, 2021.

This report is organized into seven primary sections and six appendices:

- I. Introduction presents the background and overall requirements of the 2000 GUP, the reporting period and organization of the Annual Report, and provides a glossary of terms used in this report.
- **II. Development Overview -** presents major statistics on certain 2000 GUP provisions, including the academic building area cap, the distribution of development, development projects that do not count toward the building area cap, housing, and parking.
- **III. Overview of Monitoring During Twentieth Year** summarizes Stanford's activities and status of compliance with 2000 GUP conditions.
- **IV. Project Summaries -** provides summaries of major Stanford projects that received Architectural and Site Approval (ASA) within this Annual Report's reporting period.
- V. Anticipated Future Development lists projects anticipated for submittal/approval during the next Annual Report period. Includes a map showing proposed locations.
- VI. Other Information presents references for the information used in this Annual Report and the persons involved in its preparation.

Appendix A - provides maps to illustrate the general orientation of Stanford University lands and campus.

Appendix B - presents the complete list of 2000 GUP conditions and associated activities in the reporting period.

Appendix C - provides cumulative tables and location maps for building projects, housing projects, parking projects, and grading projects.

Appendix D - provides a summary of the result of traffic monitoring at the Stanford University campus between 2001 and 2020.

Appendix E – presents the Stanford Sustainability Annual Report.

Appendix F – provides a summary of Stanford's approved Alternate Means Programs.

Glossary of Terms

The following terms and acronyms are used in this Annual Report:

- **AR Annual Report:** "AR 20" refers to Stanford's 20th annual report on development and compliance with GUP conditions.
- ASA Architecture and Site Approval (ASA): A procedure established by the County of Santa Clara Zoning Ordinance to review the quality of site and architectural design associated with a proposed project. ASA may establish conditions of approval that change and improve development design.
- ASX ASA Administrative Review for Minor Projects (ASX): Projects that are below a certain threshold due to their minimal impact are exempt from the full ASA process and public hearing. ASX is a discretionary staff approval process. ASX may establish conditions of approval that change and improve development design.
- **CEQA** California Environmental Quality Act: The overarching California law under which environmental reviews are conducted.
- **CP** Stanford Community Plan: Plan that refines the policies of the County of Santa Clara's 1995 General Plan as they apply to Stanford lands under County jurisdiction.
- DAPER Stanford's Department of Athletics, Physical Education and Recreation supports student athletes, and the university's physical education, recreation, and wellness initiatives.
- **EIR Environmental Impact Report:** Documents the result of environmental analyses conducted under CEQA.
- **FY** Stanford University's Fiscal Year: A one-year period from September 1st August 31.
- **GUP** 2000 General Use Permit: Permit issued to Stanford by the County of Santa Clara, which describes the allowable distribution of additional building area, and establishes procedures under which construction may occur and associated measures that must be accomplished before, during and after construction as conditions of approval for development.
- **NPS Non-point source:** Refers to pollution of runoff by diffuse sources, such as vehicle traffic on parking lots or streets.

- **NSF** Net square feet: Total "net" or overall change in square footage. This category designates a total amount of positive or negative square footage for a project, based on square footage of total construction ("gross square footage") less any credits for demolition.
- **SDS** Sustainable Development Study: A Study required under GUP Condition E.5 that was submitted by Stanford and approved by the Board of Supervisors in 2009. In 2018, the County prepared a Supplement to the SDS. The Supplement augmented the work previously prepared to identify the maximum planned buildout potential of Stanford lands in unincorporated Santa Clara County.

GUP Building Area Cap

The 2000 GUP (GUP Condition A.1.b) establishes a 2,035,000-netsquare-foot building area cap for new academic and academic support uses. The limit applies to most nonresidential development that Stanford proposes to build during the time that this GUP is in effect. Because the exact amount of square footage may change due to design refinements that occur between initial ASA application and subsequent issuance of a building permit, the County requires that the actual square footage deducted from the building area cap be documented at the time a building permit is issued. The cumulative total building area authorized during the reporting period is provided in this annual report for those projects that received building permits between September 1, 2019 and August 31, 2020.

The GUP distributes the 2,035,000 sq. ft. of additional academic and academic support facilities among 11 development districts on the Stanford Campus. Map 2 in Appendix A shows the development districts. The majority of 2000 GUP academic building area is allocated to the Campus Center. The allocation of square footage between the development districts can deviate from the GUP's general allocation as long as the GUP procedures are followed (see GUP Condition E.2). For example, during the AR 8 reporting period, the allocation for Campus Center was revised down from 1,600,268 sq.ft. to 1,480,268 sq.ft. to allow for the allocation of 120,000 sq.ft. to the DAPER (Department of Athletics, Physical Education and Recreation) and Administrative district to accommodate the Knight Management Center and future anticipated projects, which is consistent with the 2000 GUP.

Table 1 lists the development districts, the 2000 GUP allocation of building area for each district, and the amount of academic/academic support square footage that received ASA or building permit approval in each district during this reporting period. The academic/academic support projects that do not affect the GUP building area cap are not shown in Table 1. See Section IV, Project Summaries, for additional information on projects that received ASA approval during the AR 20 reporting period.

TABLE 1 ANNUAL REPORT 20 DISTRIBUTION OF GUP-ALLOWED ACADEMIC AND ACADEMIC SUPPORT DEVELOPMENT¹

Development District	2000 GUP Building Area Distribution (sq.ft.)	GUP Building Area Distribution at the end of AR 20 ¹	ASA Approved Space in AR 20 (sq. ft.)	Building Permit Approved Space in AR 20 ² (sq. ft.)	Previous ARs Cumulative Building Permit Approvals (sq. ft.)	Cumulative Total Building Permits Approved ³ (sq. ft.)	GUP Balance Remaining (sq. ft.)	
Campus Center	1,605,000	1,389,337	10,560	14,642	1,236,3695	1,251,011	138,326	
DAPER & Administrati ve	250,000	375,796	0	0	367,470	367,470	8,326	
East Campus	110,000	$(27, 167)^4$	0	0	(30,064)	(30,064)	2,897	
Quarry	50,000	165,000	0	0	152,1205	152,120	12,880	
Lathrop	20,000	20,000	0	0	0	0	20,000	
West Campus	0	17,341	0	0	17,341	17,341	0	
Foothills	0	4,732	0	0	3,135	3,135	1,597	
Lagunita	0	89,961	0	0	89,961 ⁵	89,961	0	
Arboretum	0	0	0	0	0	0	0	
San Juan	0	0	0	0	0	0	0	
Total	2,035,000	2,035,000	10,560	14,642	1,836,332 ⁵	1,850,974	184,026	

1. 2000 GUP Conditions E.2, 3, and 4 allow for deviations from the building area cap for each district. Any proposed increase in development in a district will be accompanied by an identified corresponding proposed decrease equivalent in building area in one or more of the other districts so that the overall campus-wide GUP building area cap is not exceeded. A cumulative maximum of 15,000 square feet of building area may be located in the Foothills District in a manner consistent with the General Plan and zoning. This amount may not be increased. Redistribution occurred in AR 8, AR 9, AR 11, AR 13, AR 14, AR 17, and AR 18.

2. Square footage is counted against the GUP building area cap in the reporting year in which the building permits are approved.

3. Cumulative totals include adjusted results from the current and previous annual reports. Also see Appendix C and/or previous annual reports for more detailed background on these cumulative totals.

4. The East Campus District had a net demolition of 27,167 sf from previous Annual Reports. Therefore, when the remaining square footage was transferred to the DAPER District for the Public Safety Building and to the Quarry District for the Center for Academic Medicine in FY 18, the transfer included all remaining allocation as well as the credit from the net demolition. The balance in the District is now zero sf.

5. AR 18 includes a correction to the final square footages of three projects reported in AR 16 and AR 17: The Regional Loading Dock project (AR 16), the Denning House project (AR17), due to minor design changes or revisions in calculation. AR 19 includes a correction to the square footage of the ChEM-H & SNI project reported in AR 17, which was reduced by 6 sf due to a revision in calculation. AR 20 includes corrections to the square footage of the Center for Academic Medicine and the Academic Advising and Rowing Center, reported in AR 18, due to minor changes to design. These revisions are also noted in Appendix C.

During the AR 20 reporting period, three projects received ASA approval and there were no ASX projects.

Figure 2 illustrates the cumulative status of building-permitapproved square footage for academic/academic support facilities, including the ASA approved square footage counted during the reporting period, as also shown in Table 1. In addition, it illustrates the remaining allowable square footage for development under the 2000 GUP.

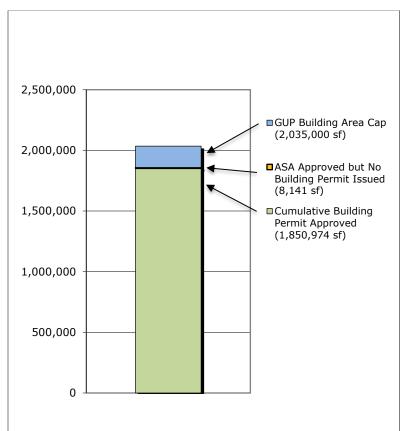


FIGURE 2: CUMULATIVE DEVELOPMENT ACTIVITY 12/12/00 - 8/31/20

Figure 2 illustrates the cumulative status of development that counts toward the GUP building area cap. The square footage of building permit approvals is cumulative. In contrast, ASA approved square footage is only shown for projects that received ASA and ASX (small project) approval during the current reporting period.

> The Stanford Community Plan and GUP Condition E.5 required that a Sustainable Development Study (SDS) be completed and approved prior to acceptance of applications for the second 50% of the academic development allowed under the 2000 GUP. The SDS was presented to the Stanford Community Resource Group (CRG) on November 13, 2008 and to the Planning Commission on November 20, 2008, and was approved by the Board of Supervisors on April 7, 2009. In 2018, the County prepared a Supplement to the Sustainable Development Study. The Supplement augmented the work previously prepared to identify the maximum planned buildout potential of Stanford lands in unincorporated Santa Clara County. Supplement The available is at https://www.sccgov.org/sites/dpd/DocsForms/Documents/SU SD S Supplement.pdf. See Appendix E for a Summary of Stanford's Sustainability Activities during this reporting period.

> Figure 3, below, based on data in Table 1 and Figure 2, illustrates the 2000 GUP distribution of academic/academic support square

footage throughout the 10 development districts, and the academic/ academic support square footage authorized by building permits or received approval by the ASA committee during the current reporting period. Anticipated projects or projects in the approval process for Annual Report 20 reporting period are noted in Section V, Table 6.

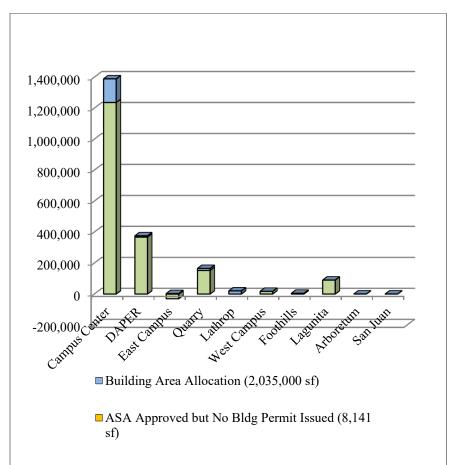


FIGURE 3: DISTRIBUTION OF ACADEMIC DEVELOPMENT

Other Space Caps

Remaining 1989 GUP Approved Square Footage

In addition to providing a 2,035,000 sq. ft. academic/academic support building area, the 2000 GUP preserved the remaining 92,229 sq.ft. authorized but undeveloped under the 1989 GUP. The remaining 1989 GUP approved square footage was consumed during the Annual Report 5 reporting period.

Temporary Surge Space

The 2000 GUP (Condition A.2.c) allows Stanford University to install up to 50,000 sq. ft. as surge space during construction. Surge

A map of Stanford University's Development District is provided in Map 2 in Appendix A. The distribution of GUPallowed academic and academic support development is detailed in Table 1.

TABLE 2 ANNUAL REPORT 20 OTHER SPACE CAPS - PROJECT SUMMARY						
Non- Building Cap Category	Maximum Allowable Square Footage	ASA Approved (sq. ft.)	Building Permit (sq. ft.)	Cumulative Building Permits Approved (sq. ft.) from AR1- AR19	Cumulative Total Building Permits Approved (sq. ft.) from AR1-AR20	Balance Remaining (sq. ft.)
Remaining 1989 GUP Square Footage	92,229	0	0	92,229	92,229	0
Temporary Surge Space	50,000	$(10,560)^1$	(10,560) ¹	10,560	0	50,000
Childcare/ Community Center	40,000	0	0	40,000	40,000	0

¹ The Temporary Childcare Facility (later renamed the Stock Farm Childcare Facility) was converted from Temporary Surge Space to Academic space. Although the conversion did not involve new construction, the reduction in Temporary Surge Space is recorded under the Building Permit columns in Table 2 to document the removal of square footage.

space is typically provided by installing modular buildings for a limited time. During this reporting period, the Temporary Childcare Facility (later renamed the Stock Farm Childcare Facility) was removed from the temporary surge space inventory.

Childcare and Community Centers

The 2000 GUP (Condition A.2.c) allows up to 40,000 sq. ft. of building area for the purpose of new childcare or community centers, in addition to the academic/academic support building area. As indicated in Table 2, a total of 0 sq.ft. remains available.

Housing

The 2000 GUP allows for the construction of 3,018 net new housing units on campus, with allocations for faculty and staff, graduate and undergraduate students, and postdoctoral and medical students. In FY 16, pursuant to Condition F.7, the Planning Commission approved an additional allocation of 1,450 housing units, for a total allocation of 4,468 housing units, as shown in Table 3. The GUP identified potential housing sites for students, staff and faculty (Map 3, Appendix A). As with academic/academic support building space, the housing units must be distributed among the 10 development districts (see Table 3).

Housing may also be developed on sites other than those shown on Map 3. The estimated distribution of the type and location of housing among development districts may deviate from the locations described in the 2000 GUP pursuant to Conditions F.2,

F.3, and F.4. As explained under Condition A (A.1.c, A.1.d, and A.3.b), the square footage of housing units constructed is tracked but does not count toward the 2000 GUP building area cap (see Table C-2, Appendix C).

During the AR 20 reporting period, 2,020 net new housing units were completed via the Escondido Village Graduate Residences Project. For purposes of the housing linkage requirement, as provided in GUP Condition F.8, the housing requirement is counted at the time of the framing inspection.

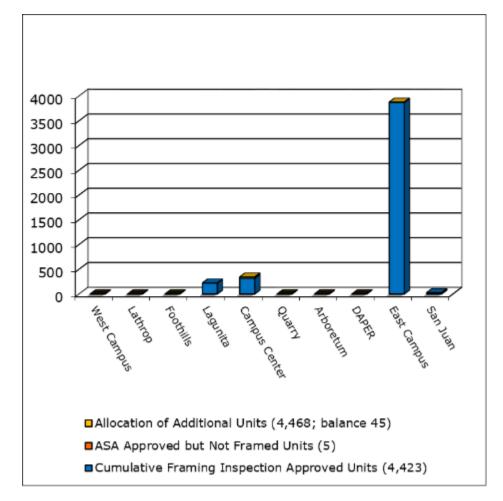


FIGURE 4: DISTRIBUTION OF RESIDENTIAL DEVELOPMENT

There is currently a total allocation of 4,468 housing units for the campus. As illustrated in Figure 4, the cumulative total number of approved units under the 2000 GUP allocation, which have completed framing inspection, is 4,423 units. A total of 45 housing units remain available under the housing allowance.

TABLE 3 ANNUAL REPORT 20 DISTRIBUTION OF RESIDENTIAL DEVELOPMENT

	Allowable 2000 GUP Net Additional	ASA Approved Units but Not Yet	Past	Final Framing Inspection Approved		Unused 2000 GUP Authoriza tion
Development District ¹	Units	Framed	Cumulative ²	Units	Cumulative	0
West Campus	0	0	0	0	0	0
Lathrop	0	0	0	0	0	0
Foothills	0	0	0	0	0	0
Lagunita - Driving Range - Searsville Block - Mayfield/Row	222	0	220	0	220	2
Campus Center	345	0	318	0	318	27
Quarry - Quarry/Arboretum - Quarry/El Camino	0	0	0	0	0	0
Arboretum	0	0	0	0	0	0
DAPER & Administrative	0	0	0	0	0	0
East Campus - Manzanita - Escondido Village - Quillen - GSB Residences	3,878	0	1,847	2,020	3,867	11
San Juan - Lower Frenchman's - Gerona - Mayfield	23	5	18	0	18	5
Total	4,468 Allowed ^{1, 3, 4}	5	2,4035	0	4,423	45

1. Housing may be developed on other sites and development may vary from the estimated distribution with regard to either the type (student, postdoctoral, or faculty/staff) or amount of housing on the site (2000 GUP Conditions F.2, F.3, and F.4). Redistribution was reported in AR 6, AR 13, AR 14, AR 16 and AR 17.

2. Cumulative totals include results from previous annual reports. See Appendix C and/or previous annual reports for more detailed background on these cumulative totals.

3. A GUP amendment was approved on May 5, 2015 to revise the remaining housing allocations by housing types, to provide flexibility in meeting campus housing needs. All remaining unused housing allowances consisting of 228 faculty/staff beds, 3 graduate student bends, and 350 post-doc/medical resident beds, were approved to be usable for any type of university affiliate housing.

4. 1,450 additional housing units were approved on March 24, 2016 pursuant to GUP Condition F.7, in preparation for the Escondido Village Graduate Residences (EVGR) project. At the same time, 566 housing units from various Development Districts were reallocated to the East Campus Development District (194 from Lagunita, 1 from Campus Center, 350 from Quarry, and 21 from San Juan). The ASA for the EVGR project was approved in FY 17.

5. The Kingscote Gardens Renovation was approved on March 30, 2016, removing 33 units from the housing inventory for conversion to academic offices.

6. In September 2018, with further updates in October of 2020, the Board of Supervisors adopted an ordinance (Ordinance No. NS-1200.368) for a 16% inclusionary housing requirement applicable to the Stanford Community Plan Area for residential development projects of three or more units. The ordinance became effective on July 1, 2019. There were no housing projects subject to the inclusionary housing requirement during the AR 20 reporting period.

Parking

The 2000 GUP allows for 2,300 net new parking spaces above the campus base of 19,351 spaces. As explained in Condition A.3.c, the building area of parking structures does not count towards the GUP academic/academic support building area cap. As with academic/academic support building area square footage and housing, the allowed parking spaces have been distributed among the development districts (Table 4 and Figure 5).

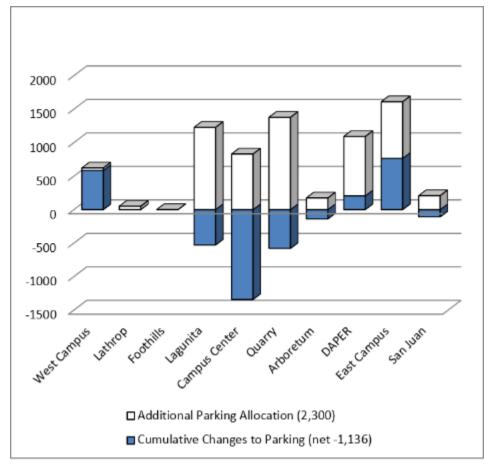


FIGURE 5: DISTRIBUTION OF PARKING SPACES

Table 4 presents the changes in parking spaces during the current reporting period, and cumulative increases and decreases in parking spaces on the campus during the AR 1 through AR 20 reporting periods.

During the AR 20 reporting period, there was a net increase of 622 parking spaces on campus. The cumulative change in the parking inventory is a net decrease of 1,136 parking spaces under the 2000 GUP.

TABLE 4 ANNUAL REPORT 20 DISTRIBUTION OF PARKING								
	t				Changes to l	Parking Inventor	у	
	Development District	Base Parking GUP EIR	2000 GUP Allowed Change in Parking Spaces	AR 20 Contribution	Previous AR 1-19 Contribution	Cumulative (AR 1 Through Current AR20)	EIR Base and Cumulative (Current Parking Capacity)	Unused 2000 GUP Allocation
West Campus		191	622	0	585	585	776	37
Lathrop		0	50	0	0	0	0	50
Foothills		0	0	0	0	0	0	0
Lagunita		1,745	700	0	(528)	(528)	1,217	1,228
Campus Center		8,743	(511)	(92)	(1,249)	(1,341)	7,402	830
Quarry		1,058	800	0	(578)	(578)	480	1,378
Arboretum		134	36	0	(138)	(138)	(4)	174
DAPER & Administrative		2,209	1,092	0	206	206	2,415	886
East Campus ¹		4,731	1,611	714	52	766	5,497	845
San Juan		540	100	0	(108)	(108)	432	208
Campus Wide Summary		19,351	2,300 ²	622 ⁶	(1,758)	(1,136)	18,215	3,436 ²

1. Parking allocation in East Campus increased from 900 to 1,611 spaces and decreased in Campus Center from 200 to negative 511 with the approval of Parking Structure 6 (Munger).

2. According to 2000 GUP Condition H.1, the total net additional parking on campus shall not exceed 2,300 spaces, except for parking provided with any housing that is constructed in excess of 3,018 planned housing units. Also, per GUP Condition H.1, parking constructed as part of and for new faculty/staff housing in areas designated Campus Residential-Low Density and Campus Residential-Medium Density will not count toward the limit for each development district. In order to allow flexibility in the distribution of parking, the GUP also sets an upper limit for new parking in each development district. Some districts will ultimately build less than their GUP allocations. Thus, the sum of unused district allocations is more than the remaining 2000 GUP allocation, which is the campus-wide maximum number of parking spaces that will be built under this GUP.

3. Parking allocation for Arboretum increased from zero to 36 spaces and decreased in DAPER from 1,700 to 1,664 when on-street, nonstriped parallel parking was converted to striped, angled parking along the west side of the street, and two-way traffic was converted to one-way northbound traffic in association with the Galvez Parking Lot project.

4. Parking allocation for West Campus increased from 50 to 622 and decreased in DAPER from 1,664 to 1,092 when 611 new surface parking stalls were added to the Searsville Parking lot and 19 on-street parking spaces were removed in West Campus.

5. In FY 16, Stanford conducted a comprehensive quality review of the parking inventory which resulted in the following corrections:

- (i) 61 spaces were removed from the Quarry District inventory (Lot 1-A and Parking Structure 9 next to Hoover Pavilion) as these are in Palo Alto, but entered into the inventory in AR 14 and AR 15 by mistake;
- (ii) 28 faculty/staff-only spaces in the San Juan District within R1S and R3S zoning were removed from the inventory, consistent with the treatment of parking for the faculty subdivision per GUP Condition H.1; and
- (iii) 108 bus storage and staging spaces were removed from the inventory, including 64 spaces at L-20 for storage of Marguerite shuttles in the Campus Center District; 38 spaces at Oak Road for staging of Marguerite, tour bus, charter bus, and authorized oversize vehicle and equipment in the Campus Center District; and 6 spaces for tour bus staging in the Arboretum District. Bus storage and staging areas are not part of the parking inventory that can be used by commuters, campus residents, or the general public, but rather serve to facilitate a mode of transportation that reduces vehicular trips to and from campus.
- 6. The Thoburn Garage and surface parking spaces, which support the Escondido Village Graduate Residences project, opened in FY20. In FY21, Manzanita Garage and the garage associated with the Center for Academic Medicine are expected to open, which will use over 1,600 spaces from the allocation.

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This section provides a summary of activities conducted during the AR 20 reporting period in compliance with 2000 GUP conditions. For a complete discussion of compliance with each 2000 GUP condition, please see Appendix B.

GUP Condition A: Building Area

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	Section II of this Annual Report provides statistics and distribution of building area by district. It also provides accounting of the 2000 GUP space expenditure for those projects that received building permits during the AR 20 reporting period. Descriptions and illustrations of projects that received ASA and ASX during the AR 20 reporting period are provided in Section IV.
	During the AR 20 reporting period, September 1, 2019 through August 31, 2020:
	• Stanford did not exceed the GUP building area cap, or the GUP caps for new housing and parking.
	• Stanford also remained within the other space caps established under the GUP.
GUP Condition B:	Framework
	A total of three projects received ASA approval or ASX during the AR 20 reporting period. All were determined to be consistent with General Plan land use designations and zoning. Stanford University paid all costs associated with the work conducted by the County Planning Office in relation to the 2000 GUP (staff time, consultant fees, and the direct costs associated with report production and distribution)mostly, in a timely manner.
GUP Condition C:	Monitoring, Reporting, and Implementation
	The County Planning Office gathered comprehensive data related to Stanford projects, compiled the information, produced and published the AR 20 pursuant to the 2000 GUP. Stanford University provides funding for all aspects of the Annual Report preparation,

The Draft AR 20 will be presented to the Community Resource Group on April 15, 2021 and the final report will be presented to the Planning Commission at the June 2020 public hearing.

GUP Condition D:	Permitting and Environmental Review
	During the AR 20 reporting period, Stanford received ASA or ASX for 3 projects. All of these projects were determined to be consistent with the General Plan land use designations and zoning requirements, and found to be adequately analyzed in the CP/GUP EIR. See Section II of this Annual Report for the status of each project.
	When violations of codes, ordinances or other requirements occur, they are addressed through appropriate County procedures. During the AR19 reporting period, a violation was issued by the County involving the Cabrillo-Dolores Subdivision, for unpermitted removal of three oak trees and noncompliance with GUP Condition K.2., relating to preconstruction surveys for nesting raptors and migratory birds. The required replacement trees will be planted following project completion, anticipated by AR 22 reporting period. The County is investigating additional tree removals and grading work, that will be reported in AR21.
	Stanford University remains in general compliance with the GUP and other County requirements.
GUP Condition E:	Academic Building Area Review
	Stanford is in compliance with CUD Condition E.5. See Annondices

Stanford is in compliance with GUP Condition E.5. See Appendices B and E for more detail. Appendix E is provided electronically at https://sustainability-year-in-review.stanford.edu/2020/

GUP Condition F:	Housing
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During this reporting period, Stanford did not add or remove housing units, and 2,020 net new housing units were completed via the Escondido Village Graduate Residences project. The total number of campus housing units constructed under the 2000 GUP is 4,423.

Currently, Stanford's capacity for providing student-housing units remains equivalent to the capacity identified by Stanford University at the time of initial occupancy. Stanford's housing need is subject to fluctuation during any given year. Accordingly, Stanford University may redistribute the student population among existing housing facilities in any given year, based on current population and programmatic needs. The County will, as needed, reassess housing availability status with appropriate Stanford University staff. If Stanford University should ever apply for a development permit that would change the number of beds available to students, that action and the change in beds would be reported in the Annual Report.

The 2000 GUP requires Stanford to build additional housing units commensurate with the development of academic/academic support facilities. The threshold at 1,500,000 sq.ft. of academic or academic support area requires a minimum of 1,815 housing units. Stanford University has constructed 4,423 units and is therefore, in compliance with this requirement.

Stanford has complied with the affordable housing requirements under the GUP conditions for net new academic square footage constructed by paying the in-lieu fee for applicable projects prior to occupancy. An Affordable Housing Fee Square Footage Bank (Square Footage Bank) has been maintained by the County since 2000 for demolition or conversion of projects that remove buildings from GUP allocation square footage. Stanford may use the square footage from the Square Footage Bank and is not required to pay the in-lieu fee because the square footage is not treated as net new academic square footage.

