5.2.2 Draft EIR Comment Letters – Organizations

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February 2, 2018

County of Santa Clara - Department of Planning and Development
Attention: David Rader
70 W. Hedding Street, 7th Floor, East Wing
San Jose, CA 95110

RE: Stanford University 2018 General Use Permit Draft Environmental Impact Report

Submitted via email to David.Rader@pln.sccgov.org

Dear Mr. Rader,

We appreciate the opportunity to comment on the Draft Environmental Impact Report (EIR) analyzing Stanford University's proposal to expand their campus between 2018 and 2035.

We also want to thank Mr. Girard and other County representatives for meetings with us to answer our additional questions and provide us with some additional data. We recognize that both the applicant and the County Staff have worked hard to engage with community members like us and we greatly appreciate your efforts in this process.

We have both technical comments on the Draft EIR, and concerns about the University's proposal. Both are outlined in the attached list of comments, and we would appreciate a detailed and substantive response to all of these points.

Sincerely,

Nadia Naik & Elizabeth Alexis
Cc: Kirk Girard
Supervisor Joe Simitian

Stanford University 2018 General Use Permit Draft EIR Comments

Stanford's Regional Multiplier Effect Is Unique And Not Sufficiently Addressed By Traditional Planning Metrics

Stanford has analyzed the impacts of increasing its directly affiliated students and employees by 25%, as well as the indirect impact of these employees (e.g. more Stanford faculty will increase the demand for dentists). It ignores entirely the massive stimulus effect of a university that is singular in its efforts to promote technology transfer to industry. New professors and researchers mean more technology spin-offs and consulting firms - many of will locate nearby.

As the number of technology firms increase, the need for more patent lawyers and IPO bankers located nearby increases also. This is why the demand for incredibly expensive office space remains high and why companies are finding ways to fit more employees into smaller spaces. And those tech jobs create the demand for many service jobs - at a ratio of up to 5:1 (Attachment A: https://sloanreview.mit.edu/article/the-multiplier-effect-of-innovation-jobs/). All of these service workers need to live somewhere they can afford - which may mean a nightmarish commute.

This cluster effect has many benefits as well as negative impacts. It is clearly one of the reasons why Stanford wants to expand its existing campus. But it is real - and it needs to be planned for and its impacts mitigated. The County must determine what is the acceptable mitigation for this effect. 1

This Stanford University Office of Technology Licensing 2016 Annual Report (Attachment B https://otl.stanford.edu/documents/otlar16.pdf) shows the incredible number of firms created using Stanford technology - there are many more companies where Stanford does not have official intellectual property rights. This is a unique phenomenon not captured in typical regional planning metrics based on square footage expansion.

A 2012 study by two Stanford professors (Attachment C: https://news.stanford.edu/news/2012/october/innovation-economic-impact-102412.html) explains that: "One-quarter of entrepreneurs who graduated after 1990 formed their companies within 20 miles of the university. (Among the engineering graduates whose firms dot Silicon Valley, that number rises to 31 percent.) Thirty-nine percent of all alumni founded firms located within 60 miles of Stanford – roughly a one-hour drive. Statewide, California is home to an estimated 18,000 firms created by Stanford alumni, generating annual worldwide sales of about $1.27 trillion and employing more than 3 million people."

In addition, service workers to support these spin-offs need to live somewhere and travel to their jobs, thus amplifying the need for affordable housing and to diligently study ways to improve commutes. The Stanford expansion project into Redwood City means there will be a general increase

of workers and researchers going back and forth to the campus that will likely not be captured in cordon counts.

Given how unique Stanford is as a research university, it likely that Stanford should use a much higher multiplier in its analysis to calculate indirect growth. The ABAG analysis is too broad and does not have the sensitivity in its analysis to accurately estimate the impacts of the expansion of Stanford's academic campus given the unique nature of Stanford's economic impacts as described in the reports cited above.

The reality is that Stanford is not just a set of buildings in unincorporated Santa Clara County. It is tied with the Research Park, the Medical Center, SLAC and even the Stanford Shopping Center. The increased density shift within the research park alone may be causing regional traffic and commute pattern changes which need to be studied under the EIR. How do we assess how much of the regional activity is as a result of Stanford and what can we do to do quantify that so that we can be more strategic in our thinking? Are there solutions we are missing by not considering all of these things cumulatively? What new innovations or tools can be applied to these opportunities?

Another important consideration is the lag time of the multiplier effect. Some Stanford projects are not finished yet, and even completed projects may not immediately change traffic or instantly create economic activity within the cordon. What are the best ways to track these changes over time and better anticipate the timeframe in which these changes do take place?

1 cont.

Worker Distribution Assumptions Are Incorrect

Page 22 of the ESA Peer Review of Technical Data to Address Population and Associated Housing memo in Volume 2 of the DEIR a sentence in the "Notes" of the data chart that says: *"The commute survey data used in Table 11 did not provide data on workers in the "Other workers" category. This analysis assumes that the distribution of Other Worker households will be the same as the distribution of Staff households"*

This is likely not a correct assumption since elsewhere (pg 7) they describe "Other Workers" as: *"The "Other Worker" population segments are presented separately from the faculty, staff, and student populations because many members of these populations do not work on the campus on a daily or year-round basis or are not directly employed by Stanford. The Other Worker populations are divided into the following categories: contingent,(5) casual,(6) temporary workers,(7) other nonemployee academic affiliates,(8) third party contract workers,(9) janitorial contract workers,(10) and construction contract workers.(11)*

Footnotes:

(5) Salaried workers with roles that are comparable to academic staff and Other Teaching, working less than 50% FTE and/or working less than six months

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(6) Hourly workers less than 50% FTE and working no more than 980 hours a year, including summer camp staff, summer grounds/facilities work, and special projects in academic units
(7) Hourly workers at 50% FTE or more working no longer than six months, including summer camp staff, summer grounds/facilities work, and special projects in academic units
(8) Affiliated teaching staff, adjunct professors, and visiting scholars, typically not full time, approximately half of this category of workers are 20% FTE
(9) Food service workers at on-campus cafeterias, and childcare center workers
(10) Working off-peak hour morning and evening shifts
(11) Related to ongoing construction projects on campus"

2 cont.

Clearly, hourly workers, visiting scholars, food service workers, etc. are not likely to have similar salaries, live in the same cities or commute in similar ways to Staff which are defined as:'"Staff" refers to regular benefits-eligible employees generally in nonacademic positions such as human resources, information technology, facilities, financial aid, etc."

It is more likely that "Other Workers" are commuting from much further away. Stanford should be required to survey those workers and report their findings publicly. The survey must include mode choice, travel time, origin and destination, typical work times and typical travel times.

Provide Data to Support Findings:
The "*Technical Data to Address Population and Associated Housing Demand*" document describes where current workers and future workers will likely live. Was that data used to analyze Caltrain users and their origin/destination along the Caltrain line? Or was any of the data coupled with Marguerite data to further understand commuters origins/destinations? All of this data and analysis must be clearly laid out in the DEIR and all raw data should be available for review.

3

Stanford is fundamentally shifting academic functions way beyond the Academic Growth Boundary in Santa Clara County
Stanford has decided to fundamentally change the way they use their campus, indicating through their communications and their actions that they intend to develop beyond the campus considered in this application for academic and academic support functions. As a result of properties stretching over multiple jurisdictions, it has not been possible for any single city or county to accurately measure and understand the impacts. This expansion into many jurisdictions also makes it difficult to quantify how much inter-regional traffic is being created as a result of this expansion.

4

Expansion into Redwood City

In a newsletter article from December 2008, Stanford announced "major academic and clinical programs will move from their current location at Stanford Medical Center to expanded, state-of-the-art facilities in the 360,000- square-foot Outpatient Center" in Redwood City, which they explain "represents the first time in half a century that Stanford has relocated multiple academic and clinical activities away from its main academic campus." (Attachment D: http://med.stanford.edu/news/all-news/2008/12/milestone-move.html).

The article further explains that " The university has chosen Redwood City as the location for its first large-scale, major move of administrative and support functions away from the core academic campus in Palo Alto. It has begun the process of seeking required approvals from the City of Redwood City to build up to 1.5 million square feet on the property, with the first phase of approximately 500,000 square feet projected to start construction in 2010, with initial occupancy in 2012…..The Redwood City campus is expected to have the capability to handle the university's growth for the long term."

How will Stanford measure activity between their new Redwood City academic campus and the Palo Alto campus? Cordon counts seem inadequate to be able to provide real metrics on travel between these two destinations. The fact that they are located in different jurisdictions also complicates matters. The County has an obligation to develop a way to accurately measure the impacts of this move on travel within Santa Clara County. VTA travel models are not designed to predict this type of movement between two connected but divided satellite locations.

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In addition, Stanford seems to be touting the availability of "ample parking" at this facility, which will lead to more congestion. In a newsletter in 2009 (Attachment A-4: http://med.stanford.edu/news/all-news/2009/02/for-many-outpatient-services-the-doctor-will-now-see-you-in-redwood-city.html) they write:

"The Stanford Medicine Outpatient Center, which is to open Feb. 17 in Redwood City, is the new home of specialized services that were previously located on the main campus at Stanford University Medical Center. 'It's not crowded, it's easy to find, it's right off Highway 101, and it has free parking.' The outpatient center, located at 450 Broadway St., offers all the conveniences of one-stop shopping with the continued excellence of care that is the hallmark of Stanford Hospital & Clinics."

While the Redwood City facility falls outside of the County, it is an expansion of the campus that will have an impact on local and regional travel and is an example of why all of Stanford's academic facilities must be reviewed and analyzed in their totality to understand the regional impacts.

Expansions of Stanford Academic Affiliates Impacts Traffic Congestion But Is Not Considered

In October 2011, a Stanford Newsletter article describes the expansion project of a Stanford Affiliate, the Veterans Affairs Palo Alto Health Care System, or VAPAHCS. (Attachment A-5: http://med.stanford.edu/news/all-news/2011/10/huge-va-project-to-boost-med-school-mission.html). The newsletter describes "As part of that process, VAPAHCS is enhancing its 50-year affiliation with the School of Medicine, adding space for the education of Stanford doctors who treat veterans and the research by Stanford faculty on injuries and illness that affect veterans and others." It further describes the project will have "90 faculty members from the medical school" and "750 residents and fellows and 211 medical students from the School of Medicine." There is simply no way that the expansion of Stanford's academic affiliates will be effectively measured by cordon counts when these people are located far from the academic core. Stanford may claim there will be no one driving between this location and the main campus, but the Stanford must develop a metric that can be independently validated to prove that this is indeed the case. 6

Expansion as a Strategy to avoid GUP impacts

In 2014, Stanford's new Parking and Transportation Services director, Brian Shaw, described in an article (Attachment A-3: https://news.stanford.edu/news/2014/september/shay-parking-director-092314.html) that Stanford is aware that even with their TDM program, the are reaching a point where other strategies have to be employed, like moving academic functions off the main campus. Shaw said in an interview *"We're doing well, but we're reaching a plateau. It took a lot of work to get us to this low drive- alone rate, including alternative transportation programs, such as the free Caltrain pass and VTA Eco Pass, and expanding the free Marguerite Shuttle. But Stanford continues to grow. If we add more people, even at the current drive-alone rate, that's going to increase the number of trips coming to campus. That's just doing the math."*

More from the article: *"While Stanford has achieved its trip-count goal during the morning commute by a comfortable margin, the afternoon commute has always proved more challenging. During the last cordon counts, spring and fall 2013, the county tallied 3,744 vehicles leaving campus between 5 and 6 p.m. – which is 153 trips* over *the limit. Stanford can apply "credits" earned primarily through Marguerite Shuttle ridership outside the cordon count area – taking hospital employees to the train station, for instance – to reduce its trip count. In 2013, those credits enabled the university to stay within the GUP limits, but Stanford tries to accomplish the goal without credits.* 'We're running up against the trip count limit,' Shaw said. *Shaw and his staff are considering other ways to reduce demand for parking in congested areas of campus and to shift demand to less crowded areas, a feat he achieved at the University of Pennsylvania, where he oversaw parking and transportation services from 2010 to 2014.'When I was at Penn, I was able to curb the high demand we were experiencing in some areas of campus and shift it to other areas,' he said. Shaw said Stanford will need to look at the issue in a comprehensive way, considering all options, and may need to move to a system of managing parking on a district level. "* 7

This article makes it clear that even with cordon credits, the University is taking significant action to change how it uses its expansive lands to manage their properties while balancing the various restrictions of each jurisdiction. This type of structure increases the temptation to game the system.

As described in the article, we recommend Stanford should analyze how managing their parking on a "district level" would change their calculations. Additionally, we would recommend all transit, congestion and TDM programs be viewed as a "district", where all academic and academic support functions (including those outside the Academic Growth Boundary in Santa Clara County) are considered and analyzed in their entirety. And, given the overlap of parts of the Hospital properties generally with the School of Medicine (which is considered academic), and the Stanford Research park (which houses academic, research and school of Medicine functions (see Stanford @ Porter Drive description below)), we request that Stanford provide a full analysis of all it's properties as a single Stanford District, with granularity about this project described as part of the totality of Stanford's land holdings.

Please provide a list of all buildings outside the academic cordon that are used for Academic and academic support functions (including School of Medicine), how many employees are located there and where they used to be on campus? Also, provide any commute / survey data that exists for those employees and how does that data differ from those within the cordon?

7 cont.

Academic Expansion into the Research Park - Stanford @ Porter Drive

Recently, academic functions have also been moved into a development known as "Stanford at Porter" located in the Stanford Research Park. The website (Attachment E: https://porterdrivecampus.stanford.edu/som/som-technology-innovation-park) describes the area as a "total of seven buildings in the Porter Drive vicinity will be occupied by the School of Medicine (SoM) and Stanford University (SU) administrative units."

In light of the above questions and concerns, we echo the suggestion by San Mateo county and others that there should be a mitigation measure requiring a Traffic impact Analysis as part of each building permit application. This would provide an opportunity to check the assumptions made about traffic patterns against actual traffic conditions, and provide a more direct method for identifying the specific improvements that should be installed prior to or concurrently with the proposed construction.

The Stanford @ Porter development highlights another problem, although there is land use diversity in the research park, they have minimal transit services compared to other areas. In order to understand the viability of their TDM program, we must understand the composition of who's on campus and the density of the buildings being built - not simply the square footage, since different

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densities likely have different transportation patterns. From a 2012 article (Attachment A-6: http://med.stanford.edu/news/all-news/2012/11/several-school-groups-moving-to-porter-drive-site.html) we can see that the move to Porter is viewed as positive because of ample free parking: "'This really is a fantastic place that we've come to adore,' David Jones, the university's vice president for human resources, said in a video about the new site. 'The grass is truly greener. The cardinals chirp a little louder. And we have free parking.'" This illustrates the concerns of limiting the project artificially to simply the academic core.

Stanford may have data available in their Stanford Transportation survey that could shed light on these commuters, but it has not been made publicly available. In light of its importance in understanding the issue, we request it be made available immediately for public review.

On the Stanford @ Porter website, there is a report from 2012 detailing a number of potential transportation mitigations: Attachment F: https://porterdrivecampus.stanford.edu/sites/default/files/shared/documents/som/committees/transportation_committee_recommendations_040512.pdf

In this 2012 presentation, there is a mitigation that mentions the possibility of increasing shuttle service to the Research Park (the RP line) and it identifies the hours of 7-9am, 4-6pm as the key times needed. If Stanford's own analysis shows this is the peak time of day that requires mitigations, explain why this is not the appropriate timeframe for analysis when considering traffic and congestion potentially created by this project?

8 cont.

--continued on next page – intentionally left blank --

The aforementioned presentation contains the following map identifying alternate transportation areas:

Alternate Transportation

➢These options are detailed in a word document

STANFORD SCHOOL OF MEDICINE — irt INFORMATION RESOURCES & TECHNOLOGY

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Please elaborate to what extent are the various numbered and colored areas being considered for Stanford University (Academic and support) purposes, how many people might be moved and what type of impacts can be expected if employees are shifted to those places? Are there similar plans for other academic and academic support functions in locations other than Stanford @ Porter and the proposed project area? If so, please elaborate and describe how many people might be moved and what type of impacts can be expected if employees are shifted to those places.

8 cont.

Stanford University, Stanford Hospital, Stanford Research Park and Stanford Shopping Center are related entities and should be viewed in their totality.

The relationship between the different entities of the University, Research Park, Shopping Center and other land holdings is complex and poorly understood by outsiders. For example, Stanford University is the only corporate member of Stanford Hospital which is a non-profit entity. The land holdings of

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Stanford University, including but not limited to the Research Park and Stanford Shopping center, are held in an endowment along with the hospital that are in a co-mingled fund which seeks to make profits for all.

Per Stanford Management Company's website: "Established in 1991, the role of the Stanford Management Company (SMC) is to invest and manage Stanford University's endowment and other financial assets. Our goal is to provide financial support for the continued strength of Stanford University."

The efforts of the TDM program going on at the Academic campus will be severely undermined if the Research Park does not implement similar initiatives (such as paid parking). Stanford has tremendous control over the type and density of the businesses in the Research Park. The University's lack of a cohesive and measurable strategy across all its land holdings make it impossible to evaluate.

In the Research Park, for example, Stanford largely retains the ability to choose tenants based on their academic research interests. For example, they've recently chosen 5-6 companies that are working on self-driving cars. These technologies could have benefits, but may make implementing transit improvements harder if we don't get them done now.

9 cont.

Secondary Impacts of Growth

As described above, the multiplier effect of Stanford's growth on the local economy, housing, transportation and infrastructure is much higher than estimated and cannot be accurately captured in the ABAG numbers which are based solely on square footage. More housing, transit improvements and other infrastructure should be considered to accommodate the regional growth that will be caused by this expansion.

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Housing

Stanford cannot simply buy local apartment buildings to help house their people because that simply reallocates existing housing.

Attached is a recent article from the Stanford Daily News (Attachment A-10) that illustrates this problem. The University representative explains: *" 'We have also been working to expand nearby housing for employees — a short distance away, if not immediately on campus,' Miranda wrote, pointing to the Stanford West complex off Sand Hill Road and the Welch Road Apartments, which are open to the public but give priority to Stanford affiliates. The Colonnade apartment complex in Los Altos and Mayfield Place in Palo Alto have also recently become available to Stanford faculty and staff."* These types of transactions only further exacerbate the housing crisis.

Another article highlights the magnitude of the problem (Attachment A-11). From the article we learn

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that in Palo Alto, the University owns 30 homes. In Menlo Park, they own 12. However, this is not the entire extent of the problem because the article explains *"county records indicate that number could be higher. Stanford uses ground leases, by which the university retains ownership of a property while the "buyer" can build on it or purchase the existing residence. Under such leases, the university can claim it "owns" fewer properties than it does. In addition to College Terrace, Stanford owns several other single-family homes throughout Palo Alto, including at least three out of 10 homes at the recently built Edgewood Plaza in the Duveneck/St. Francis neighborhood and some on Hawthorne Avenue in the Downtown North neighborhood, county records show. There are also 120 homes in Menlo Park in the Stanford Hills and near Stanford Creek communities, built in the 1950s on Stanford land, that the university has under ground leases. Stanford didn't count them as "owned" homes in the recent email from McCown. "*

We could not find any mention of these issues in the DEIR. This issue must be studied, reported and fully mitigated appropriately.

11 cont.

Stanford Long Range Planning

Stanford is undertaking a major long range planning exercise called the "Purposeful University" - https://planning.stanford.edu/. Initial findings were released February 1, 2018 and have a 30 day comment period, but the information is only available to someone with a Stanford ID. We are concerned that this process seems to have been excluded from the DEIR, as it will greatly influence how Stanford expands in the future. The current DEIR is a blank check. Other large universities in California have found ways to integrate their long range planning exercises with their expansion EIRs. This seems like a serious missed opportunity for all involved to help evolve Stanford in a way that improves the local community, rather than simply create impacts that need mitigating.

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2018 Baseline Environmental Setting

Regional Plans

The DEIR describes a variety of state and local plans as the backdrop for this development project. If Stanford wants to include all of the relevant documents then the county should consider the relevant policies of each of these entities when considering whether to approve the applicant's proposal.

The lack of synchronization across jurisdictions when it comes to dealing with Stanford's expansion makes it nearly impossible to analyze, quantify or understand the regional impacts to changes made on such a large scale. The County should consider entering into a multi-jurisdictional agreement with Stanford and San Mateo County in order to have a cohesive strategy that better serves the planning needs of the area.

The DEIR describes the Santa Clara County General Plan goals which includes the following policy:

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"Policy C-TR 3 – In order to safeguard future mobility and achieve other transportation- related goals and objectives stated in the Vision of the General Plan, the following set of coordinated strategies should guide decision-making and implementation efforts on a sub-regional basis:
a. develop urban land use patterns that support travel alternatives;
b. manage travel demand, system operation, and congestion levels;
c. expand system capacity and improve system integration; and
d. support new transportation technologies."

13 cont.

Since one of the main tools in the TDM toolbox that Stanford uses is Caltrain, the County should consider how Stanford's plan addresses the issues of expanding Caltrain system operations and capacity, along with the strong increased very demand for Caltrain capacity that is being made by cities throughout the Caltrain corridor (see more below on Caltrain Capacity)? We recommend that the County require Stanford to provide mitigations that not only include transportation improvements for cars (like widening intersections), but also include mitigations aimed at expanding public transit capacity, especially Caltrain capacity.

Marguerite Shuttle Data is an existing baseline condition that should be made public
In November 2017, we requested the Marguerite data (by route and time). This data is necessary to validate Stanford's assumptions, many of which are from derived calculations, rather than observations. In addition, the data is required to inform the DEIR of the totality of trip generation entering Palo Alto and surrounding communities due to the campus expansion and related off campus expansions.

Santa Clara County Supervisor Simitian's staff help facilitate a meeting with Stanford and their consultants to review the partial Marguerite data they were able to provide. While we appreciate the information that we were given (Attachments G-L), this information is wholly inadequate to be able to respond to the DEIR. And simply making the information available for the FEIR seems contrary to the spirit of this process.

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Understanding that not all of the people on Marguerite are necessarily Academic and/or their support staff, Santa Clara County should still require Stanford to make publicly available all Marguerite shuttle data. This information should include boarding and alightings for ALL routes, including the 1050A (paid for by School of Medicine) and line V in one hour increments to better understand the full system. It is an existing baseline condition and all of the data should be included in the DEIR for evaluation.

Stanford should use more the detailed Caltrain ridership information that is available and couple it with the Marguerite data to provide a full assessment of their assumptions and analysis around

transit use. The combination of these data sets for public review is one of the few ways to validate the data Stanford presents in their Commuter Survey (which should also be made public - more on that later). In addition, the County should develop guiding metrics that it feels would be most useful as part of the survey, to ensure that we maximize the opportunity to learn from the information collected.

Caltrain provides data that shows average boardings and alightings on each train at each station, averaged over a period in February. In their analysis, Stanford used general ridership information but detailed information can be found here (Attachment M): http://www.caltrain.com/Assets/_Marketing/caltrain/pdf/2016/2017+Annual+Count+by+Trains+$!e2$!80$!93+Weekdays.xls

Santa Clara County VTA currently has detailed bus data available on their website that shows every bus route and stop, on every single run a bus takes every single day, all year long. For example: You can look up the 9:03 bus on route 35 on July 2 and see how many people got on and off at each station.

According to news articles from 2003, Stanford appears to have similar capabilities. Attachment N - http://www.businesswire.com/news/home/20030902005103/en/Intuicom-Selected-Provide-Wireless-Network-Stanford-University

14 cont.

From the article:
"Phase one components include: Computer Assisted Dispatching/Automatic Vehicle Location (CAD/AVL), Mobile Data Communications, Mobile Data Computer, Automatic Passenger Counting and Internet Information Display. Data to and from the vehicles will be communicated in real-time via Intuicom's wireless network to provide Dispatchers and Supervisors operational status of all the vehicles and trip status, passenger counts, and AVL location reports. The ability to add on technology in the future was a key factor for Intuicom selection. Future functions the University is considering are next-stop annunciations, wayside passenger information signs, and kiosks."

And in 2016, Stanford seems to have upgraded their system: (Attachment O - http://www.metro-magazine.com/management-operations/news/710951/eta-transit-systems-completes-stanford-its-installation

"The expansive project saw the outfitting of all 81 of the university's shuttles with on-board equipment that provides real-time GPS, automatic on-board announcements and integration with existing automatic passenger counters. The SPOT ITS will provide Stanford students and campus riders with real-time bus tracking and arrival predictions, and through GTFS, allows the university's transit schedules to be communicated in real-time through Google Transit."

When we requested this information from Stanford and their consultants through Santa Clara County Supervisor Joe Simitian's office, we received a letter (Attachment G) from Stanford explaining in part:

Automatic Passengers Counters
As noted by CA/RR/D, the Marguerite Shuttle does have Automatic Passengers Counters (APCs) installed. The APC data is collected and stored within the ETA/SPOT cloud. It records both boarding and alighting data and is available to us for review. However, this data is not yet used by the Marguerite Operations team as it has been found to be inaccurate. It appears that some older Marguerite buses have wiring that causes the APC data to undercount ridership. Until those buses are replaced and any other technical issues are resolved, Marguerite operators will continue to rely on manual counts of boardings, which is recorded by Marguerite drivers throughout each day and reported to the Marguerite Operations Team on a monthly basis.

14 cont.

The EIR describes that the Marguerite system has 66 buses. In the GHG part of the report, it describes the makes and models of these buses. Which buses currently have functioning electronic counters and what routes those buses run on? By what date are these expected to up and running?

In order to fully understand the impact of the Marguerite shuttle system on regional transportation, we must be able to fully analyze Marguerite data for the entire Stanford system (academic, research park, hospital, shopping center and satellite locations in various cities). Stanford should also be required to report who/how many riders are getting picked up between 7-10 am outside the cordon that is not Caltrain or VTA stop or Park & Ride?

Marguerite Shuttle Data credit system must be independently verified

In the Transportation Impact Report Part 2 – it says that Stanford is asking for a "minor" modification (pg iii) *"First, Stanford proposes a clarification of the existing policy, that reduction of an off-campus trip can be recognized as long as one terminus for the trip is within the boundary described by the condition. For example, if Stanford runs a shuttle to East Palo Alto and an East Palo Alto resident rides that shuttle to a business in Palo Alto, a vehicle trip will have been removed within the targeted geographic boundary."*

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How can Stanford accurately measure this type of credit if the counters are still not functioning? If not with sensors, what other methodology does Stanford intend to use to validate riders and their origin/destination patterns? Please provide more details on the implementation problems and how these have been dealt with when counting on cordon count days.

It is unclear why Stanford did not provide any more detailed Marguerite data since independent research (and common sense) indicates it likely exists. Given that the Marguerite shuttle system is currently one of the ways that Stanford receives credits against cordon counts, we know that Stanford has a way by which it captures detailed boardings and alightings at a minimum during the 2 weeks in the fall and the 4 weeks in the Spring when cordon counts are done. The Marguerite shuttle

rider data collected during the last 5 years of cordon counting should be made publicly available on a webpage similar to VTA's approach, in order to encourage better regional planning and allow validation of credits.

The sharing of this information is supported by the Stanford Community Plan adopted in December 2000 part SCP-C (i) 13 which states the following implementation recommendation "Work cooperatively with surrounding jurisdictions to develop solutions to regional transportation problems."

In the future, Stanford should provide the same information provided by VTA to allow for proper analysis and support SCP-C (i) 4 of the Stanford Community Plan adopted (Dec 2000) (Attachment A-2) which aims to to "Establish a system for direct, independent, and verifiable monitoring of Stanford's level of achievement with the "no net new commute trips" standard through the annual monitoring procedure." Additionally, the cordon credit counting system (which tracks Marguerite shuttle riders) should also be able to be "direct, independent, and verifiable monitoring of Stanford's level of achievement."

15 cont.

Passengers using the Marguerite shuttle to Stanford Hospital projects are counted as credits against Stanford exceeding No Net Trips, but if that was a condition of the Hospital project, why should that be included? The No Net New Trips system is supposed to be to reduce people to the campus, and giving reductions for something that is already considered to be an impact in another agreement doesn't make sense.

Parking

The county should not allow Stanford to expand parking under any circumstances. In general, the traffic into campus can be predicted by the number of parking spaces. Large increases, as proposed, would negatively impacts trip generation and congestion. In addition, if some of the added parking on the campus was mostly used for the hospital, it would undermine the planning work done by the city of Palo Alto to limit hospital related traffic.

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In addition, a simple count of parking spaces inside the academic boundary does not represent the effective number of spaces, which would add those outside the cordon but used by Stanford campus employees and subtract those inside the cordon used by hospital employees. The DEIR should include the total number of parking spaces currently used by Stanford across all of its land holdings, not just official parking lots.

What is Stanford doing to understand (not just count) why hospital commuters park in campus lots and vice versa? Please describe actions taken and share any data collected on this topic. 16 cont.

Additional Regional Projects impacting the Project

Google Expansion

None of the regional transportation plans referenced in 5.15.4 articulate the impacts of the current plan for Google to expand into San Jose. According to a San Jose City Council Memo from June 2017 (Attachment P - http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=2689&meta_id=641032)

"Preliminary discussions with Google indicate interest in planning and building a master-planned transit-oriented development that includes between 6 and 8 million square feet of office/R&D space and retail/commercial amenities. This development could support more than 20,000 new Downtown employees, significantly aiding the City's need for local jobs and supporting ridership on existing and new public transportation investments. The development will engage and integrate with the surrounding community and be a permeable, open-style development with active, high-quality public open spaces. The company has demonstrated a commitment to quality and innovation in workplace design and sustainability. No development applications have been submitted to the City, nor are expected to be submitted in 2017."

While it is impossible to know exactly what will be submitted, it is clear that the impact of this project will impact the demand and capacity of public transit, specifically CalTrain, given the project area's proximity to Diridon station. We ask that the potential impact of this project on the Caltrain demand and capacity be considered to properly analyze whether Stanford will be able to depend on Caltrain in the future. We understand that the TDM program is flexible and has a variety of alternatives, but it is also important to note that currently, Caltrain is the single largest tool in the TDM toolbox. 17

California High Speed Rail Project

High Speed Rail's 2016 Business Plan has presented plans to connect Fresno and Merced to San Jose. Their plan is to "connect these two regions and their unique economies—to help bring about jobs and housing balance through effective land use and transit oriented development—and to provide for fast, efficient connections to Silicon Valley employment centers could spark significant economic growth in the Central Valley and sustain economic prosperity in Silicon Valley." The high speed rail project should be considered and included in the analysis given the 15 year time frame of the GUP. 18

TransBay Terminal in San Francisco 19

Once Caltrain extends to the TransBay terminal in San Francisco,the plans to extend Caltrain from 4th and King (current endpoint) to TransBay terminal would have a significant, and yet unanalyzed impact on ridership and capacity of the Caltrain system and all other feeder systems.

Analysis done in 2012 using census data shows are more jobs in a ½ mile radius of the TransBay terminal then there are along the ½ mile radius from 4th and King to San Jose combined. This means that once Caltrain goes further into San Francisco, we will likely see a dramatic rise in Caltrain ridership and a change in where people live, work and how they commute. SPUR recently produced a Caltrain visioning report (Attachment Q) (with Arup's help) that details similar findings highlighting the density and job distribution that are likely to change as result of this extension. While it might be difficult to analyze how these proposed changes might impact Caltrain capacity and the possible changes in commute patterns relative to Stanford, it will surely change things. For this reason, we echo the suggestion by San Mateo county and others that there should be a mitigation measure requiring a Traffic impact Analysis as part of each building permit application.

