City of Palo Alto (ID # 8748)

City Council Staff Report

Report Type: Action Items **Meeting Date: 1/22/2018**

Summary Title: Stanford GUP 2018: DEIR Comment Letter

Title: Review the Revised City Comment Letter on the Draft Environmental Impact Report (EIR) for the Stanford General Use Permit (GUP) Application to Santa Clara County (County) and Authorize the Mayor to Sign and Staff to Transmit the Letter to the County

From: City Manager

Lead Department: Planning and Community Environment

Recommendation

Staff recommends that Council review the revised draft comment letter on the Draft Environmental Impact Report for Stanford University's 2018 General Use Permit Application (Attachment A) and authorize the Mayor to sign and transmit the letter to Santa Clara County before the County's February 2, 2018 deadline.

Background

In November 2016, Stanford submitted an application to Santa Clara County (County) requesting an update of its General Use Permit (GUP), as well as minor revisions to the Stanford Community Plan and changes to some of the on-campus zoning regulations. The Stanford GUP application sets forth a conceptual development plan in County jurisdiction through a 2035 planning horizon. The project requires the preparation of an Environmental Impact Report (EIR) and the City submitted a letter in response to the Notice of Preparation earlier this year (Attachment C).

Santa Clara County is the "lead agency" for review pursuant to the California Environmental Quality Act (CEQA) and released a Draft EIR for a 60-day public review period on October 6, 2017. (www.scc.org/sites/dpd/Programs/Stanford/Pages/GUP2018_aspx) The comment period was originally scheduled to end December 4, 2017 and has been extended by the County to 5:00 PM on February 2, 2018.

A cross-departmental group of City staff, together with consultants retained to conduct a technical review of the Draft EIR, developed a draft comment letter for review by the City Council after receiving input from the Planning & Transportation Commission on November 8, 2017. The draft letter was reviewed by the City Council on December 4, 2017 (https://www.cityofpaloalto.org/civicax/filebank/documents/62281). The draft letter has now been revised to reflect the City Council's input. Related comments from members of the public have been included as Attachment B.

Quite a few revisions and clarifications have been made in the attached letter, and some reorganization made it infeasible to track the changes. Principal revisions address the status of fire service negotiations with Stanford, and the Palo Alto Unified School District's concerns about enrollment projections. Revisions also address the use of housing funds, housing impact fees, air quality impacts, parkland acquisition, the opportunity for a transit center at I-280, alternatives that should be considered, and open space protections.[1] The revised letter also clarifies and amplifies previous comments about transportation impacts, transit capacity, and mitigation.

Timeline

The County's public comment period on the Draft EIR ends at 5:00 PM on February 2, 2018. In the months that follow, the County will prepare responses to comments for inclusion in a Final EIR. Staff expects the County to release its Final EIR in mid-2018 so that the Board of Supervisors can review the FEIR and consider the project application in the fall.

Environmental Review

Submittal of comments on a Draft EIR is not a project under CEQA. Under Section 15381 of the CEQA Guidelines and Section 21069 of the CEQA Statute, the City of Palo Alto is a "responsible agency", which is a public agency, other than the lead agency (Santa Clara County), responsible for carrying out or approving components of the project. Items requiring City approval include any physical improvements within the City limits – including mitigation measures – as well as any agreements or contracts between the City and the University and/or County related to implementation of the Stanford 2018 GUP.

Attachments:

Attachment A: Draft Comment Letter on the Draft EIR for the GUP -- Revised December 2017 (DOC)

[1] Councilmember Holman asked why the Draft EIR does not find a significant and unavoidable air quality impact like the City's Comprehensive Plan EIR did. The Bay Area Air Quality Management District (BAAQMD) requires the use of different procedures and standards for plans (like the Comp Plan) and projects (like the GUP). Nonetheless, the revised comment letter requests additional air quality analysis of the potential for near-term impacts since the improved fuel standards assumed in a longer time horizon may mean that nearer term emissions are understated.

Attachment B: Letter to City Council from Elizabeth Goldstein Alexis Re: Comments on Stanford GUP EIR December 4, 2017 (DOC)
Attachment C: City of Palo Alto Comment Letter Re: Notice of Preparation for DEIR on Stanford University 2018 General Use Permit Application, March 7, 2017 (PDF)

CITY LETTERHEAD

DATE

Kirk Girard, Director
Department of Planning and Development
Santa Clara County
c/o David Rader & Kavitha Kumar
Santa Clara County Planning Office
70 W. Hedding Street
7th Floor, East Wing
San Jose, CA 95110

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

Dear Mr. Girard & Staff,

The City of Palo Alto appreciates the opportunity to comment on the Draft Environmental Impact Report (EIR) analyzing Stanford University's proposal 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. We also want to thank you and other County representatives for attending meetings of our City Council and our Planning & Transportation Commission over the last couple of months and for convening related community meetings in Palo Alto.

The City of Palo Alto has 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. A number of the City's comments for the Notice of Preparation (NOP) have not been satisfactorily addressed in the Draft EIR and remain at issue, and some of the City's concerns will require the County to attach meaningful conditions of approval to the ultimate approval action.

The issues of primary concern to the City are briefly highlighted below:

A. Open Space Protections. While we understand that the University is not currently proposing development outside the Academic Growth Boundary (AGB), we are concerned that current open space protections for the foothills area (in the form of the requirement for a super-majority vote to amend the AGB) will expire in 2025 and are not proposed for extension or replacement. This is not acceptable to the City of Palo Alto and undermines both the validity Draft EIR and the community's trust that the University and the County will be appropriately protective of our collective open space resources. Please extend existing open space protections or be explicit where growth and development outside the AGB may be proposed so that it can be appropriately analyzed in the EIR.

B. Housing. The region's housing crisis (and affordability crisis) will be exacerbated by any project that proposes to add more jobs and more housing demand than housing. We urge the County and the University to reconsider parameters of the current proposal, potentially staging the proposed development as housing is built and transportation solutions are implemented rather than the other way around (i.e. housing & transit then development, rather than development then housing & transit).

The University should be required to increase affordable housing within the campus to address its contribution to the regional housing crisis and to reduce commute trips to and from the University. The University should also provide more funding for affordable housing proximate to the campus, and should not be permitted to expand the eligible geographic area for this housing. Funding should include fees charged on new academic and academic-related square footage and should be based on current City impact fees, adjusted over time to reflect inflation and increases in construction costs.

We also call upon the County to partner with the City regarding our Regional Housing Needs Allocations (RHNAs) for the 2023-2030 Housing Element cycle. The County and the City were successful in seeking an adjustment whereby the City's allocation was decreased and the County's allocation was increased by 645 units in the 2007-2014 cycle based on a recognition that the University was constructing housing within the City's Sphere of Influence. We ask for a commitment to this kind of adjustment again, and -- if an adjustment is not acceptable to the regional council of governments – we ask for a commitment that the County would seek to form a "subregional entity" with Palo Alto and one or more other cities for purposes of redistributing the RHNA.

C. Traffic. Stanford's "no net new commute trips" goal is in fact a goal not to increase commute trips in the peak direction by automobiles during one hour per day at defined cordon locations around the campus. Once again, the University is also suggesting it may "meet" this goal by using credits from trip reductions achieved outside the cordon.

The City does not believe this approach is sustainable for the next 20 years and urges the County to require explicit and effective mitigation such that the University is required to specify *in advance* the specific trip-reduction measures and transit capacity enhancements they will implement as mitigation between 2018 and 2035 and to make contributions to necessary capital improvements at City intersections and grade separations. Without additional detail regarding impacts from all auto trips at the cordon (i.e. not just peak direction trips, and not assuming trip credits), without realistic assumptions of Caltrain capacity now and with the project, and without specific mitigation measures, the City cannot determine whether the University is effectively addressing its contribution to cumulative traffic volumes and congestion in our City.

D. Fire Services. As of the date of this letter, Stanford University is not under a going-forward contract with the City of Palo Alto for fire protection and suppression, or emergency medical services (EMS). Stanford cancelled their contract with the City as of October 2015 and both parties have been extending the contract for short periods of time (6 to 12

months) while attempting to negotiate a successor agreement. Stanford has not identified a viable or sustainable fire protection and suppression and EMS model or provider other than Palo Alto. The University does not have access to the State of California Master Mutual Aid Agreement for fire protection and suppression – access is only available via public fire departments who are participants in the agreement – and would have access to EMS ambulance transportation services through Santa Clara County Ambulance unless a new contract can be executed in short order.

E. Upstream Detention & Flooding. The Biological Resources section (but not the Hydrology section) of the Draft EIR identifies capacity and flood issues in San Francisquito Creek (page 5.3-46) and references one or more on- and off-site detention basins being considered by the San Francisquito Creek Joint Powers Authority. The City requests a full review of existing flood issues in both watersheds in which the project is located, as well as documentation of the change(s) in impervious surfaces and runoff volumes. This review/documentation should lead to an assessment of potential off-site flooding impacts for the baseline, project and cumulative scenarios taking into consideration the likely effects of climate change.

We would be happy to meet with you, Supervisor Simitian, and representatives of the University if such a meeting would help resolve any of these issues and concerns. If there are any questions regarding the specific EIR comments attached, please contact our Planning Director, Hillary Gitelman at Hillary.Gitelman@cityofpaloalto.org.

Sincerely,

Mayor Greg Scharff

Cc Palo Alto City Council
City Manager James Keene
City Attorney Molly Stump
Planning & Transportation Commission Members
Hillary Gitelman/Meg Monroe/File

Stanford University 2018 General Use Permit
Draft EIR Comments

Introduction to Environmental Analysis and EIR Assumptions

1. 2018 Baseline Assumptions. The additional development comprising the 2018 Baseline scenario as described on DEIR pages 5-6 to 5-7 is not clearly identified or quantified, and it is not clear whether the 2018 Baseline includes development under construction in adjacent jurisdictions. As a result, it is not clear what development is included in the 2018 Baseline and whether all pending and proposed Stanford development is adequately addressed in the DEIR in either the 2018 Baseline or Cumulative scenarios. The DEIR indicates that the 2018 Baseline includes all remaining academic and support development and housing authorized under the 2000 General Use Permit (GUP) that will be built and occupied at time the County considers approval of 2018 GUP. However, this remaining development is not quantified, and there appears to be conflicting information where quantification is provided. Table 5.15-12 (page 5.15-65) identifies 769,354 square feet of academic space and 416 beds under the 2000 GUP that will be constructed by Fall 2018. However, the DEIR also indicates on page 3-19 that Stanford may not have received project-specific approval for construction of all development authorized under the 2000 GUP when the County considers the proposed 2018 GUP. As part of the 2018 Baseline description in each DEIR topical section, the DEIR states that "nearly all remaining academic and academic support development and remaining housing authorized under the 2000 General Use Permit will be built and occupied at the time of approval of the proposed 2018 General Use Permit," except for the planned Escondido Village (EV) Graduate Residences (2,020 net new beds), which are currently under construction, but not expected to be occupied until 2020.

   The City asks that the Final EIR provide a table and map that clearly identifies the size, location and construction timing/status of projects that are assumed for the Baseline 2018 scenario. The EIR should also identify whether any projects in adjacent jurisdictions that are under construction (or that have received a building permit) are included in the 2018 Baseline.

2. Cumulative Impacts. The Final EIR should identify cumulative projects and whether the cumulative scenario is based on specific projects or growth projections pursuant to CEQA Guidelines section 15130(b). The basis for the cumulative scenario as described on page 5-8 is not clearly defined, and the reader is unable to discern whether all cumulative development has been addressed in the cumulative analyses, including cumulative growth in neighboring communities. The Transportation and Traffic section has the best summary of the scenarios evaluated in the DEIR (page 5.15-61) and indicates that the cumulative scenario includes completion of development authorized under the 2000 General Use Permit, including the EV Graduate Residences, background growth and reasonably foreseeable projects. Yet neither background growth nor reasonably foreseeable projects are clearly identified.

   The City requests that the DEIR provide a clear identification of cumulative projects and/or growth in section 5.0 and that the cumulative scenario include and clearly identify:

a. Projected growth in Palo Alto and surrounding communities, including growth expected to occur during the life of Palo Alto's adopted Comprehensive Plan and analyzed in a related EIR certified on November 13, 2017; and

b. All off-campus approved or planned cumulative development on other Stanford University owned lands, including off-site housing, non-residential uses in the East Bayshore area, Stanford Research Park, University Medical Center, the transit center site, projects outside the Academic Growth Boundary, and the Stanford Golf Course.

3. Long-Term Stanford Growth and Protection of Foothills. An updated sustainability study should be prepared by Stanford to define the next 'phase' of development and the horizon of that plan, which should be completed and adopted prior to 2025. While Palo Alto has recognized and commended Stanford's commitment to the campus' Academic Growth Boundary (AGB), the City has serious concerns regarding the potential change to the AGB and future protection of foothills from development. Palo Alto prefers and requests that the commitment to the AGB be renewed as part of the 2018 GUP to ensure protection of the foothills open space lands.

Project Description

4. Potential Future Changes in Land Uses or Distribution. The DEIR indicates that additional housing beyond the proposed limit of 3,150 units and/or changes in distribution of academic, academic support, and housing may be requested by Stanford as a condition of the permit, subject to additional environmental review and County approval (pages 1-4 and 3-20). As indicated in the City's letter on the Notice of Preparation (NOP), the City is concerned that the land use intensity identified for each development district not change or increase unless clear performance standards are identified and included as mitigation measures or project conditions of approval. The Final EIR should identify such performance standards. Since for example, the Historic Preservation Alternative emphasizes that new development will be pushed to the peripheral areas around the central campus with potential resulting impacts upon views and tree loss, the flexibility to transfer uses within development areas under the 2018 GUP raises similar concerns. The City requests that the Final EIR provide an assessment of the range and magnitude of potential future changes in the distribution of land uses, potential related impacts, especially related to visual impacts, tree removal, parking and traffic, and identify performance standards to avoid potential impacts.