For this reporting period Stanford paid in-lieu fee for 5 projects totaling \$6,093,566, and used 84,686 sq.ft. from the Square Footage Bank. As of August 31, 2020, Stanford has made affordable housing fee payments totaling \$32,261,440. At the end of FY20, no square footage is remaining in the Square Footage Bank.

Five affordable housing projects have been built within the 6 mile, radius from the Stanford Campus boundary and have provided 286 affordable housing units, with 137 units restricted to very low income to extremely low income families. In September 2017, \$14.5 million of the in-lieu fees was used to partially fund the acquisition and rehabilitation of the Buena Vista Mobile Home Park in Palo Alto. In addition, on April 17, 2018, the County Board of Supervisors approved setting aside \$6,000,000 to support the development of a 60- to 100-unit multifamily rental development in Palo Alto for teachers.

GUP Condition G: Transportation

A baseline traffic count to determine the existing level of commute trips entering the campus during the morning peak commute period and leaving the campus during the evening peak commute period was established in 2001. The baseline is the raw traffic volumes adjusted for hospital parking and cut-through traffic.

FY 20 was a highly unusual year because of the COVID-19 pandemic. A COVID-19 shelter-in-place order was issued in March 2020 and continued through the year. This resulted in the Stanford campus shutting down to limit the spread of the virus. The Spring 2020 Stanford traffic monitoring was cancelled because the campus was closed due to the County's shelter-in-place requirements. In Fall 2020, the County approved the use of a reduced traffic monitoring program for a period of 2 weeks to c raw traffic volumes only, and confirm assumptions and observations of significant reduction in traffic volumes. The 2000 GUP Condition G.7.a. requires traffic counts for a minimum of three times per year for an interval of 2 weeks each time. Since 2003, the established methodology for traffic monitoring program is 6 weeks in the spring and two weeks in the fall for a total of 8 weeks of count data. However, given the pandemic, the County determined that 2 weeks of raw traffic counts would be sufficient to demonstrate that the traffic volumes, due to the pandemic, campus closures and statewide shelter-in-place orders, were well below the historic traffic volumes from 2001.

The baseline used to determine compliance with the no-net-new trips included the adjustments; the adjusted traffic volumes were always calculated as part of the monitoring program for that year. In FY 20, the adjustment data was also not collected because of the COVID-19 pandemic.

County hired traffic consultant, AECOM, compared the raw, unadjusted data with the newly compiled historic raw, unadjusted data from the previous 19 years. Two weeks of data in the fall of 2020 found an unadjusted average AM peak-hour traffic volume of 1,747. This is compared with the unadjusted AM peak-hour average of 4,091 from the previous 19 years of data. Two weeks of data in the fall of 2020 found an unadjusted average PM peak-hour traffic volume of 2,045. This is compared with the unadjusted PM peak-hour average of 4,355 from the previous 19 years of data. Thus, pandemic conditions resulted

in traffic at less than half of normal levels. Results determined that raw traffic counts for 2020 do not exceed the baseline traffic limits threshold for the AM and PM peak hour traffic.

The Stanford University Traffic Monitoring Report 2020 is available for review at the County and is also available on the County website,

(https://www.sccgov.org/sites/dpd/Programs/Stanford/2000GUP/P ages/Docs.aspx). Results of annual traffic monitoring are summarized in Appendix D of this document.

	The Annual Report normally reports on activity between September 1 and August 31. However, the typical annual Traffic Monitoring Reporting period is the same as the baseline, 6 weeks in the Spring and 2 weeks in the Fall for the period of a calendar year. The 2020 traffic monitoring cordon locations used for traffic monitoring are shown on Figure 1 of the Stanford University Traffic Monitoring Report 2020, available on the aforementioned County website link. Data and analysis of these counts, reported in March 2021, are provided in Appendix D of this annual report.
GUP Condition H:	Parking
	During AR 20 reporting period, all parking projects were in compliance with GUP Condition H. Detailed information may be found in Section II, Table 4 and Appendix B, Appendix C (Map C- 3) and Figure 5. As indicated in this Annual Report, several parking projects were implemented. The cumulative change in the parking inventory remains significantly under the cap set for the 2000 GUP, which allowed a total increase campus-wide of 2,300 spaces. With cumulative reductions, the remaining parking capacity that could be installed under the 2000 GUP parking cap is 3,436 spaces.
GUP Condition I:	Parks and Recreation Facilities
	Construction of C2/Arastradero Trail: Construction and trail improvements were completed and the trail was dedicated in November 2013. The trail links to the Pearson-Arastradero Preserve. San Mateo County and Stanford did not reach agreement for the San Mateo C1 segment and in February 2012, Stanford paid County of Santa Clara approximately \$10.3 million. In August 2012, the County issued a request for applications for projects that would serve as alternative mitigation measures to address the loss of recreational facilities on the Stanford campus. The County received 15 project applications from six local agencies. The Board of Supervisors declared its intent to fund six of the 15 projects, including \$4.5 million to Stanford to construct a perimeter trail along El Camino Real and Stanford Avenue frontages. Stanford subsequently did not accept the grant award for the Stanford Perimeter trail, which was opened to the public in April 2016. The Board also directed County Administration to negotiate projects agreements for the selected projects and submit approval to the Board consistent with the requirements of CEQA. A project agreement and appropriation modification for the Adobe Creek /

	Highway 101 Overcrossing Project were approved by the Board on December 17, 2019, and, an appropriation modification for the Ravenswood Bay Trail project was approved by the Board on February 25, 2020.Further, at the May 12, 2020 Board meeting, the Board declared its intent to fund all or parts of seven additional projects relating to					
GUP Condition J:	California Tiger Salamander					
	The final Stanford University Habitat Conservation Plan (HCP) and Final Environmental Impact Statement (EIS) were published on November 23, 2012 and the HCP was revised in March 2013. On August 13, 2013, the County Board of Supervisors acknowledged the determination that the approved HCP provides equal habitat value and protection for the California Tiger Salamander (CTS). Therefore, the HCP supersedes all conditions in the GUP that address the CTS, implementing Condition J.9 of the GUP.					
GUP Condition K:	Biological Resources					
	One project that began construction during the current reporting period required pre-construction surveys for breeding raptors and migratory birds. For more information, see Appendix B, Condition K.2. No special status plant assessments were conducted on campus during this reporting period.					
GUP Condition L:	period required pre-construction surveys for breeding raptors and migratory birds. For more information, see Appendix B, Condition K.2. No special status plant assessments were conducted on campus					
GUP Condition L:	period required pre-construction surveys for breeding raptors and migratory birds. For more information, see Appendix B, Condition K.2. No special status plant assessments were conducted on campus during this reporting period.					
GUP Condition L: GUP Condition M:	period required pre-construction surveys for breeding raptors and migratory birds. For more information, see Appendix B, Condition K.2. No special status plant assessments were conducted on campus during this reporting period.Visual ResourcesOne project approved during the reporting period included exterior lighting. The ASA conditions of approval required the lighting impacts to be mitigated and limited to the site to be in keeping with					

GUP Condition N:	Geology and Hydrology			
	During the AR 20 reporting period, all projects were in compliance with GUP Condition N. See Appendix B, Condition N for more details.			
GUP Condition O:	Cultural Resources			
	During the AR 20 reporting period, all projects were in compliance with GUP Condition O. See Appendix B, Condition O for more details.			
GUP Condition P:	Utilities and Public Services			
	During the AR 20 reporting period, all projects were in compliance with GUP Condition P. See Appendix B, Condition P for more detail.			
GUP Condition Q:	Air Quality			
	All approved projects were required to comply with BAAQMD's permitting, control measures and recommendations as appropriate. See Appendix B, Condition Q for more detail.			
GUP Condition R:	Noise			
	Stanford complied with the requirements of the County Noise Ordinance on individual construction projects. Two events per calendar year are allowed by the GUP, and additional fireworks events were allowed under separate permits. Stanford continues to meet the GUP Condition by operating the noise hotline at (650) 724- 4900, which is intended to log complaints related to outdoor special events and high impact events on campus. The University reports that zero noise complaints were received during FY 20. See Appendix B, Condition R for more detail.			
GUP Condition S:	Additional GUP Conditions			
	This condition was a requirement for Stanford University to agree to the GUP conditions of approval within 60 days. This condition was fulfilled in Annual Report 1.			

Project Summaries

This section presents brief project summaries of all major projects that received ASA approval or exemption and/or a building permit or demolition permit during the reporting period. A list of projects that received approval is presented at the end of this section. Figure 6 shows the locations of the major projects.

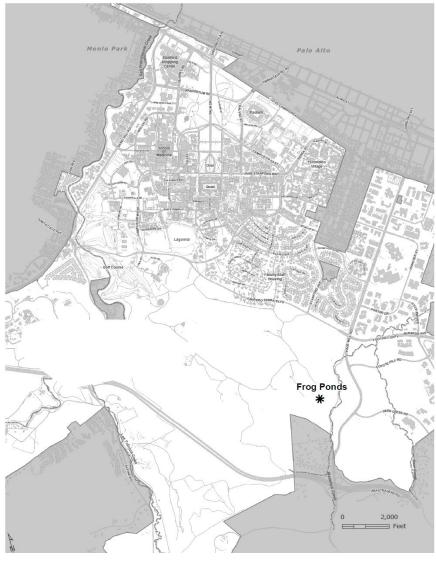


FIGURE 5: LOCATION OF MAJOR ANNUAL REPORT 20 PROJECTS

Files No. PLN19-0080: Frog Ponds

ASA Application	
Submitted:	04/18/2019
ASA Approved:	Approved 09/05/2019
Status as of 08/31/20:	Under Construction; Expected Completion 11/2020
Project Description:	This project was undertaken to enhance portions of the Upper Quarry, along a tributary to Matadero Creek. This project created four ponds suitable for California red-legged frog (CRLF) reproduction and provides ecological benefit to the riparian habitat as part of the Stanford Habitat Conservation Plan (Federal Incidental Take permits with State Consistency Determination). The project is located north of Matadero Creek and Old Page Mill Road at an abandoned quarry site located on Stanford University lands in the Matadero Creek watershed. The site is located in a permanent conservation easement. The four proposed ponds each have a surface area of approximately 400 to 600 SF and have a maximum depth of 3 to 5 feet. They will be filled with surface run-off and groundwater. They were designed to maintain ponding depth and duration suitable for CRLF breeding. Grading for the ponds was approved for approximately 452 cubic yards of cut and 441 cubic yards of fill, with a maximum depth of 5 feet.
Development District:	Foothills
Type of Project:	Grading
Applicable GUP	Stanford is in compliance with Mitigation Monitoring and Reporting Program requirements and GUP Conditions for this project. Detailed summaries of

Conditions: Stanford is in compliance with Mitigation Monitoring and Reporting Program requirements and GUP Conditions for this project. Detailed summaries of project-related conditions are maintained in County project files.

TABLE 5 ANNUAL REPORT 20 DEVELOPMENT PROJECTS RECEIVING ASA OR OTHER APPROVAL								
PC/ File #	Project Name	Development District	ASA gross sq. ft.	Demolitio n sq. ft.	Bldg. Permit sq. ft. (New Constr.)	Development Status		
Projects that affect GUP sq.ft.								
10804	Regional Loading Dock Expansion (loading dock and café)	Campus Center	2,366	(20,628)	2,366	Completed		
10784	ChEM-H & SNI	Campus Center	210,953		210,940	Under Construction		
10829	Demolition of Herrin Hall	Campus Center		(35,944)		Demolition in progress		
10829	Demolition of Herrin Labs	Campus Center		(78,047)		Demolition in progress		
3497	Academic Advising and Rowing Center	Campus Center	23,714		22,622	Under Construction		
11037	Center for Academic Medicine	Quarry	153,821		152,120	Under Construction		
11076	Public Safety	DAPER	27,820	(2,729)	27,196	Under Construction		
11176	EOC/ECH	DAPER	7,429		Not yet	Project on hold		
11231	DWC: Panama site	Campus Center	3,926		3,926	Under Construction		
11230	DWC: Roth site	Campus Center	3,926		3,926	Completed		
11256	DWC: Memorial site	Campus Center	3,926		3,926	Under Construction		
11337	Softball Stadium Improvements	DAPER	120		120	Completed		
11218	Gilbert Greenhouse	Campus Center	714		Not yet	Planning Approval obtained; Project on hold		
11424	Stock Farm Greenhouses	Campus Center	8,352	(7,832)	8,352	Completed		
11443	Chemistry Admin Modular	Campus Center	4,082		4,082	Completed		
PLN19- 0164	George P. Shultz Building	Campus Center	48,643	(48,643)		Application Under Planning		

IV. Project Summaries

TABLE 5 ANNUAL REPORT 20 DEVELOPMENT PROJECTS RECEIVING ASA OR OTHER APPROVAL

DEVELOPINENT PROJECTS RECEIVING ASA OR OTHER APPROVAL						
PC/ File #	Project Name	Development District	ASA gross sq. ft.	Demolitio n sq. ft.	Bldg. Permit sq. ft. (New Constr.)	Development Status
						Department Review
PLN14- 10228	Stock Farm Childcare (also see "Projects that affect other sq.ft.")	Campus Center	10,560 conversion to academic sf		NA; no construction	Planning Approval obtained; conversion completed
PLN20- 081	LBRE Replacement Building	West Campus/DAPER	73,000	(123,922)		Application Under Planning Department Review
Projects tha	t affect other sq.ft.					
Demolition Permit	1215 Welch Rd Modulars (C, D, E) demolition	Campus Center		(4,030)		Demolished
PLN14- 10228	Stock Farm Childcare (also see "Projects that affect GUP sq.ft.")	Campus Center		(10,560) removal from temp. surge sf		Planning Approval obtained; conversion completed
Housing						
10541	Lasuen	San Juan	0		Not yet	Renovation deferred
7165; 10915	Escondido Village Graduate Residences	East Campus	1,824,127 housing sq.ft.	(168,920) housing sq.ft.	1,699,001 housing sq.ft.	Under Construction
11069	Cabrillo-Dolores Faculty Housing	San Juan	23,448 housing sq.ft.	(5,273) housing sq.ft.	Not yet	Planning Approval obtained; Abatement work in progress (retroactive Tree Removal Permit issued on May 12, 2020)
DEV19- 1599	Hoskins Renovation	East Campus	N/A	N/A	N/A	Completed
Site Projects	S		I	1		
8972	Serra Roundabout	DAPER and East Campus	N/A	N/A	N/A	Under Construction
10915	Manzanita Garage	East Campus	N/A	N/A	N/A	Under Construction
7352	Stanford Golf Course Restoration	Foothills	N/A	N/A	N/A	Completed

TABLE 5 ANNUAL REPORT 20 DEVELOPMENT PROJECTS RECEIVING ASA OR OTHER APPROVAL							
PC/ File #	Project Name	Development District	ASA gross sq. ft.	Demolitio n sq. ft.	Bldg. Permit sq. ft. (New Constr.)	Development Status	
11171	Via Ortega North	Campus Center	N/A	N/A	N/A	Under Construction	
11335	Bonair Pampas Road	DAPER	N/A	N/A	N/A	Under Construction	
11411	Stadium Turf Subgrade Air System	DAPER	N/A	N/A	N/A	Completed	
PLN19- 0060	Pampas Laydown	DAPER	N/A	N/A	N/A	Withdrawn	
PLN19- 0080	Frog Ponds	Foothills	N/A	N/A	N/A	Under Construction	
PLN19- 0115	Manzanita Turnaround	DAPER/East Campus	N/A	N/A	N/A	Under Construction	
PLN19- 061	Crothers Extension	Campus Center/East Campus	N/A	N/A	N/A	Project on hold	
11425	Golf Course Grading Abatement	Foothills	N/A	N/A	N/A	Completed	

V. Anticipated Future Projects

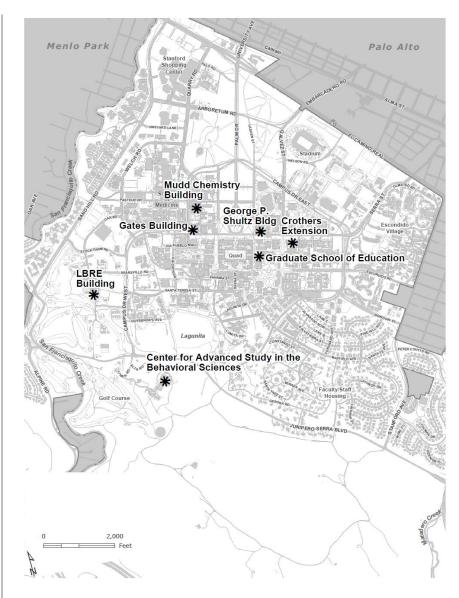


FIGURE 6: LOCATION OF ANTICIPATED PROJECTS

Map ID Project

- 1 George P. Shultz Building
- 2 Crothers Extension
- 3 Center for Advanced Study in Behavioral Sciences
- 4 Gates Building Tenant Improvement project
- 5 LBRE Building
- 6 Mudd Chemistry Building Demolition 7
 - Graduate School of Education

TABLE 6 ANTICIPATED PROJECTS FOR ANNUAL REPORT 21								
County File #	Project	Development District	ASA Application Submitted	Anticipated ASA Square Footage	Anticipated Housing	Anticipated Parking		
ASA Applications Submitted During FY 20 or earlier, No Approval as of August 31, 2020								
PLN19- 0164	George P. Shultz Building	Campus Center	08/2019	48,643 new; (48,643 demo)	-	-		
PLN19- 0061	Crothers Extension	Campus Center/East Campus	03/2019	-	-	-		
PLN20-048	Center for Advanced Study in the Behavioral Sciences	Lathrop	03/2020	1,689 new; (1,721 demo)	-	-		
PLN20-081	LBRE Replacement Building	West Campus/DAPER	7/2020	73,000 new; (123,922 demo)	-	(305)		
ASA & Other	Applications Anticip	ated for AR 21 Repo	rting Period					
-	Gates Building Tenant Improvement project	Campus Center	09/2020	776	-	-		
-	Mudd Chemistry Building Demolition and Grading Approval	Campus Center	11/2020	76,657	-	-		
-	Graduate School of Education	Campus Center	12/2020	48,193	-	-		

References

- County of Santa Clara 2000 Stanford Community Plan/General Use Permit Environmental Impact Report. Prepared by Parsons.
- Stanford University Community Plan. Adopted by County of Santa Clara Board of Supervisors December 12, 2000.
- Stanford University General Use Permit. Approved December 12, 2000.

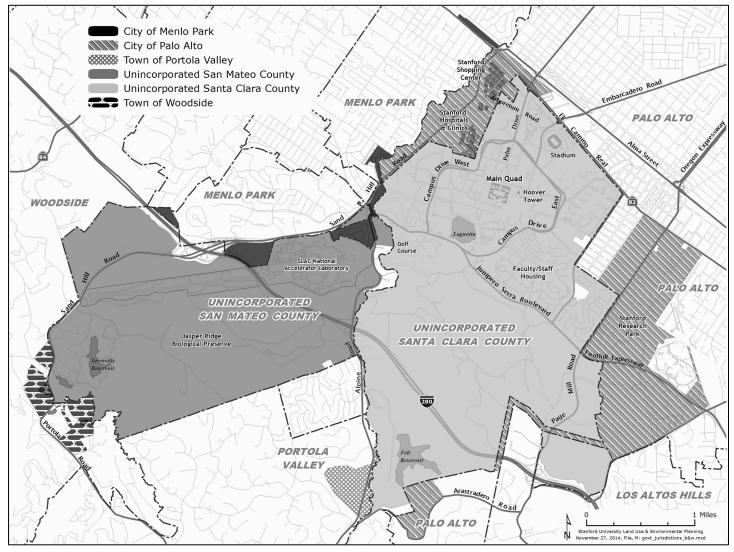
County of Santa Clara Annual Report Preparers

• Charu Ahluwalia, Associate Planner [(408) 299-5740/ charu.ahluwalia @pln.sccgov.org] (Project Manager: Stanford Environmental Mitigation Monitoring and Reporting Program), County of Santa Clara Planning Office

Stanford University Data Providers

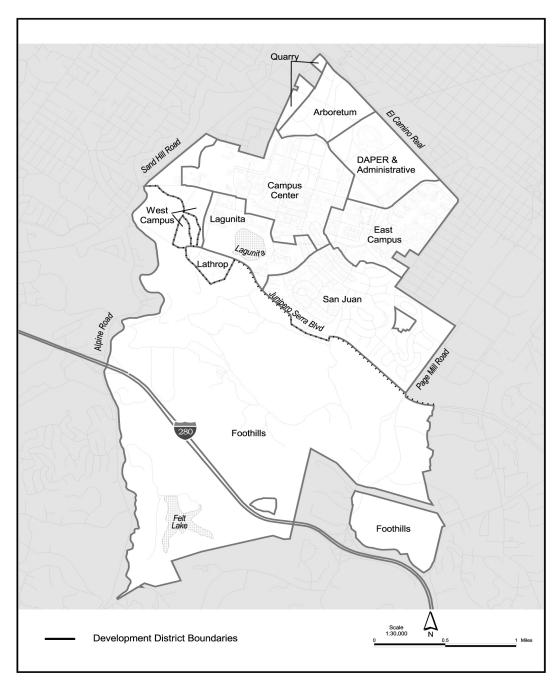
- Land Use and Environmental Planning: Catherine Palter, Associate Vice President; Jessica von Borck, LEED AP, Director; Karen Hong, AICP, Planning Manager; Ramya Subramanian, Planner/GIS Specialist
- Department of Project Management: Laura Goldstein, Executive Director; Project Managers and staff
- Parking & Transportation Services: Brian Shaw, Executive Director; Brian Canada, Parking Operations Coordinator
- Utilities: Adam Porter, Civil Infrastructure Engineer
- Project Management Resources, Residential and Dining Enterprises, Environmental Health & Safety Department, Facilities Operations - Utilities, University Architect/Campus Planning and Design

Appendix A Reference Maps



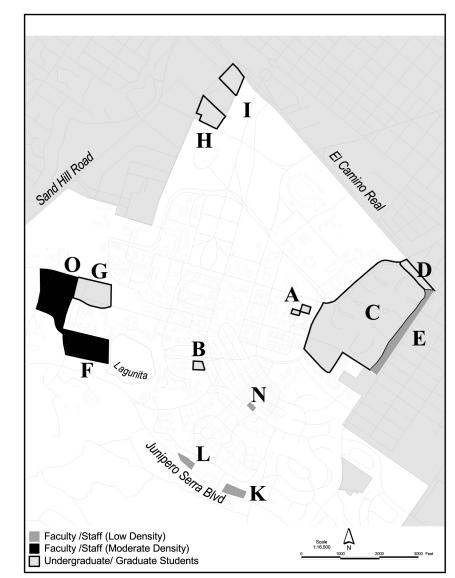
Source: Stanford University 2014

MAP A-1 GOVERNMENTAL JURISDICTIONS ON STANFORD LANDS



Source: Stanford University General Use Permit, December 2000

MAP A-2 STANFORD UNIVERSITY DEVELOPMENT DISTRICTS

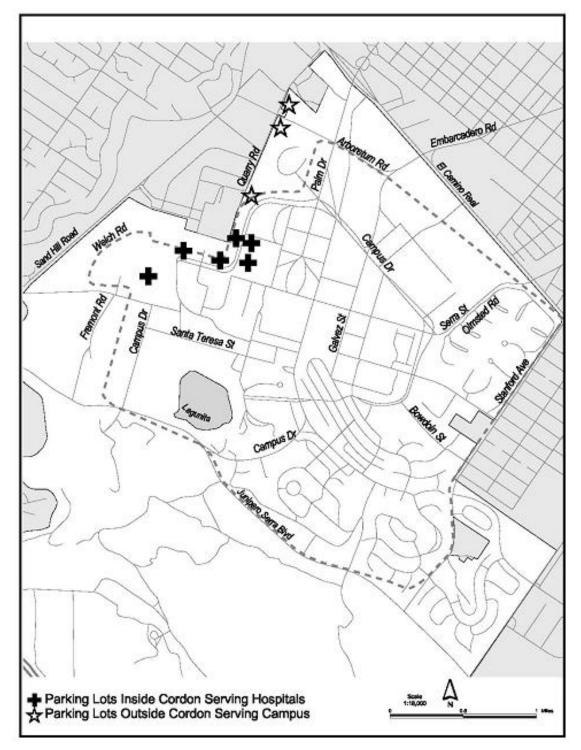


Source: Stanford University General Use Permit, December 2000

MAP A-3 POTENTIAL HOUSING SITES

- A Manzanita
- **B** Mayfield/Row
- C Escondido Village
- **D** Escondido Village
- E Escondido Village
- **F** Driving Range
- **G** Searsville Block
- H Quarry/Arboretum
- I Quarry/El Camino
- **K** Lower Frenchman's
- L Gerona
- N Mayfield
- **O** Stable Sites

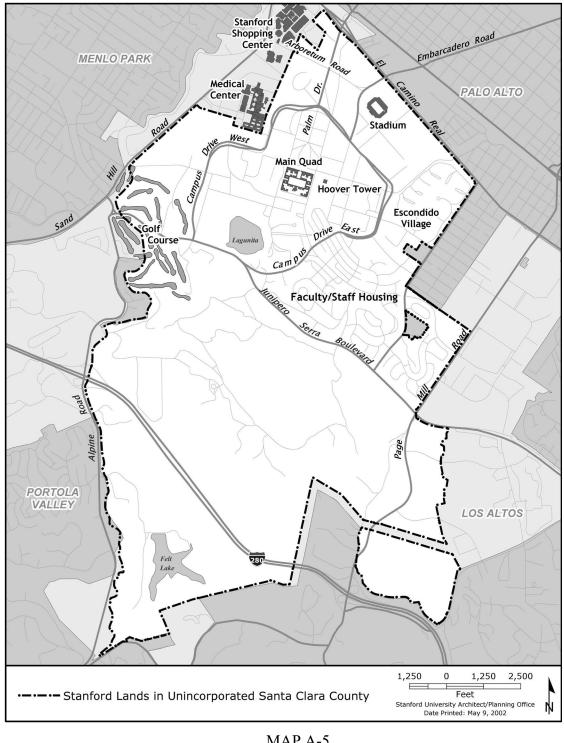
Appendix A Reference Maps



Source: Stanford University General Use Permit, December 2000

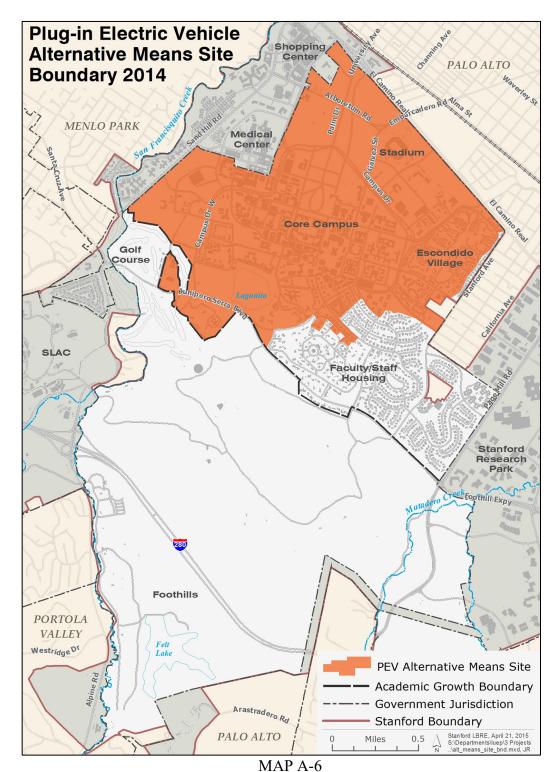


Appendix A Reference Maps



MAP A-5 GENERAL ORIENTATION MAP OF STANFORD UNIVERSITY (UNINCORPORATED SANTA CLARA COUNTY)

Appendix A Reference Maps



PLUG-IN ELECTRIC VEHICLES ALTERNATIVE MEANS SITE BOUNDARY 2014

	GUP Condition	Stanford Compliance
A.	Building Area	
A.1.	GUP allowed construction on unincorporated Santa Clara County lands.	Illustrations and details are provided in Section IV of this report of all major projects that received ASA during the current reporting year. Projects are described in detail in the annual report for the period in which ASA was granted; however, academic and support building area is counted against the building area cap in the period during which the project received a building or grading permit. Table 1 in Section II of this annual report shows building area accounting during this reporting period relative to the "GUP building area cap."
		During this reporting period, no housing units were demolished. As of August 31, 2020, the cumulative number of framed housing units is 4,423, as shown in Section II (Table 3).
		During the AR 20 reporting period, there was a net increase of 622 parking spaces. Changes that resulted from these projects are enumerated in Section II (Table 4).
A.2.	Building area allowed in addition to the GUP building area cap.	The remaining 1989 GUP approved square footage was consumed during the Annual Report 5 reporting period, per Condition A.2.a.
		The 2000 GUP (Condition A.2.c) allows Stanford University to install up to 50,000 sq. ft. as surge space during construction activities in the form of temporary trailers, which shall not be counted towards the GUP building area cap. During FY 20, the Temporary Childcare Facility (later renamed Stock Farm Childcare Facility) was removed from the temporary surge space inventory, as shown in Section II (Table 2).
A.3.	Construction that does not count toward the GUP building area cap.	The 2000 GUP (Condition A.3.a) allows up to 40,000 sq. ft. of additional building area for the purpose of new childcare or community centers. During FY 20, as shown in Section II (Table 2), construction of the CCSC childcare project was completed and the balance remaing under childcare and community center is zero square feet.
B.	Framework	
B.1.	Development under the GUP must be consistent with the Community Plan and General Plan.	Three ASA/ASX projects were approved consistent with the policies in the Community Plan and the General Plan.
B.2.	Definition of a proposed building project.	No action required.
В.3.	Minimum time duration of GUP (modification possible, subject to County Ordinance).	No action required.

