COMMENTS PREPARED IN RESPONSE TO THE NOTICE OF PREPARATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR UCSC'S 2020 - 2040 LONG RANGE DEVELOPMENT PLAN (LRDP)

Dear Erika Carpenter;

Thank you for the opportunity to provide our comments on the 2020-2040 Long Range Development Plan (LRDP) Environmental Impact Report (EIR). In our view, the proposed increase in student enrollment will have numerous significant impacts on both the UCSC campus as well as the surrounding community.

In fact, the many unmitigated and insufficiently mitigated impacts caused by enrollment growth under the current LRDP justify a moratorium on future enrollment increases until the needed on-campus infrastructure and off-campus mitigations are provided.

However, as a minimum, the LRDP EIR needs to include a complete and adequate analysis, based on substantial evidence, of the LRDP's potential environmental impacts, the imposition of feasible mitigation measures to reduce the potential impacts to a less than significant level, and detailed consideration of reasonable alternatives. The purpose of the comments provided below is to help achieve these objectives. We hope and expect the University to fully consider and respond to them in the Draft EIR and to revise the draft LRDP as appropriate.

PROJECT DESCRIPTION

- The DEIR should specify the total amount (in acres or square footage) of the campus currently developed with structures and the total land area to be developed under the proposed LRDP for each of the potential uses.
- The 2020-2040 LRDP DEIR needs to identify the role of the Coastal Commission in the adoption of the LRDP for the 2300 Delaware Avenue facility. The relevant policies from the City of Santa Cruz's Local Coastal Program (LCP) should also be discussed and any inconsistencies identified and mitigated.
- -The Notice of Preparation (NOP) states that "... natural space would protect wildlife corridors and scenic views". On page A-5 "natural space" is defined as "land preserved as open space to maintain special campus landscapes due to scenic value, special vegetation, and wildlife continuity." However, the map in Attachment C depicts "Potential Future Roadway" and "Potential Primary Roadway" through lands the Open Space lands designated "Natural Space" and "Campus Natural Reserve". The EIR needs to clarify this apparent inconsistency in the

Project Description. The Project should include a map clearly depicting the boundaries of the City of Santa Cruz in the north campus area.

AESTHETICS

- The 2020 2040 LRDP DEIR should contain simulations of possible building masses at all the sites identified for development in the LRDP. Using existing buildings on campus, general mass and scale parameters should be prepared and applied in analyzing the potential aesthetic impacts of the Plan in the various areas slated for development. Since the proposed LRDP land use map designates specific areas for housing and academic uses and the Draft LRDP projects the amount of square footage for each of them, an analysis of the potential aesthetic impacts of structures in these areas is not speculative and should be provided.
- The DEIR should include mitigation measures to minimize the loss of trees, particularly those with special aesthetic and biotic value. The DEIR should contain a definition for "significant trees" based on size, type, visual characteristics, etc. and enumerate how many such trees (as well as non-significant trees) will potentially be lost in each area proposed for development.
- Portions of campus are visible not only from the City but also from adjoining areas of the County, including the north coast and through the Highway 1 corridor east of the City of Santa Cruz. These vistas are important and should be analyzed in the LRDP. Potential visual impacts to Empire Grade and other applicable County General Plan-designated scenic County roads, as listed in Policy 5.10.10 of the County General Plan, should be addressed in the DEIR, with mitigations proposed as appropriate. Special attention should be paid to the potential visual impacts from the proposed development, especially in the lower campus, that could impact views from off-campus vantage points. Photo simulations showing the visual impact of all significant new proposed development as viewed from various public roads and other viewpoints should be included in the DEIR
- The NOP indicates that the EIR will evaluate the "potential changes in the visual characteristics and quality of the main residential campus and westside research park and surrounding area." It does not specify that the DEIR must also evaluate the potential impacts in visual character and quality to the surrounding area that will result from the development proposed in the Draft LRDP. This includes west-campus, the development in the previously designated campus habitat reserve at the main entrance, etc.

AGRICULTURAL RESOURCES – CONVERSION OF FARMLAND

- Continued development of the campus may reduce the viability of maintaining a grazing program, an important historical agricultural practice on campus. This should be analyzed and any issues that arise should be mitigated.
- The Draft Land Use Plan in Attachment C of the NOP shows Employee housing development in a portion of the County's Local Coastal Program (LCP) area, which is currently designated as Agricultural Land. The EIR should be consistent with the proposed Land Use Plan with the Coastal Commission approved County LCP as well as the potential impacts of converting this land to non-agricultural uses.

AIR QUALITY

- The 2020-2040 LRDP DEIR should include a worst-case analysis of all the emissions that might result from development and construction under the proposed 2020-2040 LRDP.
- The air quality analysis should include the impacts resulting from off-campus traffic, not only from the increased campus growth provided for under the 2020-2040 LRDP but the additional growth induced by the campus growth (the multiplier effect).
- Given the current high traffic volumes on High Street, Storey, Bay, Mission, Western, and King that will increase substantially under the proposed LRDP, the DEIR should consider the potential public health impact on nearby residents, and specifically on Westlake and Bay View schools, from the increased air emissions resulting from this increased traffic.
- The DEIR should ensure that the analysis of traffic impacts is consistent with the analysis of air pollution impacts.
- On page B-1 of the NOP, the University acknowledges that construction will require additional
 energy and result in significant increases in greenhouse gas releases. However, the Campus
 Sustainability Plan contains a commitment to achieve net-zero emissions for all new capital
 projects. The EIR needs to reconcile the differences between this commitment in the Campus
 Sustainability Plan.