5. Location of Future Development. Future development locations in the DRAPER district along El Camino Real between the Arboretum and the new graduate housing are not defined. Without better definition of potential building sites, some environmental impacts of the proposed 200,000 square feet of academic and academic support development on adjacent Palo Alto neighborhoods cannot be assessed, such as impacts on views and the visual character of the area, loss of useable open space, tree removal, traffic and circulation associated with parking changes.

Visual and Scenic Resources

6. Impacts to Visual Character of Palo Alto. As indicated in Palo Alto's comments on the NOP, the City is concerned regarding the lack of information on the location/scale of proposed development and impacts to the visual character of areas adjacent to the City. While the DEIR generally references Stanford design guidelines and policies, there is no inclusion or summary of these standards.

    a. The City asks that the Final EIR identify a process for City review/consultation on projects adjacent to the City, including provision of project photo simulations, and to identify specific performance standards to ensure that the visual character of the City is not adversely affected, such as: 1) standards for screening development and/or maintaining vegetated buffer along roads; and 2) specific reference to County or Stanford Design Guidelines that would address building siting, height, scale, architectural features, landscaping, screening, etc.

    b. To maintain the aesthetic character and open space along El Camino Real, the City requests that the County include a mitigation that prohibits re-distribution of housing or academic square footage to the Arboretum Development District or lands designated "Campus Open Space."

7. Views Along El Camino Real. Of particular concern are impacts to views of the campus along El Camino Real (State Route 82), which provides a view of open space and is a significant value to Palo Alto as a vegetated buffer between the City and the higher density development of the central campus. The proposed development of 200,000 square feet of academic and/or academic support space in the DRAPER development area is not specified, and current required setbacks do not provide adequate buffers. Alteration and/or removal of this open space would substantially alter the visual character of the surrounding area and should be considered a significant impact. Mitigation should be provided to insure that any future development in this area preserve and continuation this open view through the 2018 GUP.

8. Lighting Impacts. The City requests that Mitigation Measure 5.1-4 be modified to include specific performance standards to ensure that future Stanford development results in no offsite illumination into adjacent neighborhoods within Palo Alto.

Air Quality

9. Emissions.

    a) *Project Emissions.* Since the rate and timing of development under the proposed 2018 GUP is not known, the EIR should provide a worst-case analysis of operational emissions with emission calculations of buildout at an earlier year, such as 2025. The EIR also should identify a mechanism to ensure that all measures and programs built into the air emissions model assumptions that may help to reduce emissions, such as electrification of bus and vehicle fleets, are actually implemented with a specified timeframe for implementation.

    b) *Sensitive Receptors.* Figure 5.2-1 should be revised to clearly identify all sensitive receptors, including residences since there is potential for construction to occur

around campus edges, and the nearest sensitive receptors in Palo Alto are within 80 feet of project boundaries.

c) *Construction Emissions*. The DEIR indicates that Stanford agrees to use final California Air Resources board Tier 4 standards for all construction equipment, except for chainsaws and pavers, throughout the life of the 2018 GUP. The City asks whether it is feasible/reasonable to assume that the campus construction contractors will be able to acquire and use all Tier 4 Final equipment (except for chainsaws and pavers), and if not the emissions modeling and analysis should be revised. Given the amount of development anticipated, construction activities could be ongoing throughout the period from 2018 to 2035.

Cultural Resources

10. Review of Landscape Elements as Potential Historic Resources. Full historic protection of the Oval, Palm Drive and the Main Gate were not addressed in the DEIR. The EIR should evaluate these areas to determine whether they are historic resources and/or should be considered as part of the Main Quadrangle historic block. If found to be a historical resource pursuant to CEQA, the area(s) should be included in Mitigation Measure 5.4.1(a-e).

Hydrology and Water Quality

11. Groundwater Impacts and Recharge. The section lacks documentation/references for assumptions and conclusions. Impact 5.9-4 does not quantify the amount of increased groundwater use that is anticipated for the 2018 GUP as requested in the City's NOP letter or assess impacts on the groundwater basin and vicinity wells as established in the DEIR's Hydrology Significance Criterion "b." While the impact indicates that project operation could substantially deplete groundwater supplies, there is no supporting analysis, and the mitigation measure presented addresses monitoring of recharge, not impacts to groundwater supplies. Because Palo Alto operates municipal water supply wells in the vicinity, the FEIR needs to provide a full analysis with technical documentation in order to make a significance conclusion, including addressing the following:

    a. Identify whether the project area is within the Santa Clara Valley groundwater basin or different sub-basin.
    b. Identify other vicinity groundwater wells. Figure 2 of the City of Palo Alto 2015 Urban Water Management Plan indicates that the area adjacent to campus contains groundwater wells.
    c. Provide annual monitoring of groundwater levels to determine an annual average over a sufficient time to include both wet and dry years.
    d. Identify the potential amount of increased groundwater use. It is stated that irrigation needs would not change substantially (page 5.9-26) without reference to an actual estimate, and in contradiction with the increase in non-potable water use estimated in Appendix Water Supply Assessment (WSA). The WSA (as summarized in Section 5.16.5) makes an assumption about groundwater demand that is not supported by the record provided in the baseline setting, in which groundwater use is shown to have

increased substantially in the last extended drought, consisting of up to 88% of irrigation water demands in FY14-15. Section 5.16.5 (pgs. 5.16-16 and 5.16-17) assumes no change in groundwater supply, and does not apportion the water demand in drought scenarios between surface water and groundwater. This lack of information prevents a meaningful analysis of how much groundwater use could increase, and whether it would exceed significance thresholds.

e. Section 5.16.5 asserts with no supporting evidence that Stanford's wells can withdraw up to 1,700 AFY (1.52 mgd) without adversely affecting groundwater conditions. Given the wells have a combined pumping capacity of approximately 4,450 AFY, additional analysis is required to support the impact conclusions. The analysis and determination of 1,700 AFY as the sustainable yield needs to be disclosed and available for public review.

f. Most importantly, the EIR should evaluate impacts to adjacent and nearby wells or groundwater basin due to increased Stanford pumping. The multiple dry year scenario under full buildout needs to be addressed with respect to groundwater, and whether there could be impacts to adjacent wells or the groundwater basin.

g. It is unclear under what circumstances groundwater could be used to meet potable demands.

h. Assumption that groundwater recharge can only occur in the unconfined zone is not adequately explained or justified.

12. Storm Water and Flooding. Some of the storm water from the project area is conveyed through storm drains maintained by the City of Palo Alto that discharge into creeks managed by the Santa Clara Valley Water District (SCVWD). The Draft EIR does not include an analysis that clearly indicates the estimated runoff flows with and without the project and under cumulative conditions, so it is not possible to determine the significance of the impact on these collection facilities. This is of particular concern since the City of Palo Alto's storm drain system, downstream from Stanford, has limited capacity at various locations that can result in localized flooding. Secondly, flows from Matadero Creek discharge into a flood basin located East of Highway 101. This area is protected by a levee that will need to be improved in the future to mitigate for sea level rise. Increased flows into the flood basin would affect the future levee design. The Final EIR must provide existing and proposed runoff calculations from the project area for both the 10-year and 100-year storm event.

13. Adequacy of Detention Facilities. The DEIR did not respond adequately to the City of Palo Alto's request in the NOP to provide information on current storm water volumes into the existing detention facilities generated within the Academic Growth Boundary. Further, how would the added flow from the 2018 GUP development affect the current detention capacity in the case of a 10-year and 100-year storm event? Without this information it is difficult to determine the adequacy of current detention basins to meet future needs. The Impact 5.9-6 analysis asserts "the existing detention facilities are estimated to have the capacity for accommodating an additional approximate 57.0 acres (2.48 million square feet) of impervious surfaces in the San Francisquito watershed, and an additional approximate 194.8 acres (8.52 million square feet) of impervious surfaces in the Matadero watershed." However, there is no

reference to a specific study, such as the "annual reporting," that clearly documents and quantifies changes in detention capacity as a result of identified flows from constructed projects. This information needs to be provided in the Final EIR to substantiate the DEIR's conclusions on capacity and determination that no significant impact would occur. It is unclear to what degree development under the 2000 GUP (including Escondido Village Graduate Residences) or other development added to establish the 2018 Baseline scenario has already used the additional available capacity. The Final EIR must provide documentation of the change in impervious surfaces and runoff volumes for existing development, development completed as part of the 2018 Baseline, development with the 2018 GUP Project, and cumulative development to adequately assess the impact of increased runoff and the adequacy of detention facilities and conclusion of a less-than-significant impact.

14. San Francisquito Creek Joint Powers Authority. Stanford should be required to coordinate and cooperate, including funding, with the San Francisquito Creek Joint Powers Authority to provide meaningful large-scale upstream detention facilities to attenuate and manage flows in San Francisquito Creek.

15. Flood Impacts. The City of Palo Alto's NOP comments include a request for records of past runoff volumes for the 10- and 100-year storm flow into Matadero and San Francisquito Creeks. This information was not provided and is essential to determining the significance of additional storm water flows with the project. The DEIR Hydrology and Water Quality section does not identify existing flood problems, but relies on existing detention facilities to control flows. As indicated above in Comment #12, there is no cited drainage study that documents existing remaining detention capacity or quantifies additional runoff volumes added for baseline, project and cumulative conditions to substantiate the conclusion that no offsite flooding impacts will occur. The Biological Resources section does in fact identify capacity and flood issues in San Francisquito Creek (page 5.3-46) with one or more on- and off-site detention basins being considered by the San Francisquito Creek Joint Powers Authority. The Final EIR must provide a review of existing flood issues in both watersheds in which the project is located, and in conjunction with the above comment, clearly document potential off-site flooding impacts for the baseline, project and cumulative scenarios.

Noise

16. Sensitive Receptors. The DEIR reports that residences, schools, hospitals, and nursing homes are considered to be the most sensitive to noise (page 5.11-8), and sensitive receptors are described on page 5.11-25. However, a map showing locations of sensitive receptors is not provided. The DEIR Noise section does reference Figure 5.2-1 in the Air Quality section, which shows sensitive receptors, however, specific residential receptors are not identified. This figure should be revised to clearly identify residential neighborhoods, which are not shown, since there is potential for construction to occur around campus edges, and the nearest sensitive receptors in Palo Alto are within 80 feet of project boundaries.

17. Construction Noise Mitigation. DEIR page 5.11-25 states Mitigation Measure 5.11-1, which implements a performance standard, will reduce construction-noise impacts, where it is

technically and economically feasible to do so, but also suggests that variances may be permitted. The mitigation measure should specify:

- How "technically or economically infeasible" will be determined;
- Who has the authority to grant a variance and the process by which a variance request would be made and reviewed; and
- That City of Palo Alto should have the ability to review and comment on requests for such variances for projects within 150 feet of their boundaries.

Population and Housing

18. Existing and Projected Housing. The Final EIR should clearly identify/quantify existing on-campus student and faculty/staff housing and 2000 GUP units expected to be constructed and added to the 2018 Baseline as well as proposed units in the 2018 GUP. A full accounting is needed in order to confirm that Stanford has met its overall housing linkage/ratio (605 new beds per 500,000 SF of new academic and academic support) and not just for the increment of growth permitted under the project. The City also questions whether this ratio should be increased to require more units per new academic space given the region's housing crisis, or if the housing should be provided *in advance* of non-residential development. Please clarify whether the total campus units include units constructed outside of the academic boundaries that are referenced on page 5.12-3.

19. Population Estimates and Growth. Palo Alto has concerns regarding the population estimates used in the DEIR and population/growth impact conclusions. The DEIR concludes that population induced by the project is consistent with Stanford's historic annual growth rate, but this rate is not identified in the DEIR. The Final EIR should identify the historic annual growth rate and the rate with the proposed project, including the basis for the "Compound Annual Growth Rate" (CAGR) used in the DEIR to estimate Stanford growth for each population. Furthermore, comparison with regional growth rates would be a more appropriate standard of review to ascertain whether or not projected Stanford growth is consistent with or exceeds the historic growth rate in Palo Alto and surrounding communities. The total population resulting from indirect household growth (graduate students/faculty and their families) in Palo Alto should be identified and compared to the City's projected population growth as part of the impact discussion, utilizing the population growth projections included in the City's adopted Comprehensive Plan.

20. Off-Campus Household Formation and Housing Demand. The DEIR (page 5.12-17) estimates the indirect off-site campus housing demand based on off-campus household formation derived from the Stanford Commute Survey, which is not listed in the DEIR references. The City believes that the County should use another source of data or an updated objective and statistically valid survey tool to validate findings of the University's commute survey. The FEIR should clearly identify how the 2,425 off-campus household estimate was derived. Furthermore, the FEIR should also explain the assumption of a net decrease in 102 off-campus faculty households since the project's faculty housing unit count (550) is less than the increase in faculty (789).

21. Secondary Impacts of Growth. While the DEIR estimates the number of new households that would reside off campus, the Final EIR should also clearly identify the secondary population growth that would occur in the City of Palo Alto as a result (total number of people per household), as well as the amount of increased Stanford household population added to the City between 2015 and the 2018 baseline. The Final EIR should clearly address the impacts of secondary population growth on housing demand, public service demand, and public school capacities. This growth is important to quantify for a variety of reasons and undercuts reliance on a 'no new net trips' policy focused only on the peak travel direction in the peak commute hour.