	GUP Condition	Stanford Compliance
B.4.	Funding of work associated with conditions of GUP.	Stanford paid all costs associated with work conducted by the County Planning Office in relation to the GUP (staff time, consultant fees, and direct costs associated with report production and distribution) in a timely manner.
C.	Monitoring, Reporting, and Implementation	
C.1.	Preparation of an Annual Report that summarizes Stanford's development over the preceding year, upcoming development, and compliance with GUP conditions.	This Annual Report fulfills Condition C.1. for the reporting period of September 1, 2019 to August 31, 2020.
C.2.a.	County of Santa Clara Planning Office has the responsibility of preparing the Annual Report.	The County Planning Office staff prepared and distributed this 20 th Annual Report pursuant to the 2000 GUP.
C.2.b.	Funding for Annual Report by Stanford.	Stanford provided funding to the Santa Clara County Planning Office for all aspects of this Annual Report in a timely manner.
C.2.c	Stanford to submit information related to Annual Report.	Stanford provided required information for this Annual Report in a timely manner.
C.2.d.	Annual Report presentation to the Community Resource Group (CRG).	The Draft Annual Report 20 was presented to the CRG on April 15, 2021.
C.2.e.	Presentation of the Annual Report to the Planning Commission in June of each year.	This Annual Report 20 is scheduled for presentation to the Planning Commission at the June 2021 public hearing.
C.2.f.	Time period and content of the Annual Report.	This Annual Report documents Stanford's development activity and compliance with 2000 GUP conditions, and any specific conditions, associated with building projects proposed between September 1, 2019 and August 31, 2020.
C.3.	Funding of work associated with implementing tasks identified in the CP and GUP.	Stanford paid all costs associated with work conducted by the County Planning Office in relation to the CP and GUP during this reporting period (including staff time and consultant fees), mostly, in a timely manner.
D.	Permitting and Environmental Review	
D.1.	Review of proposed building projects and issuance of all necessary permits and approvals in accordance with County requirements.	Three projects received ASA/ASX during the reporting period, as described in Section II and detailed in Section IV of this Annual Report.
D.2.	Compliance with adopted GUP conditions and adopted mitigation measures within the Mitigation Monitoring and Reporting Program (MMRP).	During this reporting period, Stanford submitted three ASA/ASX applications for projects proposed under the 2000 GUP. All approved projects were in compliance with GUP conditions. For additional details, see Section II of this annual report and Condition K.7 in Appendix B.
D.3.	Compliance with CEQA requirements.	All projects that received ASA/ASX approval also received adequate CEQA review and clearance during

	GUP Condition	Stanford Compliance
		the reporting period as specified in this GUP condition. (See also GUP Conditions D.4 and I.2).
D.4.	Determination of appropriate level of environmental assessment.	Relevant measures identified in the EIR, and incorporated into the GUP, have been incorporated into the conditions of approval for each project. Additional project conditions of approval were included where necessary.
D.5.	Project specific environmental assessment.	A project-specific traffic study was submitted for the Land Building Real Estate (LBRE) Replacement Building project during the reporting period.
D.6.	Impact areas to be considered in environmental assessment.	Not applicable.
E.	Academic Building Area	
E.1.	Distribution of 2,035,000 square feet of academic and academic support facilities distributed among ten development districts.	During the reporting period, academic/academic support facilities were approved for the Campus Center, and DAPER Districts. (See Section IV Project Summaries for details).
E.2.	Deviation from the proposed distribution of academic development.	During the reporting period, no redistributions were proposed.
E.3.	Maximum allowable development in the Lathrop District shall be 20,000 square feet.	The Center for Advanced Study in the Behavioral Sciences (CASBS) Collaboration Building project was proposed for a net demolition of 32 square feet in the Lathrop District during the reporting period.
E.4.	No academic development allowed in the Arboretum District.	No academic development was proposed for the Arboretum District.
E.5.	Complete and submit a Sustainable Development Study (prior to cumulative development total of more than 1,000,000 net square feet).	The Sustainable Development Study (SDS) was approved by the Board of Supervisors on April 7, 2009. More detail on the SDS process was provided in AR 9. In 2018, the County prepared a Supplement to the Sustainable Development Study. The Supplement augmented the work previously prepared to identify the maximum planned buildout potential of Stanford lands in unincorporated Santa Clara County. The Supplement is available at <u>https://www.sccgov.org/sites/dpd/DocsForms/Docum</u> <u>ents/SU_SDS_Supplement.pdf</u> . Appendix E provides an Annual Report of Stanford's sustainable activities. Stanford is in compliance with GUP Condition E.5.
F.	Housing	
F.1.	Type and distribution of the 3,018 housing units allowed under the GUP.	To date, 4,423 net new housing units have been built or framed. The Escondido Village Graduate Residences Project was completed during this reporting period for 2,020 net new student units. In FY 13, a GUP Housing Amendment was proposed to allocate 372 faculty/staff units in West Campus to 166 student units in Lagunita and 206 student units in

	GUP Condition	Stanford Compliance
		East Campus. The Amendment was approved on November 26, 2013. In FY 15, a GUP Housing Amendment was submitted to allow all remaining unused housing allocation to be usable for any type of university affiliate housing. The Amendment was approved on May 5, 2015. Redistributions of housing units across development districts were approved during FY 6, 13, 14, 16, and 17.
F.2.	Other allowed housing sites.	During the FY 20 reporting period, there were no housing projects proposed on housing sites other than the designated sites on Map 3, Appendix A.
F.3.	Allowable variation of housing development.	See compliance with GUP Condition F.2 above, and F.4 below.
F.4.	Deviation from estimated housing distribution.	No housing unit redistribution occurred in FY20.
F.5.	No housing may be constructed in the Foothills, Lathrop, or Arboretum districts.	No housing projects were proposed for any of these districts during the reporting period.
F.6.	Compliance with affordable housing requirement.	Stanford has complied with the affordable housing requirements under the GUP conditions for net new academic square footage constructed by paying the in- lieu fee for applicable projects prior to occupancy. An Affordable Housing Fee Square Footage Bank (Square Footage Bank) has been maintained by the County since 2000 for demolition or conversion of projects that remove buildings from GUP allocation square footage. Stanford may use the square footage from the Square Footage Bank and is not required to pay the in- lieu fee because the square footage is not treated as net new academic square footage. For this reporting period Stanford paid in-lieu fee for 5 projects totaling \$6,093,566, and used 84,686 sq.ft. from the Square Footage Bank. As of August 31, 2020, Stanford has made affordable housing fee payments totaling \$32,261,440. At the end of FY20, no square footage is remaining in the Square Footage Bank. Five affordable housing projects have been built within the 6-mile radius from the Stanford Campus boundary, and have provided 286 affordable housing units, with 137 units restricted to very low income to extremely low income families. In September 2017, \$14.5 million of the in-lieu fees was used to partially fund the acquisition and rehabilitation of the Buena Vista Mobile Home Park in Palo Alto. In addition, on April 17, 2018, the County Board of Supervisors approved setting aside \$6,000,000 to support the development of a 60- to 100-unit multifamily rental development in Palo Alto for teachers.

	GUP Condition	Stanford Compliance
F.7.	Allowance for additional housing beyond 3,018 units.	In FY 16, pursuant to GUP Condition F.7, the addition of 1,450 housing units beyond the initial 3,018 unit housing authorization was approved, for the Escondido Village Graduate Residences project. Stanford's new housing authorization is 4,468 units. No additional housing allowance was proposed in FY 20.
F.8.	Housing linkage requirements.	The GUP requires 1,815 housing units to be provided as part of a housing "linkage" to Stanford development of 1,500,000 cumulative sq. ft. of academic square footage. Stanford has constructed a total of 4,423 net new housing units, which complies with the housing linkage requirement.
F.9.	For purposes of the linkage requirement, the County will consider Stanford to have met housing compliance at the time of framing inspection.	The County has and continues to use the framing inspection for determination of the housing linkage requirement.
F.10.	Petition for modification of the housing linkage requirements.	Stanford made no petition for modification of the housing linkage requirement.
F.11.	Adoption of new zoning designations for Campus Residential – Low Density and Campus Residential – Medium Density.	Completed during Annual Report 1 reporting period.
F.12.	Allowed suspension of the housing linkage requirement.	There was no suspension of the housing linkage requirement.
G.	Transportation	
G.1.	Intersection modifications.	Completed during Annual Report 1 reporting period.
G.2.	Continued compliance with 1989 GUP transportation requirements.	Stanford has reported that they continue to offer the following programs that were in effect during the 1989 GUP: free Marguerite shuttle system, carpool app and vanpool incentives, bicycle services and staff support of alternative transportation programs.
		In 2019-20, Stanford continued to offer the Zipcar car sharing program and continued to maintain the largest university Zipcar fleet in the United States, with 44 Zipcar vehicles at 24 locations. Stanford's free Marguerite shuttle system has 25 routes and 60 buses, of which 11 were suspended during part of the year due to reduced ridership resulting from shelter-in- place/COVID-19. The total number of riders during FY 20 was 1.42 million. The Marguerite fleet includes 41 electric buses ands five diesel-electric hybrid buses, and 14 other vehicles fueled by diesel. There have been a number of updates to the programs and services Stanford offers as a result of COVID-19 and the substantial decline in the number of on-campus commuters. Stanford anticipates expanding services as the number of commuters to campus increases.

GUP Condition	Stanford Compliance
	Stanford continues to be designated as a Platinum Bicycle Friendly University and is currently in its 3 rd consecutive renewal. Stanford's bicycle program accommodates an estimated 13,000 bikes on campus on a normal weekday and has parking capacity for over 19,000 bikes. In October 2019 Stanford offered incentives for sustainable commuting, for Commute Club members. Free vanpools, free transit passes, an emergency ride home program, and programs for bicycle commuters continued to support sustainable commuting. New in 2020, Stanford began providing the AC Transit EasyPass to eligible university and hospital employees, providing free unlimited travel on all AC Transit services, both local and transbay.
G.3. Mitigation of transportation impacts from additional development and population growth.	The County hired an independent consultant, AECOM Engineering, to complete traffic studies. See Appendix D of this document for a summary of results.
G.4. No net new commute trips.	FY 20 was a highly unusual year because of the COVID-19 pandemic. A COVID-19 shelter-in-place order was issued in March 2020 and continued through the year. This resulted in the Stanford campus shutting down to limit the spread of the virus. The Spring 2020 Stanford traffic monitoring was cancelled because the campus was closed due to the County's shelter-in-place requirements. In Fall 2020, the County approved the use of a reduced traffic monitoring program for a period of 2 weeks to count raw traffic volumes only and confirm assumptions and observations in significant reduction in traffic volumes. The 2000 GUP Condition G.7.a. requires traffic counts for a minimum of three times per year for an interval of 2 weeks each time. Since 2003, the established methodology for traffic monitoring program is 6 weeks in the spring and two weeks in the fall for a total of 8 weeks of count data. However, given the pandemic, the County determined that 2 weeks of raw (unadjusted) traffic counts swould be sufficient to demonstrate that the traffic volumes, due to the pandemic, campus closures and statewide shelter-in-place orders, were well below the historic traffic volumes from 2001. Unadjusted numbers capture hospital and cut-through traffic.

	GUP Condition	Stanford Compliance
		County hired traffic consultant, AECOM, compared the raw, unadjusted data with the newly compiled historic raw, unadjusted data from the previous 19 years. Two weeks of data in the fall of 2020 found an average (unadjusted) AM peak-hour traffic volume of 1,747. This is compared with the AM (unadjusted) peak-hour average of 4,091 from the previous 19 years of data. Two weeks of data in the fall of 2020 found an average (unadjusted) PM peak-hour traffic volume of 2,045. This is compared with the PM (unadjusted) peak-hour average of 4,355 from the previous 19 years of data. Thus, 2020 raw traffic counts during the pandemic showed traffic at less than half of normal levels. Results determined that raw traffic counts for 2020 do not exceed the historic raw (unadjusted) averages for the AM and PM peak hour traffic.
G.5.	Traffic counts cost.	Stanford submitted all requested funds in a timely manner.
G.6.	Baseline count established prior to construction of first new non-residential structure or by an alternative methodology determined to be more accurate.	Baseline cordon counts were completed during AR 1 and 2 reporting periods.
G.7.	Traffic counts and determination of traffic volume.	The traffic counts were not conducted in Spring 2019 because the campus was closed and in Fall 2020, a 2- week count was conducted for raw traffic volumes only The counts were conducted by the County's traffic consultant team lead by AECOM Engineering. As described in Appendix D of this report, the results of the 2020 raw (unadjusted) counts were analyzed against the newly compiled historic raw, unadjusted counts from the previous 19 years., and were determined not to exceed the traffic limits threshold for the AM and PM peak hour traffic.
G.8.	Off-campus trip reduction.	During FY 20, Stanford was also below the 2000 GUP EIR thresholds for vehicle counts. No trip credits were submitted to the County this year by Stanford.
G.9.	Monitor cordon count volumes.	A summary report of traffic monitoring is provided as Appendix D to this annual report.
G.10.	Neighborhood traffic studies.	No additional neighborhood traffic study requests have been received by the County Planning Office.
G.11.	Project-specific traffic studies.	A project-specific traffic study was submitted for the Land Building Real Estate (LBRE) Replacement Building project during the reporting period.
G.12.	Construction traffic management plan.	Stanford informed both its Public Safety Office and the University Fire Marshall's Office about site work

	GUP Condition	Stanford Compliance
		and schedules for all construction projects that could affect emergency access. The University Fire Marshall's Office has regular coordination meetings with the Palo Alto Fire Department, where they update the Department on any emergency route changes. In addition, Stanford requires, through contract with the general contractors, that emergency vehicle access is always kept available through work areas. The Stanford Contracts office provides a general "Stanford Area truck routes map" to all general contractors and all the associated sub-contractors for the project at the time of contract release. The map also includes pedestrian zones, weight limits, service vehicle parking areas, and loading areas. In addition, Stanford provides copies of the map to contractors that come into the Parking and Transportation office to purchase Service Vehicle permits. This map and others are available on the web at <u>http://transportation.stanford.edu/</u> . The County and Stanford continue to work towards consistent inclusion of a traffic management plan as part of the construction plan set available on site. Stanford reported that no complaints about construction traffic associated with building projects were received during the AR 20 reporting period.
G.13.	Special event traffic management plan.	Compliance with this requirement was achieved during the AR 3 reporting period.
G.14.	Junipero Serra Boulevard/ Stanford Avenue traffic group.	The full JSB/Stanford Avenue Multi-Jurisdictional Group did not meet during the reporting period; however, an ad hoc working group including Stanford, the SCRL and County Roads and Airports (CR&A) met on several occasions regarding the JSB traffic calming project. In June 2010, County Supervisor Liz Kniss announced that the County Board of Supervisors had approved \$1.5M in funding to complete the project. CR&A awarded a design contract in March 2011. Construction documents (30% stage) were issued in August 2011. A draft Initial Study was issued for public review in November 2011. A final CEQA document was adopted in March 2012. CR&A anticipated starting construction in spring of 2012. However, due to permitting constraints from the Regional Water Quality Control Board delayed the approval process. Stanford presented a conceptual redesign to CR&A in the Spring of 2015 that could eliminate the permitting constraints. Stanford conducted neighborhood outreach to share the concept with SCRL representatives. The conceptual design was reviewed for engineering feasibility by CR&A in summer 2015. In summer 2016, a CEQA Addendum

	GUP Condition	Stanford Compliance
		was completed for the redesign. Final engineering drawings were prepared in FY 17, and the County identified funding to construct the project. Construction began in August 2018 and ended in Fall 2018.
Н.	Parking	
H.1.	Net additional parking spaces shall not exceed 2,300 spaces, with the exception of parking provided for any housing in excess of 3,018 units.	During the reporting period, changes in parking resulted in an estimated net increase of 622 parking spaces on the campus for a total cumulative decrease since September 1, 2000 of 1,136 spaces. Changes in parking occurred in the Campus Center and East Campus. See Section II, Table 4, and Appendix C-3 for details.
Н.2.	Residential Parking Permit Program.	In 2006, Stanford paid the City of Palo Alto \$100,000 towards the development of a Residential Parking Permit Program. Stanford is in compliance with Condition H.2.
		The City of Palo Alto conducted a College Terrace Parking Permit Program experiment in 2008 and 2009 and subsequently adopted a permanent program in late 2009. The program includes continued monitoring of the parking patterns in the neighborhood.
I.	Parks and Recreation Facilities	
I.1.	Improve parks in the San Juan faculty/staff residential area.	At the April 8, 2004 ASA meeting, the ASA Committee accepted the <i>Stanford University Program</i> <i>for the Replacement of Recreational Facilities in the</i> <i>San Juan District.</i> Stanford has complied with the requirement to submit the plan, and future compliance will be required through implementation of the plan, if triggered by infill development.
I.2.a.	In consultation with the County Parks and Recreation Department, identify and complete Trail Easements within one year of GUP approval.	Stanford entered into an agreement with the County on January 3, 2006, to construct the S1 trail in Santa Clara County and to make offers to Los Altos Hills for the funding of a trail extension through that town and to the Town of Portola Valley and San Mateo County for improvements to the C1/E12 Alpine Trail. <u>Construction of S1 Trail</u> : Construction of the off-road portions of the S1 trail was completed in May 2011. Santa Clara County accepted the trail easement and the
		trail opened in May 20, 2011. All aspects of the S1/ Matadero Trail in unincorporated Santa Clara County including trail construction, associated roadway improvements, and dedication of easements are complete. <u>Construction of C1/E12 Trail</u> : Stanford's proposal for the design and funding of the C1/E12 Alpine Trial (segment in Portola Valley) improvements was

GUP Condition	Stanford Compliance
	accepted by the Town of Portola Valley in 2009. All aspects of the C1/E12 Alpine Trial in Portola Valley including trail construction, associated roadway improvements, and dedication of easements are complete.
	<u>Construction of C2/Arastradero Trail</u> : Construction and trail improvements were completed and the trail was dedicated on November 1, 2013. The trail links the S1/Matadero Trail (at the Arastradero Road and Purissima Road intersection) to the Pearson- Arastradero Preserve.
	Construction of Stanford Perimeter Trail:
	San Mateo County and Stanford did not reach agreement for the San Mateo C1 segment and in February 2012, Stanford paid Santa Clara County approximately \$10.3 million. In August 2012, Santa Clara County issued a request for applications for projects that would serve as alternative mitigation measures to address the loss of recreational facilities on the Stanford campus. Santa Clara County received 15 project applications from six local agencies. The Santa Clara County Board of Supervisors declared its intent to fund six of the 15 projects, including \$4.5 million to Stanford to construct a perimeter trail along El Camino Real and Stanford Avenue frontages. Stanford subsequently did not accept the grant award for the Stanford Perimeter Trail, which was opened to the public in April 2016. The Board also directed County Administration to negotiate project agreements for the selected projects and submit approval to the Board consistent with the requirements of CEQA. A project agreement and appropriation modification for the Adobe Creek / Highway 101 Overcrossing Project were approved by the Board on December 17, 2019, and, an appropriation modification for the Ravenswood Bay Trail project was approved by the Board on February 25, 2020.
	Further, at the May 12, 2020 Board meeting, the Board declared its intent to fund all or parts of seven additional projects relating to alternative mitigation for loss of recreational facilities on the Stanford campus. Project agreements have not yet been approved for any of the seven projects.
I.2.b. Work with County Parks and Recreation Department to identify responsibilities for trail construction, management and maintenance.	Identification of trail construction, management, and maintenance responsibilities had begun previously, based on Stanford's 2001 proposal (see Condition I.2.a above and "Overview of Monitoring Activities"). A

	GUP Condition	Stanford Compliance
		trail management plan for S1 was accepted by Santa Clara County, along with the easement, in May 2011.
J.	California Tiger Salamander (CTS)	
J.1.	Habitat protection easements for protection of the CTS.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.2.	Specifics of habitat protection easements.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.3.	Creation of breeding ponds for CTS prior to issuance of a building permit for a proposed building project on occupied CTS habitat.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.4.	CTS monitoring.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.5.	Project specific measures in CTS Management Zone.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.6.	Operational measures required within the CTS Management Zone.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.7.	Continued compliance with 1998 CTS Management Agreement.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.8.	CTS passage ways across Junipero Serra Boulevard.	Condition superseded by Stanford's Habitat Conservation Plan (see Condition J.9).
J.9.	U.S. Fish and Wildlife Service permit prior to construction on occupied CTS habitat if CTS is listed as threatened or endangered.	The final Stanford University Habitat Conservation Plan (HCP) and Final Environmental Impact Statement (EIS) were published on November 23, 2012, and revised in March 2013. On August 13, 2013, the County Board of Supervisors acknowledged the determination that the HCP provides equal habitat value and protection for the California Tiger Salamander (CTS). Therefore, the HCP supersedes all conditions in the GUP that address the CTS, as stated in Condition J.9.
К.	Biological Resources	
K.1.	Special-status plant surveys.	No special species plant surveys were done during this reporting period.

	GUP Condition	Stanford Compliance
K.2.	Preconstruction surveys for breeding raptors and migratory birds.	The County hired Environmental Science Associates to complete one survey for breeding raptors and migratory birds potentially affected by Stanford projects. During the AR19 reporting period, a violation relating to the Cabrillo-Dolores Subdivision (in the San Juan
		neighborhood) was issued by the County. The violation included unpermitted removal of three oak trees and noncompliance with this condition relating to preconstruction surveys for nesting raptors and migratory birds, that were not conducted prior to tree removal. To abate the violation, Stanford was required to pay a fine of \$15,000 and submit a retroactive Tree Removal permit application to legalize all work done in violation of the tentative map approval. The \$15,000 fine has been paid by Stanford and a Tree Removal permit with conditions was issued by the County on May 12, 2020. Per the approved Tree Permit conditions, replanting of trees at a 10 to 1 ratio is required, to be completed following project completion by FY22.
K.3.	Oak woodland habitat – create or restore at a 1.5:1 ratio for proposed building projects located in oak woodland area.	During this reporting period, no trees within oak woodland habitat were proposed for removal.
K.4.	Tree preservation for proposed building projects affected by protected trees.	All projects were conditioned to protect existing trees during construction. Stanford proposed appropriate mitigation for the loss of protected trees greater than 12 inches diameter at breast height (dbh) in the ASA applications for all projects.
K.5.	Stanford to hire biological consultant to prepare wetlands description.	Compliance with this requirement was achieved during the AR 3 reporting period. Subsequent wetland delineations are conducted in compliance with Army Corps of Engineers guidelines.
K.6.	Updates to CA Natural Diversity Database.	Stanford submitted CNDDB sheets for the following species to the State in the following years: California red-legged frogs – annually since 2002 California tiger salamanders – annually since 2008
K.7.	Special conservation area plan.	Stanford submitted a "Conservation Program and Management Guidelines for the Special Conservation Areas" to the County on December 11, 2001. The County waited for the Stanford HCP to be approved and adopted before directing Stanford with specific requirements for modification and resubmittal. The Stanford HCP was approved on August 13, 2013 (see Condition J.9). Stanford submitted and the County accepted a revised Special Conservation Area Plan in August 2015, fulfilling Condition K.7.

	GUP Condition	Stanford Compliance		
L.	Visual Resources			
L.1.	Streetscape design for El Camino Real prior to or in connection with submitting an application for development along El Camino Real.	During AR 8, Stanford completed and submitted a draft <i>Plan For The El Camino Real Frontage</i> , approved by the County of Santa Clara Architectural and Site Approval Committee on April 10, 2008. Stanford is in compliance with Condition L.1.		
L.2.	Minimum 25-foot building setback from Stanford Avenue.	No building projects were proposed on Stanford Avenue during the reporting period.		
L.3.	Lighting plan for development projects that include exterior light sources.	Project-specific lighting plans were submitted with ASA applications during the reporting period.		
L.4.	Development locations in the Lathrop Development District.	The CASBS Collaboration Building project was proposed for a net demolition of 32 square feet in the Lathrop District.		
М.	Hazardous Materials			
M.1.	Hazardous materials information/Risk Management Plan for each proposed building project.	Hazardous materials information was provided in the ASA applications for all projects proposed or approved during the reporting period. No projects were proposed or approved during the reporting period that triggers the California Accidental Release Prevention (CAL-ARP) law.		
M.2.	Maintenance of programs for storage, handling, and disposal of hazardous materials.	University Dept. of Environmental, Health and Safety (EH&S) continues to provide key resources in the planning, development, and implementation of effective environmental and health and safety training programs. Where appropriate and possible, EH&S provides in-house training programs that enable University managers and supervisors to deliver health and safety training directly to their staff. Schools, Departments and Principal Investigators provide other levels of training throughout the University. During this reporting period, EH&S maintained a training catalog that included 105 separate training courses. Stanford staff, faculty, and students through both on-line and classroom sessions completed a total of 46,012 trainings. The increase in sessions in FY20 was due to COVID-related safety trainings. Stanford also extends its training efforts by providing training and information resources on the World Wide Web at <u>http://chs.stanford.edu</u> . Information on COVID safety can be found at https://healthalerts.stanford.edu. Surveys of campus and medical center labs, shops and studios are conducted on a routine basis to provide compliance assistance regarding hazardous materials, hazardous waste, fire safety, biological safety and chemical safety requirements. Personnel conducting the surveys often work one-on-one with personnel in labs, shops and studios to help them understand pertinent compliance requirements.		