19 cont.

Impacts and Mitigation Measures (other than VMT)

Implementation of the project WOULD substantially increase intrusion by traffic in nearby neighborhoods

The DEIR describes the neighborhoods surrounding the campus and shows a map of the neighborhoods that were "considered for street assessment."

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SOURCE: Fehr & Peers

Stanford 2018 General Use Permit . 160531

Figure 5.15-9
Location of Neighborhoods Considered for Street Assessment

5.15-103

This map is misleading since the DEIR then goes into detail about how the only neighborhoods it deems to be impacted are Crescent Park and College Terrace.

On page 5.15-105, the analysis says that "While there have not been any new traffic calming studies in the Southgate and Evergreen Park neighborhoods since the preparation of the 2000 General Use

20 cont.

Permit, these neighborhoods have some existing traffic calming features that reduce the potential for vehicle trips through the neighborhood. Even without the existing traffic calming, the location and design of the roadway network eliminates any advantage in traveling through the neighborhood to access the Stanford campus."

This ignores how Churchill is actually used as part of the road network. There are currently only 8 places to cross the Caltrain tracks through Palo Alto: Palo Alto Avenue, University, Embarcadero, Churchill, Oregon Expressway/Page Mill, East Meadow and Charleston. Of the 8 possible crossings, 4 of them are not grade separated (Palo Alto Avenue, Churchill, East Meadow and Charleston) which means they are subject to delays related to Caltrain traffic due to train pre-emption. In addition, the Embarcadero underpass is limited to 2 lanes in one direction and one lane in another, thus it already has a lot of traffic.

The DEIR fails to recognize the importance of Churchill road in the Palo Alto network. Both at University Avenue and Embarcadero road, eastbound traffic looking to turn south on Alma must go under the grade separation and then take an unsignalized left turn onto Alma across 2 lanes of traffic. This is a frequent cause of traffic accidents. As such, drivers often prefer to use Churchill to be able to have a signalized left turn onto Alma since it is the only intersection in North Palo Alto where drivers can do that safely. Similarly, in the Old Palo Alto neighborhood traffic East of Alma wishing to travel southbound on Alma must also make the dangerous unsignalized left turn across two lanes of Alma. As such, many avoid this dangerous maneuver and instead use the signalized light at Churchill. Thus, Churchill is indeed a vital connector to the road system.

20 cont.

The DEIR further states "Instead of passing through the Southgate and Evergreen Park neighborhoods, travelers accessing the Stanford campus use Churchill Avenue along the northern edge of the Southgate neighborhood or Oregon Expressway and El Camino Real to the south and west, respectively. As these roadways are located on the edge of the neighborhoods, through traffic is not expected to travel within the neighborhoods. Therefore, these neighborhoods were not included in the Neighborhood Streets assessment, which focuses on pass through trips."

While travel on Churchill is not considered cut-through traffic, it is impacting the neighborhood. As pointed out by the DEIR, there are already a number of barriers within the Southgate and Evergreen neighborhoods prevent vehicles from cutting through the neighborhood, but that also means anyone traveling through the area is forced onto Churchill, and increased traffic on Churchill thus has an impact.

Additionally, Old Palo Alto was not considered impacted, even though the shortest route through Palo Alto to the 101 from certain parts of campus is to take Churchill eastbound across Alma and continue on Churchill to Embarcadero.

5.5-7 Emergency Access

The City of Palo Alto is currently studying the impacts of building grade separations, including at Churchill. The DEIR states "Emergency access can be impeded as a result of the construction of physical features that can block emergency access routes or make them more circuitous, or as a result of high levels of congestion that lengthen the response time of emergency providers."

While it is true that no physical features would be built on Churchill, the added congestion would make it difficult for emergency vehicles to move around the City. As discussed in comments on section 5.15-5, one of Churchill's main function is to be able to make signalized left turns onto Alma. Based on the City's study of intersections, the Churchill/Alma intersection has one of the highest uses by emergency vehicles:

At-Grade Crossing Comparison

	Palo Alto Ave	Churchill Ave	Meadow Dr	Charleston St
Traffic ADT	14,700	11,400	9,300	16,000
Bicycle	550	1020	900	240
Pedestrian	300	270	180	140
Road Transit/Bus	33	7	11	45
School Bus	0	64	48	20
Heavy Truck	190	127	47	20
Gate Down (Secs)	43 (25-75)	39 (30-78)	39 (20-74)	40 (22-76)
Collisions (2011-13)	0	13	13	11
Max Queue (Veh per EB/WB)	11/21	20+/1	15/0	25+/0
Emergency Vehicle	15	30	18	8

(Attachment R - : https://www.cityofpaloalto.org/civicax/filebank/documents/57947)

The DEIR should study how the heavy use of this intersection by emergency vehicles might be impacted by increased Stanford traffic.

21

Peak Spreading

Hexagon consultant's report (Attachment S) completed for the City of Palo Alto raises a number of issues with the current methodology for cordon counts, which only looks at one specific time period. We echo their concerns.

It is clear that an increase in overall traffic is leading to "peak-spreading". If the extra traffic was confined to highways and arterial roads, this would not necessarily be a problem. There are significant overflow issues, however, into the neighborhoods which mean that residents may face

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several hours every evening of gridlock traffic. It is also impacting travel times for buses that are stuck in traffic and cannot divert to neighborhood streets, as anyone with Waze can. The TIRE analysis done by Stanford does not adequately capture these impacts because there is already gridlock. More data is needed.

What is the justification for using peak hour instead of peak period and please provide the data that was used to arrive at this decision? Stanford should calculate the average start time and end time of the various sectors of workers outlined in the *Technical Data to Address Population and Associated Housing Demand* document to better understand if the peak hours selected accurately reflect the times when most people commute on and off the campus. For example, hospital workers go to work at 7AM, so how does that impact load factors on Caltrain at, for example, 6-7AM?

Similarly, on pg 6 of the same document, the School of Medicine is projected to grow at a CAGR of 2.4% while the other schools will grow at 1.2%. How does this difference affect commute hours of the various categories of workers? Does this impact the cordon counts at specific gates differently? Please provide all data available to show average worker and/or student entry and exit times?

In 2012, a Stanford professor created a program to try to incent people to drive during non-peak hours. (Attachment T - https://www.microsoft.com/en-us/research/wp-content/uploads/2016/06/trb2015-2.pdf)

22 cont.

--continued on next page – intentionally left blank--

In his paper he included the following:

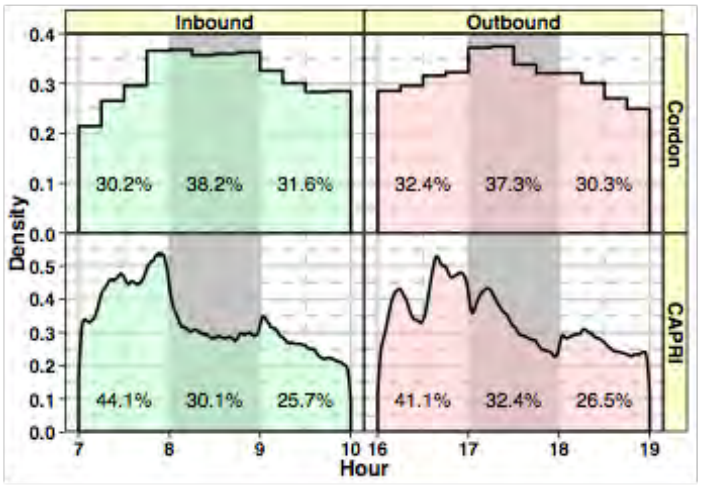

FIGURE 3 Stanford commute time density (cordon counts) vs. CAPRI participants' commute time density on an average day. The time window is 7–10AM and 4–7PM. Areas shaded gray indicate the designated peak hours: 8–9AM and 5–6PM. Each density is normalized: the area under each curve is 1.

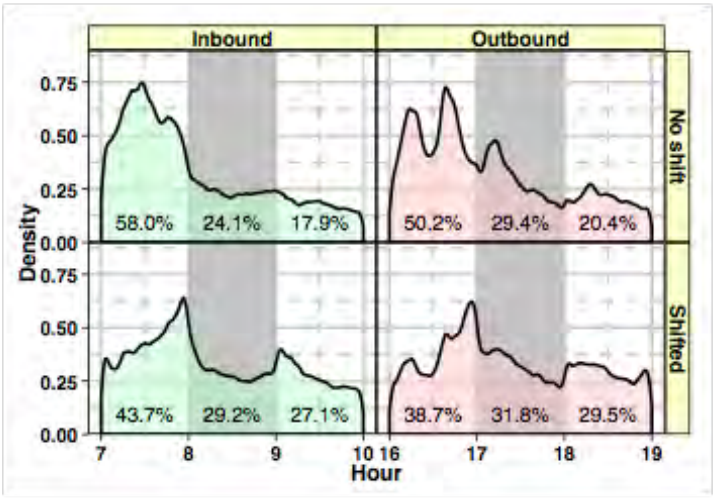

FIGURE 4 Commute time density for self-declared shifters and non-shifters in CAPRI survey. Areas shaded gray indicate the designated peak hours: 8–9AM and 5–6PM.

22 cont.

His data (based on cordon counts) showed a shift in the data. Peak period in Palo Alto is actually different than Stanford's peak time. What changes between 7 -10 am have been observed in the numbers over the life of the 2000 GUP and how has it changed? Same question for the 4-6pm period. This data is partially available in the Stanford Traffic Monitoring Report, but the raw data is not easily available electronically in order to perform these calculations. For example, it would take hours of work to analyze how increases at each cordon gate happened over time without being able to easily

tabulate and manipulate the data. Please provide the raw data tables in a more easily accessible form (Excel or similar).

The professor's study illustrates a broader concern: the cordon counts represents a high power incentive and it would be tempting to cheat if they're too difficult to achieve.

22 cont.

"Cut-through" traffic must be further broken down

With the advent of services like Lyft and Uber, it is important for Stanford to take a more proactive role in identifying the type of "cut-through" traffic that is currently taking place. Without further detail, it is impossible to tell if actual "cut-through" traffic has dropped and instead these car services have increased. From a community perspective, these car services represent a double impact and thus should be tabulated differently and considered accordingly when taking into account their impacts as they add much more to local congestion.

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Crescent Park Analysis Highlights Deficiencies in Current Metrics

The draft EIR has some startling data about afternoon traffic in Crescent Park. Not only is Hamilton Avenue being used as a cut-through route, it is actually able to accommodate more cars than University. On the face of it, this does not make any sense. What is causing this phenomenon? What impact is gridlock in this area having on traffic patterns? We have seen some data to suggest that many commuters are choosing to travel north on El Camino to Menlo Park or beyond, even when going quite far north. Stanford should use additional analysis to understand this problem. Does Stanford have any research related to this problem that can inform these problems? Would better data help and if so what kind?

The traffic on University is so bad that flows are limited to 160 cars per hour in some sections. Using standard analysis tools like TIRE or intersection based delay models will fail to capture the disfunctionality of the road system because much of the system is already in gridlock.

The Willows in Menlo Park is experiencing similar back-ups, which may result in virtual gridlock for hours. This is a serious problem for local residents, transit vehicles and emergency responders, happening multiple times per week.

Stanford's response is that they will either not increase cars or if they do, it is already such a mess, what difference will the additional traffic make? Additional analysis must be completed to understand the problem and then consider ways to fix it. We also need to understand how much additional capacity we could have with reasonable changes to street patterns and infrastructure. This analysis should be part of the DEIR.

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Stanford Should Provide Big Data Analysis

Analysis needs to be done to figure out who is driving during peak time periods. Are they coming from Stanford? Downtown? The Research Park? Are they trying to go to the East Bay? Or just East Palo Alto? Stanford should be using Big Data to provide analysis (such as what is offered by the company Streetlight Data). (Attachment U - Streetlight Data) A video on the Streetlight Data website includes CEO Matt Hardy of Fehr & Peers (the consultants who did some of Stanford's transportation analysis) explaining the many benefits of using Big Data: https://youtu.be/VYmRNUD-cYE

It is very possible that the majority of the problem is caused by Stanford affiliated projects. If previous analyses underestimated neighborhood traffic impacts, it seems unreasonable that Stanford could use the current dysfunction to argue that really bad and REALLY bad can't be distinguished.

The use of Big Data is becoming common practice and should be required by the county. We have attached (Attachment V) a copy of a VTA 2017 Congestion Management Program document which highlights that VTA will be transitioning to Big Data that is likely more reliable and has a lower cost. From the report, " In addition, Big Data may open up new avenues for congestion analysis in areas such as duration of congestion, automobile travel times and reliability, congestion spillover to alternate routes, causes of congestion, transit travel times and reliability, modal split, automobile trip generation, and vehicle miles traveled. "

By only measuring peak hour, peak direction tire counts, the County is measuring the wrong thing. It's too easy to game that metric. Instead, they should measure peak period and, for example, measure it against the number of people participating in Stanford TDM programs. If the two aren't in ballpark of being the same, then you know there's an issue. However, in order to understand what is happening, Stanford must provide the population of employees and residents across all of its land holdings (Academic campus, Research Park, Hospital, Shopping Center and all other Stanford owned lands in the region), including a breakdown by location and building.

25

Cumulative Impacts

Despite the fact that the DEIR states there will be many "significant and unavoidable" transportation impacts, many of the mitigations described in the DEIR propose that Stanford should pay only for their "fair share" of the mitigations. Further, the DEIR explains that if other parties might be involved and those parties can't find funding, then it is likely the mitigations will not be completed. Here's an example:

"Implementation of this mitigation measure would reduce the impact to a less-than- significant level. However, because this improvement depends on the actions of Caltrans, and may require additional funding that has not yet been identified, it is not certain that this improvement would be

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implemented in a timely manner such that the proposed Project's impact is mitigated. Therefore, the impact would remain significant and unavoidable."

While over time, it might be the case that these mitigations would be required even if Stanford did not expand, it is clear that Stanford's expansion will necessarily force these mitigations to become necessary. As such, Stanford should bear the entire cost of proposed mitigation projects where the impacts can be mitigated from "significant and unavoidable" to "less-than significant."

26 cont.

Transit and Bicycle Facility Capacity

Impact of Senate Bill SB743 on GUP

The DEIR describes that OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*

"recognizes that increased demand throughout a region may cause a cumulative impact requiring new or additional transit infrastructure. However, OPR states such impacts may be best addressed through a fee program that fairly allocates the cost of improvements not just to projects that locate near transit, but rather across a region to all projects that impose burdens on the entire transportation system."

There is currently no regional fee program that can fairly allocate the costs of improvements for regional transit, however, given that Caltrain has reached maximum capacity, and that future planned capacity is not likely to be enough (See Caltrain Capacity section below) as part of their development agreement, the County should consider imposing a fee for the duration of the GUP to be kept in an account that would be earmarked for transit improvements such as buying additional Caltrain cars or funding grade separations to help ease congestion.

27

The Stanford General Use Permit has an unusually long time frame to be considered for potential impacts and mitigations. More and more, the State, counties and cities are adopting transportation and land use policies that are having a positive impact towards reducing GHG emissions. However, the policies will also have the impact of eventually creating crowding on transit systems.

The current guidelines described above are the latest information on how we are directed to deal with these situations, but in 10 or 13 years, what if that guideline has changed? How can the County plan for the possibility that future transit capacity will simply be unable to handle the proposed increases, both by Stanford but even just the region generally?

Santa Clara County has recently had some experience dealing with a similar situation at Levi Stadium. The attached article titled: *"How Should Public Transit Be Evaluated for a Regional Attractor? The Case Study of the San Francisco 49ers Football Stadium"* underscores the important role of the

County thinking beyond the requirements of CEQA when considering mitigations of potential impacts.
(Attachment W - http://transportchoice.org/wp-content/uploads/2017/02/HowShouldPublicTransitBe-EvaluatedFeb2017.pdf)

One benefit of Stanford's TDM is that it has created a new "good" problem - we need more T (transportation) for the TDM programs. One suggestion is that there should be some centralized "bank" where Stanford tabulates how much future Stanford people (across all of its land holdings, not just the Academic Campus) will rely on Caltrain. This will help Caltrain develop their business plan and help accurately predict how much future transit need their might be. This information could be reported to the County and Caltrain annually.

27 cont.

New Stanford Transit Users

The DEIR explains that for the purpose of analysis, they have assumed the percentage of rail users will increase: *" For purposes of this analysis, drive alone commuters have been shifted to the rail mode. Rail mode share is assumed to increase from 23.1% in 2015 and 2018 to 29.9% in 2035."*

The DEIR then attempts to demonstrate through their analysis that this it is reasonable to assume Caltrain can absorb this increase in riders (see below Caltrain Capacity Analysis for more details). In other places in the DEIR, Stanford highlights the need and desire for flexibility in the TDM options available to Stanford to be flexible in order to meet growing and changing needs. While the DEIR does attempt to analyze capacity for buses and bikes, the DEIR has not factored into their calculations how mode choice might vary from their analysis. In other words, Stanford assumes that if Caltrain can't take the extra riders, those people might ride their bike - but would the really ride their bike? This is akin go surveying people about their intent to go to the gym to workout vs. their actual work out habits. Without appropriate data, it would be hard to determine the validity of these assumptions.

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The DEIR also describes that: *"Under the Expanded TDM scenario, the greatest pressure on transit services and bicycle infrastructure would occur in the AM and PM peak hours (i.e., 7:00 to 8:00 AM, and 5:00 to 6:00 PM)."*

When dealing with impacts on public transit, it is not relevant to focus on the "peak hour" given that mode choice by users is often driven by a variety of factors including schedules, level of comfort when traveling and travel time. For example, a commuter might choose a 6:55 AM bullet train over a 7:05 local stop train because it is faster. As such, peak period is the better metric to be analyzed when looking at transit ridership.

As described previously, academic functions have moved into a development known as "Stanford at Porter" located in the Stanford Research Park. The website (Attachment E -

https://porterdrivecampus.stanford.edu/som/som-technology-innovation-park) describes the area as a "total of seven buildings in the Porter Drive vicinity will be occupied by the School of Medicine (SoM) and Stanford University (SU) administrative units." The same website also includes a link to an aforementioned presentation (Attachment F - https://porterdrivecampus.stanford.edu/sites/default/files/shared/documents/som/committees/transportation_committee_recommendations_040512.pdf) from 2012 detailing a number of potential transportation mitigations that Stanford is considering including the possibility of increasing shuttle service to the Research Park (the RP line) and it identifies the hours of 7-9am, 4-6pm as the key times needed. If Stanford's own analysis shows this is the peak time of day that requires mitigations, explain why this is not the appropriate timeframe for analysis when considering traffic and transit impacts potentially created by this project? 28 cont.

Stanford Transportation Survey Is An Integral Part Of Stanford's Analysis And Should Be Made Public

The DEIR states: *"The focus of this analysis is on commuters rather than on campus residents. The Stanford Transportation Survey, conducted by Stanford Parking & Transportation Services every year, yields robust data on transit and bicycle use by Stanford commuters. However, little information is available regarding mode choice by campus residents other than their single occupant vehicle trip generation. "*

The Stanford Transportation Survey is referred to multiple times within the DEIR but the raw data results are not presented in the document. In order to verify the accuracy of the conclusions drawn from this data, we request that Stanford provide the questionnaires and the raw data set of answers for verification. Additionally, we would point out that the Stanford Community Plan (December 2000) states Stanford will "work cooperatively with surrounding jurisdictions to develop solutions to regional transportation problems." The public availability of this data is supportive of this goal. It is reasonable that Stanford take steps to anonymize the data, however, the data should be made public, to the extent possible, in its most raw form. 29

The DEIR also points out that despite the survey data that is collected, "*little information is available regarding mode choice by campus residents other than their single occupant vehicle trip generation."* We would recommend the County require Stanford to consider adding additional questions to their survey in order to better understand the mode choice by campus residents other than single occupant vehicle.

Caltrain

We would like to support the comments made by Hexagon Consultants (Attachement S) and which state: 30

"2018 GUP, Background Conditions Report, page 4-58: Intersection improvements identified as mitigation measures for the 2000 GUP were divided into two tiers. A condition of the 2000 GUP "required Stanford to construct Tier 1 intersection improvements regardless of whether Stanford achieved the 'no net new trips' goal." A two-tier approach may also make sense for the 2018 GUP, with a condition of approval that requires a fair-share contribution towards improvements at the Palo Alto Intermodal Transit Station in order to accommodate 8-car trains for Caltrain service. The County could require such a contribution regardless of whether Stanford achieves the "no net new trips" goal because increased Caltrain capacity is so critical to further reductions to the SOV mode share and the projected increases in Caltrain ridership."

On page 5.15-157 the DEIR describes the assumptions of future Caltrain upgrades through 2035 including. It is important to note that while we understand that Stanford is not required to discuss transit system capacity in the DEIR, the County must consider whether or not Stanford's assumptions will have any countywide impacts as a result of this project.

In addition, public transportation funding and planning is difficult to predict due to changing economic conditions and their impact on funding. Caltrain is particularly vulnerable to this phenomenon. As described in this article: (Attachment X - https://patch.com/california/losaltos/caltrain-declares-fiscal-emergency-2) "Unlike other agencies that have allotted revenue through taxes, more than half of Caltrain's funding comes from its three partner agencies—Valley Transportation Authority (VTA), SamTrans and the county of San Francisco—which make up the Peninsula Corridor Joint Powers Board. Payment from each agency is typically proportional to the amount of riders within that county,..." 30 cont.

There is currently no stable funding for Caltrain and in recent years, funding partners have been unable to maintain their funding levels. (See: Attachment Y - https://mv-voice.com/news/2011/02/07/caltrain-board-the-crisis-is-at-hand) Thus, anticipating future Caltrain service, equipment improvements or infrastructure upgrades should be reviewed annually and verified. It is not possible to project 15 years out, especially given the agencies inability to make reliable long range planning estimates due to lack of stable funding.

In addition, Caltrain is in the process of developing a Business Plan that will further analyze future operations and infrastructure investment that could differ significantly from assumptions made by Stanford in their capacity analysis. (More about Caltrain Business Plan Below)

The DEIR states: *" It was assumed that the Caltrain modernization project, which includes electrification in 2021 and further capacity improvements thereafter, will be fully implemented by 2035. This means that 2018 will have no capacity improvements over 2015. Electrification would convert Caltrain rolling stock from diesel locomotive-hauled trains to electric multiple unit (EMU)*

trainsets between the 4th and King Street Station in San Francisco and the Tamien Station in San Jose. The electrification project would involve the installation of new infrastructure, including traction power supply substations and overhead catenary. After electrification, the number of peak hour trains will increase from the existing 5 trains to 6 trains. Another important improvement that will significantly expand capacity is a platform expansion and train program that would allow trains to increase from 5 cars per train to 8 cars per train."

These assumptions are based on Caltrains plans, but do not reflect what is currently funded. In January 2018, the Peninsula Corridor Joint Powers Authority applied for 2018 Transit And Intercity Rail Capital Program Funds (TIRCP). Their application is attachment Z. According to the application, Caltrain "is requesting $631.5 million in TIRCP funds in support of their Electrification Expansion Project". The magnitude of this request for funds underlines the need for caution when forecasting future Caltrain infrastructure and/or operational improvements.

The TIRCP application represents Caltrain's most up-to-date information regarding future operations, ridership and infrastructure investment and this information should supercede any data used previously to analyze current and future Caltrain capacity in the DEIR. Please update all the analysis accordingly.

30 cont.

Page 17 of the application has the breakdown of Caltrain's request showing the dollar amount of currently unfunded train cars:

Table 2: Electrification Expansion TIRCP Elements Project Costs (in Thousands)

Project Element	Cost
Capacity Improvements	
Procurement of 40 Electric Multiple Units (EMUs)	$224,700
Minor Platform Modifications	$8,000
Wayside Bike Parking Improvements	$3,500
Planning and Agreement Support	$6,000
Subtotal	**$242,200**
System Enhancements	
Broadband Communications	$14,000
Subtotal	**$14,000**
Full Fleet Conversion	
Procurement of 56 Electric Multiple Units (EMUs)	$375,300
Subtotal	**$375,300**
TOTAL	**$631,500**

Caltrain currently only has funding for 6 car trains, not 8 car trains as specified in the DEIR. On page 9 of the application, Caltrain states they are applying for funds for" the procurement of 40 additional EMUs to increase capacity of the electrified system by expanding 6-car EMU sets already under procurement to 8-car sets."

The DEIR describes the Electrification project but does not take into account the additional and unfunded infrastructure improvements that need to be made in order to run 8 car train sets. For example, again on page 9 of the TIRCP application, Caltrain makes reference for the need for "Funding for limited platform modifications (lengthening) to support the operation of 8-car trains."

We recommend the County consider these unfunded Caltrain infrastructure projects as potential mitigations of impacts as a result of Stanford's expansion.

What alternate plans does Stanford have if Caltrain is not a viable alternative due to lack of capacity? If Caltrain were to cut service (a very likely scenario due to its unstable funding situation), does Stanford have contingency plans to reduce trips? What are the specific steps that would be taken and under what conditions are these plans triggered? Please describe all of these scenarios in detail and with supporting data to fully measure whether the proposed plans will be adequate in the event this occurred.

At its January 4, 2018 board meeting, VTA discussed the possibility of cutting service. (see attachment A-1 GreenCaltrain blog post) What other non-Caltrain contingency plans does Stanford have if county or regional bus service is interrupted and under what conditions would these plans be deployed? Please provide supporting data to fully measure whether the proposed contingency plans would be adequate in the event this occurred.

30 cont.

Caltrain Capacity Analysis

Capacity analysis on trains is actually quite difficult to estimate. Unlike buses, which have similar configurations, train sets can be put together in a variety of configurations which would impact the capacity of any given run. For example, train cars with higher bike capacity (thus less seats) or a car that has a restroom, would impact the number of seats available at any given time. Desired service patterns and operations and maintenance impacts make it difficult to assume specific configurations in the future.

Another consideration is how riders choose which train they want to take. For example, if a rider has a short commute, they likely won't care whether they are on an express train or a local train. However, the longer the commute, the more sensitive riders are to travel time, and thus are more likely to select express trains over local trains. Again, without understanding Caltrain's future service goals, it is impossible to guess what a future schedule will look like, particularly given that Stanford is attempting to only look at one peak hour in the AM and PM.

Finally, there is the consideration of crowding. Caltrain's TIRCP application (pg 24) indicates that "updated ridership projections show a significant projected increase in demand for Caltrain service." They also describe that "VTA's travel demand ridership model is not capacity constrained, however,

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meaning that its projections do not take into account the effect of crowding on trains. Caltrain believes that the system will need additional capacity to accommodate the projected increase in ridership growth."

It goes on to describe that "While VTA's travel demand ridership model is capacity-blind, there is ample evidence that crowding on transit can be a significant deterrent to realizing latent ridership demand. Expansion of Caltrain's electrified fleet from 6- to 8- car train sets will directly increase ridership on each Caltrain trip between San Francisco and San Jose."

If Caltrain is unsuccessful in obtaining funding the additional cars needed to expand from 6-8 cars, and demand continues to increase significantly (whether organically in the region or due to Stanford's expansion), the effect of crowding on the system could actually negatively affect Stanford's current and future rail user forecasts. As Caltrain points out in its application:

"Crowding has been shown by numerous transit and rail studies to greatly influence modal choice due to its significant effect on the perception and valuation of travel time, with indications that the higher the perceived cost of a combination of route and mode (e.g., longer travel time, more crowded conditions), the less likely a person would choose it for a given trip. When the passenger load (the ratio between passengers to seats) is at 1.0, perceived travel time is 10 percent longer for seated passengers and 90 percent longer for standing passengers. When the passenger load is 1.4, this increases to 30 percent longer for seated passengers and 110 percent longer for standing passengers. For passengers sitting, the crowding multiplier increases the value of travel time from 1.0 to 1.63 as the density of standing passengers increases from zero to six passengers per square meter, whereas for passengers standing these figures are 1.53 and 2.04, respectively. Other studies have found that the time multiplier for standing passengers averages 2.32. Additionally, crowding has actual impacts on travel time due to increased time needed for boarding and alighting, resulting in longer dwell times, and with high average occupancy levels increasing the probability of trains being full, and therefore, not being able to pick up passengers waiting at stops and stations, further increasing waiting time and travel time variability."

31 cont.

Thus, the effects of crowding on commuter patterns is unknowable given future Caltrain operations are simply too uncertain.

In the previous GUP, Stanford's growth was contingent on adding a certain amount of housing. The County should likely do something similar with transportation capacity given the importance of public transit to Stanford's TDM program. The County should strongly consider working with Caltrain and other public transit agencies to validate the capacity studies and ensure that there is in fact enough capacity for the expansion being planned. The County could work to develop established triggers to ensure, for example, X amount of expansion is only allowed when Y amount of capacity is added.

Caltrain Business Plan

In Appendix D of Caltrain's 2018 Transit And Intercity Rail Capital Program (TIRCP) application (Attachment Z of this document) shows the analysis that Caltrain intends to complete but is not currently available. Among the goals currently outlined are "Adopt a long range "Service Vision" for the Caltrain corridor including number of trains per hour, mix of express and local services, stopping patterns and desired connectivity to the regional, interregional and state rail network. " Given that this plan is not completed, it is impossible to verify whether the assumptions included in Stanford's analysis are in fact the direction that might be decided followed by Caltrain in the future. 32

Mitigations

While the DEIR is required under CEQA, the County has the responsibility to intervene when it comes to the safety, health and welfare of the community. As we have discussed at length, the impacts of expansion on regional travel and transportation will impact the health and welfare of the community. 33

There are a number of mitigations that the County may want to consider:

Joint Transportation Authority: Creation of joint transportation authority (Stanford, Palo Alto, Menlo Park?, East Palo Alto?). Most people don't know the Marguerite buses are available for non-Stanford people, can the county require marketing this information to the community broadly to help encourage use and reduce congestion? There may be efficiencies for the cities to have Stanford run the city shuttles. A joint service would minimize confusion and increase ridership. 34

Comprehensive bike share program: There is a real need for a serious bike share program that would include the Stanford Shopping Center, downtown Palo Alto, Stanford, the hospital, SRP and California Avenue. This would help minimize car trips as people travel to and from Stanford. It might decrease the number of people who bring bikes on Caltrain, which would leave more room for passengers. Currently, many people still drive to work because they need to get around during the day - a better shuttle system and bike share could be the key to TDM success. 35

Grade Separation Analysis and Funding:

There are over 40 remaining level grade crossings on the Peninsula that Caltrain and cities are working on either closing or separating including in Palo Alto, Menlo Park, Mountain View, Redwood City and Sunnyvale. Each grade separation is complex given they are happening in generally dense, suburban environments and near station areas. In addition, some projects will likely have extended construction disruptions. For example, the most recent plans for Rengstorff call for potentially partially or fully closing Alma for up to 6 years. 36

These projects will be evolving over the life of the GUP. How would these grade separation projects influence the projections related to Stanford's activities overall? How would the long term construction timelines of these projects change traffic flows regionally as they relate to Stanford? What would be the best way to help measure these changes and what can we do to minimize disruption? What would the construction of a grade separations do to traffic flows in Palo Alto. Please describe in detail the effects of grade-separating Palo Alto Avenue, Churchill, East Meadow and Charleston crossings on circulation in and around Stanford campus. What would be the impacts if any of these intersections are close? Please ensure to describe scenarios that consider building some grade separations but leaving others unchanged and how that would impact circulation.