22. Affordable Housing Demand. In its letter of comment on the NOP, the City requested an assessment of housing demand, including existing and future demand by employees and students qualifying for below market rate affordable housing. However, the DEIR does not address the project's demand for affordable units off campus in Palo Alto. It is expected that a significant number of graduate students, postdoctoral researchers and staff would need affordable housing. Taking the Palo Alto number alone, 367 or 5.6% of the City's projected household growth between 2015 and 2040 would be from lower paid Stanford graduates, post-doctoral graduates, faculty and staff. The City would need to provide an additional 2.3% of its housing stock in 2040 for low and moderate income units. This would be in addition to the low- and moderate-income housing need generated by the rest of the City's population and employment. The analysis also adjusts the ABAG household numbers without documentation. For example, the DEIR includes a 2015-2040 period for future household formation, whereas ABAG uses 2010-2040 without a corresponding change in household formation. Further, the estimate of new households assigned to Palo Alto is based on current residency, which should also be documented. Therefore, the additional affordable housing demand generated by Stanford should be more accurately assessed in the Final EIR with regards to impacts on the City's housing supply.

23. Off-campus Affordable Housing Fees. Under the 2000 General Use Permit, Stanford is required to provide one on-campus affordable housing unit or make an in-lieu payment to Santa Clara County for each 11,763 square feet of constructed academic development.

    a. The Final EIR should identify how many affordable units have been constructed on campus and how many have been constructed as a result of payment of in-lieu fees with the 2000 GUP in order to document whether Stanford is meeting its affordable housing requirement. Please indicate projects, number of units and location of affordable housing that have been constructed under this requirement and the number of affordable units that have been constructed in Palo Alto under this program.

    b. The DEIR states that Stanford will continue contributions to the County-administered off-campus affordable housing program. However, without the analysis to identify affordable housing needs as requested in Comment #20, the extent to which these fees actually meet affordable housing needs is not known, and the finding of a less-than-significant impact is not substantiated. Please consider that impact fees are generally set at levels well below what it actually costs to provide housing.

c. Stanford should continue to pay a housing development fee for academic and academic support square footage to the County to assist receiver communities with providing housing for this spillover Stanford population. This fee should be based on Palo Alto's adopted fee schedule and should be indexed to inflation and the increase in regional construction costs.

d. The basis for the DEIR statement that 900 new graduate student units would equate to approximately 450 affordable housing units that will be credited toward the County's RHNA (page DEIR page 5.12-20) should be explained and substantiated.

Public Services

24. Fire Protection and Emergency Services.

a. The impact analysis does not identify a specific need for new or physically altered public fire protection/emergency services facilities related to project growth. However, no substantial evidence is provided to support this conclusion. The Final EIR should assess the effect of on- and off-campus growth on response times and other performance criteria identified in the EIR and provide a clear discussion of project impacts – will new or relocated facilities be required at build-out of the project? The effects of the project on fire and emergency services related wildland fires also should be addressed.

b. According to the DEIR, replacement and improved fire stations would allow the Palo Alto Fire Department to adequately serve growth and buildout in the City. This is based on Stanford's continued annual fair share payment to the City of Palo for fire protection services. Stanford and the City are currently in negotiations for a multi-year contract with automatic renewal for fire and EMS services, but agreement has not yet been reached, and thus, the issue of long-term fire protection service is not adequately assessed in the EIR. The Final EIR should evaluate development alternatives for Stanford if agreement on a fire contract cannot be reached.

c. The Palo Alto Fire Department requests that the following text be added to page 5.13-1, Add: The PAFD provides fire protection and suppression, and emergency medical service (EMS), for all areas within the jurisdictional boundaries of Palo Alto in addition to some of the unincorporated land surrounding the city limits, including the project site under a services contract. As of the date of the City's response, Stanford University is not under contract with the City of Palo Alto for fire protection and suppression, and EMS. Stanford cancelled the contract as of October 2015, and both parties have been extending the contract for short periods of time (6 to 12 months) while attempting to negotiate a successor agreement. Stanford does not have a viable or sustainable fire protection and suppression, and emergency medical service (EMS) model or provider other than the City of Palo Alto. Stanford does not have access to the State of California Master Mutual Aid Agreement for fire protection and suppression – access is only available via public fire departments that are participants in the agreement. Stanford would have access to EMS ambulance transportation services through Santa Clara County Ambulance.

25. Police Services Impact. The DEIR analysis of police services concludes that the 2018 GUP would increase demand for service, but would not result in an adverse physical impact from construction of additional facilities. No evidence is presented about the effect of on-/off-campus growth on police and emergency dispatch services provided by Palo Alto or performance criteria for these services. The Final EIR should address impacts of Stanford population growth and new housing on Palo Alto Police Department (PAPD) response times, staffing, facilities, traffic enforcement on City streets, and response in mutual aid situations. The Final EIR should also address indirect impacts associated with increased calls for mutual aid assistance and associated impact on the PAPD performance standards for provision of adequate services. The PAPD has concerns regarding increased calls for PAPD service especially for parking enforcement, traffic enforcement on bordering streets, special sporting and other events, and visiting dignitaries, which should be addressed in the Final EIR. All additional service requests may lead to the need for additional facilities and these should be identified and analyzed. If the University intends to rely on new City facilities, the University should contribute to their cost.

26. Schools Impacts. The DEIR concludes that the project would increase enrollment in local schools, but would not result in adverse physical impacts from the construction of additional school facilities that may be needed in order to maintain acceptable enrollment standards. Of the new housing provided on-campus, growth in school-aged children is associated only with 550 new units of housing for faculty, staff, postdoctoral scholars, and medical residents. The Final EIR should also address student growth from undergraduate and graduate students, and from indirect growth of 367 new households in Palo Alto. Based on the student generation rates presented in the EIR, the project could result in 183 additional students from new households in Palo Alto.

    While enrollment data is not presented, the DEIR states that there will be declining enrollment in Palo Alto Unified School District (PAUSD) schools through 2026/27 and given that decline, there should be remaining capacity to accommodate project-generated students. PAUSD disputes this conclusion and we request that the Final EIR be revised to reflect their projections as well as the City's adopted Comprehensive Plan. With these changes, the cumulative analysis will indicate the need for new facilities. The Final EIR should acknowledge the University's contribution to this need, particularly in relationship to the location of new households with school-aged children. Representatives of PAUSD have suggested that concentrating new units along Quarry Road may contribute to the need for a new school in that vicinity.

Recreation

27. Additional Parks and Recreation Facilities Impacts.

    a. There is no explanation for why the three-mile radius was used to identify parks and recreational facilities that may be used by Stanford's population. Apparently this was based on a survey of current use by Stanford population. However, the impact analysis and mitigation was limited to the four parks in the College Terrace neighborhood. Table 5.14-2 omits Peers Park, Bol Park, Juana Briones Park, John

Boulware Park, Robles Park, Ramos Park, Sarah Wallis Park, Johnson Park, Seale Park, Hoover Park, and Monroe Mini-Park. These parks are within the three-mile radius of campus and should be considered in the EIR and included in any mitigation or compensation. In addition, two parks on leased land from Stanford, El Camino Park and Mayfield Fields, are within the three-mile radius. These lease arrangements and the future of these parks should be described; will they remain in use through the horizon year of 2035 and how long past that date?

b. The Final EIR should also consider the impacts on paths through Bol Park that are used for recreation and bicycle transportation by Stanford-residing adults as well as Stanford-residing children attending Terman and Gunn schools. People traveling to/from the Stanford campus use these paths on a daily basis and the impacts of increased use should be assessed.

c. The DEIR did not mention the substantial current impact or anticipated future impact of the Escondido Village housing and 2018 GUP by Stanford affiliates and their children on the College Terrace neighborhood library located in one of these College Terrace neighborhood parks.

28. Recreation Facilities. The DEIR indicates that Stanford has offered to pay the City for on-campus resident student and faculty use of the four parks in College Terrace. The City believes that the payment offered ($300,000) is understated because as a one-time fee, it will not address the impact and needed future maintenance at these and other parks caused by Stanford students and faculty and their families over the 17 years of the 2018 GUP. The fee offered fails to address the fact that in one of the heavily used parks there is a neighborhood library impacted by the use of families associated with Stanford. The City Librarian indicates that the renovation costs to expand the current 2,392 square foot building to 4,860 square feet would be (based on Sunnyvale and Newark studies of $250-385/SF) $617,000 to $950,180 for a full renovation to include the entire building for library purposes and meet the anticipated increase in service resulting from the 2018 GUP, particularly from the Escondido Village graduate student/family housing project (2,020 net new beds). Stanford should focus on expanding the amount of park land available to city residents and Stanford users by providing acreage for park use, including making currently leased areas permanent, and funds for ongoing maintenance.

Transportation / Traffic

29. Traffic Impact Analysis. Palo Alto recognizes Stanford's efforts to reduce traffic impacts since 2001 and meet its "No Net New Commuter Trips" goal. However, Palo Alto has a number of concerns with the Traffic/Transportation section, including its assumptions and analyses, and questions the effectiveness of the "No Net New Commuter Trips" goal going forward. The City's primary concerns are listed below and are fully articulated in the attached Technical Memorandum from Hexagon Transportation Consultants who reviewed the DEIR as part of the City's review. The City requests that all of the comments presented in the Hexagon memo be addressed as part of the City's comments on the DEIR. A summary of the City's concerns include:

a. There are several concerns with the "No Net New Commute Trips" goal's wording and methodology that should be addressed. The three key areas of concern include: the definition of the peak period and the methods of monitoring traffic, the direction of travel to be monitored, and the unlimited use of trip credits to meet the goal. An additional concern is the feasibility of further reducing single-occupant vehicle trips to the extent needed in order to meet the No Net New Commute Trips goal for development in the 2018 GUP. The method and timeframe for traffic counts also is a concern.

b. Given the current experience based on the 2000 GUP development, there is concern about the trip generation rate being based on traditional peak periods periods (7 – 9 AM and 4 – 6 PM) that potentially underestimate impacts of project trips given the recent trends of "peak spreading" and the growing level of University trips during off-peak periods.

c. The analysis relies on public transit to help achieve the No Net New Commute Trips goal. However, some of the assumptions used in the analysis of transit capacity and performance analysis for transit and Caltrain are not entirely accurate may not be achieved, such as expanded Caltrain capacity from five to eight cars by 2035. The EIR should clearly identify ridership, service and capacity of all transit providers (VTA, Catrain, and the Marguerite) to ascertain whether adequate capacity exists to serve the project or whether additional mitigation or improvements will be required. If capacity increases are not fully funded, the EIR should assess impacts with and without these increases.

d. The project proposes a 2,000 space parking reserve, in addition to constructing all parking for the 2000 GUP. However, expansion of parking is contrary to the University's TDM and trip reduction goals that seek to reduce vehicle trips. The effects of providing additional parking should be assessed.

e. Further evaluation is needed regarding impacts at specific intersections, including the Caltrain grade separations at Alma and Charleston and freeway segments as discussed in the attached technical memo. The analysis should assess impacts with and without Caltrain grade separations.

f. The EIR does not address project impacts on off-campus parking and resulting traffic circulation and does not analyze the effects of City programs to manage on-street parking in the vicinity of the campus. Have these programs affected Marguerite bus routes and pushed Stanford parkers to distant neighborhoods? Impacts of Marguerite bus routes themselves should also be considered.

g. The EIR should explicitly identify the current and future transit and TDM programs that will be relied on to meet the No New Net Commute Trips goal. The effectiveness of these specific programs should be evaluated and they should be monitored as mitigation pursuant to Public Resources Code Section 21081.6.

h. The EIR should review the option of rerouting the Marguerite through campus to reduce impacts on adjacent City streets.

i. The City requests that the threshold for the Crescent Park TIRE be re-calculated based on only the "non-diverted" traffic on Hamilton. In other words, the analysis should

subtract the existing diverted traffic from Hamilton, calculate a revised threshold, and then see if the trips generated by the Stanford GUP would meet the lower threshold.

30. No Net New Commute Trips. The City of Palo Alto requests that Santa Clara County require Stanford to revise the No Net New Commute Trips policy and adopt a mitigation monitoring program with monitoring by an independent third party to insure that it continues to be effective as development under the 2018 GUP takes place. Members of the Palo Alto community experience traffic congestion on a daily basis that can be attributed to students, faculty and staff of Stanford University. If the County wants evidence of this, it should collect data throughout the day when Stanford is in session, and when Stanford is not in session. The data will show that traffic congestion is noticeably less when Stanford is not in session and validate community members perspective that the current "no net new commute trips" program is not working.

As a legal matter, if the "no net new commute trips" policy is expected to function as mitigation, it should be revised to address all vehicle trips entering and exiting the campus during the peak hours and Stanford should not be able to apply unlimited credits for trip reductions outside the cordon. Certainly the cordon credit area should not be expanded. The County should establish a threshold for both directions of travel, should consider the trips made during a longer peak period, should revise the method for discounting "cut-through" trips, and should set a limit on the number of trip credits that may be used toward achieving the goal.

The County should also identify specific mitigation measures to reduce vehicle trips and the University should be required to implement or fund those measures as well as making fair share payments to operational and capital improvements needed to address its contribution to regional congestion. The effectiveness of all mitigation should be quantified. Also, if the No Net New Commute Trips assumption is changed or cannot be met, the EIR should address whether the analyses regarding criteria pollutant and greenhouse gas emissions and exposure to traffic noise need to be revised as a result of potential increased traffic.