Appendix B GUP Conditions and Compliance Activities **GUP** Condition **Stanford Compliance** Hazardous Materials Management Plans for existing buildings storing hazardous materials are submitted annually to the Santa Clara County Environmental Health Hazardous Materials Compliance Division as online updates via the Cal/EPA California Environmental Reporting System Portal. To facilitate hazardous materials tracking and reporting, Stanford has implemented an on-line chemical inventory database system whereby authenticated chemical users may maintain their hazardous materials inventories, supporting timely and accurate submission of required regulatory reports. The University Committee on Health and Safety meet five times during the reporting period. The committee membership includes a member from the public as well as faculty, staff and students. Issues considered by the committee included environmental, health and safety activities, and initiatives conducted at the SLAC National Accelerator Laboratory. The EH&S Department reviews each set of plans for new structures and those for renovation and/or remodeling of existing structures to help ensure that the risks associated with activities conducted in Stanford's buildings are addressed, and that all facilities projects are undertaken in compliance with applicable environmental and health and safety laws, codes, and regulations. EH&S also conducts Human Environmental and/or Health Risk Assessments for new projects as required by the Bay Area Air Quality Management District and as appropriate as part of the building planning process. EH&S personnel specifically responsible for handling hazardous wastes and for emergency response are trained by certified independent professionals and by professional EH&S staff in accordance with all applicable regulations. The operational waste personnel are augmented and assisted by professional environmental engineers, chemists, and environmental managers. As a part of waste minimization activities, EH&S

As a part of waste minimization activities, EH&S operates a Surplus Chemical redistribution program, which reduces the disposal of unused chemicals, therefore reducing the amount of hazardous waste generated, and the costs of disposal. Redistribution volumes are dependent on department and laboratory changes, which can vary annually. In FY 2020, EH&S redistributed 139 unneeded chemical containers from laboratory inventories to other campus users.

	GUP Condition	Stanford Compliance		
N.	Geology and Hydrology			
N.1.	Compliance with all requirements of the Uniform Building Code, County Geologist, County Building Inspection Office, Stock Farm Monocline Agreement, and others defined under the GUP in regard to reduction of seismic risk.	Stanford is in compliance with Condition N.1 requirements. These are reviewed through the ASA applications submitted, and building and grading permits issued during the reporting period. See Section II of this report for project details.		
N.2.	Hydrology and drainage study.	The Storm Water Detention Master Plan for the Matadero Creek watershed was submitted by Stanford and accepted by the County during the Annual Report 4 reporting period. Stanford is responsible for implementing phased measures consistent with the plan prior to development of new impervious cover within the watershed.		
		Regarding storm drainage and flood control, Stanford and the County reached agreement on the approach and engineering design criteria for detention provisions to avoid increases in peak runoff flow rate from the campus in the San Francisquito Creek watershed. Stanford continued with implementation of its storm drainage master plan for both detention and protection of campus facilities, engineering the remaining barriers to divert overland flows away from structures to streets and malls, and Phase 1 and II of the West Campus detention basins. With these improvements and the detention basins constructed previously in the Matadero watershed, Stanford has mitigated anticipated runoff from all its development under the 2000 GUP, including the Escondido Village Graduate Residences, in compliance with Conditions N.2 and N.3.		
N.3.	Storm water management facilities designed to only store storm water runoff temporarily and not create extended ponding.	The Serra/El Camino Real (ECR) and the West Campus Storm Water Detention Facilities projects are designed to accommodate increases in the 10-year and 100-year storm runoff associated with 2000 GUP development in the Matadero and San Francisquito Creek watersheds respectively. These projects are designed to drain within a couple of days, thereby avoiding extended ponding.		
		An initial phase of this plan was implemented when the Stock Farm/Sand Hill Road Detention Basins were completed during the AR 4 reporting period. Phase II of the West Campus Detention Basins was completed during FY 16.		
N.4.	Groundwater recharge study in conjunction with projects located in unconfined zone.	Stanford has prepared and submitted a draft campus- wide groundwater recharge plan that describes the groundwater recharge mitigation approach in coordination with the Santa Clara Valley Water District (SCVWD) and the County. This plan accounts for water from Stanford's Lake Water system		

GUP Condition	Stanford Compliance
	that is directed to Lagunita (where it percolates) in an amount that exceeds the cumulative groundwater recharge lost from projects built in the unconfined zone. Stanford and County staff finalized this plan on May 27, 2015. The annual groundwater recharge mitigation monitoring report has been submitted to the County for tracking purposes.
N.5. Review and approval for s groundwater recharge facilities.	
N.6. Notice of Intent to State Wat Control Board (SWRCB) prepa for anticipated projects.	

GUP Condition	Stanford Compliance
N.7. Monitor effectiveness of storm water pollution prevention best management practices; monitor at construction sites before and during storm events occurring during construction period.	 Projects <u>started/continuing</u> from September 1, 2019 – August 31, 2020: Escondido Village Graduate Housing, WDID # 2 43C378743 Serra Roundabout/Serra Street, WDID # 2 43C380436 Stanford University Center for Academic Medicine, WDID # 2 43C381311 Manzanita Field Parking Garage, WDID # 2 43C382298 Serra Mall, WDID # 2 43C382842 Public Safety Building, WDID # 2 43C382842 Public Safety Building, WDID # 2 43C384834 Cabrilo Dolores Faculty Housing, WDID # 2 43C387001 Via Ortega North, WDID # 2 43C384834 Cabrilo Dolores Faculty Housing, WDID # 2 43C389493 Projects utilizing an Erosivity Waiver from September 1, 2019 – August 31, 2020: Golf Course Grading Abatement, WDID # 2 43W004148 Each construction site under the 2000 GUP that disturbs one acre or more is permitted through the General Permit for Discharges of Storm Water Runofff Associated with Construction Activity. The information submitted as part of the permit will be updated yearly to reflect the current construction projects. In accordance with that permit, the sites are required to have a Storm Water Pollution Prevention Plan (SWPPP). Each SWPPP outlines the Best Management Practices for preventing storm water pollution on that specific site. To ensure that the BMPs are working and in place, each construction project is required to monitor the construction site and BMPs before, during, and after rain events or weekly, whichever is more frequent. The project is required to monitoring. In addition, Stanford is required to send an Annual Compliance Status Report to the State Water Resources Control Board, certifying compliance with the provisions of the General Permit for Discharges of Storm Water Runoff Associated with Construction Activity, including BMPs and monitoring.

	GUP Condition	Stanford Compliance		
N.8.	Surveys to determine presence and location of wells prior to issuance of any building permit or grading permit.	Stanford performed surveys to identify existing wells on building sites with ASA applications as required. Stanford reviews these historic wells surveys with every building project and confirms in the applications that no historic wells not properly closed are at the project location.		
N.9.	Permit from Santa Clara Valley Water District for any proposed construction, demolition, grading, landscaping within 50- feet of the top of the bank.			
N.10	No new land use or practices within the unconfined zone that could pose a threat to the groundwater quality or supply.	In 2009, Stanford mailed an informative pamphlet to all residential leaseholders whose property is located within the unconfined zone. This pamphlet contains valuable information regarding the sensitive nature of these properties with respect to the potential for downward migration of contaminants to groundwater. The pamphlet also provides "Best Management Practices" regarding proper application of landscape chemicals, notifying Stanford of abandoned wells and fuel tanks, and safe management of household chemicals and hazardous waste. Stanford also mailed this pamphlet to all other residential leaseholders that are not located within the unconfined zone as a part of continuing outreach.		
0.	Cultural Resources			
0.1.	Assessment of structure with potential historic significance for building projects that involve the demolition of a structure 50 years or older.	No projects approved in this reporting period involved buildings 50 years or older.		
0.2.	Requirements for remodeling, alteration, or physical effect on structures that are 50 years old or more.	No projects that received approval would have a physical effect on structures 50 years old or more.		
0.3.	Archaeological resources map, site-specific analysis, and construction monitoring	The Stanford archaeologist provided draft maps to the County Planning Office in March 2001 and a revision in 2014. These maps show the locations of all known prehistoric and historic archaeological resources in the unincorporated Santa Clara County portion of Stanford land. County and Stanford staffs will continue to work on revision and updates to these maps so they can be utilized by County staff to identify all known cultural resource site boundaries on Stanford land within the County's jurisdiction. All maps and updates will be maintained as confidential records. A cultural resources assessment was performed by state and federal agencies reviewing the Stanford University Upper Quarry Restoration (Frog Ponds).		

	GUP Condition	Stanford Compliance
		The old Page Mill Road quarries were found to be ineligible for listing on the California Register.
		Construction monitoring was implemented at the Centre for Academic Medicine (CAM) site and a small quantity of historic artifacts were discovered. A monitoring report has been submitted to the County (December 2020) in accordance to the CAM conditions of approval.
O.4.	Required actions if fossilized shell or bone is uncovered during earth-disturbing activities.	All projects adjacent to known prehistoric and historic archaeological resources were monitored during construction. No fossilized shell or bone was uncovered during 2000 GUP construction activities.
Р.	Public Services and Utilities	
P.1.	Law Enforcement Agreement.	"Memorandum of Understanding Regarding Police Services Between Santa Clara County and Stanford University" was signed February 6, 2001, and signed again in May and June of 2007.
		Per the GUP Condition, Stanford is providing funding for the Stanford Police Department to maintain 32 full- time sworn police officers (one officer per 1,000 daytime population). There was no decrease in the level of police services during the reporting period.
P.2.	Funding of Fire Protection Services.	The City of Palo Alto assesses the city's fire protection needs on an annual basis and adopts a yearly budget for fire protection services. As part of this process, the City identifies Stanford's share of this budget, and Stanford pays its annual allotment. Stanford and the Palo Alto Fire Department have executed an agreement for continued service.
P.3.	Fire protection response times.	The Palo Alto Fire Department has not expressed any concerns regarding lengthened response times in FY 20. Stanford and the Palo Alto Fire Department have executed an agreement for continued service, which contains provisions to address response times if issues arise.
P.4.	Water conservation and recycling master plan.	Stanford has completed the plan and it was approved in 2008. The University has undertaken numerous water conservation projects, including installation of water misers, toilet retrofits, low flow jet spray nozzles, and Maxicom controls. Stanford has performed effective conservation outreach and education, as evidenced by County staffdiscussions with campus facility managers. The County continues to monitor Stanford implementation of the approved master plan as a measure of compliance with this condition and consults with the SCVWD to determine compliance. The SCVWD assessment is that Stanford

	GUP Condition	Stanford Compliance
		appears to be implementing aggressive water conservation measures.
P.5.	Annual daily average water use.	The allowed domestic average daily water allocation from the San Francisco Water Department is 3.033 million gallons per day (mgd). Stanford's average campus domestic water use for the 2019-2020 year was 1.43 mgd.
Р.б.	Information on wastewater capacity and generation.	Stanford submitted project-specific wastewater capacity information as necessary with ASA application materials.
Р.7.	Palo Alto Unified School District school impact fees.	Stanford paid school impact fees for all applicable building permits.
P.8.	Community Services Study.	No study was required during this reporting year.
Q.	Air Quality	
Q.1.	Compliance with Bay Area Air Quality Management District (BAAQMD) measures for construction activities.	Grading activities associated with 2000 GUP projects that commenced during the reporting period complied with the BAAQMD control measures incorporated into the ASA conditions of approval.
Q.2.	Maintenance of equipment for construction activities.	Stanford requires all construction contractors to properly maintain equipment.
Q.3.	Conduct a risk screening analysis and obtain BAAQMD permit for building projects containing more than 25,000 square feet of laboratory space and 50 fume hoods. ¹	All approved projects were required to comply with BAAQMD's permitting, control measures, and recommendations, as appropriate.
R.	Noise	
R.1.a-e	Compliance with County Noise Ordinance during construction activities of each building project.	Construction activities associated with 2000 GUP projects complied with the County Noise Ordinance and incorporated noise reduction measures as required by ASA conditions of approval.
R.2.	Limits on construction hours.	Construction activities associated with 2000 GUP projects were limited to the provisions as specified in the Santa Clara County Noise Ordinance. For construction sites within 150 feet of the City of Palo Alto, construction was limited to the hours of 8:00 a.m. to 7:00 p.m. Monday through Friday, 9:00 a.m. to 7:00 p.m., Saturday, and prohibited on Sundays and holidays, as specified in GUP Condition R.2.
R.3.	Operational noise reduction measures.	ASA-approved building projects incorporated all county-specified noise reduction measures (listed in Section D of the MMRP) and complied with the County Noise Ordinance.

¹ Note: Q.3 has been confirmed to match BAAQMD regulations, which requires both triggers in order to do risk screening.

	GUP Condition	Stanford Compliance
R.4.	Fireworks displays to be limited to no more than two events per calendar year.	Two fireworks displays at events per calendar year are permitted under the GUP. All fireworks displays require an entertainment event license from the County's Planning Division. From September 1, 2018 through August 31, 2019, the Spring Baseball game and the San Jose Earthquakes Game received permits. From September 1, 2019 through August 31, 2020, there were no fireworks events.
R.5.	Maintenance of hotline for noise complaints.	Stanford continues to meet the GUP condition by operating the noise hotline at (650) 724-4900, which was established to log complaints related to outdoor special events and high impact events on campus. Stanford continues to use this hotline to record concerns about noise disruptions and complaints on campus. In FY 17, a change was made in the hotline structure in order to provide callers the option to connect to Stanford Public Safety dispatch at (650) 329-2413 for timely action regarding the complaint, or the caller can log a noise complaint with the operator mail box. Stanford reported that zero noise complaints were received during the AR 20 reporting period to the noise hotline.Stanford continues to work with different types of residential communities to maintain acceptable levels of noise and strengthen communications between campus community members.
S.	Additional Conditions	
S.1.	Acceptance of Conditions of Approval.	See Annual Report 1.

Appendix C Cumulative Projects Completed building projects under the GUP cap, housing projects, parking, non-GUP building projects and grading projects are tracked in Appendix C. A map and table are provided for each category to illustrate the project, its location, its square footage/housing units/parking spaces counted toward the GUP cap, and in which annual report period the project was completed. Each table provides a cumulative total of square footage, housing, or parking to date. A table also provides a cumulative total of non-GUP building projects. Additional backup data is kept on file by Stanford and the County.

Section II of this annual report provides brief descriptions of each project on which there was activity during the current reporting year. Projects listed in Appendix C that were completed in prior years are not reported in the body of the Annual Report. Detailed information on these projects may be found in previous Annual Reports.

Fiscal Year	Map No.*	Project	Built Area (sq. ft.)	Net Addition to GUP Building Cap
Annual Report 1 (2000-01)	N/A	None	N/A	0
× /	1	Student Services	20,000	
		Demo Bridge Building	(-2,752)	
Annual Report 2		Band Trailer	4,320	22,790
(2001-02)		Demo existing Band Trailer	(-2,160)	
		Rugby Pavilion	3,382	
	2	Carnegie Global Ecology Center	18,164	
		Demolish Carnegie Greenhouses	(-6,161)	
1.0	3	Lucas Center Expansion	20,600	
Annual Report 3		Electronics Communications Hub-West	1,500	32,023
(2002-03)		Demolition of Ortho Modular	(-2,080)	
		SoM Trailer Replacement	0	
		Galvez Modular Re-Permit	0	
	4	Maples Pavilion Addition	18,298	
Annual Report 4		Demolish Maples Ticket Booth	(-179)	92,915
(2003-2004)	5	Arrillaga Family Recreation Center	74,796	-)
	6	Varian 2	63,869	
Annual Report 5	Ű	Building 500	3,254	39,763
(2004-2005)		Wilbur Modular Ext.	(-27,360)	
	7	Environment and Energy Building	164,087	
	7	GP-B Modular Demolition	(-8,640)	
		Varian 2 (sq.ft. adjustment from AR 5)	8,305	
	8	HEPL Demolition	(-71,425)	
	0	Engineering Shed	(-929)	
		Galvez Too	(-4,320)	
	9	Football Stadium Renovations	33,050	
Annual Report 6)	Munger House Relocations	906	
(2005-2006)		Avery Aquatic	1,445	116,237
(2005 2000)		Band Trailer	(-4,320)	
		Guard Shelter	42	
		579 Alvarado (Humanities Annex)	(-3,258)	
		Barnum Family Center	2,337	
		Barnum Family Center Brick Barn	4,690	
		Knoll Trailer A	,	
		Knoll Trailer A Knoll Trailer B	(-2,912)	
Annual Report 7 (2006-2007)		None	(-2,821) N/A	0
	10	Lorry I. Lokey Stem Cell Research Building (SIM 1)	198,734	
Annual Report 8	11	Li Ka Shing Center for Learning and Knowledge (LKSC)	104,000	
(2007-2008)		Demolish Fairchild Auditorium	(14,600)	323,264
		Demolish Welch Road Modulars	(4,030)	

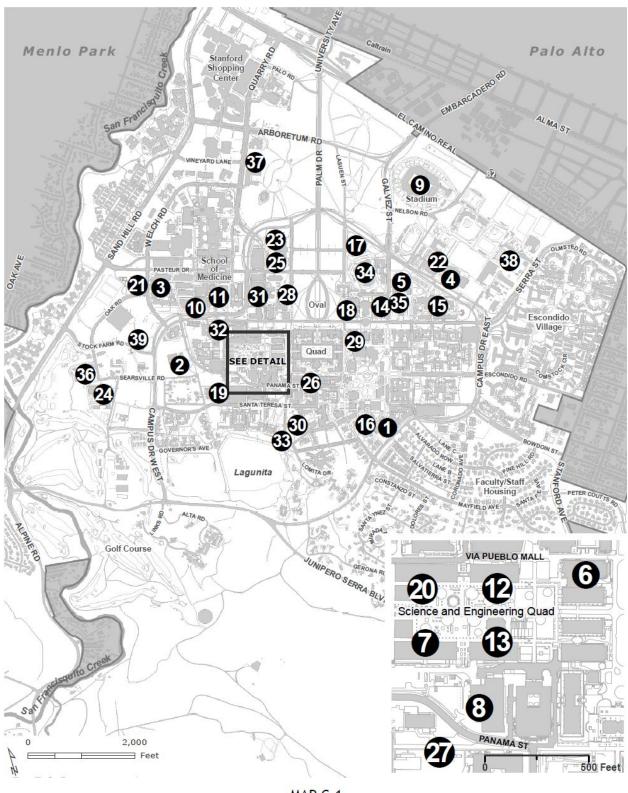
Fiscal Year	Map No.*	Project	Built Area (sq. ft.)	Net Addition to GUP Building Cap
	12	Center for Nanoscale Science and	99,297	
		Technology Demolish Ginzton		
		Jen-Hsun Huang School of Engineering	(69,714)	
	13	Center	125,639	
		Demolish Terman Engineering	(148,818)	
Annual Report 8		Lorry I. Lokey (Stanford Daily) Building	4,783	
(2007-2008)		Demolish Storke Building	(9,040)	
continued		Li Ka Shing Center for Learning and Knowledge - Connective Elements	5,890	
		Peterson Building Renovation	(661)	
	14	John A. and Cynthia Fry Gunn SIEPR Building	31,784	
	15	Knight Management Center	331,093	
		Demolish GSB South	(167,371)	
		Demolish Serra Complex	(84,000)	
		Demolish Kresge Auditorium	(13,042)	72,776
		Cobb Track Bleacher addition	3,950	
1 D (0		Arrillaga Gymnasium and Weight Room	19,951	
Annual Report 9		Site 515 Demolition	(1,540)	
(2008-2009)		Volkswagen Automotive Innovation Lab	8,000	
		Oak Road Restrooms	499	
		Golf Practice Storage Trailer	432	
		Cubberley Seismic Project	(3,654)	
		Press Building Demolition	(14,303)	
		Recalculation of sq.ft. with Annual Reports 1 through 8	(7,239)	
Ammed Demont 10	16	Neukom Building	61,014	
Annual Report 10	17	Bing Concert Hall	78,350	126,676
(2009-2010)		DAPER Corps Yard Demolition	(12,688)	
A		Braun Music Center	167	
Annual Report 11 (2010-2011)		Bing Concert Hall adjustment	7,185	174,723
(2010-2011)	18	Retention of GSB South	167,371	
	19	Arrillaga Outdoor Education and Recreation Center	75,000	
	20	Bioengineering and Chemical Engineering	196,172	223,725
Annual Report 12	21	Satellite Research Animal Facility	20,507	
(2011-2012)		Anatomy demolition	(66,579)	
		Cagan Soccer locker rooms	3,345	
		Cypress Annex demolition	(960)	
		Quonset Hut demolition	(3,760)	
Annual Report 13		Ford Center Addition (from AR 8)	8,710	165,092

Fiscal Year	Map No.*	Project	Built Area (sq. ft.)	Net Addition to GUP Building Cap
(2012-2013)	22	Arrillaga Family Sports Center Addition	27,709	
()	23	Anderson Collection at Stanford	30,279	
	24	Replacement Central Energy Facility	14,715	
		Grounds trailer demolition	(722)	
	25	McMurtry Art - Art History	84,239	
	20	New Field Hockey Bleachers	2,397	
		Windhover Contemplative Center	3,928	
		Encina Modular Demolition	(8,400)	
		520/524 Renovation	2,237	
		Northwest Data Center and	2,237	
		Communications Hub	3,130	
	26	408 Panama Mall	56,790	•
Annual Report 14	20	Educational Farm	864	52,735
(2013-2014)		Roble Gym Renovation	544	52,155
		Field Conservation Facility	2,842	1
	27	Demolition of Godzilla Trailer	(11,435)	
	21		(11,433)	
	28	Science Teaching & Learning Center – Old Chem	68,151	
		Sunken Diamond New Entry/Locker Room Expansion	3,410	
		Cagan Soccer Field Bleacher Lockers	2,658	
		Maples Pavilion Addition	1,135	
		Softball Field House	2,618	
Annual Report 15		Football Stadium New Locker Room	8,966	(45, 170)
(2014-2015)		Siebel Varsity Golf Training Complex	3,431	(45,179)
		Demolish golf storage trailer	(432)	
		Demolition of old Field Conservation Facility	(2,821)	
		Meyer Library Demolition	(124,710)	
		Lasuen Restrooms	1,023	1
		Demolition of Central Energy Facility	(8,715)	1
		Hogan Lab Renovation Project	107	1
	29	David and Joan Traitel Building, Hoover Institution	50,340	
		Demolition of Cummings Art		
		Building Demolition of HEPL Powerhouse	(51,024)	4
			(3,684)	1
Annual Report 16 (2015-2016)		Regional Loading Dock Expansion (loading dock and café) ³	2,366	5,092
(2013-2010)		Demolition of Stauffer III	(19,611)	
		Demolition of Gazebo II	(1,017)	
		Earth Sciences Courtyard Infill	2,586	
	30	Kingscote Gardens Renovation	20,298	
	31	Bass Biology Building	120,337	
		Demolition of Herrin Hall	(35,944)	

	Map		Built Area	Net Addition to GUP Building
Fiscal Year	No.*	Project	(sq. ft.)	Сар
		Demolition of Herrin Labs	(78,047)	
		Demolition of Campus Gas Station	(1,508)	
		Golf Learning Center	295	
	32	ChEM-H & SNI	210,940	
		Home of Champions	2,440	
Annual Report 17		Educational Farm Huffington Barn	1,263	215,061
(2016-2017)	22	Organic Chem demolition	(14,270)	,
	33	Denning House	16,471	
	34	Frost Amphitheater renovations	9,707	
		Bonair Huts for East Campus Utilities	(11,785)	
		Golf 10 th Tee restroom	142	
		Demolition of storage shed	(199)	
		CCSC Child Care Center ³	13,847	
		Demolition of BKLK	(4,846)	206,221
		Demolition of existing CCSC	(6,099)	
		Demolition of Rainbow	(4,775)	
Annual Report 18		Demolition of Pepper Tree	(1,024)	
(2017-2018)	35	Academic Advising and Rowing Center ⁴	22,622	
	36	Environmental Health and Safety Expansion	14,087	
		Encina Commons (net demolition)	(4,121)	
	37	Center for Academic Medicine ⁴	152,120	
	38	Public Safety Building	27,196	
		Demolition of Public Safety Annex	(2,729)	
		District Work Center: Panama site	3,926	
		District Work Center: Roth site	3,926	
		District Work Center: Memorial site	3,926	
Annual Report 19		Softball Stadium Improvements	120	12,418
(2018-2019)		Stock Farm Greenhouses (construction)	8,352	, • • • •
		Demolition of Stock Farm		
	• •	Greenhouses	(7,832)	
Annual Report 20	39	Stock Farm Childcare Facility	10.560	
(2019-2020)		Chemistry Admin Modular	4,082	14,642
		n toward 2000 GUP Building Cap:		1,850,974

Fiscal Year	Map No.*	Project	Built Area (sq. ft.)	Net Addition to GUP Building Cap
1. Projects included at t	he time of building p	permit issuance.		
		sults from the recalculations for buildir reflected in this table at this time.	ngs and demolitions from previ	ious annual reports under
3. The CCSC Child Car	e Center also took c	hildcare square footage, please see the	Key to Map C-5 for more info	ormation.
	inges in design. The	e square footage for two projects. The 6 Academic Advising and Rowing Cent le 5 of the Body.		
*Map C-1 illustrates the 1.	locations of building	projects 10,000 sq. ft. or greater. Proj	ects smaller than 10,000 sq. ft	are not shown on Map C-

Appendix C Cumulative Projects



MAP C-1 CUMULATIVE BUILDING PROJECTS THAT AFFECT BUILDING AREA CAP (GREATER THAN 10,000GSF)