36 cont.

The current traffic woes in the afternoon and some difficult decisions about grade separations have highlighted the deficiencies in the current analytical approach to modeling traffic. As part of its expansion, Stanford should consider an institute focused around infrastructure. This would call upon many areas in which Stanford has expertise and could be used for the direct benefit of the local community.

Incentivizing the Best Outcome

While the Stanford TDM program is seeking to lower trips to campus, there is a downside: the inherent incentive for Stanford to choose to reduce the cheapest trips instead of making more expensive improvements that would provide a larger, though perhaps less concrete, community benefit.

For example, there are likely specific intersections and locations where the benefit to the community of trip reduction is very large, but these may not be how Stanford minimizes trips. Additionally, Stanford's choices may have significant implications for land use - in the way the Google buses have led to localized housing impacts in the neighborhoods in SF where the bus stops.

Stanford and the county should work to develop a more open process where the communities are involved in decision making, helping to ensure that cost effectiveness or cordon count reduction isn't the most important factor in determining mitigations.

37

Flawed Transportation Models and Further Model Refinement Are Problematic

The VTA traffic model has known flaws for predicting local traffic. Two different consultants working on different projects for the city of Palo Alto were unable to validate the model for the purpose of predicting traffic flows on specific streets and at specific intersections.

38

This has several implications. First, most analysis of specific intersections will be done outside of the framework of a comprehensive model so important but complex effects of increased traffic in one location on another location are likely to be missed.
As a result, all studies of traffic demand on specific streets and intersections have required the use other models that can use current traffic patterns and assumed increases in traffic to forecast changes in LOS and delays.

It is our understanding that the studies done for Stanford have required similar analysis that is outside of the original model framework. Page 1767 of Volume 3 describes in detail how the VTA model was refined. The multiple levels of data manipulation make it difficult to validate any specific result. The approach to analyzing individual intersections outside of a more comprehensive model means that important dependencies will not be included in the forecasts. Second, the failure of the model represents the complexity of the underlying street grid and traffic patterns that vary by time of day and location. There are important factors like the perceived safety of unprotected left turns that heavily influence traffic patterns but which are unaccounted for in the model.

38 cont.

Failure of model validation for local traffic patterns,
Palo Alto's traffic model is based on the countywide VTA model that is based on the regional MTC model. They use Cube software to forecast:

- How many trips will be taken in the ENTIRE BAY AREA
- Where will people go in the ENTIRE BAY AREA
- How will they travel (bike, train, car etc) in the ENTIRE BAY AREA
- What route will be taken from A to B

39

These are very complicated models and many assumptions have to be made.

For all automobile drivers traveling between two specific zones, the model decides on the **one** fastest route and assumes everyone uses this specific route to travel from the center of each zone to the center of the other zone.

The model has very limited information about many of the real world factors that actually go into our decision-making about what route to take. It doesn't include all the streets in Palo Alto. It omits key details about the design of the streets that impact their usage. It definitely doesn't handle train pre-emptions in a direct way.

It is useful for estimating the number of trips in a 24 hour period between Stanford campus and and the west side of San Jose - the trips between A and B.

It is not useful for predicting the local routes that people will take to get to specific locations within Palo Alto - how to get from A to B.

This can clearly be seen in the model validation that was done by Hexagon in December 2013 for the Comprehensive Plan Update (Attachment A-7), as well as the validation that was done by Mott MacDonald for this study (Attachment A-8).

On the next page, we have a copy of the Hexagon analysis that compares local street traffic data from the VTA model forecast, actual traffic counts, and the forecasts from the Palo Alto version of the VTA model is on the next page (Attachment A-7).

39 cont.

--Continued on next page – intentionally left blank --

Model Volume Comparisons on Local Streets (City of Palo Alto and VTA Models)

		AM Peak Hour			PM Peak Hour		
Roadway	Segment	VTA Model Volume	CPA 2013 Count Volume	CPA 2013 Model Raw Volume	VTA Model Volume	CPA 2013 Count Volume	CPA 2013 Model Raw Volume
University Avenue	between Bryant St and Waverly St	1716	908	591	1955	828	734
	between Waverly St and Middlefield Rd	1647	947	698	1999	913	801
	between Middlefield Rd and Chaucer St	1206	1026	776	1774	1044	778
Loma Verde Avenue	between Alma St and Middlefield Rd	54	701	123	47	462	172
	between Middlefield Rd and Bayshore Rd	55	649	136	95	473	190
Meadow Drive	between El Camino Real and Alma St	582	882	1731	743	783	1217
	between Alma St and Middlefield Rd	44	977	316	78	850	341
	between Middlefield Rd and Fabian Wy	130	585	222	269	420	282
Charleston Road	between El Camino Real and Alma St	784	1161	1032	1265	1100	615
	between Alma St and Middlefield Rd	1201	960	2303	1632	964	1290
	between Middlefield Rd and Fabian Wy	857	1346	1216	761	1231	1319
Stanford Avenue	between Junipero Serra Blvd and Peter Courtts Rd	262	773	631	637	684	215
	between Peter Coutts Rd and Hanover St	247	670	455	322	754	697
	between Hanover St and El Camino Real	314	583	246	539	685	335
Middlefield Road	between Everett Ave and Lytton Ave	1497	1437	1640	1913	1636	1666
	between Lytton Ave and University Ave	1535	1044	638	1934	1314	912
	between University Ave and Hamilton Ave	939	877	749	1667	1212	891
	between Colorado Ave and Loma Verde Ave	320	1394	296	813	1575	1077
	between Loma Verde Ave and Meadow Dr	385	1451	389	806	1717	1090
	between Meadow Dr and Charleston Rd	402	1687	596	884	1941	1208
Bryant Street	between Oregon Expwy and N California Ave	1	194	404	13	233	971
	between Oregon Expwy and Colorado Ave	1	147	59	88	132	52
Miranda Avenue	north of Arastradero Rd	104	628	83	58	691	107
	south of Arastradero Rd	13	379	32	13	148	17

Notes: Directional volumes from both models were added together to yield two-way volumes.
CPA 2013 Raw Model Volumes and VTA Volumes were converted from 4 hour model output to 1 hour volume by applying factors of 2.793 (AM) and 3.584 (PM).

39 cont.

3.6 2014 Model Results vs. Traffic Counts

The comparison of the base year traffic forecasts with traffic counts is summarized in Table 1. The "Counts" column represents the 2015/2016/2017 observed traffic counts, and the "model" column represents the traffic forecasts from the 2014 base year model (note: the El Camino Real / Palo Alto Ave intersection traffic counts are from 2017, while those of other intersections are from 2015/2016). The comparison is conducted for one hour in both the AM and PM peak periods at the four key study intersections.

Table 1: Base Year Model Forecast Validation

Int.	Approach direction	AM Peak					PM Peak				
		Counts	Model	Diff	Diff%	GEH*	Counts	Model	Diff	Diff%	GEH
1.El Camino Real / Palo Alto Ave	SB	2414	2537	123	5%	2.5	1710	2121	411	24%	9.4
	NB	715	964	249	35%	8.6	1548	2291	743	48%	17.0
	EB	487	239	-248	-51%	13.0	687	297	-381	-56%	17.3
	WB	584	434	-150	-26%	6.6	823	720	-103	-13%	3.7
2.Alma St. / Churchill Ave	SB	696	658	-38	-5%	1.5	1161	1215	54	5%	1.6
	NB	1529	650	-879	-57%	26.6	1463	864	-599	-41%	17.6
	EB	203	47	-156	-77%	14.0	438	46	-392	-89%	25.2
	WB	94	98	4	4%	0.4	160	46	-114	-71%	11.2
3.Alma St. / Meadow Dr	SB	812	723	-89	-11%	3.2	1346	1038	-308	-23%	8.9
	NB	1348	1184	-164	-12%	4.6	1361	1386	25	2%	0.7
	EB	434	611	177	41%	7.7	368	759	391	106%	16.5
	WB	368	188	-180	-49%	10.8	441	116	-325	-74%	19.5
4.Alma St. / Charleston Rd	SB	746	1290	544	73%	17.1	1259	1696	437	35%	11.4
	NB	1470	1379	-91	-6%	2.4	1455	1480	25	2%	0.7
	EB	666	243	-423	-64%	19.8	668	274	-394	-59%	18.2
	WB	399	250	-149	-37%	8.3	522	228	-294	-56%	15.2

Source: observed traffic counts and 2014 base year traffic forecast model

* GEH stands for Geoffrey Edward Havers, who developed a statistical method of measuring the "goodness of fit" between two independent data sets. It is a modified Chi Squared test and outputs a statistical value for the comparison. It has been adopted by the UK Department of Transportation, many U.S. State DOTs, and the travel demand modeling industry in general.

A number of observations can be made from the comparison:

- The volume discrepancy between the model forecasts and the traffic counts demonstrates that the model should not be used directly to estimate individual traffic flows. The general standard is that when the GEH value is greater than 5.0, the data sets are not compatible, which was to be expected.
- The model forecasts on Alma Street are generally lower than the observed traffic counts.

Based on the above, it was decided that future year traffic forecasts from the model should not be used directly for traffic operational analyses at a detailed level and would be used to estimate the growth in traffic demand. The models would also be used to identify changes in travel patterns.

39 cont.

The data shows many local streets where the models widely over or underestimate usage.

Hexagon decided that for the purposes of the comprehensive plan, the model was acceptable because it had reasonable forecasts for the total number of people driving north or east, although the model did not work to predict which streets people would choose to drive on.

Mott Macdonald did a similar exercise with the new data they collected. They too concluded that the model was not reliable for the purpose of forecasting the distribution of traffic.

For example, the model predicted that only 46 people would travel eastbound on Churchill in the afternoon peak hour - in reality there were 438 cars. The model did not understand why anyone other than Churchill residents would use Churchill.

While the absolute counts are more reasonable for Alma/ Palo Alto Avenue, there are a number of data points that suggest the model does not accurately portray the destinations of those using the crossing - which means that any analysis about diverted traffic will not be accurate. The model appears to forecast most of the users cutting down to Middlefield on Palo Alto Avenue, in order to avoid Menlo Park traffic. This is not consistent with actual turn data that shows the road being used to access downtown Palo Alto instead of University Avenue and being used to access destinations off Alma much further south.

The models seem to overpredict use of Oregon Expressway and other grade separated cross streets. Residents use local roads like Churchill and Loma Verde much more frequently than forecast.

39 cont.

Is there wisdom in crowds?

The data that we have looked at suggest that, compared to the forecasts from the traffic model, residents avoid El Camino and are more likely to use Alma.

The three existing grade separations at University, Embarcadero and Oregon Expressway were done to avoid conflicts between trains and cars. The chosen designs, however, created new conflicts between cars and other cars for anyone wanting to turn, not just continue straight.

Most turn movements at the existing grade separated crossings are riskier and much less comfortable than those at the current grade crossings.

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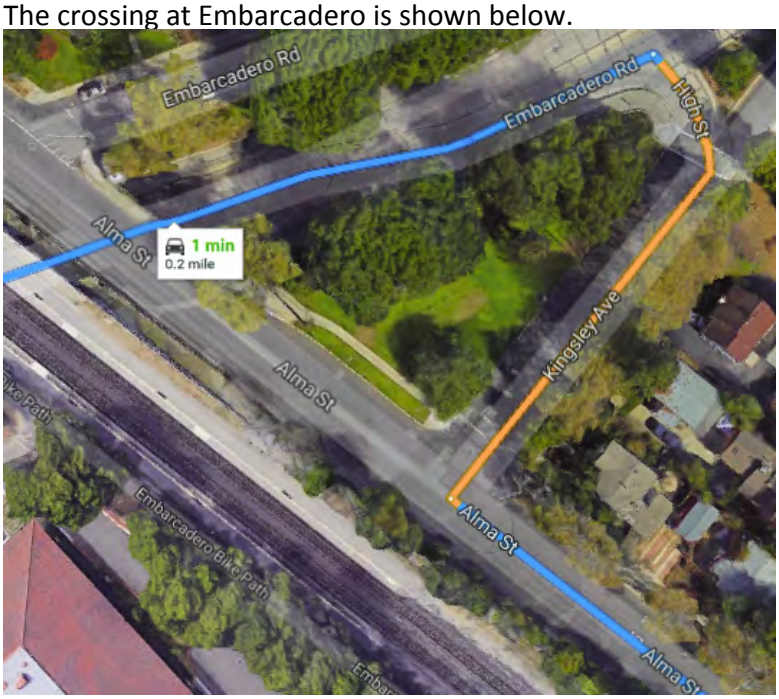
--continued on next page---

Here is a chart of how someone would make a right turn onto Alma southbound.

Road	Direction	Turn Movement	Description	Risk level
Palo Alto Ave	East	South onto Alma	Road merges	Very low
University	East	South onto Alma	Pass under Alma, loop back, make unprotected left turn	High
Embarcadero	East	South onto Alma	Pass under Alma, loop back onto Kingsley, make unprotected left turn	High
Churchill	East	South onto Alma	Signalized right turn	Low
Oregon Expway	East	South onto Alma	Short exit ramp, short merge into fast moving traffic	Medium
Meadow	East	South onto Alma	Signalized right turn	Low
Charleston	East	South onto Alma	Signalized right turn	Low

40 cont.

The crossing at Embarcadero is shown below.



While we didn't have time to finalize a review of complete accident records for Alma in time for this meeting, we reviewed the police records available for the last 6 weeks. We counted 16 accidents that

appeared to happen on or around Alma. All but one happened an existing rail crossing unsignalized intersections along Alma.

Road	Intersection
Palo Alto Ave	0
University	5
Embarcadero	0
Churchill	0
Oregon Expressway	6
Meadow	2
Charleston	1
San Antonio	1

40 cont.

Our initial analysis of traffic data looking back 3 years suggests that there are a high number of accidents in the vicinity of four locations that would be impacted by Stanford's expansion. These are the streets that connect campus to the Stanford Hospital roads, University Avenue and Alma, the intersection of Alma and Oregon Expressway and the many unsignalized intersections in north Palo Alto with Alma.

Will additional traffic lead to more accidents at these locations where most of the turn movements are not protected ones? Further study around this issue and additional data must be provided to understand the impacts.

Increased train traffic and grade crossings

41

Both Palo Alto Avenue and Churchill play important roles in Palo Alto's transportation grid to facilitate safer turning movements on and off Alma road. This would explain the high truck and emergency vehicle usage of Churchill.

The closure or effective closure (remaining open with 20 trains per hour at high speeds) of these roads would push drivers onto University or Embarcadero. They would either be forced to make incredibly unsafe turns on/off Alma or use local streets to get to a signalized intersection.

At University, drivers trying to go south on Alma would likely turn right on High Street, right at Hamilton and use the signalized intersection.

At Embarcadero, drivers coming from Stanford trying to go south on Alma would likely turn right onto Emerson St (by Castilleja) and then turn right on Churchill to use the signalized intersection.

All traffic forecasts for Palo Alto need to account for these types of travel patterns and any analysis looking forward to 2035 should consider the impact of increased train service. While Palo Alto is focused on grade separations at its rail crossings, these may or may not happen during the timeframe of the GUP.

The traffic analysis needs to consider both scenarios where the crossings are separated and where they are not. For example, Palo Alto is considering closing the Churchill intersection which would have a significant impact on traffic patterns, but it is important that any such analysis be done only with an analytical framework that accounts for the relatively high usage of Churchill.

41 cont.

The previous studies for the city of Palo Alto have also highlighted the challenges of modeling the impact of train pre-emption on traffic. In 2015, Fehr & Peers made a presentation (Attachment A-9: https://www.westernite.org/annualmeetings/15_Las_Vegas/Presentations/6B-Barnes.pdf) and compared several software packages for their ability to model Caltrain grade crossings, including those in Palo Alto. Their data suggest that Synchro results should be taken with a LARGE grain of salt.

SimTraffic/VISSIM Results Comparison

- VISSIM more closely replicated field observations at test locations, but required *significantly* more effort

Intersection	SimTraffic Model		VISSIM Model	
	AM Peak Hour Delay (LOS)	PM Peak Hour Delay (LOS)	AM Peak Hour Delay (LOS)	PM Peak Hour Delay (LOS)
San Francisco Intersections (Urban, intersections on each side)				
7th Street/ 16th Street	29.1 (C)	31.4 (C)	67.3 (E)	49.5 (D)
Owens Street/ 16th Street	40.2 (D)	24.2 (C)	10.6 (B)	10.7 (B)
Palo Alto Intersections (Suburban, intersections parallel)				
Alma Street/ Meadow Drive	51.3 (D)	71.1 (E)	72.6 (E)	62.0 (E)
Alma Street/ Charleston Road	64.9 (E)	100.9 (F)	63.5 (E)	80.5 (F)

Focus more on understanding current traffic flows in Palo Alto than using fixing models that will be very difficult to fix.

A better understanding of how the road system is used today and the flaws in the network would go a long way. We should know more about all the turning movements on and off Alma and El Camino at every intersection. New data from Google can help us understand travel patterns. We may need to engage some of our corporate citizens in analyzing this data, but this will be more helpful than using the large scale models like Cube for what we are trying to do. 42

Focus on explaining the traffic impact and safety implications of train pre-emption for our specific situation

In the United States, the typical issue with pre-emption are infrequent but very long freight trains. In this case, gate downtime is important. Preventing people from trying to "run the gate" is important, in the same way that drivers are more likely to run red lights at intersections where the phases are very long.

On the Peninsula, we have relatively short and fast passenger trains. They are, however, very frequent and pre-empt high volume streets with nearby signals that are also pre-empted (except in the case of Palo Alto Ave/Alma). There are also specific safety issues with confused drivers as well as bicyclists and pedestrians who are mid-intersection with a sudden red light. Residents and policymakers have a difficult time understanding the ways in which train pre-emption affects traffic flow, capacity and safety on our crossings. The impacts and potential mitigations of these known issues must be addressed. 43

5.2.2.1 Responses to Comments from Californians Advocating Responsible Rail Design

O-CARRD-1 Please see Master Response 9: Population and Housing Methodology and Calculations, Topic 6: Job Multiplier.

O-CARRD-2 The comment suggests that the assumption that "other workers" behave similar to Stanford off-campus faculty and staff is not a correct assumption and that they are more likely commuting from further away.

"Other workers" represent a range of employment types, including those in academic and temporary positions. It would be speculative to assume, for example, that someone who works in a summer camp position or is a greeter at a football game would be coming from further than permanent staff. The data provided in the transportation survey are a reasonably accurate prediction for where employees, including "other workers," are living and how they approach the campus.

Please see Master Response 9: Population and Housing Methodology and Calculations, Topic 3: Clarification Regarding "Other Workers," and Topic 4: Use of Stanford Commute Survey.

Please also see Master Response 13: Transportation and Traffic, Topic 4: Trip Generation and Distribution for details on the methodology used to calculate the trip generation and trip distribution attributes of Stanford.

O-CARRD-3 As noted in Draft EIR Table 5.15-44, the 2015 Transportation Survey was used to estimate the number of Caltrain riders under existing and future scenarios. The Draft EIR further describes on page 5.15-159 that the Caltrain analysis analyzes growth in Stanford rail commuters on Caltrain, assuming that expanded Transportation Demand Management strategies designed to achieve the no net new commute trips standard are implemented through 2035. As stated, it was conservatively assumed that these strategies shifted all drive alone commuters to rail. The methodology is further explained in Draft EIR Appendix TBC, on page 8, for the Business as Usual scenario and page 13, for the Expanded Transportation Demand Management scenario.

Marguerite provides first-last mile connections to the Palo Alto Transit Center, but boarding data was not used to understand the number of Caltrain riders to the campus. Boarding data at the Transit Center would not provide information on where Caltrain riders are coming from as shuttles meet trains traveling both northbound and southbound. The Transportation Survey provides the best data about how Stanford affiliates commute to campus.

Raw data from the 2015 Transportation Survey is not available for public review as it contains confidential information about Stanford affiliates.

O-CARRD-4 Please refer to Master Response 6: Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, Topic 2: Approach for Cumulative Scenario, and Topic 3: Consideration of Non-Project Stanford-Related Development Outside General Use Permit Boundary.

Please also refer to Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR.

O-CARRD-5 Growth or occupancy of buildings outside of Santa Clara County is subject to the local jurisdiction's entitlement and environmental review process, and is subject to the regulatory requirements of that jurisdiction. The cumulative impact analysis of the proposed 2018 General Use Permit has taken into account all the local and regional growth, including that of Stanford and its affiliates, that would be outside Santa Clara County, including the Stanford Redwood City campus.

Please refer to Master Response 6: Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, Topic 2: Approach for Cumulative Scenario, and Topic 3: Consideration of Non-Project Stanford-Related Development Outside General Use Permit Boundary.

Please also refer Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR. As explained in the master response, traffic associated with the Stanford Redwood City campus is included in the cumulative transportation analysis.

O-CARRD-6 Growth or occupancy of buildings outside of Santa Clara County is subject to the local jurisdiction's entitlement and environmental review process, and is subject to the regulatory requirements of that jurisdiction. The cumulative impact analysis of the proposed 2018 General Use Permit has taken into account all the local and regional growth, including that of Stanford and its affiliates, that would be outside Santa Clara County, including the Veteran's Administration Palo Alto Healthcare System (VAPAHCS).

Please refer to Master Response 6: Approach to Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 2: Approach for Cumulative Scenario.

Please also refer Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR. As explained in the master response, the VAPAHCS project is an approved project in the VTA

traffic model, and traffic associated with the VAPAHCS is included as appropriate in the cumulative transportation analysis.

O-CARRD-7 Growth or occupancy of buildings outside of Santa Clara County is subject to the local jurisdiction's entitlement and environmental review process, and is subject to the regulatory requirements of that jurisdiction. The cumulative impacts of the proposed 2018 General Use Permit are disclosed in Chapter 5, Sections 5.1 through 5.16, which include all the local and regional growth, including that of Stanford and its affiliates, that would be outside Santa Clara County. The additional level of detail regarding non-Project development requested in the comment would not provide new information meaningful or necessary in disclosing Project or cumulative impacts.

Please refer to Master Response 6: Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, Topic 2: Approach for Cumulative Scenario, and Topic 3: Consideration of Non-Project Stanford-Related Development Outside General Use Permit Boundary.

Please also refer Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR.

O-CARRD-8 Growth or occupancy of buildings outside of Santa Clara County is subject to the local jurisdiction's entitlement and environmental review process, and is subject to the regulatory requirements of that jurisdiction. The cumulative impact analysis of the proposed 2018 General Use Permit has taken into account all the local and regional growth, including that of Stanford and its affiliates, that would be outside Santa Clara County, including the Stanford Research Park.

The Stanford Research Park is a separate land use from the University with multiple employers. Buildings within the Stanford Research Park that are occupied by Stanford affiliates in the Research Park are entitled for office uses, and were occupied prior to Stanford's occupancy. There is a separate Transportation Management Association (TMA) that serves all employers in the Research Park which addresses transportation options for their unique geography and population. The TMA surveys its own population and reports findings to the City of Palo Alto.

The April 2012 PowerPoint presentation referenced in the comment was prepared by the Stanford School of Medicine when it moved some administrative staff to occupy 3172 Porter Drive in the Stanford Research Park. In support of that development Stanford assessed what transportation programs were available to serve that location so they could provide that information to their employees. The RP Shuttle morning and evening commute periods recommendation was

made to ensure there was shuttle service that would meet the Baby Bullet trains at Palo Alto Transit Center. Slide 20 of the 2012 PowerPoint referenced in the comment merely illustrates which VTA routes served the Stanford Research Park in 2012.

Regardless, it should be noted that the traffic impact analysis for the 2018 General Use Permit did use the standard commute periods to identify the peak hour, as is required by the VTA Transportation Impact Analysis Guidelines.

Please also refer to Master Response 6: Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, Topic 2: Approach for Cumulative Scenario, and Topic 3: Consideration of Non-Project Stanford-Related Development Outside General Use Permit Boundary.

Please also refer Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR. The Stanford @ Porter Drive project within the Stanford Research Park is an approved project in the VTA traffic model, and traffic associated with this development is included in the cumulative transportation analysis.

The comment also indicates that it concurs with the County of San Mateo and others' suggestions there should be a mitigation measure requiring a traffic impact analysis as part of each building application. Please refer to Response to Comment A-SMC-24.

O-CARRD-9 Stanford-affiliated uses, including the Stanford University Medical Center, Stanford Research Park and Stanford Shopping Center, are separate from, and located in different jurisdictions than, the Project uses within the 2018 General Use Permit area. Growth or occupancy of buildings outside of Santa Clara County is subject to the local jurisdiction's entitlement and environmental review process, and is subject to the regulatory requirements of that jurisdiction. The cumulative impact analysis of the proposed 2018 General Use Permit has taken into account all the local and regional growth, including that of Stanford and its affiliates, that would be outside Santa Clara County.

Please refer to Master Response 6: Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, Topic 2: Approach for Cumulative Scenario, and Topic 3: Consideration of Non-Project Stanford-Related Development Outside General Use Permit Boundary.

Please also refer to Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR. Stanford-affiliated uses located in other jurisdictions are subject to, and appropriately served by, separately-operated TDM programs tailored to those uses. Nevertheless, Stanford University, the Stanford Research Park TMA, and the Stanford Hospital TDM coordinator share resources and strategies to ensure that their programs are meeting the needs of their specific commuter populations.[1]

There is no evidence supporting the comment that the TDM program implemented under the 2018 General Use Permit would be compromised unless other Stanford-affiliated uses implemented similar initiatives. Nevertheless, the TDM programs operated for Stanford affiliate uses would continue to be adapted as needed to accommodate further growth associated those uses.

O-CARRD-10 Please see Master Response 9: Population and Housing Methodology and Calculations, Topic 6: Job Multiplier.

O-CARRD-11 The Draft EIR analyzes the potential environmental impacts of the proposed 2018 General Use Permit. To clarify, Stanford did not simply purchase the Stanford West Apartments and Welch Road Apartments mentioned in the comment, rather Stanford constructed both housing complexes. In addition, the new Mayfield Place affordable housing apartments were constructed on Stanford land, and are available to the community as a whole. Stanford purchased the Colonnade Apartments in Los Altos, but bought the property when it was newly constructed and did not displace any residents.

O-CARRD-12 "Purposeful University" is a long-range planning process that Stanford began in 2017 as an effort to identify general and specific priorities for the university. It is not a land use exercise, would not result in a comprehensive physical land use plan document, and has no direct relationship to the Draft EIR project description or impact analysis. Rather, that land use planning process is the Stanford Community Plan completed in 2000, and which is the framework that the proposed 2018 General Use Permit would operate under.

Although the outcomes of the long-range planning process may affect Stanford's decisions regarding future uses of land and buildings, it is primarily a process to help Stanford create a shared vision in research, teaching, campus life, community outreach, and other areas. The long-range planning process will continue into 2019 and beyond.

[1] See Appendix TRF-MISC in this Response to Comments Document.

If this long-range planning process were to result in the identification of a future building project in the General Use Permit area, it would be processed for approval through the General Use Permit framework and its required permits, such as Architectural and Site Approval and Building Permits.

O-CARRD-13 The Draft EIR's impact analysis approach fully discloses the Project's regional impacts, consistent with CEQA requirements. The need for a joint transportation authority to develop a "cohesive strategy" is not a CEQA issue, and is beyond the scope of the EIR for the proposed 2018 General Use Permit. This comment does not address the adequacy of the Draft EIR; please refer to Master Response 1: Non-CEQA Comments.

The comment also recommends that the County require Stanford to provide mitigations that not only include transportation improvements for cars (like widening intersections), but also include mitigations aimed at expanding public transit capacity, especially Caltrain.

The Draft EIR does not identify a significant adverse effect to the environment that would be addressed by requiring Stanford to contribute money to expand Caltrain capacity. The Draft EIR explains on page 5.15-155 that the Governor's Office of Planning and Research recognizes that increased demand throughout a region may necessitate new or additional transit infrastructure. However, OPR states such effects may be best addressed through a fee program that fairly allocates the cost of improvements not just to projects that locate near transit, but rather across a region to all entities that rely on the entire transportation system.

O-CARRD-14 Each year, Stanford provides data to the Caltrain Joint Powers Board (JPB) regarding Marguerite shuttle ridership on lines that connect to Caltrain stations. The data provided to the JPB are based on manual boarding counts that Marguerite shuttle drivers conduct, and reflect all ridership on Marguerite shuttle lines that serve Caltrain stations. Stanford has provided the data submitted to the JPB for 2016 and 2017 to the commenter. It is important to understand that the manual counts include all riders on the line regardless of whether they board or disembark at a Caltrain station and the manual counts do not differentiate between campus, hospital, shopping center, and Stanford Research Park riders. The data provided to JPB cannot readily be translated to Caltrain ridership by the Stanford campus population that is the subject of the proposed 2018 General Use Permit.

To better equate the Marguerite shuttle boarding data to Caltrain ridership, average daily boarding data at the Palo Alto Transit Center for 2016 and 2017 data for those lines that operate at the station is presented below:

AVERAGE DAILY BOARDINGS OF MARGUERITE SHUTTLES AT PALO ALTO TRANSIT CENTER BY ROUTE

Route	Average Daily Boardings	
	2017	2016
X	1,310	1,479
Y	635	687
SE	10	21
S	32	31
P	466	464
O	4	6
N	8	9
MC	393	420
Total	**2,857**	**3,115**

Source: Marguerite Shuttle, manual bus driver counts, 2016 and 2017

Similar to the data provided to the JPB, the data in the above table includes riders from the hospitals, shopping center and Stanford Research Park. Not all riders are from the academic campus lands subject to the General Use Permit.

As noted in the comment, the Marguerite shuttles have Automatic Passengers Counters (APCs) installed. The APCs record both boardings and alightings (i.e., passengers entering and exiting the shuttles) and the data is available to Stanford Parking & Transportation Services for review. However, this data is not yet used by the Marguerite shuttle operations team as it has been found to be inaccurate.[2] Until those buses are replaced and any other technical issues are resolved, Marguerite shuttle operators will continue to rely on manual counts of boardings, which are recorded by Marguerite shuttle drivers throughout each day and reported to the Marguerite shuttle operations team on a monthly basis.

The Marguerite shuttle is a private shuttle system. The capacity and route planning of the shuttle system is evaluated by Stanford and capacity is expanded when there is sufficient demand. The main service is a first-last mile connection to regional transit. Thus, regional transit service drives the ridership of Marguerite. The transit capacity analysis (Draft EIR Appendix TBC, and summarized beginning on page 5.15-155 of the Draft EIR; see also subsequent addendum report presented in Appendix TBC-ADD in this Response to Comments Document), shows that campus growth will not result in Caltrain capacity exceedances.

O-CARRD-15 The comment states that hospital riders on Marguerite shuttles should be counted toward the Stanford Hospital and not counted toward the University. Because Stanford administers the Hospital TDM programs, the hospital employees and visitors that use the University services are considered a trip

[2] Wiring on some older buses cause the APCs to undercount ridership.

removed and thus a credit. Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for information regarding the application of trip credits in the context of the no net new commute trips policy.

The comment also suggests that Stanford cannot measure Marguerite shuttle passengers accurately without APCs and questions why Marguerite shuttle data is not publicly available. Passenger counts are conducted manually by the Marguerite shuttle drivers. The Marguerite ridership data in support of cordon credits is submitted to the County Planning Office and its consultant for independent review annually as part of the annual traffic monitoring process. Marguerite shuttle data is not shared beyond the data that is required for the County cordon count monitoring and Caltrain's monthly request, as the Marguerite shuttle is a privately-operated shuttle system.