ODORS

- Given that manufacturing is an allowed use at the 2300 Delaware Avenue Facility and such activity could generate odors, the DEIR should consider this potential impact and include a mitigation measure prohibiting the location of any odor generating use at the site.

BIOLOGICAL RESOURCES

- The analysis of potential biotic impacts of the LRDP should include detailed and area-specific consideration of habitat connectivity issues.

SPECIAL STATUS SPECIES:

- UCSC's campus contains many special status species. These include species identified by Roy Buck in surveys cited in the 1988 LRDP & the 2005 LRDP. All species identified as sensitive in previous EIRs for all projects at UCSC should be specifically reviewed in the Draft EIR and any inconsistencies fully explained.
- A number of species previously identified as sensitive have disappeared from UCSC; analysis of these campus extinctions should be included in the LRDP DEIR including a discussion of the reasons for the disappearance of these species and mitigation measures to assure that similar results will not occur with additional campus development.
- O Baseline surveys conducted over a full year and no more than one year old should be completed for all sensitive species and should include population numbers as well as distribution. The environmental analysis also should include identification of critical population numbers for the sensitive species and mitigation measures where appropriate to ensure that future campus planners prevent sustainable thresholds from being exceeded.
- Special attention should be given to the cave organisms endemic to the Empire Cave System. Experts in these organisms are associated with the California Academy of Sciences; they have expressed concern with regard to campus activities, including changes in hydrology that could alter moisture and humidity levels critical to the sensitive species. Also, the Pacific Giant Salamander population in that cave system may be a distinct race or subspecies, pending scientific analysis: this species should be included in the LRDP DEIR analysis. Baseline population studies should be completed to detect the abundance, distribution, and health of these species. The environmental analysis should include identification of critical population numbers for these species and mitigation measures where appropriate to ensure that future campus planners prevent sustainable thresholds from being exceeded.
- Other sensitive species that require analysis include mountain lion, raptors, grasshopper sparrow, dusky footed woodrat, red-legged frog, and Ohlone tiger beetle.
 Baseline surveys for these species should include nesting pair numbers and location

for bird species, and corridor use for mammals, red-legged frog, and the Ohlone tiger beetle. The environmental analysis should identify critical population numbers for the sensitive species so that future campus planners can prevent sustainable thresholds from being exceeded.

- SENSITIVE HABITATS:

- The DEIR should include a detailed but comprehensible definition (including scientific citations) for "sensitive habitat" and the sensitive habitat types.
- The following sensitive habitats should be included: purple needlegrass stands, seeps, and springs, coast live oak woodland, dwarf redwood forest, Shreve oak forest, freshwater wetland, wet meadow, and caves. These habitat types have variously been designated by UCSC, the California Department of Fish and Wildlife or local biologists as requiring CEQA analysis.
- Cumulative impacts to these habitats in the region should be analyzed with regard to potential off-campus development and construction impacts over the timeline of the LRDP.
- Maritime chaparral requires additional levels of analysis. Cumulative impacts analysis should include loss of this habitat throughout the region due to fire suppression as well as development over the timeline of the LRDP.
- The DEIR analysis should identify and propose mitigations for any reduction in the potential to continue the campus' past practices of prescribed fire to manage this and other habitat types because of the increased proximity of students and facilities.
- Ecotones are specific types of habitat for a number of species and require analysis, including baseline studies and system-specific potential for cumulative impacts.
- All sensitive habitats may continue to increasingly be impacted by UCSC's overpopulation of deer. The decimation of forest understory may lead to increased erosion and sedimentation of surrounding wetlands and watercourses. Deer overpopulation is triggered by access to irrigated landscaping during the summer months and because of a lack of predation by mountain lions, which are driven away by human encroachment on natural habitat. The Campus has access to studies by its own Natural Reserve on impacts of deer overpopulation; moreover, it has made several attempts to plan for this crisis. Increased development may lead to additional impacts to sensitive habitats and species in and around UCSC (including on adjoining land set aside for conservation of these) by deer overpopulation. These potential impacts should specifically be

identified and analyzed in the DEIR. A baseline inventory of forest understory and the deer population is required to adequately assess impacts by additional campus growth. Fecal coliform bacteria levels resulting from deer overpopulation threatens surface and groundwater quality and should also be enumerated in a baseline study. Cumulative impacts analysis should include the potential for additional build-out under the County and City's existing general plans and the potential for that to further increase the effects of deer overpopulation. While deer are not themselves a special status species, the potential/y significant impact of their overpopulation on special status species justifies analysis in the DEIR

- Campus development has failed to adequately plan for or mitigate the profusion of ad hoc pedestrian and bicycle trails that connect buildings and illegal homeless encampments in campus natural areas. Recreational use of the natural areas of the campus has increased with additional student population, with off-road bicyclists increasingly using and creating trails for which there is no maintenance. These trails degrade sensitive habitat and further imperil at-risk species. In the past, the campus has been largely unable to fund activities outside of the immediate building envelope because of perceived limitations to funding. A baseline study of these trails is required in the DEIR as well as an analysis of their potential impacts. This should include the projection of additional trails that are likely to occur because of the campus growth proposed by the proposed LRDP.
- o Increased campus growth will also increase the chance for the further introduction of non-native, invasive species including plants, animals, and pathogenic microorganisms (e.g., sudden oak death). A baseline of existing levels of impact from these species should be completed to inform an analysis of the potential impacts from additional introductions and/or disturbances that will allow for more invasions. The DEIR must include effective mitigation measures to prevent any further introduction of invasive species to the campus resulting from the proposed LRDP
- Recent studies indicate potentially significant impacts due to nitrogen from automobile exhaust on adjoining ecosystems. These impacts include increased growth of weeds that have impacted sensitive species. The campus includes soils that are very low in nitrogen so that additional nitrogen may constitute a significant threat to species associated with those soils. A baseline of atmospheric nitrogen deposition in sensitive habitats needs to be completed to inform an analysis of the potential for additional impacts associated with campus growth.
- o Campus growth into adjoining natural areas will require additional fire safety measures which may entail additional fire breaks, vegetation clearing, etc.. The

DEIR must analyze campus-wide impacts of fire safety measures and their cumulative impacts on sensitive species and habitats.