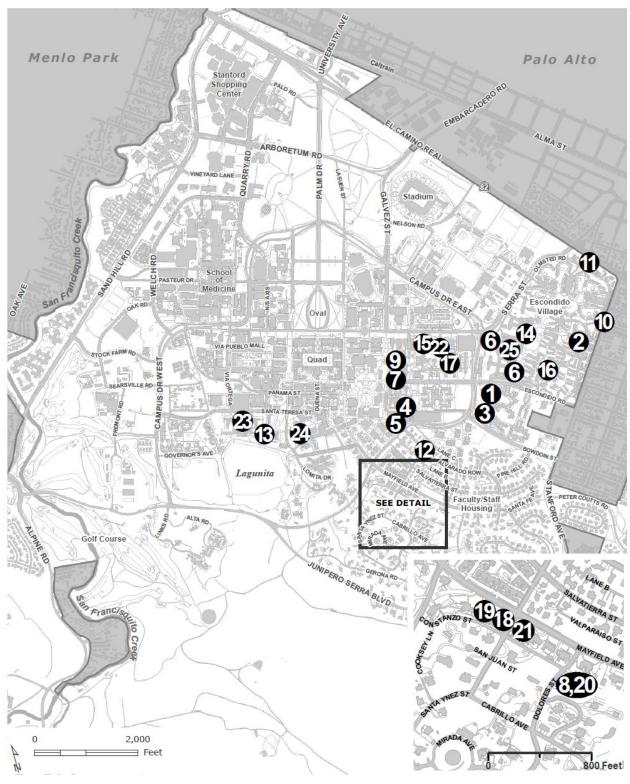
Appendix C Cumulative Projects

KEY TO MAP C-2 ANNUAL REPORT 1 THROUGH ANNUAL REPORT 20 CUMULATIVE HOUSING PROJECTS									
Fiscal Year	Map No.*	Project	Housing Units	Square Footage	Annual Units	RHNA** Units			
Annual Report 1 (2000-01)	1	Mirrielees – Phase I	102	0	102				
Annual Report 2 (2001-02)	2	Escondido Village Studios 5 & 6	281	139,258	331	281			
	3	Mirrielees – Phase II	50	0					
		Branner Student Housing Kitchen	0	1,596					
Annual Report 3 (2002-03)	N/A	None	N/A	N/A	0				
Annual Report 4 (2003-04)	N/A	None	N/A	N/A	0				
Annual Report 5 (2004-05)	N/A	None	N/A	N/A	0				
Annual Report 6 (2005-2006)		Drell House (conversion to academic)	-1	(-906)		-1			
		579 Alvarado	579 Alvarado 1 3,258 (-8)		(-8)	1			
	4	Casa Zapata RF Unit Replacement	-8	(-691)		1			
Annual Report 7 (2006-2007)		None	N/A	N/A	0				
Annual Report 8 (2007-2008)	5	Munger Graduate Housing	349	267,6831	349	209			
Annual Report 9 (2008-2009)	5	Munger Graduate Housing	251	192,517 ¹		147			
		Schwab Dining Storage	N/A	464	514				
	6	Blackwelder/Quillen Dorms	ackwelder/Quillen Dorms 130 N/A		514				
Annual Report 10 (2009-2010)	7	Crothers Renovation	133	N/A		1			
	8	717 Dolores	4						
	9 10	Crothers Olmsted Terrace Faculty	2 39	0 103,127	- 70	39			
	11	Housing Olmsted Staff Rental Housing	25	53,831		25			
		Arrillaga Family Dining Commons	N/A	28,260					
Annual Report 11 (2010-2011)	6	Quillen Dorm Phase 2	90	N/A	90				
Annual 12 Report 12		Hammarskjold renovation	7	1,730	9				
		Haus Mitt renovation	1	210					
(2011-2012)		Phi Sigma renovation	1	420					
		Grove House Renovation	N/A	500	427				

Fiscal Year	Map No.*	Project	Housing Units	Square Footage	Annual Units	RHNA** Units
		Columbae Renovation	N/A	950		
		Slavianskii Dom Renovation	N/A	961	_	
				,		
[Muwekma-Tah-Ruk Renovation	N/A	450]	
Annual Report 13	13	Ujamaa	2	N/A		
(2012-2013)	14	McFarland	63	N/A		
(2012-2013)		EV summer renovation	(2)	N/A		
	15	Toyonito Demolition	N/A	(13,298)		
	16	Comstock graduate housing demolition	(74)	(30,547)]	(40)
	16	Comstock Graduate Housing	438	256,258		274
A 1		Mars Renovation	1	273		
Annual		Sigma Nu Renovation	N/A	628	2	
Report 14 (2013-2014)		Roth Renovation	1	508	2	
		Durand Renovation	N/A	675		
Report 15	17	Manzanita Park Residence Hall	129	41,805		4
	18	Phi Kappa Psi	2	505	133	
	19	Kairos	2	979		
	20	717 Dolores	2	928		
A	21	La Maison Francaise	(2)	871		
Annual Report 16	22	GSB Residences	200	124,670	385	101
(2015-2016)	23	New Residences at Lagunita Court	218	74,300	565	2
	24	Kingscote Gardens Renovation	(33)	(20,298)		(33)
Annual Report 17 (2016-2017)		Lagunita-Eucalipto	1	0	1	
Annual Report 18 (2017-2018)		Muwekma student bedroom conversion	(2)	0	(2)	
Annual Report 19 (2018-2019)		None	0	0	0	
Annual Report 20	25	Escondido Village Demolitions	(414)	(168,920)	2,020	(188)
(2019-2020)	25	Escondido Village Graduate Residences	2,434	1,699,001		1,499
Cumulative		tribution toward 2000 GUP using Units	4,423	2,761,956	4,423	2,322

**Housing units developed by Stanford are not required to be deed restricted affordable housing units.

1. Based on an average of 767 square feet per unit constructed for the Munger Graduate Student Housing project.



MAP C-2 CUMULATIVE HOUSING PROJECTS

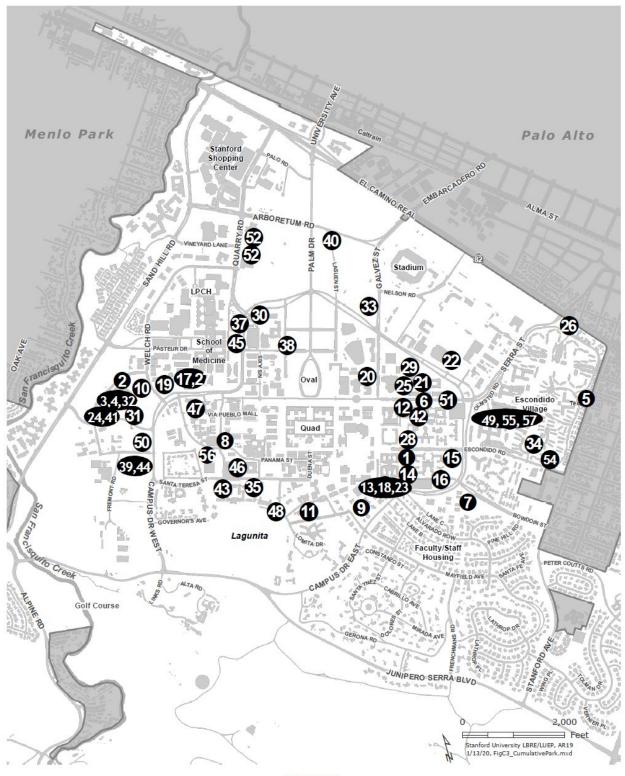
	ANNU	KEY TO MAP C-3 IAL REPORT 1 THROUGH ANNUAL REPOR CUMULATIVE PARKING PROJECTS	r 20	
Fiscal Year	Map No.*	Project	Parking Spaces	Spaces Subtotal
	1	Removal of Arguello Lot	(55)	Subtotui
Annual Report	2	Oak Road Angle Parking	52	1
1		Oak Road Parallel Parking	12	(29)
(2000-01)		Student Services Building	(38)	
		Band Modular Project	23	
Annual Report	3	Parking Structure V	97	
2	4	Oak Road (Angle to Parallel)	(66)	31
(2001-02)		Closure of Anatomy Lot	(28)	
		Maples Lot	5	
		PS-1 Restriping/ADA	(29)	
		Maples Lot	21	
	5	Escondido Village Expansion	212	
A	6	Serra Street Reconstruction	50	
Annual Report 3 (2002-03)		Arguello Lot	37	394
		Mirrielees Lot Reconfiguration	(23)	
	7	Cowell Lot Expansion	154	
		Carnegie Global Center Parking	17	
		Misc. reconstruction/restripe/ADA	(45)	
		Anatomy Lot Reopening	26	
		Encina Gym/ Arrillaga Rec Center Construction	(17)	
Annual Report		Ventura Lot Closing-CSLI/EPGY Annex Construction	(21)	(91)
4 (2003-2004)		Housing Maintenance Yard Project	(25)	
		Graduate Comm. Center Parking Lot	(35)	
		Misc. reconstruction/restripe/ADA	(19)	
		Stock Farm Bus Reconfiguration	(47)	
Annual Report 5		Dudley & Angell Recount	(20)	
(2004-2005)		Mayfield 3 Recount	(23)	(159)
(2001 2000)		Mayneid 5 Recount Misc. reconstruction/restripe/ADA	(69)	-
	8	Ginzton Lot Closure (for Environment & Energy construction)	(09)	
		Humanities Lot (for Old Union Surge Trailers)	(20)	
		Law School Lot/ House Relocation/ Prep for Munger construction	(26)	
	9	Mariposa Lot/ Munger Law School/ House Relocation/ Columbae Renovation	(115)	1
Annual Report 6	10	Stock Farm Bus Reconfiguration	(64)	(659)
(2005-2006)	11	Tresidder Lot (for House Relocation)	(138)	
		Dudley & Angell/ Olmsted Road	24	1
	12	Eating Clubs Lot (for Old Union Surge)	(87)	1
	13	Stern Lot	(64)	1
	14	Wilbur-Stern Temporary Lot	108	1
	15	Wilbur Modulars Removal	131	7
	16	Wilbur South Lot (for PS 6)	(128)	

KEY TO MAP C-3 ANNUAL REPORT 1 THROUGH ANNUAL REPORT 20 CUMULATIVE PARKING PROJECTS

Fiscal Year	Map No.*	Project	Parking Spaces	Spaces Subtotal	
		Misc. reconstruction/restripe/ADA	(69)		
Annual Report 7	17	Li Ka Shing Center for Learning and Knowledge displacement	(505)	(798)	
(2006-2007)		Tresidder – Post House Relocation project	34		
	18	Munger Displacement	(369)		
		Misc. Reconstruction/restripe/ADA	42		
		Dean's Lawn reconfiguraton	(27)		
Annual Report 8	19	Beckman/MSOB Closure for Li Ka Shing Center for Learning and Knowledge construction	(206)		
(2007-2008)	20	Memorial Lot closure for John A. and Cynthia Fry Gunn SIEPR Building	(81)	93	
	21	Serra closure for Knight Management Center	(712)		
	22	Maples closure for Athletics Practice Gym	(75)		
	23	Parking Structure 6	1,185		
		Misc. Reconstruction/restripe/ADA	9		
Annual Report 9 (2008-2009)	24	Oak Road Parking Lot	197		
	25	Arguello and 651 Serra Closure	(267)		
		Track House	(46)	(313)	
	26	Barnes & Abrams For Olmsted Road Staff Rental Housing	(96)		
		Dudley & Angell for Stanford Terrace Faculty Homes	(42)		
		Miscellaneous reconstruction/restripe/ADA	(59)		
	27	Beckman Lot reopening	66		
Annual Report 10 (2009-2010)	28	Toyon lot closure for Arrillaga Family Dining Commons	(163)	(56)	
		Miscellaneous reconstruction/restripe/ADA	41		
		Cypress lot closure for BioE/ChemE	(44)		
		Stock Farm West reconfiguration for bus parking	(20)		
Annual Report		Roth Way reconfiguration for bus loading	(36)	810	
11 (2010-2011)	29	Parking Structure 7	858		
		Dudley & Angell	49	-	
		Miscellaneous reconstruction/restripe/ADA	3		
	20	Lasuen@Arboretum – Bing and Galvez	39	-	
	30	Anatomy-McMurty Art - Anderson	(95)	_	
Annual Report	31	L-17 (Stockfarm South) – Temp Child Care	(75)		
12 (2011-2012)		L-25 (Panama) – West Campus Rec Center	(23)	(236)	
. ,		Lasuen – Bing Concert Hall	(26)	-	
		L-73 (Stern Annex) – East Campus Rec	(37)	-	
	22	Miscellaneous reconstruction/restripe/ADA	(19)		
	32	L-20 (Stock Farm West) - SESI Project laydown	(202)	-	
Annual Report	22	L-25 (Panama) - West Campus Recreation Center	28	((0)	
13 (2012-2013)	33	L-96 (Galvez) - Galvez Event Lot completion	423	(68)	
13 (2012-2013)	34	Comstock - Comstock Graduate Housing Project	(84)	1	

	ANNU	KEY TO MAP C-3 IAL REPORT 1 THROUGH ANNUAL REPOR CUMULATIVE PARKING PROJECTS	Г 20	
Fiscal Year	Map No.*	Project	Parking Spaces	Spaces Subtotal
	35	L-31 (Roble) - Windhover Project	(69)	
	36	L-01 (Rectangle) - Parking Structure 9 construc. yard	(86)	
		Miscellaneous reconstruction/restripe/ADA	(29)	
	37	Dean's Lawn for SHC Steam Plant	(106)	
		Cypress lot reopening	40	
Annual Danart		Panama Lot for Roble Garage	(27)	
Annual Report 14 (2013-2014)	38	Lomita at Rodin	(72)	526
14 (2013-2014)	36	Rectangle parking Lot reopening	75	
	39	Searsville Lot net loss on Searsville Road	592	
		Miscellaneous reconstruction/restripe/ADA	24	
	40	Lasuen @ Arboretum reconfiguration and partial closure	(168)	
		Gates Lot closure for Bio Quad construction	(32)	
	41	L-20 (Stock Farm West) – removal of laydown, restoration of parking	117	
Annual Report		Roth Way – Tour bus reconfiguration	32	((0,0))
15 (2014-2015)	42	L-79, L-81 (GSB Highland Hall project)	(108)	(695)
	43	L-29, L-31, Santa Teresa @ Lagunita and Santa Teresa @ Sterling (New Residences at Lagunita Court and Roble Field projects)	(395)	
	44	L-22 (Searsville lot) – Construction laydown	(126)	1
		Miscellaneous reconstruction/restripe/ADA	(120)	
	45	L-09 (Deans Lawn and Evening Shift)	70	
		L-25 (Panama) – Via Ortega South roadway construction	(43)	
		Galvez Roundabout and West Burnham Parking lot reconfigurations	(23)	
		L-79 (GSB Residences) – parking reconfiguration	21	
	43**	L-29 and L-31 (at Lagunita Court) – reconfiguration	117	1
Annual Report 16	44**	L-22 (Searsville lot) – construction laydown converted back to permit parking	126	11
(2015-2016)		Miscellaneous reconstruction/restripe/recount/ADA	(60)	1
. ,		Correction – removing Marguerite, tour bus, charter bus, and authorized oversize vehicle parking and staging spaces from L-20, Oak Road, and Arboretum	(108)	
		Correction - removing spaces at L-1A and Hoover Pavilion Garage (in Palo Alto)	(61)	
		Correction - removing Faculty/staff-only parking spaces from residential zoned areas	(28)	
	46	Parking Structure 10	1160	
Annual Report	47	L-21 (Jordan Quad) ChEM-H & SNI project	(157)	
17		L-25 (Panama)	35	177
(2016-2017)		Kingscote	23	7
	48	L-35 (Boat House) Denning House project	(60)	

Fiscal Year	Map No.*	Project	Parking Spaces	Spaces Subtotal
		L-31 (Roble Lot)	(22)	
	49	Parking removed due to Escondido Village	Total	
	49	Graduate Residences project	(787)	
		Blackwelder	(186)	
		Hoskins	(144)	
		Jenkins	(106)	
		McFarland	(185)	
		Quillen	(95)	_
		Thoburn	(71)	
		Miscellaneous reconstruction/restripe/recount/ADA	(15)	
	50	EH&S Facility Expansion – Partial lot closure during construction	(49)	
Annual Report 18 (2017-2018)	51	Serra Mall closure (Serra at Schwab)	(52)	
		L-65 (Cowell Bowdoin) – Removal of construction trailers	25	
	52	L-2 (Quarry Psychiatry) – Partial closure due to Center for Academic Medicine construction	(52)	(667)
	53	L-3 (Quarry South) – Closure due to Center for Academic Medicine construction	(464)	
		Miscellaneous reconstruction/restripe/recount/ADA across campus	(75)	
	54	Comstock Circle parking changes and East Campus Childcare Center project completion	54	
Annual Report		EH&S Facility Expansion – Reopening of L-19 after project completion	23	
19		Projects at Bonair Siding displacing parking	(23)	(29)
(2018-2019)	55	Parking removed due to Escondido Village Graduate Residences Project - Quillen	(61)	(27)
		Miscellaneous reconstruction/restripe/recount 1	(22)	-
	56	ADA across campus L-25 (Panama) Parking Lot Chiller Project	(92)	
	50	Escondido Road Reconfiguration	(41)	1
		Parking added due to Escondido Village Graduate	Total	1
Annual Report	57	Residences project	755	
20	-	Blackwelder Lot	159	622
(2019-2020)		EVGR North Lot	75	
× -/		Quillen Lot	153	1
		Thoburn Court	57	1
	<u> </u>	Thoburn Garage	311	1
		ion toward 2000 GUP Parking Cap:	•	



MAP C-3 CUMULATIVE PROJECTS THAT AFFECT PARKING INVENTORY (+/-50 SPACES OR MORE)

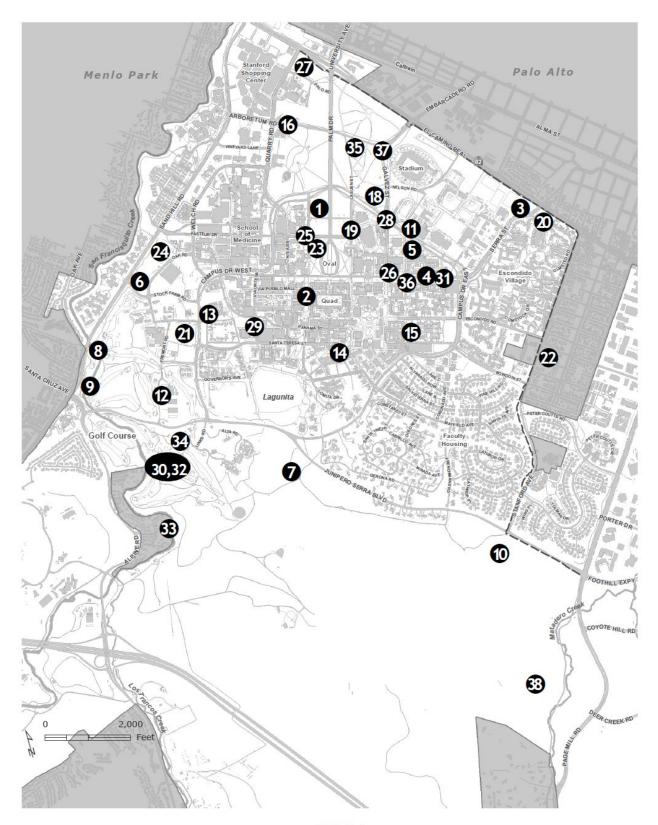
KEY TO MAP C-4 ANNUAL REPORT 1 THROUGH ANNUAL REPORT 20 CUMULATIVE GRADING PERMIT PROJECTS

Fiscal Year	Map No.	Project	
Annual Report 1 (2000-01)	1	Sandstone Sculpture	
Annual Report 2 (2001-02)	2	Lomita Mall	
	3	Serra/ECR Detention Basin	
	4	Serra Street Reconfiguration	
	5	Encina Tennis Courts	
Annual Report 3 (2002-03)		None	
Annual Report 4 (2003-04)	6	West Campus Storm Detention	
	7	CTS Breeding Ponds	
	8	Hole #3 Golf Cart Bridge Replacement	
Annual Report 5 (2004-2005)	9	Hole #4 Golf Cart Bridge Replacement	
	10	Temporary Art in Foothills	
	11	Taube Tennis Practice Bleachers	
Annual Report 6 (2005-2006)	12	Equestrian Center	
	13	Carnegie Grading Permit	
Annual Report 7 (2006-2007)		None	
Annual Report 8 (2007-2008)		None	
Annual Report 9 (2008-2009)	14	Dinkelspiel Stage	
Annual Report 10 (2009-2010)		None	
Annual Report 11 (2010-2011)		None	
Annual Report 12 (2011-2012)	15	Arguello Recreation Field	
	16	LPCH Contractor Parking Lot	
	17	Page Mill Road Construction Laydown	
Annual Report 13(2012-2013)	18	Galvez Parking Lot	
	19	Lasuen Street Parking Lot	
	20	Acorn Parking Lot	
Annual Report 14 (2013-2014)	21	Searsville Parking Lot	
Annual Report 15 (2014-2015)	22	Stanford Perimeter Trail	
	23	Regional Storm Water Treatment Facility	
	24	West Campus Detention Basin	
	25	Lomita/Roth Parking Lot & Lomita Road	
Annual Report 16 (2015-2016)	26	Galvez and Serra St Parking Lot	
	27	Palo Lot (laydown)	
	28	Galvez Roundabout	
	29	Via Ortega South	
Annual Report 17 (2016-2017)	30	Stanford Golf Course Renovation (delayed to AR19)	
Annual Report 18 (2017-2018)	31	Schwab Drop-off	
Annual Report 19 (2018-2019)	32	Golf Course Grading Abatement	
	33	Lagunita Diversion Dam Removal and Creek Restoration	

KEY TO MAP C-4 ANNUAL REPORT 1 THROUGH ANNUAL REPORT 20 CUMULATIVE GRADING PERMIT PROJECTS

	34	Golf – 10 th Tee Improvements
	35	Arboretum Lasuen Grading Abatement
	36	Serra Mall at Encina
	37	Galvez Arboretum Roundabout
Annual Report 20 (2019-2020)	38	Stanford University Upper Quarry Restoration (Frog Ponds)

Note: These are reported at the time of completion. These are grading projects that were not associated with construction of academic or housing square footage.



MAP C-4 CUMULATIVE COMPLETED GRADING PROJECTS

KEY TO MAP C-5 ANNUAL REPORT 1 THROUGH ANNUAL REPORT 20 CUMULATIVE BUILDING PROJECTS THAT DO NOT AFFECT BUILDING AREA CAP*

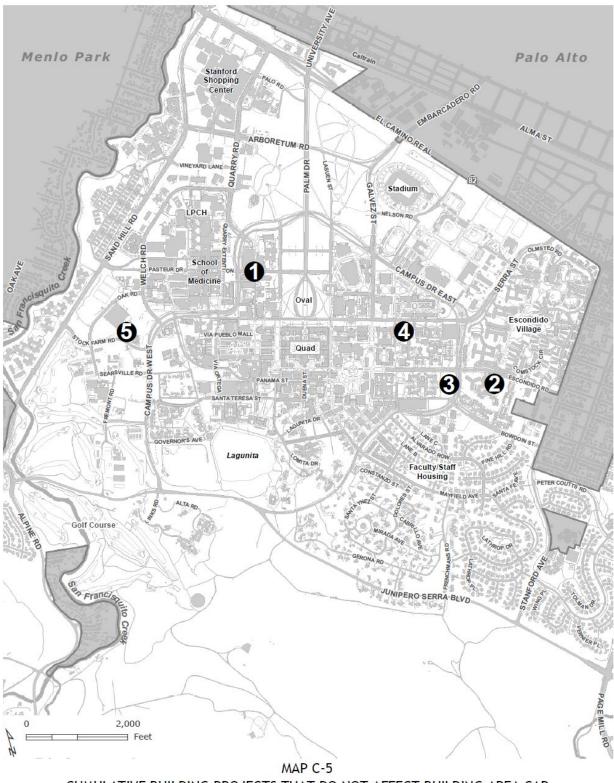
					Applicable Cate	
Applicable GUP C	Conditio	n:	1	A.2.a	A.2.b	A.3
Fiscal year	Map No.	Project	Size (sq. ft.)	1989 GUP (sq. ft.)	Temporary Surge Space (sq. ft.)	Community Childcare Center (sq. ft.)
Annual Report 1 (2000-01)		None				
	1	Lokey Lab	85,063	85,063		
		Demolish Chem Storage	(2,441)	(2,441)		
Annual Report 2 (2001-02)		Demolish Shocktube Lab for ME	(929)	(929)		
		CCSC Modular Replacement	768			768
Annual Report 3 (2002-03)		None				
		Maples Surge Trailers	2,688		2,688	
Annual Report 4 (2003-2004)	2	Graduate Community Center	12,000			12,000
		CSLI/EPGY	8,270	8,270		
	3	Wilbur Modular Ext.	27,360		27,360	
Annual Report 5 (2004-2005)		Building 500	2,266	2,266		
(2001 2000)		Maples Surge	(2,688)		(2,688)	
		Varian Surge	3,050		3,050	
	3	Wilbur Modular Removal	(27,360)		(27,360)	
Annual Report 6 (2005-2006)	4	Old Union – Serra	21,495		21,495	
		Old Union – Lomita	7,680		7,680	
		Old Union – Lomita Removed	(7,680)		(7,680)	
Annual Report 7 (2006 – 2007)		Durand Surge (formally Varian Surge)	3,050			
		Tower House Rehabilitation	3,241			3,241

KEY TO MAP C-5 ANNUAL REPORT 1 THROUGH ANNUAL REPORT 20 CUMULATIVE BUILDING PROJECTS THAT DO NOT AFFECT BUILDING AREA CAP*

					Applicable Cate	
Applicable GUP C	Conditio	<u>n:</u>	•	A.2.a	A.2.b	A.3
Fiscal year	Map No.	Project	Size (sq. ft.)	1989 GUP (sq. ft.)	Temporary Surge Space (sq. ft.)	Community Childcare Center (sq. ft.)
		Black Community Service Center Addition	2,500			2,500
		GSB Modulars	3,840		3,840	
Annual Report 8 (2007 – 2008)		SCRA Sports Complex	3,701			3,701
(2007 – 2008)		Demolish old SCRA complex	(2,617)			(2,617)
		Madera Grove Childcare Center (Acorn Building)	8,354			8,354
Annual Report 9 (2008-2009)		Recalculation of AR 1 - 8	197			197
Annual Report 10 (2009-2010)		None				
Annual Report 11 (2010-2011)		Welch Road modulars	4,030		4,030	
		GSB Modular demolition	(3,840)		(3,840)	
		Madera Gove Childcare Center (Mulberry Building)	8,218			8,218
Annual Report 12 (2011-2012)	5	Temporary Child Care Facility	10,560		10,560	
Annual Report 13 (2012-2013)	4	Encina Modulars Trailer demolition (Old Union – Serra)	(21,495)		(21,495)	
``´´		Cowell Lot Construction Trailers	2,584		2,584	
Annual Report 14 (2013-2014)		None				
		Varian Surge (double- counted in AR7)	(3,050)			
Annual Report 15 (2014-2015)	5	Extension of Temporary Child Care Facility	0 (already counted in AR 12)		0 (already counted in AR 12)	
Annual Report 16 (2015-2016)		Demolition of 315 Campus Dr Modulars (also known as Varian Surge or Durand Surge)	(3,050)		(3,050)	
Annual Report 17 (2016-2017)		1215 Welch Rd Modulars (C, D, E) demolition	(4,030)		(4,030)	
Annual Report 18		West Campus Surge Trailers	560		560	

KEY TO MAP C-5 ANNUAL REPORT 1 THROUGH ANNUAL REPORT 20 CUMULATIVE BUILDING PROJECTS THAT DO NOT AFFECT BUILDING AREA CAP*

				A	Applicable Cates	gory
Applicable GUP C	e GUP Condition: A.2.a					A.3
Fiscal year	Map No.	Project	Size (sq. ft.)	1989 GUP (sq. ft.)	Temporary Surge Space (sq. ft.)	Community Childcare Center (sq. ft.)
(2017-2018)		Removal of Cowell Lot Construction Trailers	(2,584)		(2,584)	
		Demolition of Big Kids Little Kids childcare sf portion	(768)			(768)
		CCSC Childcare Project - Use of childcare sf	4,406			4,406
Annual Report 19 (2018-2019)		West Campus Surge Trailers	(560)		(560)	
Annual Report 20 (2019-2020)	5	Temporary Childcare Facility (later renamed Stock Farm Childcare Facility)	(10,560)		(10,560)	
Cumulative Net So	uare F	eet:	132,222	92,229	0	40,000



CUMULATIVE BUILDING PROJECTS THAT DO NOT AFFECT BUILDING AREA CAP (GREATER THAN 10,000GSF)

Appendix D Summary Report of Traffic Monitoring, 2001-2020

The following tables summarize Stanford Traffic Monitoring to date. The requirements for establishment of the traffic baseline and performing annual comparisons to the baseline are contained within the December 2000 Stanford Community Plan/General Use Permit (GUP)/Environmental Impact Report (EIR) and within the 2000 Stanford General Use Permit.

