

Final
Environmental Impact Report

Campus Master Plan Update

California State University, Long Beach

May 2008

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**California State University,
Long Beach**

State Clearinghouse No. 2007061092

May 2008

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Executive Summary

This Program Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Section 15000 et seq.) to analyze the potential significant impacts associated with the Campus Master Plan project at California State University, Long Beach (CSULB). This Final EIR contains comments and response to comments received on the Draft EIR, which was circulated for public review from on January 15, 2008 to February 28, 2008. The comments and responses to comments are presented in Section 8.0. Substantive revisions and clarifications to the EIR made in response to comments and information received on the Draft EIR are indicated by **shading**, as illustrated in this sentence.

The Project

The State Legislature's commitment to accommodating student demand and providing access to higher education is reflected in the rise in student enrollment throughout the CSU, as well as the University of California, systems. The project is the comprehensive update of the Campus Master Plan for CSULB to accommodate a gradual growth in student enrollment projected to reach 31,000 full-time equivalent students (FTES) within the Master Plan's horizon year of 2020. The Master Plan includes the following facilities and improvements to accommodate this gradual growth in student enrollment while furthering the CSULB aims to achieve greater distinction with strategic priorities of student success, academic quality, service excellence, and campus life and environment.

- Student Services Addition in the center of campus
- Peterson Hall 1 and 2 (formerly Liberal Arts) Replacement project and Liberal Arts Complex in the south part of campus
- Student dormitories and related facilities in the Parkside and Residence Commons Housing complexes in the western part of campus
- A soccer field, track, bleachers, and related sports buildings near the center of campus
- Two new parking structures in the western and southern parts of campus
- Associated infrastructure improvements within the campus

Architectural guidelines and a utility master plan are included. Existing mobility programs will continue.

Master Plan Objectives

The Campus Master Plan will guide future development of the University's main campus by providing a framework for the decisions concerning the allocation and management of resources, capital outlay programs, and construction planning for facilities and improvements needed to accommodate the 31,000 full time equivalent student (FTES) enrollment level. The primary purpose of the Master Plan is to further the University's mission to provide each student the skills necessary to pursue knowledge and to integrate information from various sources by graduating students with highly valued degrees. To that end, the major objectives of the Campus Master Plan include to:

- Share in the need to accommodate the demand for higher education by students in California by providing the necessary facilities and improvements
- Improve, update, and replace outdated, inefficient and obsolete facilities
- Provide high quality services that enhance access and usability
- Maintain and enhance campus open space, character, and the quality of the physical environment

Project Location and Existing Conditions

The CSULB campus is generally bounded by East 7th Street to the south, East Atherton Street to the north, Bellflower Boulevard to the west, and Palo Verde Avenue to the east. Land uses in the vicinity consist primarily of single-family residential areas, but also include multi-family residences, institutional uses, and commercial businesses. Interstate 405 (I-405) runs east-to-west north of the campus, with interchanges at several nearby streets. State Route 22 (SR-22) provides direct access to East 7th Street just southeast of campus. Interstate 605 (I-605) terminates at I-405 and SR-22 east of campus.

Existing campus facilities comprise approximately 4.9 million gross square feet with approximately 2.1 million of assignable square feet. These include traditional academic buildings, administrative offices, a student union, library, bookstore, and food service facilities. The campus facilities also include student dormitories, support facilities, and parking structures.

Master Plan Characteristics

The Master Plan reflects the University's intent to minimize facility growth on the campus perimeter, and is designed to first provide new in-fill development in the interior of the campus and replace existing aged, obsolete, and inefficient facilities. The Master Plan also provides for additional student housing on campus to further reduce commuter trips and new parking facilities to further accommodate student parking needs within the main

campus' boundaries. Existing aged and obsolete buildings will be demolished and replaced with new modern facilities at approximately the same locations, providing program areas required to support the academic plan that cannot be accommodated within existing buildings. Associated infrastructure improvements will be provided as needed throughout the campus.

Open Space: The updated Campus Master Plan maintains open spaces, and protects pedestrian corridors and campus architectural themes. Overall, the Master Plan aims to enhance the University's distinct character, update and expand campus infrastructure, and maintain the quality of the physical environment.

Facilities: The Master Plan provides for comprehensive guidance for physical and programmatic improvements into the future to accommodate 31,000 FTE students. Up to approximately 1.2 million square feet in new or replacement structures are currently proposed to meet this need. Area plans have been identified for more detailed development. These are the Student Services Addition, Liberal Arts Replacement Phase 1 and 2, the Liberal Arts Complex, Student Housing providing more than 2,000 beds, and the Soccer Field and Sports Buildings. Two new parking structures will also be provided.

Mobility: The "buildings in a park" campus configuration creates a pedestrian-oriented environment with automobile and public transportation circulation routes remaining outside the central campus and the major open spaces. The campus core is designed as a pedestrian domain, and service vehicles will continue to use designated service routes. Public vehicular circulation is primarily restricted to the perimeter areas, and secondary access roads provide direct routes to parking, as well as for service vehicles. A high degree of transit access and efficient onsite circulation will be maintained via the campus shuttle system and Long Beach Transit.

Utility Infrastructure Master Plan: A detailed survey of the existing utility systems that serve campus was conducted, including for sewerage, domestic and reclaimed water, electrical, telecommunications, and stormwater. Each utility system was evaluated for capacity, functionality, reliability, ease of maintenance, age, and its ability to serve the present and future campus needs. Alterations, upgrades, and modifications necessary to support new buildings, major renovations, and building replacements pursuant to the Master Plan were identified. Components planned include an upgrade to the Central Plant, upgrades to potable and reclaimed water distribution systems, replacement of damaged or poorly operating systems, and rerouting of utility lines for proposed buildings.

Architectural Guidelines: Architectural guidelines are an integral component of the Master Plan. The guidelines address building siting, outdoor transition, building form, materials, roofs, windows, service, and accessibility.

Environmental Impacts

CSULB prepared this EIR to analyze the potential environmental impacts associated with the updated Campus Master Plan project. In addition, the EIR identifies mitigation measures capable of avoiding or substantially reducing significant impacts. A summary

of environmental impacts, mitigation measures, and a level of impact remaining after mitigation is presented in Table ES-1 at the end of this Executive Summary.

The analysis contained in this EIR uses words “significant” and “less than significant” in the discussion of impact. These words specifically define the degree of impact and parallel language used in CEQA Guidelines. As required by CEQA, mitigation measures have been identified in this EIR to avoid or substantially reduce the level of potentially significant impacts to the greatest extent possible. Certain significant impacts, even with the inclusion of mitigation measures, cannot be reduced to a level below significance. Such impacts are identified as “unavoidable significant impacts.”

Impacts Considered and Found to be Less Than Significant

The analysis contained in the EIR indicates that the project will not result in a significant impact with respect to the following:

- Access and internal circulation, pedestrian circulation, parking, and transit
- Long-term traffic noise and campus activity noise, except for the new soccer field facility
- Police and fire protection services
- Short-term construction-related and long-term water quality
- Carbon monoxide hotspots and consistency with air quality plans
- Consistency with regional plans
- Utilities and service systems
- Aesthetics, light, and glare
- Cumulative effects, other than vehicular traffic, air quality, solid waste, and construction-related air quality and noise
- Growth-inducing and significant irreversible effects

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project (refer to Appendix A). The Initial Study concluded that implementation of the Master Plan will result in either no impact or a less than significant impact with regards to:

- Agricultural resources
- Biological resources
- Geology and soils
- Hazards and hazardous materials
- Land use and planning

- Mineral resources
- Population and housing
- Recreation
- Hydrology

Potentially Significant Impacts that Can Be Mitigated

The EIR analysis identified the following potentially significant impacts associated with the updated Master Plan that can be mitigated to less than significant levels.

- Addition of project traffic at 3 study intersections
- Noise from athletic events at the soccer field facility
- Water use
- Construction related traffic, parking, diesel emissions, and solid and hazardous waste generation
- Archaeological resources

Unavoidable Significant Impacts

The CEQA Guidelines define a significant impact on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance” (Section 15382). In order to approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project against its unavoidable significant effects, and has concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered “acceptable” (CEQA Guidelines, Section 15093[a]).

The EIR identifies the following unavoidable significant impacts associated with implementation of the Campus Master Plan:

- At the time when the campus enrollment level reaches 31,000 FTE students, project-specific and cumulative vehicular traffic impact on one segment of I-405 between Bellflower Boulevard and Lakewood Boulevard, and at 2 study intersections: Bellflower Boulevard and Stearns Street and Bellflower Boulevard and 7th Street since no adequate right-of-way is available to implement identified improvements at these two intersections
- Project-specific and cumulative air quality impact from vehicular emissions
- Cumulative contribution to solid and hazardous waste disposal at regional landfills

- Short-term project-specific and cumulative air quality, noise, and vibration impacts from peak construction day

Beneficial Effects

This EIR identifies the following effects of the Master Plan that are beneficial:

- Sharing in the need to accommodate the demand for higher education by students in California by providing the necessary facilities and improvements
- Improving, updating, and replacing outdated, inefficient and obsolete facilities
- Providing high quality services that enhance access and usability
- Maintaining and enhancing campus open space, character, and the quality of the physical environment
- Protecting open spaces, pedestrian corridors, and campus architectural themes
- Identifying and implementing consistent architectural guidelines
- Furthering the University's mission to provide each student the skills necessary to pursue knowledge and to integrate information from various sources by graduating students with highly valued degrees
- Achieving greater distinction in regards to student success, academic quality, service excellence, and campus life and environment
- Providing a framework for the decisions concerning the allocation and management of resources, capital outlay programs, and construction planning for facilities and improvements
- Providing needed utility improvements
- Providing additional parking facilities on campus to help avoid intrusion of students seeking parking into surrounding neighborhoods
- Providing additional student housing on campus to help reduce commuter trips
- Providing local economic benefit by returning \$4 for every dollar received from the State to support campus enrollment

Alternatives to the Project

The following alternatives to the updated Campus Master Plan considered include the following:

Alternative 1: “No Project” – Continuation of Current Campus Master Plan alternative required by CEQA

Alternative 2: Smaller Facility Development

Alternative 3: More Student Housing on Campus

Among the alternatives considered, none of the alternatives discussed is considered clearly environmentally superior to the project. Each alternative results in potential impacts, with a number of impacts that may be greater and some impacts that may be lesser than those associated with updated Campus Master Plan. Overall, when both direct and indirect impacts of each alternative are considered together, the alternatives are either environmentally comparable or inferior to the project.

Issues Identified During the NOP Process

No areas of controversy were identified during the Notice of Preparation (NOP) process. In response to the NOP, certain issues were raised by public agencies and individuals and these issues are addressed in the EIR as follows:

- Water supply (addressed in Section 3.6)
- Stormwater drainage (addressed in Section 3.5)
- Bicycles (addressed in Section 3.1)
- Vehicular traffic and parking (addressed in Section 3.1)
- Archaeological resources (addressed in Section 3.7)
- Air quality (addressed in Section 3.2)
- Sewerage facilities (addressed in Section 3.5)

Mitigation Monitoring Program

In accordance with CEQA Section 21081.6, a mitigation monitoring program will be adopted by CSULB, if the updated Campus Master Plan is approved. The mitigation monitoring program has been prepared as a separate document and is designed to ensure compliance with the adopted mitigation measures contained in the Final EIR. The program is available for public review prior to the University actions on the updated Campus Master Plan.

Summary of Impacts

Table ES-1 summarizes the environmental effects associated with implementation of the updated Campus Master Plan, the mitigation measures required to avoid or minimize impact, and the level of impact remaining after full implementation of identified mitigation measures.

**Table ES-1
Summary of Environmental Impacts and Mitigation Measures**

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Impacts Considered But Found To Be Less Than Significant (CEQA Guidelines Section 15128)			
Consistency with Regional Plans	The Master Plan has been developed in response to existing and projected demand for University facilities necessary to accommodate the higher education needs of the region's population as mandated by the State Legislature. The Master Plan includes a variety of features that will help reduce the number and length vehicle trips, including more on-campus housing opportunities, preservation of open space that will encourage pedestrian activity, and provision of structured parking. Therefore, the project is consistent with adopted regional plans, including the Regional Comprehensive Plan and Guide (RCPG), Regional Mobility Element/Regional Transportation Plan (RME/RTP), Growth Management Plan (GMP), and Air Quality Management Plan (AQMP).	Impact will be less than significant, and no mitigation is required	Less than significant
Access and Internal Circulation	The primary internal circulation system at the campus will remain in place with implementation of the Master Plan. Access to the proposed parking structures will be provided by the existing internal roadway network. As part of the standard University design process, a site-specific review will be conducted for each of the proposed parking structures.	Impact will be less than significant, and no mitigation is required.	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Pedestrian and Bicycle Circulation	Pedestrians will continue to take priority, and all new facilities will be built pursuant to ADA and Title 24. Disabled parking at structures and surface lots will continue to provide access to the campus core and support facilities. Ramping, when required, will be an integral element of landscaping and buildings to the extent feasible. Seating areas and other pedestrian amenities will be incorporated into new buildings, walkways, and other open areas. Bicycle facilities will be provided, as appropriate. The University will continue to work to minimize conflicts between bikes and pedestrians.	Impact will be less than significant, and no mitigation is required.	Less than significant
Parking	New and existing parking will provide a total of approximately 15,500 spaces. The University currently has a ratio of 2 students per parking space. This ratio will continue to be maintained with the projected enrollment growth. Nonetheless, a mitigation measure will be implemented to address concerns about neighborhood parking issues.	1. The University will consult with the City of Long Beach to examine the feasibility of instituting additional neighborhood parking restrictions in the campus vicinity.	Less than significant
Transit	The projected enrollment growth will result in approximately 122 new transit person-trips in the weekday AM peak hour and 147 new trips in the weekday PM peak hour.	Impact will be less than significant, and no mitigation is required.	Less than significant
Cumulative and Project-specific Long-term Traffic and Campus Activity Noise (except for soccer facility)	At most, the project will contribute 1.5 dB CNEL at 1 of the 93 street segments, and 1 dB CNEL at 5 of the segments. At other locations, the project's contribution to traffic noise will be less than 1 dB CNEL. This contribution will be substantially less than 5 dB CNEL threshold.	Impact will be less than significant, and no mitigation is required.	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	Onsite noise due to the Master Plan will be similar to existing noise levels. Noise from parking structures and mechanical equipment will not exceed applicable standards. The project will not produce a substantial permanent increase in ambient noise in the vicinity above levels existing without the project.		
Police Protection Services	While enrollment growth will incrementally increase demand for police protection services, additional personnel can be accommodated by existing facilities. Enhanced operating procedures, continued campus safety training, and appropriate staffing of the University Police Department will work to minimize increased demand for service. No new police protection facilities will be required.	Impact will be less than significant, and no mitigation is required.	Less than significant
Fire Protection Services	While the Master Plan will contribute to incrementally increased demand for fire protection, enhanced operating procedures, incorporation of required fire suppression and safety features, and continued emergency response training will work to minimize this increase. No new fire protection facilities will be required.	Impact will be less than significant, and no mitigation is required.	Less than significant
Long-term Water Quality	Standard National Pollutant Discharge Elimination System (NPDES) and Standard Urban Stormwater Mitigation Plan (SUSMP) requirements will be incorporated into the final site plan for each individual facility. The University will work to incorporate permeable surfaces into each project, to the extent possible, and will continue to minimize dry-weather flows. Compliance with existing regulations and continued	Impact will be less than significant, and no mitigation is required	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	implementation of programs to improve water quality will ensure that any impact that may occur will be beneficial.		
Consistency with Air Quality Plans	The Master Plan provides for continuing use of campus for educational purposes to accommodate planned future area-wide growth in student populations. The project will increase student housing opportunities on campus, which will work to reduce long commuter trips and area-wide congestion. The Master Plan is consistent with regional growth projections and land use policies, including policies focusing growth and development within urban areas, encouraging infill development, and re-using previously developed urban land. The University implements, and will continue to implement pursuant to the updated Master Plan, numerous programs and policies to improve air quality in the region, including providing preferential parking for carpoolers, operating an on-campus transit system, installation of solar energy arrays, and minimizing energy use through project design. Therefore, the project is consistent with the Air Quality Management Plan.	Impact will be less than significant, and no mitigation is required.	Less than significant
Sewerage Facilities	The project will result in 62,800 net new gallons of sewage per day. The Utility Infrastructure Master Plan includes improvements to accommodate these flows. New and replacement lines are proposed to address root intrusion, cracking, and joint displacement. To avoid potential conflicts with proposed new and replacement structures, rerouted lines will be installed, if necessary. Also, the University will reduce sewage through the use of	Impact will be less than significant, and no mitigation is required	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>water conserving toilet and urinal fixtures.</p> <p>Wastewater will be continue to be conveyed by campus sewers to Long Beach Water Department (LBWD) and Los Angeles County Sanitation Districts (LACSD) lines for treatment at Joint Water Pollution Control Plant in Carson or the Long Beach Water Reclamation Plant. The Joint Water Pollution Control Plant has a design capacity of 400 mgd and processed 310 mgd in January 2008. The Long Beach Water Reclamation Plant processed 14.5 mgd during that month, and has a design capacity of 25 mgd. These facilities have capacity to treat new wastewater flows from the University.</p> <p>The University will obtain approval prior to any sewage system or other improvements within the sewer easement and/or over or near any LACSD's sewer. Compliance with existing requirements to obtain this authorization will ensure that the Districts' sewer facilities will not be adversely affected.</p>		
<p>Domestic Water Distribution Systems</p>	<p>The Master Plan is projected to result in a net new use of 66,120 gallons of potable water per day. The University will continue to work to increase the use of reclaimed water through expansion of recycled water distribution systems on campus. The University will install water-conserving fixtures in new and existing facilities as well as in irrigation systems.</p> <p>Existing transite and asbestos cement pipe mains will be replaced with polyvinyl chlor-ide class 900 plastic pipe in phases and upsized where necessary. The</p>	<p>Impact will be less than significant, and no mitigation is required</p>	<p>Less than significant</p>

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	reclaimed water networks on the north side of the campus will be connected together to form a single network to provide redundancy to the system. Backflow preventor systems will be installed where necessary. Lines that are within the sites of proposed buildings will also be relocated. Implementation of these improvements will ensure that water distribution systems are adequate.		
Stormwater Drainage	Improvements to the existing system will be implemented, such as replacing and upsizing lines. Storm drains within the sites of proposed buildings will be relocated. In compliance with existing regulations, on-site structural or treatment control BMPs will be included in individual projects pursuant to SUSMP and NPDES requirements. Entrances to storm water drains will include traps and sieves to sift out debris, and if storm water detention basins are used, they will include devices to minimize entry of pollutants into the storm drain system. Implementation of modern stormwater conveyance requirements will work to reduce peak flows.	Impact will be less than significant, and no mitigation is required.	Less than significant
Solid and Hazardous Waste	The project will result in 279 net new tons per year, or 1,530 pounds per day, of solid waste that will be disposed of at regional facilities. With more students attending classes, some additional hazardous waste will be generated as well from laboratory equipment and other academic activities. With the continued very high current campus waste diversion rates of over 70%, the remaining amount of solid and hazardous waste is relatively small and will continue to be	Impact will be less than significant, and no mitigation is required.	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	accommodated by regional landfills.		
Aesthetics, Light, and Glare	<p>New buildings will largely be within interior of the campus, minimizing changes from the exterior. These new elements will mostly replace existing facilities or provide for appropriate infill development. Standard University review procedures for compliance with the architectural guidelines will ensure that the specific design treatment selected for these facilities is compatible with the character of each individual setting.</p> <p>No substantial change in overall security lighting levels as viewed from off-campus locations is anticipated. New lighting will be installed at the sports fields for use during evening events. However, instead of using typical lights mounted in groups on 110- to 120-foot high standards, the University plans to install 75 to 85-foot lights at the field to minimize effects on the surrounding uses, which will significantly reduce glare and line-of-sight effects. In addition, the best available fixtures will be used to avoid spillover. This lighting will be shielded and directed downwards to provide the necessary illumination and at the same time minimize visibility from nearby areas. The closest sensitive off-site residential uses are located more than 600 feet from the facility. Intervening street lighting will mask views from surrounding areas. All lighting will be turned off after sport games or other events end.</p>	Impact will be less than significant, and no mitigation is required.	Less than significant
Cumulative impacts, other than air quality, vehicular traffic,	The Master Plan's contribution to potential cumulative impacts on noise, archaeological resources, drainage, sewer, water distribution infrastructure,	Impact will be less than significant, and no mitigation is required.	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
construction, and solid and hazardous waste disposal facilities.	police and fire protection services, water supply and quality, and aesthetics will be less than significant.		
Growth-inducing impacts	The Master Plan will not foster economic or population growth. Implementation of the Master Plan will result in infill facilities and reuse and reinvigoration of the existing CSULB campus. The campus is located within a fully urbanized area that is well served by existing infrastructure. The project will not result in excess capacity that may induce growth.	Impact will be less than significant, and no mitigation is required.	Less than significant
Significant Environmental Impacts That Can Be Avoided or Mitigated (CEQA Guidelines Section 15126.4)			
Vehicular Traffic (project-specific and cumulative)	<p>With 31,000 FTE student enrollment, campus-generated traffic will result in a significant impact at 3 study intersections. Feasible mitigation is identified for these affected intersections.</p> <p>Impact on transit, parking, onsite circulation, and pedestrian and bicycles will be less than significant.</p>	<p>1. The University and the City Long Beach and CSULB jointly agree that the proposed mitigation measures at all intersections listed in the Draft EIR (West Campus Road/7th Street, Palo Verde Avenue/Atherton Street, and East Campus Road/7th Street) and the additional intersections listed in the City's response to the DEIR will be replaced with a single improvement which will be referred to as the Atherton Corridor Improvement Project. This project will include improvements at five (5) intersections along Atherton between Bellflower Boulevard and Studebaker Road which include: Atherton/Chatwin (new pedestrian signal), Atherton/Earl Warren/Britton (new traffic signal, center median work, and crosswalk), Atherton/Palo Verde (minor signal improvements) and Atherton/Studebaker (minor signal improvements), as well as signal timing improvements for the entire corridor. The University will contribute on a fair-share basis to the Atherton Corridor Improvement project.</p>	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Long-term noise from the soccer field facility	<p>While most noise from on-campus activities will be less than significant, some noise from the soccer field facility will be audible at the closest residences. This noise will be both short-term and intermittent, will only occur for the duration of the game, and will not occur on the daily basis. The resultant increase of 1 to 2 decibels (dB) for the duration of the game event at will be below the identified 5 dB threshold, and will not result in exposure of people to substantial increase in ambient noise levels. Nonetheless, to ensure that this impact will continue to be less than significant, implementation of the measures pertaining to the design of the public announcement (PA) system and conduct of the athletic events will be required.</p>	<p>To ensure that noise from athletic events at the soccer field facility on campus continues to be a less than significant impact, the following design and conduct measures will be implemented:</p> <ol style="list-style-type: none"> 1. Events will not be scheduled and the public address (PA) system will not be scheduled to operate at George Allen Field between the hours of 10:00 PM and 7:00 AM. 2. The PA system at George Allen Field will not be used during sports practices. 3. The PA design system at the George Allen Field will include the following features: <ul style="list-style-type: none"> ▪ The system will be configured and calibrated to generate maximum noise level of 65 db(A) at the nearest homes. Once calibrated, the system will be “locked” to ensure that individual users cannot operate them at higher noise levels. ▪ The loudspeakers will be small and highly directional with a narrow spread. ▪ The loudspeakers will have sufficient mass so that no substantial noise leaks through the cabinet. ▪ The loudspeakers will be located above the spectators and oriented downwards. ▪ The height of the loudspeakers above the spectators will be minimized to permit a lower volume setting. ▪ Spectators will not be allowed to use noise-generating devices, such as air horns. 	Less than significant
Water Use	<p>Supplies of potable and reclaimed water are available to provide service. The University already uses reclaimed water for landscape irrigation in north and south parts of the campus. The University will continue to work to increase the use of recycled water and reduce demand for potable</p>	<ol style="list-style-type: none"> 1. The use of reclaimed water for irrigation will continue to be expanded to the extent feasible. 2. The University will continue to implement policies and programs to reduce water use, such as installing low-use water fixtures, waterless urinals, and other features. 3. The University will continue to 	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	water through active conservation and education. Nevertheless, mitigation is identified to ensure that proper water conservation is pursued.	coordinate with the Long Beach Water Department to reduce water use during water supply shortages.	
Short-Term Construction-related Traffic	Construction trucks and equipment may use may cause localized congestion at some locations. Due to the campus' pedestrian character, construction activity could adversely affect pedestrian flows. Construction activities also may temporarily affect bus and bicycle circulation routes. Mitigation measures have been identified to reduce these potential impacts.	<ol style="list-style-type: none"> 1. A flag person will be employed as needed to direct traffic when heavy construction vehicles enter the campus from Bellflower Boulevard, Palo Verde Avenue, 7th Street, and Atherton Street. 2. Construction trucks will avoid travel on residential areas to access campus and use the City of Long Beach designated truck routes to travel to and from campus. 3. Construction-related truck traffic will be scheduled to avoid peak travel time on the I-405 and I-605 freeways, and State Route 22 (SR-22), as feasible. 4. If major pedestrian or bicycle routes on campus are temporarily blocked by construction activities, alternate routes around construction areas will be provided, to the extent feasible. These alternate routes will be posted on campus for the duration of construction. 5. If any bus stop or other transit facility on campus is obstructed by construction activity, the University, in cooperation with the transit service providers, will temporarily relocate such transit facility on campus as appropriate. 	Less than significant
Construction-related Solid and Hazardous Waste	Demolition of existing facilities and construction of new facilities and associated infrastructure improvements will generate construction waste. Even though the amount of overall construction of individual campus facilities and infrastructure improvements is relatively modest, and the activities will be phased, mitigation has been identified to reduce impact.	<ol style="list-style-type: none"> 1. Demolition and construction inert materials, including vegetative matter, asphalt, concrete, and other recyclable materials will be recycled to the extent feasible. 2. Demolition materials that contain hazardous substances will be disposed of at certified disposal facilities in strict compliance with all applicable regulations. 	Less than significant
Archaeological Resources	The updated Campus Master Plan will result in new and replacement buildings and	<ol style="list-style-type: none"> 1. All earth moving construction activity will be monitored by a professional archaeologist and Native American 	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>associated infrastructure on campus. The work performed for these individual facilities and improvements will result in ground-disturbing activities. New and replacement buildings and facilities have been situated to avoid known archaeological resources. The Cultural Resources Management (CRM) program determined that the vast majority of the campus represents secondary depositions of invertebrate shell, rather than in situ archaeological sites. Nevertheless, even though it is highly unlikely given the magnitude and expanse of previous investigations throughout the campus area, the construction of new and replacement facilities may potentially disturb an unknown archaeological resource.</p>	<p>monitor. The archaeological monitor will conduct on-site cultural resources sensitivity training (crew education) as outlined below. If subsurface cultural materials are uncovered, construction work in the immediate vicinity will be halted and the emergency discovery procedures described below will be implemented.</p> <ol style="list-style-type: none"> 2. Prior to the beginning of the earth moving construction activities (including initial grading of vegetation removal), the construction crew will be informed of the cultural resources values involved and of the regulatory protections afforded those resources. The crew will also be informed of procedures relating to the discovery of unanticipated cultural resources (as outlined below). The crew will be cautioned not to collect artifacts, and asked to inform a construction supervisor and the onsite archaeological monitor in the event that cultural remains are discovered during the course of construction. The onsite archaeological and Native American monitor will administer supplement briefing to all new construction personnel, prior to their commencement of earth moving construction activities. 3. In the event archaeological resources are unearthed during excavation activities associated with the project, work will be stopped immediately, and the discovery will be evaluated by a qualified archeologist, pursuant to the procedures set forth at CEQA Guidelines Section 15064.5. 4. In an event that a previously unknown archaeological resource is discovered and disturbance to such a resource cannot be avoided, a Phase-III, or "data recovery," phase of investigation will be required, pursuant to CEQA Guidelines Section 15064.5. The Phase-III study will generally consist of a limited scale program of archaeological excavation, radiocarbon dating of organic materials - such as shell midden and faunal remains, laboratory analysis, and report writing designed to assess the importance of the resource in question. Any resources recovered will be properly curated, as appropriate. 	

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		<ol style="list-style-type: none"> 5. If human skeletal remains are found at the project site during earth moving activities such as grading or trenching, work will be suspended and the Los Angeles County Coroner’s Office will be notified. Standard guidelines set by California law provides for the treatment of skeletal material of Native American origin (California Public Resources Code, Sections 5097.98 et seq.; Health and Safety Code, Section 7050.5 and others). Procedures to be employed in the treatment of human remains are found in, “A professional Guide for the Preservation and Protection of Native American Remains and Associated Grave Goods,” published by the California Native American Heritage Commission. 6. Paleontological resources have not been identified on the CSULB campus; however, if fossilized shells, plants or bones are discovered during construction of an individual project, work will be suspended in the immediate vicinity of the finds, and the potential significance of the resources will be evaluated by a qualified specialist. 	
<p>Unavoidable Significant Environmental Impacts (CEQA Guidelines Section 15126[b] – Lead Agency must issue a “Statement of Overriding Considerations” under CEQA Guidelines Section 15093 if the Agency determines these effects are significant and approves the project)</p>			
<p>Short-term Construction-related Air Quality (project-specific and cumulative)</p>	<p>During construction, short-term air quality impact will result from worker travel emissions, construction equipment emissions, and dust from demolitions.</p> <p>Peak day emissions of reactive organic gases, carbon monoxide, and 1 category of dust (i.e., PM 2.5) will not exceed South Coast Air Quality Management District (SCAQMD) thresholds. However, peak day emissions will exceed the daily thresholds for oxides of nitrogen and overall dust (i.e., PM10). Overlap of construction activities may result in exceedance of</p>	<ol style="list-style-type: none"> 1. Exposed surfaces are watered as needed 2. Soils stabilizers are applied to disturbed inactive areas as needed. 3. Ground cover is replaced quickly in inactive areas. 4. All stockpiles are covered with tarps or plastic sheeting. 5. All unpaved haul roads are watered daily and all access points used by haul trucks are kept clean during the site grading. 6. Speed on unpaved roads is reduced to below 15 miles per hour. 7. Trucks carrying contents subject to airborne dispersal are covered. 	<p>Significant</p>

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>SCAQMD thresholds for other criteria pollutants emissions as well. Therefore, impact is considered significant.</p> <p>The combined effect of peak day construction-related emissions from the project together with construction emissions from other development in the area will exceed SCAQMD daily amounts.</p>	<ol style="list-style-type: none"> 8. Grading and other high-dust activities cease during high wind conditions (wind speeds exceeding a sustained rate of 25 miles an hour). 9. Diesel particulate filters are installed on diesel equipment and trucks. 10. All construction equipment will be properly tuned. 11. To reduce emissions from idling, the contractor shall ensure that all equipment and vehicles not in use for more than 5 minutes are turned off, whenever feasible. 12. Low VOC-content paint, stucco, or other architectural coatings materials will be utilized to the extent possible. 13. Low VOC-content asphalt and concrete will be utilized to the extent possible. 14. The University will continue to comply with SCAQMD Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities) and other pertinent regulations when working on structures containing asbestos, lead, or other toxic materials. <p>The University will implement the following measures to protect students present at campus.</p> <ol style="list-style-type: none"> 15. As appropriate, outdoor activities at the campus will be limited during high-dust and other heavy construction activities, including painting. 16. If construction activities occur adjacent to classrooms, student dormitories, health facilities and other sensitive receptors the University will either: <ol style="list-style-type: none"> i. Make findings and notify each sensitive receptor that construction activity will not affect such receptor, or ii. Install and maintain filters on interior ventilation system to reduce intake of pollutants until construction activity ceases. 	
<p>Short-term Construction-related Noise</p>	<p>Construction activities will result in a temporary and intermittent increase in</p>	<ol style="list-style-type: none"> 1. Muffled construction equipment will be used wherever possible. 	<p>Significant</p>

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
and Vibration (project-specific and cumulative)	ambient noise and vibration levels that may affect residences and other noise-sensitive uses in surrounding areas.	<ol style="list-style-type: none"> 2. The contractor will ensure that each piece of operating equipment is in good working condition and that noise suppression features, such as engine mufflers and enclosures, are working and fitted properly. 3. The contractor will locate noisy construction equipment as far as possible from residential areas. 4. Construction hours will be consistent with the City of Long Beach regulations of between 7 a.m. and 7 p.m. on weekdays and between 9 a.m. and 6 p.m. on Saturdays. No construction will take place on Sundays or federal holidays. 5. If a sustained high-noise construction activity takes place within 100 feet from classrooms or other noise-sensitive uses on campus, measures will be taken to limit the amount of noise affecting the sensitive receptor. These measures may include scheduling the activity when classes are not in session or the sensitive receptor is not use, providing a temporary barrier of no less than 6 feet in height made of wood or other similar materials; and/or other measures. 	
Long-term Air Quality (project-specific and cumulative)	The project's net new emissions will be above the SCAQMD daily threshold amounts. When these emissions are combined with the emissions generated by related projects and future basin-wide growth, this will also result in a cumulatively significant impact. Region-wide implementation of local and regional growth management policies, a reasonable jobs/housing balance, new technologies (e.g., in vehicle emission control equipment and fuel), and programs to encourage alternative modes of transportation, including public transit, will reduce cumulative impacts and work toward attaining long-term emissions reductions.	<p>The following mitigation measure will continue to be implemented by the University to reduce stationary emissions to the extent feasible.</p> <ol style="list-style-type: none"> 1. The University will exceed Title 24 energy saving requirements on campus by 15% or more on all new or renovation projects by applying a range of techniques and measures that may include planting trees to provide shade and shadow to buildings; use of energy-efficient lighting in buildings and parking lots; use of light-colored roofing materials; installing energy-efficient appliances; installing automatic lighting on/off controls; use of insulation and double-paned glass windows; connecting buildings to central air and water heating and cooling systems, and/or other measures . 	Significant
Cumulative Effect on Regional Solid	Even though the project includes all requisite waste-reduction measures, Los	The University implements an aggressive recycling program that results in a diversion rate of over 70%. Continued effort towards	Significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
and Hazardous Waste Facilities	Angeles County forecasts a shortage of landfill space for both solid and hazardous waste in the future. Thus, the project will contribute to future cumulative impact on the County solid waste management facilities that is considered potentially significant.	further reducing solid and hazardous waste generation will work to reduce the severity of the shortage to the extent feasible.	
Vehicular Traffic (project-specific and cumulative)	<p>At the time when enrollment reaches 31,000 FTE students, the project will result in significant unavoidable impacts at the intersections of Bellflower Boulevard and Stearns Street, and Bellflower Boulevard and 7th Street. Adequate right-of-way is not available to implement the identified mitigation measures.</p> <p>At the time when enrollment reaches 31,000 FTE students, the project will impact one segment of I-405 freeway between Bellflower Boulevard and Lakewood Boulevard. No feasible mitigation measures are available to reduce this impact to a level below significance. Widening and/or other major improvements to the I-405 freeway - a major regional freeway facility - to provide additional capacity are within the jurisdiction of regional transportation agencies as these are regional issues requiring region-wide solutions.</p>	<p>At these two intersection locations no adequate right-of-way is available to implement the following roadway improvements identified to reduce impact:</p> <ol style="list-style-type: none"> 1. <i>Bellflower Boulevard and Stearns Street</i> – At the time when student enrollment reaches 31,000 FTEs, provide an additional left-turn lane on westbound Stearns Street to serve vehicles traveling from westbound Stearns Street to southbound Bellflower Boulevard. 2. <i>Bellflower Boulevard and 7th Street</i> – At the time when student enrollment reaches 31,000 FTEs, provide an additional left-turn lane on eastbound 7th Street to serve vehicles traveling from eastbound 7th Street to northbound Bellflower Boulevard. 	Significant

1.0 Introduction

Purpose of the EIR

This Final Program Environmental Impact Report (EIR) has been prepared to evaluate the environmental effects of the adoption and implementation of the proposed California State University, Long Beach (CSULB) updated Campus Master Plan. The updated Master Plan constitutes a project for the purposes of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines.

According to the CEQA Guidelines, an “EIR is an informational document which will inform public agencies, decision makers, and the public generally of the significant environmental effects of a project on the environment, identify possible ways to minimize the significant effects, and describe alternatives to the project.” This Draft EIR is an informational document to be used by decision makers, public agencies, and the general public. It is not a policy document of CSULB.

This Final EIR contains comments and response to comments received on the Draft EIR, which was circulated for public review from on January 15, 2008 to February 28, 2008. The comments and responses to comments are presented in Section 8.0. Revisions and clarifications to the EIR made in response to comments and information received on the Draft EIR are indicated by **shading**, as illustrated in this sentence.

The EIR will be used by CSULB in assessing impacts of the proposed project. During the project implementation process, mitigation measures identified in the EIR may be applied to the project by CSULB and/or other involved agencies.

Program EIR

This document is a Program EIR prepared pursuant to the provisions of Section 15168 of the CEQA Guidelines. A Program EIR is an EIR prepared on a series of actions that can be characterized as 1 large project. The project consists of a series of physical and programmatic actions and improvements pursuant to the updated Campus Master Plan implemented over time to the year 2020 planning horizon.

A Program EIR allows later activities, i.e. a subsequent actions and improvements, to be approved provided that the effects of such projects were examined in the Program EIR, and no new effect could occur or no new mitigation measure would be required upon implementation of such subsequent action or improvement. At the time that each facility improvement or other action pursuant to the Master Plan is carried forward, CSULB will review each individual action or improvement to determine whether the Program EIR fully addressed the potential impacts and identified appropriate mitigation measures. If so, no further review will be required.

Legal Requirements

This EIR has been prepared in accordance with the California Environmental Quality Act of 1970 (Public Resources Code, Section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) published by the Public Resources Agency of the State of California (California Code of Regulations, Title 14, Section 15000 et seq.), and in accordance with the CSU CEQA Guidelines. The Trustees of the California State University is the lead agency for this EIR, as defined in Section 21067 of CEQA.

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project. The Initial Study concluded that the project might have a significant effect on the environment. The Initial Study checklist is included in Appendix A of this EIR. A Notice of Preparation (NOP) for this EIR was issued by the University on June 22, 2007 in accordance with the requirements of the CEQA Guidelines Sections 15082(a) and 15375. The NOP indicated that an EIR was being prepared and invited comments on the project from public agencies and the general public.

This EIR was prepared by environmental planning consultants under contract to CSULB and under the direction of University staff.

Scope of the Project

The project is the comprehensive update of the Campus Master Plan for CSULB to accommodate a gradual growth in student enrollment projected to reach 31,000 full-time equivalent students (FTEs) within the Master Plan's horizon of the year 2020. As of Fall 2006, the University's student enrollment had reached approximately 26,440 FTEs. The updated Master Plan identifies primary physical facilities required to accommodate CSULB's strategic and academic plans and programs. The Master Plan is designed to first provide new in-fill facilities in the interior of the campus and replace existing aged, obsolete, and inefficient facilities. Associated infrastructure improvements will be provided as needed throughout campus.

The Campus Master Plan maintains open spaces, pedestrian corridors, and campus architectural themes. Overall, the Master Plan aims to enhance the University's distinct character, update and expand campus infrastructure, and preserve the quality of the physical environment. The Master Plan also reflects the University's intent to minimize facility growth on the perimeter of campus.

Scope of the Environmental Analysis

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project. The Initial Study concluded that the Master Plan would not result in a significant effect on the following environmental factors:

- Aesthetics
- Agricultural resources
- Biological resources
- Geology and soils
- Hazards and hazardous materials
- Hydrology and water quality
- Land use and planning
- Mineral resources
- Population and housing
- Recreation

The Initial Study concluded that the proposed project might have a significant effect on the environment with respect to the following environmental issue areas:

- Air quality
- Cultural resources
- Noise
- Public services
- Traffic, circulation, and parking
- Utilities and service systems

These issues are addressed in this EIR in the appropriate section. No additional environmental issue areas were raised in response to the NOP.

Appendix A contains the Initial Study and NOP for the project. Appendix B contains the traffic study. Appendix C contains the air quality worksheets. Appendix D contains the noise study. All other reference documents cited in the EIR are on file with CSULB, Physical Planning and Facilities Management, 1250 Bellflower Boulevard, BH370, Long Beach, CA 90840-0127.

Intended Uses of the EIR

The Campus Master Plan and subsequent implementing actions are subject to review and approval by the Trustees of the California State University. This EIR may also be used to provide information to other agencies for their discretionary actions related to the project implementation, including the following:

- City of Long Beach
- County of Los Angeles Sanitation Districts
- Caltrans, District 7
- Others, as may be necessary

Public Review and Comment

The Draft Program EIR was circulated for a 45-day public review period. The public was invited to comment in writing on the information contained in the document. Persons and agencies commenting were encouraged to provide information that they believed was missing from the Draft EIR, or to identify where the information could be obtained. All comment letters, and oral comments received at the public meeting on the Draft EIR held by the University, have been responded to in writing, and the comment letters, together with the responses to those comments are incorporated into this Final EIR in Section 8.0.

Contact Person

The primary contact person regarding information presented in this EIR is Susan Brown, Director, Physical Planning and Facilities Management, CSULB, 1250 Bellflower Boulevard, BH370, Long Beach, CA 90840-0127. Ms. Brown can be reached at (562) 985-4131 and by fax at (562) 985-7647.

2.0 Project Description

Established in 1949 by Governor Earl Warren, California State University, Long Beach (CSULB) is one of the larger urban campuses in the CSU system, encompassing approximately 322 acres. The University is highly ranked in a number of categories nationally, and will also be one of the first within the CSU system to offer independent doctoral degree program in education.

The Project

The project is the comprehensive update of the Campus Master Plan for CSULB to accommodate a gradual growth in student enrollment projected to reach 31,000 full-time equivalent students (FTEs) within the Master Plan's horizon year of 2020. As of Fall 2006, the University's student enrollment had reached approximately 26,440 FTEs.

The State Legislature's commitment to accommodating student demand and providing access to higher education is reflected in the rise in student enrollment ceilings throughout the CSU, as well as the University of California. At CSULB, the last FTE ceiling increase to 25,000 FTE occurred in 1972. It has taken 35 years to reach this enrollment level. The campus anticipates an average annual growth rate of about 2% - 2.5% to reach the new ceiling, assuming the same level of State funding as currently provided. With some CSU campuses raising their ceiling levels to 35,000 FTEs, the proposed Master Plan represents about half of the increase of other large CSU campuses.

CSULB aims to achieve greater distinction with 4 strategic priorities: student success, academic quality, service excellence, and campus life and environment. To that end, in 2003, CSU Long Beach launched a master planning process to examine long-range enrollment and the campus physical plan. A master planning framework was established to accommodate 31,000 FTEs and outline stipulations for growth. In the Spring of 2004, this framework was endorsed by the Academic Senate and the President, and in fall 2006 was re-affirmed by the Academic Senate. The framework creates stipulations related to the quality of instruction; parking and traffic; green space; the quality of the student experience; resources; diversity; tenure faculty density; student retention and graduation rates; and program balance.

Project Objectives

The Campus Master Plan will guide future development of the University's main campus by providing a framework for the decisions concerning the allocation and management of resources, capital outlay programs, and construction planning for facilities and improvements needed to accommodate 31,000 FTE student enrollment level.

The primary purpose of the Master Plan is to further the University's mission to provide each student the skills necessary to pursue knowledge and to integrate information from various sources by graduating students with highly valued degrees. To that end, the major objectives of the Campus Master Plan include to:

- Share in the need to accommodate the demand for higher education by students in California by providing the necessary facilities and improvements
- Improve, update, and replace outdated, inefficient and obsolete facilities
- Provide high quality services that enhance access and usability
- Maintain and enhance campus open space, character, and the quality of the physical environment

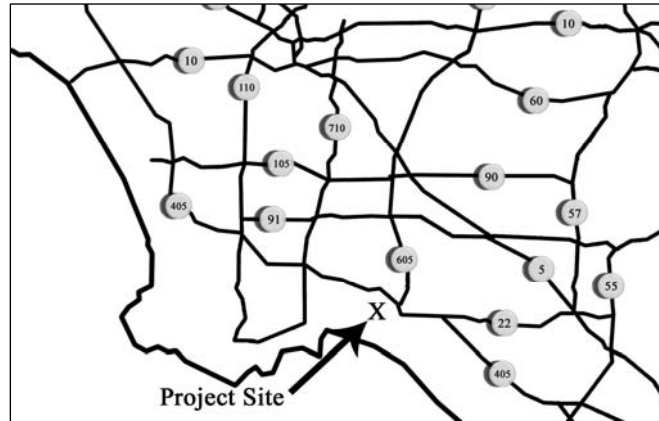
Project Location

CSULB campus is generally bounded by East 7th Street to the south, East Atherton Street to the north, Bellflower Boulevard to the west, and Palo Verde Avenue to the east (refer to Figure 1). Interstate 405 (I-405) runs east-to-west north of the campus, with interchanges at several streets that serve the campus. State Route 22 (SR-22) provides direct access to East 7th Street just southeast of the campus. Interstate 605 (I-605) terminates at I-405 and SR-22 east of campus.