- WETLANDS:

The project description in the NOP neglects to mention several areas of jurisdictional wetlands; a campus-wide baseline study delineating wetlands should be completed and summarized in the draft EIR Furthermore, since development proposed by the draft LRDP, including runoff from roads and parking lots, may create additional jurisdictional wetlands, the Draft EIR must analyze this potentially significant impact and provide adequate mitigation measures. In past projects, catchment basins constructed to prevent runoff have become filled with potentially polluted sediments and often have not been maintained so that these polluted sediments are then transported downstream in the water bodies they were meant to protect. A mitigation measure proposed that includes basins should detail how these will be maintained in financial, technical, and regulatory frameworks as informed by past practices, including similar projects that have been successful.

- NATIVE FISH, WILDLIFE CORRIDORS, NURSERY SITES

- Wilder Creek contains resident and migratory native fish directly downstream of the proposed campus development that will impact the Cave Gulch drainage. A baseline study of the hydrology that affects Wilder Creek from UCSC is necessary to determine the degree of impact to this important fish population in the Draft EIR's analysis of the proposed project's potentially significant impacts on these populations.
- o The Draft EIR should analyze whether the UCSC upper campus contains corridor habitat for Marbled Murrelet, which may pass over the band of native habitat when traveling between the ocean and old-growth redwood groves at Henry Cowell State Park. If such habitat is found to exist, the Draft EIR should contain mitigation measures to ensure its protection.
- In order to ensure the accuracy of data collected on wildlife species, surveys using radar or other sensitive detection devices should be employed to establish baseline use by these species.
- O Proceeding along the spine of Ben Lomond Mountain from the City of Santa Cruz to the Lockheed site, it is evident that there are very few wildlife corridors connecting the east and west slopes, including substantial protected natural areas. The upper campus of UCSC may provide the most substantial corridor between Henry Cowell State Park and Wilder Ranch State Park. A landscape-level baseline of wildlife corridors for mountain lions, deer, and mesopredators needs to be completed in order for the Draft EIR to adequately analyze the impacts of the proposed expansion of development northward.

- A baseline study is required to inform the analysis of the impacts of sedimentation and altered hydrology on the wildlife corridors for cave organisms and the Pacific Giant Salamander between the caves of the Empire Cave system.
- UCSC contains nursery sites for a number of endemic cave organisms, the Ohlone tiger beetle, and a number of sensitive raptors and other bird species. A baseline of these should be completed to inform the analysis of the proposed project's potentially significant impacts on these species.

- HABITAT CONSERVATION PLAN

 The University will be required to prepare a Habitat Conservation Plan (HCP) as part of the LRDP process. The DEIR should discuss the status of this HCP and how it will relate to and be incorporated in the LRDP.

- CONFLICT WITH HCP:

As detailed above (and below), campus growth will impact adjoining protected areas by increased deer herbivory, the spread of non-native, invasive species, changed hydrology, deposition of nitrogen associated with vehicle exhaust, and proliferation of ad hoc and recreational trails. All of these impacts could affect provisions in the HCP and therefore require analysis in the Draft EIR.

- SENSITIVE NATURAL COMMUNITY:

o In analyzing the potential impacts of the proposed LRDP on sensitive natural communities, their effect on the adopted Sensitive Habitat maps and General Plan policies of the County need to be identified and mitigations proposed.

- 2300 DELAWARE:

- o The DEIR should analyze how the LRDP may impact Antonelli Pond. The DEIR should evaluate the potential impact from the use of chemical fertilizers and pesticides and require, as a mitigation, avoidance of such chemicals.
- One of the planning principles in the NOP is the commitment to "preserve open space to maintain special campus landscapes due to scenic value, special vegetation, and wildlife continuity". The DEIR needs to evaluate the potential impacts of the construction and implementation of developments proposed in the draft LRDP on wildlife movement and fragmentation of habitats and propose mitigations that provide specific protection. The Draft EIR should also discuss the consistency of this planning principle with the amount and location of development proposed in the LRDP Land Use Map.

CULTURAL RESOURCES

- The 2020-2040 LRDP DEIR should analyze the potential impact of nearby on and off-campus developments on on-campus archeological, historical, or cultural (tribal disputes are of particular concern) resources.

GEOLOGY

- UNIQUE GEOLOGICAL FEATURE:

- Karst topography that supports the extensive Empire Cave system is inextricably linked with campus hydrology. In order to establish a baseline for the links between the campus and the cave system, the following studies need to be performed and made available as part of the Draft EIR: die testing, seasonal flow monitoring, water quality, sedimentation rates, residence time, rock dissolution rate, and humidity.
- o The DEIR should recognize past failures to address the dangers of building on the campus, including the experience that led to the pumping of ∼200 cubic yards of concrete into a void beneath Applied Sciences during the construction of that facility. A baseline would include collapse rates. The costs to date of mitigating the potential for collapse should also be included. The DEIR should expressly indicate the amount of uncertainty and the potential risks involved with campus construction in and around karst areas.