Please also see Response to Comment O-CARRD-14.

O-CARRD-16 Please refer to Master Response 13: Transportation and Traffic, Topic 12: Parking Supply and Restrictions for additional detail related to Stanford affiliates parking on-and off-campus, as well as the strict conditions for which parking would be expanded beyond the limit approved in the 2000 General Use Permit.

O-CARRD-17 The Google Expansion proposed in downtown San Jose was not an approved or pending project at the time of the Notice of Preparation for the proposed 2018 General Use Permit; therefore, it is not considered a reasonably foreseeable probable future project included in cumulative traffic analysis in this EIR. Google is in negotiations with the City of San Jose over the purchase/lease of the land and associated development rights. Once an application is submitted, the City of San Jose will conduct its own environmental review under CEQA for that project.

Please refer to Master Response 6: Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, and Topic 2: Approach for Cumulative Scenario.

Please also refer Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR.

O-CARRD-18 The California High Speed Rail project is not fully funded, and the timing of its completion through the study area is uncertain. The VTA-C/CAG Travel Demand Forecasting model therefore does not include the project in the baseline 2040 transportation network assumptions, and it is not considered a reasonably foreseeable probable future project for cumulative traffic analysis.

Please refer to Master Response 6: Approach to 2018 Baseline Environmental Setting and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, and Topic 2: Approach for Cumulative Scenario.

Please also refer Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR.

O-CARRD-19 The Peninsula Corridor Electrification Project (PCEP) EIR modeled 2040 ridership with an extension to the Transbay Terminal Center (TTC). The Caltrain capacity analysis includes ridership growth rate based on this project.

O-CARRD-20 Please refer to Master Response 13: Transportation and Traffic, Topic 8: Neighborhood Street Impacts for an explanation of how neighborhood streets were selected for evaluation and how it was determined that the proposed Project would not result in significant traffic intrusion into any nearby neighborhoods.

O-CARRD-21 As stated in the Chapter 3, Project Description (p. 3-25) and reiterated in Section 5.15, Transportation and Traffic, Stanford has committed to implementing expanded transportation demand management designed to achieve the no net new commute trips standard under the 2018 General Use Permit. The traffic analysis prepared for the Draft EIR analyzes the potential impacts if Stanford does not achieve the no net new commute trips standard. The intersection of Churchill Avenue and Alma Street is presented as intersection #57 in the transportation analysis. The proposed Project would not result in a significant impact at this intersection under 2018 Baseline conditions and 2035 Cumulative conditions.

Please refer to Master Response 13: Transportation and Traffic, Topic 9: Design Hazards and Safety Impacts for additional detail on the Draft EIR analysis of design hazards and safety impacts.

O-CARRD-22 Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for a discussion of average daily traffic and peak hour spreading in the context of the no net new commute trips policy.

O-CARRD-23 There is no evidence that the travel routes used by TNCs would be any different from travel routes used by any other vehicle type. The Draft EIR uses the TIRE methodology because most of the neighborhoods that would experience increases in traffic are located in the City of Palo Alto, and this is the methodology that Palo Alto uses. The TIRE methodology was independently reviewed for application on the proposed Project and is recognized to be an appropriate methodology supported by substantial evidence.

Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard, and Topic 8: Neighborhood Street Impacts for additional detail on the methodology and impact evaluation for neighborhood streets, and the deduction for cut-through trips in the no net new commute trips policy monitoring process.

O-CARRD-24 Traffic currently is diverting onto Hamilton Avenue to bypass the congestion and queuing on University Avenue. This was the primary consideration for including Hamilton Avenue in the neighborhood traffic analysis for the proposed 2018 General Use Permit. Hamilton Avenue carries more traffic during the peak period than University Avenue because it carries a combination of local and diverted trips. Local trips on Hamilton are accessing the other roadways in the neighborhood, while diverted trips tend to return to University Avenue near Woodland Drive.

Please refer to Master Response 13: Transportation and Traffic, Topic 8: Neighborhood Street Impacts for additional detail on the methodology and impact evaluation for neighborhood streets.

O-CARRD-25 The purpose of the traffic impact analysis in this EIR is to identify transportation impacts of the Project - the proposed 2018 General Use Permit. As such, “big data analysis” is not appropriate for this purpose. The Draft EIR’s transportation analysis fully complies with existing VTA guidance for project-level analysis.

Please refer to Master Response 6: Approach to 2018 Baseline Environmental Setting, and Cumulative Scenarios, Topic 1: Approach for 2018 Baseline Environmental Setting, and Topic 2: Approach for Cumulative Scenario.

Please also refer Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for information on how travel demand forecast for growth outside the Project site was developed for the Draft EIR.

O-CARRD-26 The Draft EIR’s approach to fair share mitigation complies with CEQA requirements for mitigation of cumulative impacts. See CEQA Guidelines Section 15130. Please refer to Master Response 13: Transportation and Traffic, Topic 5: Intersection Impacts and Mitigation for a discussion mitigation measure funding/implementation.

O-CARRD-27 Please Response to Comment O-CARRD-13, above.

O-CARRD-28 As noted on page 5.15-157 of the Draft EIR, the methodology used for this analysis was selected because it represents a conservative approach in estimating the impacts of increased transit demand. To be conservative, the analysis assumed that all mode shifts from drive-alone modes would be to Caltrain, the mode for which capacity constraints are of greatest concern given the amount of investment required to increase capacity. The peak hour was

selected as the timeframe for this analysis because it represents the condition where capacity impacts would be the greatest.

O-CARRD-29 The questionnaire for the commute survey in 2015 is described in detail in Draft EIR Appendix TIA (see TIA Part 1, page 11). The data collected is proprietary and sensitive, and is not available for public distribution. The fact that the data is not widely distributed increases the response rate as responders know their information will remain confidential. CEQA does not require that the public be given access to the raw data on which an EIR analysis relies, and lack of access to this data does not prevent the commenters from effectively commenting on the Draft EIR's transportation impact analysis.

According to Stanford, it continually modifies the annual commute survey to collect meaningful data and to maintain a high response rate. The no net new commute trips standard is a monitored performance standard, as opposed to a prescribed set of transportation demand management measures. The measures that Stanford uses to achieve the performance standard may change over time. For these reasons, the County does not impose requirements as to which questions Stanford must include in its annual commute survey.[3]

O-CARRD-30 Assumptions about future transit capacity were based on the best available information from transit providers, and have been updated in response to a comment from Caltrain (see the Addendum to the Transit and Bicycle Capacity Analysis in Appendix TBC-ADD in this Response to Comments Document). The analysis relies on the 2014 Caltrain Capital Improvements Program (CIP), which states that Caltrain would expand its platforms to accommodate eight-car trains.[4]

The Draft EIR explains on page 5.15-155 that the Governor's Office of Planning and Research (OPR) recognizes that increased demand throughout a region may necessitate new or additional transit infrastructure. However, OPR states such effects may be best addressed through a fee program that fairly allocates the cost of improvements not just to projects that locate near transit, but rather across a region to all entities that rely on the entire transportation system.

Stanford reports that it is working closely with Caltrain to create a business plan for future service enhancements. Stanford has provided funding to Caltrain for this purpose as well as professional services. Caltrain's objective is to increase service, as described in the Business Plan Strategy and Scope, which includes a year-to-year description of how service in the corridor will grow and change to

3 See Appendix TRF-MISC in this Response to Comments Document.
4 It should be noted, that the Palo Alto Station, which serves the campus, does not need a platform extension to accommodate the eight-car trains. http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Presentations/Caltrain+Longer+Platform+and+Trains.pdf.

achieve the 2040 Vision.[5] If Caltrain were to reduce its service, Stanford could implement express bus service to move Stanford affiliates to the campus.[6]

O-CARRD-31 Assumptions concerning service were based on the best available information from Caltrain at the time, recognizing uncertainty in what the future service plan may be. Recognizing this and other uncertainties, an approach was used to estimate the overall peak hour capacity based on known factors – trains per peak hour, number of cars per train, train capacity (number of seats multiplied by 120 percent). This approach was used to provide an approximation of future capacity, understanding that specific factors will result in small variations.

The Draft EIR explains on page 5.15-155 that the Governor's Office of Planning and Research (OPR) recognizes that increased demand throughout a region may necessitate new or additional transit infrastructure. However, OPR states such effects may be best addressed through a fee program that fairly allocates the cost of improvements not just to projects that locate near transit, but rather across a region to all entities that rely on the entire transportation system.

O-CARRD-32 Assumptions concerning service and capacity were based on the best available published information from transit providers at the time as documented in the Transit and Bicycle Capacity Analysis. This included the PCEP EIR and the Caltrain Short-range Transit Plan FY 2015-2024. The upcoming Caltrain Business Plan, including any information in and analysis for that plan, was not available in time for consideration in the EIR analysis.

Please also refer to Master Response 13: Transportation and Traffic, Topic 12: Transit and Bicycle Capacity for a discussion of capacity assumptions provided by the Caltrain Joint Powers Board.

O-CARRD-33 The County is committed to protecting the health and welfare of the community, as demonstrated by evaluation of Project consistency with relevant County policies and future application of conditions of approval. The EIR properly discloses the physical environmental effects of the proposed Project, and identifies feasible mitigation to substantially lessen or avoid its significant impacts.

O-CARRD-34 The comment presents no evidence that creation of a joint transportation authority is feasible or would mitigate any of the project's significant transportation impacts. This measure is beyond Santa Clara County's ability to implement, and is beyond the scope of the EIR for the proposed 2018 General Use Permit. With regard to public knowledge regarding the free price of Marguerite shuttles, the Marguerite shuttles are marked as free on each bus. In

5 See http://www.caltrain.com/Assets/__Agendas+and+Minutes/JPB/CAC/Presentations/2018/2018-02-01+CBP+Staff+Report.pdf.
6 See https://drive.google.com/file/d/1RKH5iIbUXSkCdA9rV0q8EntlMow7EmS0/view.

addition, the schedules and Stanford website note that Marguerite shuttles are free and open to the public, with no identification required.

O-CARRD-35 The comment presents no evidence that a comprehensive bike share program is feasible or would mitigate any of the project's significant transportation impacts. Stanford implements programs designed to support bicycle travel in its transportation demand management programs. In addition, in March 2018, the City of Palo Alto approved a one-year pilot program that effectively invites all vendors in the growing fields of bike- and scooter-sharing to bring their services to Palo Alto.[7]

O-CARRD-36 The comment presents no evidence that grade separation analysis and funding would mitigate any of the project's significant transportation impacts. The VTA model used for the Project traffic forecasting, which was provided by the VTA, includes the Caltrain Electrification Project. The model does not assume that the Electrification project would result in the effective closure of the grade crossings. The Caltrain Electrification EIR assessed the impacts of the Electrification Project on the grade crossings and intersections adjacent to the grade crossings, and recommended mitigation measures to alleviate significant traffic operation impacts associated with the Electrification Project. Implementation of these mitigation measures is not the responsibility of the proposed 2018 General Use Permit Project because they do not mitigate the Project's significant transportation impacts.

The City of Palo Alto is studying multiple scenarios related to grade separation and is not expected to have a preferred scenario until early 2019, which would then trigger a need to commence environmental review in 2019. It is speculative to include grade separation construction analysis in the 2018 General Use Permit EIR, as it is unclear what scenario will ultimately be proposed.

The comment further suggests that Stanford should consider an institute focused on infrastructure. This comment does not address the adequacy of the Draft EIR. However, please note that Stanford reports that it houses the Global Projects Center which is an interdisciplinary research center that seeks to facilitate understanding of the financing, development, and governance of critical infrastructure worldwide.

O-CARRD-37 The Stanford Community Plan includes policies providing flexibility to Stanford to decide which specific TDM measures it employs and to what extent. The TDM program is meant to be a flexible program, and the TDM investments are chosen by what programs will get behavior changes from the population. Programs are tested, altered, improved or removed based on the current

[7] See https://www.paloaltoonline.com/news/2018/03/06/palo-altos-sets-its-bike-share-program-on-new-path.

environment. Further, Stanford has continued to partner with the public transit agencies to provide service to the campus rather than operating private shuttles.

O-CARRD-38 Please refer to Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for a discussion of the travel demand forecasting model selection and vetting process, and why the VTA model is an appropriate methodology for analyzing the Project's transportation impacts.

O-CARRD-39 Please refer to Master Response 13: Transportation and Traffic, Topic 3: Travel Demand Forecasts for a discussion of the model calibration process.

O-CARRD-40 The proposed 2018 General Use Permit does not propose offsite infrastructure changes. Therefore, it is beyond the scope of the EIR to determine whether or how City of Palo Alto roadways should be modified.

In April 2018, the California Governor's Office of Planning and Research (OPR) published its updated Technical Advisory on Evaluating Transportation Impacts under CEQA.[8] On pages 21 and 22 of the Technical Advisory, OPR explains why a CEQA document is not the appropriate forum to address risk of accidents on local roadways:

> Because safety concerns result from many different factors, they are best addressed at a programmatic level (i.e., in a general plan or regional transportation plan) in cooperation with local governments, metropolitan planning organizations, and, where the state highway system is involved, the California Department of Transportation. In most cases, such an analysis would not be appropriate on a project-by-project basis. Increases in traffic volumes at a particular location resulting from a project typically cannot be estimated with sufficient accuracy or precision to provide useful information for an analysis of safety concerns. Moreover, an array of factors affects travel demand (e.g., strength of the local economy, price of gasoline), causing substantial additional uncertainty.

If Stanford is able to achieve the no net new commute trips standard, the proposed Project would not increase vehicle trips during peak hours in the peak commute direction. However, if Stanford is unable to attain the no net new commute trips standard, the intersection mitigation measures proposed in the Draft EIR would include upgrades to existing pedestrian and bicycle facilities as deemed appropriate by the local jurisdiction.

O-CARRD-41 Please see Response to Comment O-CARRD-36.

O-CARRD-42 As described on Draft EIR page 5.15-8, an established and accepted methodology was used to select intersections for analysis in the Transportation Impact Analysis for the Draft EIR. This methodology captured 20 intersections on El Camino Real and 4 intersections on Alma Street. The turning movement

8 Available at http://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf.

counts for the AM and PM peak periods are provided in Appendix TIA of the Draft EIR, Volume 3. As described on page 5.15-62 of the Draft EIR, the VTA 2020 and 2040 models were used to understand volume growth at intersections in 2035. The traffic growth was then applied to the turning movements to project 2035 intersection conditions. The traffic impact analysis prepared for the Draft EIR used the required methodology as required by the Santa Clara County VTA to forecast traffic volumes at intersections.

O-CARRD-43 As noted on page 5.15-13 of the Draft EIR, existing intersection lane configurations, signal timings, and peak-hour turning movement volumes were used to calculate peak-hour levels of service (LOS) for the study intersections. To the extent that rail service affects intersection safety, such effects would be the result of projects implemented by Caltrain and would not result from the proposed 2018 General Use Permit.

Please refer to Master Response 13: Transportation and Traffic, Topic 5: Intersection Impacts and Mitigation for additional information on intersection impacts.

Please note Comment Letter O-CAARD contained several attachments (Attachments A through Z) which did not comment directly on the Draft EIR. These attachments are included in Appendix O-CAARD in this Response to Comments Document.

February 2, 2018

County of Santa Clara
Department of Planning and Development
County Government Center
70 West Hedding Street, San Jose, CA 95110
Attention: David Rader
david.rader@pln.sccgov.org

Dear Santa Clara County Board of Supervisors,

Thank you for the opportunity to provide feedback on the Stanford General Use Permit (GUP). Friends of Caltrain is a 501c3 nonprofit focusing on sustainable transportation on the Peninsula Corridor. We respectfully submit the following comments for your consideration:

Transportation Infrastructure

- Caltrain Capacity funding. Stanford's growth, and success at encouraging transit use, will add many more riders to Caltrain, which has been running at capacity. The electrification project being constructed is the first of several steps to add capacity to the system. The EIR does not fully analyze impact on Caltrain capacity. We recommend more robust analysis on the impact of the project on Caltrain crowding, and funding contributing to the upcoming phases of Caltrain modernization, providing longer trains, longer platforms, and level boarding, which will allow Caltrain to carry more Stanford commuters and help Stanford achieve its "no net new trips" goal. 1
- Bicycle connections between the Palo Alto Transit Center, Stanford, and Palo Alto. Caltrain has the highest rate of bicycle use for first/last mile connections in the US. However, the routes connecting Stanford to and through the Palo Alto Transit Center are confusing and stressful. The bicycle mode share from north Palo Alto is lower than West Menlo Park, and Stanford's bikeshed studies confirm that Palm Drive has one of the lowest bicycle volumes. Therefore, it would be valuable for Stanford to partner with the City of Palo Alto, CalTrans and other agencies to create a more stress-free, continuous cycling experience along University Avenue to Palm Drive corridor, and from the Quarry district to the transit center and downtown services, including the route to/from the Homer Tunnel. Such improvements would help improve access to the transit center, but improve access to Stanford from North Palo Alto and East Palo Alto. 2

Transportation Demand Management

- Extend TDM benefits for “Other Workers.” We applaud the no-net new trips goal, and Stanford’s success over time in reducing vehicle trips. However, the EIR’s extrapolation that “Other Workers” (Temporary, casual, seasonal workers who have <50% FTE roles) are likely to have transportation patterns similar to full-time employees is problematic, since these jobs are often lower-income and workers may live in different places with different commute patterns. Commute patterns of these worker populations should be studied directly, with the results included in VMT and no net new trips assessments.

  Given a projected increase of 2500 “Other Workers” between 2015 and 2035 this could worker population growth account for a significant number of daily trips. Other workers should also be able to benefit from transit passes, rideshare, carpool and other TDM benefits to reduce SOV commutes that full time regular employees have in order to extend Stanford’s TDM performance and meet the “no net new trips” obligation. 3

- Update “offsite mitigations” to be more multi-modal, working with neighboring TDM programs. Historically, the Stanford Community plan provides an additional means to achieve No Net New Commute Trips through implementation of "offsite" programs to reduce trips in other jurisdictions. Current examples of such offsite mitigations include: 1) Marguerite riders outside the cordon, 2) hospital employees in the Commute Club, and 3) hospital employees on the East Bay bus service. Currently, the area eligible for “offsite mitigations” includes roadways proximate to the Stanford Campus. In recent years, Palo Alto and nearby communities have established TDM policies and are moving forward with Transportation Management Associations with programs to reduce vehicle trips. These organizations are typically starting from a higher drivealone mode share base, similar to where Stanford was before the No Net New Trips requirement. 4

  Building on the offsite mitigation program, we recommend that Santa Clara County change the definition of the eligible geography to a 45 minute transit or bicycle commuteshed. Offsite mitigations could include contributions to transportation management associations, joining forces to negotiate new transit routes and expand transit service with Caltrain, VTA, SamTrans, AC Transit, and pool transportation benefits (bikeshare, carshare, etc), focused on reducing peak hour trips within the transit and bicycle commuteshed. Such an effort can significantly improve regional transportation linkages by create a wider "Stanford Plus" transit sphere of influence. 5

Housing

- More housing on (or near) campus. Over the last several years, EIRs for Stanford’s General Use Permit and other major plans in the region show that housing near jobs results in lower VMT per person. The 3150 beds/housing units proposed in the draft GUP is welcome and much needed, but the projected jobs increase still results in a shortfall of 2425 housing units. Please consider adding more housing options particularly for administrative staff, post-doctorates and Stanford workers who have fewer local 6

options due to high local rental prices. We also encourage Stanford to partner with the City of Palo Alto or the County of Santa Clara to explore more housing on nearby sites. 6 cont.

- Housing locations. Stanford proposes to change the location where affordable housing impact fees could be used from within a 6-mile radius to any location near robust transit. However, the proposal as written could logically provide funding for housing near the Antioch eBART station, SMART in Santa Rosa, ACE in Tracy or some transit location with a 2.5+hour one-way commute to Stanford. We would recommend modifying the proposal to apply to locations near transit, within a 60-minute transit commuteshed to Stanford, and favoring locations within 6 miles and a 45 minute transit commute. 7

Since the 2000 General Use Permit went into effect, Stanford has been a regional leader in practices to reduce solo driving and transportation impact. We hope that you and Stanford's planning team consider these comments to strengthen Stanford's role in helping to solve these important challenges. 8

Sincerely,

Adina Levin
Friends of Caltrain
http://greencaltrain.com
650-646-4344

5.2.2.2 Responses to Comments from Friends of Caltrain

O-FOC-1 The Draft EIR presents information regarding the capacity of the public transit system to accommodate growth in ridership resulting from the proposed Project, but as allowed by CEQA, this topic is not treated as an adverse impact.

Please also refer to Master Response 13: Transportation and Traffic, Topic 12: Transit and Bicycle Capacity.

O-FOC-2 Please refer to Master Response 13: Transportation and Traffic, Topic 10: Bicycle and Pedestrian Analysis for a discussion of bicycle infrastructure improvements proposed in this comment.

O-FOC-3 Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for detail on the TDM program, including specific programs for which Other Workers are eligible.

O-FOC-4 to O-FOC-5

The commenter suggests that the trip reduction credit boundary be extended to a 45-minute transit or bicycle commute shed to improve regional transportation linkages, as this would provide a better range for offsite mitigations. The impact area is defined by the locations where significant impacts that would occur at intersections if Stanford did not meet the no net new commute trips standard. This boundary is necessary for providing adequate CEQA mitigation for significant traffic impacts identified in the Draft EIR. However, the local impact area boundary does not prevent Stanford from receiving credit for improvements or programs that occur outside the local impact area boundary. If those trip reduction measures would remove a vehicle trip that otherwise would enter or exit the local impact area boundary, Stanford could receive a trip reduction credit. For example, if a bicycle facility improvement outside the boundary would cause someone to ride a bicycle into or out of the local impact area rather than drive a car into or out of the local impact area, the improvement could result in a credit.

O-FOC-6 On June 12, 2018 the County published the Recirculated Portions of Draft EIR, which includes two new housing alternatives (Additional Housing Alternatives A and B) under which additional quantities of on-campus housing would be added to the proposed Project. The analysis of Additional Housing Alternative A and Additional Housing Alternative B, along with comments received on, and responses to, the Draft EIR and Recirculated Portions of Draft EIR, will be presented to the County Board of Supervisors to assist in their consideration of whether more housing should be constructed on the Stanford campus.

O-FOC-7 As described on page 4-4 of the Draft EIR, Stanford proposes that the affordable housing fee contribution support development of affordable housing within one-

half mile of a major transit stop or a high-quality transit corridor as defined by SB 375, which includes fixed-route bus service with service intervals no longer than 15 minutes during peak commute hours. Promotion of affordable housing near major transit corridors would help to reduce vehicle miles traveled and associated GHG emissions, both of which are in keeping with the goals of Plan Bay Area 2040. Use of the affordable housing fee as proposed by Stanford is a policy decision that will be decided by the County Board of Supervisors prior to its consideration of Project approval.

Please also see Master Response 10: Affordable Housing, Topic 5: Geographical Distribution of Affordable Housing Funds.

O-FOC-8 The comment is noted but does not address the adequacy of the Draft EIR.

MENLO SPARK *Climate Neutral for a Healthy, Prosperous Menlo Park*

February 2nd, 2018

Via email: David.Rader@pln.sccgov.org

Kirk Girard, Director
Department of Planning and Development
County of Santa Clara
County Government Center
70 West Hedding Street, San Jose, CA 95110

RE: Stanford 2018 General Use Permit Application and the Draft EIR

Dear Mr. Girard, Planning Staff, and County Supervisors,

Thank you for the opportunity to comment on the Draft Environmental Impact Report (EIR) analyzing Stanford University's proposal to add over 2 million square feet of academic and academic support (non-residential) space, 3,150 dwelling units or beds, and 40,000 square feet of additional building space to their campus between 2018 and 2035. We appreciate the extensive public process that Santa Clara County has led around this impactful General Use Permit proposal ("GUP").

We are writing to highlight several important elements of the GUP as well as areas for improvement. Menlo Spark is an independent, nonprofit organization working with local businesses, residents, and government partners to achieve a carbon-neutral Menlo Park and a more sustainable region in the near future. We support and concur with the concerns and recommendations raised in the letters from the Cities of Palo Alto and Menlo Park, and the Stanford Coalition for Planning an Equitable 2035 (SCoPE 2035). Our primary recommendations are for the GUP to: 1

- Commit to a zero carbon building policy for all new developments; and
- To include a more proactive approach to ensure that the excellent No Net New Commute Trips policy occurs continuously in practice. 2

Environmental Leadership at Stanford

Stanford University has demonstrated a strong commitment to reduce greenhouse gas (GHG) emissions and improve energy sustainability for its on-campus construction projects. For example, 65% of the energy that the University uses on campus is from renewable energy, much of which comes from solar, and this percentage is likely to increase over time. More impressively, Stanford has cut its on-campus GHG emissions by over 50% since 2012.[1] Stanford has a renowned sustainability program with venerable principles;[2] and the main campus runs a top-notch transportation demand management (TDM) program. 3

[1] https://sustainable.stanford.edu/sites/default/files/resource-attachments/E_C_Plan_2015.pdf
[2] https://sustainable.stanford.edu/about/principles

Recommended Green Building Improvements

Although the Draft EIR finds that the proposed GUP is below the threshold of significance for GHG emissions in 2030 and 2035, every ton of additional GHG emissions matters greatly as the cities around Stanford work towards their climate action plan goals. More broadly, global carbon dioxide levels have exceeded 400 parts per million for over a year, indicating that we have passed a key threshold for a safe and stable climate.[3] Thus, it is imperative that Stanford make every effort to minimize the carbon footprint of new development. Stanford should commit to 100% renewable energy for all new developments, so that each building is carbon free. This has been done well by Stanford for other buildings on campus, such as the Y2E2 building,[4] which was no more costly to build than other comparable buildings. ***We urge the County to require a carbon free building standard in the GUP to minimize GHG emissions from the project.*** 4

Recommended Transportation Improvements

The proposed "No Net New Commute Trips" policy in the GUP is a laudable goal that we strongly support. However, it is not clear from the Draft EIR and the concerns that the City of Palo Alto research and other commenters have brought to light, that this policy as currently conceived is attainable. We agree with the intent of the policy to minimize transportation impacts and GHG emissions. In order to ensure that this policy continues to be effective as development under the 2018 GUP takes place, **we recommend that the County require the City of Palo Alto and City of Menlo Park's suggested revisions to the No Net New Commute Trips policy, and adopt a mitigation monitoring program with monitoring by an independent third party.** 5

Stanford has a responsibility to minimize the carbon footprint of the major developments envisioned by this project according to its own Energy and Climate Plan, which summarizes the University's commitment to climate change. The document states a guiding principle that the University is dedicated to applying its "intellectual and financial resources to provide leadership in climate change solutions, even if these efforts may differ from popular perceptions of how to pursue GHG reduction or are greater than governmental regulations may require."[5] Stanford University is an integral part of the surrounding communities of Silicon Valley, producing good jobs, contributing revenue to local cities, offering first-class educational opportunities, and providing a source of pride for the Peninsula. It is therefore even more important for Stanford, being such an influential institution, to lead by example, meeting top sustainability standards for new development. 6

We urge Santa Clara County to require maximum climate mitigation for the GUP, including carbon free building standards and ensuring no increase in traffic and transportation related GHGs from the project. Thank you for consideration of these comments. 7

Sincerely,

Diane Bailey, Executive Director, Menlo Spark

[3] https://e360.yale.edu/features/how-the-world-passed-a-carbon-threshold-400ppm-and-why-it-matters

[4] https://www.hpbmagazine.org/attachments/article/11976/11Su-Y2E2-Stanford-CA.pdf

[5] Stanford University's Energy&Climate plan, https://sustainable.stanford.edu/sites/default/files/resource-attachments/E_C_Plan_2015.pdf

5.2.2.3 Responses to Comments from Menlo Spark

O-MS-1 The comment is acknowledged but does not address the adequacy of the Draft EIR.

Please also see Response to Comment O-MS-4, below.

O-MS-2 Draft EIR Mitigation Measure 5.15-2(a) includes procedures to monitor Stanford's achievement of the no net new commute trips program, and the mitigation measure creates incentives for Stanford to continue to meet this standard.[9] Mitigation Measure 5.15-2(b) has been added to include an upfront fair-share payment by Stanford to address the impact of peak-hour, off-peak direction Project-generated vehicle trips (i.e., reverse commute) that are not accounted for in the no net new commute trips standard. Please see Chapter 2 in this Response to Comments Document for the revised mitigation measure text.

Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for detail on the net new commute trips program, including the ability to expand the program to reduce more vehicle trips in the future.

Please also see Response to Comment O-MS-5, below.

O-MS-3 The comments are acknowledged.

O-MS-4 Please note Project GHG emissions are adequately addressed in the Draft EIR using applicable CEQA significance criteria. As discussed in Impact 5.7-1 in the Draft EIR, the total GHG emissions under the proposed 2018 General Use Permit would be at or below those GHG emissions under the 2018 baseline. Further, GHG emissions under the proposed 2018 General Use Permit would be below the significance thresholds that relate to consistency with GHG reduction goals for year 2030 and, to the extent feasible, year 2050. As such, the proposed Project would not generate GHG emissions, either directly or indirectly, that would make a cumulatively considerable contribution to a significant impact on global climate change, and accordingly, the Project impact on generation of GHG emissions is less than significant, and no mitigation, such as a carbon-free building standard is required. Furthermore, as discussed in Impact 5.7-2, the proposed Project as mitigated would have a less-than-significant impact with respect to consistency with the all applicable, plans, policies and regulations adopted for the purpose of reducing GHG emissions.

O-MS-5 Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for evidence of the effectiveness of the no net new

[9] Please note that in response to comments, and as a result of County initiated changes, Mitigation Measure 5.15-2 has been expanded as Mitigation Measure 5.15-2(a)-(b). Please see Chapter 2 in this Response to Comments Document for the full revisions made to this mitigation measure.

commute trips program, including the ability to expand the program to reduce more vehicle trips. Please also see relevant City of Menlo Park Responses to Comments A-MP-19, A-MP-21, and A-MP-35; and City of Palo Alto Responses to Comments A-PA-9, A-PA-72, A-PA-76, A-PA-77, A-PA-90, and A-PA-100.

Please also refer to Master Response 4: Environmental Review Process, Topic 1: Use of Program EIR and Subsequent Approvals, for a discussion of the Mitigation Monitoring and Reporting Program (MMRP) that is required for the Project, including for implementing the No Net New Commute Trips standard.

O-MS-6 The comments are acknowledged. The comment is noted but does not address the adequacy of the Draft EIR. Please see Master Response 1: Non-CEQA Comments. Please also see Response to Comment O-MS-4, above.

O-MS-7 The comments are acknowledged. Please see Response to Comment O-MS-4, above.

Palo Alto Chamber of Commerce
Create | Connect | Compete

February 1, 2018

Santa Clara County Board of Supervisors
70 West Hedding Street, 10th Floor
San Jose, CA 95110

Dear President Simitian and Santa Clara County Supervisors,

On behalf of the Board of Directors of the Palo Alto Chamber of Commerce, I am writing to support the Stanford University 2018 General Use Permit Application. 1

Our Board of Directors has had the opportunity to review the Application with representatives of the University and to clarify any questions we may have had concerning the proposed new development on the campus.