Surrounding Uses

CSULB campus is generally bordered and separated from the surrounding uses by perimeter streets. Land uses in the vicinity consist primarily of single-family residential areas, but also include multi-family residences, institutional uses, and commercial businesses. These include the Veteran's Administration Medical Center complex that borders the campus to the southwest; commercial uses located to the northwest of campus on the south side of Atherton Street, in the vicinity of its intersection with Bellflower Boulevard; Whaley Park that straddles Atherton Street within this area; Mini Gant Elementary School is located on the north side of Atherton Street across from the campus' northern boundary; Station 22 of the City of Long Beach Fire Department located at the northeast corner of campus at the intersection of Atherton Street and Palo Verde Avenue; a Los Angeles County electrical substation located on Atherton Street, immediately west of Station 22; Hill Middle School located about one block southeast of campus; and the Los Cerritos flood control channel that runs north-south about 1,200 feet to the east of campus, with the San Gabriel River running north-south about 1,200 feet to the east beyond that.

Local and Regional Location
Figure 1



Source: Google Earth, 2007.

Existing Facilities

Existing campus facilities comprise approximately 4.9 million gross square feet with approximately 2.1 million of assignable square feet (refer to Table 1 and Figure 2). These include traditional academic buildings, administrative offices, a student union, library, bookstore, and food service facilities. The campus facilities also include student dormitories, support facilities, and parking structures.

Table 1
Existing Facilities

Facility	Gross Square Feet	Assignable Square Feet
Administrative	134,096	92,996
Academic	2,195,567	1,380,232
Corporation Yard	103,145	43,413
Cafeteria	39,500	31,103
Library	406,020	256,491
Other	74,081	28,862
Student Union	229,696	95,026
Health Center	38,629	18,142
Dormitories	435,739	105,895
Parking Structures	1,244,980	991
Pyramid	19,510	10,204
Total	4,920,063	2,063,349

Note: space is approximately grouped into facility categories for comparative purposes only.

Campus Layout

Within the campus, two major landscaped quadrangle areas create predominant axes around which buildings are grouped, one east-to-west in the center of campus, and the other north-to-south in the southern portion of campus. Other smaller quadrangles, walkways, and open space areas tie the campus together, providing pedestrian and bicycle paths throughout the area. A large open space area lies along the campus' western boundary, adjacent to Bellflower Boulevard.

Vehicular circulation is predominantly confined to the campus periphery. West Campus Drive and Beach Drive provide access to the campus core along its western side, with a major focal point and pedestrian/vehicular interface at their intersection. East Campus Drive and State University Drive provide access to the eastern side of the campus. Additional access is provided directly from major nearby streets, including Atherton Street, Palo Verde Avenue, and 7th Street. Interior roadways provide access through the campus, including East Warren Drive and Merriam Way.

Existing Campus Master Plan Figure 2



Source: Campus Master Plan Revision. 2007. CSULB. Prepared by Rossetti/Jorgensen.

EXISTING MASTER PLAN BUILDING LIST							
NO.	BUILDING NAME		NO.	BUILDING NAME		NO.	BUILDING NAME
1	E. James Brotman Hall		36	Faculty Office 4		69	Softball Field Restrooms
2	Student Health Services		37	Peterson Hall 1		70	Communications - Main Distribution Facility B
3	Nursing		38	Peterson Hall 2		71	University Music Center
4	Soroptimist House		39	Peterson Hall 3		72	Carpenter Performing Arts Center & Dance Center
5	Family and Consumer Sciences		40	Science Lecture Halls		73	Mike and Arline Walter Pyramid
6	University Student Union		41	Microbiology		74	Parking / Transportation Sevices
7	Cafeteria		42	Animal House		75	International House
8	Bookstore		43	Greenhouse 1 and 2		76	Earl Burns Miller Garden
9	Psychology		44	Electrical Substation (North)		78	Visitor Information Center
10	Liberal Arts 5		45	Faculty Office 5		79	Communications - Main Distribution Facility C
11	Liberal Arts 4		46	Social Sciences/Public Affairs		80	University Police
12	Liberal Arts 3		47	University Gymnasiums		81	Pyramid Annex
13	Liberal Arts 2		48	Health and Human Services Classrooms		82	Outpost Food Services
14	Liberal Arts 1		49	Health and Human Services Offices		83	Engineering / Computer Science
15	Faculty Office 3		50	Vivian Engineering Center		84	Steve and Nini Horn Center
16	Faculty Office 2		51	Engineering 2		85	College of Business
17	Lecture Hall 150-151		52	Engineering 3		86	Central Plant
18	KKJZ		53	Engineering 4		87	Campus Housing
19	Library		54	Design		88	Parking Structure No. 1
20	Academic Sevices		55	Human Services Design		89	Housing & Residential Life
21	Multi-Media Center		56	Engineering Techonology		91	Parking Structure No. 2
22	Education 1		57	Facilities Management		92	<i>Parking Structure No. 3</i>
23	Education 2		58	Corporation Yard		93	<i>Student Recreation & Wellness Center</i>
24	McIntosh Humanities Office Building		59	Patterson Child Development Center		94	Molecular and Life Sciences Center
25	Language Arts Building		60	Los Alamitos Hall		95	<i>Peterson Hall 3 Science Replacement Building</i>
26	Studio Theater		61	Los Cerritos Hall			
27	University Threatre		62	Residence Halls and Commons			
28	University Telecommunications Center		63	Recycling Center			
29	Art Annex		64	Greenhouse 3			
32	Fine Arts 1		65	Electrical Substation (South)			
33	Fine Arts 2		66	Reprographics			
34	Fine Arts 3		67	Communications - Main Distribution Facility A			
35	Fine Arts 4		68	Restroom / Storage			

Legend: Existing Facility / *Approved Facility*

See Previous Page for Building Locations

University Facilities

Classrooms, laboratories, lecture halls, educational buildings, and other campus activity clusters are generally grouped in the southern and central-eastern sectors of campus, around the major quadrangles. Administrative, wellness, and student support facilities, including the book store and student union, are mostly gathered around the central campus core, but are also interspersed through other campus areas. Athletic facilities, including the University's distinctive Walter Pyramid, are grouped near the central northern portion of campus. Music and performing arts facilities are located north of the Pyramid along Atherton Street.

Currently, there are 18 two- and three-story dormitory buildings on campus providing 1,962 beds. These residences halls and associated facilities are grouped in two clusters along the western edge of campus. The existing student housing accommodates approximately 7% of the undergraduate students (FTE) attending classes at the University. The unique International House pairs international students with U.S. residents. Approximately 4% of undergraduate students participate in fraternities and sororities, although these organizations are not housed on University property.

Parking facilities accommodate approximately 13,430 spaces, including a little more than 4,000 spaces in parking structures. Surface parking lots are located in the central-western area of campus, and around the periphery. Existing parking structures are located near the campus center in the proximity of the Pyramid and at the northeast corner of campus.

Many existing buildings on the CSULB campus are approaching the end of or have passed their planned useful life cycle. About 55% of all of the facility space at campus was built prior to 1977, and 5% prior to 1957. The classrooms reflect an even older building age distribution. About 82% of the classrooms are more than 30 years old, and 57% of the classrooms were constructed before 1967.

Campus Design

The University architecture is mostly of the international style, placing emphasis on open landscaped areas throughout campus creating a natural, park-like setting. Landscaping and architecture are integrated in semi-formal quadrangles, courtyards, rolling grass-covered hills, and sculptured tree canopies.

The campus buildings primarily are comprised of brick, glass, and concrete. Modernist proportioning, flat roofs, punched windows, and the consistent use of peach-colored brick tie the campus together. One exception is the blue Walter Pyramid, which provides a noteworthy contrast on campus and serves as an icon for the University and the City of Long Beach.

Existing Master Plan

The first Campus Master Plan for CSULB was adopted by the Board of Trustees in January 1963. Since then, revisions to the Master Plan have been adopted by the Trustees as campus planning progressed and facilities were added. The existing Master Plan (refer to Figure 2) illustrates existing academic facilities, circulation routes, recreation and wellness facilities, sports fields, parking, and open spaces as well as the facilities that have already been approved to date and will be developed pursuant to the current Campus Master Plan.

Proposed Master Plan

The updated Campus Master Plan maintains open spaces, pedestrian corridors, and campus architectural themes. Overall, the Master Plan aims to enhance the University's distinct character, update and expand campus infrastructure, and preserve the quality of the physical environment. The Master Plan also reflects the University's intent to minimize facility growth on the perimeter of the campus.

The Master Plan identifies primary physical facilities required to accommodate CSULB's strategic and academic plans (refer to Figure 3). With enrollment growth anticipated to reach approximately 31,000 FTEs, the Master Plan provides for the required instructional, research, faculty office and administrative space, student services areas, student housing, sports and recreation, parking, and support facilities.

The Master Plan is designed to first provide new in-fill facilities in the interior of the campus and replace existing aged, obsolete, and inefficient facilities. These facilities include Peterson Hall 1 and 2 Replacement, the Liberal Arts Complex, 2 new parking structures, a student services addition to Brotman Hall, student housing, and a soccer field and sports buildings. The existing aged and obsolete buildings will be demolished and replaced with new modern facilities at approximately the same locations, providing program areas required to support the academic plan that cannot be accommodated within existing buildings. Areas identified for reconstruction are the student services addition, liberal arts area, and science area. Associated infrastructure improvements will be provided as needed throughout the campus.

Area Plans

The Master Plan provides for comprehensive guidance for physical and programmatic improvements into the future to accommodate 31,000 FTE students. Up to approximately 1.2 million square feet in new or replacement structures are currently proposed to meet this need. In addition, area plans on campus have been identified for more detailed development. These are the Student Services Addition, Peterson Hall 1 and 2 Replacement, the Liberal Arts Complex, Student Housing, and the Soccer Field and Sports Buildings.

Proposed Campus Master Plan Figure 3



Source: Campus Master Plan Revision. 2007. CSULB. Prepared by Rossetti/Jorgensen.

PROPOSED BUILDING LIST

NO.	BUILDING NAME
1	E. James Brotman Hall
2	Student Health Services
3	Nursing
4	Soroptimist House
5	Family and Consumer Sciences
6	University Student Union
7	Cafeteria
8	Bookstore
9	Psychology
10	Liberal Arts 5
11	Liberal Arts 4
12	Liberal Arts 3
13	Liberal Arts 2
14	Liberal Arts 1
15	Faculty Office 3
16	Faculty Office 2
17	Lecture Hall 150-151
18	KKJZ
19	Library
20	Academic Sevices
21	Multi-Media Center
22	Education 1
23	Education 2
24	McIntosh Humanities Office Building
25	Language Arts Building
26	Studio Theater
27	University Theatre
28	University Telecommunications Center
29	Art Annex
30	<i>Liberal Arts Replacement Phase 1</i>
31	<i>Liberal Arts Replacement Phase 2</i>
32	Fine Arts 1
33	Fine Arts 2
34	Fine Arts 3

NO.	BUILDING NAME
356	Fine Arts 4
36	Faculty Office 4
37	Peterson Hall 1
38	Peterson Hall 2
39	Peterson Hall 3
40	Science Lecture Halls
41	Microbiology
42	Animal House
43	Greenhouse 1 and 2
44	Electrical Substation (North)
45	Faculty Office 5
46	Social Sciences/Public Affairs
47	University Gymnasiums
48	Health and Human Services Classrooms
49	Health and Human Services Offices
50	Vivian Engineering Center
51	Engineering 2
52	Engineering 3
53	Engineering 4
54	Design
55	Human Services Design
56	Engineering Techonology
57	Facilities Management
58	Corporation Yard
59	Patterson Child Development Center
60	Los Alamitos Hall
61	Los Cerritos Hall
62	Residence Halls and Commons
63	Recycling Center
64	Greenhouse 3
65	Electrical Substation (South)
66	Reprographics
67	Communications - Main Distribution Facility A

NO.	BUILDING NAME
68	Restrooms / Storage
69	Softball Field Restrooms
70	Communications - Main Distribution Facility B
71	University Music Center
72	Carpenter Performing Arts Center & Dance Center
73	Mike and Arline Walter Pyramid
74	Parking / Transportation Sevices
75	International House
76	Earl Burns Miller Garden
78	Visitor Information Center
79	Communications - Main Distribution Facility C
80	University Police
81	Pyramid Annex
82	Outpost Food Services
83	Engineering / Computer Science
84	Steve and Nini Horn Center
85	College of Business
86	Central Plant
88	Parking Structure No. 1
89	Housing & Residential Life
91	Parking Structure No. 2
92	Parking Structure No. 3
93	<i>Student Recreation & Wellness Center</i>
94	Molecular and Life Sciences Center
95	<i>Peterson Hall 3 Science Replacement Building</i>
96	<i>Parking Structure 4</i>
97	<i>Parking Structure 5</i>
99	<i>Liberal Arts Complex</i>
100	<i>Student Services Addition</i>
101	<i>Campus Housing Phase 1</i>
102	<i>Campus Housing Phase 2</i>
103	<i>Soccer Field and Sports Buildings</i>
104	<i>Food Services</i>

Legend: Existing Facility / Proposed Facility

See Previous Page for Building Locations

Student Services Addition – The Student Services Addition will provide more efficient and effective student services in a centralized location, such as enrollment services, the Bursar’s office, student counseling, the career center, academic advising, and the learning resource center. The addition, located in a portion of Parking Lot 3, will allow for consolidation of multiple student service locations that are presently located in numerous buildings throughout campus, allowing those spaces to be converted into other uses, including instruction and faculty offices. The project will provide a 1-stop location where students can obtain enrollment information, financial aid assistance, academic advising, and tutoring, for example.

Peterson Hall 1 and 2 Replacement (formerly Liberal Arts Replacement Phases 1 and 2) consists of replacing Peterson Hall 1 and 2 with two new buildings at the existing location. The new buildings, one with approximately 55,000 square feet of assignable space (or 88,000 gross square feet) and one with 38,500 square feet of assignable space (or 62,500 gross square feet), will accommodate replacement lecture and laboratory space as well as about 170 faculty offices. The second phase will involve construction of replacement space for the College of Liberal Arts, including laboratory space, about 100 faculty offices, general administration, instructional activity, and media space.

Liberal Arts Complex – The existing Liberal Arts 2, 3, and 4 complex has outlasted its useful life. Additionally, Lecture Hall Nos. 150 and 151 are outdated and overutilized. These inefficient, inflexible, and obsolete buildings will be replaced with facilities that make better use of the existing footprint and house modern, economical, adaptable classrooms, support spaces, and faculty and department offices.

Student Housing – The Master Plan provides for more than 2,000 new beds in both the Parkside and Residence Commons Housing complexes, as well as adding new dining rooms, convenience stores, coffee houses, laundry facilities, and seminar, activity, and conference rooms. Phase 1 will include almost 1,000 beds, one dining common, a coffee house, offices, and other amenities. At the Parkside Commons, the existing dining and commons will be replaced with a long, linear building with a breezeway that weaves a major north-south pedestrian circulation spine in this neighborhood. The building will have two wings with dining, kitchen, laundry, and other amenities will be located on the ground floor and three floors of student housing above providing approximately 312 beds. At Residence Commons South, a residence hall with 424 beds and 8 R.A. units will be provided north of Los Alamitos Hall, an a new, centrally located dining hall with a coffee house, convenience store, activity room, arts and crafts, and other amenities will be provided, replacing the existing commons office building and a portion of Building D.

Phase 2 will include more than 1,000 beds and other support facilities. These include two residence halls around a central yard at the current site of the Housing Administration Office at Parkside Commons. The south residence is planned for four stories while the north residence hall is planned for three stories to maintain a low profile towards nearby uses. A four-story residence hall at Residence Commons will replace the existing dining hall, and will engage Los Cerritos Hall to create a large semi-open courtyard.

Soccer Field and Sports Buildings - The proposed soccer field area improves the existing George Allen Field which is currently used for a variety of athletic and

kinesiology activities, including soccer and track. The improvements will provide bleacher seating to accommodate approximately 1,000 spectators on the east side of the field. Accessory amenities, including locker rooms, ticket booths, public restrooms, and food concessions, will be provided. Lighting standards will be installed for evening events.

Architectural Guidelines

The following architectural guidelines are specified by the Master Plan.

Building Siting – Campus buildings are primarily sited as buildings in a park. As such, access to the buildings will be carefully coordinated with the open spaces of the campus, and pedestrian circulation patterns. Entrances will be broad and welcoming, opening off of and integrating with the campus open spaces. The primary building frontage and access will be oriented to the central campus, although secondary entrances from parking may be appropriate.

Outdoor Transition – Roof overhangs, trellises, courtyards and other means of transitioning outdoor to interior spaces are encouraged. Opportunities for informal learning will be provided whenever possible. Outdoor areas should include usable space designed to be more than places to walk through to get to the building. Paving materials, colors and patterns within these areas are important for adding a sense of place and scale. Materials should coordinate with other paving on campus but may be designed to specifically compliment and coordinate with the building and the adjacent campus pathways.

Building Form – The building forms at CSULB are primarily rectilinear. The Pyramid is a unique focal point on campus. All future buildings will continue the tradition of the brick modernist simple and elegant lines that define the architectural vocabulary of the campus. Attention to detailing is imperative to the success of building design within this vernacular. The California climate and building orientation will influence the design of the different facades. The campus topography will be embraced by the buildings rather than resisted with retaining walls.

Materials – The combination of brick with white cementitious materials will be the primary vernacular of CSULB. Brick vertical facades utilizing the designated campus peach brick color are encouraged. Full size brick units should be used whenever possible. Thin brick should be considered only in locations where it will not give an appearance of being an applied finish, or a “wallcovering” but rather will be an integral element of the structure. Vertical planes of brick will be incorporated in locations and proportion significant enough to integrate the design to the campus vernacular. White concrete will be a secondary material and may be utilized in various configurations and geometries. Exterior materials will be durable, particularly in regards to the marine atmosphere.

Roofs – Roof lines will appear flat and roof overhangs to shield sun and rain are appropriate. Mechanical and building system equipment will be housed within the buildings whenever possible. Where roof mounted equipment is unavoidable it will be concealed by parapets and line of sight. If mechanical equipment screens are

necessary to complete the screening of equipment, they will be designed to integrate with the building. Some roofs may be visible from upper floors of neighboring buildings. All vantage points will be considered when designing the roof.

Windows – Window opening configurations and scale are important elements for the rectilinear building forms of CSULB. Individually set windows and storefront installations are acceptable systems. Glass curtain wall systems should only be considered if used in a limited and purposeful manner. Glass surfaces will add depth, shadow and dimension to the building façade. Future flexibility of interspaces will be considered when the façade and window penetrations are being designed. Glazing color will be bronze tinted, and window frames and storefronts will be dark bronze anodized or a finish complimentary to dark bronze.

Service – Service areas, including access for campus vehicles, trash collection and pickup, and building deliveries will be located in a manner to minimize pedestrian and vehicular paths from conflicting. Pedestrians will always have the priority in the circulation planning of buildings. Service access and areas will be shielded from view and will be located adjacent to parking and driveways. Prioritizing the pedestrian right of ways over those of service vehicles should be the priority. Access for service activities need not be compromised. Planning for pedestrian safety and not disrupting the pedestrians' paths and activities is of primary importance, and if consideration is specifically given to how service will be delivered to the proposed buildings, the 2 should be able to coexist without conflict.

Accessibility – Planning and design of buildings, landscape areas, sidewalks, and parking facilities will all equal or exceed the requirements of Title 24.

Parking

The updated Master Plan includes additional structured parking needed to accommodate gradual growth in student enrollment and keep students on campus. Two new parking structures will be provided: Parking Structure 4 with approximately 1,150 spaces that will replace the existing Parking Lot 14A between Merriam Way and Earl Warren Drive, and Parking Structure 5 with approximately 1,360 spaces that will be located in the southeast corner of the campus and will replace the existing Parking Lot 7 that currently provides 211spaces.

Access and Circulation

Two primary vehicular entrances and 7 secondary access points from public streets provide access to the campus. The Beach Drive entrance from Bellflower Boulevard has a significant community presence, including a monument sign. The Visitor Information Center is also located on Beach Drive, where visitors may receive parking advice and day permits. The West Campus Drive entrance from 7th Street is also prominent and has an electronic marquee with information about campus events.

Vehicular Mobility: Earl Warren Drive and Merriam Way provide access through the campus from Beach Drive on the south to Atherton Street on the North. They are both west of the main academic areas of campus and provide access to parking and student housing. Secondary access roads provide direct routes to parking, as well as for service vehicles. Restricted access roads require card key or similar means of access and are for designated users only. Pedestrian Drop-Off areas allow vehicles to continue through the campus without entering major parking lots and structures.

Emergency/Service Access: Emergency vehicles have access to the interior of campus by using restricted routes and service roads and paths. Planning and building design incorporate access for emergency vehicles as an integral part of the design. Dual use paths are paved to accentuate pedestrian primacy. Service vehicles use designated service routes, and service access throughout most of the campus follows the Primary, Secondary and Restricted road systems. In areas where those roads are not present, service vehicles can use the emergency routes.

Walking and Bicycling: The “buildings in a park” campus configuration creates a pedestrian-oriented environment with automobile and public transportation circulation routes remaining outside the central campus and the major open spaces.

The campus core is designed as a pedestrian domain. Most academic, academic support, and housing facilities are all clustered within a one-half mile walking distance. Pedestrian circulation pathways are provided through open spaces where diagonal crossings of the landscape create a pedestrian-friendly environment. At points of convergence of multiple modes of travel, the pedestrian are given the right-of-way, especially at key crossing of heavily traveled streets. Information pylons are located throughout the campus at pedestrian orientation points and pedestrian route intersections, where visual cues direct pedestrians toward the most desirable path. A north-south pedestrian mall is being implemented to complete a safe and inviting walking route from Parking Structures 2 and 3 to the central campus. Pedestrian and bicycle facilities comply with ADA and Title 24 requirements.

Transit: Long Beach Transit provides transit service to the campus, with connections to other local and regional transit agencies. Transit routes run along 7th Street, West Campus Drive, Beach Drive, and Bellflower Boulevard, with a major stop on West Campus Drive and at the West Turnaround.

Campus Shuttle: The Campus Connection is a shuttle program dedicated to providing alternative transportation for the campus community. Three routes serve the entire campus perimeter and all major parking facilities, as well as residences just to the west of the campus. By providing shuttle access, campus commuters are encouraged to park only once when they arrive on campus and not move their car to another area of campus during the day, thus reducing traffic and parking space “hunting” that congests the parking lots and structures. The shuttle also provides safe passage for evening classes and events.

Utility Master Plan

CSULB campus operates its own electrical distribution system, receives transmission service from Southern California Edison, and purchases its electric supply directly from an energy service provider. The University also operates a central heating and cooling plant with a thermal energy storage that provides heating and cooling to majority of the buildings on campus, which reduces peak electrical loads by shifting cooling production to off peak hours. Water service is provided by the Long Beach Water Department. The campus sewer system connects to local and regional sewer and treatment to City of Long Beach and County Sanitation Districts facilities. Long Beach Gas Company provides gas service, and Verizon is the local exchange carrier for telecommunication services. With the exception of power, telecommunications, and chilled water and heating hot water distribution systems, the majority of the utilities infrastructure date back to campus inception and is over 50 years old.

Due to their age, a detailed survey of the existing utility systems that serve campus was conducted. The survey documented existing conditions of the systems and identified needed improvements and upgrades. Each utility system was evaluated for capacity, functionality, reliability, ease of maintenance, age, and its ability to serve the present and future campus needs. Alterations, upgrades, and modifications necessary to support new buildings, major renovations, and building replacements pursuant to the Master Plan were identified. These include the following:

- **Domestic and Fire Water Systems** – Existing transite and asbestos cement pipe mains will be replaced with polyvinyl chloride (PVC) class 900 plastic pipe in phases and upsized where necessary. Lines that are within the sites of proposed buildings will be relocated.
- **Sewer Systems** – Existing lines that are affected by root intrusions and have cracks and joints displacement will be replaced. Lines that are within the sites of proposed buildings will be relocated.
- **Storm Drain Systems** – Minor improvements to the existing system are proposed. Lines that are within the sites of proposed buildings will be relocated.
- **Irrigation Reclaimed Water** – The reclaimed water networks on the north side of the campus will be connected together to form a single network to provide redundancy to the system in case repairs are ever needed and work to improve pressure and flow. Reclaimed water is used on the south side of campus for irrigation as well. Backflow preventor systems will also be installed where necessary.
- **Chilled and Hot Water Systems** – Energy efficiency measures will continue to be implemented.
- **Gas Systems** – Existing PVC pipe will be replaced with polyethylene pipe. Modifications to the existing distribution system to accommodate the proposed buildings are also specified.
- **Electrical Systems** – The system overall operates adequately, and only minor modifications are proposed. Lines that are within the sites of proposed buildings will be relocated.
- **Telecommunication Systems** – Category 6 type copper cables will be installed as the campus standard for all new/renovation building projects. Other telecommunications infrastructure will be upgraded as well.

Relationship to Regional Plans

The Southern California Association of Governments (SCAG) assists cities, counties, and other public agencies in reviewing projects and plans for consistency with adopted regional plans, including the Regional Comprehensive Plan and Guide (RCP), Regional Mobility Element/Regional Transportation Plan (RME/RTP), Growth Management Plan (GMP), and Air Quality Management Plan (AQMP). All regional plans are interrelated and work in tandem to manage Southern California growth and development and still meet federal and State air quality and other standards.

The updated Campus Master Plan is consistent with these regional plans. The Master Plan is designed to accommodate the projected growth in student enrollment generated by increased development in the area and the region. The updated Master Plan by itself has no potential of substantially changing population and/or employment levels in the region, since the Master Plan has been developed in response to existing and projected demand for University facilities necessary to accommodate the higher education needs of the region's residential population as mandated by the State Legislature. As the updated Master Plan will not change population or employment levels in the region, it is consistent with the growth assumptions of the regional plans, including the AQMP – which is based on SCAG's projections and RCP. The updated Master Plan includes a variety of features that will help reduce vehicle trips generated by student enrollment at the University. This includes addition of on-campus housing opportunities for students that will reduce the number of commuter trips to and from campus; preservation of open space that will encourage pedestrian activity throughout the campus and reduce internal auto trips; and provision of structured parking on campus that will keep more students on campus and reduce trips on the surrounding streets; among others. As such the updated Campus Master Plan works toward achieving goals of the growth management, air quality management, and transportation mobility plans.

Project Actions

The updated Campus Master Plan and subsequent implementing actions are subject to review and approval by the Trustees of the California State University. Implementation of the updated Campus Master Plan may also involve actions of other agencies, including the following:

- City of Long Beach

Issuance of permits for construction of utility and roadway improvements within City right-of-way; approval of other utility arrangements; approval of new connections and fee payment for water delivery, and/or others, if any

- County of Los Angeles Sanitation Districts

Approval of new connections and approval of fees for new connections and/or increase in quantity of wastewater from existing connections, if any

- Los Angeles County Flood Control District
Issuance of permits for construction and/or other actions that affect
- Caltrans, District 7
Approval of roadway improvements within Caltrans jurisdiction, if any
- Others, as may be necessary

3.0 Environmental Impacts and Mitigation Measures

This section of the EIR examines potentially significant effects associated with the CSULB updated Campus Master Plan as identified through the NOP process (see Section 1.0 and Appendix A) and identifies mitigation measures to avoid or substantially reduce impacts found to be potentially significant in the EIR analysis. Each environmental issue for which the Initial Study (see Appendix A) identified a potentially significant impact is discussed in the following manner:

Environmental Setting describes the existing environmental conditions in the vicinity of the project as it exists before the commencement of the project to provide a baseline for comparing “before the project” and “after the project” environmental conditions.

Thresholds Used to Determine Level of Impact defines and lists specific criteria used to determine whether an impact is considered to be potentially significant. Appendix G of the CEQA Guidelines; applicable local, State, federal or other standards; and officially established thresholds of significance are the major sources used in crafting criteria appropriate to the specifics of a project, since “...an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting” (CEQA Guidelines Section 15064[b]). Principally, “... a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance” constitutes a significant impact (CEQA Guidelines Section 15382).

Environmental Impact presents evidence, based to the extent possible on scientific and factual data, about the cause and effect relationship between the project and potential changes in the environment. The exact magnitude, duration, extent, frequency, range or other parameters of a potential impact are ascertained to the extent possible to provide facts in support of finding the impact to be or not to be significant. In determining whether impacts may be significant, all the potential effects, including direct effects, reasonably foreseeable indirect effects, and considerable contributions to cumulative effects, are considered. If, after thorough investigation, a particular impact is too speculative for evaluation, that conclusion is noted (CEQA Guidelines Section 15145).

Mitigation Measures identify measures that can reduce or avoid the potentially significant impact identified in the EIR analysis. Standard existing regulations, requirements, and procedures applicable to the project are considered a part of the existing regulatory environment. Mitigation measures are those feasible, project-specific measures that may be needed in addition to compliance with existing regulations and requirements, in order to reduce significant impacts. Mitigation, in addition to measures that the lead agency will implement, can also include measures that are within the responsibility and jurisdiction of another public agency (CEQA Guidelines Section 15091[a][2]).

Level of Impact after Mitigation indicates what effect remains after application of mitigation measures, and whether the remaining effect is considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as “unavoidable significant impacts.” To approve a project with significant unavoidable impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project against its significant effects, and has concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered “acceptable” (CEQA Guidelines Section 15093 [a]).

3.1 Traffic, Circulation, and Parking

This section discusses traffic, circulation, and parking issues associated with the updated Campus Master Plan. A traffic study was prepared for the Master Plan by Fehr & Peers/Kaku Associates in October 2007. The study findings are summarized below, and the study is included in Appendix B of this EIR. The traffic study appendices are provided under separate cover.

Environmental Setting

The University campus is generally bordered by Atherton Street to the north, Palo Verde Avenue to the east, 7th Street to the south and Bellflower Boulevard to the west. Regional access is provided by Interstate 405 (I-405) with interchanges at Bellflower Boulevard and Palo Verde Avenue. State Route 22 (SR-22) terminates at 7th Street just to the southeast of campus with additional access provided at Studebaker Road. Direct access to Interstate 605 (I-605), which terminates to the northeast of CSULB, is provided via SR-22. Pacific Coast Highway (SR-1) runs diagonally past the University's southwest side as well.

Roadway Network

The roadway system in the vicinity of CSU Long Beach campus is described below:

Bellflower Boulevard – a north-south arterial providing access to I-405 to the north and the Pacific Coast Highway to the south. Bellflower Boulevard has 6 travel lanes with limited on-street parking near CSULB.

Palo Verde Avenue – a north-south arterial providing access to I-405 to the north. It provides 4 travel lanes with on-street parking near the campus. South of Atherton Street, Palo Verde provides access to CSULB Parking Structure 2 and 3, each of which provides approximately 1,300 parking spaces in the north campus.

Studebaker Road – a north-south arterial providing access to I-405 to the north with a partial interchange serving vehicles traveling to/from the north on I-405 and providing access to SR-22 to the south. Studebaker Road has 4 travel lanes in the vicinity of CSULB with limited on-street parking.

Atherton Street – an east-west roadway and serves as the University's northern border, providing access to the north campus. Atherton Street has 4 travel lanes with limited on-street parking near CSULB.

7th Street – an east-west roadway and serves as the University’s southern border, providing access to the south campus. This roadway has 6 travel lanes with no on-street parking. East of CSULB, 7th Street becomes SR-22 and provides regional access to the east and I-405.

Merriam Way – a north-south roadway providing internal access within CSULB. Between Atherton Street and Parking Structure 1, Merriam Way has 4 lanes and then narrows to 2 lanes south of the parking structure. North of Atherton Street, Merriam Way becomes Fanwood Avenue and provides access to the residential neighborhood north of the University.

Earl Warren Drive – a 2- to 4-lane north-south roadway providing internal access within CSULB and surface parking lots in the north campus.

Beach Drive – a 4-lane east-west roadway providing internal access within CSULB. A primary campus gateway is at the Beach Drive and Bellflower Boulevard intersection at the western edge of campus. Beach Drive curves to the south and becomes West Campus Road.

West Campus Road – a 2-lane north-south roadway providing internal access within CSU Long Beach. A primary campus gateway is at the West Campus Drive and 7th Street intersection at the southern edge of campus.

East Campus Road – a 2-lane north-south roadway providing internal access within CSULB. East Campus Road is restricted to campus vehicles north of the surface parking lot adjacent to 7th Street.

State University Drive – a 2-lane east-west roadway providing access to the pick-up/drop-off area west of Palo Verde Avenue. East of Palo Verde Avenue, State University Drive becomes Anaheim Road, which provides access to Studebaker Road and areas further east.

Level of Service (LOS)

Level of Service (LOS) is a qualitative measure used to describe traffic flow conditions, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the satisfactory level of service in urban areas. The Intersection Capacity Utilization (ICU) method of intersection analysis, which is consistent with the County of Los Angeles Congestion Management Program (CMP) and City of Long Beach guidelines, was used to determine the volume-to-capacity (V/C) ratio and corresponding level of service for 23 signalized study intersections. The ICU value is determined by assessing the V/C ratio for each movement at the intersection, identifying the critical movements, and calculating the sum of the V/C ratios for the critical movements.

At the remaining 6 study intersections, which are stop-controlled, the average vehicular delay was determined using the “Stop Control” method.¹ For all-way-stop-controlled

¹ Highway Capacity Manual, Special Report 209. Transportation Research Board. 2000

intersections, the average delay for all vehicles traveling through the intersection is used to determine LOS. For side-street stop-controlled intersections, the methodology calculates the average vehicle delay for each individual movement and the LOS is based on the reported worst-case movement at the intersection. In this case, both the worst-case and average LOS are reported for side-street stop-controlled intersections.

Existing Traffic Conditions

A total of 29 intersections were selected for analysis (see Figure 4). Existing AM and PM peak-hour turning movement data were collected at each of the study intersections. Table 2 summarizes the results of the intersection capacity analysis indicating ICU values and corresponding LOS for each intersection at AM and PM peak hours. As shown, the following intersections currently operate at LOS E or F:

- ***Bellflower Boulevard and 7th Street*** – LOS E during both peak hours
- ***Pacific Coast Highway and 7th Street*** - LOS E during the AM peak hour and LOS F during the PM peak hour
- ***Pacific Coast Highway and 2nd Street*** – LOS E during the AM peak hour and LOS F during the PM peak hour

Congestion Management Program

The Los Angeles County Metropolitan Transportation Authority (MTA) oversees preparation and implementation of the CMP, a State-mandated program to monitor traffic growth on the regional transportation system and work to maintain pre-established LOS on critical routes. For CMP freeways, LOS is described based on a classification system ranging from LOS A, representing excellent flows, to LOS F(3), representing severely congested conditions.

Congestion Management Program facilities selected for study in the project vicinity include 10 segments of I-405, I-605, and SR-22, and the intersection of Pacific Coast Highway and 7th Street. As shown in Table 2, existing LOS at this intersection is LOS E in the AM peak and LOS F in the PM peak. Level of Service along the CMP freeway segments ranges from LOS C to LOS F(0), with most poor operating conditions occurring on I-405 (refer to Table 2).

Internal Vehicular Circulation

The internal roadway system at the campus is comprised of the following roadways:

- ***Merriam Way*** – Merriam Way extends south from Atherton Street to Beach Drive and provides access to surface parking lots and Parking Structure #1.
- ***Earl Warren Drive*** – Earl Warren Drive extends south from Atherton Street to Beach Drive and provides access to the surface parking lots in the north campus.

- **Beach Drive** – Beach Drive is a primary campus gateway providing access to/from Bellflower Boulevard at the western edge of campus and continuing east to connect with West Campus Road.

**Table 2
Existing Year 2007 Intersection Level of Service**

Intersections	Peak Hour	V/C or Average (Worst) Delay	LOS
1. Palo Verde Avenue & Anaheim Road	A.M. P.M.	27 17	D C
2. I-405 SB Off-Ramp & Los Coyotes Diagonal	A.M. P.M.	0.653 0.653	B B
3. Bellflower Boulevard & I-405 NB Ramps	A.M. P.M.	0.528 0.547	A A
4. Bellflower Boulevard & Stearns Street	A.M. P.M.	0.716 0.813	C D
5. Bellflower Boulevard & Atherton Street	A.M. P.M.	0.790 0.784	C C
6. Bellflower Boulevard & Beach Drive	A.M. P.M.	0.525 0.581	A A
7. Bellflower Boulevard & 7th Street	A.M. P.M.	0.920 0.975	E E
8. Bellflower Boulevard & Pacific Coast Highway	A.M. P.M.	0.618 0.704	B C
9. Pacific Coast Highway & 7th Street	A.M. P.M.	0.976 1.003	E F
10. West Campus Road & 7th Street	A.M. P.M.	0.822 0.826	D D
11. Palo Verde Avenue & Parking Structure [a]	A.M. P.M.	1 (22.4) 1 (27.8)	A (C) A (D)
12. Palo Verde Avenue & Rendina Street	A.M. P.M.	0.406 0.478	A A
13. Palo Verde Avenue & Atherton Street	A.M. P.M.	0.678 0.801	B D
14. Palo Verde Avenue & Stearns Street	A.M. P.M.	0.758 0.753	C C
15. Palo Verde Avenue & Woodruff Avenue	A.M. P.M.	0.849 0.735	D C

Table 2 (continued)
Existing Year 2007 Intersection Level of Service

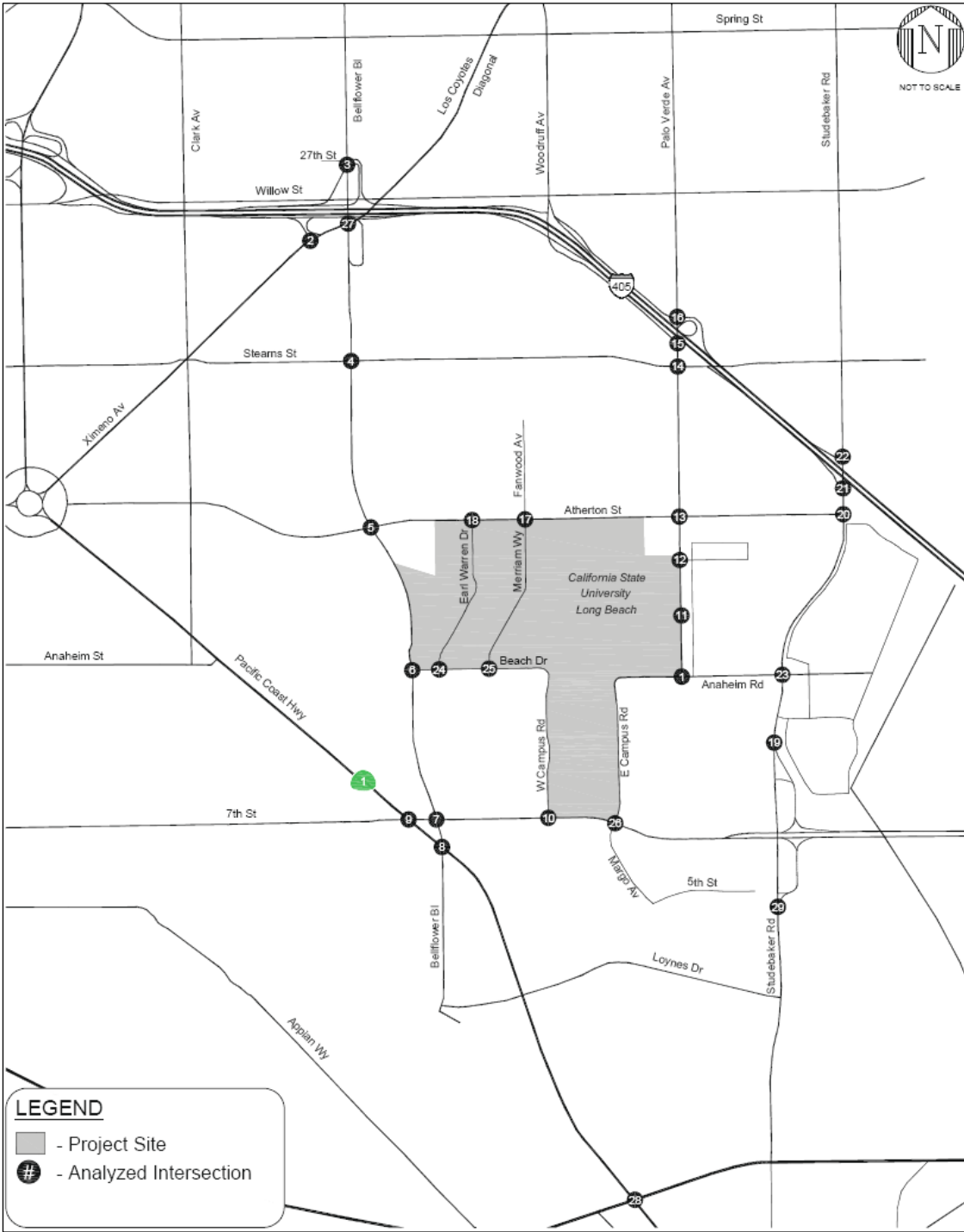
Intersections	Peak Hour	V/C or Average (Worst) Delay	LOS
16. Palo Verde Avenue & I-405 NB Off-Ramp	A.M. P.M.	0.607 0.636	B B
17. Merriam Way/Fanwood Drive & Atherton Street	A.M. P.M.	0.761 0.741	C C
18. Earl Warren Drive & Atherton Street [a]	A.M. P.M.	1 (13.3) 1 (12.3)	A (B) A (B)
19. Studebaker Road & SR-22 WB Ramps	A.M. P.M.	0.701 0.820	C C
20. Studebaker Road & Atherton Street	A.M. P.M.	0.595 0.643	A B
21. Studebaker Road & I-405 SB Off-Ramp [a]	A.M. P.M.	5 (72.6) 3 (57.6)	A (F) A (F)
22. Studebaker Road & I-405 NB On-Ramp	A.M. P.M.	0.560 0.482	A A
23. Studebaker Road & Anaheim Road	A.M. P.M.	0.753 0.676	B A
24. Earl Warren Dr & Beach Drive [a]	A.M. P.M.	3 (28.1) 4 (18.3)	A (D) A (C)
25. Merriam Way & Beach Drive [a]	A.M. P.M.	10 12	B B
26. East Campus Road & 7th Street	A.M. P.M.	0.782 0.860	C D
27. Bellflower Boulevard & Los Coyotes Diagonal	A.M. P.M.	0.786 0.853	C D
28. Pacific Coast Highway & 2nd Street	A.M. P.M.	0.927 1.029	E F
29. Studebaker Road & SR-22 EB Ramps	A.M. P.M.	0.692 0.747	A B

Notes:

- [a] Intersection is controlled by stop signs. The top rows show analysis using *Highway Capacity Manual* stop-controlled methodology, for the purpose of evaluating the operating condition of the intersection. Average (worst case) intersection vehicular delay in seconds per vehicle is reported rather than V/C ratio.

Study Intersections

Figure 4



- **West Campus Road** – extends north from 7th Street to Beach Drive and serves as a primary internal circulation roadway.
- **East Campus Road** – extends north from 7th Street to State University Drive and is restricted to campus vehicles north of the surface parking lot adjacent to 7th Street.
- **State University Drive** – an eastern campus roadway providing access to the pick-up/drop-off area west of Palo Verde Avenue.

Parking

Currently, there are approximately 13,400 parking spaces on campus. The majority of parking is provided in surface lots, which are scattered around campus, primarily in the center and along the periphery. The distribution of on-campus parking is summarized below.

- Surface Lots = 8,961 spaces
- Temporary Lot (20) = 419 spaces
- Parking Structure #1 = 2,727 spaces
- Parking Structure #2 = 1,297 spaces
- Total = 13,404 spaces

Transit

Long Beach Transit provides transit service in the vicinity of campus, including bus routes within the campus along Beach Drive and West Campus Drive. These bus routes provide connections to other local and regional transit service, including Metrolink and the Green Line light rail line via Norwalk, and the Blue Line light rail line in downtown Long Beach. The University also provides transit service throughout campus and nearby areas.

Long Beach Transit routes serving the campus include the following:

Route 81 – runs in the east-west direction along 10th Street and 7th Street from downtown Long Beach to CSULB at 30-minute headways during peak hours.

Routes 91, 92, 93, and 94 – run along 7th Street in the east-west direction and along Bellflower Boulevard in the north-south direction. These routes provide service from downtown Long Beach to Alondra Boulevard at 12-minute headways during peak hours.

Routes 172, 173, and 174 – run along the Pacific Coast Highway and Stearns Street in the east-west direction and along Palo Verde Avenue and Studebaker Road in the north-south direction. These routes provide service from downtown Long Beach to Norwalk Station at 30-minute headways during peak hours.

Passport D – runs mostly along Ocean Boulevard in the east-west direction. The route provides service from Catalina Landing in the west to CSULB and to Los Altos Market Center at 30-minute headways during peak hours.

CSULB provides shuttle service within campus with the Campus Connection. This shuttle promotes alternative transportation on campus and reduces the need for students, faculty, or staff to drive within campus once they arrive and park their vehicle. The Campus Connection provides the following 3 shuttle routes to serve major parking facilities and the campus perimeter.

Off-Campus West Shuttle – provides service from the south campus to the north campus along western campus roadways. The route begins at the 7th Street pick-up/drop-off area, continues north along West Campus Drive and west along Beach Drive, and then continues into the north campus on Earl Warren Drive, Merriam Way, and Atherton Street. Two shuttles are provided along this route with operation from 7:00 AM to midnight Monday through Thursday and from 7:00 AM to 5:00 PM on Fridays. The Off-Campus West Express also provides service between 7:30 AM and 3:00 PM Monday through Thursday.