- SOIL EROSION AND LOSS OF TOPSOIL:

• A thorough baseline of existing rates of soil erosion on the campus is necessary to adequately analyze the potential impacts of development proposed in the LRDP.

EROSION

- The 2020-2040 LRDP DEIR should contain a detailed evaluation of potential erosion impacts in each specific area proposed for development under the LRDP.
- Construction creates the potential for significant soil erosion. This should be evaluated.
- An increase in impermeable surfaces (roofs, walkways, roadways) results in increased runoff and potentially increases erosion, which should be evaluated in detail in the DEIR, including if applicable any effect on off-campus properties.

HAZARDS & HAZARDOUS MATERIALS

- The baseline fire risk rate should be assessed by mapping historic fires. The current baseline fire risk should be assessed also by using fire models in conjunction with consultation with CalFire. The baseline data should be used to inform the analysis of the potential impacts of proposed campus development on fire safety.
- Given the ever-increasing risk of fires in California, particularly in densely forested areas, the University must consider emergency access in their plans for enrollment growth and development. Because there are only three viable ways to get off campus (Western Ave, Bay St., and High St.) which are all already gridlocked during certain periods of the day, UCSC is already vulnerable to inept fire-safety routes. With increased populations on campus, the LRDP EIR must identify and analyze evacuation routes in the case of a natural disaster, heeding the advice of safety experts, and evaluate the potentially significant impacts.

DRAINAGE AND FLOOD CONTROL

- The DEIR should include Federal and State regulations for wastewater management and evaluate UCSC's current level of compliance. The Draft EIR should include a mitigation measure to prohibit construction or additional enrollment, or staff or faculty hiring until the impacts of current wastewater and runoff are assessed and adequately mitigated.

STORM DRAINAGE

The drainage analysis in the 2020-2040 LRDP DEIR should be specific and should not simply identify the need for additional drainage plans. Moreover, it should contain specific performance measures to ensure that any potentially significant impacts are reduced to a less than significant level.

LAND USE PLANNING

- The evaluation in the DEIR of potential conflicts between development under the proposed LRDP and related City and County plans should contain a detailed analysis of the relationship between the proposed development and the specific policies in the local general plans, climate action plans, and other relevant plans.
- The DEIR should address the role of the California Coastal Commission and Coastal Act policies as they impact the proposed LRDP.
- The DEIR should analyze the consistency of the development proposed in the draft LRDP with existing UCSC planning and land use policies and guidelines regarding

sustainable development, including but not limited to the UCSC Campus Sustainability Plan, UC Sustainability Policy, and the prerequisites for the Laboratories for the 21st Century (Labs21) and LEED IV.

On page A-4 of the 2020 Notice of Preparation, UCSC acknowledges the differences between the land use categories identified in the 2005 LRDP and the current 2020 NOP. The University claims "Under the proposed LRDP, these types [those identified in the 2005 LRDP] of land use categories would be maintained, but have been further refined through the LRDP planning process to reflect campus needs and functions today." Notable differences include the exclusion of any area that is "protected from development" or a "habitat reserve". The Draft EIR must state the specific differences between the two LRDPs and specify the potential for development in the newly-defined "Campus Natural Reserve and Open Space" – neither of which include an explicit exemption from development under the 2020 -2040 LRDP. In addition, the Draft EIR must identify and analyze the potentially significant impacts from development in these formally protected areas.

NOISE

- Construction proposed in the Draft LRDP in west-campus will create an unprecedented intrusion of noise into a residential neighborhood, i.e., the Cave Gulch Neighborhood. The noise is likely to continue for several years. The DEIR must evaluate the potential significance of this impact and propose adequate mitigations to reduce this impact to a less than significant level.
- The location of recreational facilities, housing, and academic buildings as proposed in the Draft LRDP will significantly increase the current number of hikers, walkers, bikers, etc. to the campus. This will likely increase the amount of activity and noise generated by these individuals. The DEIR should evaluate this impact.

POPULATION & HOUSING

- The Notice of Preparation indicates that the DEIR will analyze the increase in the "regional" population resulting from the Plan's implementation. This is inadequate. Given the already overwhelming impact that the University is having on the population in the City of Santa Cruz and, to a lesser extent, the County of Santa Cruz, the DEIR must evaluate the impacts on the City and County both separately and combined. In addition, this analysis should not only include direct campus growth, but the indirect community growth induced by the campus growth (the multiplier effect) and be both comprehensive and detailed.