Our support for the Application is grounded in our appreciation and respect for Stanford as a driver of prosperity in our community and a contributor to our enviable quality of life, both culturally and economically. Its new development will be an enhancement and not a detractor of those benefits. 2

Stanford serves as a vital economic engine for the region, state, and country. Companies formed by Stanford entrepreneurs have generated world revenues of $2.7 trillion annually and have created 5.4 million jobs. Stanford's alumni and faculty have created nearly 40,000 companies, which, if gathered together into an independent nation, would be the world's tenth largest economy.

And the new development will be achieved with no net new commute trips through Stanford's innovative TDM program, expanding the program it developed under the current General Use Permit which reduced the drive-alone rate of Stanford commuting employees from 72 percent in 2002 to 50 percent today. 3

The expansion of existing fields, the emergence of new academic fields, the space requirements associated with collaborative teaching and research, and the equipment demands associated with many research fields are driving the need for new academic space on campus. New academic space would support newly emerging academic fields; provide improved space for interdisciplinary collaboration and state-of-the-art research equipment; allow replacement of outdated buildings and infrastructure; and accommodate potential modest growth in undergraduate enrollments. 4

The General Use Permit allows Stanford the flexibility to responsibly pursue exciting new opportunities that benefit both Stanford and the surrounding community. We are impressed with Stanford's vision that anticipates the educational and research needs for the next two decades, with the foresight, flexibility and innovation required to meet those needs and maintain the preeminent quality of this world-class institution. 5

Sincerely,

Judy Kleinberg

Judith Kleinberg
President and CEO

5.2.2.4 Responses to Comments from Palo Alto Chamber of Commerce

O-PACOC-1 The comment is noted but does not address the adequacy of the Draft EIR.

O-PACOC-2 The comment is acknowledged.

O-PACOC-3 The comment is acknowledged.

O-PACOC-4 The comment is acknowledged.

O-PACOC-5 The comment is acknowledged.

From:	Elaine Uang
To:	Rader, David
Subject:	Fwd: Stanford General Use Permit
Date:	Tuesday, January 23, 2018 2:44:34 PM

Dear David,
I sent the following letter on behalf of the Palo Alto Forward Board of Directors to the Board of Supervisors, but just saw your contact on the Stanford GUP site. I'm forwarding in case this did not reach you.
Best,
Elaine

---------- Forwarded message ----------
From: **Elaine Uang** <elaine.uang@gmail.com>
Date: Tue, Jan 23, 2018 at 2:17 PM
Subject: Stanford General Use Permit
To: boardoperations@cob.sccgov.org

Dear Santa Clara County Board of Supervisors,

Thank you for your hard work shepherding the Stanford General Use Permit (GUP) process and for allowing the public an additional 60 days of comment. Palo Alto Forward is a community group that supports better housing and transportation options in Palo Alto, and helps educate our broader community on different topics, from ADUs to cycling infrastructure, Missing MIddle Housing to Mobility as a Service. Our board members have served as Planning & Transportation and Human Relations Commissioners and Comprehensive Plan Committee Members. We support positive change in our city's long range planning efforts. Palo Alto Forward's board has had an opportunity to review the Stanford GUP proposal and DEIR and respectfully submit the following comments for your consideration.

Housing

- **More housing on (or near) campus** - 3150 beds/housing units is welcome and much needed, but the projected jobs increase still results in a shortfall of 2425 housing units - Please consider adding more housing options particularly for administrative staff, post-doctorates and Stanford workers who have fewer local options due to high local rental prices. Housing is an important transportation impact mitigation strategy, and the lowest wage workers are most severely impacted. We also encourage Stanford to partner with the City of Palo Alto or the County of Santa Clara to explore more housing on nearby sites. 1

- **Housing impact fees** - Stanford has a great track record providing fees for affordable housing funds. However the current proposal of $20/sf is a little lower than the $25/sf that many surrounding jurisdictions require for commercial development. (Palo Alto is the exception with a much higher fee) Given our massive regional housing shortfall increasing Stanford's housing impact fees could contribute more dollars to the county's affordable housing fund. We would prefer to see affordable housing funds spent near transit hubs that are in close proximity to Stanford lands (not necessarily six miles, but perhaps within 20-30 minute transit commute) to mitigate transportation impacts. 2

- **Housing locations** - It's great to see significant numbers of housing units proposed in the Quarry district. The location is closest to transit and services and can bear a higher level of housing. For 3

housing that may have school aged children, consideration of sites near College Terrace closer to Escondido and Nixon Elementaries may be more convenient. It's also good to see some consideration for higher density sites near Lagunita and Santa Teresa, but the R3S medium density housing areas should be enlarged to accommodate greater housing supply. 3 cont.

Transportation Infrastructure

- **Caltrain Grade Separation & Transit Center Funding -** Please consider matching funds for Caltrain grade separation and a new transit center at Palo Alto station. Caltrain electrification requires significant physical improvements to support additional ridership capacity. Stanford will be the largest beneficiary of the increased frequency and load and Stanford financial assistance for capital improvements could bring those changes online much more quickly. Palo Alto is also terminus for three major bus lines which serve the Stanford population, and a transit center upgrade to improve bus and shuttle connections would help further reduce SOV and achieve the goal of no net new trips. 4

- **University Avenue/Palm Drive Bicycle Connection** - we applaud the proposals for the roadway bicycle infrastructure along Hanover Street to the Bol Park Path, Middle/San Mateo in Menlo Park, and the University BIke Bridge to East Palo Alto. However there is one significant GAP in the bicycle network - the connection between University Avenue, the PA Transit Center, over El Camino, to the Class I facility along Palm Drive. Given the high Caltrain ridership rates, the bicycle is a natural last mile connection to campus...but is not used frequently enough. The bicycle mode share from north Palo Alto is lower than West Menlo Park and Stanford's bikeshed studies confirm that Palm Drive has one of the lowest bicycle volumes. The lack of good infrastructure from the Transit Center over El Camino to Palm is a likely reason. Stanford can partner with the City of Palo Alto, CalTrans and other agencies to create a more stress-free, continuous cycling experience along the University Avenue to Palm Drive corridor. This can help improve access to the transit center, but improve access to Stanford from North PA and East Palo Alto. 5

- **Quarry/Everett Bicycle Pedestrian link**- Residents in the Quarry district may need better access to the transit center and downtown services. The current routes, especially on foot or bike are not ideal. Creating a bicycle and pedestrian connection to downtown Palo Alto to link Quarry Road with Everett Avenue to give residents more direct access to important transportation options and services. 6

Transportation Demand Management

- **Extend TDM benefits for "Other Workers"** We applaud the no-net new trips goal, but feel the impact of "Other workers" (Temporary, casual, seasonal workers who have <50% FTE roles) should be included in VMT and no net new trips assessments, as other groups have noted. Given a projected increase of 2500 "Other Workers" between 2015 and 2035 this could account for a significant number of daily trips. Other workers should also be able to benefit from transit passes rideshare, carpool or other TDM benefits to reduce SOV commutes that full time regular employees have and hope these benefits can be extended to them. 7

- **Partner with local TMAs to leverage regional transportation benefits** - Palo Alto has launched a TMA to support trip reduction downtown and potentially the Cal Ave Area, and SRP has a parallel TDM effort. Joining forces with these TMAs to share benefits, negotiate new transit routes and expand service with VTA, SamTrans, AC Transit, and pool transportation benefits (bikeshare, carshare, etc) can benefit more community members. Such an effort can significantly improve regional transportation linkages by create a wider "Stanford Plus" transit sphere of influence. 8

Increase Parking Fees - this has been a cornerstone of Stanford's TDM policy for decades. However, Stanford's parking fees are still rather low (<$2/day for C permits, compared with min $10/day in SF) To further reduce SOV mode share and achieve no net new trips, increasing parking fees is an important tool to utilize. 9

- **TDM for recreational areas** - Places like the Dish, the Arts district, Bing Concert Hall, and sports venues are incredibly popular, and Stanford acknowledges that they see 400,000 visitors annually. Please consider TDM measures to mitigate recreational SOV trips. Parking is one of the major constraints for the Dish and leads to parking spillover in the neighborhoods. A regular shuttle service from Cal Ave or Palo Alto train stations could reduce need for parking and emissions/GHG generated by cars looking for parking. Shuttles or improved bicycling infrastructure to to the Arts District, Bing, Maples Pavilion or Stanford Stadium could also help reduce daily/weekend traffic. 10

In general, we are supportive of change, and housing and transportation efforts that can also improve quality of life for all residents in Palo Alto. As you are aware, our regional challenges require each municipality and institutions in the area to develop ways to assist in the solution. The Stanford GUP is a critical planning document for this effort. We applaud Stanford's initial proposal to address critical housing and transportation issues, and hope that you and Stanford's planning team consider these comments to strengthen Stanford's role in helping to solve these important challenges. 11

Sincerely,
Elaine Uang
On behalf of the Palo Alto Forward Board

5.2.2.5 Responses to Comments from Palo Alto Forward Board of Directors

O-PAF-1 On June 12, 2018 the County published the Recirculated Portions of Draft EIR, which includes two new housing alternatives (Additional Housing Alternatives A and B) under which additional quantities of housing would be added to the proposed Project. The analysis of Additional Housing Alternative A and Additional Housing Alternative B, along with comments received on, and responses to, the Draft EIR and Recirculated Portions of Draft EIR, will be presented to the County Board of Supervisors to assist in their consideration of whether more housing should be constructed.

O-PAF-2 The County Board of Supervisors is not bound by imposing the affordable housing impact fee offered by Stanford under the proposed Project. The County has separately undertaken the preparation of an Affordable Housing Nexus Fee Study[10] to analyze the appropriate fee to be imposed. On September 25, 2018, the County Board of Supervisors approved an ordinance establishing an affordable housing impact mitigation fee of $68.50 per square foot of academic and academic support space. This fee will be effective of July 1, 2019, with the $68.50 fee taking effect on July 1, 2020. Please see Master Response 10: Affordable Housing, Topic 3: Future Contribution to Affordable Housing Fund, and Topic 5: Geographical Distribution of Affordable Housing Funds.

O-PAF-3 These comments do not address the adequacy of the Draft EIR; the suggestions made will be considered by the County decision-makers.

O-PAF-4 If Stanford achieves the no net new commute trips standard, the proposed Project would not increase peak hour, peak direction vehicle trips. If Stanford does not achieve the no net new commute trips standard, Stanford will be required to provide fair share funding for transportation mitigation. The Santa Clara County Planning Office under Mitigation Measure 5.15-2 will apply funds collected from Stanford to one or more of the intersection improvements identified in the Draft EIR. The County Planning Office will consult with affected jurisdictions to determine the priority order for funding such improvements. If the use of the funds for intersection improvements is infeasible, the County will apply the funds to other trip reduction programs in the local impact area.

O-PAF-5 Please refer to Master Response 13: Transportation and Traffic, Topic 10: Bicycle and Pedestrian Analysis for a discussion of commenter-proposed bicycle infrastructure improvements.

[10] Available at https://www.sccgov.org/sites/osh/HousingandCommunityDevelopment/Pages/Nexus-Study-Documents.aspx.

O-PAF-6 Please refer to Master Response 13: Transportation and Traffic, Topic 10: Bicycle and Pedestrian Analysis for a discussion of commenter-proposed bicycle infrastructure improvements.

O-PAF-7 Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for detail on the TDM program, including specific programs for which Other Workers are eligible.

O-PAF-8 Stanford is part of several local, regional and national groups that share best practices and resources. At the local level, Stanford communicates and participates in planning efforts with regional transit agencies, including SamTrans, VTA and AC Transit. TMAs are typically formed to enable small- to medium-sized companies and organizations that would not have the capacity to implement TDM on their own to pool resources. Stanford by contrast has demonstrated the ability and willingness to invest heavily in TDM and will continue to seek opportunities for collaboration with others when possible.

Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for additional information on Stanford's TDM program (no net new commute trips policy).

O-PAF-9 The comment is incorrect that parking at Stanford is less than $2 a day, as C parking permits are over $5.25 per day, and A permits are $13.50 per day. Priced parking is relatively rare on the Peninsula and parking costs in San Francisco are not a good comparison. Regardless, increasing parking charges can be an important tool in expanding the success of its transportation demand management programs under the proposed 2018 General Use Permit.

Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for additional information on Stanford's TDM programs.

O-PAF-10 These options currently exist. Bicycle infrastructure and shuttle service already serve the core academic areas of the campus. Further, the Dish is connected by the Stanford Perimeter Trail, on-road bicycle facilities, and has bike parking. The 1050A Marguerite shuttle travels on Junipero Serra Boulevard. Stanford states that it is evaluating the demand for a stop at the Dish.[11]

O-PAF-11 The comments are acknowledged, and they do not address the adequacy of the Draft EIR.

[11] See Appendix TRF-MISC in this Response to Comments Document.

From: Tim Bauman
To: Rader, David
Subject: Stanford GUP Draft EIR comments from Redwood City Forward
Date: Friday, February 2, 2018 10:21:38 AM

Dear Santa Clara County Department of Planning and Building:

We write to provide our comments on Stanford University's General Use Permit Application Draft Environmental Impact Review.

We are residents in Redwood City interested in crafting a vision for the future of Redwood City that expands choice, opportunity and quality of life. The possible of expansion of Stanford University may present significant challenges to our region if the impacts of the expansion are not mitigated. 1

Our concerns center on the increased demand on housing and transportation, and are as follows:

Additional jobs should be mitigated by supplying sufficient housing with additional study being done to update the housing-jobs linkage ratio; and consider the income-specific housing demands. 2

Traffic/Transportation impacts and opportunities should be studied, including but not limited to all local Caltrain stops' current and future capacity; inclusion of part-time and contract workers in transportation management district programs; and, the current and future capacity of Marguerite shuttle. 3

We ask that the increased need for housing and transportation be adequately addressed so that negative impacts to our region are mitigated. If the additional jobs are not mitigated by supplying sufficient housing on-site, there will be increased demand on the housing stock of nearby communities such as Redwood City. Redwood City does not have any spare housing capacity, so increased pressure will both worsen affordability and put additional stress on the local transportation system. 4

Sincerely,

Redwood City Forward
Steering Committee
(Isabella Chu recused herself due to her affliation with Stanford University)

5.2.2.6 Responses to Comments from Redwood City Forward Steering Committee

O-RCF-1 Please see the responses that follow.

O-RCF-2 Please refer to Responses to Comments O-RCF-3 and O-RCF-4, below.

O-RCF-3 With respect to Project effects on Caltrain, please see Master Response 13: Transportation and Traffic, Topic 12: Transit and Bicycle Capacity.

With respect to inclusion of part-time and contract workers in transportation management demand programs, please see Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard.

With respect to the Marguerite shuttles, as a privately operated shuttle, the shuttles can be expanded and contracted to meet the demands on the system at any point in time. As such, a capacity analysis is not warranted.

O-RCF-4 Please refer to Draft EIR Section 5.12 Population and Housing, and Section 5.15 Transportation and Traffic which address all Project and contribution to cumulative housing and transportation impacts related to construction and operation of the proposed Project.

Please note that on June 12, 2018 the County published the Recirculated Portions of Draft EIR, which included a new significant Project impact (Impact 5.17-1: Environmental Consequences of Stanford Providing Off-campus Housing Under Proposed Project) was identified in the Recirculated Portions of Draft EIR.

The Recirculated Portions of Draft EIR includes two new housing alternatives (Additional Housing Alternatives A and B) under which additional quantities of on-campus housing would be added to the proposed Project. The analysis of Additional Housing Alternative A and Additional Housing Alternative B, along with comments received on, and responses to, the Draft EIR and Recirculated Portions of Draft EIR, will be presented to the County Board of Supervisors to assist in their consideration of whether more housing should be constructed on the Stanford campus.

David Rader
Santa Clara County Planning Office

February 1st, 2018 *via email*

RE: Stanford University 2018 General Use Permit (GUP) and Draft Environmental Impact Report (DEIR)

Dear Director Girard,

The Sierra Club Loma Prieta Chapter and the Santa Clara Valley Audubon Society appreciate the opportunity to comment on the Stanford General Use Permit (GUP) and the associated Draft Environmental Impact Report (DEIR). The GUP proposes to add 2.275M square feet of academic and academic support (non‐residential) space and 3,150 dwelling units or beds, and 40,000 square feet of additional building space to their campus between 2018 and 2035.

Together, our organizations represent thousands of residents in Santa Clara and San Mateo Counties. Our members value nature and the environment, birds and wildlife, and believe that a sustainable approach to development is critical to our future, and that open space and the preservation of our biological assets are an inherent part of a sustainable future in our region and beyond.

We are concerned with Stanford's growth plans and the impacts on the environment and biological resources. Here are our comments:

1. Open Space

The 2018 GUP provides that Stanford does not seek growth beyond the current Academic Growth Boundary (AGB) at this time. However, as organizations that focus on the preservation of open space and biological resources, we remain concerned that current open space protections will expire in 2025 and that the 2018 GUP and DEIR do not include the extension of these protections. The AGB is critical to the containment of development and its separation from open space and habitat, and protects Stanford neighboring communities from sprawl and all the maladies associated with it. Indeed, the 2000 Stanford Community Plan described the AGB as "the primary mechanism for promoting compact urban development and resource conservation on the Stanford

1

campus." Currently, growth beyond the AGB requires approval by a super‐majority of Santa Clara County Supervisors. This protection should be extended in perpetuity 1 cont.

2. Bird-Friendly Design

It is now widely recognized that bird collisions with man-made structures, especially glass buildings and glassy elements, are significant contributors to bird-mortality and, most importantly, to the decline of bird populations in North America. When bird-friendly design is implemented as a guiding principal, the hazards can be greatly reduced.

Many neighboring cities recognize bird-collision with glass as an important issue and make an effort to minimize hazardous construction. The issue is addressed in General and Specific Plans (San Jose, Palo Alto, Mountain View), in ordinances and mandatory Guidelines (San Francisco, Oakland, San Jose, Sunnyvale, Richmond) and in Mitigation Measures for areas near the Bay (Menlo Park). All of these cities look to provide standards and ordinances for bird-friendly design for any buildings located along and near the Bay. Some cities also require or recommend bird-friendly design and the regeneration of ecosystems along wetlands and creek corridors. For example, Mountain View has established a 200-foot "habitat overlay zone" for creeks and sensitive habitats in the North Bayshore. Companies such as Google, Facebook, Intuit, Microsoft, and LinkedIn are also incorporating bird-friendly design into their buildings, signifying the easily attainable union between ecology and building design and preserving the integrity of our natural ecosystems while allowing our region to develop. 2

The Stanford campus is rich with birdlife. We used eBird (a citizen science-based, national database that provides data on bird abundance and distribution), to compile a list of bird species observed at several areas on campus in all years, and in the past 10 years. The results are presented in Figure 1 (see also attachment Stanford Birds). The data clearly show the importance of Lake Lagunita for migratory birds.

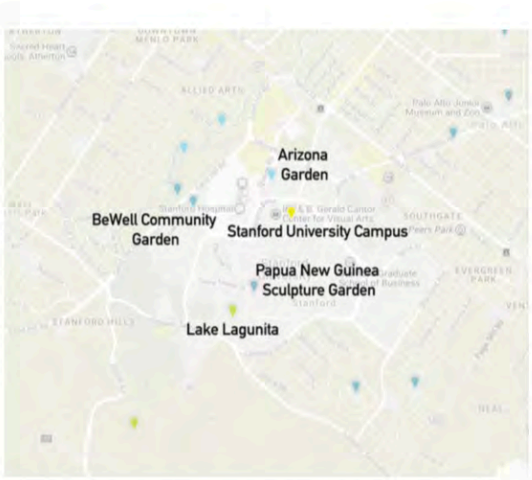


Figure 1: Campus locations and number of avian species

	Campus (10 year)	Campus (all years)	BeWell	Arizona	Lagunita	Papua
Number of species	142	157	37	54	143	19

Bird-friendly design measures may include: a substantial reduction in the amount of glassy material used in the building's design; avoidance of glass glazing that reflect the bay, the sky and surrounding vegetation; incorporation of visual cues into glass facades to alert birds of the structure; avoidance of see-through situations such as transparent skyways and free standing walls; and avoidance or reduction of light emissions.

We ask the Stanford GUP and EIR to:

- Provide respectful setbacks of development from sensitive habitats where birds aggregate (such as Lake Lagunita)
- Require all new construction, and major renovation of existing buildings, to implement Bird-Friendly Building Design feature.
- Monitor bird collisions with all new construction, and major renovation of existing buildings, to implement Bird-Friendly Building Design feature

Resources:

- The City of San Francisco Standards for Bird Safe Buildings
  - http://sf-planning.org/standards-bird-safe-buildings
- Richmond Bird-safe standards
  - https://www.ci.richmond.ca.us/DocumentCenter/View/41218 (See 6-105)
- Sunnyvale Bird Safe Building Design Guidelines (required)
  - https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23799
- In Mountain View, the North Bayshore Precise Plan requires Bird Safe Design for all new buildings North of Hwy 101 and installs a 200-ft Habitat Overlay Zone setback near wetlands and creeks.
  - http://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=24429
- American Bird Conservancy Bird-Friendly Design Guide
  - https://abcbirds.org/wp-content/uploads/2015/05/Bird-friendly-Building-Guide_LINKS.pdf
- Monitor bird collisions
  - Loss, S.R., Loss, S.S., Will, T., Marra, P.P. 2014. Best practices for data collection in studies of bird-window collisions. https://abcbirds.org/program/glass-collisions/learn-more/

2 cont.

3. Light Pollution

Impact 5.1-4 (Significant Impact): The Project could create a new source of substantial light or glare that would adversely affect nighttime views in the area. Mitigation Measure 5.1-4: Stanford shall submit a lighting plan for approval by the County Planning Office, as part of an ASA review, for each development project that would include exterior light sources. The plan shall show the extent of

3

> illumination that would be projected from proposed outdoor lighting. State-of-the-art luminaries shall be used where necessary, with high beam efficiency, sharp cut-off, and glare and spill control. Upward glow shall not be allowed in residential or academic uses.

While this mitigation may suffice for aesthetic purposes, it is not adequate for minimization of impacts to biological resources – especially migrating birds. Artificial light at night – light pollution – is now pervasive as a background, with few brightly contrasting beams or buildings. How does this impact migrating birds?

Two recent papers now confirm that urban glow attracts birds towards the built environment.[1,2] This applies primarily to migrating songbirds, found in unexpectedly high densities in areas lit at night. As the birds stopover in these areas, they are vulnerable to collisions with glass, predation by cats, and other unintended consequences of urban life. Given that high-quality stopover habitat is critical to successful migration, and hindrances during migration can decrease fitness, artificial lights present a potentially heightened conservation concern for migratory bird populations. Effects of increased illumination on bird behavior include changes in singing times[3], disruption of breeding cycles[4], and extended foraging[5], all of which can result in significant impacts to bird populations.

3 cont.

We are concerned that lighting associated with development in the AGB in general, and specifically with new or relocated sports fields may contribute to light pollution in the Stanford area and impact migrating birds in the region. Sports fields can create a luminous dome of bright white light where it is currently darker than the surrounding city, increasing ambient illumination over a wide area to levels that are ecologically

[1] McLaren, J. D., Buler, J. J., Schreckengost, T., Smolinsky, J. A., Boone, M., Emiel van Loon, E., Dawson, D. K. and Walters, E. L. (2018), Artificial light at night confounds broad-scale habitat use by migrating birds. Ecol Lett. doi:10.1111/ele.12902

[2] McLaren, J. D., Buler, J. J., Schreckengost, T., Smolinsky, J. A., Boone, M., Emiel van Loon, E., Dawson, D. K. and Walters, E. L. (2018), Artificial light at night confounds broad-scale habitat use by migrating birds. Ecol Lett. doi:10.1111/ele.12902 https://doi.org/10.1111/gcb.13792

[3] Longcore, T., R. Mattoni, G. Pratt, and C. Rich. 2000. On the perils of ecological restoration: lessons from the El Segundo blue butterfly. Pages 281–286 in C. J. Fotheringham, editor. 2nd interface between ecology and land development in California. U.S. Geological Survey, Sacramento, California.

[4] De Molenaar, J. G., M. E. Sanders, and D. A. Jonkers. 2006. Road lighting and grassland birds: local influence of road lighting on a black-tailed godwit population. Pages 114–136 in C. Rich and T. Longcore, editors. Ecological consequences of artificial night lighting. Island Press, Washington, D.C.

[5] Rohweder, D. A., and P. R. Baverstock. 1996. Preliminary investigation of nocturnal habitat use by migratory waders (Order Charadriformes) in northern New South Wales. Wildlife Research 23:169–183.

disruptive. The EIR should address the potential for sports fields to increase night-lighting in the area and provide appropriate mitigation measures to reduce light shed and reflectivity. At a minimum, sports field lights should be turned off during bird migration seasons and under foggy conditions, as fog can exacerbate light shed.

Bright lighting with shorter wavelengths is especially damaging to humans and wildlife. The conclusion from a number of studies on humans and wildlife is that whiter light (that is, full-spectrum light with blue and violet light included) has more adverse impacts than warmer light that does not have emissions in the shorter wavelengths. The blue-heavy spectral character of metal halide lamps and LED lights have the potential to affect human health because blue light gives a physiological signal to humans that it is daytime, disrupting circadian rhythms.[6] Metal halide lamps and LED lighting should be avoided.

The EIR should include thorough analysis of the potential impacts of new lighting, including: light scattering by aerosols, such as dust, pollen, or droplets of water; light scattering by air, known as Rayleigh scattering; and light reflection.

3 cont.

4. DEIR Project Description (Section 1.4)

- The 2018 GUP provides a shifting project description that allows, overtime, for additional housing and for changes above-identified thresholds, in the distribution of academic, academic support, and housing development within the Academic Growth Boundary. Providing "habitat overlay zones (see above) can protect biological resources on campus from a shifting project. In addition, oak woodlands and wetlands should be protected from development for the largest extent possible, and Stanford should be required to avoid development in oak woodlands, riparian areas and wetlands. 4
- Please provide explicit list of all types of infrastructure, structures or other developments that may be defined as "associated infrastructure". 5
- Please specify if sport facilities are included in "associated infrastructure" and describe any such facilities in detail. Please include lighting, noise and, if pertinent, event-related car trips. Please analyze impacts associated with light pollution, noise, and event-related traffic. If fire-works are to be deployed, please analyze noise and pollution impacts. 6
- Please provide a general description of any new infrastructure that may be built outside the ABG and outside the AGB. Please provide detailed description of on all "water supply improvements" that may occur outside the UBG. 7
- Please provide discussion of vehicle emission-associated nitrogen deposition on native habitats, and mitigate for the impact. 8
- Sustainability – why defer implementation of the final California Air Resources Board Tier 4 standards?
    - Stanford should meet final California Air Resources Board Tier 4 standards for all construction equipment, without exception, as well as Marguerite buses and Stanford fleet vehicles by 2020 at the latest. 9

[6] Pauley, S. M. 2004. Lighting for the human circadian clock: recent research indicates that lighting has become a public health issue. Medical Hypotheses 63: 588-596

5. Please identify on a map any campus lands that were set-aside as part of development agreements in the past. 10

6. Please define clear consequences and incorporate those into the language of use permits mitigation measures. 11

7. Please provide an independent, transparent monitoring program – so the public can be informed. 12

We thank you for the opportunity to comment on the Stanford Gup EIR. Please do not hesitate to contact us if you have question,

Michael Ferreira, Conservation Chair
Sierra Club Loma Prieta Chapter
3921 E Bayshore Rd., Palo Alto, CA 94303

Shani Kleinhaus, Environmental Advocate
Santa Clara Valley Audubon Society
22221 McClellan Rd., Cupertino 95014

5.2.2.7 Responses to Comments from Santa Clara Valley Audubon Society

O-SCAS-1 Please see Master Response 5, Project Description, Topic 2: Scope of Proposed Project and Analysis.

O-SCAS-2 With respect to setback from sensitive habitat, Stanford's proposed development under the 2018 General Use Permit directly avoids sensitive bird habitats outside the Academic Growth Boundary. Lagunita Reservoir is specifically mentioned in the comment. Lagunita is heavily regulated through Stanford's Habitat Conservation Plan (HCP), which includes a prohibition of development and minimization measures that effectively manage the site for wildlife during the 50-year life of Stanford's Incidental Take Permit (approved in 2013). The HCP protects a buffer around the reservoir as shown on Figure 5.3-3 on page 5.3-27 of the Draft EIR.

According to the Stanford's Conservation Program Manager, large numbers of bird mortalities due to collisions with buildings historically have not been a substantial problem on campus. This may be because the species known to occur in the area are regionally abundant and adapted to suburban landscapes. There presently are buildings near or within areas with relatively high bird abundance, such as the Arboretum and the Lathrop Development District, but bird mortalities have not been noted. Buildings added by the proposed 2018 General Use Permit would not change this existing condition and are not expected to pose a problem in terms of substantial numbers of bird collisions.

With respect to bird friendly design, and monitoring, given the buffer that exists around Lagunita under the HCP and existing conditions at Stanford, operational impacts to migratory bird species would be less than significant (see Draft EIR Impact 5.3-1 and 5.3-10), and consequently, no mitigation for operational impacts is required.

O-SCAS-3 Stanford is fully compliant and well below the light limits for Title 24. For past projects approved by the County under the 2000 General Use Permit, Stanford has minimized light spillover while providing sufficient lighting to operate a safe campus. With regard to parking and landscape facilities at Stanford:

- Parking lots have a full cut-off light that only directs light downward;
- Pathways are lit with a low level of light (0.5 foot candle average[12]);
- Interior streets are not lit; and
- Most interior intersections are lit with a cut-off/down light similar to the parking lots, particularly at each new roundabout.

12 A foot candle is a measurement of light intensity and is defined as the illuminance on a one-square foot surface from a uniform source of light.

Stanford has recently converted most of the landscape lights to LED for energy efficiency, and Stanford conducted a two-year onsite study to identify fixtures and bulbs that have minimal glare, are most efficient, and are warm in color. When Stanford began replacing its landscape lights, Stanford's vendor developed a special fixture for Stanford's use to create a warm LED that did not exist at that time (between 2800 and 3000 kelvin[13]), but is now becoming more common-place in the industry.

With regard to building lighting, Stanford's general direction is to not flood the exterior with lighting, but instead to focus on providing appropriate lighting for primary entries and for egress. When buildings are illuminated on the exterior, Stanford's best practice is to use indirect lighting with warm lamp temperatures to minimize glare, and encourage the use of lighting accents in lieu of general spots or flood lights.

Although Stanford has some targeted up-lighting in a few special locations on campus (e.g., the Rodin sculptures and Bing Concert Hall podium sign), Stanford does not encourage this practice in order to minimize light spill and the maintenance issues associated with lights in the ground.

With regard to athletic field lighting, the lights are turned off immediately following the conclusion of the event after spectators have left. While previous athletic field installations were metal halide fixtures, Stanford is currently following with the industry trend and moving towards LED with all new installations. Avery Aquatics and Sunken Diamond Baseball are two examples of projects where the metal halide fixtures were replaced.

Stanford also has implemented many lighting control measures, like occupancy sensors and automatic light level tuning that minimize light exposure during off-hours.

Given Stanford's location in an urban environment and the efforts taken to minimize lighting in total and uplighting specifically, the proposed 2018 General Use Permit would have a less-than-significant impact on migrating birds, and consequently, no mitigation is required.

O-SCAS-4 The comment indicates the Project Description allows for additional housing and that Stanford may request to move development from one Development District to another. Please see Response to Comment A-PA-18 for information regarding the process the County uses to consider requests for additional housing or redistribution of housing or square footage from one Development District to another.