31. Safe Routes to School. The Final EIR should identify and describe the existing safe routes to schools activities, which includes crossing guards at busy intersections. The Final EIR should assess impacts and possible decrease of performance as a result of project traffic in accordance with the Transportation/Traffic Significance Criterion "f" cited on page 5.15-54 of the DEIR.

Currently Palo Alto, the Palo Alto Unified School District, the Palo Alto PTA, and Stanford work cooperatively on making necessary improvements to provide the safe routes to school, particularly for Escondido and Nixon elementary schools, located on Stanford-owned land and heavily attended by children of Stanford families. If an additional school is provided near Sand Hill Road for students living in University housing on that side of campus, this cooperation on safe routes to school should be extended to access to any future school site as well. Currently, Stanford's funding for agreed improvements for safe access to schools has not been fully implemented. The City asks that Stanford create an annual budget based on the agreed work

program for future improvements that benefit Stanford faculty, employees, staff and graduate students with children. In addition Stanford should assist the City with the cost of school crossing guards required at major intersections that benefit both children of both city residents and Stanford affiliates.

32. Sharing Costs of Needed Improvements. In the 2000 GUP there were two intersections that Stanford committed to improve regardless of whether or not the No Net New Commute Trips goal was met. The reason for this appears to be based on future projects. In the same fashion, the 2018 GUP should address three projects that are critical to the Palo Alto community based on immediate need and Stanford's future impacts on Caltrain service and capacity.

    a. Stanford should be required to pay its fair share towards grade separations at all rail crossings in Palo Alto in order to increase the safety of the intersections for Stanford commuters, including bicycle, pedestrian and vehicle traffic, and to improve Caltrain service and facilitate ridership increases relied on by Stanford to achieve the "No Net New Commute Trips" goal.
    b. Stanford should be required to fund and potentially construct improvements to the Palo Alto Intermodal Transit Center to accommodate increased bus and bicycle volumes generated by Stanford's growth and to facilitate the eight car trains that the DEIR indicates will be necessary to meet Stanford's Caltrain ridership demand with the 2018 GUP project.
    c. Stanford should be required to provide a transit center near the I-280/Page Mill Road interchange to alleviate traffic impacts in Palo Alto. This could alleviate congestion created by traffic to both the academic growth area as well as to the Stanford Research Park.

33. Bicycle Improvements. Stanford has offered to contribute to one bicycle improvement in Palo Alto: Bol Park Trail. Despite the figure in the DEIR, the Bol Park Trail has not been designed. Part of the existing trail will be located on a shared pathway parallel to the street on Hanover Street. Currently, improvements on Page Mill Road will result in the installation of a new signal at Page Mill and Hanover Street. However, the improvement to the Bol Park Trail will require modification to this signal for bicycles and pedestrians. The funding offered by Stanford ($250,000) will just cover the cost of the modification to the signal. Since this trail is a connection between Stanford's main campus and the Stanford Research Park and can be a part of the TDM measures for the No Net New Commute Trips, the City feels that Stanford should make a greater contribution to the project including: dedication of right-of-way under the existing separated pathway on Hanover Street and contribution of funds to make the necessary upgrade of the Hanover pathway so that it meets current bicycle and pedestrian safety standards.

Project Alternatives

34. Project Alternatives. While the DEIR includes a Reduced Project Alternative, the City suggests a Phased Alternative that permits new development and student growth only after transit/TDM programs are expanded and housing is constructed to serve the new development.

Miscellaneous DEIR Text Corrections

35. EIR Corrections. The Final EIR should make the following corrections.

a. Page xv: "OEM California Office of Emergency Management" should be deleted (see Cal OES)

b. Page 1-33: *Protection and Maintenance of Emergency Service Access and Routes*. That should be changed to include the Palo Alto Police Department (which runs the 9-1-1 center for both Palo Alto and Stanford).

c. Page 5.8-30: Change "County OEM" to "County OES"

d. Page 5.8-33: References should also include: City of Palo Alto Emergency Operations Plan, available on: http://cityofpaloalto.org/services/public_safety/plans_and_information/ and City of Palo Alto Threat and Hazard Identification and Risk Assessment (THIRA), available on: http://cityofpaloalto.org/thira.

e. Page 5.13-2:

- Remove: one Rescue truck (at Station 2) for vehicle accidents, hazardous materials and technical rescues, and search and rescue at fires.
- Modify: two advanced life support ambulances (at Stations 1 and 2) that respond to all medical incidents, and are also included in fire, rescue, and vehicle accidents and hazardous materials incidents, and one cross-staffed ambulance (at Station 4) that responds to medical incidents when the ambulances from Stations 1 and 2 are not available. (City of Palo Alto, 2015).

f. Page 5.13-3: Modify the sentence to read: In FY 2016, PAFD arrived at 89 percent of fire emergencies within eight minutes, 92 percent of EMS calls within eight minutes, and placed a paramedic at EMS calls within 12 minutes, 99 percent of the time.

g. In Palo Alto, the Police Department funds 29 crossing guards for the City on school commute routes. (This fact was left out of the text on page 5.13-4.)

Technical Memorandum

Date: November 13, 2017

To: Stephanie Strelow, Dudek

From: Gary Black, President, and Jane Clayton, Associate

Subject: Review of Stanford 2018 General Use Permit Draft Environmental Impact Report on Behalf of the City of Palo Alto

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Hexagon Transportation Consultants, Inc. has reviewed the Draft Environmental Impact Report (DEIR) and the supporting Transportation Impact Analysis prepared for the 2018 General Use Permit (GUP) application filed by Stanford University with the Santa Clara County Planning Office. In order to prepare this letter, we have also reviewed the Project Description and Background Conditions Report included in the 2018 GUP application, the 2015 and 2016 *Stanford University Traffic Monitoring Reports*, and comments made at meetings of the Planning and Transportation Commission (8/30/17 and 11/8/2017) and the City Council (10/16/17). We have conducted this review at the request of the City of Palo Alto and have paid particular attention to the areas included in the City's comment letter for the Notice of Preparation (NOP) related to transportation and circulation. We have also reviewed all of the transportation-related impact findings and the proposed mitigation measures for their adequacy.

The development proposed in Stanford's 2018 GUP application includes 2.275 million square feet of academic and academic support space, 3,150 dwelling units or beds (of which 550 units may be used by faculty, staff, post-doctoral fellows, or medical residents), 40,000 square feet of space for child care centers and facilities for the university's commute alternatives program, and a parking supply reserve of 2,000 spaces. Stanford proposes continuation of the "no net new commute trips" goal included in the 2000 GUP, which is defined as no additional trips above a measured base level during the peak commute time in the campus commute direction (inbound towards campus in the AM peak hour and outbound from campus in the PM peak hour).

Key Areas of Concern

The "No Net New Trips" Goal: Methodology and Feasibility

The 2000 GUP Condition G.4 defines the "no net new trips" goal as "no increase in automobile trips during peak commute times in the peak direction, as counted at a defined cordon location around the campus." That condition also states:

> "Stanford shall mitigate the transportation impacts of its additional development and population growth either through a program of 'no net new commute trips' or through proportional funding of mitigation measures for specified impacted intersections."

Hexagon has concerns about the "no net new trips" policy as it is currently defined. The three key areas of concern are the definitions of the peak periods to be monitored, the direction of travel to be monitored, and the unlimited use of trip credits to meet the goal. The DEIR invokes the "no net new trips" policy as mitigation for potential impacts. However, Hexagon is concerned that the policy overlooks the following traffic issues.

Lengthening of Peak Period and Definition of Peak Hours: Although AECOM gathers 24-hour cordon count data for 8 weeks every year, the analysis of data to determine whether Stanford has met the "no net new trips" standard is currently limited to the hours of 7:00 – 9:00 AM and 4:00 – 6:00 PM. There is abundant evidence throughout the Bay Area that these traditional peak periods have lengthened, and, in fact, the traffic counts conducted at study intersections for this DEIR were conducted during the hours of 7:00 – 10:00 AM and 4:00 – 7:00 PM. In its NOP letter, the City specifically requested that the EIR identify the peak travel periods for the campus using these 24-hour cordon counts, but this was not done. At a minimum, the peak periods used for monitoring cordon counts should be consistent with the peak periods used for the intersection counts conducted for the DEIR (7:00 – 10:00 AM and 4:00 -7:00 PM).

Hexagon's spot review of the raw cordon count data in the 2015 and 2016 *Stanford University Traffic Monitoring Reports* indicates that the AM peak hour frequently occurs after the 7:00 – 9:00 AM period. Similarly, the PM peak hour frequently occurs after the 4:00 – 6:00 PM period. However, for the purposes of determining whether Stanford has met the goal, any peak hour volume that does not occur during those defined two-hour periods is ignored. The interpretation of "peak commute time" in the goal should be modified for the 2018 GUP so that if, for example, the greatest volume of vehicle trips in the evening occurs between 5:30 - 6:30 PM, then that is the volume that should be used as the basis for monitoring whether or not Stanford has met the standard.

One of the likely reasons why there appears to be a disconnect between Stanford's achievement of the "no net new trips" standard and the community's experience of increasing levels of congestion may be that there are higher levels of Stanford-related trips throughout the day or during much longer periods during the morning and evening than was true in 2001. Therefore, it is critical that a fresh analysis of the peak periods of travel to and from the campus be conducted and that recommendations for future cordon counts be based on that analysis.

Direction of Travel: The "no net new trips" standard currently applies only to the peak direction of travel: inbound towards campus in the AM peak hour and outbound from campus in the PM peak hour. As the university constructs more on-campus housing for students, faculty, and staff, the volume of traffic in the "counter-commute" direction will also increase. Figure 4 of Part 1 of the TIA

shows the change in proportion of resident and non-resident peak hour trips between 2015 and 2035, indicating that resident trips are projected to be a larger percentage of total trips in the future.

Under the 2018 GUP proposal, the volume of "counter-commute" travel could increase substantially, but Stanford would still be deemed to meet its goal as long as the "commute" direction did not increase (or was offset by trip credits). In its NOP letter, Palo Alto requested that the DEIR include an analysis of direction of travel, but this was not done.

Even if Stanford meets the "no net new trips" standard as it is currently written, it would be possible for the development proposed in the 2018 GUP to have intersection impacts that should be mitigated. The DEIR overlooks the possibility that intersection impacts may result from vehicle trips in the other direction (outbound from campus in the morning and inbound in the evening). The EIR should address this issue and propose a means of mitigating any impacts that may be caused by increases in traffic leaving campus in the morning and entering campus in the evening.

Trip Credits: The 2000 GUP specifies that the County will recognize participation by Stanford in off-campus trip reduction efforts and credit reduced trips toward attainment of the goal. Stanford has not met the PM peak hour 2001 cordon count threshold (3,591 trips) in certain years, but has been able to meet the "no net new trips" standard by taking credit for its off-campus trip reduction efforts within a defined geographic boundary (the cordon credit area).

Stanford could continue to increase the number of trip credits it claims in the future as a way of dealing with rising cordon counts through the life of the 2018 GUP. The fact that in 2015 Stanford claimed 844 trip credits, equal to 23.5% of the 2001 "trigger" value for the PM peak hour, raises a question as to whether there should be a limit or cap placed on the percentage of trip credits that may be taken during the life of the 2018 GUP in order to meet the standard. For example, Stanford proposes to take trip credits every year after providing funding for bicycle facility improvements in Palo Alto and neighboring jurisdictions (in Chapter 8 of the DEIR).

This concern is heightened by the large number of potential problems concerning the trip credit methodology that were raised in the *2016 Stanford University Traffic Monitoring Report.* No fewer than nine issues have been raised by the consultant preparing the report for the County. Hexagon believes these issues should be addressed and resolved as part of the EIR process since they are central to the "no net new trips" methodology. Hexagon also believes that trip credits should only be granted for actual trip reductions, not predicted reductions.

Hexagon notes that the monitoring reports do not provide any information on the various measures for which credits have been claimed each year, only the total number of credits claimed. In its NOP letter, Palo Alto requested greater transparency in the cordon count and trip credit reporting.

Feasibility of Mode Split Required to Meet Standard: On page 5.15-156 of the DEIR, the drive-alone mode share is given as 43.2% in 2015, which would need to be reduced to 36.5% to meet the "no net

new trips" standard for the 2018 GUP development (assuming no trip credits are taken).[1] The University has been successful in reducing single-occupant trips to levels much lower than the County average. However, the TIA (Figure 2 of Part 1) indicates that SOV mode share is approximately 50% and has been flattening out in recent years, indicating that additional reductions may be difficult to achieve. Given the environmental characteristics of the commute shed of Stanford affiliates, such as land use density, transit availability, and other factors, it is likely to be challenging to reduce that mode share by an additional 6.7%.

The TIA (Part 1, pp. 10-11) includes the following strategies expanding Stanford's TDM programs in order to meet the "no net new trips" standard under the 2018 GUP:

- Commuter buses
- Expand local bus service and first/last mile connections (Marguerite shuttle)
- Improve key bike facilities to reduce road stress for cyclists on access routes to campus
- Parking fees and policies
- Student vehicle prohibitions

However, it is an exceedingly ambitious goal to construct 2.275 million square feet of academic and academic support space and 3,150 new beds/units and to not increase peak hour vehicle volumes at all. After many years of a highly successful TDM program, all of the "low-hanging fruit" is gone, and it may prove difficult to persuade many of the remaining SOV drivers to change modes. Stanford should explore what it will take to achieve a 36.5% SOV mode share (no net new trips) with real-world examples.