HOUSING

- In the NOP the University commits to housing one-hundred percent of the net growth of students on-campus under the proposed LRDP. The 1988 LRDP contained a commitment to house 75% of the new students on-campus. At the end of the LRDP's term, the percentage of students housed on campus had not increased. A policy commitment, such as the one proposed, is insufficient to ensure that significant impacts from the housing of new students off-campus won't occur. The provision of on-campus housing must be tied to enrollment levels so that enrollment cannot increase beyond certain levels until identified amounts of housing are provided. The Comprehensive Settlement Agreement approved under the current LRDP includes this binding commitment and it has been implemented successfully. In order to ensure that the potentially significant impacts of housing net new students off-campus are avoided, the Draft EIR needs to include a mitigation measure that ties any actual enrollment growth, and its timing, to the provision of already available on-campus housing.
- The 2020-2040 LRDP DEIR should contain a detailed analysis of the on and off-campus housing impacts of the proposed LRDP, for students, faculty, and staff. It should include consideration of potentially significant impacts from the campus community as well as the increased housing demand induced by campus growth. The increased housing demand will have physical environmental effects both on and off-campus. Moreover, since the demand for housing impacts the price of housing, which in turn impacts the amount of housing constructed in a community, there is a direct nexus between the proposed LRDP and housing prices. The DEIR should evaluate this nexus and identify mitigations to address its negative effects.
- Housing demands in the City of Santa Cruz have grown steadily and made housing unaffordable for an increasingly large fraction of the non-University population. The result has been crowding in houses, changes in the character of neighborhoods, and deterioration of the quality of life for families. Mitigation of these impacts must be identified, including providing housing for all new students (as described above) as well as for faculty and staff through specifically identified University-funded programs, subsidies, land contributions, and other measures.
- On page A-4 of the NOP, the University states that it will include employee housing in places that will allow residents to "strategically access community resources". We ask that you demonstrate this. The Draft EIR needs to define and provide examples of strategic access to community resources, and identify which community resources will be accessed, and the impact on those community resources from the increase in employees and students. This evaluation should include an analysis of potentially significant impacts from the increased access and use, including traffic, aesthetics, and biology.

On page A-4 of the NOP, the University states that it "plans to accommodate 100% percent of the increase in students and up to 25 percent of the increase of...anticipated..faculty/staff members in on-campus housing." However, the implementation of past LRDP's have fallen short of these goals, with the explanation that because campus housing is "self-funded, adequate demand must be substantiated to produce on-campus housing". If this is the case, the University must identify through revisions to the draft LRDP or as mitigation measures in the LRDP EIR, the resources, including funding, demographic information and projections, that will substantiate this growth. The LRDP EIR must include the mitigation measure of providing critical infrastructure, such as housing and academic buildings, prior to enrollment increases because this measure is feasible and necessary to adequately reduce the impact.

RECREATION

- On page B-2 of the NOP, under "Recreation", the University acknowledges that the DEIR will evaluate the potential of the implementation of the proposed LRDP to increase the use of current athletic and recreational on-campus facilities, resulting in a "substantially and adversely affected" condition. Additionally, the NOP states that the EIR will evaluate "whether the construction and/operation of any additional modified recreational facilities resulting from the implementation of the LRDP could result in similar effects." However, in Attachment C, the map does not include any additional recreation facilities and instead removes a "PE (Physical Education and Recreation)" facility that is identified on the west side of the campus in the 2005 LRDP Land Use Map. While the proposed Land Use Map shows a large area on the east side of campus designated for recreation, it isn't clear whether this is an expansion of the existing recreation area or whether additional facilities are planned in this area. Additionally, the DEIR should identify what new recreational facilities, if any, are planned, and where they and additional recreational services will be located. The Draft EIR needs to analyze the potentially significant impacts of the construction and implementation of the proposed facilities and services.
- If the proposed LRDP does not anticipate an expansion of on-campus recreational facilities, the DEIR should evaluate the potential impact of proposed growth on community recreational resources and propose adequate mitigations.
- The 2020-2040 LRDP DEIR should consider opening recreational facilities at 2300 Delaware Avenue and, if there are no recreational uses intended under the proposed LRDP at 2300 Delaware, the Draft EIR needs to analyze the potentially significant impacts of the lack of recreational facilities on the surrounding community.

TRAFFIC & SAFETY

- The DEIR should assess traffic and safety potentially significant impacts of construction proposed in the draft LRDP on the campus, taking into account VMT, congestion, and environmental (visual, noise, etc.) disruptions.
- The Notice of Preparation contains information regarding the location and necessity of new roads to "improve circulation". As a result, the DEIR should contain a detailed analysis of the potentially significant impacts of these roads not only on traffic and public safety but on other campus resources, such as wildlife, vegetation, erosion, etc.
- The 2020-2040 LRDP DEIR should analyze in considerable and specific detail potential impacts of construction and implementation of the proposed LRDP on Highway 1 traffic, major County arterial intersections, as well as intersections in the City.
- VMT impacts are not directly proportional to the number of trips and should be calculated by type of vehicle, travel speed, and stops. This should be done fully considering size, acceleration during a level, downhill, and uphill grades, timing, weather (more students ride the buses during rainy weather), and specific roads. The direction of travel on grades, the width of the road at stopping points, and other factors significantly affect traffic impacts. The DEIR should incorporate these factors in its analysis of traffic impacts. Baseline traffic data should be collected at different times of the year and days of the week.
- The DEIR should consider that all data on traffic impacts are consistent with the air quality findings.
- Additionally, the DEIR should consider UCSC initiatives to "Reduce commute travel mode impacts relative to a 2017 baseline by reducing Scope 3 commuter greenhouse gas emissions 10 percent by 2022; reducing commute vehicle miles traveled (VMT) five percent by 2022, and reducing per capita parking demand 10 percent by 2022." (UCSC Campus Sustainability Plan) The Draft EIR should include mitigation measures to ensure the successful implementation of this initiative.
- The Notice of Preparation identifies that the EIR will assess the need for "enhanced alternative transportation throughout the main residential campus". However, the Draft EIR must address the need for alternative transportation beyond the main residential campus. For example, additional Metro buses will be necessary to accommodate peak loads, and it will be important to perform an hour or even 30-minute interval analyses in the DEIR of the impacts of additional students, staff, and faculty traveling to campus. And all other alternative transportation options should be assessed in similar detail.