Methodology for Evaluating Traffic Impacts

The GUP *Condition of Approval G*.7 outlined the methodology for gathering baseline counts and monitoring. The process can be summarized as follows:

- Peak hour traffic is counted at least three times per year for a two-week period each time. The three counts shall be averaged to determine the annual traffic level.
- All counts are recorded at the 16 campus entry and exit points, which form a "cordon" around the campus.
- During the count, license plate numbers are recorded for each entering and exiting vehicle to determine the amount of cut-through (and therefore non-campus) traffic.
- Cordon volumes are adjusted for parking lots within the cordon used by the hospital (these volumes are subtracted from the cordon line counts) and parking lots outside the cordon used by the university (these volumes are added to the cordon line counts).
- A peak hour is then established for the campus based on the counts, adjusted for cut-through and parking lot location.

Condition of Approval G.4 defines the "no net new commute trips" standard as no increase in automobile trips during peak commute times in the peak commute direction, as counted at a defined cordon location around the central campus.

Condition of Approval G.6 defines the peak commute directions as entering the campus in the morning peak commute period and leaving the campus in the evening commute period. The peak commute period is defined as the one-hour period of time between 7 AM and 9 AM and again between 4 PM and 6 PM with the highest volume of traffic, as defined by the counts. Therefore, the two peak hours are considered to be independent events.

Condition of Approval G.9 states that the Planning Office shall monitor the cordon count volumes using the procedures described above. If the cordon counts, as modified by trip reduction credits, exceed the baseline volumes as calculated by the procedures outlined above by 1 percent or more for any two out of three consecutive years, mitigation of impacts to intersections identified in the December 2000 Stanford Community Plan/GUP EIR will be required. Since an increase in traffic during the AM peak hour is independent from an increase in traffic during the PM peak hour, an increase in traffic for two out of three years in one peak hour would trigger the additional elements of the monitoring program without a change, or even with a decrease in the other peak hour. Also a significant increase during one year in the AM and a sufficient increase in the PM for the following year would not trigger additional mitigation.

The 90% Confidence Interval means that average traffic during the 8 weeks (40 weekdays), when the traffic data is collected (for purposes of establishing the baseline), will be within the established average traffic counts 90% of the time. This means traffic data collected will be within the Baseline of 3,319 and Upper Range of 3,319 plus 120 trips for the AM counts and Baseline of 3,446 and Upper Range of 3,446 plus 109 trips for the PM counts 90% of the time if there is no statistically significant change in the average traffic. In other words, when the traffic study is conducted under relatively the same traffic conditions, nine times out of ten, the final number will be within the established 90% confidence interval range.

The Table below displays these numbers as formally adopted in 2001 for the 2000 GUP thresholds.

Data Points	Method of Calculation	AM Peak Hour	PM Peak Hour
Baseline (A)	Counted	3,319	3,446
Standard Deviation based on 90% Confidence Interval (B)	Calculated based on daily fluctuations	120	109
Upper Range of Baseline (C)	Number (calculated) C= A + B	3,439	3,555
1 % Trigger - number of trips allowed before penalty (D)	Number (calculated) (D = 1% x C)	35	36
Upper Limit before exceedance taking into account 90% confidence interval with 1% trigger	Calculated (C+D)	3,474	3,591

2001 Traffic Baseline and Thresholds

The 1% trigger was determined through negotiations between the County and Stanford in 2000 during the establishment of the GUP traffic standards. 1% trigger is tied to GUP condition G.9 which states that exceeding this trigger for two out of three years would require intersection improvements, as identified in the mitigation measures.

Monitoring Results

Annual Report 1 - Year 2001 – Baseline

The Stanford Traffic Monitoring began in Spring 2001. Monitoring counts are done each calendar year. The 2001 counts serve as the Baseline to which future years are compared.

Annual Report 2 - Year 2002

Two adjustments were made to the 2002 counts that are summarized in this report. On the basis of results of the 2002 counts, following the adjustments, it was concluded that the counts were below the threshold that would indicate an increase in traffic volumes. Stanford thus was found to be in compliance with the "no net new commute trips" GUP requirement for 2002.

An update to the original 2002 Monitoring Report was issued on October 15, 2003. Following the publication of the July 2003 report, Stanford and the County separately analyzed traffic data for the Stanford Homecoming week. Based on consultation with Stanford and independent analysis of County consultant traffic data, the County determined that data collected for the week of Homecoming should not be included in the comparison data set. The rationale for this decision was that Homecoming had been ongoing for years, was not included in the Baseline counts, and would continue to be an annual event. The County communicated to Stanford that other future "large events" would not be excluded from future counts. The revised analysis substituted the week of October 28, 2002, for the previously counted week of October 14, 2002. The results of this change are noted in the table below as the first revision.

Subsequent to the first adjustment to the 2002 Monitoring Report discussed above, Stanford informed the County that additional Marguerite Shuttle runs had been introduced to campus since the completion of the Baseline counts, and thus counted in the Year 1 (2002) comparison counts. This resulted in an increase of 12 vehicles in each peak hour. County staff determined that these new bus lines should be subtracted from the comparison count. The resultant counts are noted in the table below as the second revision.

Annual Report 3- Year 2003

The results of the 2003 counts were also below the threshold that would indicate an increase in traffic volumes. Stanford thus was also found to be in compliance with the "no net new commute trips" requirement for 2003.

Annual Report 4- Year 2004

The results of the 2004 counts were below the threshold that would indicate an increase in traffic volumes for the inbound AM peak hour traffic. However, the 2004 count for the outbound PM peak hour traffic exceeded the threshold by 51 vehicles. On March 2, 2005 Stanford submitted a 2004 Trip Credit Report that was reviewed by Korve Engineering. This report documented a credit of 66 for the increase in the number of bus trips across the cordon points and the number of transit passengers served outside the cordon area in the PM peak hour between the 2001 baseline and 2004. Most of the trip credits claimed are for passengers (primarily Stanford Hospital employees) getting on the shuttle outside the cordon area and traveling to the Palo Alto Caltrain station. Factoring in the trip credit of 66 trips Stanford did not exceed the no net new commute trip standard based on the 2004 Monitoring Program.

Annual Report 5 - Year 2005

The results of the 2005 Monitoring Report concluded that the adjusted AM inbound count totaled 3,383 vehicles. This represented an increase of 64 vehicles, which fell within the 90% confidence interval and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,735 vehicles which was an increase of 289 vehicles from the baseline, which is above the 90% confidence interval by 180 vehicles and above the 1% increase trigger by 144 vehicles. Stanford applied for 182 trip credits for the 2005 monitoring period, consistent with the Cordon Count Credit Guidelines.

Annual Report 6 - Year 2006

The 2006 Monitoring Report concluded that the adjusted AM inbound count totaled 3,048 vehicles. This represented a decrease of 271 vehicles from the baseline and does not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,427 vehicles, which was a decrease of 19 vehicles from the baseline, which is 128 vehicles below the 90 percent confidence interval and 164 vehicles below the 1 percent established trigger. Stanford submitted a 2006 Trip Credit Report showing 223.36 trip credits – this report has been received and confirmed by the County's traffic consultant.

Annual Report 7 - Year 2007

The 2007 Monitoring Report concluded that the adjusted AM inbound count totaled 3,058 vehicles, which was a decrease of 261 vehicles from the baseline, this decrease falls below the 90 percent confidence interval by 141 vehicles and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,494 vehicles, which was an increase of 48 vehicles from the baseline counts. This increase falls below the 90 percent confidence interval by 61 vehicles and 97 vehicles below the 1 percent established trigger. Stanford submitted a 2007 Trip Credit Report showing 201 trip credits – this report has been received and confirmed by the County's traffic consultant.

Annual Report 8 - Year 2008

The 2008 Monitoring Report concluded that the adjusted AM inbound count totaled 3,020 vehicles, which was a decrease of 299 vehicles from the baseline and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,460 vehicles, which was an increase of 14 vehicles above the baseline count and did not represent a significant PM outbound traffic increase. Stanford submitted a 2008 Trip Credit Report showing 240 trip credits – this report has been received and confirmed by the County's traffic consultant.

Annual Report 9 - Year 2009

The 2009 Monitoring Report concluded that the adjusted AM inbound count totaled 2,840 vehicles, which was a decrease of 479 vehicles from the baseline and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,227 vehicles, which was a decrease of 219 vehicles below the baseline count and did not represent a significant PM outbound traffic increase.

Annual Report 10 - Year 2010

The 2010 Monitoring Report concluded that the adjusted AM inbound count totaled 2,921 vehicles, which was a decrease of 553 vehicles from the baseline and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,459 vehicles, which was a decrease of 132 vehicles below the baseline count and did not represent a significant PM outbound traffic increase.

Annual Report 11 - Year 2011

The 2011 Monitoring Report concluded that the adjusted AM inbound count totaled 3,081 vehicles, which was a decrease of 393 vehicles from the baseline and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,743 vehicles, which was a decrease of 51 vehicles below the baseline count, after the trip credit was applied, and did not represent a significant PM outbound traffic increase.

Annual Report 12 - Year 2012

The 2012 Monitoring Report concluded that the adjusted AM inbound count totaled 3,287 vehicles, which was a decrease of 187 vehicles from the baseline and did not represent a significant AM inbound traffic increase. The PM outbound count totaled 3,590 vehicles, which was a decrease of 302 vehicles below the baseline count, after the trip credit was applied, and did not represent a significant PM outbound traffic increase.

Annual Report 13 - Year 2013

The 2013 Monitoring Report concluded that the adjusted morning (AM) inbound count totaled 3,332 vehicles which was an increase of 13 vehicles from the baseline, which falls within the 90% confidence interval, and does not represent a significant AM inbound traffic increase. The afternoon (PM) outbound count totaled 3,744 vehicles, which is an increase of 298 vehicles from the baseline. However, after applying 339 trip credits submitted by Stanford and verified by the County, the PM peak hour outbound traffic is 186 trips below the 1% established trigger.

Annual Report 14 - Year 2014

The 2014 Monitoring Report concluded that the adjusted morning (AM) inbound count totaled 3,336 vehicles which was an increase of 17 vehicles from the baseline, which falls within the 90% confidence interval, and does not represent a significant AM inbound traffic increase. The afternoon (PM) outbound count totaled 3,696 vehicles, which is an increase of 250 vehicles from the baseline. However, after applying 402 trip credits submitted by Stanford and verified by the County, the PM peak hour outbound traffic is 297 trips below the 1% established trigger.

Annual Report 15 - Year 2015

The 2015 Monitoring Report concluded that the adjusted morning (AM) inbound count totaled 3,142 vehicles which was a decrease of 297 vehicles from the baseline, which falls below the 90% confidence interval, and does not represent a significant AM inbound traffic increase. The afternoon (PM) outbound count totaled 3,257 vehicles, which is a decrease of 298 vehicles from the baseline, and also falls below the 90% confidence interval and does not represent a significant PM outbound traffic increase. After applying 844 trip credits submitted by Stanford and verified by the County, the PM peak hour outbound traffic is 1,178 trips below the 1% established trigger.

Annual Report 16 - Year 2016

The 2016 Monitoring Report concluded that the adjusted morning (AM) inbound count totaled 3,170 vehicles which was a decrease of 149 vehicles from the baseline, which falls below the 90% confidence interval, and does not represent a significant AM inbound traffic increase. The afternoon (PM) outbound count totaled 3,316 vehicles, which is a decrease of 130 vehicles from the baseline, and also falls below the 90% confidence interval and does not represent a significant PM outbound traffic increase. After applying 543 trip credits submitted by Stanford and verified by the County, the PM peak hour outbound traffic is 818 trips below the 1% established trigger.

Annual Report 17 - Year 2017

The 2017 Monitoring Report concluded that the adjusted morning (AM) inbound count totaled 3,202 vehicles which was a decrease of 117 vehicles from the baseline, which falls below the 90% confidence interval, and does not represent a significant AM inbound traffic increase. The afternoon (PM) outbound count totaled 3,324 vehicles, which is a decrease of 122 vehicles from the baseline, and also falls below the 90% confidence interval and does not represent a significant PM outbound traffic increase. Therefore, Stanford met the No Net New Commute Trips standard. Stanford choose not to submit trip credits to the County this year as it was not required to meet the standard.

Annual Report 18 - Year 2018

The 2018 Monitoring Report concluded that the adjusted morning (AM) inbound count totaled 3,575 vehicles which is 256 vehicles higher than the baseline 2001 AM count; 136 vehicles above than the upper boundary of the 90% confidence interval, and 101 vehicles above the established 1 percent trigger. Because the AM peak hour traffic is above the trigger, Stanford Trip Credits are applied to the total to bring the number into compliance with the metric. The 2018 Trip Credits total is 595 Trip Credits. The afternoon (PM) outbound count totaled 3,509 vehicles, which is 63 vehicles higher than the 2001 baseline; 46 vehicles lower than the upper boundary of the 90% confidence interval and does not represent a significant PM outbound traffic increase. With Stanford's approved trip credits, Stanford met the No Net New Commute Trips standard.

Annual Report 19 - Year 2019

The 2019 Monitoring Report concluded that the adjusted morning (AM) inbound count totaled 3,193 vehicles which is 126 vehicles lower than the baseline 2001 AM count; 246 vehicles lower than the upper boundary of the 90% confidence interval, and does not represent a significant AM inbound traffic increase. The afternoon (PM) outbound count totaled 3,292 vehicles, which is 154 vehicles below than the 2001 baseline; 263 vehicles lower than the upper boundary of the 90% confidence interval and does not represent a significant PM outbound traffic increase. Therefore, Stanford met the No Net New Commute Trips standard. Stanford choose not to submit trip credits to the County this year as it was not required to meet the standard.

Annual Report 20 - Year 2020

Year 20 was a highly unusual year because of the COVID-19 pandemic. A COVID-19 shelter-inplace order was issued in March of 2020 and continued through the year. This resulted in the Stanford campus shutting down to limit the spread of the virus. The Spring 2020 Stanford traffic monitoring was cancelled because the campus was closed due to the County's shelter-in-place requirements. In Fall 2020, the County approved the use of a reduced traffic monitoring program for a period of 2 weeks to count raw traffic volumes only and confirm assumptions and observations in significant reduction in traffic volumes.

The 2000 GUP Condition G.7.a. requires traffic counts for a minimum of three times per year for an interval of 2 weeks each time. Since 2003, the established methodology for traffic monitoring program is 6 weeks in the spring and two weeks in the fall for a total of 8 weeks of count data. However, given the pandemic, the County determined that 2 weeks of raw traffic counts would be sufficient to demonstrate that the traffic volumes, due to the pandemic, campus closures and statewide shelter-in-place orders, were well below the historic traffic volumes from 2001.

The baseline used to determine compliance with the no-net-new trips included the adjustments; the adjusted traffic volumes were always calculated as part of the monitoring program for that year. In FY 20, the adjustment data was also not collected because of the COVID-19 pandemic.

County hired traffic consultant, AECOM, compared the raw, unadjusted data with the newly compiled historic raw, unadjusted data from the previous 19 years. Two weeks of data in the fall of 2020 found an average AM peak-hour traffic volume of 1,747. This is compared with the AM peak-hour average of 4,091 from the previous 19 years of data. Two weeks of data in the fall of 2020 found an average PM peak-hour traffic volume of 2,045. This is compared with the PM peak-hour average of 4,355 from the previous 19 years of data. Thus, 2020 raw traffic counts during the pandemic showed traffic at less than half of normal levels. Results determined that raw traffic counts for 2020 do not exceed the historic raw averages for the AM and PM peak hour traffic.

2001 Baseline				
Original Publication Date: Updated Publication Date:	July 2002 October 15, 2003			
Changes between the July 2002 and October 2003 reports were minor of	editorial corrections.			
Inbound AM: Adjusted Average 2002 Count 90% Confidence Interval (2001) Significant Traffic Increase (2001) 1% Increase Trigger (2001)	3,319 +/- 120 3,439 3,474			
<u>Outbound PM:</u> Adjusted Average 2002 Count 90% Confidence Interval (2001) Significant Traffic Increase (2001) 1% Increase Trigger (2001)	3,446 +/- 109 3,555 3,591			

riginal Publication Date: pdated Publication Date:			December 2002 October 15, 2003	
ibound AM:	Original Data	First Revision Data	Second Revision Data	
Adjusted Average 2002 Count	3,390	3,287	3,275	
Baseline-established 90% Confidence Interval (2001)	+/-120	+/-120	+/-120	
Baseline-established Significant Traffic Increase (2001)	3,439	3,439	3,439	
Baseline-established 1% Increase Trigger (2001)	3,474	3,474	3,474	
Result	-84	-187	-199	
	Original	First Revision	Secono Revision	
Outbound PM:	Data	Data	Data	
Adjusted Average 2002 Count	3,678	3,598	3,586	
Baseline-established 90% Confidence Interval (2001)	+/-109	+/-109	+/-109	
Baseline-established Significant Traffic Increase (2001)	3,555	3,555	3,555	
Baseline-established 1% Increase Trigger (2001)	3,591	3,591	3,591	
	+87	+7	-5	

2003	Monitoring	Report
	monitoring	itepoit.

Original Publication Date:	January 29, 2004
The following table summarizes the results of traffic monitoring for 2003.	
Inbound AM:	
Adjusted Average 2003 Count	3,413
Baseline-established 90% Confidence Interval (2001)	+/- 120
Baseline-established Significant Traffic Increase (2001)	3,439
Baseline-established 1% Increase Trigger (2001)	3,474
Result (falls below the 90% Confidence Interval by 26 vehicles)	-26
Result (falls below the 1% Trigger by 61 vehicles)	-61
Outbound PM:	
Adjusted Average 2003 Count	3,476
Baseline-established 90% Confidence Interval (2001)	+/- 109
Baseline-established Significant Traffic Increase (2001)	3,555
Baseline-established 1% Increase Trigger (2001)	3,591
Result (falls below the 90% Confidence Interval by 79 vehicles)	-79
Result (falls below the 1% Trigger by 115 vehicles)	-115

Driginal Publication Date:	January 18, 2005
he following table summarizes the results of traffic monitoring for 2004.	
nbound AM:	
Adjusted Average 2004 Count	3,176
Baseline-established 90% Confidence Interval (2001)	+/- 120
Baseline-established Significant Traffic Increase (2001)	3,439
Baseline-established 1% Increase Trigger (2001)	3,474
Result (falls below the 90% Confidence Interval by 263 vehicles)	-263
Result (falls below the 1% Trigger by 298 vehicles)	-298
Outbound PM:	
Adjusted Average 2004 Count	3,642
Baseline-established 90% Confidence Interval (2001)	+/- 109
Baseline-established Significant Traffic Increase (2001)	3,555
Baseline-established 1% Increase Trigger (2001)	3,591
Result (exceeds the 90% Confidence Interval by 87 vehicles)	+87
Result (exceeds the 1% Trigger by 51 vehicles)	+51
2004 Trip Credit	-66
Result with Trip Credit (falls below the 1% Trigger by 15 vehicles)	-15

2005 Monitoring Report

Original Publication Date:	December 21, 2005
The following table summarizes the results of traffic monitoring for 2005.	
Inbound AM:	
Adjusted Average 2005 Count	3,383
Baseline-established 90% Confidence Interval (2001)	+/- 120
Baseline-established Significant Traffic Increase (2001)	3,439
Baseline-established 1% Increase Trigger (2001)	3,474
Result (Falls below the 90% Confidence Interval by 56 vehicles)	-56
Result (Falls below the 1% Trigger by 91 vehicles)	-91
Outbound PM:	
Adjusted Average 2005 Count	3,735
Baseline-established 90% Confidence Interval (2001)	+/- 109
Baseline-established Significant Traffic Increase (2001)	3,555
Baseline-established 1% Increase Trigger (2001)	3,591
Result (exceeds the 90% Confidence Interval by 180 vehicles)	+180
Result (exceeds the 1% Trigger by 144 vehicles)	+144
2005 Trip Credit	-174
Result with Trip Credit (falls below the 1% trigger by 30 vehicles)	-30

Original Publication Date:	November 20, 2006
The following table summarizes the results of traffic monitoring for 2006.	
Inbound AM:	
Adjusted Average 2006 Count	3,048
Baseline-established 90% Confidence Interval (2001)	+/- 120
Baseline-established Significant Traffic Increase (2001)	3,439
Baseline-established 1% Increase Trigger (2001)	3,474
Result (falls below the 90% confidence interval by 391 vehicles)	-391
Result (falls below the 1% increase trigger by 426 vehicles)	-426
Outbound PM:	
Adjusted Average 2006 Count	3,427
Baseline-established 90% Confidence Interval (2001)	+/- 109
Baseline-established Significant Traffic Increase (2001)	3,555
Baseline-established 1% Increase Trigger (2001)	3,591
Result (falls below the 90% confidence interval by 128 vehicles)	-128
Result (falls below the 1% trigger by 164 vehicles)	-164

Original Publication Date: November 2007 The following table summarizes the results of traffic monitoring for 2007. Inbound AM: Adjusted Average 2007 Count 3,058 Baseline-established 90% Confidence Interval (2001) +/- 120 Baseline-established Significant Traffic Increase (2001) 3,439 Baseline-established 1% Increase Trigger (2001) 3,474 Result (falls below the 90% confidence interval by 381 vehicles) -381 Result (falls below the 1% increase trigger by 416 vehicles) -416 **Outbound PM:** Adjusted Average 2007 Count 3,494 Baseline-established 90% Confidence Interval (2001) +/- 109 Baseline-established Significant Traffic Increase (2001) 3,555 Baseline-established 1% Increase Trigger (2001) 3,591 Result (falls below the 90% confidence interval by 61 vehicles) -61 Result (falls below the 1% trigger by 97 vehicles) -97

2007 Monitoring Report

Original Publication Date:	November 2008	
The following table summarizes the results of traffic monitoring for 2008.		
Inbound AM:		
Adjusted Average 2008 Count	3,020	
Baseline-established 90% Confidence Interval (2001)	+/- 120	
Baseline-established Significant Traffic Increase (2001)	3,439	
Baseline-established 1% Increase Trigger (2001)	3,474	
Result (falls below the 90% confidence interval by 419 vehicles)	-419	
Result (falls below the 1% increase trigger by 454 vehicles)	-454	
Outbound PM:		
Adjusted Average 2008 Count	3,460	
Baseline-established 90% Confidence Interval (2001)	+/- 109	
Baseline-established Significant Traffic Increase (2001)	3,555	
Baseline-established 1% Increase Trigger (2001)	3,591	
Result (falls below the 90% confidence interval by 95 vehicles)	-95	
Result (falls below the 1% trigger by 131 vehicles)	-131	

2009 Monitoring Report

Original Publication Date:	November 2009
The following table summarizes the results of traffic monitoring for 2009.	
Inbound AM:	
Adjusted Average 2009 Count	2,840
Baseline-established 90% Confidence Interval (2001)	+/- 120
Baseline-established Significant Traffic Increase (2001)	3,439
Baseline-established 1% Increase Trigger (2001)	3,474
Result (falls below the 90% confidence interval by 599 vehicles)	-599
Result (falls below the 1% increase trigger by 634 vehicles)	-634
Outbound PM:	
Adjusted Average 2009 Count	3,227
Baseline-established 90% Confidence Interval (2001)	+/- 109
Baseline-established Significant Traffic Increase (2001)	3,555
Baseline-established 1% Increase Trigger (2001)	3,591
Result (falls below the 90% confidence interval by 328 vehicles)	-328
Result (falls below the 1% trigger by 364 vehicles)	-364

2010 Monitoring Report

Original Publication Date:	December 2010
The following table summarizes the results of traffic monitoring for 2010	
Inbound AM:	
Adjusted average 2010 count	2,921
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 518 vehicles)	-518
Result (falls below the 1% increase trigger by 553 vehicles)	-553
Outbound PM:	
Adjusted average 2010 count	3,459
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 96 vehicles)	-96
Result (falls below the 1% increase trigger by 132 vehicles)	-132

Original Publication Date:	December 2011
The following table summarizes the results of traffic monitoring for 2011	
Inbound AM:	
Adjusted average 2011 count	3,081
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 358 vehicles)	-358
Result (falls below the 1% increase trigger by 393 vehicles)	-393
Outbound PM:	
Adjusted average 2011 count	3,743
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (exceeds the 90% confidence interval by 188 vehicles)	+188
Result (exceeds the 1% increase trigger by 152 vehicles)	+152
2011 Trip Credit	-203
Result with Trip Credit (falls below the 1% trigger by 51 vehicles)	-51

2012 Monitoring Report

Original Publication Date:	December 2012
The following table summarizes the results of traffic monitoring for 2012	
Inbound AM:	
Adjusted average 2012 count	3,287
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 152 vehicles)	-152
Result (falls below the 1% increase trigger by 187 vehicles)	-187
Outbound PM:	
Adjusted average 2012 count	3,590
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (exceeds the 90% confidence interval by 35 vehicles)	+35
Result (falls below the 1% increase trigger by 1 vehicle)	-1
2012 Trip Credit	-301
Result with Trip Credit (falls below the 1% trigger by 302 vehicles)	-302

Original Publication Date:	March 2014
The following table summarizes the results of traffic monitoring for 2013	
Inbound AM:	
Adjusted average 2013 count	3,332
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 107 vehicles) Result (falls below the 1% increase trigger by 142 vehicles)	-107 -142
Result (fails below the 178 increase trigger by 142 venicles)	-142
Outbound PM:	
Adjusted average 2013 count	3,744
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls above the 90% confidence interval by 189 vehicles)	+189
Result (falls above the 1% increase trigger by 152 vehicles)	+153
2013 Trip Credit	-339
Result with Trip Credit (falls below the 1% trigger by 51 vehicles)	-186

2014 Monitoring Report

Original Publication Date:	April 2015
The following table summarizes the results of traffic monitoring for 2014	
Inbound AM:	
Adjusted average 2014 count	3,336
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 103 vehicles)	-103
Result (falls below the 1% increase trigger by 138 vehicles)	-138
Outbound PM:	
Adjusted average 2014 count	3,696
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (exceeds the 90% confidence interval by 141 vehicles)	+141
Result (exceeds the 1% increase trigger by 105 vehicles)	+105
2014 Trip Credit	-402
Result with Trip Credit (falls below the 1% trigger by 297 vehicles)	-297

The following table summarizes the results of traffic monitoring for 2015

Inbound AM:	
Adjusted average 2015 count	3,142
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 297 vehicles)	-297
Result (falls below the 1% increase trigger by 332 vehicles)	-332
Outbound PM:	
Adjusted average 2015 count	3,257
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 298 vehicles)	-298
Result (falls below the 1% increase trigger by 334 vehicles)	-334
2015 Trip Credit	-844
Result with Trip Credit (falls below the 1% trigger by 1,178 vehicles)	-1,178

Original Publication Date:	March 2017
The following table summarizes the results of traffic monitoring for 2016	
Inbound AM:	
Adjusted average 2016 count	3,170
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 269 vehicles)	-269
Result (falls below the 1% increase trigger by 304 vehicles)	-304
2016 Trip Credit	-461
Result with Trip Credit (falls below the 1% trigger by 765 vehicles)	-765
Outbound PM:	
Adjusted average 2016 count	3,316
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 239 vehicles)	-239
Result (falls below the 1% increase trigger by 275 vehicles)	-275
2016 Trip Credit	-543
Result with Trip Credit (falls below the 1% trigger by 818 vehicles)	-818

2017 Monitoring Report	
Original Publication Date:	January 2018
The following table summarizes the results of traffic monitoring for 2017	
Inbound AM:	
Adjusted average 2017 count	3,202
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (falls below the 90% confidence interval by 237 vehicles)	-237
Result (falls below the 1% increase trigger by 272 vehicles)	-272
2017 Trip Credit	-0
Result with Trip Credit	-0
Outbound PM:	
Adjusted average 2016 count	3,324
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 231 vehicles)	-231
Result (falls below the 1% increase trigger by 267 vehicles)	-267
2017 Trip Credit	-0
Result with Trip Credit	-0

Original Publication Date:	May 2018
The following table summarizes the results of traffic monitoring for 2018	
Inbound AM:	
Adjusted average 2018 count	3,575
Baseline-established 90% confidence interval (2001)	+/- 120
Baseline-established significant traffic increase (2001)	3,439
Baseline-established 1% increase trigger (2001)	3,474
Result (exceeds the 90% confidence interval by 136 vehicles)	136
Result (exceeds the 1% increase trigger by 101 vehicles)	101
2018 Trip Credit	-595
Result with Trip Credit	-494
Outbound PM:	
Adjusted average 2018 count	3,509
Baseline-established 90% confidence interval (2001)	+/- 109
Baseline-established significant traffic increase (2001)	3,555
Baseline-established 1% increase trigger (2001)	3,591
Result (falls below the 90% confidence interval by 46 vehicles)	-46
Result (falls below the 1% increase trigger by 82 vehicles)	-82
2018 Trip Credit	-
Result with Trip Credit	0

March 2020
3,193
+/- 120
3,439
3,474
-246
-281
-0
0
3,292
+/- 109
3,555
3,591
-263
-299
-0
0

2019 Monitoring Report

2020 Monitoring Report

Original Publication Date:

March 2021

Year 20 was a highly unusual year because of the COVID-19 pandemic. The Spring 2020 Stanford traffic monitoring was cancelled because the campus was closed due to the County's shelter-in-place requirements. In Fall 2020, reduced traffic monitoring was conducted for a period of 2 weeks.