East Campus Shuttle – provides service from the south campus to the north campus along the eastern campus roadways. The route begins at the 7th Street pick-up/drop-off area, continues north along East Campus Drive and east along State University Drive, and then continues into the north campus on Palo Verde Avenue, Atherton Street, and Merriam Way. Two shuttles are provided along this route with operation from 7:00 AM to midnight Monday through Thursday and 7:00 AM to 5:00 PM on Fridays.

On-Campus Tripper – provides a complete loop around the campus. The route begins at the 7th Street pick-up/drop-off area, continues north along West Campus Drive and west along Beach Drive, and then continues into the north campus on Earl Warren Drive, and uses existing surface lots and internal roadways to travel east to Palo Verde Avenue. The route then continues south on Palo Verde Avenue to State University Drive and then south on East Campus Drive. One shuttle is provided along this route with operation from 7:00 AM to 7:00 PM Monday through Thursday and 7:00 AM to 5:00 PM on Fridays.

Bicycles and Pedestrians

The campus core is designed as a pedestrian domain. Most academic, academic support and housing facilities are clustered within a ½-mile walking distance. At points of convergence of multiple travel modes, pedestrians are given the right-of-way, especially at key crossings at heavily traveled streets. Visual cues direct pedestrians toward the most desirable path. Service vehicles use designated service routes. All pedestrian and bicycle facilities comply with the American with Disabilities Act (ADA) and Title 24 requirements.

Thresholds Used to Determine Level of Impact

Based on City of Long Beach criteria, impact is considered significant if the addition of project traffic causes the V/C ratio at an intersection to increase by an amount equal to or greater than 2% of capacity (i.e. the V/C ratio is 0.02 or greater) and the resultant projected LOS at that intersection is LOS E or F. Impact on CMP facilities is considered significant if the project increases traffic by 2% of capacity (i.e., $V/C > 0.02$), causing or worsening LOS F ($V/C > 1.00$). Impact will also be significant if the project substantially degrades bicycle, pedestrian, or transit service, or results in inadequate parking or internal circulation.

Environmental Impact

Vehicular traffic conditions under both the near term and long term were projected without the project. Next, project trips were estimated and distributed onto the network, allowing the project's potential impacts to be calculated.

Near-Term Traffic Impact

A near-term traffic scenario was analyzed for the year 2012-13 when the following components are anticipated to be in place by that time:

- 27,479 FTE student enrollment (1,039 new FTE students)
- Liberal Arts Replacement Buildings (no new students)
- Soccer complex (no new students)
- 980 beds for student housing, Phase 1
- Parking Structure 3 – 1,300 total spaces located on Lot 11

Future Without Project Traffic Conditions

A list of related projects was obtained from the planning departments of the cities of Long Beach and Signal Hill to identify future conditions without the project. A total of 13 related projects were identified within a 2-mile radius of campus, which are described in Table 3 and illustrated in Figure 5.

As shown in Table 3, the related projects will generate a total of approximately 94,704 daily trips. Of these, 5,300 trips will occur during the weekday morning (AM) peak hour and approximately 9,200 trips in the evening (PM) peak hour.

Based on the related project locations and their projected trip distribution, traffic generated by the related projects was assigned to the street network within the study area. The related project trips plus an ambient growth rate of 0.5% per year was added to existing traffic volumes to yield “near-term no project” peak hour traffic forecasts at each study intersection. As indicated in Table 4, poor operating conditions (LOS E or F) are projected at the following 5 study intersections during at least one peak hour, as follows:

**Table 3
Related Projects Trip Generation**

Description	Address	City	ITE Land Use Code	Land Use	Trips Per	Daily Trips	A.M. Trips			P.M. Trips		
							In	Out	Total	In	Out	Total
1. 106 Single Family Homes	2080 Obispo	Long Beach	268	106	DU	1,014	20	60	80	67	40	107
2. 175,000 sf commercial center (Home Depot)	400 Studebaker Rd	Long Beach	812	175	ksf	5,621	263	161	424	247	238	485
3. Douglas Park Project - 349-lot subdivision, Planned Development Ordinance (PD-32), Design Guidelines, Development Agreement, for 1,400 units, 400-room hotel, 3.3 million sf of commercial/light industrial, and 11 acres of parkland	3855 Lakewood Blvd	Long Beach	230	1400	DU	8,204	105	511	616	488	240	728
			310	400	Room	3,268	137	87	224	125	111	236
			412	11	acre	25	4	2	6	2	4	6
4. 29-unit condominium development	4200 E. Anaheim St.	Long Beach	230	29	DU	170	2	11	13	10	5	15
5. 425 units, 170,000 sq. ft. of commercial space	6400 E. Pacific Coast Hwy	Long Beach	230	425	DU	2,491	32	155	187	148	73	221
			820	170	ksf	7,300	107	68	175	306	332	638
6. Ralph's expansion 6,200 sq. ft.	2930 E. 4th Street	Long Beach	850	6.2	ksf	634	12	8	20	33	32	65
7. 34 attached townhomes	5116 Anaheim Rd.	Long Beach	230	34	DU	199	3	12	15	12	6	18
8. Construction of 13 industrial bldgs @ Douglas park	2855 Lakewood Blvd	Long Beach	110	1650	ksf	11,501	1,336	182	1,518	194	1,423	1,617
9. Construction of 13 commercial bldgs @ Douglas park	2858 Lakewood Blvd	Long Beach	820	1100	ksf	47,234	691	442	1,133	1,980	2,145	4,125
			710	550	ksf	6,056	751	102	853	139	681	820
10. 4,600 sf tenant improvement (GRG management)	1941 Freeman	Signal Hill	710	4.6	ksf	51	6	1	7	1	6	7
11. 4,000 sf tenant improvement wellness center	2652 Gundry	Signal Hill	630	4	ksf	145	8	2	10	4	11	15
12. 54-unit 3-story condos "Pacificwalk"	1801 Orizaba	Signal Hill	230	54	DU	316	4	20	24	19	9	28
13. 81 townhome/condo subdivision on Orizaba near PCH	1835 Orizaba	Signal Hill	230	81	DU	475	6	30	36	28	14	42
Total						94,704	3,487	1,854	5,341	3,803	5,370	9,173

Related Projects

Figure 5



**Table 4
Near Term Intersection Level of Service**

Intersections	Peak Hour	WITHOUT PROJECT		WITH PROJECT		IMPACT	
		V/C or Average (Worst) Delay	LOS	V/C or Average (Worst) Delay	LOS	Increase in V/C	Significant Impact
1. Palo Verde Avenue & Anaheim Road	A.M.	30	D	34	D		
	P.M.	18	C	19	C		
	A.M.					0.016	NO
	P.M.					0.019	NO
2. I-405 SB Off-Ramp & Los Coyotes Diagonal	A.M.	0.675	B	0.681	B	0.006	NO
	P.M.	0.674	B	0.681	B	0.007	NO
3. Bellflower Boulevard & I-405 NB Ramps	A.M.	0.555	A	0.559	A	0.004	NO
	P.M.	0.604	B	0.608	B	0.004	NO
4. Bellflower Boulevard & Stearns Street	A.M.	0.764	C	0.771	C	0.007	NO
	P.M.	0.855	D	0.861	D	0.006	NO
5. Bellflower Boulevard & Atherton Street	A.M.	0.811	D	0.824	D	0.013	NO
	P.M.	0.824	D	0.828	D	0.004	NO
6. Bellflower Boulevard & Beach Drive	A.M.	0.535	A	0.541	A	0.006	NO
	P.M.	0.611	B	0.616	B	0.005	NO
7. Bellflower Boulevard & 7th Street	A.M.	0.964	E	0.970	E	0.006	NO
	P.M.	1.031	F	1.038	F	0.007	NO
8. Bellflower Boulevard & Pacific Coast Highway	A.M.	0.663	B	0.663	B	0.000	NO
	P.M.	0.780	C	0.782	C	0.002	NO
9. Pacific Coast Highway & 7th Street	A.M.	1.033	F	1.034	F	0.001	NO
	P.M.	1.064	F	1.066	F	0.002	NO
10. West Campus Road & 7th Street	A.M.	0.849	D	0.850	D	0.001	NO
	P.M.	0.858	D	0.859	D	0.001	NO
11. Palo Verde Avenue & Parking Structure [a]	A.M.	1 (23.1)	A (C)	1 (23.8)	A (C)		
	P.M.	1 (29.2)	A (D)	2 (30.7)	A (D)		
	A.M.					0.005	NO
	P.M.					0.006	NO
12. Palo Verde Avenue & Rendina Street	A.M.	0.413	A	0.422	A	0.009	NO
	P.M.	0.486	A	0.504	A	0.018	NO
13. Palo Verde Avenue & Atherton Street	A.M.	0.770	C	0.791	C	0.021	NO
	P.M.	0.824	D	0.835	D	0.011	NO
14. Palo Verde Avenue & Stearns Street	A.M.	0.776	C	0.790	C	0.014	NO
	P.M.	0.774	C	0.783	C	0.009	NO
15. Palo Verde Avenue & Woodruff Avenue	A.M.	0.867	D	0.888	D	0.021	NO
	P.M.	0.751	C	0.775	C	0.024	NO

**Table 4 (Continued)
Near Term Intersection Level of Service Analysis**

Intersections	Peak Hour	WITHOUT PROJECT		WITH PROJECT		IMPACT	
		V/C or Average (Worst) Delay	LOS	V/C or Average (Worst) Delay	LOS	Increase in V/C	Significant Impact
16. Palo Verde Avenue & I-405 NB Off-Ramp	A.M.	0.619	B	0.634	B	0.015	NO
	P.M.	0.649	B	0.666	B	0.017	NO
17. Merriam Way/Farwood Drive & Atherton Street	A.M.	0.777	C	0.787	C	0.010	NO
	P.M.	0.760	C	0.783	C	0.023	NO
18. Earl Warren Drive & Atherton Street [a]	A.M.	1 (13.6)	A (B)	1 (13.9)	A (B)	0.024 0.014	NO NO
	P.M.	1 (12.6)	A (B)	1 (13.0)	A (B)		
	A.M.						
	P.M.						
19. Studebaker Road & SR-22 WB Ramps	A.M.	0.770	C	0.772	C	0.002	NO
	P.M.	0.902	E	0.902	E	0.000	NO
20. Studebaker Road & Atherton Street	A.M.	0.630	B	0.632	B	0.002	NO
	P.M.	0.697	B	0.700	B	0.003	NO
21. Studebaker Road & I-405 SB Off-Ramp [a]	A.M.	7 (120.1)	A (F)	7 (123.4)	A (F)	0.002 0.001	NO NO
	P.M.	4 (96.4)	A (F)	4 (99.5)	A (F)		
	A.M.						
	P.M.						
22. Studebaker Road & I-405 NB On-Ramp	A.M.	0.595	A	0.598	A	0.003	NO
	P.M.	0.528	A	0.531	A	0.003	NO
23. Studebaker Road & Anaheim Road	A.M.	0.797	C	0.810	D	0.013	NO
	P.M.	0.726	C	0.745	C	0.019	NO
24. Earl Warren Dr & Beach Drive [a]	A.M.	4 (29.4)	A (D)	4 (30.0)	A (D)	0.004 0.007	NO NO
	P.M.	4 (18.8)	A (C)	4 (19.3)	A (C)		
	A.M.						
	P.M.						
25. Merriam Way & Beach Drive [a]	A.M.	10	A	10	B	0.005 0.009	NO NO
	P.M.	12	B	12	B		
	A.M.						
	P.M.						
26. East Campus Road & 7th Street	A.M.	0.808	D	0.811	D	0.003	NO
	P.M.	0.893	D	0.896	D	0.003	NO
27. Bellflower Boulevard & Los Coyotes Diagonal	A.M.	0.822	D	0.827	D	0.005	NO
	P.M.	0.918	E	0.925	E	0.007	NO
28. Pacific Coast Highway & 2nd Street	A.M.	1.014	F	1.015	F	0.001	NO
	P.M.	1.160	F	1.161	F	0.001	NO
29. Studebaker Road & SR-22 EB Ramps	A.M.	0.761	C	0.761	C	0.000	NO
	P.M.	0.829	D	0.829	D	0.000	NO

Notes:

[a] Intersection is controlled by stop signs. The top rows show analysis using *Highway Capacity Manual* stop-controlled methodology, for the purpose of evaluating the operating condition of the intersection. Average (worst case) intersection vehicular delay in seconds per vehicle is reported rather than V/C ratio. The bottom rows show analysis using ICU methodology. V/C ratio is reported.

- **Bellflower Boulevard and 7th Street** – LOS E during the AM peak hour and LOS F during the PM peak hour
- **Pacific Coast Highway and 7th Street** – LOS F during both peak hours
- **Studebaker Road and SR-22 Westbound Ramps** – LOS E during the PM peak hour
- **Bellflower Boulevard and Los Coyotes Diagonal** – LOS E during the PM peak hour
- **Pacific Coast Highway and 2nd Street** – LOS F during both peak hours

The remaining study intersections are projected to operate at LOS D or better during both peak periods under near-term future without the project conditions.

Project Trip Generation

To account for the University’s unique characteristics, ITE trip generation rates were adjusted to account for existing transit and proposed on-campus student housing. First, the ITE rates were reduced by 10% to account for enhanced transit. Then, the rate was adjusted to reflect new students living on campus in dormitories. To make this adjustment, the transit adjusted rate was first reduced by subtracting 50% of the new student trips, assuming that remaining 50% reflects faculty, staff, visitor, and other trips. Next, traffic generated by on-campus student housing was added, based on trip generation studies conducted for the University of California (UC) Santa Barbara, UC Davis, San Jose State University, Stanford, and California State Polytechnic University at Pomona.

The resulting trip rates as well as daily and peak hour trip generation are shown in Table 5. As indicated, the project will generate approximately 3,300 daily trips, with 163 trips during the AM peak hour and 251 trips during the PM peak hour.

**Table 5
Near Term Project Trip Generation**

Land Use	TRIP RATE CATEGORY [1]	Units	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
				In	Out	Trip Rate	In	Out	Trip Rate
CSULB FTE Students	University/College	FTE Students	2.38	80%	20%	0.21	30%	70%	0.21
Commute Student Reduction	University/College	FTE Students	1.19	80%	20%	0.11	30%	70%	0.11
CSULB Student Housing	Student Beds	Beds	2.16	17%	83%	0.06	73%	27%	0.15

Future Conditions With Project

The distribution of vehicle trips for the project was estimated based on the location of student, faculty, and staff residences, as follows:

- Approximately 35% of trips to/from the west on local roadways and I-405
- Approximately 5% of trips to/from the south on local roadways within the City
- Approximately 30% of trips to/from the north on local roadways, Interstate 710 (I-710), and I-605
- Approximately 30% of trips would to/from the east, primarily on SR-22 and I-405

Based on the trip generation and distribution, project trips were assigned to the network, and intersection operations were analyzed. The results of the near-term plus project analysis, presented in Table 4, indicate that poor operating conditions are projected at 5 study intersections during at least one peak hour, as follows:

- ***Bellflower Boulevard and 7th Street*** – LOS E during the AM peak hour and LOS F during the PM peak hour
- ***Pacific Coast Highway and 7th Street*** – LOS F during both peak hours
- ***Studebaker Road and SR-22 Westbound Ramps*** – LOS E during the PM peak hour
- ***Bellflower Boulevard and Los Coyotes Diagonal*** – LOS E during the PM peak hour
- ***Pacific Coast Highway and 2nd Street*** – LOS F during both peak hours

The remaining study intersections are projected to operate at LOS D or better during both peak periods under near-term with project conditions.

As indicated in Table 4, the project's share of traffic will not exceed 0.02 V/C. Therefore, impact will be less than significant in the near term.

Long Term Traffic Scenario

Future Conditions Without Project

Long term traffic conditions in the year 2020 without the Master Plan were projected with similar methodologies as the near term scenario. The 94,704 daily vehicle trips generated by the related projects described in Table 3 and Figure 5 were included in the analysis, and traffic volumes were adjusted upwards by 0.5% per year until the year 2020.

As indicated in Table 7, without the project, poor operating conditions (LOS E or F) are projected at 7 of the study intersections during at least one peak hour, as follows:

- ***Palo Verde Avenue and Anaheim Road*** – LOS E during the AM peak hour
- ***Bellflower Boulevard and 7th Street*** – LOS E during the AM peak hour and LOS F during the PM peak hour
- ***Pacific Coast Highway and 7th Street*** – LOS F during both peak hours
- ***Studebaker Road and SR-22 Westbound Ramps*** – LOS E during the PM peak hour
- ***East Campus Road and 7th Street*** – LOS E during the PM peak hour
- ***Bellflower Boulevard and Los Coyotes Diagonal*** – LOS E during the PM peak hour
- ***Pacific Coast Highway and 2nd Street*** – LOS F during both peak hours

The remaining study intersections are projected to operate at LOS D or better during both peak periods without the project.

Project Trip Generation

The project’s trip generation was estimated using methodology similar to the near-term scenario, but with the campus enrollment level of 31,000 FTEs and buildout of the Master Plan. As indicated in Table 6, net new trips in 2020 are forecast to be 11,961.

**Table 6
Year 2020 Master Plan Trip Generation**

Land Use	ITE TRIP RATE CATEGORY	Size	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
				In	Out	Total	In	Out	Total
CSULB FTE Students	University/College	4,560	10,853	766	192	958	287	671	958
Commute Student Reduction	University/College	-2,014	-2,396	-85	-126	-211	-32	-179	-211
CSULB Student Housing	Student Beds	2,014	4,350	21	100	121	220	82	302
10% Transit Reduction for Commuting Students & Faculty/Staff			-846	-68	0	-75	-26	-49	-75
Total			11,961	634	166	793	449	525	974

Future Conditions With Project

Trip distribution and traffic assignment were adjusted to reflect the provision of new parking structures, and the traffic model was analyzed. The results of the analysis, shown in Table 7, indicate that poor operating conditions (LOS E or F) are projected at 9 of the study intersections, including the 7 intersections projected to operate at LOS E or F without the project, as follows:

- ***Palo Verde Avenue and Anaheim Road*** – LOS F during the AM peak hour
- ***Bellflower Boulevard and Stearns Street*** – LOS E during the PM peak hour
- ***Bellflower Boulevard and 7th Street*** – LOS F during both peak hours
- ***Pacific Coast Highway and 7th Street*** – LOS F during both peak hours
- ***Palo Verde Avenue and Atherton Street*** – LOS E during the PM peak hour
- ***Studebaker Road and SR-22 Westbound Ramps*** – LOS E during the PM peak hour
- ***East Campus Road and 7th Street*** – LOS E during the PM peak hour
- ***Bellflower Boulevard and Los Coyotes Diagonal*** – LOS E during the PM peak hour
- ***Pacific Coast Highway and 2nd Street*** – LOS F during both peak hours

The remaining study intersections are projected to operate at LOS D or better during both peak periods under future with project conditions.

Project Impact

As shown in Table 7, the increase in the V/C ratio at intersections projected to operate at LOS E or F under future cumulative plus project conditions is greater than 0.02 at 5 study intersections. The significantly impacted study intersections are:

- ***Bellflower and Stearns Street*** – LOS E during the AM peak hour (V/C increase of 0.026)

- **Bellflower Boulevard and 7th Street** – LOS F during the PM peak hour (V/C increase of 0.035) and LOS F during the PM peak hour (V/C increase of 0.033)
- **West Campus Road and 7th Street** – LOS E during the AM peak hour (V/C increase of 0.032)
- **Palo Verde and Atherton Street** – LOS E during the PM peak hour (V/C increase of 0.051)
- **East Campus Road and 7th Street** – LOS E during the PM peak hour (V/C increase of 0.021)

**Table 7
Year 2020 Intersection Level of Service**

Intersections	Peak Hour	WITHOUT PROJECT		WITH PROJECT		IMPACT	
		V/C or Average (Worst) Delay	LOS	V/C or Average (Worst) Delay	LOS	Increase in V/C	Significant Impact
1. Palo Verde Avenue & Anaheim Road	A.M.	35.000	E	52.000	F		
	P.M.	19.000	C	24.000	C		
	A.M.					0.047	NO
	P.M.					0.041	NO
2. I-405 SB Off-Ramp & Los Coyotes Diagonal	A.M.	0.697	B	0.727	C		NO
	P.M.	0.696	B	0.717	C	0.021	NO
3. Bellflower Boulevard & I-405 NB Ramps	A.M.	0.572	A	0.588	A	0.016	NO
	P.M.	0.621	B	0.632	B	0.011	NO
4. Bellflower Boulevard & Stearns Street	A.M.	0.788	C	0.824	D	0.036	NO
	P.M.	0.886	D	0.912	E	0.026	YES
5. Bellflower Boulevard & Atherton Street	A.M.	0.743	C	0.781	C	0.038	NO
	P.M.	0.820	D	0.886	D	0.066	NO
6. Bellflower Boulevard & Beach Drive	A.M.	0.552	A	0.577	A	0.025	NO
	P.M.	0.630	B	0.659	B	0.029	NO
7. Bellflower Boulevard & 7th Street	A.M.	0.997	E	1.032	F	0.035	YES
	P.M.	1.066	F	1.099	F	0.033	YES
8. Bellflower Boulevard & Pacific Coast Highway	A.M.	0.683	B	0.686	B	0.003	NO
	P.M.	0.805	D	0.811	D	0.006	NO
9. Pacific Coast Highway & 7th Street	A.M.	1.068	F	1.073	F	0.005	NO
	P.M.	1.100	F	1.108	F	0.008	NO
10. West Campus Road & 7th Street	A.M.	0.877	D	0.909	E	0.032	YES
	P.M.	0.887	D	0.903	E	0.016	NO
11. Palo Verde Avenue & Parking Structure [a]	A.M.	1 (24.4)	A (C)	1 (26.5)	A (D)		
	P.M.	2 (31.9)	A (D)	2 (35.8)	A (E)		
	A.M.					0.010	NO
	P.M.					0.013	NO
12. Palo Verde Avenue & Rendina Street	A.M.	0.426	A	0.456	A	0.030	NO
	P.M.	0.501	A	0.551	A	0.050	NO
13. Palo Verde Avenue & Atherton Street	A.M.	0.796	C	0.843	D	0.047	NO
	P.M.	0.853	D	0.904	E	0.051	YES
14. Palo Verde Avenue & Stearns Street	A.M.	0.803	D	0.872	D	0.069	NO
	P.M.	0.799	C	0.849	D	0.050	NO
15. Palo Verde Avenue & Woodruff Avenue	A.M.	0.795	C	0.880	D	0.085	NO
	P.M.	0.777	C	0.847	D	0.070	NO

**Table 7 (continued)
Year 2020 Intersection Level of Service**

Intersections	Peak Hour	WITHOUT PROJECT		WITH PROJECT		IMPACT	
		V/C or Average (Worst) Delay	LOS	V/C or Average (Worst) Delay	LOS	Increase in V/C	Significant Impact
16. Palo Verde Avenue & I-405 NB Off-Ramp	A.M.	0.640	B	0.710	C	0.070	NO
	P.M.	0.671	B	0.719	C	0.048	NO
17. Meriam Way/Farwood Drive & Atherton Street	A.M.	0.804	D	0.858	D	0.054	NO
	P.M.	0.786	C	0.875	D	0.089	NO
18. Earl Warren Drive & Atherton Street [a]	A.M.	1(14.0)	A (B)	1 (17.0)	A (C)	0.076 0.053	NO NO
	P.M.	1(12.9)	A (B)	1 (14.0)	A (B)		
	A.M.						
	P.M.						
19. Studebaker Road & SR-22 WB Ramps	A.M.	0.794	C	0.802	D	0.008	NO
	P.M.	0.931	E	0.938	E	0.007	NO
20. Studebaker Road & Atherton Street	A.M.	0.649	B	0.656	B	0.007	NO
	P.M.	0.718	C	0.732	C	0.014	NO
21. Studebaker Road & I-405 SB Off-Ramp [a]	A.M.	9 (154.0)	A (F)	9 (174.1)	A (F)	0.010 0.008	NO NO
	P.M.	5 (118.8)	A (F)	5 (132.9)	A (F)		
	A.M.						
	P.M.						
22. Studebaker Road & I-405 NB On-Ramp	A.M.	0.613	B	0.623	B	0.010	NO
	P.M.	0.543	A	0.550	A	0.007	NO
23. Studebaker Road & Anaheim Road	A.M.	0.822	D	0.892	D	0.070	NO
	P.M.	0.750	C	0.819	D	0.069	NO
24. Earl Warren Dr & Beach Drive [a]	A.M.	4 (31.9)	A (D)	4 (35.8)	A (E)	0.018 0.027	NO NO
	P.M.	4 (19.7)	A (C)	5 (22.2)	A (C)		
	A.M.						
	P.M.						
25. Meriam Way & Beach Drive [a]	A.M.	10.000	B	11.000	B	0.075 0.079	NO NO
	P.M.	12.000	B	15.000	B		
	A.M.						
	P.M.						
26. East Campus Road & 7th Street	A.M.	0.835	D	0.873	D	0.038	NO
	P.M.	0.923	E	0.944	E	0.021	YES
27. Bellflower Boulevard & Los Coyotes Diagonal	A.M.	0.849	D	0.877	D	0.028	NO
	P.M.	0.948	E	0.967	E	0.019	NO
28. Pacific Coast Highway & 2nd Street	A.M.	1.047	F	1.051	F	0.004	NO
	P.M.	1.200	F	1.203	F	0.003	NO
29. Studebaker Road & SR-22 EB Ramps	A.M.	0.784	C	0.785	C	0.001	NO
	P.M.	0.855	D	0.860	D	0.005	NO

Notes:

[a] Intersection is controlled by stop signs. The top rows show analysis using *Highway Capacity Manual* stop-controlled methodology, for the purpose of evaluating the operating condition of the intersection. Average (worst case) intersection vehicular delay

Congestion Management Program

As shown in Table 7, the project's impact will be less than the 2% at the analyzed CMP arterial monitoring intersection of Pacific Coast Highway and East 7th Street. Other CMP intersections in the project vicinity are Pacific Coast Highway and Ximeno Avenue, and Pacific Coast Highway and Westminster Avenue. The criteria indicate that if the project adds 50 or more peak hour trips to a CMP arterial intersection, then a CMP arterial intersection analysis should be conducted. The project is not expected to result in 50 peak hour trips at these intersections, and no analysis is warranted. Therefore, the project will not result in a significant impact on CMP intersections.

To analyze potential impacts on study freeway segments, year 2020 freeway traffic volumes were developed by factoring the existing volumes by 0.5% per year. Future traffic due to the gradual growth in student enrollment on the campus pursuant to the Master Plan was then added, and potential impacts were calculated based on a demand-to-capacity (D/C) ratio. As shown in Table 8, the project will result in a significant impact on one segment of the I-405 freeway between Bellflower Boulevard and Lakewood Avenue.

Internal Vehicular Circulation

The primary internal circulation system at the campus will remain in place with implementation of the Master Plan. Access to parking structures will be provided by the existing internal roadway network. Traffic operations with the parking structures and resulting changes to on-campus travel patterns were analyzed as part of the traffic impact analysis under near-term and buildout conditions. As shown in Figure 4, each campus gateway and the primary internal intersections on campus are included as study intersections in the traffic impact analysis and mitigation measures are identified for affected campus gateway intersections. In addition, as part of the standard University design process, a site-specific review will be conducted for each of the proposed parking structures. As part of the review, the internal campus intersections providing access to the parking structure will be examined to ensure that sufficient capacity is provided to accommodate projected peak hour traffic volumes with full utilization of the structure.

Parking

Two new parking structures are provided for in the updated Campus Master Plan, one between Earl Warren Drive and Merriam Way south of Atherton Street (Structure #4, existing Lot 14A), and one just west of East Campus Drive north of 7th Street (Structure #5, existing Lot 7). In addition, pursuant to the current Master Plan, a new parking structure will be provided in the near future at Palo Verde Avenue south of Atherton Street (Structure #3, existing Lot 11). The additional new parking structures will provide a total of 3,831 parking spaces on campus as follows:

**Table 8
Freeway Level of Service**

CMP Monitoring Location	Peak Hour	Direction	Lanes	Capacity	Existing (2007) Conditions			2020 without Project Forecast			Project Only Peak Hour Trips	2020 with Project Forecast			Project Related D/C Change	Significant impact?
					Peak Hour Volume [a]	D/C Ratio	LOS	Peak Hour Volumes	D/C Ratio	LOS		Peak Hour Volumes	D/C Ratio	LOS		
I-405 Between Seal Beach Blvd & SR-22	A.M.	NB	7	13,700	12,109	0.884	D	12,896	0.941	E	127	13,023	0.951	E	0.009	NO
		SB	7	13,700	13,799	1.007	F(0)	14,696	1.073	F(0)	32	14,728	1.075	F(0)	0.002	NO
	P.M.	NB	7	13,700	15,148	1.106	F(0)	16,133	1.178	F(0)	90	16,223	1.184	F(0)	0.007	NO
		SB	7	13,700	12,719	0.928	D	13,546	0.989	E	105	13,651	0.996	E	0.008	NO
I-405 North of SR-22	A.M.	NB	5	9,300	9,164	0.985	E	9,759	1.049	F(0)	127	9,886	1.063	F(0)	0.014	NO
		SB	5	9,300	8,042	0.865	D	8,565	0.921	D	32	8,597	0.924	D	0.003	NO
	P.M.	NB	5	9,300	8,447	0.908	D	8,996	0.967	E	90	9,086	0.977	E	0.010	NO
		SB	5	9,300	10,060	1.082	F(0)	10,714	1.152	F(0)	105	10,819	1.163	F(0)	0.011	NO
I-405 Between Studebaker Rd & Palo Verde Ave	A.M.	NB	5	9,300	9,447	1.016	F(0)	10,061	1.082	F(0)	127	10,188	1.095	F(0)	0.014	NO
		SB	5	9,300	8,290	0.891	D	8,829	0.949	E	32	8,861	0.953	E	0.003	NO
	P.M.	NB	5	9,300	8,707	0.936	E	9,273	0.997	E	90	9,363	1.007	F(0)	0.010	NO
		SB	5	9,300	10,372	1.115	F(0)	11,046	1.188	F(0)	105	11,151	1.199	F(0)	0.011	NO
I-405 Between Palo Verde Ave & Woodruff Ave	A.M.	NB	5	9,300	9,199	0.989	E	9,797	1.053	F(0)	32	9,829	1.057	F(0)	0.003	NO
		SB	5	9,300	8,073	0.868	D	8,598	0.925	D	8	8,606	0.925	D	0.001	NO
	P.M.	NB	5	9,300	8,479	0.912	D	9,030	0.971	E	22	9,052	0.973	E	0.002	NO
		SB	5	9,300	10,099	1.086	F(0)	10,756	1.157	F(0)	26	10,782	1.159	F(0)	0.003	NO
I-405 Between Woodruff Ave & Bellflower Blvd	A.M.	NB	5	9,300	8,166	0.878	D	8,696	0.935	E	24	8,720	0.938	E	0.003	NO
		SB	5	9,300	9,305	1.001	F(0)	9,910	1.066	F(0)	95	10,005	1.076	F(0)	0.010	NO
	P.M.	NB	5	9,300	10,216	1.098	F(0)	10,880	1.170	F(0)	67	10,947	1.177	F(0)	0.007	NO
		SB	5	9,300	8,577	0.922	D	9,134	0.982	E	67	9,201	0.989	E	0.007	NO
I-405 Between Bellflower Blvd & Lakewood Ave	A.M.	NB	5	9,300	8,601	0.925	D	9,160	0.985	E	48	9,208	0.990	E	0.005	NO
		SB	5	9,300	9,801	1.054	F(0)	10,438	1.122	F(0)	190	10,628	1.143	F(0)	0.020	YES
	P.M.	SB	5	9,300	9,034	0.971	E	9,621	1.035	F(0)	135	9,756	1.049	F(0)	0.015	NO
		NB	5	9,300	10,760	1.157	F(0)	11,459	1.232	F(0)	158	11,617	1.249	F(0)	0.017	NO
I-405 Between Lakewood Ave & Cherry Ave	A.M.	NB	5	9,300	9,005	0.968	E	9,590	1.031	F(0)	41	9,631	1.036	F(0)	0.004	NO
		SB	5	9,300	10,260	1.103	F(0)	10,927	1.175	F(0)	162	11,089	1.192	F(0)	0.017	NO
	P.M.	NB	5	9,300	11,264	1.211	F(0)	11,996	1.290	F(1)	134	12,130	1.304	F(1)	0.014	NO
		SB	5	9,300	9,458	1.017	F(0)	10,073	1.083	F(0)	115	10,188	1.095	F(0)	0.012	NO
I-405 Between Cherry Ave and Orange Ave	A.M.	NB	5	9,300	9,284	0.998	E	9,888	1.063	F(0)	35	9,923	1.067	F(0)	0.004	NO
		SB	5	9,300	10,579	1.137	F(0)	11,266	1.211	F(0)	137	11,403	1.226	F(0)	0.015	NO
	P.M.	SB	5	9,300	9,752	1.049	F(0)	10,385	1.117	F(0)	98	10,483	1.127	F(0)	0.010	NO
		NB	5	9,300	11,614	1.249	F(0)	12,369	1.330	F(1)	114	12,483	1.342	F(1)	0.012	NO
I-605 North of I-405	A.M.	NB	6	11,500	6,422	0.558	C	6,839	0.595	C	32	6,871	0.597	C	0.003	NO
		SB	4	8,800	7,295	0.829	D	7,769	0.883	D	127	7,896	0.897	D	0.014	NO
	P.M.	NB	6	11,500	7,756	0.674	C	8,260	0.718	C	105	8,365	0.727	C	0.009	NO
		SB	4	8,800	6,320	0.718	C	6,731	0.765	C	90	6,821	0.775	D	0.010	NO
SR-22 East of Studebaker Rd	A.M.	EB	3	6,600	4,727	0.716	C	5,034	0.763	C	32	5,066	0.768	C	0.005	NO
		WB	3	6,600	3,812	0.578	C	4,060	0.615	C	127	4,187	0.634	C	0.019	NO
	P.M.	EB	3	6,600	3,566	0.540	C	3,798	0.575	C	105	3,903	0.591	C	0.016	NO
		WB	4	8,800	7,142	0.812	D	8,548	0.863	D	4	8,552	0.864	D	0.000	NO

Notes:

[a] Caltrans data - factored from 2006 to 2007 conditions

- *Parking Structure #3* – 1,321 total spaces on Lot 11
- *Parking Structure #4* – 1,150 total spaces on Lot 14A
- *Parking Structure #5* – 1,360 total spaces on Lot 7

The new parking structures will replace existing surface parking lots on campus. The parking structures will provide 3,381 parking spaces and replace 1,709 existing surface parking spaces, resulting in a net increase of 2,122 parking spaces on campus. Overall, the new and existing parking will provide a total of approximately 15,500 parking spaces on campus within the Master Plan’s planning horizon.

The number of FTE students under existing and Master Plan buildout conditions was compared to the amount of on-campus parking to determine if a sufficient parking supply is being provided with the updated Master Plan. The CSU Long Beach campus currently has a ratio of 2 students per parking space. This ratio will continue to be maintained with the projected enrollment growth pursuant to the updated Master Plan. The concern about neighborhood parking was raised about neighborhood parking during the Draft EIR review. The University proactively provides options including rideshare, public transportation, no cost parking at the off-campus location at Marina near Pacific Coast Highway and 2nd Street, and free shuttles running to and from the campus to discourage off-campus parking. The University also proactively discourages off-campus parking via an information program for the students. Moving forward, CSULB will be expanding this program through email and documentation. Also, a mitigation measure is identified to address this concern.

Transit

The student enrollment at the campus is estimated to generate approximately 868 total AM peak hour trips and 1,049 total PM peak hour trips under Master Plan buildout conditions. After applying the CMP guidelines by converting the vehicle trips to person trips by multiplying by a 1.4 AVR and assuming 10% transit use, the results indicate that the project could add approximately 122 new transit person-trips in the weekday AM peak hour and 147 new transit person-trips in the weekday PM peak hour.

As discussed previously, the study area is served by approximately 10 bus lines. These lines will continue to provide adequate transit service with the projected addition of transit ridership. The existing bus service can accommodate the demand and project-related impact on the regional transit system is not expected to be significant.

Pedestrians and Bicycles

The project will result in increased pedestrian and bicycle activity on campus and surrounding areas. Pedestrians will continue to take priority, and all new facilities will be built pursuant to ADA and Title 24. Disabled parking at structures and surface lots will continue to provide access to the campus core and support facilities. Ramping, when required, will be an integral element of landscaping and buildings. Seating areas and other pedestrian amenities will be incorporated into new buildings, walkways, and other open areas. Bicycle facilities will be provided, as appropriate. The University will continue to work to minimize conflicts between bicycles and pedestrians.

Mitigation Measures

At the time when the University enrollment at the campus reaches 31,000 FTE students, potentially significant vehicular traffic impacts are identified. Impacts regarding internal circulation, parking, transit, and pedestrians and bicycles will be less than significant. As concerns about neighborhood parking issues were raised during the Draft EIR review period, a mitigation measure addressing the concerns is identified.

Vehicular Traffic Impacts

No feasible mitigation is identified to reduce impact on one study segment of I-405 freeway. The following mitigation will be implemented to reduce impact at the affected study intersections.

1. The University and the City Long Beach and CSULB jointly agree that the proposed mitigation measures at all intersections listed in the Draft EIR and the additional intersections listed in the City's response to the DEIR will be replaced with a single improvement which will be referred to as the Atherton Corridor Improvement Project. This project will include improvements at five (5) intersections along Atherton between Bellflower Boulevard and Studebaker Road which include: Atherton/Chatwin (new pedestrian signal), Atherton/Earl Warren/Britton (new traffic signal, center median work, and crosswalk), Atherton/Palo Verde (minor signal improvements) and Atherton/Studebaker (minor signal improvements), as well as signal timing improvements for the entire corridor. The University will contribute on a fair-share basis to the Atherton Corridor Improvement project.

At the following two intersection locations no adequate right-of-way is available to implement the following roadway improvements identified to reduce impact:

- **Bellflower Boulevard and Stearns Street** – At the time when student enrollment reaches 31,000 FTEs, provide an additional left-turn lane on westbound Stearns Street to serve vehicles traveling from westbound Stearns Street to southbound Bellflower Boulevard.
- **Bellflower Boulevard and 7th Street** – At the time when student enrollment reaches 31,000 FTEs, provide an additional left-turn lane on eastbound 7th Street to serve vehicles traveling from eastbound 7th Street to northbound Bellflower Boulevard.

Since no right-of-way is available to implement these improvements, impact will be significant and unavoidable at these locations.

To address the concerns about neighborhood parking, the following measure will be implemented:

2. The University will consult with the City of Long Beach to examine the feasibility of instituting additional neighborhood parking restrictions in the campus vicinity.

Level of Impact After Mitigation

With the University campus enrollment of 31,000 FTE students, impact on study intersections will be less than significant, with the exception of (1) West Campus Road and 7th Street, (2) Palo Verde Avenue and Atherton Street, (3) East Campus Road and 7th Street, (4) Bellflower Boulevard and Stearns Street, and (5) Bellflower Boulevard and 7th Street. Feasible mitigation is identified to reduce impacts to less than significant levels for the intersections of (1) West Campus Road and 7th Street, (2) Palo Verde Avenue and Atherton Street, (3) East Campus Road and 7th Street. No potentially significant impacts are identified for CMP facilities, except for one segment of the I-405 freeway between Bellflower Boulevard and Lakewood Avenue. Impact regarding internal circulation, parking, transit, and pedestrians and bicycles will be less than significant.

Vehicular Traffic – Study Intersections

As indicated in Table 9, implementation of the identified improvements will reduce traffic impact at the affected study intersections to less than significant levels. However, as discussed above, due to the existing commercial and residential development there is no adequate right-of-way available to implement mitigation at the intersections of Bellflower Boulevard and Stearns Street and Bellflower Boulevard and 7th Street. Taking of private businesses and/or homes to provide for additional turn lanes is not considered to be a feasible mitigation and therefore, impact is considered significant and unavoidable at these locations.

**Table 9
Intersection Level of Service with Mitigation**

Intersections	Peak Hour	WITHOUT PROJECT		WITH PROJECT		IMPACT		WITH PROJECT WITH MITIGATION		IMPACT	
		V/C or Average (Worst) Delay	LOS	V/C or Average (Worst) Delay	LOS	Increase in V/C	Significant Impact	V/C or Average (Worst)	LOS	Increase in V/C	Residual Impact
4. Bellflower Boulevard & Stearns Street	A.M.	0.788	C	0.824	D	0.036	NO	--	--	--	--
	P.M.	0.886	D	0.912	E	0.026	YES	0.860	D	-0.026	NO
7. Bellflower Boulevard & 7th Street	A.M.	0.997	E	1.032	F	0.035	YES	0.919	E	-0.078	NO
	P.M.	1.066	F	1.099	F	0.033	YES	1.001	F	-0.065	NO
10. West Campus Road & 7th Street	A.M.	0.877	D	0.909	E	0.032	YES	0.796	C	-0.081	NO
	P.M.	0.887	D	0.903	E	0.016	NO	--	--	--	--
13. Palo Verde Avenue & Atherton Street	A.M.	0.796	C	0.843	D	0.047	NO	--	--	--	--
	P.M.	0.853	D	0.904	E	0.051	YES	0.896	D	0.043	NO
26. East Campus Road & 7th Street	A.M.	0.835	D	0.873	D	0.038	NO	--	--	--	--
	P.M.	0.923	E	0.944	E	0.021	YES	0.938	E	0.015	NO

Vehicular Traffic – Freeways

Since the project will increase the D/C ratio on one I-405 segment - the segment between Bellflower Boulevard and Lakewood Avenue - more than 2%, impact on this segment of the freeway will be significant. No feasible mitigation measures are available to reduce this impact to a level below significance. Widening and/or other improvements

to the interstate freeways to provide additional capacity are within the jurisdiction of regional transportation agencies as these are regional issues requiring region-wide solutions. Thus, mitigation requiring the University to widen this major freeway is not considered feasible. Therefore, impact at the identified freeway section will be significant and unavoidable.

3.2 Air Quality

This section examines the potential long-term air quality impacts associated with the updated Campus Master Plan. Short-term impacts from construction of individual facilities pursuant to the Master Plan are discussed in Section 3.9, Construction Effects. Cumulative air quality effects are addressed in Section 5.0, Cumulative and Long-term Effects. Air quality worksheets are provided in Appendix C.

Environmental Setting

The CSU Long Beach campus lies in the South Coast Air Basin. Due to the unique geography and meteorology of the Basin, ozone (O₃) levels have been some of the highest in the country and are expected to continue to violate the federal and state ambient air quality standards even with the implementation of vigorous control measures. High levels of fine particulate matter (PM₁₀ and PM_{2.5}) also continue to exceed the federal and/or state standards. Carbon monoxide (CO) levels have not violated State or national standards since 2002 and the Basin is currently in attainment status for this pollutant. Basin-wide air quality conditions are described in detail in the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook.

Air Pollution Control Efforts

Both the federal and state governments have set health-based ambient air quality standards for the following 6 pollutants:

- Sulfur dioxide (SO₂)
- Lead (Pb)
- Carbon monoxide (CO)
- Fine particulate matter (PM₁₀)
- Nitrogen dioxide (NO₂)
- Ozone (O₃)

Standards for these pollutants have been designed to protect the most sensitive persons from illness or discomfort with a margin of safety. The California standards are more stringent than federal standards, especially in the case of PM₁₀ and SO₂. The Federal government has also set standards for PM_{2.5}.

Table 10 outlines current federal and state ambient air quality standards, and sources and health effects of these pollutants. Additional information about health effects associated with each pollutant is provided in the SCAQMD CEQA Air Quality Handbook, which is hereby incorporated by reference. The South Coast Air Basin meets the standards for Pb and SO₂, and therefore, emissions of these pollutants are not discussed further herein.