- Traffic eastbound-southbound on High Street in the afternoon has long been a motivation for drivers to seek alternative routes, specifically, Bay Street and some of the other Westside streets such as Escalona and King. The lengthy delay in reaching the Mission and King intersection on both the High Street route and along Mission will further encourage travel on Laurel and Walnut through the downtown area and onto Broadway and Soquel for eastbound traffic. Detailed computer modeling will be necessary to adequately analyze and accurately characterize these impacts and should be included in the DEIR.
- Traffic northbound on Empire Grade to the proposed new Cave Gulch Bridge entrance will include construction vehicles and construction and maintenance materials deliveries. Heavy vehicles carrying capacity loads traveling up the steep grade to the proposed Cave Gulch Bridge entrance will sometimes have velocities as low as 5 or at most 10 mph. This will make the entrance less attractive to all users since the mile from the West Entrance to the proposed new Cave Gulch Bridge Entrance will then take between 8 and 12 minutes to travel as compared with the 40 mph speed limit travel time of approximately 1.5 minutes. This slow traffic should be analyzed in terms of the actual projected usage of this new entrance.
- The safety of the road between the West Entrance and the Cave Gulch Neighborhood is currently considered unacceptable by area residents. Numerous vehicles park along the roadway on both sides and directions of travel each year. There are a number of reasons for this dangerous condition, including the curves and incline as well as the very limited surface area adjacent to the road over most of this 1+ mile distance. Numerous heavily-laden vehicles will significantly increase the hazardous travel conditions resulting in a dramatic increase in accidents, injuries, and, perhaps, fatalities. It is unreasonable to expect the present road to support the proposed increased traffic without considerably increased safety hazards as well as vehicle damage to the canyon as vehicles leave the roadway and impact the hillside on the west side of the road or tumble into the canyon on the east side. The potentially significant impacts of development under the proposed LRDP and, particularly the new entrance on Empire Grade, on public safety should be analyzed in detail and mitigations imposed to reduce these impacts to a less than significant level. Increasing roadway width would have significant environmental impacts and should be evaluated thoroughly if it is to be considered as a mitigation.
- The Draft EIR should evaluate the feasibility of a mitigation measure whereby the University would provide alternative transportation to reduce or eliminate increased impacts on traffic. This could include ride-sharing and enhanced access for bikes.
- The DEIR should identify the projected summer school population and evaluate the traffic impacts of this increase, especially since it occurs during the busy tourist season.

- SAFETY:

- O Northbound traffic of heavy vehicles carrying full capacity loads from the West Entrance to the proposed corporate yard and Cave Gulch Bridge Entrance to campus will impose significant weight on the roadway. The downhill lane (east side of road) adjacent to the Cave Gulch Canyon washed out in the early 1980s during a period when the ground was heavily saturated. The stability of the road should be evaluated and necessary improvements should be identified as well as alternatives to the proposed increased uses. The costs of improvements and other mitigations should be identified and be part of the plan itself. Approval of the plan should include approval of the funds for implementation of the mitigations of negative impacts.
- On There are already more than a dozen locations on Empire Grade between the West Entrance and the proposed Cave Gulch Entrance where there is very little distance between the roadway and the edge of the canyon where there are clearly visible cracks in the pavement indicating that the downhill side of the road has sunken or that the earth below has been compacted. These cracks are an ominous foreboding of landslides to come. The addition of numerous heavily burdened construction materials transport vehicles as well as other construction vehicles on the road suggests that the campus planners have simply not examined this road and its capacity to carry more vehicles. There are also frequent tree falls on this road, both closing the road and taking out of service the power and communications lines that run alongside and over it. The DEIR should evaluate the potentially significant impacts of these dangers in light of the growth proposed in the LRDP.
- The geologic underpinnings, the history of slides, the narrowness of the road, the steepness of the grade, and steepness of the slopes above and below the road, and other factors should be thoroughly investigated to determine the suitability of Empire Grade between the West Entrance and the proposed new entrance at Cave Gulch for the increased volume and weight of traffic proposed in the plan.
- O In addition to the above-mentioned impacts, the development under the proposed LRDP, especially during construction, will cause the physical deterioration of City and County roads leading to the campus, with a resulting increase in danger to the public. The Draft EIR should analyze the potentially significant impacts to public safety due to this deterioration of roads. In addition, the costs of improvements and other mitigations should be identified in detail in the Draft EIR and performance measures provided to ensure their implementation. Mitigations in the Draft EIR should require that approval of the proposed LRDP includes approval of the funds for implementation of the mitigation measures.

- Emergency egress for the private school and the neighborhood immediately above the proposed new entrance and road on Empire Grade in the Cave Gulch Neighborhood will be threatened by the planned new uses of the road and should be evaluated in the DEIR.
- Current access to the University via Mission St, Bay St, and High St will not accommodate the increased traffic. University furnished transit must be provided, bicycle access and usage must be increased, and public transit systems must be supported for increased usage. The DEIR should contain specific mitigations including performance measures to reduce the potential impacts to a less than significant level.