For year 2020, only raw, unadjusted data was obtained. In typical years, parking and license plate data is collected to adjust traffic volumes to capture just university traffic through the cordon (i.e., removing hospital affiliated parking inside the cordon, adding in university affiliated parking outside the cordon, and removing cut-through traffic from the cordon). However, these tasks could not be performed in 2020 due to COVID-19 related restrictions. Hence, the raw, unadjusted data was compared with the newly compiled historic raw, unadjusted data from the previous 19 years. The raw unadjusted average counts do not represent an adopted traffic baseline. Count dates for the 2020 Monitoring Report were week of September 28, 2020 and week of October 5, 2020. The following table summarizes the results of traffic monitoring program for 2020.

Inbound AM:

Average historic raw (unadjusted) peak traffic count (2001-2019)	4,091
Average raw (unadjusted) peak traffic count (2020)	1,747
Result (falls below the average historic (unadjusted) peak raw traffic count by 2,344 v	vehicles)-2,344
	·
Outbound PM:	
Average historic raw (unadjusted) peak traffic count (2001-2019)	4,355
Average raw (unadjusted) peak traffic count (2020)	2,045

Result (falls below the average historic (unadjusted) peak raw traffic count by 2,310 vehicles)-2,310

Definitions

The following definitions are provided to assist in understanding for procedures of the Stanford Traffic Monitoring.

Adjusted Traffic – The raw traffic counts defined below are adjusted to add in University traffic that does not cross the cordon, and to subtract hospital traffic that does cross the cordon, and cutthrough traffic through the campus that is not university related. The adjusted traffic volumes are used to compare the Baseline traffic volumes to subsequent year volumes to assess potential changes in commute traffic volumes.

AM Peak Hour – The 60-minute time period with the highest volume of traffic within the 2-hour AM Peak Period. During the AM Peak Period, traffic counts are aggregated by 15-minute increments. The AM Peak Hour is the highest four consecutive 15-minute intervals during the Peak Period for all 16 entrance/exit points combined.

AM Peak Period – The 2-hour period beginning at 7:00 AM and ending at 9:00 AM. The AM Peak Hour is calculated for traffic volumes collected during the AM Peak Period.

Average Count – Traffic data are collected for 16 entry and exit points. The entering data are averaged for the AM peak and the existing data are averaged for the PM peak. The average counts are used to compare one year to a subsequent year to determine if a change in traffic volumes has occurred.

Baseline – The Baseline traffic data are the counts from calendar year 2001, the first year of monitoring after approval of the Stanford GUP in 2000. Subsequent year's counts are compared to the Baseline to determine if the GUP condition requiring no net new commute trips is being satisfied.

Cordon Line – A cordon line is an imaginary line that completely encircles an area and crosses all roads leading into and out of the area. By counting traffic volumes on the cordon by direction, the amount of traffic entering the area and exiting the area can be determined. For Stanford traffic monitoring, the cordon line surrounds the campus and crosses all entry and exit roads, such that all vehicles entering and exiting the campus can be counted.

License Plate Recognition – In 2018, Stanford University moved to a virtual permit platform that uses license plate recognition technology. This change has altered the way some of the data are collected for the monitoring report. Tube counters in the road continue to count the raw number of trips through the cordon. Parking lot data, now conducted through license plate recognition technology, calculates the absolute percentage of vehicles that are affiliated with the hospitals versus the absolute percentage of vehicles that are affiliated with the university during the morning and afternoon peak interval. While Stanford has expressed a preference for this data to be applied as a relative percentage rather than an absolute proportion, the County has determined that this adjustment should continue to be applied as an absolute proportion because this is the established methodology and because it is the more conservative treatment of the data. The parking-permit license-plate scanning is one of two adjustments to the cordon counts. This adjustment modifies the data to account for campus-affiliated vehicles parked outside the cordon (an increase to the raw total) and hospital-affiliated vehicles parked inside the cordon (a decrease for the raw total).

License Plate Survey – The last four digits of the license plates of each vehicle entering and exiting the campus is recorded by the County's traffic consultant, AECOM Engineering, for one day during each week of traffic counts. The time period during which each identified vehicles

enters and exits the campus cordon is also recorded. If an entering vehicle's license plate matches an exiting vehicle's license plate with a 20-minute interval, that vehicle is assumed to represent a cut-through trip (i.e. not campus-related) and is subtracted from the total traffic count for Stanford since it does not represent traffic related to Stanford. In order for a vehicle trip to be identified as "cut-through", it must be identified by license plate match as having entered via one roadway and exited via another. If a car is identified by license plate match as using the same entering and exiting roadway, the trip purpose is assumed to be to drop-off a passenger within the campus, and the trip is assumed to be Stanford related and is not subtracted from the trip count total.

PM Peak Hour – The 60-minute time period during which the highest volume of traffic is counted, within the 2-hour PM Peak Period. During the Peak Period, traffic counts are aggregated by 15-minute increments. The PM Peak Hour is the highest four consecutive 15-minute interval during the Peak Period for all 16 entrance/exit points combined.

PM Peak Period – The 2-hour period beginning at 4:00 PM and ending at 6:00 PM. The PM Peak Hour is calculated for traffic volumes collected during the PM Peak Period.

Raw Data – The total traffic volumes counted at the cordon line before adjustments are made known as unadjusted volumes. Adjustments are made to the raw data to subtract hospital parking within the cordon, and cut-through traffic from the total count, and to add university parking outside the cordon to the total count, in order to accurately account for traffic attributable to Stanford University.

Significant Traffic Increase – In comparing the change in traffic volumes between the Baseline and subsequent years, only statistically significant changes are considered. The following parameters define how a significant traffic increase is calculated:

- Ninety Percent Confidence Interval A confidence interval is calculated to determine if a subsequent set of data is statistically different from the Baseline data. The County selected a 90 percent confidence interval as the significance threshold. Based on the daily variation in the Baseline counts, the 90 percent confidence interval for the AM peak hour is +/- 120 vehicles. The 90 percent confidence interval for the PM peak hour is +/- 109 vehicles. Therefore, if a subsequent year count exceeds the Baseline count by more than 120 vehicles, there is a 90 percent likelihood that the increase in traffic volumes has increased significantly.
- One Percent Increase Trigger The 1 percent trigger is a second criterion for identifying significant increases in traffic volume. Condition of Approval G.9 stipulates that if traffic volumes increase above the Baseline volumes by 1 percent or more in two out of three consecutive years, this will "trigger" a requirement for additional mitigation.

Trip Credits – *Condition of Approval G.8* specifies that the County will recognize and "credit" Stanford off-campus trip reduction efforts after the approval data of the GUP (December 12, 2000), but not before, within a specified area surrounding the campus. These credits can be used to offset a significant increase in peak hour traffic into and out of the campus. Specific guidelines have been established that define how credits can be applied. An example of a credit would be Stanford providing bus service to someone traveling from the Caltrain Station to the hospital. By reducing overall travel in the area around the campus, Stanford can receive a credit against increases in travel onto the campus.

Appendix E Sustainability at Stanford Annual Report

SUS AT STANFORD 2019-20 Year In Review

Stanford is a living lab of sustainability – in research, teaching, campus action, student experience, and community. Across the university, we have made great strides and are committed to accelerating our work to deepen our impact and service. Our research identifies challenges and helps develop critical solutions that can have a lasting impact on campus and around the world."

Fisher

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Stanford President Marc Tessier-Lavigne and Stanford Persis Drell

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Amidst an unprecedented year, climate change remains a challenge for which 2020 was a defining year of action. Returning to the original definition of sustainability, with its triple bottom line—environment, economy, and equity—this year has seen critical momentum and that re-establishes the whole picture of sustainability as a fundamental priority for society. Stanford continues to work toward a more sustainable future with vigor and determination, and the university has deeply embedded sustainability across all aspects of campus life. There have been significant shifts toward new paradigms.

This year, as a key outcome of its Long-Range Vision process, the university announced a <u>school focused on</u> <u>climate and sustainability</u> to accelerate Stanford's impact. The school aims to align resources across disciplines and expand the university's <u>function as a living laboratory</u>. Stanford has also made significant progress toward its goals of reducing campus emissions by 80% and diverting 90% of its waste from the landfill.

The 2019-20 fiscal year represents a significant shift in how communities engage with each other and the world around them. Stanford has embraced the global shifts with resilience and builds on its strong foundation of driving innovation in advancing comprehensive, systematic changes to model and develop a truly sustainable campus in action. For example, to improve infrastructure resiliency in 2019, the university expanded its <u>energy system cooling</u> <u>capacity</u> to eliminate disruption to teaching and research.

Through the IDEAL initiative, a focus on expanding

equitable access and cultivating a culture of inclusion will only continue to grow. Sustainable Stanford is committed to expanding its partnership with those focused on environmental justice in the years ahead.

Throughout the uncertainty and shifts, new programmatic initiatives for the coming decade have been incubated this year. We have begun our work in the following areas that will be highlighted throughout this report:

- 1. Deeper decarbonization
- 2. Zero waste by 2030
- 3. Climate resilience
- 4. Digitization of operations
- 5. Robust community engagement

The spirit of our community and its commitment to grappling with crucial global challenges persist unfettered. We remain united on our path to progress, and we continue to align our efforts around the UN Sustainable Development Guidelines. In this report, we are privileged to share highlights from more than 35 academic and operational departments that work together to run efficiency and conservation programs that reduce Stanford's collective environmental footprint and model sustainable cities in action.

Fahmider A. Buryert

Fahmida A. Bangert Director, Sustainability and SEM Business Services Department of Sustainability and Energy Management

2019-2020 Year in Review

#1

Ranking Research Institution

In 2019, Stanford renewed its Platinum rating through the Sustainability Tracking, Assessment, & Rating System (STARS) of the national Association for the Advancement of Sustainability in Higher Education (AASHE). With a weighted rating of 88% across criteria for academia, administration, operations, and coordination, **Stanford earned the highest place among research institutions in the United States at the time, among 940+ reporting institutions.**

View more awards Stanford has earned this year



Summary 4

2019-2020 Year in Review

Thinking globally, acting locally. UN Sustainable Development Goals

In 2015, the United Nations adopted a plan to help create a prosperous future for the planet and guide its work through 2030. The agenda establishes <u>17 Sustainable</u> <u>Development Goals (SDGs)</u> toward which countries are working. The SDGs cover a broad range of topics and help countries and industries consider the impacts of their operations in a uniform manner. Throughout this report, you will see icons where Stanford's work to innovate solutions maps and aligns with the SDGs.



Summary 5

Bridging Disciplines in Research and Academia

Stanford emphasizes deep collaboration in its transformative research and learning approach to influence future leaders at a global scale. The university's commitment to sustainability empowers ambitious research collaborations that contribute to a deeper understanding of the subject around the world. During the pandemic, the interconnected nature of sustainability as a discipline has never been more apparent.

In 2019-20, building on this rich history of interdisciplinary work, Stanford doubled down on its commitment with the announcement of a <u>school</u> <u>of sustainability</u> accelerating climate solutions. The announcement is a key outcome of the Long-Range Vision process, which started in 2017 and emphasized sustainability as a critical area of focus for the university. The school will amplify Stanford's contributions in education, research, and impact, and will support and expand "campus as a living lab" projects to model sustainability solutions in action.



As planning for the new school gets under way, sustainability-focused research and education progresses across all seven existing schools at Stanford. This work continued seamlessly in March when Governor Newsom implemented California's shelter-in-place order. Within the week, all instruction had transitioned online, allowing the Stanford community to remain <u>connected from</u> <u>anywhere</u> and encouraging <u>resilience and innovation</u> among us all.

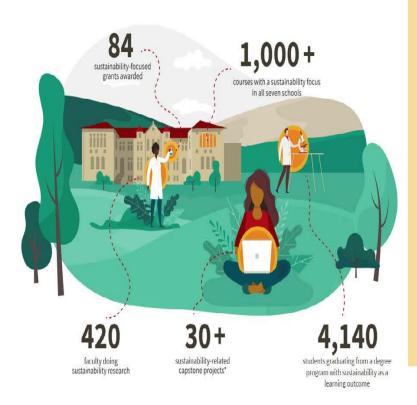
In 2019-20, nearly 30 community-engaged learning courses connected Stanford students with local organizations to develop innovative solutions. Across disciplines, Stanford regularly partners with local and regional communities on research and other projects that have broad implications beyond the Stanford campus. During 2019-20, Stanford faculty, staff and students have been actively involved in the formation of the Northern California Environmental Justice Network for Community-Academic Partnerships, which brings together representatives of universities and community organizations working to advance environmental justice. The network hosts regular workshops to promote knowledge sharing and collaboration on community-engaged projects. These kinds of partnerships are just one example of how Stanford solutions contribute broadly to the health and well-being of the world at large.

Academics 6

Bridging Disciplines in Research and Academia

In 2020, Stanford announced a school focused on sustainability and climate. The school will engage everyone addressing climate and sustainability at Stanford in a newly expanded, integrated, and impact-focused community.

Across all seven schools at Stanford, sustainabilityrelated efforts in 2019-20 included:



Academic Partners

Stanford Woods Institute for the Environment Precourt Institute for Energy Haas Center for Public Service Hasso Plattner Institute of Design Graduate School of Business Graduate School of Education School of Earth, Energy, & Environmental Sciences School of Engineering School of Humanities and Sciences School of Law School of Medicine

Academics 7

Expansive Evaluation, Conservation, and Engagement Programs

Supporting resilient infrastructure and cultivating a spirit of resiliency in individuals are critical to the mission of the Office of Sustainability and Business Services (the Office). The Office aggregates campus sustainability programs to reduce the university's environmental footprint in a systematic way. In 2019-20, its programs saved \$1.4 million and significantly supported strategic initiatives to propel Stanford forward as a living laboratory and as a leader in climate resilience. In addition, the Office supported the campus COVID recovery response, contributing to global efforts to understand the links between the pandemic and the environment. The Office has collected monthly data since shelter-in-place began in March to understand how largely virtual operations impact campus resource consumption, revealing significant reductions across all categories, as well as insight into building and system performance with reduced populations.

The Office's holistic approach embraces detailed analysis of campus performance to inform comprehensive planning and programs for improvement. The Office continues to steward progress toward the two sustainability targets laid out in the Long-Range Vision: becoming 80% carbon free by 2025 and reaching zero waste (defined as 90% diversion or higher) by 2030. Through a comprehensive vulnerability assessment to address risks, Stanford is also preparing to both adapt (respond to the impacts of climate change) and be resilient (prepare for and recover from adverse impacts) in the coming decades to synch with the realities of the changed climate.

In 2019, the Office began to explore strategies to reduce campus emissions further, with plans to phase out natural gas-powered equipment. The next frontier of decarbonization lies in Scope 3 emissions accounting, program development, and systematic reduction of carbon in several aspects of the university's travel footprint and supply chain; an initial inventory is under way.

The data-driven nature of the Office's work is underscored by the Business Systems initiative, which integrates dispersed data sets for greater insight and efficiency in operations, while setting the foundation for Stanford to lead as a "smart campus" with sensors and tools for more sophisticated analytics, predictive maintenance, and forecasting. In 2019-20, a critical tool that exemplifies this work is the real-time Central Energy Facility <u>capacity dashboard</u>, which allows the campus community to view real-time heating and cooling consumption compared to available capacity of the system.



Central Office 8

Expansive Evaluation, Conservation, and Engagement Programs

With technology continuously advancing as a critical asset in managing campus infrastructure, the Business Systems work is actively accelerating the university's "<u>smart campus</u>" capabilities.

While individual departments manage specific infrastructure programs, since 2017 the My Cardinal Green program has provided a streamlined pathway for the campus community to engage with and practice sustainable behaviors. The program provides personalized conservation suggestions for students, staff, and faculty, including targeted opportunities for labs, offices, IT infrastructure, events, and custom student projects. This year, My Cardinal Green users have completed an average of 1,400 more actions per month compared to last year. In addition, the platform now includes more than 30 recommendations to support sustainability while working from home. My Cardinal Green has established the framework through which to engage our various university communities in a personal way, and the next steps will aim to broaden participation and integration within them. This engagement is necessary to model a sustainable campus in action and ensure that our community members are also sustainable citizens in the world at large.



Central Office 9

Expansive Evaluation, Conservation, and Engagement Programs



Streamlining and Digitizing Sustainability





2019-2020 Highlights

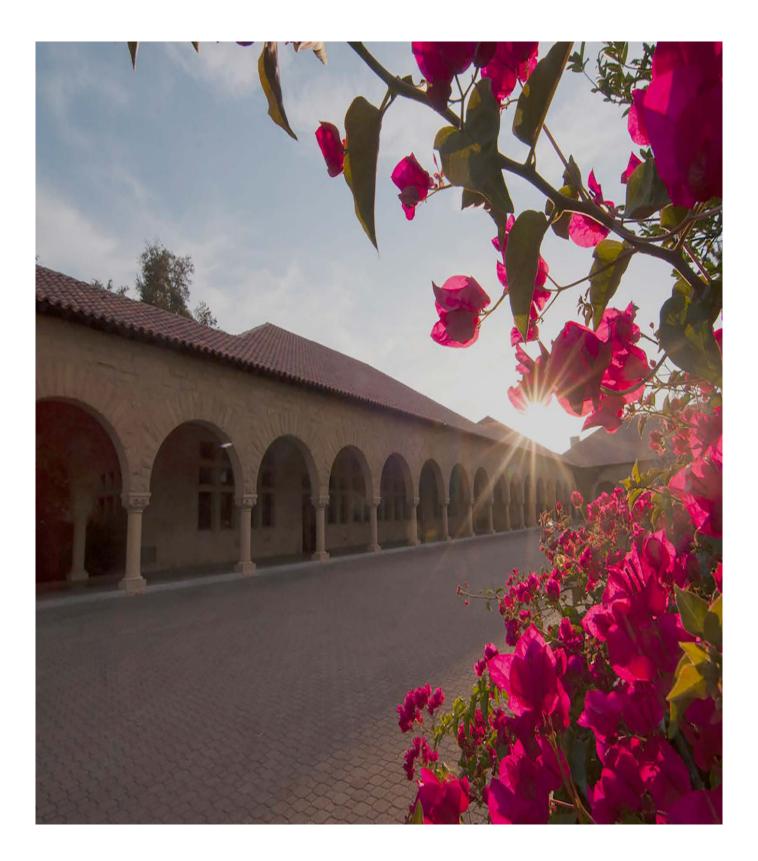
Student Research Projects Spark Further Analysis of Scope 3 Emissions

Supporting Recovery and Tracking Impacts from COVID-19

Showcasing Resiliency for Earth Day

Students Advancing Environmental Justice

Central Office 10



A Carbon-Free and Resilient Energy Supply

In September 2019, to improve infrastructure resiliency during heat waves and to eliminate disruption to teaching and research, the university installed additional equipment to expand the cooling capacity of the Central Energy Facility by 35%. Additional temporary equipment came online in June 2020, nearly doubling the capacity of the system. A permanent expansion will come online in 2022.

This cooling capacity offers zero curtailment or disruption of the heat recovery-based heating systems of the Stanford Energy System Innovations (SESI) program, which came online in 2015. SESI enables the transition of the campus energy supply from a fossil fuel system to an electrically powered heating and cooling system that will allow the university to reach its target of reducing Scope 1 and Scope 2 emissions by 80% in 2021—four years ahead of the goal. At that point, Stanford will rely on 100% renewable electricity to power the campus. Through SESI, the campus has been able to model environmentally and economically sustainable heating and cooling systems at a district level.

More than 6 million additional square feet rely on Stanford's Central Energy Facility today than in 2015. More than 50% of this new square footage came online this year and belongs to new buildings associated with Stanford Hospital & Clinics. In providing hot and chilled water to new spaces, the Central



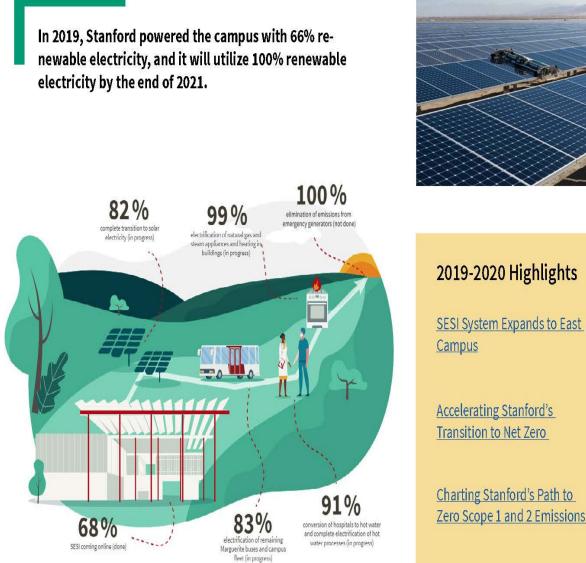
Energy Facility achieves economies of scale that make the energy supply system even more sustainable.

Stanford's energy transformation puts it at the forefront of universities on the path to carbon neutrality, leaving a minimal percentage of Scope 1 and 2 emissions to eliminate. After <u>conducting deep analysis</u> to understand and strategize solutions for eliminating these remaining emissions sources, in the year ahead the university will undertake specific programs to decarbonize. One such program will assist departments with replacing natural gas equipment in buildings with more sustainable electric alternatives.



Energy Supply 12

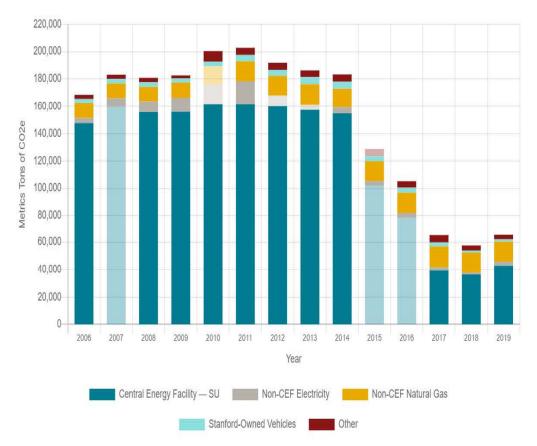
A Carbon-Free and Resilient Energy Supply



Zero Scope 1 and 2 Emissions

Energy Supply 13

A Carbon-Free and Resilient Energy Supply



Publicly Reported Historical GHG Emissions

This chart depicts Stanford's publicly reported and third-party verified Scope 1 and 2 emissions over time. These are the emissions associated with Stanford's building energy consumption, fleet fuel usage, and process and fugitive emissions. The chart does not include indirect Scope 3 emissions associated with commuters and air travel. <u>View Scope 3 emissions trends here</u>.

Energy Supply 14

Pioneering Energy Management Solutions

Stanford has long been a leader in developing solutions to deliver maximum efficiency in existing buildings. To model sustainability while supporting the complex needs of its broadly focused research initiatives, Stanford implements comprehensive, innovative energy management solutions that increasingly incorporate digital technologies to automate efficiency.

The <u>Facilities Energy Management (FEM)</u> team utilizes multiple dynamic operating systems and efficiency programs to optimize energy consumption in existing buildings, and incorporates best practices into all new buildings. More than 40 buildings on the main campus now rely on a new building automation system equipped with advanced fault detection and diagnostic tools. These tools enable smart analytics on multiple fronts, including building commissioning, new-construction post-occupancy studies, chilled and hot water return temperature management, chilled water resilience planning, and even tracking of COVID modes for air handlers.

To complement the progress enabled by SESI, demandside management programs like the <u>Whole Building</u> <u>Energy Retrofit Program (WBERP) and the Energy Retrofit</u>

Program (ERP) have accounted for energy savings of nearly 10%, cumulatively estimated at \$15 million based on current utility rates, since their inception. This year, facilities teams moved quickly to respond to the shelter-in-place restrictions and were able to shut off heating and cooling in 135 unoccupied buildings for several weeks-and in some cases several months. This allowed for significant reductions in energy consumption to support empty spaces, as well as the launch of the COOLER program, through which FEM has begun chilled water load experiments in unoccupied spaces during this time. FEM also worked closely with Environmental Health and Safety (EH&S) to develop guidelines for increasing building ventilation levels without excessively impacting energy costs and changing settings in the building automation systems to meet the guidelines.



Energy Demand 15

Pioneering Energy Management Solutions

In 2019-20, more than 85 Energy Retrofit Projects saved more than \$265,000 in energy costs. As of 2019, Stanford has reduced energy intensity on campus 32% from a 2000 baseline.