13 The color appearance or correlated color temperature (CCT) of light is measured in kelvin (K). The color appearance of lights with between 2800K and 3000Kwould be comparable to that of a typical incandescent bulb. The sun at noon on a clear day produces a light of approximately 5500K.

The comment indicates that habitat overlay zones to biological resources on campus, and that oak woodlands and wetlands should be protected from development for the largest extent possible, and Stanford should be required to avoid development in oak woodlands, riparian areas and wetlands.

The comment also suggests providing habitat overlay zones to protect areas of the campus from shifting distribution of development. The Draft EIR addresses uncertainty about where individual building projects would be sited by assuming that all portions of the academic campus that are within the Academic Growth Boundary and outside Campus Open Space could be developed. Draft EIR Section 5.3, Biological Resources, identifies the areas of the campus that are sensitive for each biological resource, and establishes mitigation measures designed to avoid and reduce impacts to those resources. Please see Response to Comment O-SCAS-2, above.

With respect to oak woodlands, as discussed in the Draft EIR, biologically functional oak woodlands at the Project site are located in areas outside the Academic Growth Boundary (p. 5.3-4), and inside the Academic Growth Boundary within the Lathrop Development District (p. 5.3-8). As discussed in Impact 5.3-8 in the Draft EIR, appropriate mitigation is included for any potential loss of oak woodland habitat under the proposed 2018 General Use Permit, including through planting replacement oak trees; protecting existing native oak woodland on or off the Project site from future development through a conservation easement or fee title dedication to the County or a land conservation group approved by the County; or other options, which would ensure the impact would be mitigated to a less-than-significant level.

With respect to wetlands, as discussed in the Draft EIR, the great majority of jurisdictional wetlands within the Academic Growth Boundary are in Lagunita Development District. As discussed above, Lagunita is heavily regulated through Stanford's HCP. Furthermore, as discussed in Impact 5.3-9 in the Draft EIR, appropriate mitigation is included that would reduce impacts to wetlands through avoidance, or if avoidance is not feasible, replacement through the creation, preservation or restoration of jurisdictional waters or wetlands or through other measures to adequately mitigate the impact.

With respect to riparian areas, as discussed in Draft EIR Impact 5.3-7, activities in riparian areas on the Project site are subject to the Stanford HCP and the County-approved Special Conservation Area Plan which state that Stanford will protect habitat and use effective mitigation measures. Furthermore, implementation of Mitigation Measures 5.3-6 and 5.3-7, including avoiding work conducted within 150 feet of riparian habitat, or if not feasible, replacing lost riparian habitat through the creation, preservation or restoration of equivalent habitat would reduce impacts to riparian habitat to a less-than-significant level.

Based on the above analysis, no revisions to the Draft EIR's biological resources mitigation measures are warranted.

O-SCAS-5 Infrastructure improvements would be required consistent with the levels of demand that would be required to serve the development that would occur under the proposed 2018 General Use Permit. As discussed in Draft EIR, Chapter 3 Project Description, page 3-18, most infrastructure subject to the proposed 2018 General Use Permit would be constructed on vacant land, infill sites and redevelopment sites within the Academic Growth Boundary; examples of infrastructure improvements include utilities and circulation improvements. While the full scope of such improvements is unknown, Stanford has identified one set of improvements that it intends to construct under the 2018 General Use Permit. As discussed in the Project Description, page 3-24, this consists of improvements on its lands in unincorporated Santa Clara County that have been identified by the Palo Alto Unified School District and the City of Palo Alto as the Suggested Routes to Schools shown on the Walkabout Maps for Nixon and Escondido Elementary Schools.

In addition, some infrastructure improvements could occur outside the Academic Growth Boundary within the Foothills Development District, such as underground pipelines, electrical transmission lines, water supply improvements, roadways and pathways and habitat improvements. See also Response to Comment O-SCAS-7, below.

Please also see Master Response 5: Project Description**,** Topic 1: Level of Specificity.

O-SCAS-6 Generally, sports facilities that include habitable buildings are considered academic and academic support facilities. Building square footage associated with such facilities is subject to the square footage authorization in the General Use Permit. Potential impacts from all proposed academic and academic support facilities are appropriately analyzed in the Draft EIR, including related to lighting, noise and traffic.

Lighting that is not associated with a building project could be considered infrastructure. The Draft EIR, Section 5.1, Visual and Scenic Resources, addresses lighting under Impact 5.1-4 on page 5.1-18. Noise associated with sports facilities is an existing condition at Stanford, and is addressed through compliance with the County Noise Ordinance. See Draft EIR pages 5.11-15 and 5.11-16 for a discussion of the County Noise Ordinance. Event-related traffic that occurs during peak hours is addressed in Section 5.15, Transportation and Traffic, as part of the Project because the existing trip generation characteristics of the campus (which include event traffic) have been scaled up in proportion to the anticipated growth on campus to reflect future trip generation under proposed Project conditions. In addition, all-day traffic including trips by visitors are

included in calculations of annual Vehicle Miles Traveled that form the basis for the Air Quality, Energy, and Greenhouse Gas Emissions analyses in the Draft EIR. Finally, events such as fireworks are an existing condition on the campus. Should the number of fireworks events increase beyond the two pre-permitted displays per year, Stanford is required to obtain entertainment permits from Santa Clara County, which includes consideration of noise and other effects. Fireworks programs are relatively short, and temporary in nature and would not result in significant adverse effects on the environment.

Please also see Master Response 4: Environmental Review Process, Topic 1: Use of Program EIR and Subsequent Approvals; and Master Response 5: Project Description**,** Topic 1: Level of Specificity.

O-SCAS-7 With respect to new infrastructure that may be built inside the AGB, please see Response to Comment O-SCAS-5, above.

As described in Section 3.8.1 of the Draft EIR, infrastructure improvements such as pathways, underground pipelines, electrical transmission lines, water supply infrastructure, habitat improvements, and similar types of improvements could be constructed throughout the lands subject to the proposed 2018 General Use Permit, including the land outside the Academic Growth Boundary. Examples of existing water supply features outside the Academic Growth Boundary include infrastructure associated with Stanford's Lake Water System described on page 5.9-4 of the Draft EIR, including the Los Trancos Creek Diversion/Felt Reservoir, San Francisquito Creek Diversion, and associated water pipelines. Other existing water supply features outside the Academic Growth Boundary include the Lagunita diversion dam/fish ladder structure (was removed in summer 2018), and two (covered) water reservoirs. The San Francisco Public Utilities Commission Hetch Hetchy pipeline system is also located outside the Academic Growth Boundary, on non-Stanford land. Modifications to Stanford's existing water system beyond the Academic Growth Boundary could occur under the 2018 General Use Permit.

The comment makes references to the acronyms "ABG" and "UBG," however, it is not clear what those acronyms represent, and those acronyms are not used in the Draft EIR.

O-SCAS-8 The Draft EIR addresses all applicable biological resource impacts in Section 5.3, Biological Resources, including impacts to native habitats, using appropriate resource agency criteria and standards, and mitigates all biological resource impacts to a less-than-significant level. There are no unique aspects regarding the proposed Project characteristics or related impacts that merits an analysis of vehicle emission-associated nitrogen deposition on native habitats.

O-SCAS-9 As discussed in the Draft Project Description, page 3-28, under the 2018 General Use Permit, Stanford commits to continue to implement, and update as needed, its

sustainability programs and practices. In addition, to further minimize impacts of development under the proposed 2018 General Use Permit, Stanford proposes to, among other programs, achieve the following:

- During the life of the 2018 General Use Permit, Stanford would meet final CARB Tier 4 standards for all construction equipment, except for chainsaws and paving phase equipment;
- All Marguerite buses would be electric by 2035; and
- 70 percent of Stanford Land Buildings and Real Estate and Bonair fleet vehicles would be electric by 2035.

The comment suggests that some of these project components should be implemented more quickly than Stanford has proposed. The proposal pertaining to construction equipment would be implemented throughout implementation of the 2018 General Use Permit. Earlier conversion of buses and fleet vehicles to electric vehicles is not necessary to reduce a significant effect of the proposed Project, and therefore is not warranted as a mitigation measure.

O-SCAS-10 The comment is not germane to the proposed Project, and does not address the adequacy of the Draft EIR. Please see Master Response 1: Non-CEQA Comments. However, for informational purposes the following discussion is provided.

As part of the 1997 Development Agreement between Stanford and the City of Palo Alto pertaining to the Sand Hill Road improvement projects, Stanford agreed not to develop an approximately 139-acre portion of the campus that is located in the West Campus Development District, known as "Area B," until December 31, 2020, except for academic and recreational fields and associated support facilities, and with the further provision that Stanford could propose and construct faculty, staff or student housing within a specified portion of Area B regardless of the December 2020 date.

In April 2001, the City and Stanford executed an amendment to the Development Agreement. This "First Amendment" revised Area B in order to exchange restrictions on portions of Area B such that (i) development would be precluded until December 31, 2020 on a 13-acre area that previously had been slated for the near-term development of housing under the original Development Agreement, and (ii) development of housing would be permitted on another, adjacent 13-acre area that had been restricted under the original Development Agreement until December 31, 2020.

In 2003, the City and Stanford executed another amendment to the Development Agreement. This "Second Amendment" further implemented the First Amendment, by defining more precisely the boundary between that portion of Area B where development was restricted until December 31, 2020, and that

portion of Area B where the development of housing was permitted regardless of the December 31, 2020 date.

Lastly, in 2012, the City and Stanford executed another amendment to the Development Agreement. This "Third Amendment" removed an approximately 10-acre site from Area B, in contemplation of the development of a new campus Central Energy Facility, which is part of the Stanford Energy Sustainability Initiative, or SESI. This 10-acre area previously had been slated for near-term development of housing under the Development Agreement (as amended by the First and Second Amendments).

Although most provisions of the 1997 Sand Hill Road Development have expired, the provisions and restrictions applicable to Area B (as that area has been revised by the First, Second and Third Amendments) remain in place until December 31, 2020.

O-SCAS-11 Please refer to Draft EIR Chapter 5, Section 5.0 Introduction to Environmental Analysis, which describes the EIR approach for analyzing and mitigating impacts of the proposed Project.

O-SCAS-12 As described in the Draft EIR, Chapter 2 Introduction, page 2-5, throughout this EIR, mitigation measures have been described in language that will facilitate establishment of a Mitigation Monitoring and Reporting Program (MMRP). As required under CEQA (see CEQA Guidelines, Section 15097), an MMRP will be prepared and presented to the County Board of Supervisors at the time of certification of the Final EIR for the proposed Project and will identify the specific timing and roles and responsibilities for implementation of adopted mitigation measures.

Please note Comment Letter O-SCAS contained an attachment which did not comment directly on the Draft EIR. This attachment is included in Appendix O-SCAS in this Response to Comments Document.

Stanford Coalition for Planning an Equitable 2035
equitable2035@gmail.com

Via E-Mail

February 2, 2018

County of Santa Clara Department of Planning and Development
Attention: David Rader
County Government Center
70 West Hedding Street, San Jose, CA 95110

Dear Mr. Rader,

The Stanford Coalition for Planning an Equitable 2035 (SCoPE 2035) is a coalition of undergraduate and graduate students concerned about affordable housing, accessible transportation, workers' rights, and environmental justice. We appreciate the opportunity to submit the enclosed comments on the Draft Environmental Impact Report (DEIR) prepared for the Stanford University Draft General Use Permit.

SCoPE 2035 is concerned that the Project threatens communities within and around Stanford with a variety of impacts, particularly impacts on housing, transportation, and greenhouse gas emissions. As indicated in the attached comment letter, we are concerned that the technical analysis contained within the DEIR obscures the full extent of these impacts. We provide new data sources and alternative interpretations of data already in the DEIR to complete analyses which we believe more accurately represent the impacts of this proposed project.

We hope to continue to work cooperatively with Stanford and the County to address the many issues that this Project raises in our community. We further desire to participate in a collaborative conversation that is accessible to all people, especially those most impacted by this project. Please do not hesitate to contact us if you have any questions.

1

Sincerely,
The Stanford Coalition for Planning an Equitable 2035 (SCoPE 2035)

Chiamaka Ogwuegbu
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240-505-9049

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SCoPE 2035's Comments on the Stanford 2018 GUP Draft Environmental Impact Report

Stanford Coalition for Planning an Equitable 2035

February 2nd, 2018

Table of Contents

Section 1: Indigenous Lands

Throughout this document, we refer to development on "Stanford land." We would like to acknowledge that this land is more correctly unceded Muwekma-Ohlone land. We would like to see Stanford to commit itself to incorporating indigenous perspectives on its development from the Muwekma-Ohlone and Ramaytush tribes. From the outreach efforts described in the DEIR, these attempts appear to have been minimal. 2

Section 2: Housing and Population

A. Housing Linkage Ratio

The 2018 General Use Permit EIR assessed Stanford's plans for housing under the linkage requirement established by the 2000 General Use Permit under Condition F.8, which states that for every 500,000 square feet of development, Stanford must provide 605 beds/units of housing[1]. This requirement was based on data from the 2000 GUP EIR, in which it was established that Santa Clara County expects a unit of housing for every 1.56 jobs[2]. This number was taken from Santa Clara County's General Plan, which established that "…the supply of housing in each part of the county should be increased to a level consistent with existing employment" (Santa Clara County General Plan, 1993 Housing Element Update Policy #3) [3]. There was no reasoning given in the Draft EIR as to why this linkage requirement is still accurate. Indeed, this plan is almost 25 years old now, and conditions in the Bay Area have changed significantly since. In the most recent Housing Element Update, published in 2015, the most recent jobs/housing ratio was 1.3— not 1.56 as it was in 1993[4]. If we examine Stanford's plans for development, we find that the University does not meet the jobs to housing requirement. 3

They plan to add 789 faculty to campus, and build 550 units to accommodate them. However, 789/1.3 = 607— Stanford is under-building housing for faculty by almost 60 units. These units are also supposedly intended to house postdoctoral students. If we add the 961 postdocs that Stanford intends to add to campus to our analysis, we find that Stanford is under-building by 796 units in using the 1.3 jobs/housing ratio, or 572 units using the 1.56 jobs/housing ratio from the 2000 GUP. Similarly, Stanford intends to add 1200 Graduate students, and build 900 units to accommodate them. However, 1200/1.3 = 923— Stanford is under-building for graduate students by about 20 units[5][6]. If these units are actually also intended to house postdoctoral students, the deficit grows larger, with the University under-building by 762 units by current standards and 485 units by 2000 GUP standards.

[1] https://drive.google.com/file/d/0B0BM4gZWP7M6Ym1kc3A3YnBWeHM/view, pg. 11
[2] https://drive.google.com/file/d/0B0BM4gZWP7M6c2NCWnFaX2dKTjg/view, pg. 4.3-17
[3] https://drive.google.com/file/d/0B0BM4gZWP7M6c2NCWnFaX2dKTjg/view, pg. 4.3-14
[4] https://www.sccgov.org/sites/dpd/DocsForms/Documents/HealthElement_2015_Adopted_Final.pdf, pg. 66
[5] https://drive.google.com/file/d/0B0BM4gZWP7M6anp0TW9JbWVrajg/view, pg. 5.3
[6] DEIR, pg. 5.12-15

Considering a housing deficit of 20 units was enough to declare housing a significant impact in the 2000 GUP, the housing deficit here is at the very least a significant impact as well. At worst, it is egregious.

Using the same analysis performed in 2000 to establish Stanford's linkage requirement, we find that the linkage requirement of 605 units per 500,000 square feet is no longer adequate to satisfy regional needs. As Santa Clara County's housing situation, policies, and priorities have changed, so too should the requirements expected out of Stanford. The University is NOT adequately meeting population growth and housing demand.

Furthermore, the 2015 Housing Element Update also notes that simply building housing is not enough to satisfy housing demand— "It does little good if a quantitative jobs/housing balance is attained but the housing costs are beyond the reach of most of our households, or the housing available does not suit the needs of households"[7]. Stanford is failing to meet this criteria. First, the University does NOT intend to house any staff or workers. Despite the language in the GUP stating that the 550 units are intended for "faculty, staff, postdoctoral scholars, and medical residents", it is well known that the University reserves housing benefits for faculty, postdocs, medical residents, and only SOME staff— a vast majority of staff and workers are ineligible for housing at Stanford. (And, If we were to assume staff were eligible for the 550 units, the University would then be vastly under-building for the population). Thus, Stanford is not supporting low-income community members and thus failing to uphold the 2015 Housing Element Update's directive.

3 cont.

B. Analysis of Income Level and Type of Housing Units

As described above, the current Stanford GUP does not appear to meet the needs of low-income community members. The DEIR, however, omits any analysis on how Stanford's underprovision of low-income housing impacts surrounding jurisdictions. The DEIR for Stanford's 2018 GUP has little to no analysis on housing needs broken down by income even though this is required by statute. CEQA Guidelines, section 15131, subdivision (c) states: "Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR." This has traditionally been accomplished by projecting the number of housing units required by income ("very low," "low," "moderate" and "above moderate") and type (one, two, or three bedroom apartments). This analysis can and must be done despite potential uncertainties in the nature and extent of future indirect development (See *Napa Citizens for Honest Government v. Napa County Board of Supervisors*). Indeed, it was an analysis that was completed in the 2000 GUP EIR. The current Stanford GUP DEIR currently predicts population increases in neighboring jurisdictions, but does not account for the distribution of housing units by income or type. The final EIR must contain a thorough analysis of housing demand by all projected growth among students, staff, faculty, and workers divided by income category and type of housing demanded. This type of analysis is present in the 2012 Facebook Campus Project FEIR.

4

[7] https://www.sccgov.org/sites/dpd/DocsForms/Documents/HealthElement_2015_Adopted_Final.pdf, pg. 32

C. Counting Graduate Housing Units Towards RHNA

We also observe that Stanford intends to count approximately 450 units of its graduate residences as low and very-low income units for unincorporated Santa Clara County's Regional Housing Needs Allocation. We recognize that these units do meet the necessary requirements to be counted as such, but we find it important to note that these units are not accessible to low-income Santa Clara residents generally, and do not seem to fulfill the purpose of RHNA allocations. We also note that Stanford, being in unincorporated Santa Clara County, is able to attribute much of its generated housing demand to local jurisdictions' RHNA numbers. According to the ABAG RHNA 2012 methodology, "In Napa, San Mateo, Santa Clara, Solano, and Sonoma counties, the allocation of housing need generated by the unincorporated SOI was assigned to the cities"[8]. This shows that unincorporated Santa Clara County's RHNA figures already do not account for Stanford's housing impact.

5

D. Local Housing Analysis Inconsistencies

In addition, we note that page 13 of Appendix PHD contains misleading statements about Stanford's housing impact. This section states that 789 faculty members are expected to be added over the lifetime of the GUP, and of these, 550 will be housed in new housing units, with 239 living off campus. The report then claims that because there are 1.76 workers per household with at least one worker in SCC, these 550 units will remove, in addition to 550 faculty members, (0.76) x 550 = 418 non-faculty members from local housing demand. In net, the report claims that there will be a reduced demand by 418 - 239 = 179 people in the area or 179 / 1.76 = 102 households. From this, the section concludes that Stanford's plans will yield a "net decrease in housing unit demand in the region". This assumes, however, that the 1.76 workers who would then live on Stanford's campus previously lived separately in the Bay Area. We find this an inaccurate assumption - it is much more likely that faculty housemates living together on campus already lived together before moving to campus. Instead, assuming the 1.76 workers per households already lived together prior to moving to campus, there will be simply an *increased demand for 239 units* representing (1.76) x 239 = 421 people.

6

E. Nexus Study of Stanford's Housing Impacts

Even if Stanford were to fully house its student and faculty population, the BMR fee it currently pays is grossly inadequate. Stanford points to this proposed $20 per square foot of academic and academic support space fee as a substantial offset to its housing impact. We show that this fee dramatically underestimates Stanford's true housing impact.

7

In the 2000 GUP, Stanford was given the option to either build affordable housing on campus or provide an in-lieu fee to offset its housing impact. The fee, established in Condition F.6(c)[9], is there linked to

[8] https://abag.ca.gov/planning/housingneeds/pdfs/RHNA_Methodology_Technical_Documentation.pdf
[9] https://drive.google.com/file/d/0B0BM4gZWP7M6Ym1kc3A3YnBWeHM/view, pg. 10

Palo Alto's BMR fee for commercial development, presumably because Stanford's impact would be similar to a commercial development in Palo Alto.

In its 2018 GUP application, Stanford has proposed to delink its fee from Palo Alto and to adopt a $20 per square foot fee, rising with inflation. Yet even if it were still linked with Palo Alto's fee, this fee would drastically underestimate Stanford's housing impact. Palo Alto's 2016 Nexus Study, conducted to inform an update of Palo Alto's fee, found that the maximum justifiable fee for Palo Alto Office / Medical Office / R&D commercial development was $264 per square foot. The suggested fee for this category was $35 per square foot, largely due to financial feasibility for Palo Alto in order to continue to attract commercial development. Santa Clara County does not need to be concerned about Stanford ceasing to develop or moving to a neighboring jurisdiction due to an imposed BMR fee - although Stanford has already begun relocating some of its operations, the bulk of the main academic campus will, most likely, remain.

There still remains the question of whether commercial development in Palo Alto can be used as a reasonable proxy for Stanford's development. We present results using Stanford specific data showing that $177 per square foot is a conservative estimate of Stanford's housing impact.

We followed Palo Alto's Nexus Study methodology closely as a model for appropriate assumptions. Our steps were as follows:

7 cont.

Step 1) For the proposed growth under the 2018 GUP, estimate the number of jobs created.

We use data presented in Table 9 of the PHD Appendix of the DEIR for projected job growth. Results are shown below:

	2018	2035	2018- 2035 Growth
Postdoctoral Students	2,403	3,364	961
Faculty	3,073	3,862	789
Staff (in project area)	8,985	11,423	2,438
Daily Other Worker Population	5,322	6,396	1,074
Total	19,783	25,045	5,262

Table 1: Projected population growth by Stanford affiliation over lifetime of 2018 GUP. Source: Table 9, PHD Appendix of DEIR.

For this analysis, we consider only the housing needs of the Staff and Daily Other Worker Population. This is partially because 550 units are reserved for faculty, offsetting some of their housing demand, but primarily due to data availability. *Importantly, this means that our results are a conservative estimate of true housing needs.*

Next, we map these numbers onto employment categories used by IPEDS data from the National Center for Education Statistics[10]. Data was used from the 2015-2016 year.

IPEDS Job Category	IPEDS Worker Count	DEIR Worker Category	2018-2035 Worker Projected Growth by IPEDS Category
Research	283	Staff	126
Public service	0	Staff	0
Librarians Curators Archivists and Academic Affairs and Other Education Services	348	Staff	155
Management	749	Staff	333
Business and Financial Operations	1886	Staff	839
Computer Engineering and Science	912	Staff	406
Community Social Service Legal Arts Design Entertainment Sports and Media	311	Staff	138
Healthcare Practitioners and Technical	45	Staff	-
Sales and related	0	Staff	441
Office and Administrative Support	992	Staff	0
Service	456	Other Worker	642
Natural Resources Construction and Maintenance	307	Other Worker	432
Production Transportation and Material Moving	0	Other Worker	0

Table 2: Employment distribution of workers at Stanford, by IPEDS job category, matched to worker categories used in the DEIR. Source: IPEDS data for Stanford University.

Step 2) For each IPEDS job category, use Bureau of Labor Statistics data to determine the number of occupations.

Data from the May 2016 BLS Occupational Employment Statistics for the San Jose-Sunnyvale-Santa Clara region were used[11]. Occupations were merged to the IPEDS data using the Standard Occupational Classification (SOC) codes listed for each IPEDS job category. For each IPEDS job category, the

7 cont.

[10] https://nces.ed.gov/ipeds/Home/UseTheData
[11] https://www.bls.gov/oes/current/oes_41940.htm#11-0000

distribution of occupations was determined and the projected worker counts were distributed proportionally. See Appendix A for full results.

Step 3) For each occupation, determine household income and associated income bracket.

For each occupation, the annual mean salary was multiplied by 1.76, the average number of income earners per household with at least one worker in Santa Clara County. The resultant household income was then categorized into the corresponding HUD income bracket using the 2017 State Income Limits for Santa Clara County for Extremely Low, Very Low, Low, and Moderate Income 3-person households[12]. Three people were assumed per household as was used in the Palo Alto Nexus Study. See Appendix A for full results.

Step 4) Determine total number of extremely low, very low, low, and moderate income households that are projected to result from development.

Summing the total number of categorized occupations, we find a total number of households by income category as follows:

Extremely Low	Very Low	Low	Moderate Income
0.0	295.7	476.6	766.1

Table 3: Household demand resulting from expansion under 2018 GUP, by income bracket. Source: 2017 State Income Limits for Santa Clara County.

Step 5) Use affordability gap data used in other cities Nexus Studies to determine cost of building housing for these workers.

We then use figures calculated by the City of Palo Alto and the City of San Jose for their nexus studies, to determine the gap between what households can be reasonably be expected to contribute towards housings costs and the cost of construction for these units. The figures used were as follows:

	Palo Alto Commercial Linkage Fee Nexus Study Affordability Gap[13]	San Jose Residential Nexus Study Affordability Gap[14]
Extremely Low Income	-	$256,000
Very Low Income	$306,164	$186,000
Low Income	$252,258	$151,000
Moderate Income	$249,596	$121,000

7 cont.

[12] http://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/inc2k17.pdf
[13] https://www.cityofpaloalto.org/civicax/filebank/documents/50935
[14] http://www.sanjoseca.gov/DocumentCenter/View/32877

Table 4: Affordability gap figures for Palo Alto and San Jose. Source: Palo Alto and San Jose Nexus Studies.

Palo Alto and San Jose were used as representative cities because they are the top two cities that will experience growth from Stanford's development from the 2018 GUP, according to the Population and Housing analysis, with an increased demand of 367 units in Palo Alto and 279 units in San Jose[15].

Using the household counts above, we find the following affordability gaps across income categories.

	Extremely Low	Very Low	Low	Moderate Income	Total
Affordability Gap (Palo Alto Based)	$0.0	$90,539,881.46	$120,226,888.28	$191,225,579.78	$401,992,349.52
Affordability Gap (San Jose Based)	$0.0	$55,004,566.02	$71,967,034.27	$92,702,988.64	$219,674,588.93

7 cont.

Table 5: Total affordability gap due to proposed Stanford expansion under 2018 GUP.

Step 6) Divide total affordability gap by the projected growth square footage, to find the housing impact per square foot.

Lastly, dividing the results above by the 2.275 million square feet of projected growth until 2035, we find a per-square-foot housing impact as follows:

BMR Fee (affordability gap / sq. ft., Palo Alto Based)	BMR Fee (affordability gap / sq. ft., San Jose Based)
$176.7	$96.6

Table 6: Affordability gap per square foot under Stanford's proposed expansion.

From this, we can see that Stanford's proposed $20 per square foot BMR fee grossly underestimates Stanford's housing impact.

F. Indirect and Induced Growth

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[15] https://www.sccgov.org/sites/dpd/DocsForms/Documents/SU_Gup2018_DEIR_Vol1.pdf, 5.12-18

As outlined in the PHD Appendix, the DEIR considers both direct and indirect economic growth associated with the proposed project. For the former, the project is slated to add 5,262 new jobs to campus through 2035. For the latter, the DEIR considers three forms of indirectly induced growth: off-campus demand for housing by Stanford affiliates, non-Stanford jobs indirectly created and induced by growth in population of Stanford affiliates, and the growth induced by infrastructure improvements associated with the project. We are currently disappointed by the lack of analysis in the first two areas, as we will elaborate here. We also find no analysis of the impact of Stanford alumni which do not fit neatly into the Stanford/non-Stanford dichotomy, yet have significant impacts on the Bay Area economy that are not mentioned in the DEIR. Given this, it seems clear that Stanford's project will absolutely have significant housing impacts, and the GUP should be adjusted accordingly.

1. Off-Campus Housing Demand

Stanford is using data from the 2016 Commute Survey to determine where the anticipated off-campus students, faculty, staff, and other workers would live. Of the 2,425 units of increased off-campus demand, over a quarter (610) is anticipated to come from the "Other Workers" category. According to Table 6 of the PHD Appendix, 129 out of the 2,101 anticipated increase in Other Workers will be third party contractors, janitorial contractors, or construction contractors. However, according to page 24 of the VMT analysis, the Commute Survey does not actually survey these groups. As a result, Note (b) in Table 14 of the PHD section says that that the analysis uses the same distribution as Staff households. Given that these are likely lower-wage workers than the average staff member at Stanford, this skews the distribution of where future housing demand will be located and should be corrected.

In addition, the metrics used to evaluate housing demand are at best ridiculous. The off-campus housing increase is compared to ABAG's *Projections 2013* to evaluate Stanford's contributions in comparison to entire regional growth. While it may be necessary to consider a reasonable comparison to evaluate Stanford's numbers, the appropriate comparison point cannot possibly be the growth experienced by a booming metropolitan area of 7 million people. We ask for a significance threshold to be used that evaluates Stanford's impact not relative to regional numbers, but on its own basis. This threshold should consider the financial value of these units and in this must consider the affordability of these units as well.

2. Induced and Indirect Non-Stanford Jobs

We take issue with the rather limited analysis of induced and indirect non-Stanford jobs that will be caused by the project, as studied in Appendix PHD. To do this, the report examined studies used in other colleges and universities, finding a range of job multipliers from 0.33 to 1.36. The report notes that these studies vary because they used different bases for impacts, impact areas, and methodologies. Ultimately, the PHD Appendix chooses to use UC San Francisco's multiplier of 0.73 of indirect and induced workers, as the best "'order of magnitude' estimate for regional impacts for Stanford, as it is in the same Bay Area region with the same range of available local goods and services." Using this multiplier with the addition of 5,262 directly added jobs gives 3,843 indirectly added and induced jobs.

8 cont.

9

This is again compared to regional ABAG projections, and the report concludes that this impact is insignificant.

This is absolutely absurd. First, as noted before, this comparison to regional ABAG projections makes little sense. Second, Stanford University is entirely unlike UCSF. While UCSF is primarily a graduate and professional school of 3,300 students, 1,500 residents, and 1,000 postdoctoral students[16], Stanford has 7,000 undergraduate students and 9,300 graduate students[17]. Moreover, Stanford touts itself as an entrepreneurial incubator which certainly creates a higher demand for local services. In October 2012, professors Eesley and Miller at Stanford published a report titled "Impact: Stanford University's Economic Impact via Innovation and Entrepreneurship"[18]. From an extensive survey sent to 143,482 alumni, with a 19 percent response rate, and 1,903 faculty with a 59.6 percent response rate, the authors found that 25 percent of faculty and 22 percent of research staff have founded a company, many of which are located within 20 miles of the university. Given that Stanford actively encourages this type of local entrepreneurship through an extensive range of programs, this project will predictably increase economic activity and the concomitant housing demand. These impacts must be taken seriously.

3. Stanford Alumni Impacts

8 cont.

More broadly, however, the impacts of alumni are not considered at all, which should be considered seriously in the DEIR analysis. This would require the DEIR to deviate from its current method of evaluating these impacts through job multipliers, because these impacts can only be evaluated cumulatively across time. In particular, this kind of analysis does not take into account the regular, planned recruitment of students and production of high-wage alumni that is, in part, the mission of Stanford University. Whereas a jobs multiplier, which only considers *a snapshot view* of an employer's workforce, may be appropriate for long-term positions where workers come and go irregularly, it is completely inappropriate for students. These impacts can only be considered *cumulatively, summed across time*. As a result, the housing and ultimately environmental impacts that will be caused by the increased number of alumni alone are absolutely significant.