HYDROLOGY & WATER QUALITY

- The 2020 2040 LRDP DEIR should contain a detailed evaluation of potential drainage impacts in each specific area proposed for development under the LRDP. On page B-2 of the NOP, the university states that the EIR will evaluate "the potential for construction and operational activities associated with the LRDP to... modify existing drainage patterns." This is inadequate. Given the size and topography of the campus, each drainage area impacted by the LRDP should be analyzed separately and in detail.
- The NOP does not mention specific water quality standards with which the campus is required to adhere; the LRDP DEIR should list all water quality standards applicable to the campus or standards that the campus itself will propose. Additional analysis should include standards developed for municipalities in areas of karst topography as the use of these standards may mitigate potentially significant impacts of proposed campus development.
- The LRDP DEIR should recognize that sinkholes and swallow-holes drain directly into the groundwater; standards for runoff should take into account the potential to pollute and become concentrated in groundwater. This is especially important as the University proposes to use well water as a mitigation for campus growth impacts and campus runoff could impact local water systems.
- Baseline studies of erosion and siltation rates on and off-site should be completed for the DEIR analysis.
- A hydrological model should be prepared for the entire campus and its sub-watersheds to analyze the baseline conditions under various scenarios. This baseline model would be useful in analyzing any impacts resulting from the proposed LRDP. Cumulative impacts are of particular concern in this area and must be addressed in the DEIR.

- Existing methods of draining stormwater from developed areas of campus may be illegal or overstressed; baseline discharge rates from campus including into each individual karst feature should be included in the DEIR. The DEIR should evaluate alternative methods of disposing of stormwater runoff.
- According to the Campus Sustainability Plan, as part of the proposed LRDP planning process, the campus is exploring opportunities for purple pipe (recycled water) connections across campus. Specifically, Porter has installed purple pipe and is ready to utilize recycled water when it becomes available and Kresge is designed to collect stormwater into a treatment facility to feedback into its water closets. The possibility of using these stormwater collection methods should be evaluated on each site proposed for development under the LRDP. In addition, the Draft EIR should contain mitigation measures to ensure compliance with the UC Office of The President's Sustainability Policy Practices Goal to reduce potable water usage by 36% weighted by campus users by 2025.
- Additional sources of pollution would include parking lots, roads, construction sites, and newly constructed facilities (which are sources of heavy metals, according to the EPA). The 2004 Mitigation and Monitoring Report details high levels of toxins from parking lot runoff long after the 'first flush,' which would have carried even higher levels of toxins. The DEIR analysis of impacts as well as the mitigation measures imposed should include citations of reports documenting the efficacy of such an analysis and proposed practices.
- The University has at least three dams near the Arboretum that may trap runoff if either the karst or the manufactured drainages fail to drain them. If these dams do trap runoff, any dam failure may endanger structures and people downstream of them as well as cause significant environmental damage. The DEIR should evaluate this risk and include mitigations to adequately reduce the potential impacts should the failure of a dam occur.
- Because campus development proposed under the LRDP could create potentially significant impacts in the areas surrounding the campus, the DEIR should analyze potential impacts on Cave Gulch Neighborhood groundwater and wells, impacts on Cave Gulch Creek, impacts on Moore Creek, impacts on Wilder Canyon and Wilder Creek, and impacts on streams and creeks on and below the east side of campus.
- Every water quality impact on campus, however slight, contributes to cumulative impacts on water quality in Monterey Bay, which is a Marine Sanctuary. This is a primary natural resource for the community, marine ecosystem, and vital to any economic sustainability. Recreation is centered around the ocean. People of all ages swim and play in the Bay. The DEIR should evaluate and mitigate this cumulative impact.

WASTEWATER

- Additional population growth resulting from growth in the proposed LRDP will contribute to additional wastewater burdens at the municipal treatment plant. The capital plus the operating costs of the additional burden must be evaluated in the DEIR as potentially significant impacts and mitigation measures included to reduce the impacts to a less than significant level.
- Any increase in carrying capacity of the wastewater piping resulting from growth proposed in the LRDP must be determined in the DEIR and the environmental impacts of any construction, as well as the impacts on water leaving the outfall, must be addressed.
- The UCSC Campus Sustainability Plan indicates that the university will meet the UC Office of the President's Sustainable Practices Policy goal to reduce potable water usage by 36 percent by weighted campus user by 2025 from a 2005-2008 baseline. The strategy commits the university to explore the feasibility of all non-potable water sources for the campus as part of the LRDP planning process. The DEIR should discuss the University's efforts to implement this policy and analyze, as possible mitigation measures, feasible methods for achieving the policy's goal.

PUBLIC SERVICES

- The University's growth target in the proposed LRDP would overwhelm the city. The city's ability to provide public services such as Water, Public Works, Police, Fire, etc... to support the additional campus population will be severely taxed. For example, "Student Houses" often require special police attention, landlords often neglect student houses, and student houses are often overcrowded to afford rents. These all tax city services as well as disturb, and in some cases endanger, families living in neighborhoods. The DEIR needs to analyze these potentially significant impacts.
- The Draft EIR should identify the potential impacts from the increased strain on police resources due to the increase in activity that will be associated with the proposed increase in student populations, such as responses to noise violations, public intoxication, etc. Feasible mitigation measures must be provided.

NEW STORMWATER DRAINAGE FACILITIES

 The proposed hydrologic model (above section) should be used to establish acreage figures for any additional stormwater retention facilities. The DEIR should analyze offsite impacts of these retention facilities, including changed hydrology (adjoining areas will be more moist, affecting habitat quality) and new sources of polluted sediment and runoff should these facilities be incorrectly maintained. Such facilities may also attract red-legged frogs; if the water is polluted it would affect the frogs directly or indirectly. These basins may also be sources for the many amphibian diseases affecting red-legged frogs and the Pacific giant salamander. The DEIR should analyze all these potentially significant impacts.