2019-2020 Highlights

Bing Nursery School Gets the Light

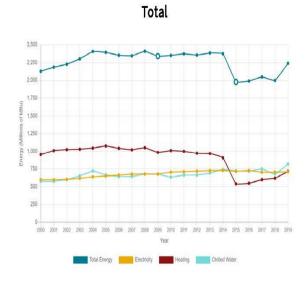
New Analytics Tool Proactively Identifies Savings

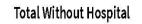
School of Medicine Building Less "Exhausted"

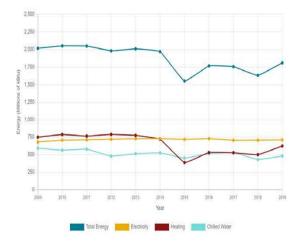
Energy Demand 16

Pioneering Energy Management Solutions

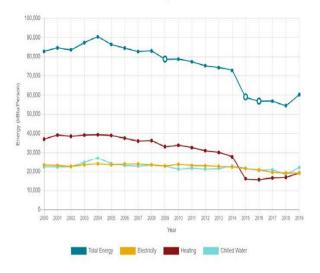
Energy Demand Charts



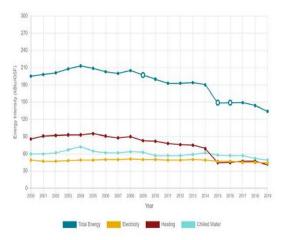








Energy Intensity



Energy Demand 17

Stewarding Vital Water Resources

Stanford has an expansive history of efficient water management practices, stewarded by the <u>Water Resources and Civil Infrastructure (WRCI)</u> group, which also manages water quality, water systems infrastructure, roads, bridges and dams on university land. The group proactively works to meet the needs of both the university community and the ecological systems it encompasses.

WRCI is looking ahead to secure water resiliency for the future of the campus. Since the start of its water conservation program in 2001, the campus has reduced total potable water use by 44%.

In 2019, water consumption largely remained steady, following <u>significant reductions by all major</u> <u>campus water customers</u> compared to pre-drought baselines. Potable water consumption also declined significantly following building shutdowns due to shelter-in-place regulations.

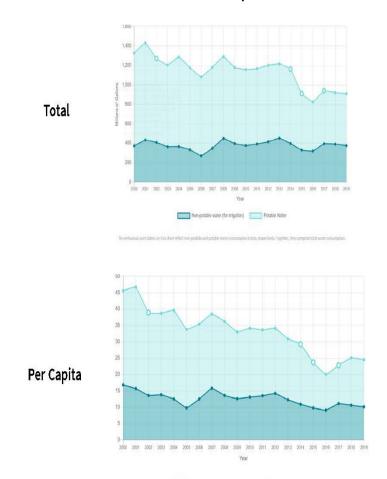




Water 18

Stewarding Vital Water Resources

In 2019, potable water use increased by 1% and nonpotable water use decreased by 4% from the previous year.



Non-potable Water (for impation)

Potable Water

Water Consumption Trends



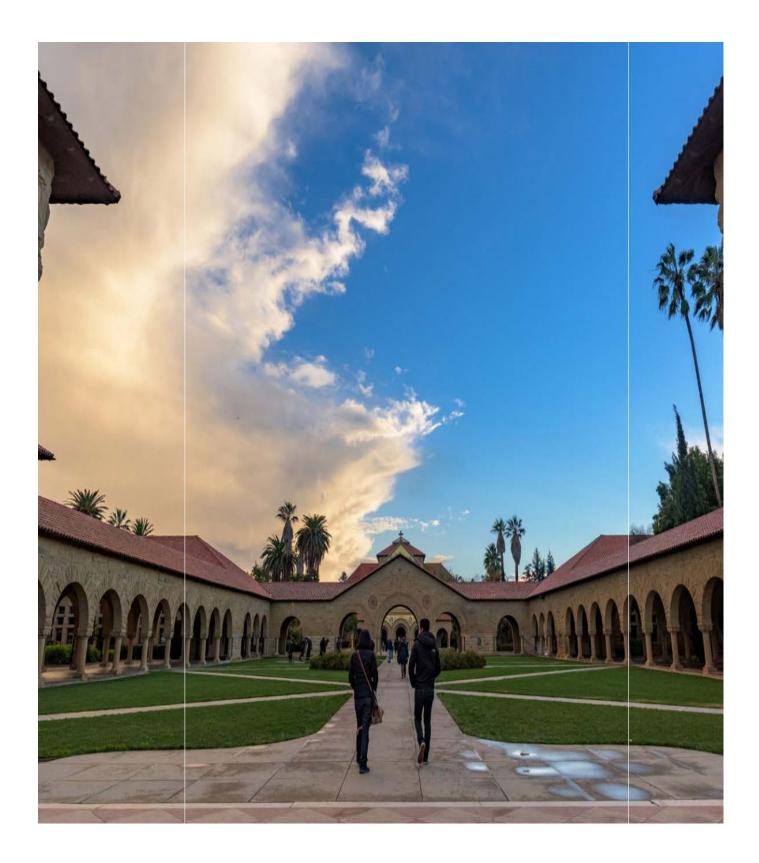
2019-2020 Highlights

<u>New Data Management Tool</u> <u>Saves Water</u>

Athletics Department Pilots Low-Flow Showerheads for Savings

New Stormwater Retention Area Can Be Explored Virtually

Water 19



Increasing Waste Diversion

Stanford is actively progressing on its path toward diverting more than 90% of waste from the landfill by 2030. Through expansive reuse, recycling, and composting programs, the university has reduced the total amount of material going to landfill to 8,970 tons in 2019, for a diversion rate of 66%, compared to a peak of 14,000 tons sent to landfill in 1998. With a significantly reduced population on campus in the wake of local shelter-in-place laws, the campus generated an average of 1,300 fewer tons of waste each month than during the same period the prior year. Managing campus resources in a way that prioritizes sustainable purchasing, reduction, and reuse, followed by recycling and composting, is critical to achieve the zero waste goal.

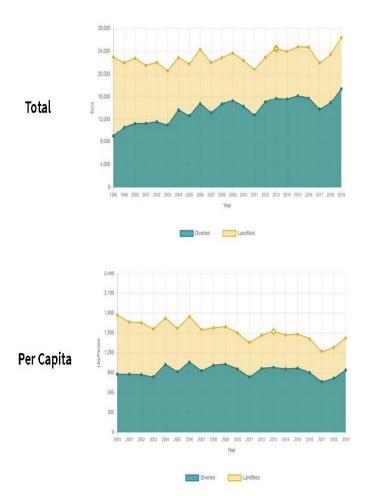
In 2019, Stanford published its Zero Waste Feasibility Study, outlining the process to evaluate the university's existing waste infrastructure and key solutions to reach its target of zero waste by 2030. Stanford identified source reduction efforts and efficiency opportunities throughout its waste system, and the study further refined these efforts into a multistep, data-driven pathway to zero waste. A Zero Waste Systems Manager joined the Office team to implement the plan and begin pilot programs to deploy the new waste system in buildings. The pilot programs build on the success of the systems implemented at the Redwood City campus, which opened in March 2019. Solutions that will be piloted on the main campus in academic year 2020-21 reduce touch points and include moving to single-stream recycling; removing deskside collection and opting for central waste stations; adding compost bins to breakrooms and kitchens; adding paper towel compost collection to restrooms; and streamlining the custodial collection process. As the university progresses through its recovery, the centralized systems will also minimize the number of individuals interacting with the overall process and allow for greater sanitization. While the dramatically reduced population of building occupants has paused the timeline of the initial pilots, the Office is working closely with the university's procurement team to encourage contract language that supports waste minimization goals.



Waste 21

Increasing Waste Diversion

In 2019, Stanford recovered 2,500 more tons of waste than in 2018, including 177 more tons of reusable materials, 73 more tons of recyclables, 486 more tons of organics, and 1,726 more tons of construction and demolition material.



Waste Consumption Trends



2019-2020 Highlights

Stanford Wins Top Place for Reducing Food Waste

Students Supporting Food Recovery Increase Collection

Partnership with IDEO Promotes Reusables

Waste 22

Living and Dining Sustainably

<u>Residential & Dining Enterprises (R&DE)</u> is home to 13,000 students and serves 18,000 meals per day across its more than 300 facilities for dining, catering, hospitality, and residences. R&DE collaborates with faculty, students, and staff to foster behavior change, reduce energy and water consumption and waste production, educate students through teaching academic classes, and integrate long-term sustainable thinking into how it operates. R&DE prioritizes local, organic, humanely raised, and fairly traded food, as well as food from family-owned farms and sustainable fisheries. R&DE's efforts directly influence student learning and the overall campus culture, as well as the lives of Stanford's students as they move into new communities after graduation.

This year, R&DE opened the largest residential project in the Bay Area, with enough beds to house 2,400 students. The four 10-story buildings each have a four-stream waste chute to promote waste sorting, and students received free composting buckets, with compostable bags supplied year round. There are specific collection points for e-waste and composting of pizza boxes on the ground floors. Students have access to a free green cleaning solution and laundry detergent in their laundry rooms; the product is made with natural ozone and safely converts back to drinkable water after seven days. An advanced lighting system controls lights in all common areas so hallways, huddle rooms, and lounges are only fully lit when students are using them. R&DE continues to use an advanced analytics program to provide real-time insight into building operations related to energy, water, and waste. Using the tool, this year R&DE launched a new Cardinal Comfort campaign that aimed to reduce energy used for winter heating by 10% while ensuring students remain comfortable. It exceeded that goal, with a total reduction in hot water usage of 10.5%, or 4 million kBtu.

R&DE is a critical partner in achieving the university's zero waste and climate goals. Across its eateries and cafes, R&DE expanded its food waste reduction initiatives in 2019-20, utilizing multilevel strategies centered on source reduction, food waste monitoring, consumer education campaigns, and food recovery and donation initiatives. R&DE continues to partner with the Loaves and Fishes "A La Carte" food rescue program to donate excess food from dining halls, cafes, and concessions to local organizations. This year, R&DE also launched a pilot pop-up food pantry program for undergraduate and graduate students and their affiliates who self-identify as food insecure, in collaboration with the Graduate Student Council, ASSU, and the Stanford Solidarity Network. The program has distributed over 100,000 pounds of food to the Stanford community since its inception in August 2019.



Food and Living 23

Living and Dining Sustainably

Additionally, when the governor issued California's shelter-inplace mandate in March, thousands of students had to move out quite suddenly. When they returned to campus months later to officially pack up their belongings, R&DE collected more than four trailers of material to donate to Goodwill.

> Over 75 students worked with R&DE in 2019-20 to perform research, test new ideas, educate their peers, and implement sustainability projects in their living and eating spaces.





2019-2020 Highlights

Interns Take on Cardinal Comfort to Save Energy

Pop-Up Food Pantry Connects Stanford Community to Food Resources

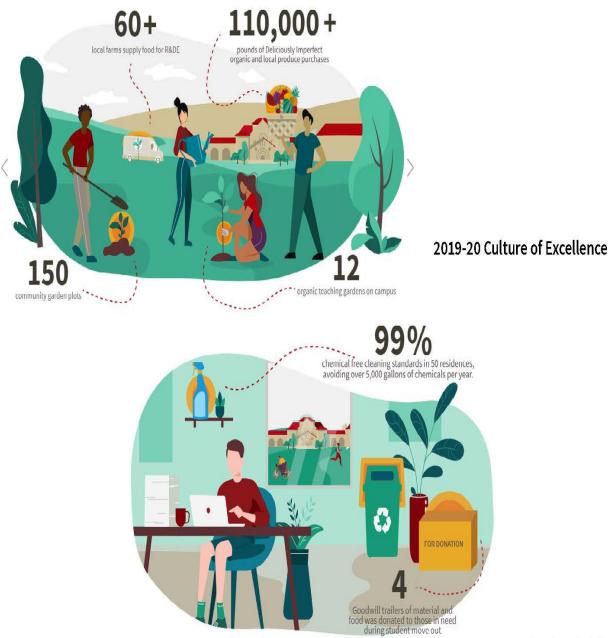
Roble Hall is the First Landfill Dumpster-Free Residence on Campus

Stanford Wins Top Place for Reducing Food Waste

Students Supporting Food Recovery_ Increase Collections_

Food and Living 24

Living and Dining Sustainably



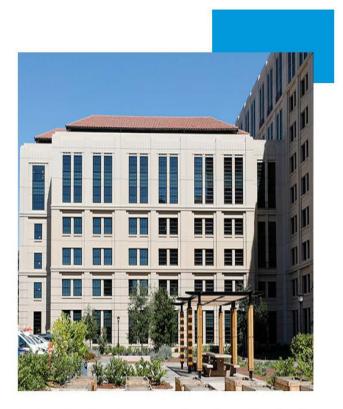
Food and Living 25

Building Design and Construction

The built environment at Stanford is critical in supporting the academic mission, providing appealing, functional spaces that enable cross-disciplinary collaboration to connect research, practice, and action around some of the world's most pressing challenges. <u>The Department of Project Management (DPM)</u> oversees major construction on campus and continually works to elevate the application of sustainable practices in building and design. Its <u>holistic method of benchmarking</u> drives improvement so that each new building coming online performs better than the last. Lessons learned from post-occupancy studies of each new building inform the target-setting process for future buildings.

In 2019, three major research buildings—Bass Biology, Chem-H, and the BioMedical Innovations building came online and help showcase Stanford's infrastructure innovations, with sustainability features like LED lighting, occupancy sensors, and low-flow water fixtures included throughout. While construction paused in many areas during shelter-in-place, the new Escondido Village residences, designed for sustainability, opened on time in summer 2020. Stanford's Project Delivery Process highlights its commitment to developing best-in-class facilities that foster connections among researchers while maximizing sustainability and continually seeking to improve. For example, sustainability and resiliency





best practices have been among the early considerations for the new Bridge Building at the former Herrin site, set to come online in 2022.

Operations teams collaborate with the building design team to understand energy consumption and energy targets for all buildings, working closely together to ensure buildings perform as designed. Because of the coordinated approach toward achieving sustainability targets, Stanford buildings operate at a <u>LEED gold standard</u>.

Buildings 25

Building Design and Construction

In 2019-20, in the face of COVID, construction continued on the new Escondido Village residences, which feature a number of sustainability components and constitute the largest residential project in the Bay Area

Strategies that Contribute to Efficiency in New Construction:





2019-2020 Highlights

Escondido Village Opens with Sustainability in Mind

Team Science Complex Fosters Collaboration

BioMedical Innovations Building Reflects Best Practices for Lab Design

Buildings 26

Sustainable Transportation Options

Stanford is committed to achieving the "No Net New Commute Trips" standard, which is defined by the Stanford Community Plan as no additional trips above a measured baseline during peak commute hours in the campus commute direction. Stanford has met, and plans to continue to meet, this standard, as required under its <u>General Use Permit</u>.

The Transportation Demand

Management (TDM) program develops innovative approaches for getting students, faculty, and staff to campus by means other than single-occupancy vehicles. Spearheaded by Stanford Transportation, the TDM program aims to reduce university-related traffic impacts, emissions, and parking demand while the campus continues to grow. demand while the campus continues to grow.

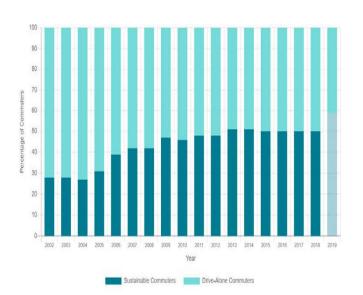




Transportation 27

Sustainable Transportation Options

In 2019, some 59% of campus commuters (employees and commuting students) utilized sustainable transportation options on a regular basis.



Sustainable Commute Rate



2019-2020 Highlights

Stanford Transportation's Hat Trick: Platinum Level Bicycle Friendly University for a Third Time

Sustainable Transportation Encouraged at New Redwood City

Stanford's Commute Club Members Enjoy Treats

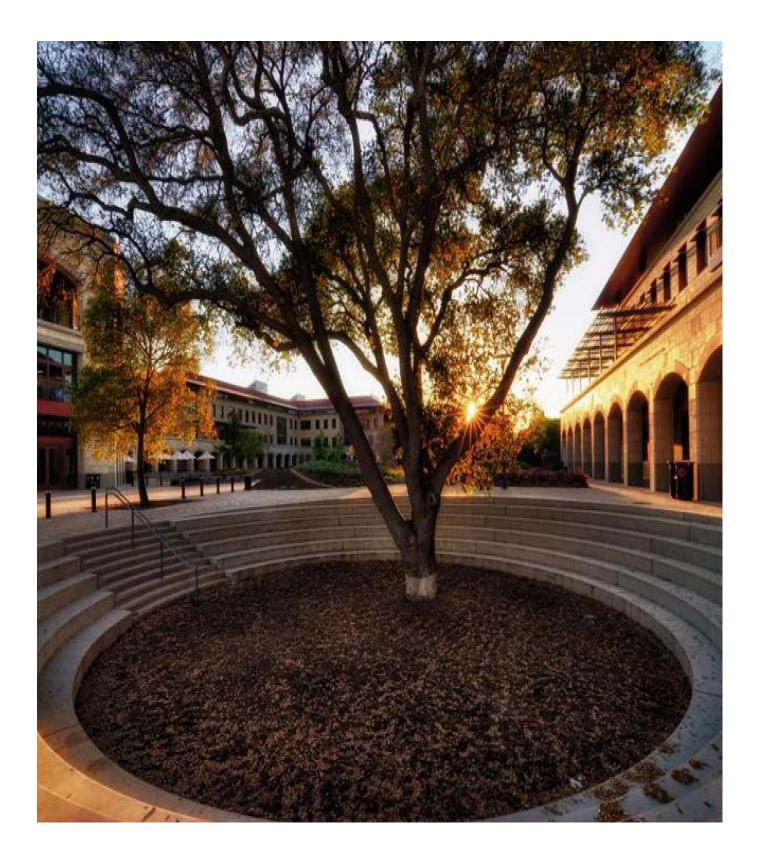
Transportation 28

Expanded Sustainable Transportation Options

2019-20 Sustainable Transportation Achievements



Transportation 29



Appendix F

Stanford Alternative Means Programs 2001-2020

F.1 Annual Reporting of Select LEED Credits

SSc4.1-4, Alternative Transportation

Reference annual GUP reporting on net trips during peak commuting hours

Stanford's annual reporting on "no net new commute trips" is provided in Appendix B (Condition G.4) and in Appendix D.

Submit an updated Transportation Demand Management Program document or similar narrative that describes alternative transportation services

Stanford's annual reporting on the TDM Program is provided in Appendix B (Condition G.2).

WEc1, Water Efficient Landscaping

Report the annual percentage of surface water (non-potable) vs. groundwater (potable) water in the lakewater irrigation system.

Lakewater Irrigation System Supply Sources					
	Non-potable (Surface Water and other sources)		Potable (Groundwater)		Total
Year	Quantity (acre- feet)	Percentage	Quantity (acre- feet)	Percentage	Quantity (acre-feet)
2010	809	70%	342	30%	1,151
2011	1,019	85%	182	15%	1,201
2012	1,032	82%	238	18%	1,270
2013	1,056	77%	311	23%	1,367
2014	72	6%	1,142	94%	1,214
2015	364	34%	721	66%	1,085
2016	215	24%	690	76%	905
2017	585	56%	456	44%	1,041
2018	684 total (588 surface water; 96 dewatering)	55% total (47% surface water; 8% dewatering)	554	45%	1,238
2019	896 total (518surface water;354 dewatering;23 stormwater)	73% total (43% surface water; 29% dewatering;	323	27%	1,219

Appendix F Stanford Alternative Means Programs

		2% stormwater)			
2020	771 total (693surface water;70 dewatering;9 stormwater)	67% total (61% surface water; 6% dewatering; 1% stormwater)	373	33%	1,145

The increased use of groundwater in the lakewater irrigation system between 2014 and 2016 was due to the drought. Groundwater wells were pumped to meet demand within the lakewater irrigation system and to fill storage within Felt Lake. The majority of campus lakewater irrigation demand was met by groundwater sources. The overall annual percentages do not reflect the Surface Water/Groundwater breakdown that occurred on a monthly basis (where a blend of both sources was used). However, the average groundwater percentage of the total lakewater irrigation system is 43% over the last 5 years, and 42% over the last 11 years (since 2010). "Abnormal" years were considered in the calculations for the Alternative Means approach, and Stanford demonstrated that with or without abnormal years, Stanford met the credit requirements for WEc1. Other "abnormal years" included 2006, when Felt Lake was drained, and 2007, when sediment removal at Felt Lake, and groundwater pumping was higher than normal. 2014 through 2016 are other examples of "abnormal years" with the drought.

Note: The sources of water contributing to the lakewater irrigation system have been tracked through various methods in order to fit within reporting formats, including that of <u>Bay Area Water</u> <u>Supply & Conservation Agency (BAWSCA)</u> and GUP reporting. Prior to 2015, the volume entering storage was subtracted from total surface water diverted and water used from storage. In 2015, water added to storage was subtracted from the metered groundwater or surface water source to better account for the source contributing to storage. Prior to 2016, all water coming from storage was assumed to be surface water. In order to better reflect the sources of water used in the lakewater irrigation system, beginning in 2016 the source of stored water is being accounted for by tracking the volume of groundwater that enters and is used from storage. Assumptions for this new method include a starting point of zero groundwater in the non-potable irrigation system storage as of July 2013, surface water entering storage first, and groundwater used from storage first.

Alternative water supplies were introduced and tracked in 2019 and 202019:

• Beginning in 2018, captured construction dewatering was used as an alternative water supply for irrigation (non-potable source). In FY 20, construction dewatering accounted for 6% of the source supply for the lakewater system. The construction projects stopped pumping dewatering water in October 2019.

• Beginning in 2019, stormwater capture was used as an alternative water supply for irrigation (non-potable source). In FY 20, stormwater capture accounted for 1% of the source supply for the lakewater system.

EAp3, Fundamental Refrigerant Management

Report when phase-out of CFC refrigerants in the central plant is complete.

The scheduled phase-out described in EAp3 has not changed. The demolition of the central energy plant began in FY 15 and was complete by November 2015. Therefore, the prohibited CFC refrigerant has been removed.

This will also indicate when EAc4, Enhanced Refrigerant Management, may be submitted for campus-wide pre-approval.

Since the Central Energy Plant was demolished by November 2015, Stanford may now submit this credit for approval.

MRp1, Storage & Collection of Recyclables; MRc2.1-2.2, Construction Waste Management

Confirm that PSSI is still Stanford University's waste contractor, and that PSSI's waste diversion programs are ongoing.

PSSI is Stanford University's waste contractor for all construction projects on campus, and their waste diversion programs are ongoing. Stanford's construction and demolition waste diversion rate for fiscal year 2020 was 80.05%, meeting both the minimum 50% diversion rate and the 75% diversion rate to maintain two credits under MRc2 for the campus as a whole.

Reference reporting already sent to the County under the Solid Waste Management Act of CA (AB 939).

Stanford submitted the County of Santa Clara Countywide AB 939 Quarterly Summary to the Santa Clara County Integrated Waste Management Program on or before March 2, May 30, August 30, and November 30, 2020.

IDc1.3, Green Housekeeping

Confirm that Unicco is Stanford University's cleaning service provider.

UG2 is the current provider of comprehensive green janitorial services to Stanford University.

IDc1.4, Green Campus Operations Education

Provide update on any new green campus operations, education campaigns, newsletters, or other forms of green campus operations education.

The description of green campus operations provided in the Green Building Ordinance materials did not change during this year.

ISc1.6, Green Dining

Provide an update on any green dining initiatives or education.

The description of green dining initiatives and education provided in the Green Building Ordinance materials did not change during this year.

Water Reduction Credits

Report on 'water bank' balance using water calculation template.

The reporting period for this credit is July 1 to June 30, to coincide with Stanford's annual GUP water consumption reporting period for SFPUC purchases and water conservation projects.

	Water Bank Balance				
Year	Projects	Change (mgd)	Cumulative Balance (mgd)		
2010	Previous Projects under GUP	0.683880	0.683880		
2011	Water conservation projects	0.012446	0.696326		
2012	Water conservation projects	0.009141	0.705467		
2013	Water conservation projects	0.017884	0.723351		
2014	Water conservation projects	0.018824	0.742175		
2015	Water conservation projects and SESI	0.422232	1.164407		
2016	Water conservation projects and new building projects	0.005922	1.1703287		
2017	Water conservation projects and new building projects	0.001648	1.1719765		
2018	Water conservation projects and new building projects	0.0007520	1.172464		
2019	Water conservation projects	0.0060580	1.178522		
2020	Water conservation projects	0.0140223	1.192544		

* SESI: Stanford Energy Systems Innovations

F.2 Annual Reporting of Plug-In Electric Vehicle Charging Systems

The parking baseline is the total number of parking spaces recorded within the site boundary, in Annual Report 13 (18,270 spaces), plus all projects approved from September 1, 2013 to February 14, 2014 (Acorn parking lot, 12 net new spaces; Searsville parking lot, 592 spaces), or a total of **18,874 spaces**. As of February 14, 2014, there were six parking spaces that had access to EV charging on-campus that counted towards meeting the Ordinance (see Figure F-1).

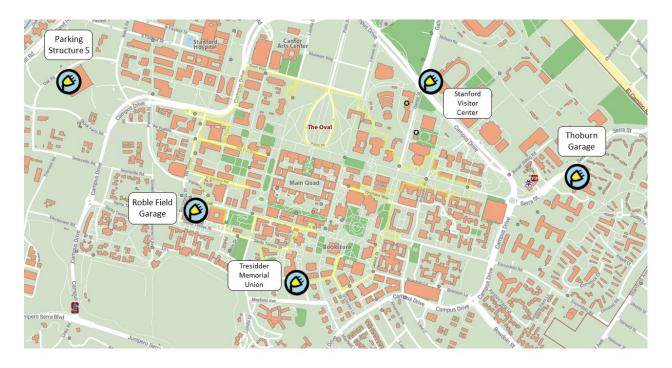
As of August 31, 2020, the total number of parking spaces on campus is 18,215, which is below the baseline number of spaces, and Stanford had 82 EV charging spaces on campus. Therefore, Stanford is in compliance with the County of Santa Clara's Ordinance for plug-in electric vehicle charging systems.

Date	Parking spaces tally	No. of spaces above baseline	No. of EV charging spaces required by PEV Ordinance	No. of EV charging spaces on campus	In compliance with PEV Ordinance
End of FY 13 (August 31, 2013)	18,270	N/A	N/A	N/A	N/A
Baseline as of February 14, 2014	18,874	0	0	6	Yes
End of FY 14 (August 31, 2014)	18,796	(78)	0	6	Yes
End of FY 15 (August 31, 2015)	18,101	(773)	0	14	Yes
End of FY 16 (August 31, 2016)	18,112	(762)	0	24	Yes
End of FY 17 (August 31, 2017)	18,289	(585)	0	78	Yes
End of FY 18 (August 31, 2018)	17,622	(1,252)	0	78	Yes
End of FY 19 (August 31, 2019)	17,593	(1,281)	0	78	Yes
End of FY 20 (August 31, 2020)	18,215	(659)	0	82	Yes

Note: All spaces are mixed-use parking lots.

Appendix F Stanford Alternative Means Programs

FIGURE F-1: CURRENT EV CHARGER LOCATIONS AS OF AUGUST 31, 2020



Locations	Number of ports	Charging type
Parking Structure 5 / Stock Farm Garage	16	Level 2
Stanford Visitor Center	4	Level 2
Tresidder Memorial Union	4	Level 2
Roble Field Garage	54	Level 2
Thoburn Garage	4	Level 2
Total	82	