Table 10
Air Pollution Standards, Sources, and Effects

Air Pollutant	State Standards	National Standards (Primary)	Sources	Health Effect
Ozone (O ₃)	0.09 ppm, 1-hr. avg. 0.07 ppm, 8-hr. avg.	0.08 ppm, 8-hr. avg.	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	Aggravation of respiratory and cardiovascular diseases, irritation of eyes, impairment of cardiopulmonary function, plant leaf injury
Respirable Particulate Matter (PM10)	50 µg/m ³ , 24-hr. avg. 20 µg/m ³ , AAM	150 µg/m ³ , 24-hr. avg.	Stationary combustion of solid fuels, construction activities, industrial processes, industrial chemical reactions	Reduced lung function, aggravation of the effects of gaseous pollutants, aggravation of respiratory and cardio-respiratory diseases, increased coughing and chest discomfort, soiling, reduced visibility
Particulate Matter less than 2.5 Microns in Diameter (PM2.5)	None yet specified	35 µg/m ³ , 24-hr. avg	Combustion from mobile and stationary sources, atmospheric chemical reactions	Health problems, including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing, and premature deaths.
Carbon Monoxide (CO)	9.0 ppm, 8-hr. avg. 20 ppm, 1-hr. avg.	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.	Incomplete combustion of fuels and other carbon-containing substances such as motor vehicle exhaust, natural events, such as decomposition of organic matter	Reduced tolerance for exercise, impairment of mental function, impairment of fetal development, death at high levels of exposure, aggravation of some heart diseases (angina)
Nitrogen Dioxide (NO ₂)	0.25 ppm, 1-hr. avg.	0.053 ppm, AAM	Motor vehicle exhaust, high-temperature stationary combustion, atmospheric reactions	Aggravation of respiratory illness, reduced visibility, reduced plant growth, formation of acid rain
Sulfur Dioxide (SO ₂)	0.25 ppm 1-hr. avg. 0.04 ppm, 24-hr avg.	0.03 ppm, AAM 0.14 ppm, 24-hr. avg.	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, industrial processes	Aggravation of respiratory diseases (asthma, emphysema), reduced lung function, irritation of eyes, reduced visibility, plant injury, deterioration of metals, textiles, leather, finishes, coating, etc.
Lead (Pb)	1.5 µg/m ³ , 30 day avg.	1.5 µg/m ³ , calendar Quarter	Contaminated soil	Increased body burden, impairment of blood formation and nerve conduction
Visibility-Reducing Particles	Extinction coefficient of 0.23 per km, visibility of 10 miles or more due to particles when relative humidity is less than 70%.	No Federal Standards		Visibility impairment on days when relative humidity is less than 70 percent

Note: ppm = parts per million by volume µg/m³ = micrograms per cubic meter
AAM = annual arithmetic mean

Source: California Air Resources Board, <http://www.arb.ca.gov/aqs/aqs.htm>, July 25, 2006; SCAQMD Air Quality Handbook.

Most pollution control programs have relied on development and application of cleaner technology and add-on emission control devices to vehicular and industrial sources, such as catalytic converters for automobiles. Recent efforts have been directed toward how emission sources are used (e.g. the Inspection and Maintenance Program, High Occupancy Vehicle [HOV] Lanes, and mandatory maintenance procedures on industrial sources).

Previous air quality programs have been effective in improving the Basin's air quality. Although the magnitude of the problem depends heavily on the weather conditions in

any given year, and improvements can only be compared at the same air quality monitoring station, ozone levels have declined by almost half over the past 30 years. However, they remain at or near the top of all pollution concentrations in the United States.

Monitored Air Quality

The SCAQMD monitors air quality throughout the Basin at various locations. A monitoring station in South Coastal Los Angeles County reports data most descriptive of conditions at the campus. Table 11 summarizes maximum pollutant concentrations and the number of days State standards for CO, O₃, NO₂, and PM₁₀ were exceeded for this area.

The air quality in Long Beach is relatively good compared to other areas of the Basin because of the City's close proximity to the Pacific Ocean and local wind patterns that carry pollutants inland and away from the ocean. The pollutant concentrations vary from year to year depending on weather conditions. Levels of CO and NO₂ have not exceeded applicable standards during the reporting period. Ozone levels only exceeded the State standard in 2003. However, particulate levels exceed the standards with varying frequency every year.

Air pollutant emissions are currently generated by activities occurring at the campus, such as from vehicular travel, cooking, heating, air conditioning, etc. These uses generate approximately 935 pounds of ROG, 1,142 pounds of NO_x, 8,407 pounds of CO, 988 pounds of PM₁₀, and 193 pounds of PM_{2.5} per day (see Appendix C).

Sensitive Receptors

The SCAQMD identifies sensitive receptors as populations that are more susceptible to the effects of air pollution than the general population. Residences, schools, child-care facilities, hospitals, and convalescent homes are examples of such receptors. Onsite dormitories, nearby residences, schools, and a variety of other sensitive receptors are located in the campus vicinity.

Table 11
Number of Days State Ambient Air Quality Standards Were Exceeded
Within Air Quality Monitoring Area

Year	Carbon Monoxide (CO)		Ozone (O ₃)		Nitrogen Dioxide (NO ₂)		Fine Particulate Matter (PM ₁₀)		Fine Particulate Matter (PM _{2.5})	
	Maximum 8-hour Concentration (ppm)	Days State Standard Exceeded	Maximum 1-hour Concentration (ppm)	Days State Standard Exceeded	Maximum 1-hour Concentration (ppm)	Days State Standard Exceeded	Maximum 24-hour Concentration (micrograms/cubic meter)	Days (%) State Standard Exceeded	Maximum 24-hour Concentration (micrograms/cubic meter)	Days (%) Federal Standard Exceeded
2000	5.8	0	0.12	3	0.14	0	105	12(21)	81.5	4(1.3)
2001	4.7	0	0.091	0	0.13	0	91	10(17)	72.9	1(0.3)
2002	4.6	0	0.084	0	0.13	0	74	5(8.6)	62.7	0
2003	4.7	0	0.099	1	0.14	0	63	4(6.6)	115.2	3(0.9)
2004	3.4	0	0.090	0	0.12	0	72	4(6.7)	66.6	1(0.3)
2005	3.5	0	0.091	0	0.14	0	66	5(8.5)	53.9	0
2006	3.4	0	0.08	0	0.10	0	78	6(9.8)	58.8	5(1.7)

Source: SCAQMD Air Quality Monitoring Data 2000-2006.

Thresholds Used to Determine Level of Impact

A project will have a significant impact if it: (1) violates any ambient air quality standard or substantially contributes to an existing or projected air quality violation; (2) results in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment; (3) exposes sensitive receptors to air pollutant concentrations that violate standards, such as CO “hot spots”; or (4) conflicts with the regional Air Quality Management Plan (AQMP).

The SCAQMD has established thresholds for certain criteria pollutants for which the region is in non-attainment. Thresholds for operation-related emissions are shown in Table 12.

Table 12
SCAQMD Long Term Operational Thresholds

Criteria Pollutant	Pounds per Day
Reactive Organic Gases (ROG)	55 pounds per day
Oxides of Nitrogen (NO _x)	55 pounds per day
Carbon Monoxide (CO)	550 pounds per day
Fine Particulate Matter (PM10)	150 pounds per day
Fine Particulate Matter (PM 2.5)	55 pounds per day

Source: South Coast Air Quality Management District

Environmental Impact

Vehicular travel by new students, faculty, staff, and visitors to the University campus will generate the majority of net new long-term emissions due to the Master Plan. This traffic will generate additional vehicle emissions within the Basin. Although much less in magnitude, emissions will also result from heating and cooling new buildings, lighting, landscaping activities, and other on-campus activities.

Table 13 summarizes estimated year 2020 net new air pollutant emissions resulting from the project. A “worst-case” scenario is used to analyze long-term air quality impacts. Emissions are calculated for both winter and summer, with the higher emissions estimate reported. As shown, the project’s net new pollutant emissions will exceed the SCAQMD daily threshold amounts for ROG, NO_x, CO, and PM10.

Table 13
Project Net New Operational Emissions, Year 2020
(pounds per day)

	Reactive Organic Gases (ROG)	Oxides of Nitrogen (NO_x)	Carbon Monoxide (CO)	Suspended Particulate Matter (PM10)	Suspended Particulate Matter (2.5)
Vehicular Emissions	65	57	551	187	36
Area Sources	3	4	5	0	0
Total	68	61	556	187	36
SCAQMD Threshold	55	55	550	150	55
Exceeds Threshold?	Yes	Yes	Yes	Yes	No

Carbon Monoxide Hotspots

Carbon monoxide has the potential to become elevated in areas of severe traffic congestion where vehicles idle and/or wind speeds are low. Such CO hotspots occur mostly in the early morning hours when winds tend to be stagnant and ambient CO concentrations elevated. However, according to the SCAQMD CEQA Handbook update, the potential for CO hot spots exists at any location where the background CO concentration already exceeds 9.0 parts per million, which is the 8-hour California ambient air quality standard. As illustrated in Table 11, maximum CO concentrations in the campus vicinity have been substantially below this level and falling for many years. Ambient levels of CO are expected to continue to fall in the future as well. Therefore, the potential for CO hotspots to form in the vicinity or due to the project will be less than significant.

Consistency with Regional Air Quality Plans

The SCAQMD suggests that the EIR discuss a project's consistency with the current regional Air Quality Management Plan (AQMP) and other regional plans. The purpose of this discussion is to determine if the project is consistent with assumptions and objectives of the regional AQMP, and thus, would not interfere with the region's ability to comply with federal and state air quality standards.

A project is considered to comply with the AQMP if it is consistent with the growth assumptions of the AQMP. The AQMP assumes development throughout the region will occur as outlined in the Southern California Association of Governments (SCAG) Regional Comprehensive Plan and Guide. The Master Plan provides for continuing use of campus for educational purposes to accommodate planned future area-wide growth in student populations. The project will increase student housing opportunities on campus, which will work to reduce long commuter trips and area-wide congestion. The Master Plan is consistent with SCAG's growth projections and land use policies, including the

policies of focusing growth and development within urban areas, encouraging infill development, and re-using previously developed urban land. The University implements, and will continue to implement pursuant to the updated Master Plan, numerous programs and policies to improve air quality in the region, including providing preferential parking for carpoolers, operating an on-campus transit system, and minimizing energy use through project design. Therefore, the project is consistent with the AQMP.

Mitigation Measures

The updated Master Plan accommodating 31,000 FTE student enrollment is expected to generate air pollutant emissions in excess of SCAQMD daily threshold amounts for ROG, NO_x, CO, and PM₁₀. The primary source of pollutant emissions is vehicular trips. The best approach to reducing emissions is to reduce vehicle trips and improve traffic flows. The campus is well served by public transportation systems, including buses, providing alternative transportation options for students, employees, and visitors going to and from the campus. The University implements numerous programs and policies to improve air quality in the region, including providing preferential parking for carpoolers, operating an on-campus transit system, and minimizing energy use through project design. No additional feasible mitigation strategies are currently available to substantially reduce vehicular emissions, and therefore, this impact is considered significant and unavoidable.

The following mitigation measure will continue to be implemented by the University to reduce stationary emissions to the extent feasible.

1. The University will exceed Title 24 energy saving requirements on campus by 15% or more on all new or renovation projects by applying a range of techniques and measures that may include planting trees to provide shade and shadow to buildings; use of energy-efficient lighting in buildings and parking lots; use of light-colored roofing materials; installing energy-efficient appliances; installing automatic lighting on/off controls; use of insulation and double-paned glass windows; connecting buildings to central air and water heating and cooling systems, and/or other measures.

Level of Impact After Mitigation

Incorporating energy-efficient features into new and retrofitted facilities will reduce emissions to the extent feasible. However, since vehicular trips are the primary source of pollutant emissions, the addition of project-related air pollutant emissions to the South Coast Air Basin will contribute to health and environmental effects associated with the criteria pollutants, including aggravation of respiratory and cardiovascular diseases, irritation of eyes, impairment of cardiopulmonary function, reduced visibility, reduced plant growth, formation of acid rain, and other effects summarized in Table 10.

3.3 Noise

This section evaluates long-term noise impact associated with the updated Campus Master Plan. A noise study was prepared by Wieland Associated acoustical engineers in October 2007. Findings of the study are summarized herein and the study is included in Appendix D of this EIR. Short-term noise impact from construction of individual facilities pursuant to the Master Plan is evaluated in Section 3.9, Construction Effects, of this EIR.

Environmental Setting

Sound levels are expressed on a logarithmic scale of decibels (abbreviated as dB), in which a change of 10 units on the decibel scale reflects a 10-fold increase in sound energy. A 10-fold increase in sound energy roughly translates to a doubling of perceived loudness.

In evaluating human response to noise, acousticians compensate for people's response to varying frequency or pitch components of sound. The human ear is most sensitive to sounds in the middle frequency range used for human speech, and is less sensitive to lower and higher-pitched sounds. The "A" weighting scale is used to account for this sensitivity. Thus, most community noise standards are expressed in decibels on the "A"-weighted scale, abbreviated dB(A). Zero on the decibel scale is set roughly at the threshold of human hearing. Common sounds in the environment include office background noise at about 50 dB(A); human speech at 10 feet at about 60 to 70 dB(A); cars driving by at 50 feet at 65 to 70 dB(A); trucks at 50 feet at 75 to 80 dB(A); and aircraft overflights directly overhead a mile from the runway at about 95 to 100 dB(A).

The community noise environment consists of wide varieties of sounds, some near and some far away, which vary over the 24-hour day. People respond to the 24-hour variation in noise but are most sensitive to noise at night. California standards for community noise use the Community Noise Equivalent Level (CNEL), in which a 5-decibel penalty is added to the 7:00 PM to 10:00 PM period, and a 10-decibel penalty to the 10:00 PM to 7:00 AM period.

Noise scales also include other criteria for shorter time intervals, including L_{50} – denoting noise levels for 30 minutes within any hour; L_{25} for within 15 minutes of any hour; L_8 for 5 minutes in any hour; L_2 for 1 minute in any hour, and L_{max} for any time.

Noise-Sensitive Uses

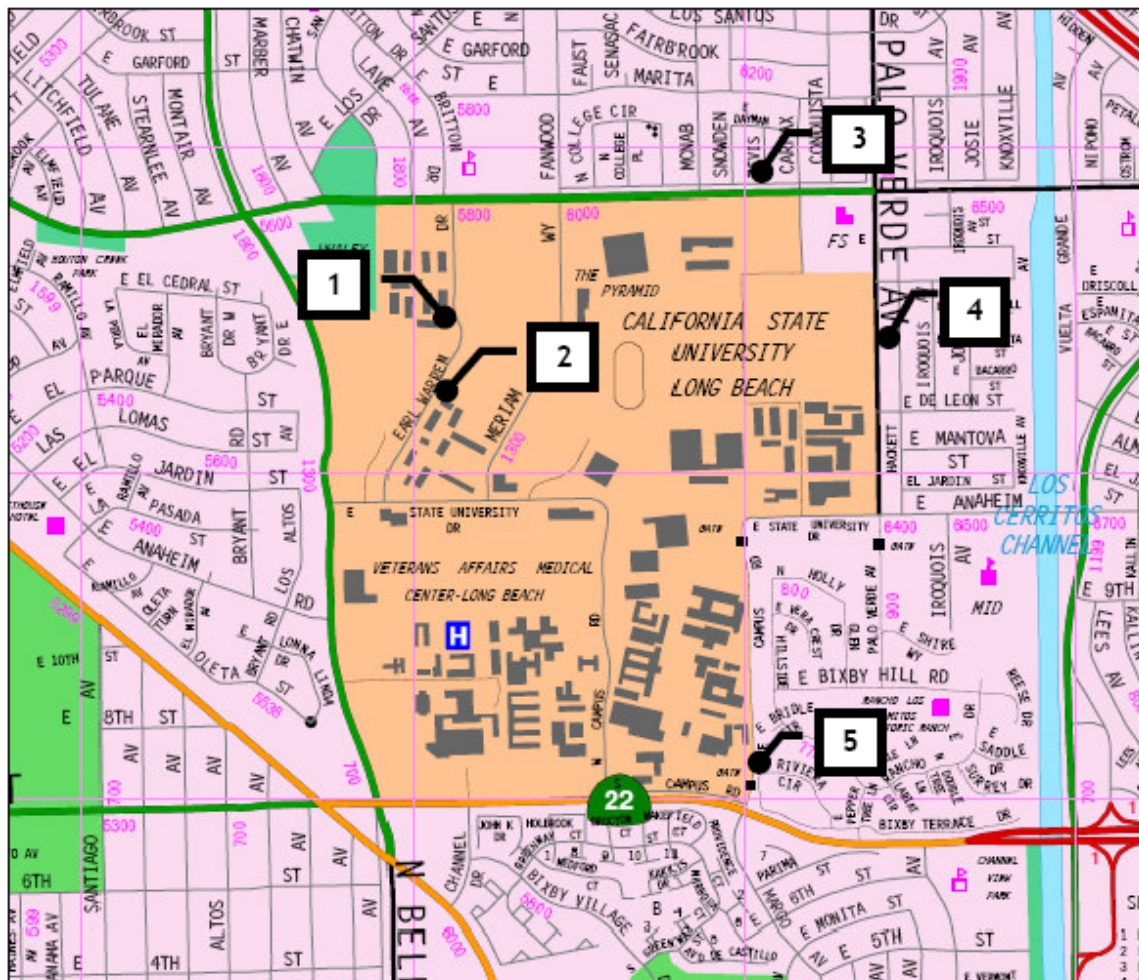
Some land uses are considered more sensitive to noise than others. Noise-sensitive land uses include homes, schools, day care facilities, hospitals, and similar uses. Commercial and industrial uses generally are not considered noise sensitive because

people do not rest or sleep there. Noise sensitive uses in the campus vicinity include predominantly single-family residential areas to the north, east, and west, and a VA medical center to the southwest.

Existing Noise Levels

Traffic on local streets is the major source of noise in the study area. Noise measurements at 5 locations were obtained to ascertain the existing noise levels. As illustrated in Figure 6 and summarized in Table 14, 3 of the measurement locations were at off-campus locations where residential uses are located, and 2 measurement locations were in the interior of the campus. The results of noise measurements indicate that in the nearby areas off campus, existing noise levels range from 53.4 - 61.5 dB(A) L_{50} to 65.5 - 84.3 dB(A) L_{max} . Within the campus, noise levels range from 50.4 - 57 dB(A) L_{50} to 62.7 - 70.3 dB(A) L_{ma} .

**Figure 6
Noise Measurement Locations**



**Table 14
Summary of Noise Measurements**

Location #	Location Description	Measured Noise Levels, dB(A)					CNEL
		L ₅₀	L ₂₅	L ₈	L ₂	L _{max}	
1	Adjacent to existing student housing on Earl Warren Dr.	55.7	58.2	60.9	63.3	70.3	N/A
2	Adjacent to existing student housing on Earl Warren Dr.	50.4	52.3	54.6	56.3	62.7	N/A
3	In front of 1800 Tevis Ave.	61.5	63.8	66.1	69.0	74.8	N/A
4	Rear yard of 1531 Hackett Ave.	53.5 - 57.6	56.7 - 60.6	60.0 - 63.5	63.9 - 68.5	71.8 - 84.3	61.4
5	HW corner of Riviera Circle, adjacent to #6201	53.4	54.9	56.7	59.4	65.5	N/A

The noise study analyzed existing traffic noise levels along 93 street segments (see Appendix D). The existing traffic noise ranges from levels of up to 59.5 dB CNEL along 13 street segments; up to 69.5 dB along 50 street segments; and up to 74.5 dB CNEL along 30 street segments, at a distance of 50 feet from the centerline. The majority of areas along the existing study street segments is subject to noise level ranging between 64 and 72 dB CNEL, at a distance of 50 feet from the centerline.

The campus is located outside the 60 dB CNEL contours of the Long Beach Municipal Airport is not affected by aircraft noise.

Thresholds Used to Determine Level of Impact

Based on the City of Long Beach General Plan Noise Element and Noise Ordinance criteria and standards of other agencies, such as the State of California Office of Planning and Research Noise Element Guidelines, impact will significant if the project will result in:

1. A permanent increase in the ambient noise level by 5 dB(A) or more
2. A temporary increase in the ambient noise level by 5 dB(A) or more
3. Increase in the exterior CNEL above 70 dB CNEL at any proposed school building and/or interior CNEL exceeding 45 dB within any school building
4. A permanent increase in CNEL to above 70 dB at any existing residential property, school, or park where existing ambient noise levels are below 70 dB; and/or to above 77.5 dB at any existing office, business, commercial or professional land uses where the existing ambient noise levels are below 77.5 dB due to project –generated traffic
5. The noise level due to operation of the project that exceed the City of Long Beach standards at off campus land uses

Environmental Impact

The gradual growth in student enrollment accommodated by the updated Campus Master Plan will result in generation of noise from additional vehicular trips, events at the new soccer facility on campus, mechanical equipment in new buildings, and general activity within campus.

Traffic Noise

Based on data in the traffic study prepared for the updated Master Plan, analyses were conducted to identify the future traffic noise levels with and without the project. Future traffic noise levels and the contribution of the project-generated traffic to these future noise levels were calculated for the 93 study street segments. The results of the analysis are summarized in Table 15.

As indicated, the addition of vehicular trips from the campus will not contribute any discernable noise to 41 of 93 study street segments. At most, the project will contribute 1.5 dB CNEL at 1 of the 93 street segments, and 1.0 dB CNEL at 5 of the 93 street segments. At other segments, the project's contribution to traffic noise will be less than one decibel (0.5 dB) CNEL. This contribution will be substantially less than 5 dB CNEL threshold, and the project will not increase the CNEL above the threshold of significance at any off-site property. Therefore, this impact will be less than significant.

Soccer Field Facilities

The updated Campus master Plan provides for the renovation and improvement of the existing George Allen Field in the interior of the campus. Soccer games and/or track meets generate noise from spectator cheering, public address (PA) system, occasional referee whistles, etc. A "worst-case" noise analysis, whereby all 1,000 spectators sit at the new bleachers, was conducted to estimate the noise levels that will be generated at maximum capacity at a sport event held at the field. Based on empirical data, the addition of the estimated activity noise to the measured existing ambient noise levels will result in noise levels of 62.5 dB(A) at the closest residences located about 1,100 feet to the north, 55-58.5 dB(A) at the closest residences located about 670 feet to the east; and 52.5 dB(A) at the closest residences located about 2,800 feet to the west of the field. While some noise will be audible at the closest residences, this noise will be both short-term and intermittent, will only occur for the duration of the game, and will not occur on a daily basis. The resultant increase of 1 to 2 dB for the duration of the game event at the stadium will be below the 5 dB threshold, and will not result in exposure of people to substantial increase in ambient noise levels and therefore, impact is considered to be less than significant. Nonetheless, to ensure that this impact will continue to be less than significant, implementation of the identified measures pertaining to the design of the PA system and conduct of the athletic events will be required.

**Table 15
Future Year 2020 Traffic Noise Levels**

Arterial / Reach	Avg. Daily Traffic	Unmitigated CNEL @ 50'	Dist. to CNEL Contour		
			60dB	65dB	70dB
2ND STREET					
West of Pacific Coast Hwy	43,320	73.5	490	235	100
East of Pacific Coast Hwy	39,790	70.0	300	130	50
7TH STREET					
West of Pacific Coast Hwy	38,960	72.0	395	185	75
East of Pacific Coast Hwy	45,050	72.5	428	200	83
West of Bellflower Bl	44,550	72.5	428	200	83
East of Bellflower Bl	46,540	73.0	460	215	90
West of W Campus Dr	49,630	73.0	460	215	90
East of W Campus Dr	52,320	73.5	490	235	100
West of E Campus Dr	52,060	73.5	490	235	100
East of E Campus Dr	53,130	74.5	560	278	120
ANAHEIM ROAD					
East of Palo Verde Av	10,450	61.5	69	---	---
West of Studebaker Rd	8,380	60.5	56	---	---
East of Studebaker Rd	2,610	56.0	---	---	---
ATHERTON STREET					
West of Bellflower Bl	16,730	67.5	200	83	---
East of Bellflower Bl	21,130	68.5	235	100	---
West of Earl Warren Dr	20,620	68.5	235	100	---
East of Earl Warren Dr	21,460	68.5	235	100	---
West of Merriam Wy	23,370	69.0	255	110	---
East of Merriam Wy	24,030	69.0	255	110	---
West of Palo Verde Av	20,950	68.5	235	100	---
East of Palo Verde Av	12,460	66.0	155	62	---
West of Studerbaker Rd	8,730	64.5	120	---	---
East of Studerbaker Rd	1,330	58.0	---	---	---
BEACH DRIVE					
East of Bellflower Bl	10,630	61.5	69	---	---
West of Earl Warren Dr	10,560	61.5	69	---	---
East of Earl Warren Dr	7,630	60.0	50	---	---
West of Merriam Wy	6,770	59.5	---	---	---
East of Merriam Wy	7,350	56.0	---	---	---

Arterial / Reach	Avg. Daily Traffic	Unmitigated CNEL @ 50'	Dist. to CNEL Contour		
			60dB	65dB	70dB
BELLFLOWER BOULEVARD					
North of I-405 NB Ramps	28,920	70.0	300	130	50
South of I-405 NB Ramps	35,550	70.5	320	143	56
North of Los Coyotes Diagonal	32,990	70.5	320	143	56
South of Los Coyotes Diagonal	39,840	70.0	300	130	50
North of Stearns St	32,630	69.0	255	110	---
South of Stearns St	35,540	69.5	278	120	---
North of Atherton St	30,740	69.0	255	110	---
South of Atherton St	29,580	70.0	300	130	50
North of Beach Dr	28,280	69.5	278	120	---
South of Beach Dr	29,350	70.0	300	130	50
North of 7th Street	29,010	70.0	300	130	50
South of 7th Street	16,680	67.5	200	83	---
North of Pacific Coast Hwy	16,300	67.5	200	83	---
South of Pacific Coast Hwy	9,190	64.0	110	---	---
EARL WARREN DRIVE					
South of Atherton St	2,720	56.0	---	---	---
North of Beach Dr	4,610	58.0	---	---	---
EAST CAMPUS ROAD					
North of 7th St	2,660	57.0	---	---	---
FANWOOD AVENUE					
North of Atherton St	880	53.0	---	---	---
LOS COYOTES DIAGONAL					
West of I-405 SB Off-Ramp	22,630	68.5	235	100	---
East of I-405 SB Off-Ramp	31,400	70.0	300	130	50
West of Bellflower Bl	31,220	70.0	300	130	50
East of Bellflower Bl	26,490	69.5	278	120	---
MARGO AVENUE					
South of 7th St	1,850	55.5	---	---	---
MERRIAM WAY					
South of Atherton St	18,260	63.5	100	---	---
North of Beach Dr	5,270	57.5	---	---	---

Arterial / Reach	Avg. Daily Traffic	Unmitigated CNEL @ 50'	Dist. to CNEL Contour		
			60dB	65dB	70dB
PACIFIC COAST HIGHWAY					
North of 7th Street	31,480	71.0	340	155	62
South of 7th Street	25,170	70.0	300	130	50
West of Bellflower Bl	24,070	70.0	300	130	50
East of Bellflower Bl	33,870	71.5	368	170	69
North of 2nd Street	40,780	73.5	490	235	100
South of 2nd Street	40,040	73.5	490	235	100
PALO VERDE AVENUE					
North of I-405 NB Ramps	16,500	66.0	155	62	---
South of I-405 NB Ramps	22,740	67.5	200	83	---
North of Woodruff Av	19,920	67.0	185	75	---
South of Woodruff Av	24,860	68.0	215	90	---
North of Stearns St	24,120	68.0	215	90	---
South of Stearns St	22,460	67.5	200	83	---
North of Atherton St	24,540	68.0	215	90	---
South of Atherton St	17,410	66.5	170	69	---
North of Rendina St	18,470	66.5	170	69	---
South of Rendina St	14,400	65.5	143	56	---
North of Parking Structure	14,340	65.5	143	56	---
South of Parking Structure	13,880	65.5	143	56	---
North of Anaheim Rd	14,440	65.5	143	56	---
South of Anaheim Rd	2,520	57.0	---	---	---
RENDINA STREET					
East of Palo Verde Av	1,300	54.5	---	---	---
STATE UNIVERSITY DRIVE					
E Campus Rd to Palo Verde Av	6,010	60.0	50	---	---
STEARNS STREET					
West of Bellflower Bl	13,150	65.0	130	50	---
East of Bellflower Bl	16,720	66.0	155	62	---
West of Palo Verde Av	12,640	65.0	130	50	---
East of Palo Verde Av	14,300	65.5	143	56	---

Arterial / Reach	Avg. Daily Traffic	Unmitigated CNEL @ 50'	Dist. to CNEL Contour		
			60dB	65dB	70dB
STUDEBAKER ROAD					
North of I-405 NB On-Ramp	19,320	68.0	215	90	---
South of I-405 NB On-Ramp	20,510	68.5	235	100	---
North of I-405 SB Off-Ramp	20,510	68.5	235	100	---
South of I-405 SB Off-Ramp	21,980	68.5	235	100	---
North of Atherton St	22,230	68.5	235	100	---
South of Atherton St	20,990	68.5	235	100	---
North of Anaheim Rd	19,920	68.0	215	90	---
South of Anaheim Rd	25,370	70.0	300	130	50
North of SR 22 WB Ramps	24,120	70.0	300	130	50
South of SR 22 WB Ramps	31,800	71.0	340	155	62
North of SR 22 EB Ramps	31,690	71.0	340	155	62
South of SR 22 EB Ramps	37,480	72.0	395	185	75
WEST CAMPUS ROAD					
North of 7th St	7,230	59.0	---	---	---
WOODRUFF AVENUE					
West of Palo Verde Av	7,840	64.5	120	---	---

Mitigation Measures

Traffic noise impact will be less than significant and no mitigation is required. To ensure that noise from athletic events at the soccer field facility on campus continues to be a less than significant impact, the following design and conduct measures will be implemented:

1. Events will not be **scheduled**, and the public address (PA) system will not be **scheduled to** operate at George Allen Field between the hours of 10:00 PM and 7:00 AM.
2. The PA system at George Allen Field will not be used during sports practices.
3. The PA design system at the George Allen Field will include the following features:
 - The system will be configured and calibrated to generate maximum noise level of 65 db(A) at the nearest homes. Once calibrated, the system will be "locked" to ensure that individual users cannot operate them at higher noise levels.
 - The loudspeakers will be small and highly directional with a narrow spread.

- The loudspeakers will have sufficient mass so that no substantial noise leaks through the cabinet.
- The loudspeakers will be located above the spectators and oriented downwards.
- The height of the loudspeakers above the spectators will be minimized to permit a lower volume setting.
- Spectators will not be allowed to use noise-generating devices, such as air horns.

Level of Impact After Mitigation

With implementation of the identified design features and operational procedures, the impact from sports activities at the soccer field facility will continue to be less than significant.

3.4 Fire and Police Protection Services

Environmental Setting

Fire protection for CSULB campus is provided by the Long Beach Fire Department. Police protection is provided by University Police.

Fire Protection

University buildings are equipped with smoke detectors and fire alarms which are set to provide both visual and audio alarms in the event a fire is detected or a fire alarm pull station is activated. Standard operating procedures are identified and disseminated on a regular basis to faculty, staff, and students to address a variety of different fire scenarios that may occur on campus. If a fire situation is identified, University Police will institute an emergency response and contact the Long Beach Fire Department, if necessary.

Fire Prevention

All fire equipment at the University is maintained in accordance with State and local regulations. Fire equipment is inspected on a regular schedule and re-charged, repaired, or replaced as needed. Twice a year the University performs fire drills which require the complete evacuation of all campus buildings. The University Housing Office staff routinely performs evacuation drills for all residence halls. The Office of Safety and Risk Management offers training to the University community on the safe operation and limitations of fire extinguishers.

Long Beach Fire Department

The Long Beach Fire Department is comprised of 4 bureaus: Administration, Fire Prevention, Operations, and Support Services. Fire suppression services are provided by the Operations Bureau.

Fire Station No. 22 is located at the northeast corner of campus, at the southwest corner of Atherton Street and Palo Verde Avenue, providing service to campus with minimal response time. A pumper engine and Battalion Chief are available at this station. Other stations in the vicinity include Fire Station Nos. 4, 17, and 18. Equipment available at these stations include engines, paramedic rescue, and basic life support ambulances, trucks, and a mobile command unit.¹

¹ http://www.ci.long-beach.ca.us/fire/station_locations.asp. Letter from Long Beach Fire Department dated February 19, 2008 (refer to Section 8.0).

Police Protection

The University Police Department is located at the south end of Parking lot 11C, on the eastern side of campus. A substation is located at the University Student Union on the 2nd floor, outside level. Numerous emergency telephones are located throughout campus. In addition, University Police operates a night escort service.

CSU Police Officers are sworn law enforcement officers under California Penal Code, Section 830.2, and in compliance with State statute, meet the peace officer standards and training requirements mandatory for all California law enforcement officers. These sections give these law enforcement officers their authority to arrest. In addition, all University Police Officers receive training on tolerance and diversity to better serve the University's varied student, staff, and faculty populations. The University Police Department has a mutual aid agreement with the Long Beach Police Department which defines and details operational authority pursuant to Kristin Smart Campus Safety Act of 1998, SB 1729.

The Mission of the CSULB Police Department is to provide community leadership by establishing a secure and peaceful learning atmosphere by:

- Reducing crime by educating the campus community in areas of personal safety and crime awareness
- Promoting community involvement in issues effecting public safety
- Continuing to increase the professionalism of Department personnel through expanded training.
- Maintaining an effective operational plan to respond to campus emergencies.
- Maintaining a positive working environment.

University Police personnel present numerous seminars to faculty, staff, and students on the following topics: sexual assault, sexual harassment, date rape drugs, and personal and property theft prevention. Each seminar offers prevention tips, current laws, and statistical data regarding these subjects, incorporating University policies. In addition, the Department offers a women's self defense class throughout the year.

Long Beach Police Department

The University Police Department has a mutual aid agreement with the Long Beach Police Department. The Long Beach Police Department has a staff of approximately 1,500 employees. The closest facility to the campus, the East Bureau, is located about one mile to the northwest, at Los Coyotes Diagonal and Park Avenue.

Thresholds Used to Determine Level of Impact

Impact on police and/or fire protection services will be significant if the project will require construction of new facilities or expansion of existing facilities, the construction of which would result in significant adverse effects, in order to maintain acceptable service ratios, response times, and other performance objectives.

Environmental Impact

Fire Protection

Implementation of the Master Plan will result in incremental increase in demand for fire prevention and suppression services from the Long Beach Fire Department. The University will continue to implement fire safety training and response procedures to facilitate fire suppression. New buildings and other facilities will continue to include all necessary ingress and egress for traffic circulation and emergency response, and will comply with all applicable requirements for construction, access, water mains, fire flows, and life safety requirements.

While the Master Plan includes new facilities, thus contributing to an incremental increase in demand, it does not result in the need for new fire protection facilities, the construction of which would result in significant adverse effects, in order to maintain acceptable response times, service ratios, or other performance objectives. Enhanced operating procedures, incorporation of required fire suppression and safety features, and continued emergency response training will work to minimize increased demand for services. Therefore, impact is considered to be less than significant.

Police Protection

The gradual growth in student enrollment on campus will result in an incremental increase in demand for police protection services, and therefore, the University will ensure that any needed additional University Police Department personnel will be provided. The University will continue to cooperate and participate in mutual aid arrangements with the Long Beach Police Department.

All new campus facilities, including access and internal site circulation plans, will be reviewed with regards to security objectives and police mobilization purposes, and to ensure adequate ingress/egress for emergency vehicles. New buildings and other facilities will be incorporated into the University's security and emergency response plans to ensure appropriate access for police and emergency response. New campus facilities may include passive and/or active security systems, and/or other measures, to minimize the need for new security personnel.

While the enrollment growth is anticipated to result in an incremental increase in demand for police protection services, this increase will be minimized through enhanced operating procedures, continued campus safety training, and appropriate staffing of the University Police Department. Therefore, no major new local or regional facilities will be required, the construction of which would result in significant adverse effects, and impact is considered less than significant.

Mitigation Measures

Impact will be less than significant and no mitigation beyond continued compliance with all applicable existing regulations, requirements, and procedures is required.

3.5 Utilities and Service Systems

This section addresses the impact of the updated Campus Master Plan on public utility infrastructure and services. Much of the information presented in this section is derived from the Utility Infrastructure Master Plan¹.

Environmental Setting

Water service is provided to the University campus by the Long Beach Water Department (LBWD). Sewer treatment and connections to City of Long Beach and County Sanitation Districts facilities are also provided. Stormwater drainage is collected by on-campus facilities and conveyed off-site to City of Long Beach and regional drainage facilities and systems. Solid and hazardous waste is collected by University for recycling and disposal at regional landfill facilities.

Water System

Domestic and fire water use on campus between July 2004 and June 2005 was approximately 397.3 acre-feet (AF)², or 129,460,100 gallons. The use of reclaimed water during that same period for irrigation of landscaped areas on campus was approximately 115.4 AF, or 37,598,220 gallons.

Domestic and Fire Water

The combined campus domestic and fire water system is served by several LBWD mains located in the surrounding streets. The majority of campus is connected to the main loop (Network 1), which is comprised of several 6-inch and 8-inch sub-loops that connect to various LBWD mains. The area around Parkside Commons residence hall is served by an 8-inch loop (Network 2). The Child Development Center and Housing & Residential Life also have their own meters and services and are separate from Networks 1 and 2. Most of the water mains date back to the original campus construction in the 1950s, and are comprised of transite or asbestos cement pipe (ACP) mains. The newer additions to the water system consist of cast iron pipe (CIP) or polyvinyl chloride (PVC) water mains. Some of the transite lines are 50 to 60 years old and are nearing the end of their lifespan.

¹ Utility Infrastructure Master Plan. CSULB. Prepared by P2S Engineering Inc. November 27, 2006.

² 1 acre-foot is 1 acre of water 1 foot deep, or 325,851 gallons.

Irrigation Water

Reclaimed water is utilized for most of the northern part of campus and the south campus for landscape irrigation, while the domestic network is used to feed small irrigation branches that serve the remainder of campus. The reclaimed water network consists of 4-inch PVC mains. There are two points of connection to the LBWD public lines in Atherton Street.

Sewer

The campus sewer system is comprised of a network of Vitrified Clay Pipe (VCP), PVC Pipe, Reinforced Concrete Pipe (RCP), Reinforced Polymer Mortar Pipe (RPMP), and CIP of various sizes. The individual building services tie into several mains on campus, which then tie into either LBWD or Los Angeles County Sanitation District (LACSD) sanitary sewer mains that run through the campus and in surrounding streets. Assuming that 95% of existing potable water use becomes wastewater, existing sewer generation is approximately 122,987,100 gallons per year, or 337,000 gallons per day.

Wastewater generated by the campus is treated at the Joint Water Pollution Control Plant, located in the City of Carson. The Plant has a design capacity of 400 million gallons per day (mgd) and processed 310 mgd in January 2008. The Long Beach Water Reclamation Plant also processes sewage into reclaimed water. In January 2008, it processed 14.5 mgd, and has a design capacity of 25 mgd.³

The University jets onsite sanitary sewer lines annually to ensure they remain functional. Four permitted clarifiers remove suspended solids from the sewer flows prior to tying into the campus mains. A pipe system consisting of 6 networks conveys wastewater, including network 1 that collects flows from the buildings in the central and eastern portions of campus; network 2 consisting of several lines that feed into an LACSD line that runs north from East Campus Drive to a pumping station further north; network 3 also ties into the same line as Network 2, after collecting flows from the northeastern portion of campus; network 4 comprised of lines that serve most of the buildings in the southern portion of campus; network 5 comprised of lines that serve buildings in the southwestern portion of campus, and network 6 consisting of several lines serving the Parkside Commons.

Stormwater Drainage

The existing campus storm drainage system consists of several networks of RCP and PVC pipe that were installed from the 1940s to the present. The pipes collect stormwater from throughout campus and empty into Bouton Creek Channel, a Los Angeles County Flood Control District channel that runs southeasterly through the campus center. Portions of the southeast campus area include a network of pipes that directs stormwater to a City storm drain near 7th Street and East Campus Drive.

³ Letter from Ruth I. Frazen, County Sanitation Districts of Los Angeles County to Susan Brown, CSULB dated January 28, 2008. Refer to Section 8.0.

The campus vicinity is served by the City of Long Beach drainage facilities. Currently, some deficiencies in the City’s system have resulted in occasional flooding along Atherton Street, at the intersection of Atherton Street and Palo Verde Avenue. The City has planned to install improvements to its system to rectify this existing deficiency.

Solid Waste

Waste is collected on campus for recycling, reuse, waste-to-energy, and/or disposal. The University contracts with a private company for transport. Recyclable and specified solid waste is transported to the Southeast Resource Recovery Facility (SERRF) in Long Beach for recycling or solid waste-to-energy conversion. Solid waste that cannot be diverted is transported to the Puente Hills landfill for disposal. Table 16 identifies existing solid waste and diversion rates for the University campus. As indicated, CSULB operates a very aggressive recycling program, resulting in diversion rates above 70%. In 2006, only 1,619 tons per year (tpy) were disposed at landfills, compared to 4,196 tpy that were recycled. The recycling and diversion programs will continue to be implemented throughout campus, and it is anticipated that diversion rates will continue to rise in the future.

Table 16
Solid Waste and Recycling
(tons per year)

Material/Process	Year					
	2001	2002	2003	2004	2005	2006
Recyclable Materials						
Source Reduction	0	1	13	28	2	3
Material Exchange	51	36	56	23	67	38
Greenwaste	31	300	423	406	442	456
Grasscycling	392	392	392	392	392	392
Tree Trimming	215	165	173	163	241	149
Wood	0	42	45	41	58	81
Pallets	8	24	25	21	17	19
Scrap Metal	102	115	89	127	98	217
Concrete/Asphalt	70	145	452	137	2,285	1,464
Mixed Office Paper	61	156	262	253	259	287
Cardboard	72	104	114	118	124	140
White Ledger Paper	30	23	5	2	0	0
Newspaper	11	10	10	4	1	0
Beverage Containers	2	4	6	8	12	11
Tires	0	2	3	2	3	4
Rendering	2	6	7	6	3	6
Transform/Incinerate	0	0	0	1,079	935	895
Constr/Demo Debris	n/a	n/a	n/a	n/a	247	34
Total Diversions	1,047	1,522	2,074	2,810	5,186	4,196
Hazardous Materials						
Electronics	0	0	20	27	4	70
Batteries	0	0	1	2	1	14

Material/Process	Year					
	2001	2002	2003	2004	2005	2006
Motor Oil/Antifreeze	3	4	3	2	2	1
Paint	1	4	1	2	1	2
Other	7	11	16	25	n/a	30
Total Haz. Mat.	11	19	41	58	8	117
Solid Waste Landfilled	2,923	3,000	3,076	1,214	1,538	1,619
Diversion Rate	26.4%	33.7%	40.3%	69.8%	77.1%	72.2%

Source: CSULB, 2007.

Thresholds Used to Determine Level of Impact

Impact on public utility services will be significant if the project will exceed the utility's capacity to provide services and/or will require construction of new facilities or expansion of existing facilities, the construction of which would cause significant physical effects on the environment.

Environmental Impact

Water System

As discussed in Section 3.6, Water Supply and Quality, the project will result in a net new use of 66,120 gallons of potable water per day. While the campus already uses reclaimed water for most of the northern part of campus and the south campus for landscape irrigation, the University will also continue to work to increase the use of reclaimed water through expansion of these recycled water irrigation systems on campus.

The Utility Infrastructure Master Plan includes recommendations to improve onsite water systems to accommodate expected demand and improve the existing system. Specifically, existing transite and ACP mains will be replaced with PVC class 900 plastic pipe in phases and upsized where necessary. The reclaimed water networks on the north side of campus will be connected together to form a single network to provide redundancy and work to improve pressure and flow. Backflow preventor systems will be installed where necessary. Lines that are within the sites of proposed buildings will also be relocated. Implementation of these improvements will ensure that water distribution systems are adequate to accommodate the projected growth in student enrollment. Construction of major new local or regional facilities will not be required. Impact will be less than significant.

Sewer

Based on 95% of potable water becoming wastewater, the project will result in 62,800 gallons of sewage per day, which will not require construction of major new regional or

local facilities. The Utility Infrastructure Master Plan includes new sewerage facilities to accommodate wastewater flows, including peak flows. New and replacement lines are proposed to address root intrusion, cracking, and joint displacement. To avoid potential conflicts with proposed new and replacement structures, rerouted lines will be installed, if necessary.

Since the Los Angeles County Sanitation Districts' sewer facilities run through the campus, in compliance with existing regulations, the University will obtain an approval prior to any sewage system or other improvements within the sewer easement or over or near a Districts' sewer. Compliance with these existing requirements will ensure that the Districts' sewer facilities will not be adversely affected.

Wastewater will continue to be conveyed by University sewers to LBWD and LACSD lines for treatment at Joint Water Pollution Control Plant in Carson or the Long Beach Water Reclamation Plant. These regional facilities have adequate capacity to accommodate increased flows from campus. The Joint Water Pollution Control Plant has a design capacity of 400 mgd and processed 310 mgd in January 2008. The Long Beach Water Reclamation Plant processed 14.5 mgd during that month, and has a design capacity of 25 mgd. Any hazardous liquids generated by University laboratories will continue to be treated and disposed in accordance with the University's procedures. Impact will be less than significant.

Stormwater Drainage

The campus includes a mix of permeable open spaces, impermeable paved areas, and buildings. Pursuant to the updated Master Plan, some of the aged and obsolete existing facilities will be replaced, and a limited number of new facilities will be constructed. The Master Plan maintains the campus' open spaces and its pervious surfaces. Since most the facilities will either replace the existing buildings or surface parking lots, no substantial increase in the amount or rate of stormwater runoff flows currently generated from the campus will occur.

The Utility Infrastructure Master Plan for the campus includes improvements to the existing system, such as replacing and upsizing lines. Storm drains within the sites of proposed buildings are also identified and will be relocated. Therefore, all necessary drainage improvements are included in the Master Plan, including catch basin inlets and storm drain pipes that will connect and drain in a similar manner as the existing system. None of the improvements would affect the the Bouton Creek flood control channel, as none are planned either over or near the channel.