If the "no net new trips" standard is not met under the 2018 GUP, then Stanford has proposed that it be "given the option of achieving No Net New Commute Trips by funding other entities' trip reduction programs before applying such funds to its proportionate share of intersection improvements." Ways in which the funding provided could be programmed as consistently over multi-year periods as possible should be explored, rather than on an annual basis with large dollar amounts in some years and no funding at all in other years, depending on the preceding year's monitoring report. Successful trip reduction programs require consistent funding to be most effective.

2015 Cordon Counts and the 2018 GUP Trip Generation Rate

The trip generation rates for the new development proposed in the 2018 GUP are based entirely on the 2015 cordon counts conducted as part of the County's annual monitoring process regarding the "no net new trips" standard. To the extent that the 2015 cordon counts do not accurately capture the number of vehicle trips generated by the campus during the AM and PM commute times, the trip generation estimates for the proposed growth will be correspondingly underestimated, which should be corrected in the Final EIR.

[1] The TIA indicates that the drive-alone mode share was approximately 50% in 2015. The Background Conditions Report also states that the drive-alone rate is 50% (page 4.47) The difference between the two percentages given for the 2015 drive-alone mode share (43.2% and 50%) should be explained.

Identification of "AM peak hour" and "PM peak hour": As discussed above, the number of peak hour trips presented in the 2015 *Stanford University Traffic Monitoring Reports* is the peak hour volume during the periods of 7:00 – 9:00 AM and 4:00 – 6:00 PM. However, due to the lengthening of peak commute periods throughout the region and the widespread use of flextime schedules, the peak traffic volume within that window of time may not actually be the peak traffic volume if a longer or different peak period were considered. The DEIR did not address the issue of changes in the peak commute times, even though the City requested such an analysis and it is key to the trip generation estimates used in the DEIR; this should be considered in the Final EIR.

"Hidden" vehicle trips: The 2015 cordon counts may also underestimate Stanford's existing trip generation if there are vehicle trips that are not counted. The City's NOP letter asked the DEIR to study the extent to which Stanford commuters are avoiding cordon counts by parking on local streets in adjacent city neighborhoods. The DEIR addresses this concern on page 5.15-176, and Figure 5.15-21 shows that there are Residential Parking Permit programs in place in all the Palo Alto residential neighborhoods adjacent to campus. However, two of these programs did not exist when the 2015 cordon counts were conducted (Evergreen Park – Mayfield and Southgate). The DEIR should have included some estimate of off-campus parking.

The DEIR also notes that there is very little on-street parking that is not time-restricted adjacent to campus, with the exception of approximately 150 parking spaces on the Stanford side of El Camino Real. The DEIR states that:

> "These on-street spaces are essentially filled before the traditional peak hour of 8:00 – 9:00 AM. Thus, drivers using these spaces are not traveling during the peak hour, and therefore are not parking in this location to avoid cordon counts."

Since the cordon counts begin at 7:00 AM, the fact that these spaces are filled by 8:00 does not mean these drivers aren't avoiding cordon counts. As noted above, Hexagon suggests that the cordon counts be re-evaluated to determine the actual peak hour, and these spaces should be included.

Another potential issue with the 2015 cordon counts is related to the exclusion of vehicles that enter campus and then leave it within 15 minutes, because they are considered cut-through traffic that is not generated by Stanford. Because of this, if a Stanford affiliate is dropped off or picked up on campus, the vehicle that enters campus to drop them off in the morning or leaves campus after picking them up in the evening is excluded from the cordon count, even though that trip is clearly a Stanford-generated trip. An evaluation of the cordon locations where a vehicle entered and where it exited campus would help identify some of these trips and distinguish them from actual cut-through trips. The Final EIR should account for this issue.

Analysis of Transit Capacity and Performance

The City's NOP letter requested that the DEIR evaluate transit performance and efficiency as it relates to site design, mobility, and access. A map showing transit priority areas for nearby transit agencies (Figure 5.15-10) and a map showing areas within a 5-minute walkshed of Marguerite stops with headways of 15 minutes or less (Figure 5.15-22) were included, but they do not show the location within the 2018 GUP area of key points of development proposed in the 2018 GUP. The EIR should include further discussion about optimal land use and site design to support an effective and efficient transit system on campus.

The City's NOP letter also requested that the demand, capacity, and utilization of Caltrain, connecting transit services at the Palo Alto Intermodal Transit Center (PAITC), and the PAITC itself be studied. The DEIR does not include a capacity assessment of the PAITC at all, including its bus bays, layover facilities, and the operational impacts of an expanded Marguerite service on other transit providers, which should be addressed in the Final EIR.

The capacity analysis of Caltrain includes a key assumption that the trains will include eight cars by 2035, rather than the current five cars. The Caltrain electrification/modernization project now underway does not include funding for extending platforms so that 8-car trains could be utilized. To make the capacity analysis consistent with the electrification project, it should not be assumed that the infrastructure improvements necessary to run 8-car trains will be operational by 2035. If train capacity were constrained by the existing 5-car maximum, then there would be a significant impact to this transit service. Hexagon suggests that an appropriate mitigation measure would be to make a fair share contribution to the platform retrofit needed at the PAITC to permit lower level boarding, which would speed up dwell time.

The DEIR asserts that transit capacity is not a potential impact under CEQA, but we disagree. Since a project can be found to cause a significant impact to transit if an element of it would conflict with an adopted policy regarding public transit or decrease the performance or safety of transit facilities, then operating extremely crowded trains would qualify as conflicting with an adopted policy and as reducing the performance of the service from the rider's point of view. Transit services generally have adopted policies or standards regarding load factor (how many riders they can accommodate per bus or per car). If a load factor is exceeded by a large amount, then the service is no longer comfortable or convenient. Such a load factor would clearly also have secondary impacts on mode choice.

Aside from how the issue is treated under CEQA, there is also a basic operational issue that relates to Stanford's ability to achieve the "no net new trips" standard. If achieving the standard would require an increase in the transit mode share, as conservatively assumed by the DEIR analysis, but the capacity is simply not available on the trains to handle the increased ridership, then the standard would probably not be achieved. This could be the case if the assumption regarding 8-car trains is changed to 5-car trains. The analysis should be re-assessed in light of these considerations in the Final EIR.

Requested Parking Reserve of 2,000 Spaces

Stanford has requested approval of a 2,000 space parking supply reserve, for which it does not seek initial authorization because it seeks to discourage automobile ownership and use. However, Stanford

proposes that it be able to seek Planning Commission approval to construct parking spaces from that reserve under any of three defined circumstances.

One of the proposed circumstances for increasing the parking supply is meeting the "no net new trips" standard. There is an obvious contradiction here: if Stanford is meeting the standard, why would it need up to 2,000 additional parking spaces? Clearly, additional parking supply would make it increasingly difficult to meet the standard in the future.

There are two obvious ways in which Stanford could meet the "no net new trips" standard and yet still need 2,000 more parking spaces by 2035. One is that the standard can now be met through an unlimited use of trip credits. Stanford could meet the standard through services and facilities that reduce SOV trips off-campus, but still need additional parking for new trips to campus generated by the development proposed in the 2018 GUP. The second relates to the lengthening of the peak period. If an increasing number of trips are made outside the peak periods as they are defined (7:00 – 9:00 AM and 4:00 – 6:00 PM) under the 2000 GUP or if the trips made in a single peak hour no longer represent as large a percentage of daily traffic as has been true historically (because traffic is more evenly spread over a much longer period of time), then Stanford would need additional parking to accommodate those trips – even though the standard, as currently monitored, has been met. The EIR should address this issue directly and define a more stringent qualifying circumstance for purposes of allowing construction of 2,000 more parking spaces or eliminate this circumstance from the request.

Review of Impacts and Mitigation Measures

Hexagon evaluated all transportation-related impact findings in the DEIR to determine their adequacy. The DEIR's analysis of every study intersection was reviewed carefully, to ensure that all potential mitigation measures at impacted intersections were included. The following sections address each impact evaluation about which Hexagon has comments or questions. Impact discussions – and specific intersection impacts – about which Hexagon has no comments or questions are not included.

Level of Service Threshold for Unsignalized Intersections

***DEIR*:** The DEIR states on page 5.15-57 that "None of the applicable jurisdictions have an officially adopted significance criterion for unsignalized intersections. For purposes of this analysis, significant impacts are defined to occur when the addition of project traffic causes:

- The average intersection delay for all-way stop-controlled intersections or the worst movement for side-street stop-controlled intersections to degrade to LOS F, and
- The peak hour traffic signal warrant from the California Manual of Uniform Traffic Control Devices (CA MUTCD) to be satisfied at an unsignalized intersection already operating at LOS F."

Hexagon Comments: The City's threshold for non-CMP signalized intersections is LOS D, and the City's practice has been to apply that threshold to unsignalized intersections as well. The significance criteria

for impacts at unsignalized intersections have been cited in several TIAs in recent years as when the project causes a movement to degrade to LOS E or F and the peak hour signal warrant is met. This Issue concerning Palo Alto's impact criteria is relevant to the unsignalized study intersection of Bowdoin Street / Stanford Avenue in the DEIR, which is discussed further below.

The following section addresses all of the study intersections within Palo Alto where a significant impact was found and where Hexagon had comments, plus the intersections of I-280 Southbound Off-Ramp/Page Mill Road, I-280 Northbound Off-Ramp/Page Mill Road, and Bowdoin Street/Stanford Avenue.

Intersection Impacts (2018 and 2035 Conditions)

I-280 Southbound Off-Ramp and Page Mill Road (#13)

***DEIR*:** Proposed mitigation measure for 2018 impact is "Contribute fair share funding toward the installation of a traffic signal." However, on page 5.15-92, the DEIR references the *Page Mill Expressway Corridor Study Report* and notes that the improvement concept is for this intersection is "a roundabout, with traffic signal at the I-280 NB Ramps intersection, and a third eastbound and westbound through lane on Page Mill Road to the east of the I-280 Northbound Ramps intersection." The DEIR says the Project's fair-share funding towards a traffic signal at this intersection "may be applied toward a roundabout."

Hexagon Comments: Stanford should contribute its fair share of the roundabout and other improvements that have been agreed upon by the three agencies (Santa Clara County, City of Palo Alto, and Town of Los Altos Hills) for this intersection. Providing fair share funding towards a traffic signal is insufficient, since that is not the intersection modification that has been agreed upon.

The DEIR does not find an impact at this intersection under 2035 conditions. The LOS calculation sheets in Appendix F of the TIA indicate that a traffic signal is assumed at this intersection under 2035 conditions, even though Appendix E of the TIA indicates that the lane configuration and traffic control (all-way stop control) are the same as under 2018 conditions. All changes in roadway network assumptions should be stated clearly in the text of the report, and all tables and figures should be consistent with any noted changes.

The intersection should be evaluated under 2035 conditions with all-way stop control and with a roundabout, not with a traffic signal, since the timing of the roundabout construction is uncertain.

I-280 Northbound Off-Ramp and Page Mill Road (#14)

***DEIR*:** No impact is found at this unsignalized intersection under 2018 or 2035 conditions. Under 2018 conditions, the intersection operates at LOS E both with and without the project, and the increased delay is one second. Because signal warrant analyses were only conducted for unsignalized intersections operating at LOS F, no signal warrant analysis is included in Appendix G of the TIA.

For the 2035 evaluation, Appendix E of the TIA shows no change to the lane configuration or traffic control at this intersection, although the LOS calculation worksheets indicate that a traffic signal is assumed under 2035 conditions.

Hexagon Comments: In general, any changes in the roadway network (lane configurations, traffic controls, signal phasing, etc.) between 2015 and 2018 or between 2018 and 2035 should be clearly stated in the TIA and the DEIR and all appendices should be consistent.

Because the intersection is already operating at LOS E during the AM peak hour and the increase in delay on the stop-controlled approach is only one second, there would not be a significant impact even if the more stringent LOS D standard were used for unsignalized intersections.

Junipero Serra Blvd – Foothill Expressway and Page Mill Road (#17)

***DEIR*:** The proposed mitigation measure at this intersection for both the 2018 and 2035 impacts is "Contribute fair share funding toward installation of an overlap signal phase for northbound and southbound right-turning vehicles and widening of southbound Junipero Serra to two lanes between Stanford Avenue and Page Mill Road to align with the existing designated right-turn lane." The text on page 5.15-92 notes that this would allow southbound right-turning vehicles additional queuing space so southbound through vehicles do not block the right-turn lane. Under 2018 conditions, there would still be a significant and unavoidable impact even with this mitigation measure, although under 2035 conditions, this measure was found to reduce the impact to a less-than-significant level.

Hexagon Comments: The mitigation measure proposed is reasonable, but ignores the other changes that have been proposed for this intersection. The *Page Mill Expressway Corridor Study Report* recommends the addition of a third eastbound and westbound through lane on Page Mill Road between the I-280 interchange and Porter Drive (just east of Page Mill Road), as noted on Page 5.15-124 of the DEIR. Measure B does not provide sufficient funding for the entire Page Mill corridor project, including modifications to this intersection, so it would be reasonable for Stanford to make a fair share contribution to it. Because the DEIR's proposed mitigation does not fully mitigate the Project's impact at this intersection, a fair-share contribution to the Page Mill widening (possibly HOV lanes) at this intersection should also be included in the mitigation measure, in addition to the proposed changes to the Junipero Serra approach.

Bowdoin Street and Stanford Avenue (#34)

***DEIR*:** No impact is found at this unsignalized intersection under 2018 or 2035 conditions. Under 2035 conditions, the intersection operates at LOS D without the project and at LOS E with the project during the PM peak hour. Because signal warrant analyses were only conducted for unsignalized intersections operating at LOS F, no signal warrant analysis is included in Appendix G of the TIA.