CEQA Guidelines requires the EIR to consider any physical change in the environment "which is not immediately related to the project, but which is caused indirectly by the project,"[19] and which is "reasonably foreseeable impact which may be caused by the project"[20]. Under this definition, it seems clear that the collective impacts of Stanford alumni must be considered as impacts caused by Stanford, which Stanford is responsible for. Alumni are substantially different from employees filling jobs indirectly created by a commercial or office development. If not for Stanford University, most of these alumni would not have moved to the Bay Area (presumably the appropriate unit of analysis, based on the use of ABAG numbers for comparison elsewhere in the housing analysis). Students move to attend

[16] https://www.ucsf.edu/sites/default/files/UCSF_General_Fact_Sheet.pdf
[17] http://facts.stanford.edu/pdf/StanfordFacts_2017.pdf
[18] https://stanford.app.box.com/s/55estv4w8qi5vgd8n7i8q6jlo7cmdy6f
[19] §15064(d)(2)
[20] §15064(d)(3)

Stanford at far greater distances than most workers would move to work at a standard, newly created worksite. As a result, Stanford is responsible for the reliable housing demand they will create for the Bay Area region.

In order to determine the total number of students that Stanford will add to the region through the 2018 GUP, we first must determine the annual inflow and outflow of students from the region. With available data, we can approximate the number of students that are added to California as a result of Stanford. While it would be preferable to measure the number of students added to the Bay Area, the data available only allows for a statewide analysis. Stanford's admission office, Senior Survey, and other Stanford IR&DS data products would have the data necessarily for a finer-resolution analysis.

Inflow: Stanford publishes data on the number of matriculating undergraduates, master's students, and postdoctoral students for each year, back until 2006. In addition, the number of international students are published for all students, as well as by state for undergraduate students[21]. As a result, if we assume that the distribution across U.S. states is the same for all types of students, we can use the statewide breakdown to estimate the percentage of non-California students that matriculate at Stanford. Results are shown in Table 1, full tabular results in Appendix C. We find that on average, 30% of students matriculate from California each year.

8 cont.

Year	Extrapolated Total Out of State	Total Matriculated	Extrapolated Percent Californian
2006-2007	3407	5019	32.1%
2007-2008	3429	5117	33.0%
2008-2009	3617	5101	29.1%
2009-2010	3470	5122	32.3%
2010-2011	3698	5293	30.1%
2011-2012	3584	5248	31.7%
2012-2013	3618	5196	30.4%
2013-2014	3723	5207	28.5%
2014-2015	3746	5102	26.6%
2015-2016	3739	5096	26.6%
Average	3603	5150	30.0%

Table 7: Out of state matriculation rates by school year, extrapolated using undergraduate student breakdown by state. Source: Stanford IR&DS annual matriculation data.

[21] http://web.stanford.edu/dept/pres-provost/irds/ir/analytical-reports/stats-book.html

Outflow: Next, we can use data available in the Stanford Alumni database to determine the number of students current living either in the Bay Area or in California, by class year. Again, Stanford also likely has this data curated from the Senior Survey and other student surveys. Results listed in Table 2. From this we find that on average 56.7% of alumni currently live in California. We also find that an average of 48.1% of alumni live in the Bay Area (Bay Area Peninsula, South Bay, East Bay, San Francisco, and Marin County), but without a Bay Area comparison for matriculation numbers, we can only use the 56.7% figure here.

Graduation Year	Alumni Currently in Bay	Alumni Currently in CA	Total Alumni	Percent Alumni in Bay Area	Percent Alumni in CA
2011	1,998	2,490	4,987	40.1%	49.9%
2012	2,080	2,595	4999	41.6%	51.9%
2013	2,374	2,825	5,007	47.4%	56.4%
2014	2,460	2,852	4,942	49.8%	57.7%
2015	2,570	3,012	5,020	51.2%	60.0%
2016	2,737	3,119	5,279	51.8%	59.1%
2017	2,672	3,022	4,875	54.8%	62.0%
Average	2,413	2,845	5,016	48.1%	56.7%

Table 8: Number of alumni by current home location as of January, 2018. Source: Stanford Alumni Directory.

Total: While we do not have access to data to determine exact numbers, even approximates point to significant impacts. Table 5 of the PHD Appendix shows that the proposed project will add 1,700 undergraduates, 1,200 graduate students, and 961 postdoctoral students. If we suppose a four year undergraduate career, a three year graduate career, and a five year postdoctoral career, this will yield about 1,020 students entering and leaving Stanford in the years close to 2035. Using the 26.7 percent net flow of students rate into California found above (56.7% - 30% = 26.7%), this yields 272 additional students entering the Bay Area each year in 2035. Assuming that students will be added to campus at a rate that increases linearly over the 17 years of the GUP's lifetime, this will add approximately (272 * 17)/2 = 2,312 students to California over the entire GUP lifetime. As noted before, this does not account for flow into the Bay Area, as data of that granularity was not available. However, even with this coarse data, this is a massive inflow of students, almost as large as the increased demand of off-campus units (2,425) estimated in the DEIR. This predictable addition of students to California, and the Bay Area more specifically, should be addressed in the DEIR.

Moreover, these students working in the Bay Area reliably act as catalysts for future growth, particularly in the high-tech sector. The 2011 Eesly study found that 30 percent of all alumni have founded a company, 39 percent of which are founded within 60 miles of Stanford. These companies in turn tend to produce much more economic activity than normal commercial development. For example, high-tech

8 cont.

jobs may create up to five additional jobs in the service economy[22]. While Stanford cannot be expected to take responsibility for all of this growth, Stanford alumni have had massive cumulative economic impacts, which must be taken seriously. In total the report estimates that the 39,900 active Stanford-founded companies (since 1930s) have created 5.4 million jobs and generate annual revenues of $2.7 trillion.

8 cont.

G. Considering an All Housing CEQA Alternative

We understand that the EIR is only mandated to consider alternatives that mitigate significant impacts. However, given the analysis presented above, we would like to see stronger justification for the elimination of the All Housing Alternative at the scoping stage of the planning process, considering that housing is clearly a significant impact. We take issue with the presented justification that this alternative would "not provide Stanford flexibility to develop its lands within a framework that minimizes growth in the surrounding community. Nor would such an alternative enable Stanford to balance academic and academic support space growth with student housing." In actuality, the Stanford currently operates with a deficit of student, staff, and faculty housing that increases housing pressure in surrounding communities. An All Housing Alternative could reduce the cumulative impacts of Stanford University's development, which are felt in the local community even prior to the commencement of the 2018-2035 GUP. This would in fact enable Stanford to better balance its academic space with the amount of housing that it provides. We understand that the All Housing Alternative has not been explored, and we would like for it to be reconsidered or for the County to release a more justified explanation of its absence.

9

Section 3: Transportation

A. Assumptions for Worker VMT Calculations

We are concerned about many of the assumptions and decisions made in the VMT analysis section. We present our concerns, with some preliminary results using the study's VMT methodology to show the impacts of addressing these issues.

10

First, we are confused by the choice to include both graduate and undergraduate students, most of whom are not employed by Stanford, as part of Worker VMT. The analysis claims that "The omission of VMT from students traveling to and from the campus would leave a large gap in the VMT picture for Stanford University," and that Stanford has therefore voluntarily opted to include these VMT counts However, we strongly emphasize that students are *not* workers employed by Stanford, and their VMT contribution should not be treated as such. Further, their VMT contribution is a very small slice of total VMT, which obscured the large VMT contributed by Stanford workers. For example, in 2015, 4,788 off campus students contributed 26,735 VMT while 22,661 workers contributed 249,058 VMT each day.

[22] https://sloanreview.mit.edu/article/the-multiplier-effect-of-innovation-jobs/

We also note that the analysis states that trip lengths used in the 2035 model were increased "by 2% to 3% based on a review of the future trip lengths from the VTA 2040 model"[23] Yet the tables do not show any increase in trip lengths. We request these to be revised. Please see Appendix B for the updated Worker VMT calculations with this increase.

We are also concerned about the trip length averages that are used for Third Party Contractors, Janitorial Shift Workers, and Construction workers, because Stanford's Commute Survey does not cover these populations. The figure of 14.2 miles used for the home-work commute trip length for the 1912 workers in the 2035 analysis is reportedly based on "the Santa Clara Valley Transportation Authority (VTA) 2015 model checked against California Household Transportation Survey (CHTS) 2012 for Santa Clara County workers." We request greater explanation be given for the source and selection of this data. We further request that a more granular data set be used that takes into account these particular types of workers, to ensure that a 14.2 mile trip distance is reasonable.

Lastly, we are concerned about many of VMT that are currently considered as "Other" VMT. For example, there are 33.0 million VMT created by Vendors / business or academic meetings and 2.7 million VMT created by deliveries / trucks annually in the 2035 buildout. Although these VMT do not represent home-based work trips, these are a substantial portion of the project's VMT impact. We recommend that, rather than including VMT from students, the much more substantial VMT from these work trips be included in Worker VMT.

10 cont.

B. Traffic Impact Analysis

In addition to the VMT Analysis, we also examined the Transportation Impact Analysis, the Transit and Bicycle Facility Capacity analysis, and proposed changes to parking policies.

The Transportation Impact Analysis section on Stanford's TDM program proposes a potential menu of new measures that Stanford could incorporate into the existing program in order to meet the goal of not increasing drive-alone peak period trips. However, missing from this list, and from all of the TDM analysis, is consideration of expanding the worker pool that is eligible for many TDM programs, and how that might move Stanford towards its goals. At present, contract and part-time workers remain ineligible for many of the financial incentive TDM programs that they would not only most benefit from, but also be most likely to use. At minimum, this possibility merits analysis in the EIR.

11A

The Transportation Impact Analysis also identifies multiple impacts to public transit service, but does not provide clear significance thresholds. Impacts 5.15-4 and 5.15-11 both reference potential transit delays that will result due to implementation of the proposed project. Impact 5.15-4 cites delays of fewer than 15 seconds on the majority of routes, and delays of fewer than 21 seconds in all cases. Many of the delays detailed in Impact 5.15-11 are greater than 20 seconds, and two are even greater than 30 seconds. All of these impacts are deemed insignificant, but no clear explanation is ever provided regarding how long a delay must be before it is deemed a significant impact, and what makes delay times below such a

11B

[23] Pg 32 of VMT Analysis

threshold insignificant. These distinctions are important given that "per the VTA TIA Guidelines, if substantial increased transit vehicle delay is found, the Lead Agency [Santa Clara County] should work with VTA to identify feasible transit priority measures near the affected facility and include contributions to any applicable projects that improve transit speed and reliability in the TIA." In light of this obligation to identify mitigation measures in the event of impacts, the EIR should clearly delineate its cutoffs and reasoning for determining transit delay significance.

11B cont.

We are also concerned about the transit capacity analysis in Volume II, Section 5.15.7. Figure 5.15-11 assumes that a decrease in drive-alone mode share will translate into increase in rail mode share, while bicycle and bus mode shares stay the same. However, no justification is offered as to why this assumption is made about the bus mode share, and no contingency is laid out for mitigation of impacts if bus mode share does in fact increase. The draft mentions potential expansion of the Marguerite bus service, but does not touch on how impacts to local bus operators would be addressed.

Later in the document, an estimate is given of a ridership increase of about 40 people during each peak hour between 2015 and 2035 for all local buses. This increase is subsequently deemed insignificant, but no criteria is provided for that judgment.

11C

Overall, when comparing service impacts estimates for car traffic versus transit, car traffic delays seem to have low significance thresholds clearly defined by public agencies, whereas transit thresholds (where they are even provided), seem arbitrary and opaque.

Moreover, the 5.15.7 Transit Capacity Analysis aggregates all Express bus routes in order to draw its conclusion that an increase in ridership due to the project won't exceed the system's capacity. But given that there are disparities in ridership among the different routes (some have much excess capacity, while others are already at capacity), this analysis should be disaggregated in order to gain a better understanding of which specific routes are most likely to exceed capacity upon completion of the project.

Finally, Stanford requested an emergency reserve of 2000 parking spaces, in addition to the leftover allotment from the 2000 GUP and a more strict definition of what counts towards the parking space limit. While these spaces are not intended to contribute to additional commute trips, we are concerned that the reserve does not align with Stanford's goal of reducing VMT. In fact, one reason given for the parking reserve is in case Stanford's VMT per capita does not continue decreasing. If Stanford intends to implement a successful TDM program, a reserve should not be necessary. Another reason for the additional parking spaces is to prepare for emergencies, such as a long-term shutdown of public transportation. However, we believe there are much more effective ways to deal with such situations without the use of parking.

11D

In summary, while Stanford's TDM program has been mostly successful in reaching the No Net New Commute Trips goal, we believe it can be more inclusive, especially for subcontracted and part-time workers who often face long commutes. Additionally, we believe significance thresholds for impacts on

public transit must be more transparently and rigorously defined, similar to how impacts of car traffic are defined. Finally, we wonder about the consistency of an additional 2,000 parking spaces. 11D cont.

Section 4: Energy and Greenhouse Gas Emissions

A. Realistic Projected Fuel Efficiency Standards for Vehicles

Table 5.5-2 shows a significant decrease in mobile fuel consumption, which the report claims will be due to - among other factors - "reasonable assumptions about increasing fuel efficiency of vehicles based on established State and federal regulatory standards" (5.5-13, page 283). The EIR should include an explanation about the assumptions that are made about the increase in fuel efficiency for vehicles owned by faculty, staff, students, and workers. Regulatory standards have the ability to influence the fuel efficiency of new vehicles that are being purchased, but this does not affect the fuel efficiency of old vehicles. The EIR should include an analysis of historical trends in the age of vehicles within the fleet in order to make such reasonable assumptions about the overall fuel efficiency of vehicles over time. This analysis should also account for the vehicles that subcontracted workers drive. Furthermore, analysis on vehicle miles traveled need to factor in *all* subcontracted workers' trips to and from work *realistically*, using data localized to Santa Clara and the particular commute conditions of these workers. 12

B. Accurate Commute Trip Assumptions for All Workers

The findings in the current VMT analysis shows that per resident and per worker VMT generation under the proposed Project will be lower than regional and countywide averages, due to factors like Stanford TDM program and the density of public transit near and on campus. We argue that public infrastructure coverage is not enough. A study that factors in all contracted and subcontracted workers' travel experiences holistically, highlighting factors like travel time and cost, will shed more light on whether or not the laudable findings stand. A KQED article published in 2013 highlighted that the Census Bureau reports that the San Francisco-Oakland-Fremont metro area has more workers than anywhere else in the country who travel at least 50 miles and 90 minutes (one way) to work; 2.06 percent full-time workers in the region are megacommuters[24]. The Bureau says that the San Francisco-Oakland-Fremont region is also No. 1 for commute distance, with just over 2 percent of workers traveling more than 50 miles one way to get to work. In second place, with 1.9 percent of workers traveling at least 50 miles, is the San Jose-Sunnyvale-Santa Clara area. One of the longest commute distance amongst this group is the trip from Central Valley to the Bay Area, a common trip for many of Stanford's subcontracted service workers[25]. 13

C. Energy Efficiency Assumptions of LEED-Certified Buildings 14

[24] https://ww2.kqed.org/news/2013/03/05/san-francisco-bay-area-nations-capital-for-megacommuting/
[25]https://www.census.gov/content/dam/Census/library/working-papers/2013/demo/SEHSD-WP2013-03.pdf

We also researched the literature on energy efficiency and reduction of greenhouse gas emissions of green buildings, such as those purported to be built in this plan. One case study includes LEED-certified United States Navy buildings. By comparing energy data from LEED-certified buildings with other United States Navy and United States Marine Corps non-certified buildings of comparable size, usage, and location, the research concluded that 9 of 11 LEED buildings did not achieve a 30% savings in electricity consumption and the majority of the USN LEED-certified buildings actually showed more electricity consumption than the national averages as published by the Commercial Building Energy Consumption Survey[26].

Another case study that examined Arizona's Leadership in Energy and Environmental Design for New Construction (LEED NC) building population concluded that the LEED NC sample underperformed both the design and baseline energy use simulations. Energy consumption correlation analysis returned very few statistically significant results[27].

Another example where model efficiencies did not pan out empirically was shown in New York City's 2011 energy performance data for more than 1,000 office buildings, 21 of which were LEED certified. The data showed that the LEED-certified NYC office buildings showed no reduction in either source or site energy relate to other NYC office buildings and similar findings were true in the 2012 NYC benchmarking data[28].

Even studies that conclude that LEED certified buildings are energy efficient have been contested by researchers. John Scofield, a professor of Physics at Oberlin College, wrote in a paper that the New Buildings Institute study's conclusion that the studied 121 LEED certified commercial buildings were saving 25-30% energy relative to conventional buildings' were not replicable in his study. After his team reexamined the data, they concluded the average energy consumption by LEED certified buildings is actually higher than the corresponding average for the US commercial building stock. The difference is due the way energy use is measured and the calculating of site energy usage versus source energy usage[29]. In addition, greenhouse gas emission calculations can be skewed too, depending on how primary or site energy are consumed.

We bring up these studies to show that models/proposals of building efficiency do not necessarily reflect reality. To strengthen their case, Stanford needs to give more data on the current green buildings it has built on campus, accessing them for their true sustainability. Even then, understanding that data can be manipulated and various factors can be added or eliminated, a critical eye that continues to question the validity of the data behind studies that affirm the efficiency of proposed green buildings is important.

14 cont.

D. Service Population Calculation for GHG Efficiency Metric

15

[26] http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29CF.1943-5509.0000218?journalCode=jpcfev
[27] http://ascelibrary.org/doi/10.1061/%28ASCE%29CO.1943-7862.0000478
[28] https://www.greenbiz.com/article/do-green-buildings-really-save-energy-look-facts
[29] http://www2.oberlin.edu/physics/Scofield/pdf_files/Scofield%20IEPEC%20paper.pdf

The DEIR uses the 2017 BAAQMD CEQA Guidelines service population efficiency metric to assess Stanford's contribution to global GHG emissions. In particular, this metric is designed to assess consistency with the climate goals set in AB 32, and, via a straight-line extension of the metric, to both 2030 and 2035 using the goals set by SB 32[30]. While under *Cleveland National Forest Foundation v. SANDAG*, Santa Clara County is not required to adopt 2050 as a target year[31], the DEIR follows the guidance of a 2015 AEP white paper recommending considering the "reduction trajectory from 2020 to 2050" using "consistency with substantial progress along a post-2020 trajectory" in its determination of significance [32].

Using this, the DEIR uses three emission thresholds. The first, is for 4.6 MT of CO2e per SP for conditions up to 2020[33]. The next criteria is comparing project emissions in 2035 to a 2030 threshold of 2.7 MT per SP. The last criteria is for a 2035 threshold of 2.1 MT of CO2e per SP[34].

The BAAQMD CEQA Guidelines recommend using an efficiency metric defined as the total GHG emissions per service population (SP) member, where SP is the sum of jobs and residents for a site. The DEIR uses a SP figure of 68,781 (49,428 workers and 19,353 residents), which, using a total project GHG emission of 125,412 MT CO2e/year, gives a metric of 1.8 MT CO2e/SP member[35]. This supposedly demonstrates that Stanford is below the threshold of significance for both 2030 and 2035.

15 cont.

However, we believe that Stanford's definition of Service Population is flawed. First, we note that this section uses worker counts as determined by the VMT analysis by Fehr & Peers. In this analysis, Stanford students are considered (in our opinion, inappropriately) to be sufficiently similar to other workers to be included in the calculation of Worker VMT[36]. Yet these students are *not* employed by Stanford - their inclusion in this analysis was primarily for accounting purposes. Therefore, it would be highly inappropriate for the efficiency metric to use the worker count in the VMT analysis that includes students. Subtracting these students yields a service population count of 49268 (29915 jobs and 19535 residents) and a metric of 2.55 MT / SP, which is over the 2035 threshold[37].

Even these figures are inconsistent with data presented elsewhere in the DEIR. Table 9 of the PHD appendix shows the projected job counts, where "Jobs are calculated as the sum of postdoctoral students, faculty, staff, and the average daily 'Other Worker' population"[38]. By this definition of a job, the service population should be 44398 (25045 jobs and 19353 residents) yielding an efficiency metric of 2.82 MT CO2e / SP, exceeding both the 2030 and 2035 thresholds.

[30] http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, pg. D-22
[31] http://caselaw.findlaw.com/ca-supreme-court/1867838.html
[32] https://www.califaep.org/images/climate-change/AEP_White_Paper_Beyond_2020.pdf, pg. 3
[33] https://www.sccgov.org/sites/dpd/DocsForms/Documents/SU_Gup2018_DEIR_Vol1.pdf, pg 5.7-22
[34] Ibid, pg 5.7-23
[35] Ibid, pg 5.7-28
[36] https://www.sccgov.org/sites/dpd/DocsForms/Documents/SU_Gup2018_DEIR_Vol3.pdf, VMT Analysis pg. 12
[37] Ibid, VMT Analysis pg. 18
[38] https://www.sccgov.org/sites/dpd/DocsForms/Documents/SU_Gup2018_DEIR_Vol2.pdf, Appendix PHD pg. 9

Here, we present the efficiency metric calculations using these different assumptions.

	Version 1 (currently in DEIR)	*Version 2 (using the VMT worker counts excluding students)*	*Version 3 (using the projected jobs data in the PHD section)*
GHG Emissions 2035	125412	125412	125412
Jobs	49428	29915	25045
Residents	19353	19353	19353
Service Population	68781	49268	44398
Efficiency Metric	1.82	2.55	2.82
2030 Threshold	2.7	2.7	2.7
2035 Threshold	2.1	2.1	2.1
Over 2030 Threshold?	Under	Under	Over
Over 2035 Threshold?	Under	Over	Over

Table 9: Greenhouse gas efficiency metric calculation comparison. Source: PHD Appendix of DEIR.

We request that these calculations be corrected, and that mitigation measures be proposed to mitigate this impact that has been shown to be significant by the DEIR's own significance criteria and data.

15 cont.

5.2.2.8 Responses to Comments from Stanford Coalition for Planning an Equitable 2035 (SCoPE 2035)

O-SCOPE-1 Please see the responses to comments immediately below.

O-SCOPE-2 The comment does not address the adequacy of the Draft EIR. Please see Master Response 1: Non-CEQA Comments.

However, please note the Draft EIR Section 5.4, Cultural Resources, pages 5.4-2 to 5.4-3 provides an ethnographic context discussion of the Project site, including for the Ohlone tribe. In addition, as discussed in Draft EIR Impact 5.4-5, the County sent letters to the Vice Chairperson of the Muwekma Ohlone Tribe in November 2016 and February 2017 extending an opportunity to the Tribe to consult on the Project; the County did not receive a response from the Tribe. Nonetheless, Draft EIR Impact 5.4-2 addresses all potential environmental impacts to tribal resources, and includes mitigation measures to ensure potential impacts to tribal cultural resources would be reduced to a less-than-significant level.

O-SCOPE-3 The comment erroneously states that the Draft EIR "*assessed* [emphasis added] Stanford's plans for housing under the linkage requirement established by the 2000 General Use Permit under Condition F.8."

As noted in Master Response 9: Population and Housing Methodology and Calculations, Topic 5: Housing Linkage Ratio and Timing, the 2000 housing linkage ratio was imposed as a condition of approval, not as a mitigation measure. Thus, the Draft EIR does not assess whether the 2000 housing linkage ratio, or any other ratio, is appropriate for the 2018 General Use Permit or whether it would reduce a potential environmental impact. It merely acknowledges that Stanford proposes to use the same ratio for development proposed under the 2018 General Use Permit. Page 5.12-17 of the Draft EIR states that the actual number of housing units proposed by Stanford would exceed the 2000 ratio if all academic and academic support space is constructed.

The housing linkage ratio is an important policy matter that the Board of Supervisors will consider when it decides whether, and under what conditions, the 2018 General Use Permit should be approved. The public will have the opportunity to provide comment on this issue during public hearings before the County Planning Commission and Board of Supervisors.

Regarding the adequacy of the housing supply, please note that on June 12, 2018 the County published the Recirculated Portions of Draft EIR, which includes two new housing alternatives (Additional Housing Alternatives A and B) under which additional quantities of housing would be added to the proposed Project. The analysis of Additional Housing Alternative A and Additional Housing

Alternative B, along with comments received on, and responses to, the Draft EIR and Recirculated Portions of Draft EIR, will be presented to the County Board of Supervisors to assist in their consideration of whether more housing should be constructed.

Finally, as discussed further in Master Response 10: Affordable Housing, Topic 1: Affordable Housing Need, impacts of the Project on affordable housing need are socioeconomic issues not required to be analyzed in the Draft EIR.

O-SCOPE-4 As noted in Master Response 10: Affordable Housing, Topic 1: Affordable Housing Need, impacts of the Project on affordable housing need are socioeconomic issues not required to be analyzed in the Draft EIR.

Separately from the Draft EIR, the affordability of the housing demand generated by the Project is analyzed in an Affordable Housing Fee Nexus Study prepared by the County of Santa Clara.[14] The section on Stanford's population assumptions can be found in the Affordable Housing Nexus Studies, Attachment C, pages 6-8.

The commenter's citation to CEQA Guidelines Section 15131 is not applicable to the alleged low income housing deficit. It addresses factors lead agencies should consider in deciding whether mitigation measures for significant environmental effects are feasible; since the alleged low income housing deficit would not be a physical environmental impact under CEQA, no mitigation would be required and Section 15131 is therefore not applicable.

O-SCOPE-5 As noted in Master Response 10: Affordable Housing, Topic 6: Regional Housing Needs Assessment Affordable Housing Credit, comments regarding RHNA allocations do not pertain to an environmental impact for CEQA purposes. However, for clarification, response to this question is included in Master Response 10: Affordable Housing, Topic 6: Regional Housing Needs Assessment Affordable Housing Credit.

O-SCOPE-6 Please see Master Response 9: Population and Housing Methodology and Calculations, Topic 3: Off-Campus Households and Household Adjustment Factors.

O-SCOPE-7 The County Board of Supervisors is not bound by imposing the affordable housing impact fee of $20.00 offered by Stanford under the proposed Project. The County has separately prepared an Affordable Housing Nexus Fee Study to analyze the appropriate fee to be imposed and on September 25, 2018, the County Board of Supervisors adopted an ordinance imposing an impact fee of $68.50 (effective July 1, 2020) on academic development. This impact fee applies to all academic development. Please see Master Response 10: Affordable

[14] Available at https://www.sccgov.org/sites/osh/HousingandCommunityDevelopment/Pages/Nexus-Study-Documents.aspx.

Housing, Topic 3: Future Contribution to Affordable Housing Fund. In addition, please see the Affordable Housing Fee Nexus Study described in Response to Comment O-SCOPE-4.

O-SCOPE-8 The assumed distribution of Other Workers households is based on the distribution of Staff households because: 1) Other Workers are not included in the Commute Survey, and therefore data on their existing distribution is not available, and 2) Staff households provides the best alternative approximation of where these employees would reside.

The comment correctly notes that 129 Other Workers anticipated under the 2018 General Use Permit (as shown Table 6 of Appendix PHD) are categorized as third-party contract workers (72), janitorial contract workers (57), and construction contract workers (0). These workers represent approximately 6 percent of the total 2,101 Other Workers. Assuming the same proportion for Other Worker *households*, as presented in Table 12, approximately 37 Other Worker households would be considered third-party contract worker, janitorial contract worker, or construction contract worker households—which represents less than 2 percent of the anticipated 2,425 off-campus households generated under the 2018 General Use Permit.

The comparison of projected 2018 General Use Permit household growth to ABAG household growth projections by Bay Area jurisdiction (as shown in Table 15) is a useful tool to show how individual communities may be affected by off-campus growth attributable to the proposed Project. In addition, as discussed further in Master Response 10: Affordable Housing, Topic 1: Affordable Housing Need, the affordability of such off-campus units is considered a socioeconomic issue that is not required to be analyzed in the Draft EIR.

Please see Master Response 9: Population and Housing Methodology and Calculations, Topic 6: Job Multiplier for further explanation of indirect and induced jobs generated by the proposed Project. The comment does not offer another multiplier rate to use for indirect jobs, and asserts that jobs created by Stanford alumni or students are indirect jobs that must be calculated. Growth caused by new companies (whether or not founded by Stanford alumni) is not directly or indirectly caused by the proposed Project. If the new company requires the construction of a new office building, the impacts of the company would be analyzed when the building is proposed for construction. The occupancy of the building and its effects on traffic, air quality, and other environmental topics would be analyzed at that time, and any population growth would be attributed to the new company.

O-SCOPE-9 On June 12, 2018 the County published the Recirculated Portions of Draft EIR, which includes two new housing alternatives (Additional Housing Alternatives A

and B) under which additional quantities of on-campus housing would be added to the proposed Project. The analysis of Additional Housing Alternative A and Additional Housing Alternative B, along with comments received on, and responses to, the Draft EIR and Recirculated Portions of Draft EIR, will be presented to the Board of Supervisors to assist in their consideration of whether more housing should be constructed on the Stanford campus.

O-SCOPE-10 Table 5.15-41 on page 5.15-153 of the Draft EIR presents VMT generation with and without Stanford students as workers. The primary calculation includes students as workers because college students behave like workers in the sense that they attend school on a regular basis, as a worker would attend a job. Just as some Stanford faculty and staff live on the campus, and travel to work by foot or bicycle, many Stanford students also live on the campus and travel to school by foot or bicycle. A VMT analysis does not pertain exclusively to trips by off-site commuters. If that were the case, there would be no recognition that onsite housing reduces trip length and affects trip mode. For resident students, their VMT for "non-work" trips are also included.

The Draft EIR on page 5.15-153 finds that if students are not included in the analysis the average daily VMT in 2035 would be 7.11 VMT/worker as compared to 4.53 VMT/worker if students are included. In either case, the daily average would be well below the significance threshold of 13.75 VMT/worker.

Please refer to Master Response 13: Transportation and Traffic, Topic 11: Vehicle Miles Traveled for additional detail on the VMT assumptions and analysis.

O-SCOPE-11A Please refer to Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for detail on the TDM program, including specific programs for which Other Workers are eligible.

O-SCOPE-11B The Draft EIR identifies the significance approach selected for evaluating impacts to transit service on pages 5.15-59 and 5.15-60. The EIR recognizes that increased *demand* for transit services is not considered to be a significant adverse effect on the physical environment; to the contrary, increased demand for transit service is considered to be beneficial because moving drivers to transit reduces roadway congestion, vehicle miles traveled, air pollutant emissions, and greenhouse gas emissions. The Draft EIR therefore focuses on transit *delay* in assessing the potential for a significant adverse change to the physical environment. The impact is considered to be significant if the project would result in substantial delay to transit services. Whether the delay would be substantial depends upon the context in which the delay occurs, including the overall duration of a commute trip on a given transit service.

On page 5.15-142, the Draft EIR explains that the proposed Project would not conflict with adopted policies, plans or programs regarding public transit because

the proposed Project would not interfere with or block access to transit. The Draft EIR addresses the performance of transit facilities by evaluating the potential for the project to result in transit delay. The VTA TIA Guidelines recommend using added delay at individual intersections as a surrogate for added bus delay. Draft EIR Table 5.15-36 on pages 5.15-142 and 5.15-143 presents the increased intersection delays resulting from the proposed Project, conservatively assuming Stanford does not expand its transportation demand management programs to achieve the no net new commute trips standard. No feature of the proposed Project would affect the safety of transit facilities because, as stated in the Draft EIR, the proposed Project would not interfere with or block access to transit. A change in the load factors of transit service facilities is not considered to be a significant adverse change to the physical environment as described above. However, the Draft EIR does provide a transit capacity analysis at pages 5.15-157 to 5.15-167.