In compliance with existing regulations, on-site structural or treatment control Best Management Practices (BMPs) will be included in individual projects pursuant to the Los Angeles County Standard Urban Stormwater Mitigation Plan (SUSMP). Volume-based or flow-based design standards will be used separately or in combination. Volume-based criteria will be used in the sizing of detention or infiltration structures, while flow-based criteria will be used for catch basin devices. In compliance with National Pollution Discharge Elimination System (NPDES) requirements, entrances to storm water drains will include traps and sieves to sift out debris, and if storm water detention basins are used, the basins will include devices to minimize entry of pollutants into the storm drain system. Implementation of modern stormwater conveyance requirements will work to

reduce peak flows. Mandatory compliance with existing regulations will ensure that impact will be less than significant.

Solid Waste

Solid waste generated during construction is discussed in Section 3.9, Construction Effects, in this EIR. Based on a solid waste generation factor of 0.06 tpy/FTE student (refer to Table 16), the project will result in 279 net new tpy, or 1,530 pounds per day of solid waste that will be disposed of at regional facilities. This generation factor takes into account current diversion rates, and therefore, may not be representative of higher diversion rates anticipated in the future. With more students attending classes, some additional hazardous waste will be generated as well from laboratory and other equipment and academic activities. With the continued very high current rates of waste diversion of over 70% on campus, the remaining amount of solid and hazardous waste is relatively small and will continue to be accommodated by regional landfill facilities. Impact will be less than significant.

Mitigation Measures

The water, sewer, and drainage improvements that will be provided as a part of the updated Campus Master Plan together with compliance with existing regulations and requirements will ensure that impact on public utilities will be less than significant. No additional mitigation is required.

3.6 Water Supply and Quality

This section discusses long-term impact from the implementation of the updated Campus Master Plan on water supply and water quality. Short-term impacts from construction-related activities are addressed in Section 3.9, Construction Effects, of this EIR.

Environmental Setting

Currently, the campus generates demand for water for landscape maintenance, dormitories, laboratories, food preparation, and other educational functions. As described in the Utility Infrastructure Master Plan¹, water consumption between July 2004 and June 2005 was approximately 397.3 (AF)², or 129,460,100 gallons. Based on a student population of 24,405 FTE in the fall of 2006, the demand for water per FTE was approximately 14.5 gallons per day. Use of reclaimed water for irrigation was 37,598,220 gallons, or 115.4 AFY.

Water Supply

Water is supplied to the University by the Long Beach Water Department (LBWD). Total water use for LBWD in 2000 was 76,138 AF and is estimated at 80,301 AF in 2005.

The LBWD has 3 major sources of water: (1) treated water imported by and purchased wholesale from the Metropolitan Water District (MWD), (2) groundwater extracted and treated by the LBWD, and (3) tertiary-treated reclaimed water provided by the Los Angeles County Sanitation Districts. The LBWD is researching the technological, environmental, and financial feasibility of seawater desalination as a source of potable water. If feasible, this source could come into production as early as 2010.³

Imported Water

LBWD receives imported water from MWD. MWD is a water wholesaler with no retail customers – it provides treated and untreated water directly to its 26 member agencies. For LBWD, Metropolitan currently receives imported water from 2 sources: (1) the Colorado River via the Colorado River Aqueduct and (2) the State Water Project (SWP) via the California Aqueduct. MWD has also been working to increase its ability to supply

¹ Utility Infrastructure Master Plan. CSULB. Prepared by P2S Engineering Inc. November 27, 2006.

² 1 acre foot is 1 acre of water, 1 foot deep, or 325,851 gallons.

³ 2005 Urban Water Management Plan. Long Beach Water Department. Revised May 17, 2007.

water, particularly in dry years, through the implementation of storage and transfer programs.

Water delivered via the Colorado River Aqueduct, which has a capacity of 1,800 cubic feet per second, or 1.3 million acre feet per year (AFY), is conveyed 242 miles from its Lake Havasu intake to its terminal reservoir, Lake Mathews, near the city of Riverside. A number of constraints limit supplies from the aqueduct, including the 1964 U.S. Supreme Court decree in *Arizona v. California* that reduced MWD's dependable supply of Colorado River water to 550 thousand AFY. In 1987, MWD entered into a contract with the Bureau of Reclamation for an additional 180 thousand AFY of surplus water. MWD also has obtained a minimum of 80 thousand AFY of Colorado River water through a conservation program with the Imperial Irrigation District. Water transfers can be limited by drought and/or use of surplus water by the entitled entities.

The SWP conveys water from Northern California to areas south of the Bay Delta region. This water originates at Lake Oroville and other drainages, flows into the Sacramento/San Joaquin Delta, and then is either pumped to water users in the San Francisco Bay area or transported through the California Aqueduct to Central and Southern California. In 2005, MWD has a contracted entitlement of 2.011 million AFY of this water, or approximately 48% of the total contracted amount. Water via the California Aqueduct arrives in southern California at Castaic Lake in Los Angeles County, Devil Canyon Afterbay in San Bernardino County, and Box Springs Turnout and Lake Perris in Riverside County. In recent years the listing of several fish species in the Sacramento/San Joaquin Delta (Delta) under both state and federal Endangered Species Acts has constrained SWP operations and created more uncertainty in SWP supply reliability.⁴

Ground Water

LBWD has the right to pump 32,684 acre-feet per year of groundwater from the Central Basin and 0.7 acre-feet from the West Coast Basin. LBWD has no wells in the West Coast Basin and, therefore, does not pump those water rights, but does, from time to time, use those rights for in-lieu replenishment of that basin.

The Central Basin is a groundwater aquifer under 277 square miles in mostly urbanized southern Los Angeles County. The Basin was seriously over-drafted by the mid-1900's and was adjudicated in Superior Court in the early 1960's, strictly limiting extractions to apportioned rights and apportioning the pumping rights to certain parties.

The water stored in the Central and West Coast basin has increased since 1962 by 165,700 acre-feet. There are several programs to keep the basin replenished, these include the following:

- To the extent possible, San Gabriel River stream flows are used for replenishment. The quantity of water from this source fluctuates with changes in weather patterns.
- The Long Beach Judgment ensures that actual or replacement flows within and below the San Gabriel River continue to meet historic averages or that

⁴ Draft Regional Urban Water Management Plan. Metropolitan Water District of Southern California. 2005.

replacement water is provided. On a long-term basis this flow is required to meet fixed minimum benchmarks.

- Reclaimed water is mixed with other waters and allowed to percolate into the groundwater basin. Because this is a reclaimed water supply, it is very reliable, even during fluctuations in weather patterns, including multiple dry years.
- MWD's imported replenishment water is purchased when available. This source can only be interrupted for a maximum of 2 years.

Because sufficient storage is maintained in the Central Basin, because non-MWD sources are available for replenishment, and because extractions from the Central Basin are restricted, groundwater supplies from the aquifer are very reliable, even during multi-year droughts. In addition, LBWD also can extract groundwater it has stored in the aquifers, up to 20% of its water rights, and to extract in emergencies up to another 20%. Also, LBWD will extract, when called to, the 13,000 acre-feet of MWD conjunctive use water stored in the Central Basin aquifers.

Reclaimed Water

LBWD receives reclaimed water from the Long Beach Reclamation Plant, which is operated by the County Sanitation Districts. LBWD has rights to the tertiary water produced by the plant. The plant produces about 22,000 AFY, and LBWD currently uses about 5,200 AFY. Because the output of the reclamation plant is not impacted by weather, and because the output of the plant exceeds current and expected demand for reclaimed water, this supply is considered very reliable. LBWD expects to continue to expand its reclaimed water system in order to make reclaimed water available to additional customers.

Imported drinking water has been injected into a seawater barrier in southeast Long Beach for several decades. The barrier prevents the seawater from intruding into the fresh-water aquifers. The LBWD is cooperating with other agencies to polish reclaimed water using reverse osmosis and ultraviolet light, and then inject the polished water into the seawater barrier. The process works to reduce demand for water from other sources, and can continue unimpeded even during multiple, consecutive dry-year events.

Conservation

The LBWD encourages conservation through its leak-detection program, metered water program, rate structuring, rebate programs, water education programs, and other measures. Additionally, prohibitions have been implemented for leaks in private plumbing systems, watering landscape beyond saturation, operating fountain or other water features that do not recirculate the water, allowing the hose run while washing a car, and others. The University also works to conserve water through education, low-flow toilets and other fixtures, use of reclaimed water, etc.

On September 13, 2007, the Long Beach Board of Water Commissioners declared that a water supply shortage is imminent, and activated the Emergency Water Supply Shortage Plan, imposing additional water use prohibitions. Water prohibitions being implemented include the following: serving drinking water unless requested; washing driveways, sidewalks, parking areas, patios or other outdoor areas with a hose unless using a water-conserving pressurized cleaning device; irrigating landscape with potable

water between the hours of 7:00 a.m. and 6:00 p.m.; operating a fountain or other water feature that does not recirculate the water; and failing to provide hotel/motel customers the option of choosing not to have towels and linens laundered daily.

Water Quality

The Los Angeles Regional Water Quality Control Board (LARWQCB) is the primary agency responsible for protecting and enhancing water quality and protecting the beneficial uses of water resources in the region. In accordance with the Porter-Cologne Water Quality Control Act and Federal Water Pollution Control Act Amendments of 1972, the LARWQB has prepared a Water Quality Control Plan (Basin Plan) for the region. The Basin Plan establishes beneficial uses.

Stormwater runoff is regulated under the National Pollution Discharge Elimination System (NPDES). The NPDES storm water permits provide a mechanism for monitoring the discharge of pollutants into stormwater runoff. The University is co-permittee under the NPDES stormwater permit covering Los Angeles County (NPDES No. CAS614001). Therefore, all projects must comply with the NPDES requirements for construction and operations, as appropriate.

The University campus is located an urban area and is surrounded by relatively intensive development with a high percentage of impervious surfaces, including streets, parking lots, and buildings. The campus itself is developed at a relatively low intensity with academic buildings, parking, and other facilities but it contains large open space and landscaped areas, including grassy quadrangle areas, sports fields, gardens, and other pervious surfaces that allow stormwater to soak into the ground. Stormwater flows off pervious surfaces through downspouts, gutters, and other conveyance facilities, and then is either transported to local and regional flood control facilities, or percolates into the ground through pervious surfaces. Landscaping can result in dry-weather urban runoff as well, and the University works to minimize these flows to the greatest extent possible. Newer on-campus facilities include features and measures to store and treat stormwater runoff.

Thresholds Used to Determine Level of Impact

Impact will be significant if the project will generate demand for water that exceeds available supply, results in a need for new or substantially altered water infrastructure systems, or substantially impairs water quality.

Environmental Impact

Water Supply

As illustrated in Table 17, total water supply to the LBWD is projected to increase from 80,301 AFY in 2005 to 88,400 AFY in 2020 to 90,800 AFY in 2030. At the same time, supplies of recycled water are projected to increase from 5,210 AFY in 2005 to 9,604 AFY in 2020 to 14,400 AFY in 2030. Groundwater pumping is expected to remain similar to current levels throughout the planning period. Imported water supplies are projected to decline, and desalinization is expected to increase supply. Deliveries to institutional/government entities are forecast to increase from 4,086 AFY in 2005 to 4,580 AFY in 2020 and 4,711 AFY in 2030.⁵

Table 17
Long Beach Water Department Water Supply
(Acre-Feet per Year)

	2005	2010	2015	2020	2025	2030
Wholesale Purchases	43,939	35,658	30,758	31,912	30,488	29,516
Groundwater	25,955	32,684	32,684	32,684	32,684	32,684
Seawater Desalinization	0	5,000	10,000	10,000	10,000	10,000
Total Potable Water	69,894	73,342	73,442	74,596	73,172	72,200
Recycled Water	5,210	6,458	8,058	9,604	12,428	14,400
Seawater Barrier	5,197	4,200	4,200	4,200	4,200	4,200
Total Water Supply	80,301	84,000	85,700	88,400	89,800	90,800

Source: 2005 Urban Water Management Plan. Long Beach Water Department. Revised 2007.

Based on a factor of 14.5 gallons per FTE per day, campus development pursuant to the updated Master Plan will result in additional demand for potable water of 66,120 gallons per day, or 74.1 AFY. As illustrated in Table 17, this increase in demand can be accommodated by the LBWD, which projects an increase of 4,742 AFY of potable water supplies by 2020.

The University will work to increase the use of reclaimed water through expansion of recycled water distribution systems on campus. As indicated in Table 17, ample supplies of recycled water are projected in the future, which can be utilized to provide irrigation for the University campus.

The University will continue to work to increase the use of recycled water and reduce demand for potable water through active conservation and education. For example, the University will continue to develop and implement plans and programs to reduce water use, such as installing low and ultra-low water fixtures and waterless urinals. Increased demand for water, including from institutional/government users, such as CSULB, has been taken into account in the LBWD's planning efforts. Therefore, existing and projected water supplies are available to serve the campus development pursuant to the Master Plan, and no additional entitlements or treatment/distribution systems are

⁵ 2005 Urban Water Management Plan. Long Beach Water Department. Revised 2007.

anticipated to be required due to the project. Nevertheless, mitigation is identified to ensure that proper water conservation is pursued.

The updated Campus Master Plan is not anticipated to result in demand equal to or greater than that generated by 500 dwelling units per year. Within the LBWD, water use by 500 dwelling units ranges from 100 AFY for multi-family units to 179 AFY for single-family units. Since the project will result in substantially less demand for water than that associated with 500 dwelling units, it has been determined that no water supply assessment is required pursuant to Senate Bill 610 (refer to Water Code Sections 10910 and 10912).⁶

Water Quality

The Master Plan will result in construction of new buildings and facilities, increasing impervious surfaces on campus. The University's standard development review process and implementation of the Utility Infrastructure Master Plan will ensure that adequate on-campus drainage infrastructure exists to safely transport on-site stormwater to local and regional facilities.

The project will also comply with all the applicable regulations for stormwater runoff, including preparation and implementation of Standard Urban Stormwater Mitigation Plans (SUSMP). In compliance with the existing NPDES regulations, development of individual sites will be required to include measures to control polluted runoff from the first 3/4-inch of rain that falls within a 24-hour period. This can be accomplished with detention basins and/or filtration systems in catch basins of the curbside drains. Entrances to stormwater drains will include traps and sieves to sift out debris.

These standard requirements will be incorporated into the final site plan for each individual facility on campus. The University will work to incorporate permeable surfaces into each individual project design, to the extent possible, and will continue to minimize dry-weather flows. Compliance with existing regulations and continued implementation of University programs to improve water quality will ensure that any impact that may occur will be beneficial relative to existing conditions due to upgrading stormwater runoff treatment.

Mitigation Measures

Impact in regards to water quality has been determined to be less than significant. The following mitigation measures are identified to reduce the use of potable water.

1. The use of reclaimed water for irrigation will continue to be expanded to the extent feasible.
2. The University will continue to implement policies and programs to reduce water use, such as installing low-use water fixtures, waterless urinals, and/or other measures.

⁶ Letter to Matthew Lyons, Long Beach Water Department, from Joshua Hart, HDR Engineering, Inc., dated September 11, 2007.

3. The University will continue to coordinate with the Long Beach Water Department to reduce water use during water supply shortages.

Level of Impact After Mitigation

With implementation of the identified mitigation measures, impact will be less than significant.

3.7 Archaeological Resources

This section addresses the updated Campus Master Plan's potential impact on archaeological resources. The analysis is based on a report prepared by Matthew A. Bost, Ph.D., archaeologist.

Environmental Setting

The region surrounding CSULB has supported continuous human occupation for at least the last 8,000 years. Current evidence suggests that a relatively small population existed in the Los Angeles Basin until approximately 2,000 years before present (B.P.). After that, populations appear to have expanded considerably into resource-rich coastal and near-shore estuarine environments. Reports from early Europeans indicated that hundreds of occupants inhabited some of the larger coastal villages.

Archaeological evidence suggests that for 3 millennia, mobile groups of hunter-gatherers established camping sites near freshwater sources on the CSULB campus. These sites were part of an extensive settlement pattern linked to the coastal plain of the lower San Gabriel River and to the relict Bouton Creek. The archaeological record suggests that Native Americans adapted to climate change and water shortages by moving their site locations. Prehistoric settlement at campus is patterned, not haphazard, and it is situated along a drainage system that traversed the northern campus. During the Intermediate Horizon or Middle Period, archaeological sites on western portions of campus were linked to a relict stream that flowed into Bouton Creek. Then, from approximately A.D. 900 to the early 18th century, Late Horizon or Late Period groups located their encampments along the banks of Bouton Creek.

In the Los Angeles/Long Beach area, prehistory ended with the arrival of the Spanish Portolá expedition of 1769. Records from this period indicate that the Los Angeles Basin and nearby valleys were the home of the Gabrielino, or Tongva, people.¹

Background

Four "horizons" or cultural stages are generally described in California: (1) Early Man, (2) Milling Stone (or Early), (3) Intermediate (or Middle), and (4) Late Prehistoric.

¹ It is not certain how these people referred to themselves. The term "Gabrielino" is derived from the Mission San Gabriel.

The Distant Past – The Paleoindian Period or Early Man Horizon: No firm evidence of human occupation of the Los Angeles Basin until roughly 10,000 B.P. has been discovered. However, finds along the paleo-shoreline sites of Tulare Lake include “Clovis-like” fluted projectile points, scrapers, and chipped crescents. The fluted projectile points of the San Joaquin Valley are associated with sites to the east, in the Mojave Desert. These sites appear along paleo-shorelines, piedmont zones of former grasslands, and in mountain passes associated with fossil lakes. The finds typically contain chipped stone crescents, graters, scrapers, choppers, perforators, and various fluted points.

In the Los Angeles Basin, partial remains of a skeleton referred to as ‘Los Angeles Man’ were recovered from the ancient channel of the Los Angeles River in the Baldwin Hills area. The ‘Los Angeles Man’ appeared to be contemporaneous with the partially preserved remains of an imperial mammoth, and therefore, his discovery contradicts the lack of other early human inhabitation of the Basin.

Partial remains of the ‘La Brea Woman’ recovered from the La Brea tar pits were assigned to the early Holocene.² At approximately 9,000 years B.P., La Brea Woman is contemporaneous with the ‘big game hunting tradition’ found at that time across most of North America.

The Millingstone Horizon: In Southern California, the Millingstone Period, also called the Millingstone Culture, extends to at least 6,000 B.P., and probably as far back to 8,500 B.P. Hard seed processing became one of the major components of subsistence during this period. Overall, the economy was based on plant collecting, but was supplemented by fishing and hunting. Initially in near-shore and coastal locations, infrequent exploitation of marine and estuarine resources occurred.

The Millingstone Horizon is typified by large, heavy ground stone milling tools such as deep basin metates and wedge-shaped manos, and large core/cobble choppers and scrapers. The portable manos and metates were most likely used as mobile processing equipment for collected plant materials. The reliance on this subsistence strategy and affiliated tools is further supported by the apparent scarcity of faunal remains. The flaked lithic tools trend towards a larger and cruder assemblage than the later periods. Projectile points and apparent hunting-type tools tend to be absent from Millingstone Culture assemblages. Cogged stones, made by a characteristic pecking and grinding process, also appear.

Millingstone Horizon sites are found from Santa Barbara to Los Angeles County, and into San Diego County, in both coastal and inland settings. In the Los Angeles area, the Millingstone Culture is typified by the so-called Topanga Culture. Topanga Culture sites include typical Millingstone assemblage materials, such as core/cobble tools, and an abundance of ground stone implements, while projectile points tend to occur less frequently.

The Intermediate Period: This period has also been called the ‘Hunting Period’ or ‘Middle Horizon.’ About 5,000 years ago, the Millingstone traditions, with their heavy reliance on vegetal food sources, began to gravitate more towards animal proteins and marine resources. In the Los Angeles Basin, a higher percentage of projectile points

² The Holocene period is generally identified as the present to 10,000 years ago.

and smaller chipped stone tools appear. Marine resources, such as shellfish, marine mammals, and fish became abundant in the diets of the local inhabitants.

Important technological, economic and social innovations, and a concomitant quickening of sociocultural evolution, occurred during the Intermediate Horizon. On a technological level, the basket hopper mortar and mortar and pestle grinding implements were added to the mano (hand grinding stone) and grinding slab of the Milling Stone Horizon. The mortar and pestle are thought to indicate the appearance of intensive use of acorns. This resource provided readily stored food surpluses and resources for buffering against the effects of seasonal food shortages. The atlatl, or spear thrower, appears to have remained in use, judging from a variety of chipped-stone spear (dart) points found in sites of this period. Small game species are well represented in the diet as well. Along the coast and on the Channel Islands, marine resources appear as a significant and increasing component of the diet. The increasing size and permanence of villages suggests a more productive economy, and of considerable movement of food products within trade patterns. The first evidence of increasing social complexity appeared as well with the appearance of social ranking, including use of stone and shell beads as status indicators.

The Late Prehistoric Period: The period probably began around 2,000 B.P., and appeared to expand culturally around 500 A.D. with the introduction of the bow and arrow. The end of the period is recognized as the close of the 18th Century, when full implementation of the Spanish mission system.

The Chumash, with a Hokan linguistic stock, and their neighbors to the east, the Gabrieleno/Tongva with a language derivative from Shoshonean stock, lived in large villages along the coastal bay and the wide valleys leading into the California interior. The western Los Angeles Basin was occupied by the 'Canalino' culture, an ethnohistoric boundary group situated between the Chumash to the northwest and the Gabrieleno/Tongva to the south and east. In the archaeological record, these people's material culture can be indistinguishable.

The Late Prehistoric Period can be seen as an acceleration of trends set in motion during the Intermediate Horizon, with a more diverse technological base than preceding periods. Coastal sites in the Santa Barbara Channel supported some of the largest aboriginal populations in the state. At the same time, socially and economically complex societies had emerged in the Los Angeles Basin. Status mediated regional trade patterns appear to have operated with long distance movement of goods such as steatite (soap stone), obsidian, shell/shell beads, and perishable items. Small projectile points, most likely from bows and arrows, begin to appear in sites of this period. It is postulated that at about A.D. 700 Uto-Aztec linguistic groups intruded to the coast from deep in the interior, displacing Hokan linguistic groups to the north and south. Many authorities believe that this event introduced the immediate ancestors of the Gabrieleno, or Tongva people.

Certain indicators such as diagnostic shell beads and finely worked projectile points help identify many Late Prehistoric sites in Southern California. Both the Gabrieleno/Tongva and Chumash were highly sea oriented and, given the presence of earlier sites on the offshore islands, this suggests that there was a maritime tradition at least partially carried over from earlier cultures.

The Gabrielino/Tongva People

The Gabrielino population at the time of European contact appears to have occupied 50 to 100 major villages containing 50 to 100 inhabitants each. The Gabrielino possessed a technological base and economy which were similar to those of the Chumash, including large plank canoes and heavy reliance of coastal villages on marine resources. In the vicinity of eastern Long Beach, several ethnographically-known Gabrielino settlements existed, including Nakaungna, Chokishngna, Ahauwit, Pubu (Puvunga), Sehat, Shua, and Tibahangna, the exact locations of which are disputed by scholars.

The Cupan language of the Gabrielino was a Takic member of the Uto Aztecan linguistic stock. Four major dialects of this language have been identified: (1) Gabrieliño proper, spoken in the Los Angeles Basin; (2) Fernandño, spoken in the San Fernando Valley area; (3) Santa Catalina Island dialect, and (4) Nicoleño, the San Nicolas Island dialect.

The first recorded European contact with the Gabrielino/Tongva was by Juan Rodriguez Cabrillo in 1542. However, it was not until 1769 that Portolá made the first Spanish overland expedition through present day Los Angeles County. In 1771, the Mission San Gabriel was founded, and Native Americans from the Los Angeles Plain were encouraged to move from their old habitation sites to the mission area. Thereafter, the people aculturated into the overall population rapidly, and the previous culture remains poorly known.

Archaeological Investigations at CSULB Campus

Extensive and numerous searches and consultations have been performed on the CSULB campus, including surveys, excavations, borings, and searches and review of records to address potential archaeological loci or suspected prehistoric cultural deposits on campus.

Between 1993 and 1997, an interdisciplinary team of researchers and Native Americans implemented a comprehensive program of Cultural Resource Management (CRM) on campus. The investigative team surveyed more than 90% of the entire campus area not currently covered by buildings or parking lots. Nearly 1,000 soil auger borings, dozens of exploratory and strategically placed hand-excavated test units, mechanically-dug trenches, and monitoring programs for new facilities were completed. Additionally, historic campus photographs (both aerial and vantage point) and topographical maps were comprehensively reviewed.

This CRM program determined that the vast majority of the campus represents secondary depositions of invertebrate shell, rather than in situ archaeological sites. Since the 1950s, construction projects, incorporating deep trenching and excavation for electrical conduits, water lines, and building foundations, have brought small shell fragments (e.g., less than 1 centimeter in diameter) to the surface. These surface expressions, initially characterized as “midden traces” were recorded as archaeological sites, primarily during the late 1970s. The seemingly random and widespread distribution of these loci gave the false impression that indigenous sites proliferate throughout the boundaries of CSULB campus. Testing has revealed that the legitimate

archaeological sites on the CSULB campus are deeply buried, preserving their integrity, and that surface remains do not represent intact midden deposits. Rather, these traces of shell are the result of disturbance to buried strata and re-deposition of shell fragments in fill material.

Consultations with California Native American Heritage Commission

Previous consultations with the California Native American Heritage Commission resulted in responses that a Burial Site, Reburial Site, Village Site, Worship/Ritual Site, and Sacred/Power Area exist in the vicinity. Of 3 archaeological sites identified on campus, only 1 is considered to be eligible for the California Register of Historical Resources.

University Policy on Native American Burial Remains

The University has established a process for consulting with the local Native American community regarding construction projects and archaeological excavation on campus. This process has resulted in CSULB's Policy on Native American Burial Remains, Associated and Unassociated Funerary Objects, Sacred Objects, and Other Cultural Patrimony. Compliance with the policy is overseen by a Committee on Native American Burial Remains and Cultural Patrimony, composed of the following

- CSULB's Director (or designee) of American Indian Studies;
- 2 probationary or tenured CSULB faculty specializing in archaeology, biological anthropology, or cultural anthropology (or the most close related specializations available);
- 2 additional probationary or tenured CSULB faculty (at least 1 of whom shall be of Native American heritage);
- 5 representatives recommended by tribal authorities of Native American communities whose heritage is closely associated geographically with the counties of Los Angeles and Orange; and
- CSULB's Vice President (or designee) for Academic Affairs.

Prior to commencement of earthmoving construction activities or archaeological work, the University confers with the Committee's Native American consultants. The sensitivity of each individual project area is discussed, resulting in recommendations for monitoring and the treatment of unanticipated discoveries. At this pre-work conference, University personnel may recommend regarding the laboratory study of such human remains or associated materials (should they be encountered) for consideration by the appropriate tribal representatives.

Threshold Used to Determine Level of Impact

Impact will be significant if the project causes a substantial adverse change in the significance of an archaeological resource or disturbs any human remains.

Environmental Impact

The updated Campus Master Plan will result in new and replacement buildings and associated infrastructure on campus. The work performed for these individual facilities and improvements will result in ground-disturbing activities. New and replacement buildings and facilities have been situated to avoid known or potentially known archaeological resources. The CRM program determined that the legitimate archaeological sites on the CSULB campus are deeply buried, preserving their integrity, and that surface remains do not represent intact midden deposits. Thus, the vast majority of the campus represents secondary depositions of invertebrate shell, rather than in situ archaeological sites. University policies require consultation with Native American representatives prior to construction or archaeological investigations. Nevertheless, even though it is highly unlikely given the magnitude and expanse of previous investigations throughout the campus area, the construction of new and replacement facilities may potentially disturb an unknown archaeological resource. Therefore, mitigation measures are identified to ensure that no significant impact will occur in such an event.

Mitigation Measures

1. All earth moving construction activity will be monitored by a professional archaeologist and Native American monitor. The archaeological monitor will conduct on-site cultural resources sensitivity training (crew education) as outlined below. If subsurface cultural materials are uncovered, construction work in the immediate vicinity will be halted and the emergency discovery procedures described below will be implemented.
2. Prior to the beginning of the earth moving construction activities (including initial grading of vegetation removal), the construction crew shall be informed of the cultural resources values involved and of the regulatory protections afforded those resources. The crew shall also be informed of procedures relating to the discovery of unanticipated cultural resources (as outlined below). The crew shall be cautioned not to collect artifacts, and asked to inform a construction supervisor and the onsite archaeological monitor in the event that cultural remains are discovered during the course of construction. The onsite archaeological and Native American monitor shall administer supplement briefing to all new construction personnel, prior to their commencement of earth moving construction activities.
3. In the event an archaeological resource is unearthed during excavation activities associated with the project, work shall be stopped immediately and the discovery

shall be evaluated by a qualified archeologist, pursuant to the procedures set forth at CEQA Guidelines Section 15064.5.

4. In an event that a previously unknown archaeological resource is discovered and disturbance to such a resource cannot be avoided, a Phase-III, or "data recovery," phase of investigation will be required, pursuant to CEQA Guidelines Section 15064.5. The Phase-III study will generally consist of a limited scale program of archaeological excavation, radiocarbon dating of organic materials - such as shell midden and faunal remains, laboratory analysis, and report writing designed to assess the importance of the resource in question. Any resources recovered will be properly curated, as appropriate.
5. If human skeletal remains are found at the project site during earth moving activities such as grading or trenching, work shall be suspended and the Los Angeles County Coroner's Office shall be notified. Standard guidelines set by California law provides for the treatment of skeletal material of Native American origin (California Public Resources Code, Sections 5097.98 et seq.; Health and Safety Code, Section 7050.5 and others). Procedures to be employed in the treatment of human remains are found in, "A Professional Guide for the Preservation and Protection of Native American Remains and Associated Grave Goods," published by the California Native American Heritage Commission.
6. Paleontological resources have not been identified on the CSULB Campus; however, if fossilized shells, plants or bones are discovered during construction of an individual project, work shall be suspended in the immediate vicinity of the finds, and the potential significance of the resources shall be evaluated by a qualified specialist.

Level of Impact After Mitigation

Implementation of the identified mitigation measures will ensure less than significant impact.

3.8 Aesthetics, Light, and Glare

Environmental Setting

Located 3 miles from the Pacific Ocean, the CSULB campus spans 323 acres with 84 buildings. The campus was established at its current location by a vote of the people in 1950. Bouton Creek, a partially covered drainage easement that runs diagonally through the northern campus, gives form to the physical form of the campus.

Campus Character

The campus architecture is mostly of the international style, placing emphasis on open landscaped areas throughout campus creating a natural, park-like setting. Landscaping and architecture are integrated in quadrangles, courtyards, rolling grass-covered hills, and sculptured tree canopies. A semi-formal quadrangle area defines the south campus, while a promenade runs east-to-west through the center of campus, generally following the alignment of Bouton Creek.

Campus buildings are clustered generally according to purpose. Academic facilities predominantly lie in the south and eastern sides of campus, oriented around landscaped quadrangles and promenade areas. Administrative and student service buildings tend to be centrally located for ease of access. Athletic facilities are grouped near the north center portion of campus, with parking facilities oriented towards the periphery where they are more easily accessed. Dormitories are located towards the western side of the site.

Campus buildings primarily are comprised of brick, glass, and concrete. Modernist proportioning, flat roofs, punched windows, and the consistent use of peach-colored brick tie the campus together. One exception is the blue Walter Pyramid, which provides a noteworthy contrast on campus and serves as an icon for the University and the City of Long Beach.

Tree canopies have been utilized to define smaller open spaces in a manner appropriate to the mild coastal climate. Some of the University's student services functions that can have long lines are located in the open courtyard of E. James Brotman Hall, which is "roofed" by a similar jungle-like canopy. The Psychology building is also notable for its soaring, courtyard planted with tall Eucalyptus trees.

Lighting

Security lighting is provided on campus in walkways, parking lots, around buildings, and at other key locations. Athletic field lighting is minimal, and located within the central campus, thereby avoiding direct spillover into surrounding neighborhoods. Energy efficient bulbs and other measures are used to the extent feasible to reduce energy use, glare, and illumination of the night sky. All campus lighting is shielded and directed down to provide necessary illumination levels and minimize light trespass.

Thresholds Used to Determine Level of Impact

Impact is considered to be significant if the implementation of the Campus Master Plan will substantially degrade the existing visual character or quality of the University campus or its surroundings, have a substantial adverse effect on a scenic vista, and/or create substantial light and glare that will adversely affect day or nighttime views in the area.

Environmental Impact

The updated Master Plan is designed to first provide new in-fill facilities in the interior of the campus and replace existing aged, obsolete, and inefficient facilities. These facilities include 6 liberal arts replacement buildings, 2 new parking structures, a student services addition to Brotman Hall, student housing, and a soccer field and sports buildings. The existing aged and obsolete buildings will be demolished and replaced with new modern facilities at approximately the same locations, providing program areas required to support the academic plan that cannot be accommodated within existing buildings. The updated Campus Master Plan protects open spaces, pedestrian corridors, and campus architectural themes.

The implementation of the updated Campus Master Plan project will result in construction of new buildings at the campus, including the following:

- The Student Services Addition in the center of campus
- The Liberal Arts Replacement project and Liberal Arts Complex in the south part of campus
- Dormitories and related facilities in the Parkside and Residence Commons Housing complexes in the western campus
- A soccer field, track, bleachers and related sports buildings near the center of campus, and
- Two new parking structures, one in the interior of the campus and one in the southeast corner of the campus

Overall, the Master Plan aims to enhance the University's distinct character, update and expand campus infrastructure, and preserve the quality of the physical environment.

The Master Plan also reflects the University's intent to minimize facility growth on the perimeter of the campus.

Architectural Guidelines

Architectural guidelines are an integral component of the Master Plan. The guidelines address building siting, outdoor transition, building form, materials, roofs, windows, and other features.

Building Siting – Campus buildings are primarily sited as buildings in a park. As such, access to the buildings will be carefully coordinated with the campus open spaces, and pedestrian circulation patterns. Entrances will be broad and welcoming, opening off of and integrating with the campus open spaces. The primary building frontage and access will be oriented to the central campus, although secondary entrances from parking may be appropriate.

Outdoor Transition – Roof overhangs, trellises, courtyards and other means of transitioning outdoor to interior spaces are encouraged. Opportunities for informal learning will be provided whenever possible. Outdoor areas should include usable space designed to be more than places to walk through to get to the building. Paving materials, colors, and patterns within these areas are important for adding a sense of place and scale. Materials should coordinate with other paving on campus but may be designed to specifically compliment and coordinate with the building and the adjacent campus pathways.

Building Form – The building forms at CSULB campus are primarily rectilinear. The Pyramid is a unique focal point on campus. All future buildings will continue the tradition of the brick modernist simple and elegant lines that define the architectural vocabulary of the campus. Attention to detailing is imperative to the success of building design within this vernacular. The California climate and building orientation will influence the design of the different facades. The campus topography will be embraced by the buildings rather than resisted with retaining walls.

Materials – The combination of brick with white cementitious materials will be the primary vernacular of CSULB campus. Brick vertical facades utilizing the designated campus peach brick color are encouraged. Vertical planes of brick will be incorporated in locations and proportion significant enough to integrate the design to the campus vernacular. White concrete will be a secondary material and may be utilized in various configurations and geometries. Exterior materials will be durable, particularly in regards to the marine atmosphere.

Roofs – Roof lines will normally appear flat and roof overhangs to shield sun and rain are appropriate. Mechanical and building system equipment will be housed within the buildings whenever possible. Where roof mounted equipment is unavoidable it will be concealed by parapets and line of sight. If mechanical equipment screens are necessary to complete the screening of equipment, they will be designed to integrate with the building. Some roofs may be visible from upper floors of neighboring buildings. All vantage points will be considered when designing the roof.

Windows – Window opening configurations and scale are important elements for the rectilinear building forms of CSULB campus. Individually set windows and storefront installations are acceptable systems. Glass surfaces will add depth, shadow and dimension to the building façade. Future flexibility of interspaces will be considered when the façade and window penetrations are being designed.

Service – Service areas, including access for campus vehicles, trash collection and pickup, and building deliveries will be located in a manner to minimize pedestrian and vehicular paths from conflicting. Pedestrians will always have the priority in the circulation planning of buildings. Service access and areas will be shielded from view and will be located adjacent to parking and driveways.

Campus Character

The Master Plan will result in placement of new structures within campus according to the architectural guidelines, as follows.

- The “buildings in a park” campus configuration creates a pedestrian-oriented environment with automobile and public transportation circulation routes remaining outside the central campus and the major open spaces.
- The campus core will continue to be a pedestrian domain, and service vehicles will continue to use designated service routes.
- Most academic, academic support, and housing facilities will continue to be clustered within ½ mile walking distance.
- At conflict points with other modes of travel, pedestrian will be given the right-of-way, especially at key crossing of heavily traveled streets.
- Visual cues will be incorporated into new and redesigned facilities to direct pedestrians toward the most desirable path.

The “spaces between” that knit together CSULB campus are critical to its character and quality. The open spaces include lawns, pedestrian malls and plazas, active and passive spaces, shady landscaped areas and smaller intimate yards. The interior orientation of the academic campus toward the open space is a unique form and character-giving attribute that will be retained and enhanced by the Master Plan.

New buildings will largely be within interior of the campus, minimizing changes from the exterior. These new elements will mostly replace existing facilities or provide for appropriate infill campus development.

- The new classroom buildings will replace existing structures that have outlived their useful life, and will result in beneficial aesthetic changes.
- The new parking structures will replace surface parking and eliminate open asphalt and concrete areas.
- The new residence halls are designed to compliment the existing dormitory buildings and related uses nearby.
- The proposed administrative and athletic facilities are consistent with existing onsite and nearby uses.

Standard University review procedures for compliance with the architectural guidelines will ensure that the specific design treatment selected for these facilities is compatible with the character of each individual setting.

Lighting

Existing security lighting will continue to be upgraded as necessary throughout the life of the Master Plan, and new lighting will be installed at new facilities and select locations as necessary to ensure adequate safety. Low-glare, cut-off, and shielded lights will be used as appropriate. This will continue to ensure appropriate levels to maximize safety while minimizing spillover into surrounding areas and the night sky. No substantial change in overall security lighting levels as viewed from off-campus locations is anticipated. The University campus is separated from nearby sensitive residential uses by relatively wide streets, and thus, this lighting will be minimally visible from those areas.

New lighting will be installed at the sports fields for use during evening events. However, instead of using typical lights mounted in groups on 110- to 120-foot high standards, the campus plans to install 75 to 85-foot lights at the field to minimize effects on the surrounding uses, which will significantly reduce glare and line-of-sight effects. In addition, the best available fixtures will be used to avoid spillover. This lighting will be shielded and directed downwards to provide the necessary illumination and at the same time minimize visibility from nearby areas. The closest sensitive off-site residential uses are located more than 600 feet from the facility, further minimizing visibility of the lights. Intervening street lighting will mask views of the light standards from surrounding areas. All lighting will be turned off after the sport games or other events end. Mitigation measures specified in Section 3.3, Noise, which limit the duration of athletic events at the sport fields, will also work to avoid lighting during nighttime. Therefore, impact will be less than significant.

Mitigation Measures

Adherence to the Master Plan's architectural guidelines will ensure that new buildings, other facilities, landscaping, and open space are appropriate to their context. The University will utilize shorter light standards for sports fields than typical to minimize visibility of the lights from nearby areas. With incorporation of these features and characteristics, impact will be less than significant, and no additional mitigation is necessary.

3.9 Construction Effects

This section examines short-term effects associated with construction of buildings, facilities, and improvements pursuant to the updated Campus Master Plan. Construction impact from each individual facility project is considered short-term as it will cease upon completion of construction activities. Due to the long-term comprehensive nature of the Master Plan, construction activities for specific facilities or improvements may overlap and/or result in continuous activities on-campus throughout the life of the Master Plan.

Environmental Setting

Generally, construction activities result in short-term noise, dust, air, and water pollution impacts, as well as increased truck and construction worker trips and localized traffic congestion. In most cases, general disturbance and annoyance associated with construction affects uses in close proximity to the specific construction site. However, other construction impacts, such as those on air and water quality, can affect areas at great distances from a specific construction site.

The 322-acre CSULB campus is surrounded by urban development of the City of Long Beach. The existing campus facilities, that comprise approximately 4.9 million gross square feet, include traditional academic buildings, administrative offices, a student union, library, bookstore, and food service facilities, student dormitories, support facilities, and parking structures.

Sensitive Uses in the Area

The campus development at CSULB is self-contained and is generally bordered and separated from the surrounding uses by perimeter streets. Sensitive uses closest to campus include single-family residential areas to the north, east, and west; the Veteran's Administration (VA) Medical Center complex that borders the campus to the southwest; and Mini Gant Elementary School on the north side of Atherton Street across from the campus' northern boundary, and Hill Middle School located about one block southeast of campus.

Within the campus, campus academic facilities, dormitories, health and wellness facilities and other places where students gather are considered to be sensitive uses.

Thresholds Used to Determine Level of Impact

Construction activities are considered to have a significant impact if they substantially disrupt or interfere with day-to-day operations of surrounding land uses, substantially affect sensitive uses, or create public health and/or safety hazards.

Environmental Impact

Construction Effects on Air Quality

The existing air quality in the project area is discussed in Section 3.3, Air Quality. Air pollutants emitted by construction activities include oxides of nitrogen (NO_x), and reactive organic gases (ROG). In addition, grading and demolition activities release dust and fine particulate matter less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}) into the atmosphere.

Criteria Pollutant Emissions

Construction emissions, including demolition and grading, were calculated with the current version of the California Air Resources Board model, URBEMIS 2007, version 9.2.2. The model uses current CARB emission factors for automobile and truck emissions and EPA emission factors for equipment emissions and fugitive dust emissions. URBEMIS estimates worker trips and truck trips based on average construction requirements for total land uses in the project. To account for a “worst-case” peak day construction emissions, the highest number of equipment pieces on any given day is used and all equipment pieces are assumed to operate full 8 hours a day, even though in practice, not all this equipment will be in use simultaneously for 8 hours during any single construction day. The estimated peak day emissions are summarized in Table 18. The worksheets and calculations are included in Appendix C.

Table 18
Estimated Peak Day Criteria Air Pollutant Emissions from Construction
(pounds per day)

	Reactive Organic Gases (ROG)	Oxides of Nitrogen (NO_x)	Carbon Monoxide (CO)	Fine Particulate Matter (PM₁₀)	Fine Particulate Matter (PM_{2.5})
Demolition	26	298	122	182	48
Grading	12	99	53	46	13
Construction	32	220	136	13	12
Peak Day Maximum	32	298	136	182	48
SCAQMD Thresholds	75	100	550	150	55
Exceed Threshold?	No	Yes	No	Yes	No

As shown, short-term typical peak day construction emissions will be above the SCAQMD threshold amounts for NO_x and PM₁₀. If construction of several facilities and/or improvements should substantially overlap, the peak day construction emissions may also be above South Coast Air Quality Management District (SCAQMD) threshold amounts for ROG, CO, and PM 2.5. Therefore, this impact is considered significant.

Toxic Air Pollutants

Toxic air contaminants are a group of pollutants defined by the Federal Clean Air Act and the California Health and Safety Code. Federal, State, and local governments have implemented a number of programs to control air toxic emissions. For example, the Federal Clean Air Act regulates emissions of nearly 200 hazardous air pollutants. The California Legislature has implemented regulation to limit toxic emissions, such as the Tanner Toxics Act (AB1807), the Air Toxics Hot Spot Assessment Program (AB2588), the Toxics Emissions Near Schools Program (AB305), and the Disposal Site Air Monitoring Program (AB374).

The Master Plan provides for replacement of existing aged, obsolete, and inefficient facilities. Since a number of these facilities were constructed before 1967, the existing buildings may contain asbestos and lead paint. All construction activities will comply with existing rules and regulations concerning toxic air pollutants, including Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities) for proper handling and disposal of asbestos-containing materials. Other known hazardous substances and toxic emissions are controlled by SCAQMD, federal, and State rules and regulations. Mandatory compliance with these regulations regarding asbestos, lead-based paint, and other toxic materials during demolition will ensure a less than significant impact related to the removal of these materials during construction.

The California Air Resources Board has identified diesel particulate emissions as carcinogenic air toxics. No safe threshold for the emissions has been established. However, the amount of diesel emissions associated with a modest amount of replacement and new facility construction within campus provided for in the Master Plan will be relatively small and will not involve massive or prolonged operations of diesel trucks or equipment. While diesel exposure from construction of facilities and infrastructure improvements at the campus is not expected to be a significant impact, nonetheless, because there are existing residences nearby and students present on campus, mitigation measures will be required to reduce diesel particulate emissions from construction equipment.

Construction Effects on Water Quality

Construction operations can impact water quality in several ways. First, to comply with SCAQMD guidelines, most construction sites are required to be watered to reduce emissions of PM₁₀. This water can result in runoff from the site laden with construction debris (including trash, cleaning solvents, cement wash, asphalt and car fluids like motor oil, grease, and fuel) and sediment, potentially affecting local waterways. Second, during rain storms, stormwater runoff from construction sites can carry construction debris and sediment into local waterways. Third, construction activities, although not anticipated, can result in dewatering, which can carry contaminants into nearby waterways.