Hexagon Comments: As noted previously, the City's practice has been to use LOS D as the impact threshold for unsignalized intersections, even though there is no formal policy statement regarding unsignalized intersection impact criteria. If a more stringent LOS D threshold were to be used and if the peak hour signal warrant were met, then the project would result in a significant impact at this intersection. The Final EIR should include signal warrant analyses on Palo Alto unsignalized study intersections operating at LOS E.

If the finding of no significant impact were to be changed to a finding of significant impact (based on LOS E in the PM peak hour and a signal warrant analysis), installing a traffic signal at this location would not be recommended as a mitigation measure, due to its fairly close spacing with other signalized intersections on Stanford Avenue, at Peter Coutts Road and at Hanover Street. The City's preferred approach to this intersection would be a roundabout or a treatment other than a signal at this location.

El Camino Real and Embarcadero Road (#48)

***DEIR*:** Significant impact found in 2035, but not 2018. Proposed mitigation measure is "Contribute fair-share funding toward the addition of a second northbound left-turn lane." Page 5.15-131 of the DEIR notes that VTA's Bus Rapid Transit (BRT) project has proposed a separate bus lane on El Camino Real, but not through this intersection. The DEIR concludes that it is not possible to determine what, if any, effect this mitigation measure would have on the BRT since there is no final design available.

Hexagon Comments: As part of the Preferred Scenario selected for Palo Alto's Comprehensive Plan Update, queue jump lanes (not exclusive bus lanes) in the curbside lane have been proposed for transit on El Camino Real. Is there be adequate right-of-way for both an additional northbound left-turn lane and queue jump lanes? Would it be possible to implement both? The DEIR notes that the City is "currently designing bicycle improvements at this intersection."

Alma Street and Charleston Road (#58)

***DEIR*:** Significant impact found under both 2018 and 2035 conditions. Proposed mitigation is "Contribute fair-share funding toward the addition of a designated northbound right-turn lane and installation of an overlap phase for the northbound and southbound right-turn movements." The impact would remain significant and unavoidable after implementation of this mitigation.

Hexagon Comments: As part of the Preferred Scenario selected for Palo Alto's Comprehensive Plan Update, grade separation between Charleston Road and the Caltrain tracks has been proposed. Because the DEIR's proposed mitigation does not fully mitigate the Project's impact at this intersection, a fair-share contribution to the grade separation project should also be included in the mitigation measure.

Freeway Impacts (2018 and 2035 Conditions)

***DEIR*:** The DEIR states that the project would result in significant and unavoidable impacts on four freeway segments under 2018 conditions and on 11 freeway segments under 2035 conditions. The impacted segments are on SR 85 and I-280. No specific mitigation measure is proposed, although it is noted that to the extent that vehicle trips are reduced to achieve the "no net new trips" standard and through applying any fees from exceeding the standard to alternative programs that reduce vehicle trips, the project's contribution to freeway congestion would also be reduced.

Hexagon Comments: The freeway segment analysis does not follow the methodology set forth in VTA's *TIA Guidelines* or in C/CAG's guidelines. According to VTA's *TIA Guidelines* (page 44), a freeway segment is said to have an impact if the level of service falls from LOS E or better to LOS F. If the segment is already operating at LOS F, then a project has an impact if the number of new trips added by the project is more than 1% of the freeway capacity.

Instead of referring to the level of service on the study freeway segments, the DEIR uses volume-to-capacity ratios (v/c) for both the 2018 and 2035 conditions. The TIA states there would be an impact if a project causes a freeway's v/c ratio to increase from less than or equal to 1.0 to greater than 1.0. If the segment is already operating at a v/c ratio greater than 1.0, then there would be an impact if the number of new trips added by the project is more than 1% of the freeway capacity. If the freeway evaluation used level of service instead of v/c ratio, there may be more freeway impacts than have been identified in the DEIR.

A few cities in Santa Clara County have identified contributions to regional freeway and transit facilities as mitigation measures for significant freeway impacts. VTA has developed a structure for a program of Voluntary Contributions to Transportation Improvements, which can be used by local agencies when preparing development agreements. The County has the opportunity to require such a contribution to regional facilities in its development agreement as an additional condition if the "no net new trips" goal is not achieved.

VTP 2040 includes four highway projects that are relevant to the impacted freeway segments on SR 85 and I-280 and could be considered as candidates for a fair-share funding contribution for the freeway impacts identified in the DEIR. A contribution to improvements at the Palo Alto Intermodal Transit Station would also be appropriate to consider.

Freeway Ramp Operations

***DEIR*:** The DEIR notes that ramp queuing is not considered an environmental impact, but rather an operational consideration that is managed over time by Caltrans and local jurisdictions. The ramp analysis is presented for information purposes only.

In the text following the Existing, 2018, and 2035 off-ramp queuing evaluations, it is noted that the left-turn queue at the I-280/Page Mill Road southbound off-ramp would exceed the pocket storage length, but that the queue would be served within the total ramp storage and would not spillback into the freeway mainline.

Hexagon Comments: Regarding the I-280/Page Mill Road southbound off-ramp, the text is somewhat misleading. An extremely long exit lane is provided on I-280 for this off-ramp, and the queue extends a long way into that lane during the AM peak hour. Due to the length of that exit lane, it is true that through traffic is not blocked on the freeway, but the DEIR implies that there are no problems at this location since the "queue would be served within the total ramp storage." A more detailed description of existing and future conditions at this off-ramp is warranted. This off-ramp is analyzed as an all-way stop controlled intersection under 2035 conditions, even though the intersection analysis assumed the intersection would be signalized by 2035. As discussed above, the proposed improvement at this location is a roundabout.

Construction Impacts

***DEIR*:** The DEIR finds that construction traffic would cause a significant impact and that it would be reduced to a less-than-significant level with the proposed mitigation measure.

Hexagon Comments: The City has expressed concern about the difficulty that its emergency responders have in meeting their response time targets when there are frequent lane closures or roadway detours due to construction. A new system for emergency responders is being implemented that will identify the best route for responders to take, based on current information about the roadway network. The mitigation measure should be revised to require the University to inform the City of all roadway changes immediately, so that the system is kept current at all times.

Transit Impacts

***DEIR*:** The DEIR finds that the project would result in a less-than-significant impact on public transit based on (a) an analysis of transit delay and (b) the fact that "The proposed 2018 General Use Permit does not propose infrastructure changes outside the Project site and, thus, would not interfere with the ability of transit agencies to modify or expand service."

Hexagon Comments: The DEIR takes a very narrow view of whether the project would conflict with an adopted policy, plan, or program regarding public transit, or would otherwise decrease the performance or safety of such facilities. The DEIR does not present the analysis of transit capacity as part of the impact analysis, but addresses that topic separately. See comments regarding the transit capacity analysis of Caltrain under "Key Concerns" above.

The City requested additional transit-related data and analysis in its NOP letter. Although some of the requested additional information regarding transit has been provided, the following requested items are not covered in the DEIR:

- Boardings, speed, and frequency of individual Marguerite lines;
- An evaluation of transit performance and efficiency as it relates to site design, mobility, and access;
- An assessment of the capacity, access, and operations of the Palo Alto Intermodal Transit Center (PAITC), including a capacity assessment of bus bays, layover facilities, and potential operating impacts to other transit providers using the PAITC, especially if Marguerite service is expanded.

The Final EIR should provide this requested additional data and analysis regarding services and facilities that serve Stanford-affiliated transit patrons.

Residential Streets

***DEIR*:** The DEIR finds that the project would not substantially increase intrusion by traffic in nearby neighborhoods and that there would be a less-than-significant impact. Traffic impacts on residential streets were estimated using the Traffic Infusion on Residential Environment (TIRE) methodology. The threshold for an increase in traffic that would be noticeable to residents is a 0.1 increase in the index. The analysis was conducted for the College Terrace and Crescent Park neighborhoods, and the minimum daily volume increase required to increase the Index by 0.1 was calculated for a few roadway segments.

Hexagon Comments: In general, the TIRE methodology is somewhat problematic in evaluating traffic diversion impacts for a number of reasons. One reason is that it is based on average daily traffic (ADT), not peak periods of traffic, and sometimes residents are most sensitive to increases in traffic during commute hours when diversions are most likely to occur. Hexagon acknowledges, however, that no other tools have been developed that are widely considered superior to the TIRE index. The TIRE index uses a logarithmic scale, such that as ADT increases, larger proportional increases in additional project-related traffic are required in order to result in an increase to the index.

The DEIR notes that "on a daily basis Hamilton Avenue (just west of Lincoln Avenue) carries about 16% of the combined volume (University Avenue plus Hamilton Avenue); however, between 4:00 – 7:00 PM, it carries about 67%." This clearly indicates that a large amount of traffic is already being diverted to Hamilton during the PM peak period. Because of that diversion, ADT is already higher than it otherwise would be on Hamilton. And, because of that higher ADT, the number of additional vehicle trips needed to trigger a 0.1 increase in the TIRE index is also much higher than the amount required to trigger a change on the streets evaluated in the College Terrace neighborhood. For example, Table 5.15-28, "Crescent Park Neighborhood TIRE Index Results," shows that 1,025 additional vehicles per

day would be needed on Hamilton Avenue (between Hamilton Court and Lincoln Avenue) to increase the index by 0.1, given that the daily traffic volume is 3,700. In other words, ADT would have to increase by 28% to trigger a 0.1 increase in the TIRE index.

What this boils down to is that because Hamilton Avenue already experiences a large amount of diverted traffic, the additional diverted traffic resulting from the 2018 GUP development is insufficient to cause a significant impact under the TIRE methodology. In fact, even if the estimate of 121 project-generated trips on the above-referenced segment of Hamilton Avenue were doubled or tripled, it would be considered a less-than-significant impact, since it would still be well below the threshold of 1,025 trips. Although some residents may take issue with this finding, the DEIR applies the TIRE methodology correctly.

Emergency Access

***DEIR*:** The DEIR finds that the project would not result in inadequate emergency access. This finding is based on the fact that the proposed 2018 GUP "would not result in any infrastructure changes outside the project site, and thus would not create fixed physical barriers to, or impede, emergency access."

Hexagon Comments: The rationale for this finding refers only to infrastructure changes outside the project site, but the DEIR should also consider any changes on campus due to the 2018 GUP development that would impede emergency access. In its NOP letter, the City asked that the DEIR evaluate impacts to response times for fire, rescue, and emergency medical services. This is not provided in the transportation (or public service) sections of the DEIR, and should be addressed in the Final EIR.

Bicycle and Pedestrian Facilities

***DEIR*:** The DEIR states that the 2018 GUP would not result in a significant impact to bicycle and pedestrian facilities because it "would not result in any infrastructure changes outside the Project site and would [not] preclude implementation of planned bicycle or pedestrian facilities and, thus, would not create hazardous conditions where none exist today."

The DEIR used StreetScore, a proprietary methodology of Fehr & Peers, to evaluate Quality of Service (QOS) of bicycle and pedestrian facilities. The proposed intersection mitigation measures are evaluated for secondary impacts to bikes and pedestrians using StreetScore, and none were found to have a significant secondary impact.

Hexagon Comments: The StreetScore methodology used by Fehr & Peers is a newly developed tool and is not widely accepted as a standard evaluation tool in the traffic engineering community. Hexagon notes that the ratings do not seem to be that sensitive to lane geometry changes. In some cases, the rating given to bicycle or pedestrian facilities does not change at all as a result of the proposed mitigation measure. In other cases, adding a lane does not affect the Quality of Service because the intersection is already at the worst rating (4) and the mitigation measure is deemed to

"maintain but not exacerbate current uncomfortable conditions." This is the equivalent of saying that if an intersection is already at LOS F that additional trips can't make it worse – which is clearly not permitted under the intersection impact criteria. In such cases, the Final EIR should address ways in which the bicycle and/or pedestrian facilities can be modified to improve conditions for cyclists and pedestrians as well as motorists.

***DEIR*:** A bicycle capacity analysis of campus gateways was conducted (pp. 5.15-167 – 169), but not as part of the impact discussion. Peak hour bicycle volumes were converted into cyclists per minute to provide an indication of how intensely the campus gateways are being utilized. The analysis concluded that the anticipated growth in bicycle commuters under the 2018 GUP would not exceed capacity at these gateways.

Hexagon Comments: The City's NOP letter states that "the DEIR should identify critical intersections on bicycle routes that currently have inadequate integration of bicycle facilities and determine needed improvements." However, the DEIR does not address this. In addition to the gateway capacity analysis, the design of bicycle facilities and their integration with routes used by Stanford commuters should be addressed. For example, Embarcadero Road is a daunting corridor for cyclists, but the analysis just says there's adequate capacity at the gateway on Galvez Street south of Arboretum Road, which is on the campus. Other corridors may also have issues.

The Final EIR should address the access routes used by bicyclists, not just the campus gateways, and should expand the analysis to include safety, comfort and connectivity, as well as capacity. In order to meet the "no net new trips" goal, Stanford will need to further increase the bicycle mode share. One of the strategies put forth in the TIA for expanding the TDM program is to identify key improvements that would directly reduce the road stress for cyclists on access routes to campus, which should be included as part of the EIR.

***DEIR*:** Separate from the impact discussion (i.e., not offered as a mitigation measure), The DEIR notes that Stanford will provide improvements to bike and pedestrian facilities on unincorporated land near Escondido and Nixon schools.