Please also see Master Response 13: Transportation and Traffic, Topic 12: Transit and Bicycle Capacity

O-SCOPE-11C As noted on Draft EIR page 5.15-157, the methodology used for this analysis was selected because it represents a conservative approach in estimating increased transit demand. To be conservative, the analysis assumed that all mode shifts from drive-alone modes would be to Caltrain, the mode for which capacity constraints are of greatest concern given the amount of investment required to increase capacity.

The comment also states that no justification was given for determining that a local bus ridership increase of 40 riders per peak hour was not significant. The Transit and Bicycle Capacity Analysis allocates Stanford commuter ridership to individual routes proportionate to the overall existing ridership levels of those routes, and determines that only one route would gain more than 10 Stanford trips – VTA's Line 22. According to the VTA FY16-17 Transit Service Plan (Service Plan), Line 22 ridership has remained stagnant over the last two years, and had been decreasing prior to then. The Service Plan also reports that Line 22 currently has a peak period load of 5,385. Ridership along Line 22 can conservatively be assumed to be about 670 boardings during the peak hour. Based on the Transit and Bicycle Capacity Analysis projection of 23 additional peak hour Stanford passengers on Line 22, the line would experience a 3 percent increase in the number of riders along this route. A 3 percent increase in ridership across a route is not considered to be a significant increase in terms of capacity.

The comment also states that the express bus capacity analysis should be disaggregated by route to gain a better understanding of which specific routes might be impacted. For the purpose of the transit capacity analysis, capacity for express buses was completed at the network level by aggregating express bus trips. This analysis aggregated total demand and total capacity of the East Bay express

routes (line U, Line AE/F and DB), to determine if the demand could be met given projected resources since all routes serve the same commuter-shed. The purpose of this analysis was not to determine a plan for how to allocate those resources for the future, but simply that the overall capacity available would meet the demand.

Please also see Master Response 13: Transportation and Traffic, Topic 12: Transit and Bicycle Capacity.

O-SCOPE-11D The commenter is referred to Master Response 13: Transportation and Traffic, Topic 13: Parking Supply and Restrictions for a discussion of the on-campus parking supply and its evaluation in the Draft EIR, which includes the strict conditions for which parking would be expanded beyond the limit approved in the 2000 General Use Permit.

O-SCOPE-12 EMFAC2014 is the motor vehicle emission factor model that was used to determine fleet fuel efficiency, both historically and in future years, for calculations in Draft EIR Appendices GHG, ENE, and AQT. EMFAC2014 (developed by the California Air Resources Board) is the EPA-approved model for use in state implementation plan development in California, per Federal Register Notice 80 FR 77337. The EMFAC2014 model can calculate historical, current, and future emissions, mileage, trips, or fuel efficiency at the state, air district, air basin, or county level and accounts for age of vehicles in the fleet specific to the area being analyzed. This analysis appropriately represents vehicles owned by faculty, staff, students, workers, and subcontractors because EMFAC2014 data localized to Santa Clara County was used. Further, the analysis uses the aggregate fleet age and emission factors for calendar year 2030, when by full buildout in 2035, the average fuel efficiency would be even higher.

As discussed beginning on page 5.15-147 of the Draft EIR, two data sources were used in the VMT analysis for contract workers' trip length that provide detailed and granular data on travel characteristics for all categories of employment as defined in terms of national industry-specific occupational employment (NAICS) codes covering employment of all individual types noted. The California Household Travel Survey (CHTS) data includes trip logs from 42,000 households representing a statistically valid sample of over 3.4 million Bay Area work trips, including 955,000 work trips from Santa Clara County, and contains trip lengths for each direct-to-work and indirect commute trip as well as all other trip purposes. The VTA travel model has been validated and calibrated against this and other empirical data to estimate, using established modeling standards and meeting industry-prescribed validation criteria, trip origin-to-destination connections for all trips in NAICS groupings occurring within the county and the region disaggregated into 2,980 traffic analysis zones.

O-SCOPE-13 The VMT estimates used in the GHG analysis cover the entire trip from point of origin to point of destination including all vehicular travel on all infrastructure

used for the trip. The trip generation estimates are not based on national averages, but rather local and regional data specifically representing Stanford, Santa Clara County and the Bay Area.

Please also refer to Master Response 13: Transportation and Traffic, Topic 11: Vehicle Miles Traveled for additional detail on the methodology used to calculate and calibrate the trip lengths for workers and residents.

O-SCOPE-14 No assumptions on the energy efficiency of LEED-Certified buildings were made in the analyses presented in Draft EIR Appendices AQT, GHG, or ENE. The analyses presented rely on current building energy use (from Stanford's 2015 energy use data), and estimates future energy demand based on the assumption that new buildings are constructed to the same energy intensity as existing buildings. The one exception is faculty/staff housing which estimates usage using 2008 or 2016 Title 24 Standards for existing or future housing, respectively. This is likely a conservative estimate, as improved California Building Energy Efficiency Standards (Title 24, Part 6) are expected to result in lower electricity usage in new buildings. LEED-Certification is not relied upon for any energy calculation or standard of performance, it is merely referenced to show examples of certifications Stanford has received for current buildings.

O-SCOPE-15 The Draft EIR analysis counted students as workers when calculating the service population because they behave like workers in that they travel by foot, bicycle, mass transit and automobiles to and from their work site (campus) on a regular basis from a variety of locations around the Bay Area. Because GHG emissions from such mobile activities are included in the inventory, and Stanford can implement programs to shift such student travel patterns and reduce GHG emissions, it is consistent to include them in the service population count. In addition, students regularly utilize all features of the campus that generate emissions and can be influenced by emissions reduction programs, including building electricity, natural gas, water, and solid waste. These emissions categories are all included in the total GHG and service population calculations.

Further, this approach to service population has been used and accepted for CEQA analyses at other colleges and universities, e.g. the UC Hastings College of Law Long-Range Campus Plan EIR (2016) also includes students as workers for its comparison against BAAQMD GHG service population thresholds, and higher education students were included in the service population for the Heritage Fields Project 2012 General Plan Amendment and Zone Change Final Second Supplemental EIR (2013) for its comparison against the SCAQMD GHG service population thresholds.[15] This treatment of students in the service

15 UC Hastings, *College of Law, Long-Range Campus Plan Final EIR*, certified July, 2016; City of Irvine, *Heritage Fields Project 2012 General Plan Amendment and Zone Change Final Second Supplemental EIR*, certified November 2013.

population was also used in recent EIRs prepared for California State University of San Bernardino for their San Bernardino and Palm Desert campuses.

In contrast with students, visitors are not counted in the service population (though the GHG emissions associated with their mobile travel and building use are) as their visits to campus are irregular and not influenced by transportation demand management programs.

With regard to the definition of a "job", it is important to recognize that different chapters may require variations of the same parameter depending upon the purpose of the analysis. Draft EIR Appendix PHD, Table 9 quantifies job growth for purposes of an economic analysis. The greenhouse gas analysis is concerned with the physical behaviors and emissions impacts of each population category.

Based on the above information, there is no need to correct Draft EIR GHG calculations or change the conclusion that GHG impacts under Impact 5.7-1 would be less than significant.

Please note Comment Letter O-SCOPE contained several appendices (Appendices A through C). These appendices are included in Appendix O-SCOPE in this Response to Comments Document.

Local 2007
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Higher Education Workers

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January 31st, 2018

David M. Rader
Senior Planner
County of Santa Clara
Dept. of Planning and Development
70 W. Hedding St., 7th Floor, East Wing
San Jose, CA 95110

Dear Mr. Rader:

On behalf of the 1,200 members of SEIU Local 2007, including over 1,100 employees of Stanford University, we write to express serious concerns regarding the draft Environmental Impact Report submitted by the University. All of our members work in Santa Clara County, and the great majority live here as well.

First, we are concerned about the University's projections for future housing needs, and the provisions outlined to address them. According to calculations by SCOPE 2035, the University is severely underestimating the amount of new housing demand that expanded University employment will lead to. These errors are especially egregious in regard to non-academic service staff such as our members, some of whom have been displaced from the Bay Area to more affordable areas as far away as the Central Valley. Service workers on campus currently have little access to on-campus housing. The DEIR does not take seriously the effect of income levels on access to the housing market. These distortions contribute to the University's under-estimation of the effect of future expansion on the local housing market (and therefore of the required affordable housing funding to mitigates those effects), which will make the area even less affordable for our members and other working-class people in the county. 1

Second, we echo SCOPE 2035's concerns that the University's estimates of Vehicle Miles Traveled are far too conservative, especially given the growing displacement of service workers described above. If these estimates are to be met, the University must do far more to offer service workers both better mass transportation options (for instance from East Palo Alto where many Stanford service workers live) and housing affordable for people with low and moderate incomes on or near campus, so that the South Bay housing market does not continue to lengthen commutes. In general, we echo the concerns raised by many local residents that the impacts on traffic and the environment are not adequately projected. 2

Finally, we are concerned that Stanford has consistently discounted or ignored the growing number of subcontracted employees in assessing impacts. Currently, subcontracted workers are ineligible for many of the programs that incentivize direct employees to reduce individual vehicle commuting. This exclusion, as well as the growth trend of subcontracted workers, should be taken into account. 3

We appreciate your work, and look forward to working with the County, the University, and stakeholders on and off campus to ensure that Stanford's future expansion benefits all.

Sincerely,

Jose Escañuela
President
SEIU Local 2007

5.2.2.9 Responses to Comments from SEIU Local 2007

O-SEIU-1 Please see Master Response 10: Affordable Housing, Topic 1: Affordable Housing Need.

Also, separate from the Draft EIR, the affordability of the housing need generated by the Project is analyzed in an Affordable Housing Fee Nexus Study prepared by the County of Santa Clara.[16]

O-SEIU-2 The comment does not provide any substantial evidence that any of the assumptions or calculations in the VMT analysis were flawed.

Please see Master Response 13: Transportation and Traffic, Topic 11: Vehicle Miles Traveled for detail on the VMT analysis.

O-SEIU-3 Please see Master Response 9: Population and Housing Methodology and Calculations, Topic 2: Clarification Regarding "Other Workers."

The Draft EIR adequately addresses the number of subcontracted employees and their impacts. Draft EIR Section 5.12, Population and Housing, page 5.12-13 states that "third-party and janitorial contract workers were estimated to grow at the same rate as occupied academic and academic support square footage (22.1 percent from Fall 2018 to Fall 2035). Construction contract workers would be expected to stay constant, as this has been the trend during the 2000 General Use Permit and construction is expected to continue at historic rates under the proposed 2018 General Use Permit."

"Other worker" populations that also contribute to the on-campus population include casual, contingent and temporary employees; non-employee academic affiliates; and third-party contractors including some janitorial staff, some food service and daycare workers, and construction contractors. "Other workers" who are non-Stanford affiliates are eligible for TDM incentives and enrollment in the Commute Club if sponsored by a university department or campus organization. Sponsors must confirm each individual's Stanford affiliation and on-campus worksite address and certify the hours and duration the individual is or will be at that address for official university business. Non-Stanford affiliates registered for TDM incentives work at retail outlets, childcare centers, cafes and restaurants on campus, UG2 Janitorial Services, Stanford Credit Union employees, employee agencies (i.e., Option1, Slingshot and Manpower), and Wells Fargo Bank. Contract and subcontract workers can be sponsored as part of this program. Other TDM programs, such as bicycling to campus and the Marguerite shuttle, are free to both Stanford and non-Stanford affiliates.

16 Available at https://www.sccgov.org/sites/osh/HousingandCommunityDevelopment/Pages/Nexus-Study-Documents.aspx.

Please also see Master Response 13: Transportation and Traffic, Topic 6: No Net New Commute Trips Standard for detail on the TDM program.

GSC Graduate Student Council
Representing the interests of Stanford's graduate students

To the County of Santa Clara
Department of Planning and Development
Attention: David Rader
County Government Center
70 West Hedding Street, San Jose, CA 95110

The Graduate Student Council (GSC) serves Stanford's graduate student population by representing student interests in University affairs, supporting graduate student organizations, and providing community events for graduate students.

We are writing to you today to comment on Stanford's 2018 General Use Permit (GUP) as it pertains to the specific graduate student issues of research and housing. These are the aspects of our graduate student life and community that we know best; and as such, to clarify, this letter focuses only on these aspects. We also know that there are many other important issues to the GUP – housing for workers and traffic impacts being some of the most mentioned at the public hearings, for example – and we believe Stanford, the County, and the community should work together to resolve them all and to provide affordable housing for all students, post-docs, workers, and faculty/staff. We support other sets of graduate student concerns, such as those voiced in the letters by Stanford Student Parent Alliance and SCOPE 2035. There is a spectrum of opinions from graduate students on many elements of the GUP; all of them need to be taken seriously and considered equally.

Stanford graduate students come from all parts of the United States in the case of our domestic constituents, and from all over the world in the case of our international students. Research and housing are the core foundational elements to all graduate students' life here at Stanford, and we support their development as part of the GUP's projections towards 2035. Getting to Stanford is an important goal in our educational and professional development – in order to be achieved, this goal takes consistent work over many years of our lives. Stanford's admissions rate is very low; getting accepted to carry out the research that we are committed to (graduate students often spend incredibly long hours on their work, be it in a lab, office, and/or at home) is a great opportunity in our lives. As students who have been lucky and privileged enough to be granted this chance, we would like others to have this opportunity as well, so we support the projected additional 1200 graduate student enrolment spaces that the GUP outlines, and the addition of accompanying buildings that we need to carry out our graduate student research projects. 1

It is also crucial that along with these new spaces, adequate and sufficient housing also be provided for graduate students. This is why we support the addition of the 900 beds of graduate student housing that the GUP details, and we want to advocate for building even

more housing spaces for graduate students. As the Graduate Student Council, we strongly believe that there should be space for any student who would like to live on campus to do so – this is one of the main areas of our advocacy work. We also advocate to the university to maintain a low cost of housing (something that can be achieved through various means, such as building housing to meet needs, providing subsidies and other methods) so graduate students and postdocs can afford to live in the residences being built - this will always be one of the main facets of our work as the Graduate Student Council. While the Escondido Village Graduate Residences project will improve the current (and extremely difficult) situation, looking forward to 2035, graduate students will definitely need additional housing spaces.

1 cont.

Without subsidized Stanford housing, graduate students remain vulnerable to all types of unsafe housing conditions, predatory landlords, etc. This is especially true in such a competitive housing market as the San Francisco Bay Area, so the housing expansion for graduate students that is outlined in the GUP is very much needed as a minimum; and as the Graduate Student Council, we would like to advocate for even more graduate student spaces than the 900 explicitly listed. Every single graduate student at Stanford, regardless of their program, field and year of study or any other category, needs an adequate housing space – this is the foundation for a safe and productive existence at Stanford so that we can all complete the work that we came here to carry out.

Thank you for your time and attention,
The Stanford Graduate Student Council

5.2.2.10 Responses to Comments from Stanford Graduate Student Council

O-SGSC-1 On June 12, 2018 the County published the Recirculated Portions of Draft EIR, which includes two new housing alternatives (Additional Housing Alternatives A and B) under which additional quantities of on-campus housing would be added to the proposed Project. The analysis of Additional Housing Alternative A and Additional Housing Alternative B, along with comments received on, and responses to, the Draft EIR and Recirculated Portions of Draft EIR, will be presented to the County Board of Supervisors to assist in their consideration of whether more housing should be constructed on the Stanford campus.

Please also see Master Response 8: EIR Alternatives, which addresses comments received regarding providing more alternatives beyond that provided by Additional Housing Alternatives A and B.

Via E-Mail

February 2, 2018

County of Santa Clara
Department of Planning and Development
Attention: David Rader
County Government Center
70 West Hedding Street, San Jose, CA 95110

Dear Mr. Rader,

Thank you for taking comments related to Stanford University's General Use Permit. This comment is from the Stanford Student-Parent Alliance, which represents Stanford graduate students with children.

Stanford University is a complex organization with a mission to lead the world in teaching and learning, research, and influence. At the heart of this mission are graduate students who carry out a great deal of the responsibilities in each of these domains and who form the majority of the student body.

Much of the physical infrastructure at Stanford University supports graduate students in the form of laboratories, offices, classrooms, housing, and childcare facilities.

As the affordability crisis on the peninsula grows, financial pressure is felt most acutely by graduate students who, for instance, increasingly can not afford to live off campus.

As Stanford pursues its mission to advance diversity and position Stanford at the forefront of innovation in graduate education, Stanford's graduate student body is nearly 40% female. Many graduate students, male and female, come to Stanford with families. For example, 21% of PhD students in the Graduate School of Education report having or thinking about having children while in their PhD program at Stanford.

1

However, graduate students with children struggle to find and afford childcare at Stanford or in the Palo Alto area. Half of the PhD student-parents in the Graduate School of Education report wanting their children in Stanford-affiliated daycare facilities but not being able to use them because the facilities do not have the capacity to meet their needs. The waitlists were too long at the time they applied, or the spaces offered them were part-time only, when the students required full-time care for their children. Stanford University needs to vastly increase its space for childcare facilities.

Stanford University is currently building a large childcare facility to accommodate at least net 90 more children than the current facilities do. However, given the lengthy waitlists already in place, the large number of graduate students who want their children in a daycare facility but have not pursued them due to the waitlists or the cost, the growing graduate student body, and the priority for space given to faculty, it is likely that this will not meet the needs of all graduate students with families in 2018, let alone 2035.

2

We support Stanford University in increasing its capacity for childcare, and we encourage all parties involved in the process of renewing the General Use Permit to support Stanford in expanding and building new on-campus childcare facilities as well.

We believe this supports the best interests of the communities on the peninsula because it prevents the need for Stanford graduate students, post-docs, faculty, and staff from competing with local families for spaces in local childcare facilities. Having on-campus childcare facilities would also reduce traffic outside of Stanford during popular commute times.

Graduate students with school-age children have less access to after-school care as the facility that previously housed after-school care was shut down and not replaced. This put a heavy burden on the many graduate students, post-docs, faculty, and staff whose children used the facility. We would like Stanford to reopen a facility for after-school programs for school-age children of graduate students, faculty, and staff.

We support Stanford University in increasing its capacity for after-school care for school-age children, and we encourage all parties involved in the process of renewing the General Use Permit to support Stanford in building new on-campus facilities for after-school programs for school-age children of Stanford graduate students, post-docs, faculty, and staff.

We believe this supports the best interests of the communities on the peninsula because it prevents the need for Stanford graduate students, post-docs, faculty, and staff from competing with local families for spaces in after-school programs.

2 cont.

In regards to graduate student housing, we have concerns about lead paint that is possibly still present in graduate student housing and its proper, safe removal. This is imperative for the safety of graduate student residents and their families. We encourage Stanford University to commit to removing all lead paint from graduate student housing and to do so in a way that prevents further exposure to lead for residents and laborers.

We believe this supports the best interests of the communities on the peninsula because exposure to any amount of lead in the environment is a known hazard, especially harmful to the development of young children. The lead in paint can be exposed to children and families in graduate student housing when it bubbles and flakes off naturally or when it is removed on purpose. If not removed properly, the dust and flakes can enter the surrounding environment. The proper removal of lead paint will ensure the safety of the surrounding environment while improving the safety of the residences of graduate students and their families.

3

In regards to water safety, we have concerns that the water on campus may contain HAA5 levels above the EPA recommendation. HAA5 is considered potentially carcinogenic and is not recommended for consumption by pregnant women or anyone who could be exposed to it over the course of several years. In 2016, it was found that water delivered to Stanford residents averaged 63.6 μg/L, which is above the EPA maximum of 60 μg/L. We encourage Stanford University to commit to regularly and randomly testing the water and reducing the levels of HAA5 in the water delivered to residents.

4

In summary, the Stanford Student-Parent Alliance calls on all parties involved in the renewal of the General Use Permit to support Stanford University in expanding its childcare facilities well beyond

5

its current and projected capacity, creating new spaces for afterschool programs for school-age children, safely removing any remaining lead paint from graduate student housing, and reducing the levels of HAA5 in the drinking water in the graduate student residences.

5 cont.

Thank you for hearing our comments. Please feel free to reach out to us.

Sincerely,

The Stanford Student-Parent Alliance

Carrie Townley Flores
PhD Student
ctflores@stanford.edu

Forest Peterson
MS '07, ENGR '15, PhD '18

5.2.2.11 Responses to Comments from Stanford Student-Parent Alliance

O-SSPA-1 The comment is noted but does not address the adequacy of the Draft EIR. Please see Master Response 1: Non-CEQA Comments.

O-SSPA-2 The comment is acknowledged. The proposed 2018 General Use Permit would allow 40,000 net new square feet of childcare center space and other space that reduces vehicle trips (e.g., transit hub).

O-SSPA-3 The Draft EIR evaluates the effects of physical changes that would occur under the proposed 2018 General Use Permit, including related exposure to lead-based paint (LBP) in buildings as a result of demolition or modification under the 2018 General Use Permit. Accordingly, Impact 5.8-1 in the Draft EIR addressed the potential for exposing construction workers, the public, or the environment to hazardous materials such as LBP during demolition and and/or and modifications of existing improvements and structures. Impact 5.8-1 discussed that OSHA's Lead Exposure in Construction Rule (29 CFR Part 1926) regulates construction work in which LBP may become disturbed during such activities as demolition, removal, surface preparation for re-painting, renovation, clean up and routine maintenance, ensuring effects from LBP would be less than significant.

The Stanford Department of Environmental Health and Safety (EH&S) has developed a comprehensive Lead Management Plan designed to ensure the on-going safety of students, faculty, staff, and visitors residing in existing buildings. Elements of the Lead Management Plan includes:

- Providing consultation and serving as an expert resource to the campus community.
- Developing and implementing safe work practices.
- Conducting ongoing building surveys and safety inspections.
- Conducting air quality and employee exposure monitoring.
- Developing and maintaining web-based access to survey data.
- Providing project specifications and oversight of abatement actions.
- Evaluating and pre-qualifying abatement contractors and consultants.
- Developing and delivering awareness training tailored to Stanford's physical facilities.
- Coordinating earthquake preparedness resources and response actions.

Ongoing implementation of this plan ensures that LBP at Stanford is properly managed to ensure the safety of students, faculty, staff, visitors.

O-SSPA-4 Stanford is a wholesale water customer of San Francisco Public Utilities Commission (SFPUC), which treats and disinfects Stanford's drinking water with chlorine and chloramines before it enters the Stanford water distribution system.

The comment does not specifically address the adequacy of the Draft EIR analysis of the proposed Project's water quality or water supply impacts. Rather, the comment is related to a 2016 exceedance of a drinking water standard in Stanford's domestic water system. Stanford's domestic water system is monitored for drinking water quality and water contaminants on a routine basis. In 2016, Stanford and other SFPUC water system customers observed elevated disinfectant byproduct concentrations, most likely caused, according to SFPUC staff, by additional organic material entering source waters during the snowmelt and precipitation events in 2016, following years of drought conditions. Extensive monitoring and system operational changes were made by SFPUC on the regional water system, and by Stanford on its system, to reduce concentrations of HAA5 and regain compliance with the HAA5 limit of 60 µg/L. Following the exceedance at one location of its HAA5 running annual average in December 2016, the ongoing sampling frequency for disinfectant byproducts was increased from quarterly to monthly, and this increased frequency will continue as needed to ensure that representative and frequent HAA5 concentration data are available. Stanford has been in compliance with the HAA5 standard during all quarters since the disinfectant byproduct rule sampling began in 2011, and has been in compliance all quarters since December 2016. Stanford and other wholesale customers continue to work collaboratively with SFPUC to implement and continue measures to ensure continued compliance.[17]

O-SSPA-5 The comment reiterates comments in O-SSPA-2 regarding child care and afterschool programs and facilities, removing LDP in Comment O-SSPA-3, and reducing HAA5 levels in drinking water in Comment O-SSPA-4. Please see Response to Comments O-SSPA2, O-SSPA-3, and O-SSPA-4, above.

[17] See https://suwater.stanford.edu/drinking-water-update.

sv@home

TRANSMITTED VIA EMAIL

County of Santa Clara
Department of Planning and Development
Attention: David Rader
County Government Center
70 West Hedding Street, San Jose, CA 95110

Re: Stanford University 2018 General Use Permit Draft Environmental Impact Report

Dear Mr. Rader and staff,

Silicon Valley at Home (SV@Home) is the voice of affordable housing in Silicon Valley, representing a broad range of interests, from leading employers who are driving the Bay Area economy to labor and service organizations, to nonprofit and for-profit developers who provide housing and services to those most in need.

We are pleased to have this opportunity to comment on the Draft Environmental Impact Report (DEIR) assessing the proposal from Stanford University for a General Use Permit (GUP) covering on-campus development from 2018 to 2035.

On behalf of our members, we recommend that the GUP be amended to include:

- Greater commitments to increasing the housing stock affordable to a range of Stanford employees, both on and off campus
- Affordable housing mitigation fees, reflective of the Stanford Nexus Study, and commensurate with the need for housing generated by the plan

1

Increasing the housing stock

Silicon Valley is suffering from a crisis in housing affordability, due to the jobs and housing imbalance that exists across the entire County and the broader region. Stanford is an anchor institution -- not only for Palo Alto, but for the entire Bay Area -- as well a major employer in Santa Clara County. The University has shown itself to be a good neighbor, working with the County and local municipalities to create affordable housing where opportunities arise. We would expect that that this history would lead to a desire to play their part in addressing this imbalance.

2

However, we are concerned that as proposed, this GUP will create significant unmitigated demand for housing in general and affordable housing in particular.

3

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408.780.2261 • www.svathome.org • info@siliconvalleyathome.org

Stanford is unique in its ability and commitment to provide housing options to students, faculty and some staff categories on campus. The University should commit to building more affordable housing both on and off campus, and to make this housing available to the full range of University employees.

3 cont.

Affordable Housing Mitigation Fees

Stanford currently pays fees into the Stanford Affordable Housing Fund, administered by Santa Clara County. This fund provides much needed financing for affordable housing production and preservation projects within a six mile radius of the campus. At their current level, these fees do not effectively mitigate the demand for affordable housing produced by Stanford's expansion. We believe that the specific fee should be determined after studying the results of the Stanford Nexus Study, currently being conducted by the County.

4

We would like to acknowledge the staff at Stanford's openness to meeting with our organization, and emphasize how helpful they were in providing us with the broader context to help evaluate their proposal. Thank you for this opportunity to provide comments. We look forward to being engaged with this process as it moves towards approval from the County Board of Supervisors.

Sincerely,

Pilar Lorenzana, Deputy Director

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5.2.2.12 Responses to Comments from Silicon Valley at Home

O-SVAH-1 With respect to the request that more housing be included in the Project, please also note that on June 12, 2018 the County published the Recirculated Portions of Draft EIR, which includes two new housing alternatives (Additional Housing Alternatives A and B) under which additional quantities of housing would be added to the proposed Project. The analysis of Additional Housing Alternative A and Additional Housing Alternative B, along with comments received on, and responses to, the Draft EIR and Recirculated Portions of Draft EIR, will be presented to the County Board of Supervisors to assist in their consideration of whether more housing should be constructed.

With respect to the comment the affordable housing mitigation fees should be commensurate with the housing need generated by the 2018 General Use Permit, please see Master Response 10: Affordable Housing, Topic 3: Future Contribution to Affordable Housing Fund.

In addition, separate from the Draft EIR, the affordability of the housing need generated by the Project is analyzed in an Affordable Housing Fee Nexus Study commissioned by the County of Santa Clara.[18]

O-SVAH-2 Please see Response to Comment A-PV-3.

O-SVAH-3 The comment asserts the proposed 2018 General Use Permit will create significant unmitigated demand for housing in general and affordable housing in particular. Please see Response to Comment O-SVAH-1.

O-SVAH-4 Please see Response to Comment O-SVAH-1.

[18] Available at https://www.sccgov.org/sites/osh/HousingandCommunityDevelopment/Pages/Nexus-Study-Documents.aspx.

SILICON VALLEY LEADERSHIP GROUP

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CARL GUARDINO
President & CEO

February 1, 2018

County of Santa Clara
Department of Planning and Development
Attention: David Rader
County Government Center
70 West Hedding Street, San Jose, CA 95110

RE: Support for the 2018 Stanford University General Use Permit

Dear Mr. Rader and Santa Clara County Board of Supervisors,

On behalf of the Silicon Valley Leadership Group, I am writing to express our support for the 2018 Stanford University General Use Permit (GUP) that allows for further investment by the University in its campus and the higher education opportunities for the Silicon Valley, Bay Area, and beyond. We believe that the proposed 2018 GUP thoughtfully continues growth and development of the campus in a manner that is consistent with the existing Stanford Community Plan's policies and mitigates the impact of that growth on the surrounding communities. 1

The Silicon Valley Leadership Group, founded in 1978 by David Packard of Hewlett-Packard, represents nearly 400 of Silicon Valley's most respected employers on issues, programs and campaigns that affect the economic health and quality of life in Silicon Valley, including energy, transportation, education, housing, health care, tax policies, economic vitality and the environment. Leadership Group members collectively provide nearly one of every three private sector jobs in Silicon Valley and have added to the unique character of our region.

As a valued member of the Silicon Valley Leadership Group, Stanford University sets a high bar in investing regionally and locally while at the same time providing world-class higher education for future generations of our Silicon Valley innovation economy.

Under the last General Use Permit, Stanford took seriously its potential impact on traffic and achieved no net new commute trips through innovative alternative transportation programs that serve as a model for office and campus growth everywhere. The 2018 GUP commits to this same no net new commute trip standard. 2

Stanford's Transportation Demand Management program has been highly successful and decreased the drive-alone rate of Stanford's commuting population from 67% in 2002 to 43% today. While Stanford has increased academic and housing facilities, in turn adding more students, staff and faculty to the campus, the number of vehicles coming to campus during the commute hours has remained within the baseline established under the 2000 GUP.

We are pleased that Stanford commits in the 2018 GUP to continue the housing linkage requirement that ensures campus housing is constructed on pace with academic space.

The 2018 GUP includes a contribution of desperately-needed affordable housing funding – $56 million over the life of the 2018 GUP to the County's affordable housing fund. This is in addition to $37 million that will be contributed under the terms of the 2000 GUP.

The Leadership Group applauds Stanford's state-of-the-art sustainability programs, including its comprehensive transportation demand management program, waste reduction programs and water and energy conservation programs. Stanford will achieve a zero net increase in total greenhouse gas emissions through 2035. Stanford has also decreased potable water use by 30% between 2000 and 2015 despite campus growth, saved more than 39 million kilowatt-hours of electricity per year through energy retrofits, and its recycling program diverts 66 percent of waste from landfills.

2 cont.

Approval of the 2018 GUP will ensure that Stanford continues to deliver a world-class education and invests in the pivotal pipeline for our Silicon Valley workforce.

Thank you for considering our support and the Leadership Group looks forward to engaging in the community process as the 2018 General Use Permit is considered.

Sincerely,

Carl Guardino
President and CEO
Silicon Valley Leadership Group

5.2.2.13 Responses to Comments from Silicon Valley Leadership Group

O-SVLG-1 The comment is noted but does not address the adequacy of the Draft EIR.

O-SVLG-2 The comment is noted but does not address the adequacy of the Draft EIR.

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