For construction in areas of 1 acre or more in size, current regulations require design and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on the implementation of Best Management Practices (BMPs). SWPPPs may include the following BMPs to reduce impacts on water quality:

- Schedule excavation and grading work for dry weather
- Use as little water as possible for dust control
- Never hose down dirty pavement of impermeable surfaces where fluids have spilled
- Utilize re-vegetation, if feasible, for erosion control after clearing, grading, or excavating
- Avoid excavation and grading activities during wet weather
- Construct diversion dikes to channel runoff around the site, and line channels with grass or roughened pavement to reduce runoff velocity
- Cover stockpiles and excavated soil with wraps or plastic sheeting
- Remove existing vegetation only when absolutely necessary
- Consider planting temporary vegetation for erosion control on slopes where construction is not immediately planned

With implementation of these BMPs impact will be less than significant, and no additional mitigation measures beyond compliance with existing regulations are required.

Noise and Vibration

Construction activities will result in a temporary increase in ambient noise levels in the vicinity of each individual construction site. During the construction period, noise from heavy equipment, power and air tools, compressors, trucks, and other noises from loading and unloading will occur with varying frequency and intensity. At a distance of 50 feet from the noise source, construction equipment noise levels (principally from engine exhaust and engine noise) range from 75 to 95 dB(A) for tractors, up to 95 dB(A) for construction trucks, up to 88 dB(A) for concrete mixers, and up to 87 dB(A) for compressors. These temporary noise levels will not be continuous but will vary as equipment is used for varying lengths of time throughout the construction period. During grading and other construction, peak noise levels at 50 feet would range from 75 to 90 dB(A), with occasional higher peaks.

The construction of new parking structures will involve the use of pile drivers and/or similar equipment for limited time during foundation work. Such equipment generates groundborne vibrations. While most of the vibration effect is contained within the construction site, some of the vibration effect will extend into the surrounding area. Therefore, this impact is considered potentially significant.

Noise levels fall substantially with increasing distance from the noise source, both as a result of spherical spreading of sound energy and absorption of sound energy by the air. Spherical spreading of sound waves reduces the noise of a point source by 6 decibels for each doubling of distance from the noise source. Absorption by the atmosphere typically accounts for a loss of 1 decibel for every 1,000 feet. Thus, high levels of construction noise usually are limited to the immediate vicinity of construction activities. Nonetheless, short-term and intermittent noise from construction will result in noise at

Whaley Park and the VA Medical Center in the campus vicinity, and on residences along East Campus Road, and at campus buildings within 40 to 100 feet of the construction activity. Therefore, noise and vibration from construction, albeit intermittent and short-term, is considered to be a significant impact. Mitigation measures have been identified to reduce this impact.

Traffic/Circulation

Construction activity will add trucks and construction equipment to streets in the area. Haul trucks and heavy equipment usually travel more slowly than other traffic on the street network and require more time to enter and exit traffic flows. When heavy equipment enters or exits a construction site, it may interrupt vehicular or pedestrian traffic. Construction activities on campus will involve the use of trucks, usually for short periods of time, to haul away demolition and construction debris and deliver construction materials. These trucks and equipment may cause localized congestion at some locations in the surrounding area, which is a potentially significant impact if not properly mitigated.

Due to the pedestrian character of the campus with students walking from one building to another throughout the day, construction activity for specific facilities could adversely affect pedestrian flows in some areas of the campus. Construction activities also may temporarily affect bus and bicycle circulation routes on campus. Mitigation measures have been identified to reduce these potential impacts.

Solid and Hazardous Waste

Demolition of existing facilities and construction of the new facilities and associated infrastructure improvements will generate construction materials waste. Even though the amount of overall construction of individual campus facilities and infrastructure improvements is relatively modest, and the activities will be phased - thus representing relatively small activities at any given time which do not involve massive construction activities that could generate significant amounts of solid or hazardous waste, mitigation has been identified to reduce this impact.

Mitigation Measures

Compliance with existing regulations and requirements will ensure that impact on water quality will be less than significant and no additional mitigation is required. The University will implement the following mitigation measures to reduce identified significant impacts by imposing conditions on the construction contractor.

Air Quality

1. Exposed surfaces are watered as needed.

2. Soils stabilizers are applied to disturbed inactive areas as needed.
3. Ground cover is replaced quickly in inactive areas.
4. All stockpiles are covered with tarps or plastic sheeting.
5. All unpaved haul roads are watered daily and all access points used by haul trucks are kept clean during the site grading.
6. Speed on unpaved roads is reduced to below 15 miles per hour.
7. Trucks carrying contents subject to airborne dispersal are covered.
8. Grading and other high-dust activities cease during high wind conditions (wind speeds exceeding a sustained rate of 25 miles an hour).
9. Diesel particulate filters are installed on diesel equipment and trucks.
10. All construction equipment will be properly tuned.
11. To reduce emissions from idling, the contractor shall ensure that all equipment and vehicles not in use for more than 5 minutes are turned off, whenever feasible.
12. Low VOC-content paint, stucco, or other architectural coatings materials will be utilized to the extent possible.
13. Low VOC-content asphalt and concrete will be utilized to the extent possible.
14. The University will continue to comply with SCAQMD Rule 1403 (Asbestos Emissions from Renovation/ Demolition Activities) and other pertinent regulations when working on structures containing asbestos, lead, or other toxic materials.

The University will implement the following measures to protect students present at campus.

15. As appropriate, outdoor activities at the campus will be limited during high-dust and other heavy construction activities, including painting.
16. If construction activities occur adjacent to classrooms, student dormitories, health facilities and other sensitive receptors on campus, the University will either:
 - i. Make findings and notify each sensitive receptor that construction activity will not affect such receptor, or
 - ii. Install and maintain filters on interior ventilation system to reduce intake of pollutants until construction activity ceases.

Noise and Vibration

17. Muffled construction equipment will be used wherever possible.
18. The contractor will ensure that each piece of operating equipment is in good working condition and that noise suppression features, such as engine mufflers and enclosures, are working and fitted properly.
19. The contractor will locate noisy construction equipment as far as possible from residential areas.
20. Construction hours will be consistent with the City of Long Beach regulations to between 7 a.m. and 7 p.m. on weekdays and between 9 a.m. and 6 p.m. on Saturdays. No construction will take place on Sundays or federal holidays.
21. If a sustained high-noise construction activity takes place within 100 feet from classrooms or other noise sensitive uses on campus, measures will be taken to limit the amount of noise affecting the sensitive receptor. These measures may include scheduling the activity when classes are not in session or the sensitive receptor is not use, providing a temporary barrier of no less than 6 feet in height made of wood or other similar materials; and/or other measures.

Traffic and Parking

22. A flag person will be employed as needed to direct traffic when heavy construction vehicles enter the campus from Bellflower Boulevard, Palo Verde Avenue, 7th Street, and Atherton Street.
23. Construction trucks will avoid travel on residential areas to access campus and use the City of Long Beach designated truck routes to travel to and from campus.
24. Construction-related truck traffic will be scheduled to avoid peak travel time on the I-405 and I-605 freeways, and State Route 22 (SR-22), as feasible.
25. If major pedestrian or bicycle routes on campus are temporarily blocked by construction activities, alternate routes around construction areas will be provided, to the extent feasible. These alternate routes will be posted on campus for the duration of construction.
26. If any bus stop or other transit facility on campus is obstructed by construction activity, the University, in cooperation with the transit service providers, will temporarily relocate such transit facility on campus as appropriate.

Solid Waste

27. Demolition and construction inert materials, including vegetative matter, asphalt, concrete, and other recyclable materials will be recycled to the extent feasible.

28. Demolition materials that contain hazardous substances will be disposed of at certified disposal facilities in strict compliance with all applicable regulations.

Level of Impact After Mitigation

Implementation of the identified measures will reduce construction impact on solid and hazardous waste facilities to a less than significant level. Incorporation of mitigation measures will reduce peak day PM₁₀ and PM 2.5 emissions. However, even with incorporation of identified feasible mitigation measures, peak emissions of NO_x and other criteria pollutants could remain above the threshold of significance amounts and, thus, this impact is considered significant and unavoidable. The impact of noise and vibration from construction activity on the closest uses in the vicinity, albeit reduced and intermittent, will remain significant and unavoidable.

4.0 Alternatives to the Project

The following discussion considers alternative scenarios to the updated Campus Master Plan. Through comparison of these alternatives, the relative advantages of each can be weighed and analyzed.

The CEQA Guidelines state that an EIR need not consider every conceivable alternative to the project [Section 15126.6(a)], or an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative [Section 15126.6(f)(3)]. The Guidelines require that a range of alternatives be addressed “governed by ‘a rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.” The discussion of alternatives must focus on alternatives that are potentially feasible and capable of achieving major project objectives while avoiding or substantially lessening any significant environmental effects of the project [CEQA Guidelines, Section 15126.6(f)].

The major objectives of the updated Campus Master Plan include:

- Share in the need to accommodate the demand for higher education by students in California by providing the necessary facilities and improvements
- Improve, update, and replace outdated, inefficient and obsolete facilities
- Provide high quality services that enhance access and usability
- Maintain and enhance campus open space, character, and the quality of the physical environment

The EIR analysis indicates that the implementation of the Master Plan will result in significant and unavoidable impacts with regards to project-specific and cumulative air quality and traffic, cumulative solid and hazardous waste facilities, and project-specific and cumulative short-term construction-related air quality, noise and vibration. All other impacts analyzed in this EIR were found to be either less than significant or can be mitigated to less than significant levels with mitigation measures identified in the EIR. Thus, the following analysis focuses on identifying alternatives that can reduce or avoid the identified significant and unavoidable impacts. Environmental effects after full implementation of mitigation measures are used as a basis for comparison.

Alternatives Considered but Rejected from Further Analysis

The following alternatives were considered but rejected from further analysis.

Alternative 1: Alternate Location

To reduce impacts at the CSULB campus, an alternative could be devised whereby an alternate locations or satellite campuses are developed instead to accommodate the projected gradual growth in student enrollment to 31,000 full-time equivalent (FTE) students. Such an alternative would require substantial resources to construct and operate a new campus or satellite campuses to accommodate 4,560 FTE student enrollment. Presently, no suitable large sites of 60 acres or more that are also appropriate for such a new campus are readily available in the surrounding area. Limited class offerings and duplication of resources would be required for satellite facilities to provide the necessary levels of service, while the University's 322-acre main campus can accommodate these additional students with relatively limited resource outlays. In addition, depending on the specific location, an alternative campus might not serve students from nearby areas as well as the existing campus which is well-served by local transit and easily accessible from the existing roadways.

Most importantly, an alternative location would likely generate greater and additional significant environmental impacts than those associated with the updated Master Plan project. Pursuant to this alternative, all of the project's environmental effects would basically relocate to another location. Construction emissions and noise, traffic and traffic noise, lighting effects and other effects associated with the construction and operation of a University campus for 4,560 FTE student enrollment would be the same at another location as at the existing campus. If the alternate location were to be located within another area of the city, the alternate site would also be likely surrounded by residential development and single-family neighborhoods. If the alternate location were to be in the periphery or at the outskirts of the city, environmental effects could increase substantially. As no large vacant sites are readily available in the surrounding urban area, a site that is already developed with urban uses would most likely be needed to be assembled. As a result, the existing development would need to be demolished generating greater demolition and construction impacts. More and larger infrastructure improvements would likely be needed to be constructed to support the new campus generating additional construction emissions and noise. More students would live far away and longer vehicular trips would generate more exhaust emissions and potentially greater or additional traffic impacts. Therefore, depending on a specific location, this alternative would be most likely be environmentally inferior to the project or at best, environmentally comparable to the project.

In addition, this alternative would not be cost-effective as it would require large fiscal outlays, including the purchase cost of a new site, cost of constructing duplicative facilities, cost of constructing utility and other infrastructure improvements; cost associated with additional parking, cost of operating and maintaining the facilities; and others.

Therefore, the alternate location alternative is not considered further.

Alternative 2: Increased Student Enrollment to 35,000 FTES

Since the CSULB is one of the larger urban campuses in the CSU system, encompassing approximately 322 acres, a larger share in accommodating the State-wide growth in student enrollment could be considered as an alternative. With continuing population growth in California the demand for higher education has been steadily increasing, resulting in some of the CSU campuses planning to accommodate enrollment levels of 35,000 FTE students. However, such a larger student enrollment at CSULB campus would result in greater environmental impacts than those associated with the proposed Campus Master Plan. With more students attending the University, more vehicular trips would be generated resulting in additional or greater traffic, air quality, noise, and other impacts. With more students, more facilities could be required to accommodate educational instructions and programs, which could adversely affect the campus' open space and pedestrian character. For these reasons, a higher enrollment ceiling alternative is not considered further.

Alternative 3: Less Student Housing on Campus

The updated Campus Master Plan provides for more than 2,000 beds in student housing facilities on campus. With less student housing, more students would need to commute to campus resulting in more peak hour trips and potentially greater traffic and related impacts. Emissions of criteria pollutants on a per-trip-basis would increase due to longer trips required to commute to campus from offsite locations. Without new dormitories, additional parking would need to be provided on campus that could result in construction of more parking structures, which could affect the open space and pedestrian character of the campus. Peak day construction air quality and noise impacts would be significant, as with the Master Plan. Therefore, an alternative with less student housing is not considered further.

Alternatives Considered

The following alternatives to the updated Campus Master Plan are considered:

- Alternative 4: "No Project" alternative required by CEQA
- Alternative 5: Smaller Facility Development
- Alternative 6: Development with More Student Housing on Campus

Alternative 4: No Project – Continuation of Current Campus Master Plan

The “No Project” alternative, required to be evaluated in the EIR, considers “existing conditions...as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” [CEQA Guidelines Section 15126.6(e)(2)]. Pursuant to this alternative, the current Campus Master Plan would continue to be implemented.

Campus Development: Pursuant to this alternative, development according to the current Master Plan (refer to Figure 2) would continue, and existing student enrollment at the campus would remain unchanged at approximately 26,440 FTE students. New buildings constructed pursuant to this alternative would include Parking Structure 3, the Student Recreation and Wellness Center, and the Peterson Hall 3 Science Replacement Building. Although not required, these new buildings would be constructed according to the purpose and intent of the specified architectural guidelines. Utilities would be upgraded for new buildings as necessary, but overall campus system improvements would not be implemented. Existing vehicular access, campus shuttle operations, pedestrian facilities, and other campus mobility programs would continue.

Environmental Effects: This alternative would eliminate new vehicle trips associated with the growth in student enrollment, and the related exhaust emissions and vehicular noise. However, since the No Project alternative would not include new dormitories to accommodate demand for on-campus housing, no potential would be realized for reducing peak hour trips that result in traffic impacts at the study intersections. Although the growth in demand for utilities and potable water would be minimized, system-wide improvements proposed under the Master Plan that are needed to improve efficiency and reduce demand would not be carried forward to the same extent, thereby increasing potential impacts. Cumulative impact on regional solid waste facilities would be avoided under this alternative.

This alternative would reduce construction-related noise and air quality impacts, although peak day impacts would be expected to remain significant. Under this alternative, no increase in demand for police or fire protection services would occur. Attention to the aesthetics of new buildings would ensure that appropriate design treatments are incorporated. Compliance with standard archaeological mitigation measures likewise will ensure a less than significant impact. No noise or light from the proposed soccer field facility would occur pursuant to this alternative.

In compliance with the State Legislative mandate expressed in the State Master Plan for Education, the CSU system is obligated to continue to accommodate all fully eligible graduates from California high schools and community college transfer students. Therefore, if no student enrollment growth is accommodated at the CSULB campus, those 4,560 FTE students projected to seek enrollment at CSULB campus would have to be accommodated at other universities elsewhere in Southern California. As a result, this alternative would relocate the environmental effects associated with accommodating those students elsewhere, including vehicular trips and the associated traffic impacts,

exhaust emissions and the resultant air quality impacts, demand for fire and police protection services, water and other public utilities, and others. Overall, these indirect effects of accommodating the students at another locations together with accommodating fewer students at the CSULB campus would likely result in either similar or possibly greater overall environmental impacts than those associated with the updated Campus Master Plan.

If the current Master Plan is not updated, some additional facilities and improvements would still be needed to provide an adequate level of support and academic facilities for the academic and other programs, including classroom space meeting current code requirements and on-campus housing. Accordingly, the current Master Plan would likely be updated in the future anyway to provide for replacement and rehabilitation of the existing campus buildings, as well as some new facilities similar to those proposed. As a result, it is likely that in the long term, the environmental effects of this alternative could be similar to those of the updated Master Plan.

Relation to Master Plan Objectives: Under a No Project alternative, planned building replacement projects would not be carried forward in a logical and efficient manner, and the identified obsolete, inefficient, and code deficient buildings would not be replaced. Needed system wide utility improvements might not be carried forward, and coherent architectural guidelines would not be adopted.

Although this alternative would maintain the campus open space and character, it would not achieve the major project objective to share in the need to accommodate demand for higher education by students in California. It would not achieve the major objective to improve, update, and replace outdated, inefficient and obsolete facilities, nor the major objective to provide high quality services that enhance access and usability to the degree as with the updated Master Plan either.

Most of all, the continuation of the current Master Plan is not feasible because it does not provide for the facilities and programs needed to support projected student enrollment that the CSULB campus is mandated to accommodate. To adequately support future student enrollment requires providing facilities, improvements, and programs beyond those considered in the current Master Plan.

Alternative 5: Smaller Facility Development

This alternative considers the provision of fewer facilities and improvements on campus.

Campus Development. A smaller project could potentially reduce environmental impacts. Reducing unavoidable significant impacts on air quality below SCAQMD significance thresholds would require reducing mobile source emissions of criteria pollutants by roughly 20%. To do so, a commensurate reduction in vehicular trips would be required. To achieve this reduction, the University would have to limit growth in student enrollment to 3,650 new FTE students. Pursuant to this alternative, new and modified facilities would also be reduced by a similar 20%, to about 1,000,000 square feet, with the soccer field and associated facilities provided as proposed. The updated Master Plan's architectural guidelines and mobility and utility plans would continue to be implemented.

Environmental Effects: This alternative would reduce long-term emissions of criteria pollutants to below the SCAQMD's daily threshold amounts, resulting in a less than significant impact under the SCAQMD criteria. Even though vehicular trips would be reduced under this alternative, the reduction of 20% in student enrollment growth would likely not be sufficient to avoid significant unavoidable impacts on the identified study intersections since most of these intersections are projected to operate at LOS E or F due to ambient traffic growth and traffic generated by other development projects in the area. With fewer trips, vehicular noise impact would be reduced, and would remain less than significant.

This alternative might slightly reduce the magnitude of peak day construction-related noise and air quality impacts, but such impacts would still remain significant and unavoidable. Demand for police or fire protection services would be incrementally slightly reduced, and as with the project, impacts would be less than significant. New buildings would be constructed according to the architectural guidelines to ensure appropriate treatment. Like with the project, noise and lighting effects from the new soccer field would be less than significant with mitigation. As with the project, compliance with standard archaeological mitigation measures would ensure a less than significant impact.

Utility improvements similar to those provided for in the updated Master Plan would be implemented, including improvements to water distribution and telecommunication systems. Demand for utilities and service systems would be reduced by 20% pursuant to this alternative, and would continue to be less than significant.

As with other alternatives, if fewer students are accommodated at the CSULB campus, those students would have to be accommodated at other universities elsewhere in Southern California because in compliance with the State Legislative mandate expressed in the State Master Plan for Education, the CSU system is obligated to continue to accommodate all fully eligible graduates from California high schools and community college transfer students. As a result, this alternative would relocate the environmental effects associated with accommodating more than 900 FTE students elsewhere, including vehicular trips and the associated traffic impacts, exhaust emissions and the resultant air quality impacts, demand for fire and police protection services, water and other public utilities, and others. Overall, these indirect effects of accommodating the students at another locations together with accommodating fewer students at the CSULB campus would likely result in similar or greater overall environmental impacts as those associated with the updated Campus Master Plan.

Relation to Master Plan Objectives: While this alternative would work to provide adequate facilities on campus, replacement of existing dilapidated buildings might not be achieved to the same extent as with the updated Master Plan, and the vitality created by the provision of campus student housing and associated facilities would not be realized. Therefore, this alternative would fall short of working to fulfill the State Legislature's commitment to accommodating higher education needs of California residents, as well as the University's aims to achieve greater distinction for campus life and the environment.

This alternative would maintain and enhance campus open space, character, and the quality of the physical environment, similar to that of the updated Master Plan. However,

this alternative would not achieve the primary project objective to share in the need to accommodate demand for higher education by students in California to the degree of the updated Master Plan, and these students would need to be accommodated elsewhere. The smaller project alternative would also not achieve the primary objective to improve, update, and replace outdated, inefficient and obsolete facilities or provide high quality services that enhance access and usability to the same degree as with the updated Master Plan.

Alternative 6: More Student Housing

Under this alternative, more housing would be provided on campus for students and/or faculty. As with the updated Master Plan, the campus enrollment level would reach 31,000 FTE students pursuant to this alternative, but by increasing on campus housing, peak hour commuter trips could be reduced, thereby minimizing vehicular traffic impacts.

Campus Development: Pursuant to this alternative, a total of 4,000 new beds would be provided on campus, or approximately double of the number of beds provided for by the updated Master Plan, and triple of the number of current beds on campus. Additional new dormitory buildings could be located in the vicinity of the Parkside and Residence Commons Housing complexes, or elsewhere within developed portions of campus.

Other components provided for in updated Master Plan would remain the same pursuant to this alternative, including new parking structures, replacement academic and other facilities, as well as the implementation of architectural guidelines, and mobility goals. The Utility Master Plan would be updated to accommodate the additional dormitories.

Environmental Effects: Provision of more on-campus housing would reduce peak hour trips, but due to the projected future poor operating conditions and/or the share of campus-generated trips at the intersections of Bellflower Boulevard and 7th Street and Palo Verde and Atherton Street, it is unlikely that this alternative would avoid a significant and unavoidable impact at these locations. However, due to the better future operating conditions and/or a smaller share of traffic, this alternative may reduce the extent of significant impacts at the remaining affected intersections.

While the provision of on-campus housing reduces peak hour trips, the total number of daily trips would not substantially change and long-term air quality impact would remain significant. Pursuant to this alternative, with additional dormitories, the demand for fire protection services would slightly increase but as with the updated Master Plan, impact would be less than significant. Demand for police services would increase in greater proportion, and may require an expansion of campus police facilities. Demand for utilities and service systems would increase as well, but would be less than significant with mitigation. Cumulative impacts on solid and hazardous waste facilities would continue to be significant and unavoidable. With additional dormitory buildings, significant unavoidable construction-related impacts could be greater pursuant to this alternative. This alternative could result in a significant aesthetic impact associated with constructing additional dormitory buildings that could affect the visual character of the campus, including the existing open space. Other impacts would be similar to those associated with the updated the Master Plan.

Relation to Master Plan Objectives: This alternative would achieve nearly all of the Master Plan's objectives, including those to share in the need to accommodate the demand for higher education, providing the necessary facilities and improvements, improving, updating, and replacing outdated, inefficient and obsolete facilities, and providing high quality services that enhance access and usability. However, since more dormitory buildings would be constructed on campus, this alternative would not achieve the objective of maintaining and enhancing campus open space to the same degree as with the Campus Master Plan.

Environmentally Superior Alternative

Among the alternatives considered, none of the alternatives discussed is considered clearly environmentally superior to the project. Each alternative results in potential impacts, with a number of impacts that may be greater and some impacts that may be lesser than those associated with updated Campus Master Plan. Overall, when both direct and indirect impacts of each alternative are considered together, the alternatives are either environmentally comparable or inferior to the project.

5.0 Cumulative and Long-term Effects

Cumulative Effects

The CEQA Guidelines (Section 15355) define a cumulative impact as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” The Guidelines [Section 15130(a)(1)] further state that “an EIR should not discuss impacts which do not result in part from the project.”

Section 15130(a) of the CEQA Guidelines provides that “[A]n EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable...” Cumulatively considerable, as defined in Section 15065(a)(3), “means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

An adequate discussion of significant cumulative impacts requires either (1) “a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (2) “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.” This cumulative impact analysis evaluates impacts based on a list of past, present, and probable foreseeable projects. Due to the long-term nature of the updated Campus Master Plan, consideration is also given to long-term growth pursuant to the City of Long Beach’s General Plan and other long-range planning for the project area. The related projects have been identified by contacting the neighboring cities of Long Beach and Signal Hill to identify known projects within the study area that are reasonably anticipated to occur within Master Plan’s planning horizon. The identified related projects are described in Table 19.

The CEQA Guidelines recognize that cumulative impacts may require mitigation – such as new rules and regulations, that go beyond project-by-project measures. An EIR may also determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project’s contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The Lead Agency must identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable [CEQA Guidelines, Section 15130(a)(3)].

Table 19
Related Projects

Description	Location
106 single-family residences	2080 Obispo, Long Beach
175,000 square feet commercial center	400 Studebaker Road, Long Beach
Douglas Park – 249 lot subdivision, 1,400 residential units, 400-room hotel, 3.3 million square feet of commercial/light industrial space, and 11 acres of parkland	3855 Lakewood Boulevard, Long Beach
29-unit condominium residences	4200 East Anaheim Street, Long Beach
425 residences, 170,000 square feet of commercial space	6400 East Pacific Coast Highway
6,200 square foot grocery store expansion	2930 East 4 th Street, Long Beach
34 attached townhomes	5116 Anaheim Road, Long Beach
Douglas Park – 1,650,000 square feet of industrial space	2855 Lakewood Boulevard, Long Beach
Douglas Park – 1,660,000 square feet of commercial space	2856 Lakewood Boulevard, Long Beach
4,600 square foot tenant improvement	1941 Freeman, Signal Hill
4,000 square foot tenant improvement	2652 Gundry, Signal Hill
54 condominium residences	1801 Orizaba, Signal Hill
81 townhome/condo subdivision on Orizaba near Pacific Coast Highway	1835 Orizaba, Signal Hill

Source: Kaku Associates/Fehr & Peers, October 2007.

Traffic, Circulation, and Parking

The traffic analysis in this EIR (see Section 3.1) addresses both project-specific and cumulative traffic and circulation impacts that account for background traffic associated with long-term regional growth and addition of traffic generated by related projects. During the near term, no potentially significant impacts are identified. At buildout, the project's contribution to traffic will result in a significant impact at 5 intersections. With implementation of the identified mitigation measures, project impact may be reduced to a less than significant level at 3 intersections. The project's contribution to future traffic volumes will be significant at the remaining 2 intersections, even with implementation of the identified mitigation measures. Impact will be significant and unavoidable.

At the time when the University enrollment reaches 31,000 FTE students, the campus traffic together with traffic generated by the related projects will significantly impact on one study segment of the I-405 freeway. No feasible mitigation measures are available to reduce this impact to a level below significance. Widening and/or other improvements to interstate freeways to provide additional capacity are within the jurisdiction of regional transportation agencies (Caltrans) as these are regional issues requiring region-wide solutions. Thus, mitigation requiring the University to widen a major regional freeway is not considered feasible. Impact at the one identified freeway segment will be significant and unavoidable.

As discussed in Section 3.1, the Master Plan provides for adequate parking for campus activities, as well as the gradually growing student enrollment. Provisions of these

facilities will work to preclude significant cumulative parking impact off-campus. None of the larger related projects are located in the campus vicinity, and thus will not contribute to parking demand nearby. No significant impact will result.

Air Quality

The implementation of the Campus Master Plan together with related projects and future growth within the region will result in additional vehicle trips and the resultant air pollutant emissions within the South Coast Air Basin. Operational emissions primarily from vehicular trips associated with growth in student enrollment will exceed the SCAQMD daily threshold amounts. The related projects are projected to generate approximately 94,704 vehicle trips per day which will, in turn, generate air pollutant emissions. As shown in Table 20, these emissions will be above the SCAQMD daily threshold amounts. When the project's emissions are combined with the emissions generated by related projects and future Basin-wide growth, this will result in a cumulatively significant impact.

Table 20
Related Projects Emissions, Year 2020

	Reactive Organic Gases (ROG)	Oxides of Nitrogen (NO_x)	Carbon Monoxide (CO)	Suspended Particulate Matter (PM10)	Suspended Particulate Matter (PM2.5)
Operational	113	49	46	1	1
Area Source	394	549	4,459	1,539	298
Total	507	598	4,505	1,540	299
Threshold	55	55	550	150	55
Exceeds Threshold?	Yes	Yes	Yes	Yes	Yes

Note: The higher of winter or summer emissions are shown.

Source: URBEMIS 2007, Version 9.2.2.

Region-wide implementation of local and regional growth management policies, a reasonable jobs/housing balance, new technologies (e.g., in vehicle emission control equipment and fuel), and programs to encourage alternative modes of transportation, including public transit, will reduce cumulative impacts and work toward attaining long-term emissions reductions. The cumulative impact even with full implementation of those measures, however, will be unavoidable and significant.

Noise

Noise generated by campus-related traffic together with traffic noise from the related projects is analyzed in Section 3.3, Noise, of this EIR. As indicated, with the enrollment of 31,000 FTE students, the Master Plan will contribute at most 1.5 dB(A) CNEL to future cumulative traffic levels along one of the 93 study street segments. Since this contribution will not exceed the 5 dB(A) CNEL threshold, the project's cumulative traffic noise impact will be less than significant.

On-site noise will be typical for university campuses in urban areas. Noise levels are not expected to change substantially as a result of the project, and future noise levels with the project will be consistent with relevant noise standards. The related projects are typical of urban uses, and are not expected to result in high noise levels, that when combined with University noise would be clearly noticeable. Cumulative noise impact will be less than significant.

Police Protection Services

The updated Campus Master Plan and related projects will incrementally increase demand for police protection services. Given that the campus vicinity is largely developed, the Master Plan's contribution to cumulative demand will be relatively minor. The surrounding Cities and the University review police protection needs and resources regularly to ensure appropriate levels of service. In addition to incorporating safety features in the design and operation of campus facilities, continued oversight of police services, including the provision of resources for the University police and cooperation in mutual aid agreements with the City of Long Beach, will ensure a less than significant cumulative impact.

Fire Protection Services

Cumulative growth will incrementally increase demand for fire protection services. Given that the surrounding area is largely developed, the University's contribution to cumulative demand will be relatively minor. The University and surrounding Cities review fire protection issues regularly to ensure adequate levels of service. In addition to incorporating fire safety features in design and operations of its campus facilities, the University will continue to educate students, faculty, and staff to increase awareness about fire prevention and emergency preparedness, and will continue to cooperate with the City of Long Beach to minimize demand for service. Continued oversight of fire protection services will ensure that no substantial new fire protection facilities will be required, and impact will be less than significant.

Utilities and Service Systems

Sewer

The Master Plan and related projects will result in increased generation of sewage flows. The University campus vicinity is part of a fully developed area that is served by extensive existing sewerage service systems. Implementation of water conservation measures will continue to work to reduce wastewater flows. The Master Plan includes new sewerage facilities on campus to accommodate wastewater flows, including peak flows. Other related projects will be required to provide all necessary onsite improvements in compliance with existing City regulations and contribute to area-wide improvements, which will ensure a less than significant impact.

Stormwater

The Master Plan and related projects will result in infill development and/or reuse of urban sites that are already largely covered with buildings, pavement, and other impervious surfaces. Therefore, no substantial increase in stormwater flows will occur. The Master Plan provides for maintenance and enhancement of the open space areas on campus that provide permeable surface. Reuse of urban sites by other related projects with new uses that include landscaping may overall increase pervious surfaces, thereby allowing greater percolation of stormwater into the ground and reducing stormwater flows into the local and regional stormwater drainage system. Additionally, development of these sites will result in implementation of modern stormwater requirements mandated by NPDES and other stormwater regulations to improve water quality. Impact is anticipated to be beneficial, and no potentially adverse cumulative impact will result.

Solid and Hazardous Waste

Landfill capacity is a regional issue that requires regional solutions, and CSULB will continue to work with regional entities to identify appropriate landfill space for solid waste disposal. Specific mitigation measures in addition to compliance with the State and the CSULB aggressive waste reduction programs identified in this EIR will reduce solid waste generation to the extent feasible. However, Los Angeles County identifies a regional landfill shortage in the future.¹ This shortage will likely necessitate the future construction of new regional landfills and facilities for both hazardous and solid waste that may result in significant environmental effects. Therefore, within this regional context, cumulative impact is considered potentially significant and unavoidable.

Water Distribution Systems

The project and the related projects will require connections to existing water distribution systems. The related projects will include payment of required fees to connect to local and regional systems. Since the Master Plan and related projects involve reuse and infill use of sites within a highly urbanized area, the existing water distribution systems will continue to serve each site. In accordance with the existing requirements, both the project and each of the related projects include the provision of all necessary improvement to the existing on-site systems. With the existing water distribution infrastructure and the necessary improvements provided on a project-by-project basis, there will be adequate system capacity to accommodate the project and related projects. No potentially significant cumulative impact will result.

Water Supply and Quality

The related projects and ambient regional growth will increase demand for water in the City of Long Beach. The Long Beach Water Department has taken increased water use

¹ Countywide Siting Element. Los Angeles County Department of Public Works, Environmental Division. June 1997 as updated.

into account for its planning purposes² and in its Urban Water Management Plan. Continued implementation of water saving programs will work to reduce the need for increased water supplies. The Master Plan will not result in substantial population growth within the area and mitigation measures are identified in this EIR to reduce project-specific impact to the extent feasible. Therefore, the project's contribution to cumulative future water use will be less than significant.

The Master Plan and the related projects will result in implementation of modern water quality standards on a project-by-project basis, including NPDES and SUSMP requirements, during construction and operations of each project. Compliance with these existing regulations will ensure that no significant cumulative impact will result, and may result in an improvement in water quality when compared to the existing conditions.

Archaeological Resources

The University implements measures to ensure appropriate treatment of archaeological resources. With mitigation, the Master Plan will not result in a significant impact on archaeological resources as the mitigation measures identified in this EIR will preclude impact if unknown archaeological resources are uncovered during construction activities. These measures have been and will continue to be implemented for all ground-disturbing activities on campus, and similar measures will be required by the City of each related project as well. The Master Plan and the related projects are urban infill projects that in general, are not expected to result in soil-altering construction in undisturbed lands. Mandatory compliance with standard mitigation measures will ensure that cumulative impact will be less than significant.

Aesthetics, Light, and Glare

The Master Plan will result in infill replacement and new facilities within the interior of the CSULB campus, including new buildings and lighting. All on campus facility projects will be reviewed for compliance with the Master Plan design guidelines to ensure compatibility with the existing campus environment. The Master Plan works to focus new facilities within the campus interior and minimize facility growth along the campus' perimeter. The related projects will be reviewed by the respective Cities for adherence to relevant planning and zoning regulations, working to ensure compatibility with surrounding development. New lighting will comply with existing requirements including shielding and focusing away from the surrounding uses, and other requirements and regulations (including height, setback, landscaping, etc.) that ensure appropriate and compatible lighting and design within the existing urban environment. Since the campus and the surrounding City of Long Beach area is fully urbanized, no new substantial sources of lighting or structures would be introduced into undeveloped open spaces that are currently unlighted. Cumulative aesthetic, light, and glare impacts will be less than significant.

² 2005 Urban Water Management Plan. Long Beach Water Department. Revised May 17, 2007, and Final Environmental Impact Report for Douglas Park. City of Long Beach. PCR Services Corporation. September 2004.

Short-term Construction Impacts

Construction activities associated with the Master Plan will result in significant, albeit short-term and intermittent, air pollutant emissions and noise even with full implementation of all mitigation measures identified in this EIR. Potential overlap of project construction may occur with construction of some of the related projects. Thus, the combined construction effects could be cumulatively significant even with full implementation of the mitigation measures identified in this EIR as well as those required of the related projects.

Growth-Inducing Impacts

The CEQA Guidelines [Section 15126.2(d)] require a discussion of "... ways in which the proposed project could foster economic or population growth ... in the surrounding environment," including the project's potential to remove obstacles to population growth. For example, the extension of infrastructure may encourage or facilitate other activities that could significantly affect the environment.

In compliance with the State Legislative mandate expressed in the State master Plan for Education, the CSU system is obligated to continue to accommodate all fully eligible graduates from California high schools and community college transfer students. To do so, CSULB campus must provide for the 31,000 FTE student enrollment in response to growing demand for higher education projected for the State of California. The updated Master Plan is designed to accommodate additional students generated by State-wide growth, and thus by itself will not induce population growth in the region. As such, the updated Campus Master Plan will not foster economic or population growth beyond the growth already anticipated in the region. The Master Plan will result in infill development at an existing developed University campus within a fully urbanized area that is well served by existing infrastructure, and extensive new infrastructure will not be required. The project includes all necessary improvements to the existing infrastructure to serve CSULB campus, and no excess capacity that could induce growth will be provided.

Significant Irreversible Effects

Implementation of the Campus Master Plan will commit non-renewable resources during construction and operation. During construction, the use of building materials (e.g., aggregate, sand, cement, steel, glass, etc.) and energy resources (e.g., gasoline, diesel fuel, electricity) largely would be irreversible and irretrievable. Energy would be consumed in processing building materials and for transporting these materials and construction workers to the individual facility sites.

The new buildings at the campus provided pursuant to the Master Plan can be expected to have a life span of approximately 50 to 70 years. Resources consumed during buildout of the Master Plan, (such as fuel, building materials, water, etc.) will be used in quantities proportional to similar development in Southern California. While title 24 (Part

6 of the California Building Standards Code) energy conservation standards are mandatory and will be applied to the construction and operation of all campus facilities, the University is committed to exceeding these standards by at least 15%. Students, visitors, faculty, and employees will consume motor fuel and water; however, these activities are part of normal operations and are not considered a wasteful use of resources. The nonrenewable resources consumed for this project are comparable to the use of resources for other major universities and colleges throughout the region and the country.

6.0 Persons Contacted and References

Persons Contacted

Matthew Lyons, Manager of Planning, Long Beach Water Department, (562) 570-2315

Dr. Matthew Boxt, Ph.D., California State University Northridge, (818) 677-3331

Jason Briscoe, Rossetti Jorgensen Architects, (949) 566-0080

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7.0 Preparers of the EIR

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8.0 Responses to Comments on Draft EIR

The Draft EIR for the Campus Master Plan Update project was made available for a 45-day public review and comment period pursuant to CEQA Guidelines Section 15105 and 15087, beginning on January 15, 2008 and ending on February 28, 2008. CSULB also held a public meeting to receive comments on Draft EIR on February 6, 2008 at The Pointe in the Pyramid building on the CSULB campus.

Two recurring concerns were raised in the comments: (1) parking, and (2) neighborhood traffic. Comprehensive responses to these issues are provided first. Second, a summary of oral comments made at the public meeting on Draft EIR are presented, with responses provided. Following are the written comments and responses to the comments. The written comments with responses are presented in chronological order by date of correspondence. Each comment letter is designated a number, and individual comments within each letter are also numbered.

Written comments were received from the following persons:

1. Ruth I. Frazen, Customer Service Specialist, Facilities Planning Department, County Sanitation Districts of Los Angeles County. January 28, 2008.
2. Robert Campbell. February 7, 2008.
3. Hal Gosling. February 8, 2008.
4. Leslie Abrahams. February 8, 2008.
5. Ken Chiang, Senior Hazardous Substances Scientist, School Program and Engineering/Geology Support Division, California Department of Toxic Substances Control. February 11, 2008.
6. Dave Singleton, Program Analyst, State of California, Native American Heritage Commission. February 19, 2008.
7. Mike Garcia, Deputy Chief, Long Beach Fire Department, Fire Prevention Bureau. February 19, 2008.
8. Bill and Judy Weldon. February 21, 2008.
9. Gary W. Frahm, President, Bixby Hill Community Association. February 25, 2008.
10. Betsy Mordino. February 25, 2008.

11. Ted Tweet. February 26, 2008.
12. Jim and Erin Wilhelm. February 27, 2008.
13. Patrick Watson. February 27, 2008.
14. Jennifer and Jeffrey Machan. February 27, 2008.
15. Daryl Supernaw, Atherton Ditch Adjacent Neighborhood Association. February 27, 2008.
16. Lisa Gonzales. February 27, 2008.
17. Juan M. Rendon. February 27, 2008.
18. Angela Reynolds, Planning Officer, Community and Environmental Planning, Development Services, City of Long Beach. February 28, 2008.
19. Sam Dunlap, Gabrielino/Tongva Tribal Council. February 28, 2008.
20. Elizabeth Jones. February 8, 2008.
21. Terry Roberts, Director, State Clearinghouse, Governor's Office of Planning and Research. February 29, 2008.

Common Issues

Two recurring common concerns were raised in the comments received on the Draft EIR. These issues are (1) parking and (2) neighborhood traffic. The issues are summarized below, with responses provided. References back to these responses are made where appropriate in responses to individual comments received.

1. Parking

Summary of Issue – Residents from nearby neighborhoods and others expressed concern about students parking in those neighborhoods. To prevent students from parking on the neighborhood streets various suggestions have been made, including to require all students to park on campus and pay parking fees, eliminate parking fees for on-campus parking facilities, stepping up parking policing, and distributing parking more evenly over the campus.

Response – The proposed Master Plan Update includes new parking facilities to address parking issues on- and off-campus (refer to Draft EIR page 16). Potential parking impacts are evaluated on Draft EIR pages 40 and 41. As indicated, the proposed new parking structures include Parking Structure 4 planned for 1,800 spaces and Parking Structure 5 which is planned for 1,100 spaces. Parking Structure 3 currently under construction will provide 1,300 spaces. These structures will provide a total of 4,200 spaces, resulting in a net increase of 2,267 spaces. Overall, the new and existing parking will provide a total of approximately 17,600 parking spaces on campus. The current ratio of approximately 2.5:1 of students-to-parking will continue to be maintained with the projected enrollment growth pursuant to the updated Master Plan.

The Master Plan is designed to minimize growth on the perimeter of campus, and provide infill facilities in the interior (refer to Draft EIR page 11). New parking structures are proposed pursuant to the Master Plan in the center and southeastern campus areas to distribute parking supply throughout the campus. The EIR evaluated potential traffic and parking impacts based on these locations.

Parking is a self-funded operation on campus that does not receive any State funding. The Campus Parking Program provides campus parking facilities as authorized under the provisions of Section 89701 of the Education Code. The program is self-supporting, so fees are not only used for construction, but also for the ongoing upkeep, maintenance, and repairs that are required for operation of the parking structures. Therefore, these fees cannot be eliminated as they are necessary to provide and operate the parking facilities.

The traffic engineer consultant who conducted the traffic study indicated that requiring all students to pay for parking would not be equitable and would not be consistent with the University's goals to incentivize carpooling and transit in order to reduce the demand for parking. Similarly, providing free on-campus parking would be inconsistent with Transportation Demand Management (TDM) practices. Since such actions could also result in modal shifts away from carpooling and transit, they could result in a greater demand for parking and might result in greater traffic, air quality, and noise impacts.

The University actively encourages students to use alternative modes of transportation including walking, bicycling and public transit to get to and from the campus, including through the Campus Connection Shuttle, Long Beach Transit, Metropolitan Transit Authority and the Orange County Transit Authority. The University also maintains an active rideshare program. The [Employee Alternate Transportation](#) has a variety of programs, and valuable incentives, designed to make alternate modes of commuting to campus both practical and rewarding for CSULB employees. Several Rideshare programs are also available for students that use alternate modes of transportation. These include student [Carpool Matchlist](#), preferential parking for registered carpools, bus schedule information, and [Campus Connection Shuttle](#) service. Overflow parking is available at no cost at the Marina, nearly Pacific Coast Highway and 2nd Street, with free parking shuttles running to and from the campus. Mandating parking fees would be in direct conflict with the TDM program the University supports. By mandating parking fees, students who normally cycle, walk or use transit would be encouraged to use an automobile instead. This may increase the traffic on the streets around the campus.

The University actively discourages off-campus parking via an information program for the students. Moving forward, CSULB will be expanding this program through email and documentation.

The University is committed to working with nearby neighborhoods and other stakeholders to address concerns about students parking in surrounding areas. The Final EIR includes the following mitigation to address concerns about parking.

“The University will consult with the City of Long Beach to examine the feasibility of instituting additional neighborhood parking restrictions in the campus vicinity.”

Issue No. 2 – Neighborhood Traffic

Summary of Issue – Residents from nearby neighborhoods and others expressed concern about CSULB traffic in nearby neighborhoods and related safety.

Response – As addressed in the EIR, CSULB implements numerous programs to reduce vehicular trips, which work to limit traffic spillover into nearby neighborhoods. These include the following:

- doubling student housing on-campus to limit growth in commuter student trips;
- operating a shuttle service to discourage multiple vehicular trips in and around the campus;
- creating a pedestrian-friendly and appealing on-campus atmosphere to encourage students, faculty, and staff to stay on-campus throughout their stay;
- encouraging carpooling and transit information;
- providing preferential and reduced-cost parking for carpools; and,
- working with transit providers to locate transit stops in convenient areas.

CSULB operates an information program to help ensure that students and visitors to the University park in campus-designated areas. Moving forward, CSULB will continue to expand this program through email and written documentation to encourage on-campus parking. Continued implementation of these programs will continue to work to minimize increased traffic and associated spillover into surrounding neighborhoods.

The University will continue to work with the City of Long Beach to implement feasible mitigation measures to improve traffic flow on the intersections analyzed in the traffic study and thereby limit traffic spillover onto nearby streets. This includes the following mitigation measure included in the Final EIR:

“The University and the City Long Beach and CSULB jointly agree that the proposed mitigation measures at all intersections listed in the Draft EIR and the additional intersections listed in the City’s response to the DEIR will be replaced with a single improvement which will be referred to as the Atherton Corridor Improvement Project. This project will include improvements at five (5) intersections along Atherton between Bellflower Boulevard and Studebaker Road which include: Atherton/Chatwin (new pedestrian signal), Atherton/Earl Warren/Britton (new traffic signal, center median work, and crosswalk), Atherton/Palo Verde (minor signal improvements) and Atherton/Studebaker (minor signal improvements), as well as signal timing improvements for the entire corridor. The University will contribute on a fair-share basis to the Atherton Corridor Improvement project.”