Hexagon Comments: The list of potential improvements suggested on page 5.15-112 of the DEIR should be reviewed to confirm that they reflect the most recent ideas regarding needed improvements for Safe Routes to School for these schools. The University should continue to coordinate with the City and the Palo Alto Unified School District to define and implement improvements that reflect the most recent Safe Routes to School recommendations. In addition, because development on campus can result in large bursts of new school children as residential projects are completed, it's important that the University remain responsive when new demands for school travel are generated by new development. .

***DEIR*:** Stanford also proposes in Chapter 8 of the DEIR to fund specified off-site bicycle improvements in Palo Alto, East Palo Alto, Menlo Park, and unincorporated San Mateo County. Stanford would apply for trip credits towards the "no net new trips" goal based on these bicycle facilities in all future years after the facilities are constructed. The proposal for Palo Alto is to connect existing facilities at Bol Park and the Stanford Perimeter Trail. "The improvements would be installed along Hanover Street, which would provide a continuous route through southern Palo Alto neighborhoods and the Stanford Research Park to the Stanford campus. (DEIR, p. 8-4)" Stanford would contribute up to $250,000 in funding towards the design and implementation of bicycle improvements in the Hanover Street corridor, "which is the full estimated cost of these improvements".

Hexagon Comments: The proposal to provide better connectivity between the Stanford Perimeter Trail and the Bol Park Path makes good sense, since the Bol Park Path is a heavily used facility and provides a route from campus to Terman Middle School and Gunn High School. However, the specific details of the improvements proposed in the DEIR have not been accepted by the City as the most critical modifications needed to improve this bike corridor. Further, some of the specific elements of this project, as listed on page 8-4 of DEIR, may already be covered by the recent agreement between the City and the County regarding improvements at the intersection of Hanover Street and Page Mill Road. Stanford representatives should coordinate with Palo Alto staff to better define this project and ensure that it does not include elements that are already covered by the $3.2 million agreement with the County but does include funding for elements that are still critically needed for upgrading this bikeway.

On-Campus Parking Supply and Off-Campus Restrictions

See comment under Key Concerns above.

***DEIR*:** Stanford wants to exclude parking spaces at EV charging stations from the count of parking spaces allowed under the 2018 GUP. The rationale is that these spaces require turnover, such that other spaces are needed for the same cars when they are not charging.

Hexagon Comments: Since the number of EV charging stations is likely to increase substantially by 2035 as EV ownership rates increase, this will not be a trivial number of parking spaces in the future. Signs at charging stations say that "Vehicles Must Be Actively Charging" to park in these spaces, but how is that enforced? If someone parks their car at an EV charging station and plugs it in, do enforcement staff look to see if it is actively charging? How long do people have after their car is charged to move it? In many public garages, it is common for EV drivers to leave their cars parked in the space all day long, even if it does not take all day to charge it.

Additional Comments

This section includes additional issues noticed by Hexagon and not addressed in any of the preceding sections.

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.

TIA, Part 1, Figure 5 , "Stanford University Employee Mode Share," provides information about the modes used by commuters coming from different geographic subareas. The information is extremely useful, but also raises questions about survey design and validation. For example, the figure shows a number of people walking from the North Bay (Marin, Napa, and Sonoma Counties). Stanford should continue to refine its survey process. Also, East Palo Alto is not identified in any of the geographic subareas. East Palo Alto should be identified on this figure and in Tables 7 and 8.

TIA, Part 1, Table 7, "Percent of Stanford Affiliates (Driving) by Geographic Area": The table indicates that Sunnyvale and Santa Clara are north of campus and would use Alpine Road and Sand Hill Road to access the campus from I-280. Was this error only made on the table or did the trip distribution and assignment actually incorporate this error?

TIA, Part 2, pages 103-104: The TIA states that "adjustments were made to the survey data to account for a known bias in the surveys. More detail on how these biases were adjusted for can be found in the 2018 GUP TIA Part 1." Part 1 does not include detail on these adjustments. This information should be added to the TIA.

TIA, Part 2, page 134: A reference is made to "C/CAG's bus routes." This should be corrected to read "SamTrans's bus routes."

From: Elizabeth Goldstein Alexis [mailto:ealexis@gmail.com]
Sent: Monday, December 04, 2017 5:41 PM
To: Council, City
Cc: Nadia Naik
Subject: Comments on Stanford GUP EIR process

I am writing to request that the city use the 60 day extension for the Stanford GUP EIR to continue public outreach and incorporate additional data into the analysis before submitting a letter.

I do have some specific suggestions and ideas which are outlined below.

The multiplier effect of a major research university
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. Every new professor means another technology spin-off, another consulting firm - many of will locate nearby. This report shows the incredible number of firms created using Stanford technology - there are many more companies where Stanford does not have official intellectual property rights.

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. All of these service workers need to live somewhere they can afford - which may mean a nightmarish commute.

This cluster effect is not a bad thing. 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.

The GUP artificially segments Stanford into multiple parts.
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. We have been asked to look at impacts in a piecemeal fashion. The overall impacts can get lost - and potential solutions overlooked.

Traffic cordon counts at Stanford
Hexagon raises a number of issues with the current methodology, which only looks at one specific time period.

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 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.

"Cut-through" trips are subtracted from trip counts. The data shows that this is an increasing percentage of all trips. While some trips may be truly cut-through, it is likely that more employees and visitors are taking Lyft and Uber or getting dropped off at campus. Any new metric should either try and distinguish between these type of trips or simply not subtract them.

Crescent Park

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. 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.

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?

First, the analysis needs to be redone. There is significant data available - we have summarized it in the attached document. We need 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.

Second, we need 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?

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.

Marguerite data
We have also requested detailed Margeurite data (by route and time) that we have not received. This data is necessary to validate Stanford's assumptions, many of which are from derived calculations, rather than observations.

This data should be provided now - so that the city and others can provide comment for the DEIR, not simply made available for the FEIR,

Caltrain capacity
While Stanford has not committed to any particular TDM program, a scenario is presented that would increase Stanford-affliate ridership of Caltrain by 50%. Many of the trains stopping at Palo Alto are at or above capacity today. There are some serious concerns that the current electrification plans will not provide the capacity to accommodate Stanford's increased demand, as well as other local TDM efforts. We are waiting for information from Caltrain and we would highly recommend that the city look closely at the assumptions in Stanford's plans as well as Caltrains before submitting a final comment letter.

Stanford long range planning
Stanford is undertaking a major long range planning exercise called the "Purposeful University" - https://planning.stanford.edu/. Initial findings are expected soon. 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.

Mitigation

There are a number of mitigations that the city, county and Stanford should consider.

- Creation of joint transportation authority (Stanford, Palo Alto, Menlo Park?, East Palo Alto?). The Margeurite buses are great, but most people don't know you don't require a Stanford affiliation. There may be efficiencies for the city to have Stanford run the city shuttles. A joint service would minimize confusion and increase ridership.
- 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.

- 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.

	EAST	AM Peak	typically 7:45 am - 8:45 am	
	East of Middlefield	West of Lincoln	East of Lincoln	West of Woodland
University	674	507	591.5	747.5
Hamilton	112.5	92.5	78	
Lytton	51			
Total	**837.5**	**599.5**	**669.5**	**747.5**
	EAST	Mid day max	Typically 13:45- 14:45	
	East of Middlefield	West of Lincoln	East of Lincoln	West of Woodland
University	752.5	769	826.5	956
Hamilton	263.5	162.5	143.5	
Lytton	112			
Total	**1128**	**931.5**	**970**	**956**
	EAST	PM Peak	4:45 pm - 5:45 pm	
	East of Middlefield	West of Lincoln	East of Lincoln	West of Woodland
University	509	197	160.5	424
Hamilton	402.5	375.5	398.5	
Lytton	282			
Total	**1193.5**	**572.5**	**559**	**424**

	WEST	AM Peak	typically 7:45 am - 8:45 am	
	East of Middlefie	West of Lincoln	East of Lincoln	West of Woodland
University	680.5	832	957.5	1104
Hamilton	266	171	160.5	
Lytton	143			
Total	**1089.5**	**1003**	**1118**	**1104**
	WEST	Mid day	typically 12:30 - 13:30	
	East of Middlefie	West of Lincoln	East of Lincoln	West of Woodland
University	609.5	719.5	786	901
Hamilton	139	78	61.5	
Lytton	51.5			
Total	**800**	**797.5**	**847.5**	**901**
	WEST	PM Peak	typically 4:45 pm - 5:45 pm	
	East of Middlefie	West of Lincoln	East of Lincoln	West of Woodland
University	423	383	382.5	513
Hamilton	169	139	127	
Lytton	104			
Total	**696**	**522**	**509.5**	**513**

City of Palo Alto
Office of the Mayor and City Council

March 7, 2017

County of Santa Clara Planning Office
Attention: David Rader
County Government Center
70 West Hedding, 7th Floor, East Wing
San Jose, CA 95110

Subject: Stanford University's Application for a 2018 General Use Permit

Dear Mr. Rader,

Thank you for the opportunity to comment on the scope of the EIR being prepared to evaluate Stanford University's application for a 2018 General Use Permit (GUP). Members of the Palo Alto community are keenly interested in this project, and the City Council is happy to provide comments to inform preparation of the DEIR and its technical analyses. At the end of this letter, we have also identified a number of shared concerns that we look forward to working on with you as the County considers Stanford's application.

Project Description

We understand that the University has requested approval of 2.275M square feet of academic and academic support space, 3,150 dwelling units or beds (approximately 450 of which would be classified as affordable units), and 40,000 square feet of additional building space for child care and Transportation Demand Management (TDM) program administration. We further understand that all of this would occur within the current Academic Growth Boundary and that concurrent changes to the Stanford Community Plan and zoning would be extremely limited in scope, essentially reflecting existing use of limited areas, and adoption of the County's housing element several years ago.

While the magnitude of this proposal means that it will require careful review, we applaud the University's long term commitment to the Academic Growth Boundary and to managing the impacts of growth. Throughout the planning process, we will be seeking as much certainty as possible regarding the number of students, staff, employees, and residents that will be accommodated by the proposed development over time, and on ways the County will ensure that the intensity of use on campus will not increase unless clear performance standards (established as mitigation measures or conditions of approval) are met. We will also be

P.O. Box 10250
Palo Alto, CA 94303
650.329.2477
650.328.3631 fax

interested in fully understanding the relationship between on-campus development and the various land uses and developments that the University has or is developing at off-campus locations within Palo Alto and nearby jurisdictions. Our community deserves a comprehensive description of the University's footprint in the region, and a full accounting of its cumulative impacts and benefits if the 2018 GUP is approved as proposed.

Aesthetics & Cultural Resources

Given the flexibility and performance criteria that are the underpinning of the 2018 General Use Permit (GUP) proposal, the City is concerned that we will not be able to adequately assess the impacts of proposed development without specific information on the location and scale of the proposed changes. The DEIR should carefully identify scenic resources, including mature vegetation and historic resources that may be affected, and should identify those resources that are likely to be impacted by the proposed development program. A specific performance standard should be identified to minimize or avoid potential impacts through alternatives, and mitigation measures should provide for review and consultation with the City of Palo Alto as each development proceeds.

Air Quality, Green House Gas Emissions, Noise, & Vibration

With the similarities in the amount of development in the 2000 GUP and 2018 GUP within the academic growth boundary and the almost continuous construction we have experienced during the 2000 GUP, a detailed study of the impact of construction is needed. Construction activities and construction equipment will have an ongoing impact on air emissions and noise and vibration. The DEIR should provide a quantitative analysis of air emissions and noise/vibration attributable to construction (including the use of heavy equipment, construction worker traffic, etc.), and provide appropriate control measures.

Land Use & Biological Resources

The EIR should address the proposed changes in land use and open space within the academic growth boundary, as well as potential impacts resulting from activities and mitigation measures that extend outside that boundary. Please be specific regarding any existing land uses that will be replaced. For example, will the 200,000 SF of academic and support development proposed in the area of the playing fields on El Camino Real (DAPER development district) affect the continued use of this area for recreation, intramural sports events, and parking for major events at the stadiums? Will rezoning of the driving range affect that existing land use?

The study should extend to include impacts from corollary uses and development on other Stanford lands located in Palo Alto, including new off-site housing, non-residential uses in the East Bayshore Area, at the Stanford Research Park, the Stanford University Medical Center and at the transit center site.

Hazards and Hazardous Materials

Palo Alto's regulations governing the use of hazardous materials in proximity to sensitive receptors (such as residences) are evidence of this community's concern regarding this issue. The DEIR should describe current and potential future hazardous materials uses on site with some specificity with regard to type and location. The DEIR should also describe ways to ensure that sensitive receptors are not adversely impacted in the event of an unexpected release of hazardous materials caused by human error or an emergency (fire, earthquake, and explosion). The notification and safety of first responders to such an event involving hazardous materials should also be addressed.

Hydrology and Water Quality

While Stanford proposes to avoid an increase in impervious surfaces, thereby avoiding an increase in storm water flows, the EIR should describe existing deficiencies (i.e. downstream flood risks) that existing flows contribute to. A study of potential flood control measures should be included along with a discussion of upstream control measures and protections.

The city understands that Stanford uses groundwater for irrigation purposes and that there is a countywide groundwater study ongoing. The aquifer is shared by Stanford and a number of jurisdictions, and the capacity and availability of water from this source will affect Palo Alto and other jurisdictions, particularly during drought years and in the event of region wide emergencies. The DEIR should quantify any expected increase in Stanford's use of groundwater, and provide some discussion regarding the health of the aquifer. If increased groundwater use is expected, we request that the DEIR discuss and evaluate plans for recharge of the aquifer from detention basins, including dams/reservoirs, and creek management. Mitigations should be included in the form of recharge areas so that the basin can meet the available supply needed by Stanford and others drawing from the aquifer in years of drought and variable water supply. Ideally, detention basins also can be planned to help alleviate the flood risks referred to above.