CUMULATIVE IMPACTS

- In Attachment B-2 of the NOP, the University commits to evaluating the "potential for implementation of the LRDP to induce (directly or indirectly) unplanned substantial population growth or displace substantial housing or residents". Given the built-out condition of the City and the likelihood that, if housing is not tied to enrollment growth, an increased number of members of the campus population will live further from campus, the cumulative impact analysis of off-campus impacts should be countywide.
- The cumulative impact analysis in the DEIR should include worst-case assumptions in order to calculate total cumulative impacts.
- The lack of details in the draft LRDP should not result in failure to consider potentially significant impacts even in a Program EIR where information regarding developments proposed in the LRDP is available. For example, total vehicle trips and linear extrapolation of impacts for traffic, drainage, and air quality can be determined based on the NOP and the attached Land Use Map. The Cumulative Impact analysis in the Draft EIR should not understate the draft LRDP's impacts or lead to inadequate mitigation measures.
- The Draft EIR analysis here and throughout should be as specific as possible based on all the information available

SUSTAINABILITY

- According to UC Santa Cruz's Campus Sustainability Plan, UCSC has identified a goal of zero-emissions for new capital projects. The Draft EIR should ensure that this goal is met through the provision of relevant mitigation measures. For example, as of 2018, the UC Office of the President enacted a mandate for the use of all-electric construction equipment in capital projects. The DEIR should include this as a mitigation measure for all construction projects.

GREENHOUSE GASES

- The NOP acknowledges that the DEIR will have to address that the "implementation of the LRDP may result in the generation of additional greenhouse gas emissions during construction and operational activities." The DEIR should document the exact increase in greenhouse gas emissions, the source of the emissions, and state why it would not be feasible to adhere to the UCSC policy of zero-emissions on new capital projects.
- In 2013, the UC adopted the Sustainable Practices Policy which commits UC to emitting net zero greenhouse gases from its buildings and vehicle fleet by 2025. The DEIR should indicate how the university will adhere to this policy.

ECONOMIC IMPACTS

- An EIR must include an analysis of economic impacts where there is a nexus between such impacts and physical impacts. The erosion of the City's tax base resulting from the University's growth under the proposed LRDP due to, for example, the sponsoring of non-education activities on campus without paying the relevant taxes. Streets and parks are deteriorating as a result of this erosion of local tax revenues.
- Another example is the University's purchase of a major manufacturing facility at 2300 Delaware Avenue. When in operation, this facility was one of the largest property taxpayers in the City. It is now off the tax rolls. The University has done nothing to compensate the City for revenue lost. The draft LRDP proposes to expand the use of this facility.
 - As a minimum, the DEIR should consider the economic impacts of the University's expanded use of 2300 Delaware on the decline of the City's streets and parks as a result of inadequate property tax revenues. The Draft EIR should include a mitigation measure to compensate the City for these losses.
- In addition, while the LRDP doesn't speak to additional off-campus acquisitions, it doesn't prevent them either. The Draft EIR should either include analysis of the potential impacts from the use of off-campus properties related to growth projected in the draft LRDP or should contain a mitigation measure to prohibit such uses.
- When selling houses, you have to disclose traffic impacts, the University should evaluate

MITIGATIONS

- The Draft EIR should not use budget limitations for mitigations to determine that a mitigation measure is infeasible. By deciding to grow, the University must recognize its

need to budget sufficiently to adequately mitigate the significant impacts caused by that growth. As a major State institution with a large annual budget, the University must adopt a planning principle that UCSC shall not grow unless it has the budget needed to fully support such growth.

- In order for the Draft EIR to be adequate, it must contain clear, accountable, and measurable mitigations and performance standards. Ambiguous "goals" in previous plans have proven unsuccessful in the past and should not be repeated.
- Mitigation measures included in the DEIR should include timelines for implementation and be tied to enrollment levels. Concurrency requirements that tie growth to implementation of mitigation measures are not only feasible under CEQA but, given the experience in the implementation of some of the mitigation measures under past LRDP EIRs are necessary to assure that the mitigation measures occur at the appropriate time.
- The costs of improvements and all mitigations should be identified and be included in the EIR. Subsequently, approval of the LRDP should include commitments to approve the funds for implementation of the mitigation measures as well as the developments proposed in the LRDP. Thereafter, no approval of any proposed enrollment growth or construction or mitigations should occur without the availability of the funds needed for their implementation.
- The DEIR must include information specifying the timing of mitigations, which should directly relate to the timing of impacts.

ALTERNATIVES

- The Draft EIR should fully analyze the following reasonable alternatives:
 - Several lower enrollment increases should be analyzed 1,000 additional students, 3,000 additional students and 5,000 additional students, and with locating increased UCSC enrollment to other campuses.
 - Providing for the proposed additional student growth by building new campuses in larger communities that can more easily absorb the impacts.
 - O Delaying all additional enrollment and construction of new facilities to support additional growth until all mitigations of existing impacts are implemented.
 - Delaying enrollment increases until the resources are identified and committed to meet 100 percent of the academic and housing needs of students, faculty and staff

SANTA CRUZ CITY-COUNTY TASK FORCE TO ADDRESS UCSC GROWTH

- The No Project Alternative should assume no enrollment growth beyond the 2005 LRDP enrollment level and no increase in the development of campus facilities to support the current campus population.
- There should be a no project alternative that assumes no additional enrollment growth but does include the development of the infrastructure proposed in the 2005 LRDP.

Based on the likely impacts resulting from the implementation of the draft LRDP, which should be documented in an adequate Draft EIR the City-County Task Force once again strongly urges the University to reconsider the 8,500 FTE enrollment increase contained in the NOP and to significantly reduce or eliminate it. However, we expect the University in their preparation of the DEIR to adequately meet the requirements of CEQA and to fully incorporate the comments contained in this letter. Thank you again for your consideration.