However, as indicated in Draft EIR on page 43, adequate right-of-way is not available at two (2) study intersections to implement the identified mitigation. Therefore, traffic impact will be significant and unavoidable at those locations.

University Police issues tickets to drivers and/or pedestrians who violate traffic safety regulations within and immediately adjacent to campus. The University will continue to work with and encourage the City to improve safety through street lighting and traffic calming in nearby areas.

Oral Comments

CSULB held a public meeting to receive comments on Draft EIR on February 6, 2008 at 7 p.m. at The Pointe in the Pyramid building on the CSULB campus. Approximately 45 people signed the attendance sheets. The meeting included a presentation provided by CSULB staff describing the Master Plan.

The following are the general questions asked about the Master Plan in the meeting. Responses are provided in italics following each summary question.

1. By what streets is access proposed for the new parking structures?

Access is proposed via existing streets. Access to the new Parking Structure No. 4 is proposed to primarily be via Atherton Street and Beach Drive on Earl Warren Drive. Access to the new Parking Structure No. 5 is proposed via 7th Street. ok

2. What is the proposed height of the parking structures?

The future parking structures have not been designed. The parking structures on Palo Verde are four levels with an open air fourth level. Future parking structures would be similar and designed to minimize lighting, noise and aesthetic impacts on the local neighborhoods.

3. What about the parking over by the soccer field? What is existing for that?

Two new parking structures, which were approved under the existing master plan with a previous Environmental Impact Report, in Parking Lot 11, just east of the proposed soccer facility. One structure was built with nearly 1,300 spaces (response under #10 shows 1,297 spaces). Another structure is under construction just north of the new structure; it will provide another 1,300 parking spaces. These structures provide more than double the number of parking spaces when compared with the 1,000 bleacher seats proposed for the soccer complex.

4. How does the full time equivalent student statistic correlate to the actual number of students on campus? What would be the real number with the increase?

The full time equivalent student capacity of 31,000 FTE is projected to be a head count of 38,500.

5. What does the term "better use" mean?

The "better use" means that the University will more efficiently utilize existing and proposed facilities.

6. Is there a website where the master plan can be viewed?

The Master Plan and the EIR are available on the University's website at the following address: <http://www.ppfm.csulb.edu/masterplan.html>.

7. Are there any changes planned for street access in the Master Plan?

No changes to street access are proposed pursuant to the Master Plan. Intersection improvements are recommended in the EIR for locations at which potentially significant impacts are identified (refer to Draft EIR page 43).

8. What is timeframe for the Master Plan?

The Master Plan's horizon year is 2020 (refer to Draft EIR page 4).

9. Are buildings or the parking structures planned first?

Planning for future buildings and parking structures is contingent upon State and non-State funding resources being made available. None of the projects in the master plan update have been funded.

10. What is the total capacity for all of existing parking structures and lots?

The total existing number of parking spaces is approximately 13,400 (refer to Draft EIR page 28). These include 8,961 spaces in surface lots, 419 spaces in Temporary Lot 20, 2,727 spaces in Parking Structure No. 1, and 1,297 spaces Parking Structure No. 2.

11. What is the current enrollment?

As of Fall 2006, the University's student enrollment had reached approximately 26,440 FTEs (refer to Draft EIR page 4).

12. What is the capacity of the proposed soccer facility?

Improvements to the soccer field will include bleacher seating for approximately 1,000 spectators (refer to Draft EIR page 14).

13. Why does the University need to grow?

The CSU system is obligated to continue to accommodate all fully eligible graduates from California high schools and community college transfer students (refer to Draft EIR page 109). Accordingly, student enrollment is increasing throughout the CSU university campuses, as well as throughout the University of California campuses (refer to Draft EIR page 4).

14. How many parking decals are issued for the campus? How many spaces are utilized?

Approximately 27,500 permits were issued in the calendar year 2007-08 for 13,400 existing parking spaces. Based on a study of space turnover, the University is averaging 2.5 space changes per day.

15. Can some curriculum be transferred to the internet to reduce tripmaking to the campus?

Technology has become thoroughly integrated into instruction at CSULB. The technology-based learning management system, known as BeachBoard (powered by Blackboard), is the principal tool used by faculty to utilize academic technology for instructional applications with their students. The University offers many technology-supplemented courses, meaning that the courses materials are put on Beachboard, which can be accessed through the internet by students and faculty. The University also offers hybrid courses, meaning that classroom time is reduced and augmented with electronic assignments. Distance education courses are also available whereby course offerings are entirely online. The University plans to increase hybrid and distance course offerings as these have been well received by both faculty and students.

Comments – The following summarized comments were made on the Draft EIR after the general question and answer period. Responses in italics are provided after the summarized comments.

16. You're adding another structure off of Palo Verde and where are they going to go? When do we need to respond to the EIR? I've also heard rumors about a marquee or a lighted sign on Atherton – what is this project?

Parking Structure No. 3 is under construction on the campus directly north of Parking Structure No. 2. Both structures will provide nearly 2,600 spaces. Access to this structure will be via Palo Verde Avenue and Atherton Street.

The deadline for comments on the Draft EIR is February 28, 2008.

A marquee is planned on the south side of Atherton Street in the vicinity of the Carpenter Performing Arts Center.

17. How does the EIR address non-school activities and the impacts of more dorms? The dorms are always occupied during the summer with various groups like summer league, basketball, dog shows, and the Special Olympics. The summer day care and camps also include a lot of traffic coming into areas off Atherton to pick up kids for their after school programs.

Third party activities on campus tend to generate vehicle trips outside typical traffic peaks. However, potential impact during the summer months will be substantially less since the academic enrollment in the summer is just 5% of the annual enrollment.

18. I live actually on the first block just past the restricted parking up here on Fanwood. You mentioned that you can't force the students to park on campus. But when the University is impacting the neighborhood in addition you're impacting also City services. Our neighbors now have to paint the tips of their driveway red to keep the students from parking in their driveway. Students move our trash cans, we don't get our trash picked up, and we have to call the police for parking violations. All of this is impacting City services, and impacting a department that is already over budget. So I'm wondering, if the University is impacting the neighborhood and the City services, maybe the University should

let us all start calling the university police to respond to all of our complaints rather than calling the Long Beach City police.

The City enforces the parking restrictions and polices parking violations on City streets, while University police provides law enforcement, including parking and pedestrian enforcement, for the campus. The University actively discourages off-campus parking via an information program for the students. Moving forward, CSULB will continue to expand this program. Please refer also to Common Response No. 1 and 2.

19. I'm a local resident and also councilmember for this District. What about night lighting, including light illuminating our streets. Does EIR address that? The lights are on longer and I understand there is a safety issue. What about the soccer seating? Will there be any special events at the soccer facility – concerts, other sports, activities. Is it solely for soccer use and sole use – it won't be rented out, it won't have any large tournaments that last all weekend that go into all hours of the night?

I live across the street. I represent the fourth district across the street, and they're good people. I think what they're interested in is making sure that this EIR addresses their quality of life. The traffic is absolutely impacting the neighborhood across the street. I hope that in the future we will have an agreement with the CSULB police department where they could write some parking tickets so that there will be quicker and consistence response. Again, whatever we can do to address the traffic patterns in and out of this University, I think they need to be master planned. Traffic should be redirected to Atherton or Palo Verde in the long term. I don't think this is going to happen within the next year, but some long term plan to siphon the increased traffic out of the University and away from the homes in the area all the way down to Palo Verde and Stearns needs to be addressed.

Please email comments to my office. It's good to see everyone out here tonight and I appreciate the University calling this meeting so we could take part in this process.

The Draft EIR evaluates potential lighting effects on page 87. As indicated, instead of using typical lights mounted in groups on 110- to 120-foot high standards, the University plans to install 75- to 85-foot lights at the field to minimize lighting at surrounding uses, which will significantly reduce glare and line-of-sight visibility. In addition, the best technologically available fixtures will be used to avoid spillover.

The closest sensitive off-site residential uses are located more than 600 feet from the soccer facility, further minimizing visibility of the lights. Intervening street lighting will mask views of the lights from surrounding areas. All lighting will be turned off after the sport games or other events end and the venue is cleared of spectators. Events will be scheduled to end by 10 p.m.

As indicated in Draft EIR on page 87, existing security lighting will continue to be upgraded as necessary throughout the life of the Master Plan, and new lighting will be installed at new facilities and select locations as necessary to ensure

adequate safety. The best technologically available fixtures will be used to ensure appropriate levels to maximize safety while minimizing spillover into surrounding areas and the night sky. No substantial change in overall security lighting levels as viewed from off-campus locations is anticipated. The University campus is separated from nearby sensitive residential uses by relatively wide streets, and thus, this lighting will be minimally visible from those areas. Impact will be less than significant, and no further mitigation is necessary.

The soccer complex will primarily be used for University events. Based on the needs of the City of Long Beach, however, the venue may be available for events and will need to follow the same requirements as the University-sponsored events.

The University actively discourages off-campus parking via an information program for students. The University provides an information program to students and visitors regarding how best to access the on-campus venue parking. Moving forward, CSULB continue to expand this program. Please refer also to Common Responses No. 1 and 2.

In terms of redirecting traffic to Palo Verde Avenue or Atherton Street, these are already major ingress/egress points to the University. These two streets contain the access point to the main parking structures and largest surface lots on campus. As such, much of the University-generated traffic enters via these locations. Access to the new Parking Structure 4 will primarily be via Earl Warren Drive and Atherton Street, and Parking Structure 5 will be via East Campus Drive, and 7th Street. Please note that the University agrees with the City of Long Beach that the signalization of Atherton Street and Earl Warren Drive would relieve the pressure on the intersection of Atherton Street and Merriam Way and a mitigation measure identifying a fair-share contribution to the entire Atherton Corridor Improvement Project, which includes signalization of this intersection, has been included in the Final EIR.

20. Can you just give us an idea of the sequence of construction? What might be your first priorities? Can you give us an idea of the timeline as to some of the construction.

None of the projects on the proposed master plan have been funded. Construction is dependent on future State and Non-State funding being made available.

21. When is the soccer stadium proposed to begin operating? How much will it cost? Will it be utilized for non-campus events?

The soccer complex will be built primarily with non-State funds. These funds have not been secured so the University cannot commit to when the facility will be operating or what the cost will be. The soccer complex will primarily be used for University events. Based on the local needs, however, the venue may be available for events and will need to follow the same requirements as the University-sponsored events.

22. What is the plan for the existing track.....a track we're building?

No changes to the track in the center of campus are proposed in the Master Plan.

23. We would like to point out again, intersection number 18 which is Earl Warren Drive and Atherton, the study shows only the ability of making a left-hand turn from Westbound Atherton. There is no other means of ingress or egress in that location, and I think that is a serious flaw and something that deserves your consideration.

The University agrees with the City of Long Beach's recommendation that the signalization of Atherton Street and Earl Warren Drive would relieve the pressure on the intersection of Atherton Street and Merriam Way and a mitigation measure identifying a fair-share contribution to the signalization of this intersection, which is a component of the entire Atherton Corridor Improvement project, has been included in the Final EIR.

24. I noticed that when the parking structures were built and the student parking fees increased, a number of students decided not to purchase a parking pass and are parking in our neighborhoods. I walk my kids to Gant elementary, and I sometimes see students sitting in their cars. If I look to see if they have a parking pass, most of the time they don't. I love the idea of the parking structures because they are obviously needed. What I am concerned about is that by increasing student parking fees even further, we're going to have more and more students who will decide to forego purchasing their pass and finding the local neighborhoods to park in. How much will parking fees increase? How many more students will not purchase parking passes when the fees increase? How many students are purchasing passes now? I don't know what kind of analysis can be done, but I'm very concerned about raising fees again. I think that would push more students out into our neighborhoods. Thank you.

Student parking fees will be increased from \$98 per semester to \$123 per semester starting July 2008 to construct Parking Structure 3 in Lot 11, which is currently under construction.

The University encourages all employees, students and visitors to park on campus or take public transportation. During 2007, approximately 27,000 parking permits were issued to students, faculty and staff. Five hundred twenty (520) students and faculty/staff purchased bus/transit passes. The Campus Connection Shuttles had an average daily ridership of 3,346. Over 910 carpool permits were distributed to students. Each semester, overflow parking is available at no cost at the Marina, nearly Pacific Coast Highway and 2nd Street, with free parking shuttles running to and from the campus. The University will continue to expand information about these options to students and visitors on how best to access parking on the campus. Please, refer also to Common Response Nos. 1 and 2.

25. I was wondering if the project will have any impact on property value in the neighborhood?

The Draft EIR addresses environmental effects of the Master Plan on the physical environment. Property values issue is a real estate issue. It is important to note that the University provides a substantial local economic benefit by returning \$4 into the local economy for every \$1 received from the State to support campus enrollment.

26. We happen to have parking restrictions in our neighborhood. But I was wondering when you look at a school like UCLA which has similar urban problems around the campus. They provide, probably through their non-state funded programs, outlying lots with buses and so forth. We don't need to start including buses, but smaller vans like the Campus Connection perhaps to use outlying lots like, Veterans Stadium for example, or all the excess parking over by Boeing down in Seal Beach. What I'm suggesting is that some of these problems could be handled with more extended parking restrictions that the councilman might be able to help us with and using this commuter sort of thing. I work at the university and my students often come in late because parking is problem. And I tell them don't park in the neighborhoods. I don't know if that works or not, but obviously not. Possibly using outlying lots, parking restrictions and bringing them in together in a van or something would be helpful.

Annual student parking fees at UCLA are \$732 as compared with annual fees at CSU Long Beach of \$243. The University actively discourages parking in neighborhoods and encourages the use of public transportation through the Campus Connection Shuttle, Long Beach Transit, Metropolitan Transit Authority and the Orange County Transit Authority. The University also maintains an active rideshare program. The [Employee Alternate Transportation](#) has a variety of programs, and valuable incentives, designed to make alternate modes of commuting to campus both practical and rewarding for CSULB employees. Several Rideshare programs are also available for students that use alternate modes of transportation. These include student [Carpool Matchlist](#), preferential parking for registered carpools, bus schedule information, and [Campus Connection Shuttle](#) service. Overflow parking is available at no cost at the Marina, nearly Pacific Coast Highway and 2nd Street, with free parking shuttles running to and from the campus. Please refer also to Common Response No. 1 and 2.

27. Buildings in the vicinity of the Pyramid are too close to the sidewalk. Flooding occurs at the end of McNabb Avenue. How does the Master Plan address runoff – where will new runoff go? Preferential parking does not work. If the parking is so bad now, imagine how it will be in 20 years.

The Master Plan does not propose alterations to buildings in the vicinity of the Pyramid.

The Pyramid was relocated more than 100 feet south of its originally planned location from the sidewalk on Atherton. The University has no data to show a correlation between the Pyramid and the referenced off-campus storm drain flooding. As indicated on Draft EIR, page 68, the Utility Infrastructure Master Plan includes improvements to the existing infrastructure systems within the

interior of the campus, including necessary drainage improvements. Impact will be less than significant.

Please refer to Common Response No. 1 regarding parking.

28. Students park in front of my house, and I have nowhere to park.

As noted, the University actively discourages parking in local neighborhoods and encourages all employees, students and visitors to park on campus or take public transportation. During 2007, approximately 27,000 parking permits were issued to students, faculty and staff. Five hundred twenty (520) students and faculty/staff purchased bus/transit passes. The Campus Connection Shuttles had an average daily ridership of 3,346. Over 910 carpool permits were distributed to students. Each semester, overflow parking is available at no cost at the Marina, near Pacific Coast Highway and 2nd Street, with free parking shuttles running to and from the campus. The University will continue to expand information about these options to students and visitors on how best to access parking on the campus. Please refer also to Common Response No. 1 and 2 about providing additional parking on campus and other measures.

29. Students park in the neighborhood to avoid paying for parking. Residents cannot park in front of their homes. Stacked parking should be employed to avoid the need for new parking structures.

As noted, the University actively discourages parking in local neighborhoods and promotes on-campus parking and public transportation options. Construction and on-going operational costs associated with a stacked parking concept is more expensive than with traditional parking structures, and since parking is a self-funded operation, parking fees would be unaffordable which would have the reverse impact of more traffic congestion and parking off-campus. Refer also to Common Response No. 1 and 2.

30. Flooding is an issue. Satellite lots should be utilized. Parking is also an issue while structures are being built - temporary lots with shuttle service should be provided during construction.

The University has no knowledge of such issues being caused by campus buildings. Infrastructure improvements are addressed as internal areas of campus are being upgraded. As indicated on Draft EIR page 68, the Utility Infrastructure Master Plan includes improvements to the existing system, such as replacing and upsizing lines, and all necessary drainage improvements are included.

To alleviate overflow parking, each semester the University uses satellite lots with free shuttle service to and from campus. The University also promotes the use of public transportation to access the campus without impacting local neighborhood streets. The University is interested in exploring use of satellite lots with the City. Please refer also to Responses to Comment Letter No. 15.

31. Neighborhood traffic safety is an issue, not only due to students, but also for special events (e.g. elderly people crossing busy streets in the dark). There have

been four serious accidents in the last five years. Criminal activity also is an issue, and increased student housing will lead to more.

Please refer to Common Response No. 2 for neighborhood traffic issues.

University Police provides law enforcement on campus, and the City of Long Beach Police provides enforcement off-campus. As indicated in Draft EIR on page 63, the University will continue to cooperate and participate in mutual aid arrangements with Long Beach Police Department. Increased demand for police services will be minimized through enhanced operating procedures, continued campus safety training, and appropriate staffing.

32. Students sit in vehicles outside my house all day long, eating lunch, leaving trash, motor oil, fluids, etc. Criminal activity is also an issue, affecting neighborhood safety.

The University actively discourages off-campus parking via an information program for students. Moving forward, CSULB will be expanding this program. Please refer also to Common Response No. 1 and 2.

University Police provide law enforcement on campus, and City of Long Beach Police do the same off campus within the City limits. As indicated in Draft EIR page 63, the University will continue to cooperate and participate in mutual aid arrangements with Long Beach Police Department. Increased demand for police services will be minimized through enhanced operating procedures, continued campus safety training, and appropriate staffing.

33. Parking should be a required component of tuition and fees.

The traffic engineer consultant who conducted the traffic study indicated that requiring all students to pay for parking would not be equitable and would not be consistent with the University's goals to incentivize carpooling and transit in order to reduce the demand for parking. Similarly, providing free on-campus parking would be inconsistent with Transportation Demand Management (TDM) practices. Since such actions could also result in modal shifts away from carpooling and transit, they could result in a greater demand for parking and could result in greater traffic, air quality, and noise impacts. The University actively encourages students to use alternative modes of transportation including walking, bicycling and public transit to get to and from the campus. Mandating parking fees would be in direct conflict with the TDM program the University supports. By mandating parking fees, students who normally cycle, walk or use transit would be encouraged to use an automobile instead. This may increase the traffic on the streets around the campus. Please also refer to Common Response 1.

34. Can enrollment be limited?

The Campus Enrollment Management Plan for 2008-09 requested authorization for the following measures:

- *Continue freshman impactation as already implemented. The campus policy has defined four geographic “tiers” for admissions. In 2007, local students in tier one were admitted under CSU statewide criteria for freshmen with an Eligibility Index of 2900. Students in the slightly more distant tier two were also admitted based on CSU statewide criteria. Applicants from the remainder of California (tier three) and from out of state and out of country (tier four) were admitted using substantially elevated criteria. The campus expects to continue these practices for fall 2008, although cutoff for admission in tiers 3 and 4 will continue to rise.*

Continue to admit a select number of lower-division Nursing transfer students who meet a rigorous set of requirements consistent with published Chancellor’s Office policy pertaining to Nursing.

- *Continue to admit a select number of lower-division Engineering transfer students who meet a rigorous set of requirements consistent with published Chancellor’s Office directives.*

- *Continue to admit qualified second baccalaureate applicants to non-impacted programs.*

- *Continue impactation for other academic programs already authorized.*

The campus will continue to manage enrollment based on the CSU guidelines and anticipates an average annual growth rate of about 2% - 2.5% to reach the new ceiling. The master plan is based on the same assumptions, with a gradual enrollment increase by the same percentages.

35. Neighborhood traffic has increased, including for performing arts and sporting events. People leave trash on the street and relive themselves on homeowners lawns. There are more accidents with the elderly. We want to work with you for positive solutions.

The University will continue to promote on-campus parking, use of public transportation and ridesharing, and discourage parking and neighborhood traffic via an information program for students and visitors. CSULB will continue to expand this program. Please refer also to Common Response No. 1 and 2.

36. Patrick O’Donnell arranged a meeting with CSULB to address traffic and parking issues. Long Beach City services and street maintenance are suffering due to these issues. Students move cars all day to avoid parking restrictions. Satellite lots and reduced parking fees should be considered. Students make unsafe and illegal U-turns. A traffic signal should be provided at McNabb Avenue and Atherton Street.

The University actively promotes on-campus parking options, public transportation, ridesharing and use of designated off-campus satellite lots. Moving forward, CSULB will be expanding this program. The campus is investigating more satellite lots, however, based on the University’s current experience at the Marina Lot, student parking is very low (average 65 cars per day). With regards to the signal at McNabb Avenue and Atherton Street, this location was not identified by the City as a study intersection for the Master Plan traffic study. In order for a signal to be warranted at this location, the volume of traffic must reach the signal warrant levels on the different legs of the intersection. Over the years, the City has not warranted a signal on Atherton at either of the two driveways to the east of McNabb (one near the Performing Arts

Center and the next driveway immediately to the east serving the new parking structure/lots). The City will need to determine whether a signal is appropriate at this location based on the actual traffic count data that is used to run a signal warrant analysis. Please refer also to Common Response No. 1 and 2.

37. Students know when the parking enforcement will occur, and they move their vehicles to avoid ticketing.

The University is providing additional parking on campus and other measures to discourage parking in the local neighborhoods - please refer to Common Response No. 1 and 2 about those measures and actions to be taken. The University is committed to working with nearby neighborhoods and other stakeholders to address concerns about students parking in surrounding areas. University Police provide law enforcement on campus, and City of Long Beach Police do the same off campus within the City limits. As indicated in Draft EIR on page 63, the University will continue to cooperate and participate in mutual aid arrangements with Long Beach Police Department. The University is committed to working with nearby neighborhoods and other stakeholders to address concerns about students parking in the surrounding areas. The Final EIR includes the following mitigation to address concerns about parking.

“The University will consult with the City of Long Beach to examine the feasibility of instituting additional neighborhood parking restrictions in the campus vicinity.”

Written Comments

The following subsection includes responses to written comments received. Responses are provided prior to each annotated letter.

1. Ruth I. Frazen, Customer Service Specialist, Facilities Planning Department, County Sanitation Districts of Los Angeles County. January 28, 2008.

- 1-1 The updated information regarding the average flows at the Joint Water Pollution Control Plan and the Long Beach Water Reclamation Plant has been included in the Final EIR. The comment that all other information in the EIR is current is acknowledged.



COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

STEPHEN R. MAGUIN
Chief Engineer and General Manager

January 28, 2008

File No: 03-00.04-00
19-00.04-00

RECEIVED

JAN 31 2008

PHYSICAL PLANNING AND
FACILITIES MANAGEMENT

Ms. Susan Brown, Director
Physical Planning and Facilities Management
1250 Bellflower Boulevard, BH370
Long Beach, CA 90840-0127

Dear Ms. Brown:

Campus Master Plan Update, California State University, Long Beach

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report for the subject project on January 15, 2008. The proposed development is located within the jurisdictional boundaries of Districts Nos. 3 and 19. We offer the following updated information regarding sewerage service:

1. The Joint Water Pollution Control Plant and the Long Beach Water Reclamation Plant currently process average flows of 310 and 14.5 million gallons per day, respectively.
2. All other information concerning Districts' facilities and sewerage service contained in the document is current.

1-1

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Stephen R. Maguin


Ruth I. Frazen
Customer Service Specialist
Facilities Planning Department

RIF:rf
cc: R. Burtner

2. Robert Campbell. February 7, 2008.

- 2-1 The comments providing suggestions for parking management are acknowledged. Please note that there is no direct 1:1 correlation between the number of units a student takes and time they are on campus. In general, there are more full-time students during the day. Evening students tend to take less than a full time class load. Also, please refer to Responses to Common Comment No. 1 regarding parking.

Robert Campbell <rscampbell5@yahoo.com>

02/07/2008 08:46 AM

To sbrown@csulb.edu
cc district4@longbeach.gov
Subject Master Plan Comments

Comment Letter No. 2

Hi Susan, I attended the meeting last night at the Pointe, thank you (and Councilmember Patrick O'Donnell) for involving the local residents in this process.

I have briefly reviewed the draft EIR and Master Plan and will take a more in-depth review of it in the next week or so. Most of my concerns involve traffic flow and parking issues and I will formulate some specific concerns after I read through the reports.

I want to expand on an idea that was brought up in the meeting last night by a local resident, regarding student parking fees. The idea was that student parking fees somehow be integrated into the regular academic fees. On the surface it seems like a good idea, forcing students to purchase a parking pass thus giving them greater incentive to park on campus. I have noticed that 90% or more of the students parking in my neighborhood do not have a parking pass.

I thought about the idea, and of course one concern students would have is what if they don't drive to campus? Also, should part-time students pay the same as full-time students? Also, what about students who drive only occasionally? Or students who simply cannot afford the pass?

So here is a solution I think to those problems. Base the student parking fee on the number of units taken. So those who impact the parking situation and use the parking resources more, pay more. Also, allow some sort of opt-out for students who either cannot afford to pay, do not drive, or drive only occasionally. For those who drive to campus only every once in a while, they can just purchase one of the daytime passes.

2-1

Integrating the fee into the academic fees also may not be feasible but it could be done on a line item basis so that students getting reimbursed only for academic fees or whatever, could easily show the fee breakout.

This wouldn't solve everything. Students are very savvy, and some will opt out, and then drive to school anyway and park in our neighborhoods. And until the extra parking spaces are built out, there will be times when lots are full and students will be forced to park in our neighborhoods.

Anyway, just an idea. I think it is a good idea even if reduces student parking in our neighborhoods in any way. And, by forcing the majority of students to purchase the parking pass, you can better plan parking revenues to repay the cost of new structures.

Again, thanks and good luck!

Robert Campbell
6200 E. Marita Street
Long Beach

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. [Try it now.](#)

3. Hal Gosling. February 8, 2008.

- 3-1 The comments providing suggestions for parking management are acknowledged. Please refer to Common Response No. 1 regarding parking. Also, since the parking structures are not supported by State funds, they are funded by CSU Systemwide Revenue Bonds, which requires student parking fees increases to provide the revenue stream to repay the bonds. To do so, the University must demonstrate a revenue stream up front since it cannot build parking structures ahead of revenue. The updated Master Plan includes additional structured parking needed to accommodate gradual growth in student enrollment and keep students on campus. As indicated in Draft EIR on page 42, the current ratio of parking to students will be maintained under the updated Master Plan. Other traffic and circulation issues are addressed in Section 3.1 of the EIR.

Comment Letter No. 3

"Gosling, Hal" <hal.gosling@boeing.com>

02/08/2008 09:04 AM

To <sbrown@csulb.edu>
cc <district4@longbeach.gov>
Subject Environmental Impact Meeting Comment

From all the remarks made at the recent meeting, it appears that student parking overflow into the neighborhoods and traffic are the biggest environmental impacts to the master plan.

In order to mitigate this intolerable situation, this time it would be prudent to put the horse in front of the cart, and build the infrastructure to support the planned growth first, rather than after the fact or even in parallel. This would include parking structures and new and improved ingress/egress points to the campus. This would satisfy both the students needs, improve safety and protect the neighborhood's quality of life.

I believe that funding parking structures is derived from revenue-generating income (parking fees, etc.) rather than state (tax payer) funds. This may be a case for CSULB to look to more conventional methods for funding a development, perhaps getting a loan up front to fund the required infrastructure needed to support the growth. There are probably many avenues available here, perhaps even with a commercial parking developer. Who knows till you look outside the box.

Again, the environmental impact mitigation plan should be to build the infrastructure to support the growth first, not after the campus and neighborhoods are further impacted.

Thanks,

Hal Gosling
6060 Marita Street,
Long Beach, ca 90815
562-596-2421

4. Leslie Abrahams. February 8, 2008.

- 4-1 Atherton Street is classified as a minor arterial in the City of Long Beach's functional classification system. As such, it is designed to carry a relatively large amount of traffic on a daily basis in comparison to local neighborhood streets. With the buildout of the Master Plan, there will be three new parking structures with different ingress/egress locations around the University campus. Parking structure 3 will be located and accessed via Palo Verde Avenue/Atherton Street, Parking Structure 4 will be primarily accessed via Atherton Street/Earl Warren Drive and Bellflower Boulevard/Beach Drive and Parking Structure 5 will be accessed via 7th Street. While the traffic on Atherton Street is expected to increase over time, the traffic growth as a result of the Master Plan is expected to be distributed on all the four main roads that surround the campus namely; Bellflower Boulevard, Palo Verde Avenue, Atherton Street and 7th Street.

With the addition of the project traffic in 2020, the majority of the intersections studied along Atherton Street in the EIR are projected to operate at LOS D (LOS D is typically considered to be the minimum acceptable LOS in an urban area) or better during either the morning or afternoon peak hours. The exception, Atherton Street and Palo Verde Avenue, is projected to operate at LOS E. A mitigation measure identifying a fair-share contribution to the entire Atherton Corridor Improvement project has been included in the Final EIR to address this traffic impact.

- 4-2 As indicated on page 14 of the Draft EIR, the proposed bleacher seating in the soccer field area will accommodate approximately 1,000 spectators.

Comment Letter No. 4

Leslie Abrahams <leslie_abrahams@yahoo.com>

To sbrown@csulb.edu

02/08/2008 03:05 PM

cc

Subject EIR/Neighborhood North of Atherton

Since our neighborhood is so impacted by the expansion of the campus already, and the campus is planning more expansion, could the campus include in it's plans to move the traffic away from Atherton and maybe onto 7th and or Bellflower? We feel overwhelmed and it is as if we live in a parking lot. The traffic on Atherton is horrific at best 7 days a week as the campus is renting out it's facilities, Pyramid, Music Center, Athletic fields to earn extra money.

4-1

Also we were told 1,000 Max. for the soccer stadium? Can I get that in writing as we are hearing it will be at least triple that in capacity?

4-2

5. Ken Chiang, Senior Hazardous Substances Scientist, School Program and Engineering/Geology Support Division, California Department of Toxic Substances Control (DTSC). February 11, 2008.

5-1 As indicated on page 90 of the Draft EIR, all construction activities will comply with existing rules and regulations concerning toxic pollutants. Mandatory compliance with regulations for toxic materials during demolition will ensure a less than significant impact related to the removal of these materials during construction. Nevertheless, the Draft EIR specifies that the following mitigation will be implemented.

“The University will continue to comply with SCAQMD Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities) and other pertinent regulations when working on structures containing asbestos, lead, or other toxic materials.”

5-2 Information about the DTSC’s school programs for elementary schools, high schools, and similar primary and secondary education facilities, is acknowledged. CSULB will coordinate with SCAQMD, the City of Long Beach, DTSC, and other appropriate State and federal agencies regarding clean-up of hazardous materials, as appropriate and mandated by existing regulations.



Linda S. Adams
Secretary for
Environmental Protection



Department of Toxic Substances Control

Maureen F. Gorsen, Director
9211 Oakdale Avenue
Chatsworth, California 91311



Arnold Schwarzenegger
Governor

Comment Letter No. 5

February 11, 2008

Ms. Susan Brown
California State University Long Beach
Physical Planning and Facilities Management
1250 Bellflower Boulevard, BH30
Long Beach, California, 90840

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CAMPUS MASTER PLAN
UPDATE, LONG BEACH, LOS ANGELES COUNTY, CALIFORNIA (SCH 2007061092)

Dear Ms. Brown:

The Department of Toxic Substances Control (DTSC) has reviewed the Draft Environmental Impact Report (DEIR), dated January 15, 2008, for the subject project. The due date to submit comments is February 28, 2008. Based on a review of the DEIR, DTSC would like to provide the following comments:

1. The project includes an update to California State University Long Beach (CSULB) Campus Master Plan involving the various improvements to the campus.
2. If demolition of old structures will occur, lead based paint and organochlorine pesticides from termiticide applications may be potential environmental concerns at the site. DTSC recommends that these environmental concerns be investigated and possibly mitigated, in accordance with DTSC's *"Interim Guidance, Evaluation of School Sites with Potential Soil Contamination as a Result of Lead From Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers, dated June 9, 2006."*
3. Since the project is school site related, California State University Long Beach (CSULB) is invited to participate in DTSC's School Property Evaluation and Cleanup Program. If CSULB elects to proceed to conduct a PEA at the site, it shall enter into a Voluntary Cleanup Agreement (VCA) with DTSC to oversee the preparation of the PEA. For additional information on the VCA Program, please visit DTSC's web site at www.dtsc.ca.gov.

5-1

5-2

Ms. Susan Brown
February 11, 2008
Page 2

If you would like to discuss this matter further, please contact me at (818) 717-6617.

Sincerely,



Ken Chiang
Senior Hazardous Substances Scientist
School Program and Engineering/Geology Support Division

cc: State Clearinghouse (State.clearinghouse@opr.ca.gov)
Office of Planning and Research

Ms. Gabriella Lopez (GLopez3@CSULB.edu)
California State University Long Beach

Mr. Guenther W. Moskat (Gmoskat@dtsc.ca.gov)
CEQA Tracking Center – Sacramento HQ

SPEGSD Reading File - Glendale

CEQA Reading File – Glendale

6. Dave Singleton, Program Analyst, State of California, Native American Heritage Commission. February 19, 2008.

- 6-1 The comments include recommendations that were submitted from the Native American Heritage Commission in response to the NOP, but do not provide any specific references to the EIR. These recommendations have been incorporated into the Draft EIR, as appropriate (refer to Section 3.7).

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-6251
 Fax (916) 657-5390
 Web Site www.nahc.ca.gov
 e-mail: ds_nahc@pacbell.net



RECEIVED

February 19, 2008

FEB 21 2008

Ms. Susan Brown, Director of Physical Planning
CALIFORNIA STATE UNIVERSITY LONG BEACH
 1250 Bellflower Boulevard, BH370
 Long Beach, CA 90840-0127

PHYSICAL PLANNING AND
 FACILITIES MANAGEMENT

Re: SCH#2007061092: CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the Campus Master Plan Update; California State University Long Beach; Los Angeles County, California

Dear Ms. Brown:

The Native American Heritage Commission is the state agency designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c) (CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action.

- √ Contact the appropriate California Historic Resources Information Center (CHRIS) for possible 'recorded sites' in locations where the development will or might occur. Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ <http://www.ohp.parks.ca.gov>. The record search will determine:
 - If a part or the entire APE has been previously surveyed for cultural resources.
 - If any known cultural resources have already been recorded in or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- √ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological information center.
- √ Contact the Native American Heritage Commission (NAHC) for:
 - A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section.
 - The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s).
- √ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
 - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
 - A culturally-affiliated Native American tribe may be the only source of information about a Sacred Site/Native American cultural resource.
 - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

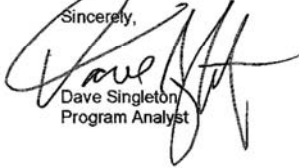
√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

√ Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

6-1

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

**Native American Contacts
Los Angeles County
February 19, 2008**

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles , CA 90020
(213) 351-5324
(213) 386-3995 FAX

Gabrielino/Tongva Council / Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
761 Terminal Street; Bldg 1, 2nd floor Gabrielino Tongva
Los Angeles , CA 90021
office @tongvatribes.net
(213) 489-5001 - Officer
(909) 262-9351 - cell
(213) 489-5002 Fax

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C Gabrielino
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
5450 Slauson, Ave, Suite 151 PMB Gabrielino Tongva
Culver City , CA 90230
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Gabrielino Tongva
tattnlaw@gmail.com
310-570-6567

Gabrielino/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
ChiefRBwife@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed SCH#2007061092; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the Campus Master Plan Update; California State University Long Beach; Los Angeles County, California.

7. Mike Garcia, Deputy Chief, Long Beach Fire Department, Fire Prevention Bureau. February 19, 2008.

7-1 The Long Beach Fire Department is contacted immediately if a fire situation is identified, as appropriate.

7-2 The updated information provided by the comment has been incorporated into the Final EIR.



CITY OF LONG BEACH

FIRE DEPARTMENT

3205 Lakewood Boulevard • Long Beach, CA 90808-1733 • Telephone (562) 570-2500 • FAX (562) 570-2506

DAVID W. ELLIS
FIRE CHIEF

RECEIVED

February 19, 2008

FEB 21 2008

Ms. Susan Brown, Director
Physical Planning and Facilities Management
1250 Bellflower Blvd, BH370
Long Beach, CA 90804-0127

PHYSICAL PLANNING AND
FACILITIES MANAGEMENT

Dear Ms. Brown,

After reviewing the Draft Environmental Impact Report on the Campus Master Plan Update, I would like to make the following suggested changes concerning 3.4 Fire and Police Protection Services on Page 61 - Specifically Fire Protection Services.

Fire Protection:

"If a fire situation is identified, University Police will institute an emergency response and contact the Long Beach Fire Department, *if necessary*".

7-1

We recommend that the Long Beach Fire Department is **called immediately** when a "fire situation is identified"...we don't mind being cancelled if the incident does not require our assistance.

Long Beach Fire Department:

"Other stations in the vicinity include Fire Station Nos. 4, 17, and 18. Equipment available at these stations include engines, trucks, and a mobile command unit."

7-2

The complement of equipment has changed at these stations to the following: Engines, Paramedic Rescue, and a Basic Life Support Ambulance.

Also stationed at Fire Station 22, located at Palo Verde and Atherton, is a Battalion Chief (who directly commands emergency incidents).

Sincerely,

Mike Garcia, Deputy Chief
Long Beach Fire Department
Bureau of Fire Prevention

Administration
(562) 570-2510
FAX (562) 570-2506

Disaster Management
(562) 570-9250
FAX (562) 570-9254

Fire Prevention
(562) 570-2560
FAX (562) 570-2566

Operations
(562) 570-2530
FAX (562) 570-2564

Support Services
(562) 570-9450
FAX (562) 570-9549

8. Bill and Judy Weldon. February 21, 2008.

- 8-1 The Master Plan does not include any additional exits from campus. The University actively discourages off-campus parking via an information program for students. Moving forward, CSULB will be expanding this program. Also, please refer to Common Responses No 1 and 2 about neighborhood parking and traffic issues.

JudyWeldonJ@aol.com

02/21/2008 03:35 PM

To sbrown@csulb.edu
cc district4@longbeach.gov
Subject DEIR

My husband and I attended the CSULB Master Plan Public Meeting, Feb.6th. And we appreciated the opportunity to comment on the expansion plans and the present problems created by the University. As the University has grown so have the problems in our neighborhoods. As long as students can find parking on the surrounding neighborhood streets they will not pay to park on campus. Besides affecting our quality of life with the constant traffic, noise and trash these problems are also impacting our city departments and their budgets. Parking enforcement is called for red zone violations, blocked driveways, parking in front of fire hydrants and marking tires in restricted parking blocks and writing tickets when necessary. The Public Works Dept. receives requests for red curbing driveways and more restricted parking areas. And if approved, signs have to be ordered and then posted. After waiting many years, Marita St. between McNab and Fanwood was recently resurfaced. The life expectancy of that resurfacing and other streets are greatly reduced by the constant flow of cars through the neighborhood. In the last few years, a 4 Way Stop was posted at the corners of Marita and Fanwood to slow the traffic down for safety reasons do to the children going to Minnie Gant. No additional exits that allow cars to flow through our neighborhoods should be considered. These are just some issues that we feel should be addressed in the DEIR.

8-1

Thank you again for the opportunity to weigh in on this important issue that affects more than just CSULB.

Bill and Judy Weldon
1901 Fanwood Ave.
Long Beach, Ca 90815
(562) 431-2431

Ideas to please picky eaters. Watch video on AOL Living.
(<http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/2050827?NCID=aolcmp00300000002598>)

9. Gary W. Frahm, President, Bixby Hill Community Association. February 25, 2008.

9-1 As part of the environmental review process, the University has provided the commentor with the Notice of Preparation of the Draft EIR for the Master Plan update and with the Initial Study document for review and comment. As part of this process, the University has provided the Notice of Completion and Availability of the Draft EIR and the Draft EIR document has been available for review at the campus, libraries, and on the University's website. As part of the public review process, the University held a public meeting to receive comments on the Draft EIR. The Final EIR, which includes comments and responses to comments on the Draft EIR, will also be posted on the University's website. Most of the large, urban CSU campuses are growing to 35,000 FTE. This University believes that the master plan should be capped at 31,000 FTE to maintain the current campus environment, accommodate the legislative requirement to accommodate students, and serve as good stewards of the environment.

9-2 The comment refers to a subsection of the Executive Summary on page iv of the Draft EIR. As indicated, long-term traffic noise and campus activity noise effects will be less than significant. Soccer plays and athletic activities already take place on campus and the soccer field has been in operation for many years. These activities will continue to be distributed over the entire day, or weekend, or an evening with no concentrated activities at any one point in time. As indicated on page v, even though the noise impact from athletic events at the soccer field facility will be intermittent and less than significant, additional mitigation measures pertaining to the design of the PA system and conduct of the athletic events identified in the EIR will be implemented to ensure that this impact will continue to be less than significant. Likewise, the Draft EIR indicates on page iv that cumulative impacts - other than vehicular traffic, air quality, solid waste, and construction-related air quality and noise - will be less than significant

9-3 The EIR identified air quality impact associated with the Master Plan update as a significant and unavoidable impact (refer to EIR Section 3.2). Levels of regulated air pollutants are described in Table 11. Comparison with other monitoring stations in southern California suggests that levels of these pollutants are generally lower in the campus vicinity than at some other locations, and are improving.

The EIR evaluates alternatives to the project in Section 4.0, including alternatives to avoid traffic and air quality impacts. As indicated in Draft EIR on page 102, the alternatives are overall either environmentally comparable or inferior to the project.

9-4 Please refer to Common Response No. 2 regarding neighborhood traffic issues.

9-5 Traffic noise is modeled in the vicinity of the intersection of Anaheim Road and Palo Verde Avenue, as presented in DEIR Table 15 on page 58. As indicated, future traffic noise with the project is projected to be 65.5 CNEL on Palo Verde Avenue north of Anaheim Road, and 57 CNEL south of Anaheim Road. Traffic

noise, including from delivery vehicles, is also modeled along East Campus Road (refer to DEIR page 57). Although traffic noise is projected to increase at some locations, this increase will be less than the 5 dB significance threshold, and in all cases will be less than 1.5 dB, which is not noticeable to most people. Note that Noise Measurement Location No. 5 was selected to identify the existing ambient noise level at the nearest homes to the proposed new parking structure in order to assess the potential impact at these locations from this noise source.

Noise impact from traffic noise and on-campus activity noise will be less than significant. Nonetheless, the EIR identifies mitigation measures to ensure that impact from the soccer field facility will continue to be less than significant.

East Campus Drive is gated from through traffic between the hours of 6 a.m. and 5 p.m. Monday through Friday. The road is open beyond that to accommodate requests from the neighbors, particularly in the Bixby Hills Community. During the week, local residents can apply for and pay a modest fee to receive a gate card to access East Campus Drive during the day.

9-6 One component of the noise study for the EIR was a 24-hour measurement in the vicinity of Bixby Hill at Noise Measurement Location No. 4. As indicated in DEIR Table 14 on page 54, the measured 24-hour noise level at this location was 61.4 CNEL, including traffic noise, aircraft overflights, and other noise-generating activities in the vicinity. This measured data supports the established airport's noise contours, which indicate that the area is outside of the 60 CNEL airport noise contour. Please, refer also to Response 9-5.

9-7 The new soccer field is expected to generate vehicle trips that will be outside of the typical traffic peaks. Currently, the soccer field operations occur during the daylight hours and may overlap with the traffic peaks. In the future, most games are expected to be played at times that do not conflict with traditional traffic peaks. The new soccer facility is expected to draw internally from the campus and, while visitors are expected from outside the University, the traffic effects are expected to be minimal.

The EIR noise analysis does not take into account atmospheric absorption or ground attenuation because these factors reduce noise; not increase it. Therefore, they were not included in the analysis to provide a "worst-case" assessment of impact. Reflections from buildings can increase noise if the source is very close and the building has a relatively smooth façade. However, even under these ideal circumstances, the increases typically are only on the order of 1 dB, which is not significant. Please, refer also to Response 9-5.