The City of Palo Alto provides wastewater treatment for Stanford University including transport for the wastewater to the treatment facilities located on the Bayfront. The DEIR should include a detailed study of the impacts of development proposed over the 17-year period of the 2018 GUP on the city's wastewater treatment plant capacity and treatment facilities. The impact on the location and capacity of the collection system, both on campus and through the city to the treatment facilities, should also be studied. Appropriate mitigations to any impacts should be identified and addressed.

Population and Housing

As noted earlier, the City will be looking for detailed information about the number of new students, staff, and residents that would accommodated on and off-campus by the development Stanford is proposing between today (the appropriate CEQA baseline) and 2035 (the proposed horizon year). Along with the population analysis, we would appreciate an assessment of housing demand, including existing and future demand by employees and

students qualifying for below market rate housing. The study should quantify housing demand inside and outside the Academic Growth Boundary and indicate how the supply of housing on campus, existing and projected, correlates with this demand, and should identify areas where those who are not provided housing on campus are likely to seek housing.

Section 5 of the application materials notes that with 550 new multiple family housing units occupied by faculty and staff on Stanford owned lands in unincorporated Santa Clara County there will be 275 additional school-aged children by 2035 (assuming 0.50 school aged children/dwelling). The City would ask for a clarification of 'multiple family' since many of the units built during the 2000 GUP particularly along Stanford Avenue were free standing single family units in close proximity to one another. More detailed study needs to be made of the family size of the current Stanford graduate, post doctorial, faculty, and staff living on campus since this is a unique population. An accurate estimate of the age range within the pre-school and school aged population is important in order to determine the impacts of these additional children on city facilities including safe routes to school, bicycle trails and travel routes, recreation needs. This analysis will also define the need for the 2018 GUP to address providing the additional square footage to meet demands for daycare and other on campus services and their related traffic impacts. Impacts on the Palo Alto Unified School District's capacity and services should also be addressed.

The City strongly supports the housing linkage/ratio concept used in the 2000 GUP and its continued use in the 2018 GUP. The proposed ratio is 605 new beds for every 500,000 SF of new academic and academic support space. The City would urge that the housing become available as close as possible to the availability of the new academic space. The City also appreciates the University's proposal to continue funding affordable housing projects elsewhere in the region, and supports continued use of a six-mile radius from campus for expenditure of these funds, with an additional focus of such development on transit corridors within that radius.

We also understand that Stanford is seeking a condition that would allow it to build additional housing beyond the proposed development limit of 3,150 housing units/beds proposed in the 2018 GUP. We have no objection to this proposal, as long as the environmental review effectively addresses potential impacts and/or provides a mechanism to do so, if and when, these additional housing units/beds should be proposed.

Public Services

Under contract with Stanford University, the City of Palo Alto Police Department Palo Alto 9-1-1 Communications Center (a.k.a. Public Safety Answering Point (PSAP)) provides 9-1-1 call taking service for the University campus and dispatches the Stanford University Department of Public Safety. The DEIR should provide a detailed study of how the demand for these services will increase as the 2018 GUP progresses and is completed.

The City of Palo Alto Office of Emergency Services (OES) works closely with Stanford University on topics related to natural disasters, technological and accidental hazards, and human-caused events, such as crime and terrorism. In particular, the Stanford University Department of Public Safety (SU DPS) and the Stanford University Environmental Health & Safety (EH&S) group routinely work with OES to conduct joint training, emergency planning, and work together on planned special events and other higher-risk events. Some clarification is needed in Section 8.5, Emergency Preparedness and Response, of the application materials. Specifically, the Background Conditions Report verbiage has to do with Palo Alto Fire Department and related topics, not emergency preparedness. The OES is a separate City Department. OES operations are closely aligned with the Palo Alto Police and Fire Departments and the 9-1-1 Communications Center. Stanford University generally receives support by OES at no additional charge despite many shared activities.

The Palo Alto Fire Department (PAFD) has been providing fire, rescue and emergency medical services (EMS) to Stanford University (Stanford) under contract since 1976. Under the proposed 2018 GUP, additional public safety impacts would be created by the increase in residential and daytime populations as well as construction and regular traffic impacting already congested road networks. The city understands that a court decision, City of Hayward v. Board of Trustees of the California State University, 242 Cal. App. 4th 833 (2015) minimizes the environmental impacts under CEQA related to emergency services. However, these effects as they relate to the 2018 GUP proposal should be studied in detail in the DEIR. Without mitigation the ability of the PAFD to meet acceptable performance standards could be negatively impacted by the anticipated growth impacting public safety.

The PAFD notes that they have been challenged to meet the response time performance noted in the 1976 contract as well as in the 2000 GUP and updated annual reports. The primary reason for response time performance challenges have been due to increased calls for service, the frequency of simultaneous calls for service, the location of the fires, speed limits, and the frequency of detours and lane closures due to construction activities. The DEIR should assess how the 2018 GUP will affect response times and provide appropriate mitigations.

Recreation

The NOP states that the DEIR will describe the environmental setting for parks and recreation, discuss the potential for increases in the use of non-Stanford recreation facilities so that substantial impacts could occur, and assess whether the construction of any proposed recreational facilities would have a significant effect on the environment. The DEIR should also address impacts and appropriate mitigations for impacts on City park and recreation facilities including available parking, over-use of recreational facilities, parks, open space trails and habitat. The study should include impacts to city recreational programs, including youth camps and classes resulting from an increased number of Stanford campus residents and employees. Will the soccer field at El Camino Real and Page Mill Road be preserved long term?

The Stanford application for the 2018 General Use Permit states that due to the size of the district and regional parks (Foothill Park/Open Space Preserve, Baylands Nature Preserve, and Pearson-Arastradero Preserve), increased visitor ship is less likely to lead to substantial deterioration. The application refers to the low increases in visits per acre for district and regional parks shown in Section16, Table 7 to demonstrate that such projected increases in visits per acre are negligible given the size of the parks. The City of Palo Alto disagrees with these statements because -- although the open space preserves are large -- the areas where people actively recreate are a very small percentage of the entire preserve area. The impact of concentrating more people into these areas should be studied and identified impacts should be addressed with appropriate mitigation.

In Section 16, Parks and Recreation Analysis, of the application materials, Stanford includes a section assessing recreation impacts on nearby public park and recreation facilities located in the City of Palo Alto focusing on the College Terrace neighborhood. The city notes that the number of visitors per day cited (41 visits to Foothills Park, 32 visits to the Baylands, and 27 visits to the Pearson Arastradero) clearly demonstrate that visitation to parks by Stanford campus residents is not limited to the nearby College Terrace parks, and appropriate mitigation should include a larger area. Please consider whether provision of funding for acquisition of new parkland (in addition to funding to address impacts on existing parks) would address identified impacts.

The premise of the 2018 GUP involves concentration of uses within the core campus, increasing the density of the population within the academic growth boundary and requiring new construction that will reduce open space from 15.1 acres/1000 in the Fall of 2018 to 12.2 acres/1000 at build out of the 2018 GUP. While infill development is preferable to the alternative, the City requests an assessment of how any changes open space within the Academic Growth Boundary might affect recreational uses/facilities on and off-campus.

Transportation & Circulation

Members of the Palo Alto community appreciate the University's focus on reducing commute trips to/from campus by single occupant vehicle (SOV) during peak commute hours but are increasingly skeptical that the University's trip reduction programs are living up to their promise. We would ask the County to take a hard look at how the "no net trips" goal is structured, starting with the baseline, and including the methodology, reporting, peer reviews, and penalties for not achieving the promised results.

As the basis for this analysis, the DEIR should include the following data collection and background information:

1) Identify peak travel periods for the campus based on vehicle volumes collected across an entire day. Due to the University's unique land use mix, the city is interested in understanding how travel patterns may differ from typical morning and afternoon peak periods. Consider using the 24-hour cordon count data from the most recent version of the *Stanford University Traffic Monitoring Report.*
2) Identify the University's existing and planned primary and secondary transit corridors, especially within the Campus Drive ring-road, as this area is described as limited to most motorized vehicles. Primary corridors should be routes with frequencies greater than 15 minutes in the peak periods.
3) Additional background information is needed on transit serving the University: Include an inventory of applicable local and regional transit lines serving the project area, their ridership, capacity, and utilization.
4) The Marguerite is the backbone of the University's transit system. Please include current performance data such as boardings, speed, and frequency for individual lines.
5) Consider estimating person trip generation and then estimate mode split. Mode split estimates may be important to assist with impact analysis for transit capacity.

Based on information provided in the application materials, the DEIR traffic impact analysis should include the following items:

1) Include intersection, freeway segment, and ramp impact assessment consistent with the latest version of the Valley Transportation Authority's TIA Guidelines.
2) Evaluate impacts to emergency response times.
3) Evaluate transportation-related construction impacts including capacity impacts to roadways.
4) Pending review of daily vehicle volumes, reset the "no net new trips" baseline, as peak hours, periods, and directions may have changed since 2001.
5) Evaluate transit performance and efficiency as it relates to site design, mobility, and access.
    a. Consider setting transit performance metrics such as speed, passenger travel time, boardings/hour. The city is concerned that dispersed development patterns may result in inefficient transit routes
    b. Of the major transit corridors identified, show the location of development areas relative to ¼ mile walksheds around stops. It is unclear whether transit accessibility was considered as a factor when the distribution of growth was proposed.

c. Include a qualitative discussion around the optimal land use and site design principles that support effective, user-friendly, and efficient transit networks. Evaluate the transit system serving the University with these principles.

6) Assess demand, capacity, and utilization of Caltrain servicing the Downtown Palo Alto Intermodal Transit Center in all scenarios. Many peak-period trains already exceed capacity. How will impacts on Caltrain be addressed, and how will current conditions impede the University from meeting its TDM goals?
7) Assess demand, capacity, and utilization of connecting transit services at the Palo Alto Intermodal Transit Center (PAITC). Consider requiring improved circulation and access to the transit center for transit vehicles as a prerequisite for additional development. Transit service would be greatly enhanced with improved access from El Camino Real.
8) Assess the performance, capacity, access, and operations of transit, bicycles, and pedestrians the Palo Alto Intermodal Transit Center (PAITC). Include capacity assessment for bus bays, layover facilities, and potential operational impacts to other transit providers using the PAITC.
9) Evaluate the relationship between mode and distance travelled to the University. Similar recent evaluations have shown persons who travel 3-5 miles may be the most likely to drive, but are still within biking distance of their destination.

When evaluating the "no net trips" methodology, please account for lengthening of "peak" traffic conditions as the University shifts more and more trips to traditionally off-peak or shoulder periods. Also consider ways to simplify the accounting process and make the annual counts and calculations more transparent to the public.

The traffic analysis should also study the extent to which Stanford commuters are avoiding cordon counts by parking on local streets in adjacent city neighborhoods. The DEIR should assess the magnitude of this practice, and propose a realistic program for addressing these "hidden" vehicle trips and the neighborhood parking problems they create.

The DEIR should identify critical intersections on bicycle routes that currently have inadequate integration of bicycle facilities and determine needed improvements to facilitate the No Net New Commute Trips program going forward. This should include an evaluation of Stanford population's use of these locations and their impact on the need for improvements.

The City of Palo Alto appreciates the University's proposal to support the City's Safe Routes to School program via "walk and roll" improvements needed for Escondido and Nixon Elementary Schools. To continue this cooperative effort, the City would ask that the DEIR study

the impacts of the 2018 GUP on other school routes and expand their support to include improvements needed for Terman and Jordan Middle Schools and Gunn High School.

Finally, if the County seeks to off-set trips that cannot be reduced by requiring payments to agencies or organizations like the Palo Alto Transportation Management Association, these should be negotiated in advance, and not on an annual basis when we learn whether the University has or hasn't met its goal. This is because successful TDM programs require thoughtful planning and consistent funding; they cannot be funded on an ad hoc or intermittent basis.

Other Issues

There are a number of issues that warrant discussion outside of the EIR process and the City would be interested in discussing these with County representatives as the Draft EIR is being prepared. These include several issues identified in the comments above: upstream detention of storm water flows; compensation for Stanford-related impacts to City parks and recreation facilities; support for pedestrian and bicycle linkages; and support for transit services/access improvements including the Palo Alto Intermodal Transit Center and TDM programs. These issues also include extension of the University's 25-year foothills protection commitment, "fair share" contributions to neighborhood Residential Preferential Parking (RPP) programs, the project's proposal to provide below market rate housing, and the opportunity to execute a transfer agreement for the next Regional Housing Needs Allocation (RHNA) cycle similar to the agreement that was negotiated concurrent with the 2000 GUP.

Thank you for the understanding you have shown the City in providing time for the preparation of these responses. We encourage County staff to contact the City with any questions you might have or information you might need during the environmental review process. If you have any questions regarding these comments please reach out to me or Hillary Gitelman, Director of Planning and Community Environment, at (650) 329-2321 and Hillary.gitelman@cityofpaloalto.org.

Sincerely,

Mayor H. Gregory Scharff
City of Palo Alto

CC. Santa Clara County Supervisor Joe Simitian
Palo Alto City Council Members

James Keene, City Manager
Jean McCown, Stanford University Director of Community Relations
Catherine Palter, Stanford University Land Use and Environmental Planning
Kirk Girard, Santa Clara County Director of Planning & Development
Hillary Gitelman/Margaret Monroe/File