9-8 The Draft EIR identifies beneficial effects on page vi. As indicated, the project will result in a number of benefits. These benefits may be enjoyed by communities surrounding the University, particularly the following:

- Improving, updating, and replacing outdated, inefficient and obsolete facilities
- Maintaining and enhancing campus open space, character, and the quality of the physical environment

- Protecting open spaces, pedestrian corridors, and campus architectural themes
- Identifying and implementing consistent architectural guidelines
- Providing needed utility improvements
- Providing additional parking facilities on campus to help avoid intrusion of students seeking parking into surrounding neighborhoods
- Providing additional student housing on campus to help reduce commuter trips
- Providing local economic benefit by returning \$4 for every \$1 received from the State to support campus enrollment

RECEIVED

Comment Letter No. 9

FEB 26 2008

PHYSICAL PLANNING AND
FACILITIES MANAGEMENT



Bixby Hill Community Association

February 25, 2008

Ms. Susan Brown
Director
Physical Planning and Facilities Management
CSULB
1250 Bellflower Blvd., BH370
Long Beach, CA 90840-0217

Dear Ms. Brown:

First off I would like to say a special thanks to 4th District Long Beach City Councilman Patrick O'Donnell for bringing the Campus Master Plan to my attention. As President of the Bixby Hill Community Association I am very disappointed in the fact that our community which is probably most effected by this Master Plan, has not been approached by any university representative/s whatsoever regarding this plan. I have read the report and have some observations regarding its content.

While I do not disagree with our legislature's admirable "commitment to accommodating student demand and providing access to higher education", I do not believe it should be at the expense of the surrounding neighborhoods. The goal of accommodating 31,000 full time students is excessive. Creating the "building in a park" campus with automobile and public transportation circulating outside the central campus puts the strain on the residential areas surrounding the university.

Under the section entitled, "Impacts Considered and Found to be Less Than Significant, long-term traffic noise and campus activity noise, except for the new soccer field facility" did not result in a significant impact. The report states, the cumulative effect of other than vehicular traffic and air quality will be less than significant. Surely, you have not considered a number of factors.

Vehicular traffic which you have identified as an "Unavoidable Significant Impact" can be avoided by scaling back enrollment levels. Scaling back enrollment levels will also lower the cumulative air quality impact this plan will create in the surrounding neighborhoods. Current air quality in this area is affected by VA Hospital, electric generating plants, the 22 Freeway (7th Street), the airport and the Ports of Long Beach and Los Angeles. Our air quality has been judged as some of the worst in the Southern

9-1

9-2

9-3

1198 Palo Verde Avenue • Long Beach CA • 90815

California area. The impact of thousands of additional trips to and from the campus and their vehicular emissions will only threaten the health of residents in surrounding neighborhoods.

9-3

At the present time traffic on Palo Verde between Anaheim Road and Atherton is completely out of control during school hours. There are students, workers and school personnel double parked waiting for parking spots, multiple illegal U-turns are being made, pedestrians constantly jay-walk, vehicles attempting to turn into university parking lots and a gaggle of inexperienced drivers who don't know where their going, are late for class, are on the phone and/or who have little or no experience in driving in our country. Driving in the area is like running a gauntlet, and it is just of matter of time before someone is killed or is severely injured. The number of automobile accidents in this area is rising not declining.

9-4

In Table ES-1, entitled, Summary of Environmental Impacts and Mitigation Measures, page IX, the plan states, "At most, the project will contribute 1.5 dB CNEL at 1 of 93 street segments, and 1 dB at 5 of the segments. I have noticed the university did not take noise measurements at Anaheim and Palo Verde. Could the reason for this be the noise level already exceeds 65 dB CNEL? According to the Long Beach EIR filed for the Airport, the level was 64.6 dB CNEL at this intersection in 2004. For some reason the City has not released 2005, 2006 and the 2007 levels as required by law. Your additional noise caused by expansion will only drive this level higher. The location of monitor number five is also a problem as it only monitors a small parking lot off of 7th Street. The real noise affecting Bixby Hill comes along East Campus Drive with delivery trucks, blowers and late night disturbances from students and faculty using the parking lots.

9-5

Your statement of "the campus is located outside of the 60 db CNEL contours of the Long Municipal Airport" and is not affected by aircraft noise is probably correct if you assume those contours are correct. I do not. My Board of Directors believes the noise levels exceed 65 db CNEL in Bixby Hill. The reason being the construction of multi-story building by the university around Bixby Hill has combined with wave divergence, atmospheric absorption and ground attenuation increasing our CNEL levels. Noise levels are higher also because of sounds bouncing off the water of Los Cerritos Channel and Boulton Creek and its concrete walls. An increase in delivery trucks using the Studebaker Road off ramp from the 22 Freeway, and then coming down Anaheim or Atherton would increase noise to levels far beyond 65 db CNEL and affect property values in Bixby Hill.

9-6

Your proposed Soccer Field Facilities means additional cars and people on weekends and some weekly day/nights. Again you have not considered the facts affecting noise in the surrounding area such as wave reflexion off buildings, atmospheric absorption and the ground attenuation of Bixby Hill. When you hold you Blues Festivals our residents can clearly hear each announcement, song and the following applause. Now you want us to listen to whistles, starting guns and any other event you plan on holding? Unacceptable!

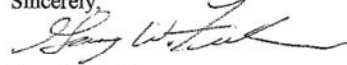
9-7

Under your list of Beneficial Effect, I do not see one beneficial effect for the residential areas that surround your university. Until the Board of Directors of the Bixby Hill Community Association can see the benefits to our members, we will stand opposed to this Update Campus Master Plan.

9-8

Please contact me if you have any answers for our Board.

Sincerely,



Gary W. Frahm
President
Bixby Hill Community Association
(562) 307-0816

cc: Councilmember Gary DeLong
City of Long Beach, Planning Officer, Angela Reynolds
State Clearinghouse, John Wayne; Daugherty Field Airport, Los Angeles County ALUC
Department of Transportation, Division of Aeronautics, Sandy Hesnard
SCAQMD, CEQA Section, Charles Blankson
CSULB, F. King Alexander, President
Councilmember Patrick O'Donnell

10. Betsy Mordino. February 25, 2008.

- 10-1 The University has recently completed a new parking structure with nearly 1,300 spaces, is constructing another parking structure immediately north also with another 1,300 spaces, and is planning to provide two more structures – one with 1,800 spaces in Lot 14 and with 1,100 in Lot 7 – to distribute parking throughout campus to keep students and visitors on campus and away from local neighborhoods. The University actively discourages off-campus parking via an information program for students and provides an information program to students and visitors regarding how best to access the on-campus parking. Moving forward, CSULB will be expanding this program. Please, refer also to Common Responses No. 1 and 2.

betsy mordino <betsypic2002@yahoo.com>

02/25/2008 04:31 PM

To college <district4@longbeach.gov>
cc s csulb <sbrown@csulb.edu>

Subject STUDENTS NOT USING THEIR OWN PARKING LOTS

the college has ruined our safe and beautiful neighborhood in the last 5 years or so since our streets around the college have become the college parking lot. when the parking rates went up we have become a parking lot.
 my new car was parked out in front of my home which i have owned for 17 years and smashed by i student.
 there is no where for my pool man, gardners, handyman, electrician, or anyone else to park who i hire for my business, and friends too.
 students can afford cell phones but not parking.-----come on??????????????
 our holiday decorations disapear so the neighborhood quit major decorating.
 my hose and other stupid things that i won't call the police for.
 my 85 year old mother which is disabled cannot get in the driveway. i have an SUV the the students block the driveway. i had red tips painted and the l.b. police said they will not tick et or tow the students, so why did i have them painted?
 cal state needs to step up to the plate. we are not their parking lots. we are a beautiful neighborhood or , we use to be when the students used their own lots.

betsy mordino
 1960 san vicente ave
 long beach, ca 90815
 562 431 1192
 HELP, HELP, HELP, HELP, HELP, HELP, HELP, HELP, HELP,
 HELP,!!!!!!!!!!!!!!!!!!!!!!

10-1

Looking for last minute shopping deals? [Find them fast with Yahoo! Search.](#)

11. Ted Tweet. February 26, 2008.

11-1 The Draft EIR identifies mitigation improvements at six intersections for future traffic conditions with the addition of the Master Plan traffic. These improvements are as follows:

- Bellflower Boulevard and Stearns Street
- Bellflower Boulevard and 7th Street
- West Campus Road and 7th Street
- Palo Verde Avenue and Atherton Street
- East Campus Road and 7th Street
- Earl Warren Drive and Atherton Street

At the first two intersections, improvements would require additional right-of-way (ROW) which is not available and, therefore, the traffic impact at these locations is considered to be significant and unavoidable.

The identified mitigation improvements at the Palo Verde Avenue and Atherton and Earl Warren Drive and Atherton intersections are considered to be feasible within the existing right-of-way. The traffic improvement to Palo Verde Avenue and Atherton Street addresses concerns about the additional traffic generated at the northern end of the campus. The University agrees with the City of Long Beach that the signalization of Atherton Street and Earl Warren Drive would relieve the pressure on the intersection of Atherton Street and Merriam Way and a mitigation measure identifying a fair-share contribution to the entire Atherton Corridor Improvement Project, which includes signalization of this intersection, has been included in the Final EIR. Also, the University would consider use of its property for contribution to mitigation involving potential future construction of improvements at 7th Street and West Campus Drive and 7th Street and East Campus Drive with appropriate credit recognized by the City and/or other appropriate agencies. The pedestrian safety is encouraged and promoted through provision and use of crosswalks at Merriam, Atherton/Palo Verde, and other street crossings. The University actively discourages off-campus parking via an information program for students. Moving forward, CSULB will be expanding this program. Please, refer also to Common Response No. 1 and 2.

11-2 Please, refer to Common Response No. 2 regarding neighborhood traffic.

11-3 Parking Structure No. 5 with 1,100 spaces will be located on Lot 7 adjacent to 7th Street in the upper campus.

11-4 Please, refer to Common Response No. 2 regarding neighborhood traffic.

11-5 Please, refer to Common Response No. 1 regarding parking.

"Ted&Nikki Tweet" <intweet@verizon.net>

To <sbrown@csulb.edu>

02/26/2008 11:50 PM

cc

Subject CSULB - EIR

To whom it may concern,

I attended your draft EIR meeting and found it completely ridiculous that no intersection or street improvements were deemed necessary even after adding more students. I am concerned that we were not invited to comment on, and I did not see an EIR, concerning traffic increases and potential problems when you decided to add 2 parking structures along PaloVerde Ave. I feel that alone has made my neighborhood unsafe many hours of the day. Insurance rates for young drivers are a premium for a reason and you are adding thousands of those "less safe" drivers to PaloVerde & Atherton to get to your new parking structures.

I am a proud alum of CSULB so I may know the parking problems and issues better than most neighbors. I know that parking on upper campus has been an issue for MANY years and is DRASTICALLY needed. You choose to put alot more parking @ the bottom corner of lower campus before a structure @ upper campus? 7th Street is at the end of the freeway and a direct route to downtown, it is 3 lanes wide, and it directly feeds upper campus. You have a few smaller lots right @ the top to work on but I feel the bookstore area lots would be perfect 3+ story structures. These lots right by the bookstore are centrally located, not visible to any residential neighborhood, accessible from 7th St and Bellflower Blvd, and your already planning construction/replacement on the adjacent outdated concrete buildings next to this area. Being a Construction Management major, having built projects on CSU and UC campuses, and most important a local building contractor, I can guarantee you save money when building in close proximity & by grouping this close of projects together. More lower campus parking seems like a VERY poor choice to me and it also promotes more parking in the neighborhoods. If you have to bring a bike, scooter, skateboard or other transportation even after you park in a structure or lot, why pay to park there? If you bring transportation to get to upper campus classes from far away lots anyway, you may as well save the parking fee and park in the neighborhoods.

11-1

One of the better ideas I heard was to include a parking pass with registration fees for everyone, unless maybe you pay for Dorm living and want opt out, and this way they will @ least use the parking you have instead of the surrounding neighborhoods. As many at the meeting stated, students have no problem moving trash cans(that then do not get picked up), leaving their trash, blocking part of a driveway, and just hanging out in their cars for an hour or two while they wait for their next class. Many times neighbors feel threatened (and rightfully so) by someone just sitting in their car in front of their house for an extended amount of time. Many people feel like someone is "casing" the neighborhood or is otherwise up to no good and call the police which then causes a strain on their resources.

All of the above issues are important - BUT - My biggest concerns are about my kids safety while trying to cross any street to go anywhere. It is a virtual fight with younger drivers to get a safe crossing, even @ a signaled intersection many times. Our neighborhood streets turn into race

11-2

tracks when someone is in a hurry or gets frustrated by the main street traffic @ peak hours. Try to cross PaloVerde Ave. between Atherton and Stearns St. in the morning or evening. There is no safe way to do it! No cross walks and no marked intersections except @ both ends and those are even scary. Even if you get to Stearns or Atherton (especially Stearns) it is a gamble @ best if you don't time it just right. I feel traffic accidents @ Stearns & PaloVerde have increased over the past few years and should be studied for solutions. How are younger kids (or adults for that matter) to cross PaloVerde Ave. for any reason? That is about 6-7 blocks for us to walk just to cross the street from one side to the other @ an intersection. It does not end with PaloVerde and I only see it getting worse if more students are added. PaloVerde/Stearns and PaloVerde/Atherton and the freeway access points are already overwhelmed with student activity many hours of the day and additional lower campus parking and increased student enrollment is only going to make it worse.

11-2

In summary:

1. I feel that upper campus parking should come before any other major improvements. This alone will help in many areas and alleviate more than just on campus parking problems.

11-3

2. Neighborhood and general public safety should be addressed as a first priority, with special attention to pedestrian crossings. Special concerns for all public safety while using surrounding public streets and intersections should be studied in conjunction with freeway entry/exit points to help keep everyone safe from the increased vehicle traffic and vehicle dangers.

11-4

3. Make parking fees much more affordable, mandatory parking pass purchases for each student, or do whatever it takes to get the students to use all the parking on campus. This will reduce the daily burden and help neighborhood residents feel less daily impact by having safer, quieter, and cleaner streets and neighborhoods.

11-5

Thank You,

Ted Tweet
562 243-4833

12. Jim and Erin Wilhelm. February 27, 2008.

12-1 The opinions expressed in the comment are acknowledged. Please refer to Common Response No. 2 regarding neighborhood traffic.

"erinandjim@juno.com" <erinandjim@juno.com>

02/27/2008 07:30 AM

To sbrown@csulb.edu
cc drywallpros@verizon.net
Subject concered neighbor

My family and I have lived 1/2 mile from CSULB for 16 years and the increase in traffic since we moved in is unbelievable. I can't believe you are planning an expansion of 10,000 more students with no plans to improve the traffic concerns we as residents already have. The majority of students and faculty drive right by my street to get on the freeway, and there are 3+ hours a day when i can't even get out of my street because even though it says "keep clear" on the street, everyone bunches up bumper to bumper so no one gets in before them, even if we want to turn left towards CSULB, or cross the 1st lane to get over and turn left on Stearns. We also have MANY people drive through our tract in order to try and beat the traffic to the freeway. They **DON'T** drive the speed limit and on my **block** alone we have 30+ kids that live here and 2 daycares with countless other kids in this tract. It is an accident waiting to happen. I firmly believe you need to look into many different options to improve traffic flow in the area, and keep the residents/taxpayers safe before you consider expanding by any number of students.

12-1

Thank you

Jim and Erin Wilhelm

6417 El Paseo St

Long Beach, Ca. 90815

[Click to create your dream Las Vegas vacation now.](#)

13. Patrick Watson. February 27, 2008.

- 13-1 Traffic heading toward the I-405 southbound ramps on Palo Verde Avenue in the morning peak hour cannot be attributed primarily to the University. The majority of the University traffic is inbound at that time of day and outbound during the evening peak hour.

Not all new parking structures will be placed on the east side of campus, but instead will be distributed throughout campus. Parking Structure No. 4 will be located on the interior west side of campus. Additionally, Parking Structure No. 5 will be located on Lot 7 adjacent to 7th Street in the south campus. Although not a component of the Master Plan, Parking Structure No. 3 will be placed adjacent to Atherton Street and Palo Verde Avenue, adjacent to the neighborhood mentioned.

The intersection of Palo Verde Avenue and Atherton Street was examined in the EIR traffic study. With the addition of the Master Plan traffic, under City of Long Beach standards, this intersection will be significantly impacted by the year 2020. In order to address these issues a traffic mitigation measure is identified in the Final EIR that includes a fair-share contribution to the entire Atherton Corridor Improvement Project, which includes the Palo Verde Avenue and Atherton Street intersection.

P and AM WATSON <pnmwatson@msn.com>

To <sbrown@csulb.edu>

02/27/2008 08:55 AM

cc

Subject: Expansion

I am dumbfounded by the initial environmental impact report concerning expansion at the campus of CSULB!! I live near the intersection of Palo Verde/Stearns, and EVERY day I have to "fight" my way onto Palo Verde to get out of my neighborhood!! I then wait to get on the S/B 405 fwy in a line that stretches all the way down stearns and wraps around on to Palo Verde (which is one of the reasons palo verde is a mess). I do not see ANY way that you can even think about expanded at this time or anytime in the future without MAJOR modifications of some sort. I also would like to know why every new parking structure is placed on this side of the campus? Why should the neighborhoods and residents in this part of Long Beach should be PUNISHED instead of making modifications to your campus and building parking facilities on the other side of campus near 7th. It seems with modifications and an a dedicated on ramp, students could get directly on 7th/22 E/B. I will be forwarding to this to the City and I can tell you now, the neighbors in this area are outraged at this proposal and lack of consideration toward our needs.

13-1

Patrick Watson
Josie Ave
Long Beach, CA

Shed those extra pounds with MSN and The Biggest Loser! [Learn more.](#)

14. Jennifer and Jeffrey Machan. February 27, 2008.

- 14-1 Traffic heading toward the I-405 southbound ramps on Palo Verde Avenue in the morning peak hour cannot be attributed primarily to the University. The majority of the University traffic is inbound at that time of day and outbound during the evening peak hour.

Not all new parking structures will be placed on the east side of campus, but instead will be distributed throughout campus. Parking Structure No. 4 will be located on the interior west side of campus. Additionally, Parking Structure No. 5 will be located on Lot 7 adjacent to 7th Street in the south campus. Although not a component of the Master Plan, Parking Structure No. 3 will be placed adjacent to Atherton Street and Palo Verde Avenue, adjacent to the neighborhood mentioned.

The intersection of Palo Verde Avenue and Atherton Street was examined in the EIR traffic study. With the addition of the Master Plan traffic, under City of Long Beach standards, this intersection will be significantly impacted by the year 2020. In order to address these issues a traffic mitigation measure is identified in the Final EIR that includes a fair-share contribution to the entire Atherton Corridor Improvement Project, which includes the Palo Verde Avenue and Atherton Street intersection.

jennifer machan <jnjmachan@yahoo.com>

To sbrown@csulb.edu

cc

02/27/2008 01:42 PM

Subject

I am dumbfounded by the initial environmental impact report concerning expansion at the campus of CSULB!! I live near the intersection of Palo Verde/Atherton, and EVERY day I have to "fight" my way onto Palo Verde to get out of my neighborhood!! I then wait to get on the S/B 405 fwy in a line that stretches all the way down stearns and wraps around on to Palo Verde (which is one of the reasons palo verde is a mess). I do not see ANY way that you can even think about expanded at this time or anytime in the future without MAJOR modifications of some sort. I also would like to know why every new parking structure is placed on this side of the campus? Why should the neighborhoods and residents in this part of Long Beach should be PUNISHED instead of making modifications to your campus and building parking facilities on the other side of campus near 7th. It seems with modifications and an a dedicated on ramp, students could get directly on 7th/22 E/B. I will be forwarding to this to the City and I can tell you now, the neighbors in this area are outraged at this proposal and lack of consideration toward our needs.

14-1

I would like to be kept informed of this proposed expansion. Please put me on your list of people/neighbors to consider when making such decisions that directly effect our homes and neighborhood.

Jennifer and Jeffrey Machan
1881 Josie Ave.
Long Beach, Ca. 90815
562-430-4006

Never miss a thing. [Make Yahoo your homepage.](#)

15. Daryl Supernaw, Atherton Ditch Adjacent Neighborhood Association. February 27, 2008.

- 15-1 The University is interested in exploring options for off-site satellite parking lots. The responses for each of the suggestions are listed below:

Satellite Parking Lot No. 1 – CSULB will explore the feasibility of using this location with the Long Beach Unified School District. One of the issues with this site is that it is nestled in a location surrounded by many homes; the use of this lot may also conflict with school operations.

Satellite Parking Lot No. 2 – This location is private property owned and operated by a church. While this option represents a good location for the University, the lot would be required on a full time weekly basis. The lot would need to be available from 7:30 a.m. to 9:00 p.m., which would conflict with the operation of the church. Therefore, this lot is not considered a feasible option.

Satellite Parking Lot No. 3 – This location is in close proximity to the University campus. The location of the proposed lot is adjacent to a busy street (Studebaker Road) and the SR-22 ramps which raises serious concerns relating to access and safety. Nonetheless, the University will explore the feasibility of this location with Caltrans and its traffic engineers.

Please note that the University already uses off-campus parking in the City of Long Beach in the satellite Marina lot during the week. However, the experience with this location indicates that few students park there (approximately 65 cars per day). While the University proactively provides options including rideshare, public transportation, no cost parking at the Marina near Pacific Coast Highway and 2nd Street, and free shuttles running to and from the campus, it cannot mandate student parking at those off campus locations.

- 15-2 The comments on the ingress/egress to Parking Structure No. 4 are noted. The University agrees with the City of Long Beach that the signalization of Atherton Street and Earl Warren Drive would relieve the pressure on the intersection of Atherton Street and Merriam Way and a mitigation measure identifying a fair-share contribution to the entire Atherton Corridor Improvement Project, which includes signalization at this location, has been included in the Final EIR.

February 27, 2008

Susan Brown, Director, Physical Planning
California State University, Long Beach
Physical Planning and Facilities Management
1250 Bellflower Boulevard, BH 370
Long Beach, CA 90840-0127

Dear Ms. Brown,

Thank you for the opportunity to provide feedback from the Initial Study community meeting on February 6, 2008. At that meeting, the subject of off-campus or satellite parking lots was mentioned. I know that Veterans Stadium has been used in the past, but the 3.5-mile distance from CSULB makes it a less than desirable option for many students. I would like to suggest three other locations with closer proximity to the campus. These satellite lots could be used permanently or as a temporary solution during periods of peak demand.

The three locations I am suggesting include one lot within walking distance, a second lot that is close enough for walking but could also accommodate a shuttle and a third lot with shuttle access only. The three lots also feed the campus from three different sides. They also differ greatly in terms of construction investment. One is ready to go immediately, another would need only minor preparation, but the third lot would require major construction and a major financial investment.

I have prepared a diagram of each lot with an aerial photo of the surrounding area. The lots are outlined in red, and the shuttle routes are shown with a light blue, dashed line. Please let me know if you have any questions or have difficulty opening or reading the three Mac/Word attachments. I'll be more than happy to send you hardcopy prints.

Best regards,

Daryl Supernaw
Atherton Ditch Adjacent Neighborhood Association
2005 Palo Verde Ave., #303
Long Beach, CA 90815

Attachments (3)

15-1

SATELLITE PARKING LOT #1



SATELLITE PARKING LOT #2

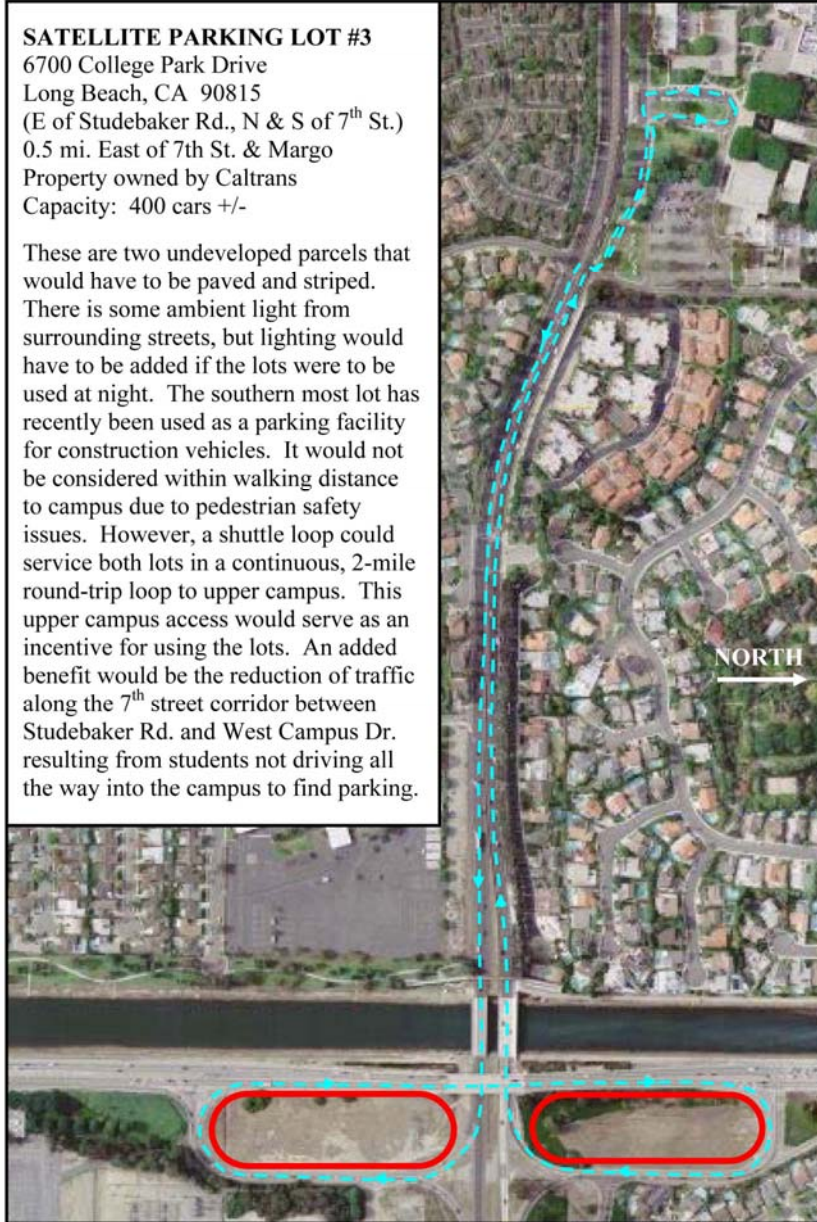


SATELLITE PARKING LOT #3

SATELLITE PARKING LOT #3

6700 College Park Drive
Long Beach, CA 90815
(E of Studebaker Rd., N & S of 7th St.)
0.5 mi. East of 7th St. & Margo
Property owned by Caltrans
Capacity: 400 cars +/-

These are two undeveloped parcels that would have to be paved and striped. There is some ambient light from surrounding streets, but lighting would have to be added if the lots were to be used at night. The southern most lot has recently been used as a parking facility for construction vehicles. It would not be considered within walking distance to campus due to pedestrian safety issues. However, a shuttle loop could service both lots in a continuous, 2-mile round-trip loop to upper campus. This upper campus access would serve as an incentive for using the lots. An added benefit would be the reduction of traffic along the 7th street corridor between Studebaker Rd. and West Campus Dr. resulting from students not driving all the way into the campus to find parking.



ditchboy <athertonditch@verizon.net>

02/28/2008 01:58 PM

Please respond to
ditchboy@verizon.net

To sbrown@csulb.edu
cc district4@longbeach.gov, mark_Hungerford@longbeach.gov
Subject CSULB DEIR comment - final

The attached Word document is my final submission to the DEIR. It was prepared in response to a suggestion made at the community meeting that the new parking structures have additional ingress/egress points around the campus. Specifically, I tried to come up with a solution that did not increase traffic on Atherton or necessitate the creation of a new controlled intersection. I am proposing an egress road from parking structure #4 to Bellflower Blvd.

15-2

Daryl Supernaw

Daryl Supernaw
Atherton Ditch Adjacent Neighborhood Association
2005 Palo Verde Ave. #303
Long Beach, CA 90815
Phone: (562) 431-5493
Cell: (562) 480-8700

EGRESS FOR PROPOSED PARKING STRUCTURE #4



EGRESS FOR PARKING STRUCTURE #4

The open storm channel that cuts across lower campus has been successfully covered and used for parking east of Merriam Way. It could be covered and used as an egress road from west of Earl Warren Dr. to Bellflower Blvd. This would add a much-needed egress for the new parking structure #4 without affecting volume or traffic flow on Atherton St. A wider road could also facilitate diagonal/parallel parking.

16. Lisa Gonzales. February 27, 2008.

- 16-1 The University actively discourages off-campus parking via an information program for the students. Moving forward, CSULB will be expanding this program. Please, refer also to Common Response No. 1 and 2.

Comment Letter No. 16

L & M & J <3badkitties@verizon.net>

02/27/2008 10:02 PM

To sbrown@csulb.edu
cc district4@longbeach.gov
Subject CSULB Master Plan

Ms. Brown,

As a homeowner near CSULB I have a few concerns about the Master Plan. I must disagree with the statement in Section B-7 in regards to the surrounding public streets being patrolled and parking unavailable. Over the last several years I have seen a large increase in students parking on residential streets - usually just beyond the posted signs, and then walking, skating, or riding bikes to class. I travel Atherton quite regularly as my daughter attends Gant Elementary and we also attend the Unitarian Church on Atherton just beyond Bellflower. It is quite rare that I see any type of patrol on Atherton, but almost without fail at least one or two cars are double parked, blocking traffic waiting for someone to leave street parking, or even worse, cruising at 5 or 10 miles an hour hoping to find a free spot. Students jaywalk constantly, often running out in front of cars, but I have never seen any deterrents.

My biggest concern upon reading the Master Plan is the proposed Soccer Field and Sports Center. Regardless of the fact that more parking structures will be built, if you charge for parking, people will go to great lengths to find it for free. I foresee Atherton becoming even more dangerous than it is now. In regards to the new traffic that this facility would bring in nights and weekends, I can only hope that CSULB and the City of Long Beach look beyond the campus border streets to deal with existing traffic issues. Most especially Palo Verde at Stearns and the 405 on-ramp and exit.

As an educator I certainly understand the need for the CSULB campus to grow, but as your neighbor I sincerely hope that CSULB will make a better effort to keep the streets safe for everyone.

Thank you,

Lisa Gonzales
2071 Snowden Avenue
Long Beach, CA 90815
(562) 430-7095

16-1

17. Juan M. Rendon. February 27, 2008.

- 17-1 With respect to the operation of the intersection of Palo Verde Avenue and Atherton Street, a traffic impact has been identified at this location and a mitigation measure providing for a fair-share contribution to the entire Atherton Corridor Improvement Project, which includes this intersection, has been included in the Final EIR.

The EIR addresses construction traffic in Section 3.9. As indicated in Draft EIR on page 94, mitigation specifies that construction trucks should avoid travel on residential streets. Impact will be less than significant.

The new soccer field is expected to generate vehicle trips that will be outside of the typical traffic peaks. Currently, the soccer field operations occur during the daylight hours and may overlap with the traffic peaks. In the future, most games are expected to be played at times that do not conflict with traditional traffic peaks. The new soccer venue is expected to draw internally from the campus and, while visitors are expected from outside the University, the traffic effects are expected to be minimal.

Sporting events will be scheduled so they are concluded by 10 p.m. to permit spectator clearance shortly thereafter. Improvements to the soccer field will include bleacher seating for approximately 1,000 spectators (refer to Draft EIR page 14). As indicated on Draft EIR page 55, noise from the soccer field will not result in exposure of people to substantial increase in ambient noise levels, and impact will be less than significant.

Please, also refer to Response No. 18-6 regarding lighting.

Comment Letter No. 17

February 27, 2008

California State University Long Beach
Ms. Susan Brown
1250 Bellflower Blvd.
Long Beach, Ca.90840-0127

Dear Ms. Brown,

My name is Juan Rendon and I live at 6531 East El Jardin Street which is near the University. I have had a chance to review DEIR on the Master Plan for the University and I am glad the University will soon be able to offer a well improved learning environment for the Students and Staff. While I support giving Student and Staff all the tools needed to improve the quality of life it should not come at the expense of the neighborhoods. I believe the following issues will have a negative impact and need further studies/ mitigation. Noise, traffic and light pollution generated from the Soccer Stadium. The traffic is already challenging at the intersection of Atherton and Palo Verde and can not seem to adequately accommodate any significant increase. Currently weekend events from the University have people overflowing into the surrounding neighborhoods. The Stadium should be limited on the hours of operation from 9:00 Am – 8:00 Pm; the number visitors should be limited per the EIR too 1,000 in capacity. Events should relate to the University and not welcome others to hold massive events. A larger School will generate more traffic and it appears this falls short of what will be needed. Construction should not be allowed to have the Semi Trucks overflowing into the side streets as is currently occurring with a much smaller project. I greatly appreciate your anticipated cooperation as this a quality of life issue.

17-1

Sincerely,



Juan M. Rendon

18. Angela Reynolds, Planning Officer, Community and Environmental Planning, Development Services, City of Long Beach. February 28, 2008.

- 18-1 The University actively encourages the use of public transportation through the Campus Connection Shuttle, Long Beach Transit, Metropolitan Transit Authority and the Orange County Transit Authority. The University also maintains an active rideshare program. The [Employee Alternate Transportation](#) has a variety of programs, and valuable incentives, designed to make alternate modes of commuting to campus both practical and rewarding for CSULB employees. Several Rideshare programs are also available for students that use alternate modes of transportation. These include student [Carpool Matchlist](#), preferential parking for registered carpools, bus schedule information, and [Campus Connection Shuttle](#) service. Overflow parking is available at no cost at the Marina, nearly Pacific Coast Highway and 2nd Street, with free parking shuttles running to and from the campus.

The proposed Master Plan Update includes new parking facilities to address parking issues on- and off-campus (refer to Draft EIR page 16). Potential parking impacts are evaluated on Draft EIR pages 40 and 41. As indicated, the proposed new parking structures include Parking Structure 4 planned for 1,800 spaces and Parking Structure 5 which is planned for 1,100 spaces. Parking Structure 3 currently under construction will provide 1,300 spaces. These structures will provide a total of 4,200 spaces, resulting in a net increase of 2,267 spaces. Overall, the new and existing parking will provide a total of approximately 17,600 parking spaces on campus. The current ratio of approximately 2.5:1 of students-to-parking will continue to be maintained with the projected enrollment growth pursuant to the updated Master Plan. The Master Plan is designed to minimize growth on the perimeter of campus, and provide infill facilities in the interior (refer to Draft EIR page 11). New parking structures are proposed pursuant to the Master Plan in the center and southeastern campus areas to distribute parking supply throughout the campus. The EIR evaluated potential traffic and parking impacts based on these locations.

Parking is a self-funded operation on campus that does not receive any State funding. The Campus Parking Program provides campus parking facilities as authorized under the provisions of Section 89701 of the Education Code. The program is self-supporting, so fees are not only used for construction, but also for the ongoing upkeep, maintenance, and repairs that are required for operation of the parking structures. Therefore, these fees cannot be eliminated as they are necessary to provide and operate the parking facilities.

The traffic engineer consultant who conducted the traffic study indicated that requiring all students to pay for parking would not be equitable and would not be consistent with the University's goals to incentivize carpooling and transit in order to reduce the demand for parking. Similarly, providing free on-campus parking would be inconsistent with Transportation Demand Management (TDM) practices. Since such actions could also result in modal shifts away from carpooling and transit, they could result in a greater demand for parking and could result in greater traffic, air quality, and noise impacts.

The University actively encourages students to use alternative modes of transportation including walking, bicycling and public transit to get to and from the campus. Mandating parking fees would be in direct conflict with the TDM program the University supports. By mandating parking fees, students who normally cycle, walk or use transit would be encouraged to use an automobile instead. This may increase the traffic on the streets around the campus.

The University actively discourages off-campus parking via an information program for the students. Moving forward, CSULB will be expanding this program through email and documentation. The University is committed to working with nearby neighborhoods and other stakeholders to address concerns about students parking in surrounding areas. The Final EIR includes the following mitigation to address concerns about parking.

“The University will consult with the City of Long Beach to examine the feasibility of instituting additional neighborhood parking restrictions in the campus vicinity.”

18-2 The proposed configuration in the comment letter of 1 right-turn lane, 3 through lanes and dual left-turn lanes on the southbound approach of the Bellflower Boulevard and Stearns Street intersection was analyzed. The ICU calculations were re run for this proposed configuration to determine the traffic benefit (refer to ICU worksheet below). The configuration is forecast to be LOS E (V/C =0.912) with the addition of the Master Plan traffic. The addition of the southbound left results in LOS E and a V/C = 0.913, showing no improvement in operating conditions over the existing configuration. Therefore, the proposed configuration will not mitigate the significant impact at this location. Based upon this analysis the impact at the Bellflower Boulevard and Stearns Street intersection remains significant and unavoidable.

MITIG8 - CP_PM Tue Mar 18, 2008 11:47:38 Page 1-1

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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 *
 Intersection #4 4. Bellflower Bl & Stearns St

 *
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.913
 Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 107 Level Of Service: E

 *
 Street Name: Bellflower Bl Stearns St
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 |
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 3 0 1 2 0 3 0 1 1 0 1 1 0 1 0 1 1 0

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|
Volume Module:
Base Vol:    107 1644   160   294 1607   150   251 473   75   332 449   96
Growth Adj:  1.00 1.00   1.00  1.00 1.00   1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse: 107 1644   160   294 1607   150   251 473   75   332 449   96
Added Vol:    0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:  0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut: 107 1644   160   294 1607   150   251 473   75   332 449   96
User Adj:    1.00 1.00   1.00  1.00 1.00   1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00   1.00  1.00 1.00   1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:  107 1644   160   294 1607   150   251 473   75   332 449   96
Reduct Vol:   0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol: 107 1644   160   294 1607   150   251 473   75   332 449   96
PCE Adj:     1.00 1.00   1.00  1.00 1.00   1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00   1.00  1.00 1.00   1.00 1.00 1.00  1.00 1.00 1.00  1.00
FinalVolume: 107 1644   160   294 1607   150   251 473   75   332 449   96
-----|-----|-----|-----|-----|
|
Saturation Flow Module:
Sat/Lane:    1600 1600   1600  1600 1600   1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00   1.00  1.00 1.00   1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:       1.00 3.00   1.00  2.00 3.00   1.00 1.00 1.73  0.27 1.00 1.65  0.35
Final Sat.:  1600 4800   1600  3200 4800   1600 1600 2762  438 1600 2636  564
-----|-----|-----|-----|-----|
|
Capacity Analysis Module:
Vol/Sat:     0.07 0.34   0.10   0.09 0.33   0.09 0.16 0.17   0.17 0.21 0.17   0.17
Crit Moves:  ****          ****          ****          ****
*****
* Traffix 7.9.0415 (c) 2007 Dowling Assoc. Licensed to FEHR & PEERS, S. MONICA

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18-3 The University agrees with the City comments. Therefore, the University and the City Long Beach and CSULB jointly agree that the proposed mitigation measures at all intersections listed in the Draft EIR and the additional intersections listed in the City’s response to the DEIR will be replaced with a single improvement which will be referred to as the Atherton Corridor Improvement Project. This project will include improvements at five (5) intersections along Atherton between Bellflower Boulevard and Studebaker Road which include: Atherton/Chatwin (new pedestrian signal), Atherton/Earl Warren/Britton (new traffic signal, center median work, and crosswalk), Atherton/Palo Verde (minor signal improvements) and Atherton/Studebaker (minor signal improvements), as well as signal timing improvements for the entire corridor.

A mitigation measure identifying a fair-share contribution to the Atherton Corridor Improvement project has been included in the Final EIR.

18-4 Field observations and count data were collected for the intersection of Studebaker Road and Atherton Street as part of the EIR traffic study. The project traffic distribution was then developed for the Master Plan based on the location of student, faculty and staff residences using zip code data. The vehicle trips to/from the campus were assigned to the new parking structures and also to the existing surface lots/structures. The distribution of vehicle trips also took into account the location of freeway access to the University, which is predominately via the I-405 ramps at Bellflower Boulevard and at Palo Verde Avenue.

The traffic at this location is attributable to a variety of different users including that it is some from the University, local residents, and trips into and out of the city. We believe it is speculative to conclude that the aggressive driver behavior, as defined by the City's Pedestrian Safety Advisory Committee, is attributable to University students alone given that the intersection of Studebaker Road and Atherton Street is half a mile from the nearest University parking lot.

- 18-5 The SCAG model data was analyzed between year 2000 and 2030 to ascertain traffic growth on major streets in the study area. On an annual basis, in the study area, this growth amounted to approximately 0.5%. The Master Plan buildout year is 2020, which is 13 years removed from the baseline conditions and, hence, the growth from the SCAG model represents the best estimate for a longer time frame given the socioeconomic forecasts for the Los Angeles and Orange County regions.

In addition to the 0.5% ambient traffic growth applied in the traffic study, trip generation estimates were also calculated for the related projects in close proximity to the campus. These trip generation estimates amounted to 5,341 a.m. peak hour trips and 9,173 p.m. peak hour trips. Trip generation from these projects was added, along with the 0.5% ambient growth, to the study intersections to forecast 2020 conditions. The ambient traffic growth and the related project trip generation results in a combined yearly growth rate closer to the City of Long Beach's 1%. If the 1% annual ambient growth rate were applied over a 13 year period, along with related project growth, then the background traffic levels would likely be overestimated.

- 18-6 As indicated on page 87 of the Draft EIR, instead of using typical lights mounted in groups on 110- to 120-foot high standards, the University plans to install 75- to 85-foot lights at the field to minimize lighting at surrounding uses, which will significantly reduce glare and line-of-sight visibility. In addition, the best available fixtures will be used to avoid spillover. This lighting will be best technologically available to provide the necessary illumination and at the same time minimize visibility from nearby areas.

The closest sensitive off-site residential uses are located more than 600 feet from the soccer facility, further minimizing visibility of the lights. Intervening street lighting will mask views of the lights from surrounding areas. All lighting will be turned off after the sport games or other events end and spectators have safely been cleared. Mitigation measures for noise prohibit events at George Allen Field between the hours of 10 p.m. and 7 a.m., and will also work to avoid lighting. Therefore, impact will be less than significant, and no further mitigation is necessary.

As indicated on Draft EIR page 87, existing security lighting will continue to be upgraded as necessary throughout the life of the Master Plan, and new lighting will be installed at new facilities and select locations as necessary to ensure adequate safety. The best technologically available lighting will be used to ensure appropriate levels to maximize safety while minimizing spillover into surrounding areas and the night sky. No substantial change in overall security lighting levels as viewed from off-campus locations is anticipated. The University

campus is separated from nearby sensitive residential uses by relatively wide streets, and thus, this lighting will be minimally visible from those areas. Impact will be less than significant, and no further mitigation is necessary.

Existing landscaping is provided in areas along the northern University boundary at Atherton Street. CSULB will continue to maintain and upgrade this landscaping, as appropriate. Landscaping is also provided by the City in the Atherton Street medians.

18-7 The suggested modification to the mitigation for noise has been incorporated into the Final EIR as follows: “Events will not be scheduled and the public address (PA) system will not be scheduled to operate at George Allen Field between the hours of 10:00 PM and 7:00 AM.”

18-8 Likewise, CSULB is committed to incorporating sustainable green building practices into project design. As indicated in DEIR on page 51, the University implements numerous programs and policies to promote sustainable development practices, including preferential parking for carpoolers, operating an on-campus transit system, and minimizing energy use through project design. The University has and continues to implement alternative energy programs, including installing solar arrays on new and existing buildings. Where feasible and appropriate, the University includes design features to facilitate solar panel installation.

Mitigation for air quality requires that the University exceed Title 24 energy saving requirements on campus by 15% or more on all new or renovation projects by applying a range of techniques and measures that may include planting trees to provide shade and shadow to buildings; use of energy-efficient lighting in buildings and parking lots; use of light-colored roofing materials; installing energy-efficient appliances; installing automatic lighting on/off controls; use of insulation and double-paned glass windows; connecting buildings to central air and water heating and cooling systems, and/or other measures. Compliance with this mitigation will further the University’s commitment to sustainability.



CITY OF LONG BEACH

LONG BEACH DEVELOPMENT SERVICES

333 W. Ocean Blvd. - Long Beach, CA 90802 - 562/570-8357 - FAX 562/570-6088

COMMUNITY & ENVIRONMENTAL PLANNING

February 28, 2008

Ms. Susan Brown
Director
Physical Planning and Facilities Management
1250 Bellflower Boulevard
BH370
Long Beach, CA 90840-0127

RE: Campus Master Plan Update, California State University, Long Beach
Comments on Draft EIR (State Clearinghouse No. 2007061092)

Dear Ms. Brown:

The City of Long Beach appreciates this opportunity to provide comments on the Draft Environmental Impact Report (EIR) for the proposed Campus Master Plan Update. We request that you consider these comments prior to Final EIR certification and project approval.

TRAFFIC, CIRCULATION AND PARKING

Neighborhood Parking Impacts

The Campus Master Plan provides an opportunity to address student parking impacts on adjacent neighborhoods. It is suggested that the University seriously consider restructuring its parking fee program to create an incentive for students to park on-campus or to take alternate modes of transportation. One possible method would be to charge all students a mandatory parking fee with their tuition. That mandatory fee could be set to provide sufficient funding to operate the parking lots as well as to provide subsidized transit passes and other ride sharing incentives to students. Mandatory parking fees would encourage students to park in the closest available parking space, rather than in outlying residential neighborhoods, and those students choosing an alternative travel mode could be rewarded. This Master Plan is a unique opportunity for the University to recognize its parking impacts on the surrounding neighborhoods and proactively move to address them.

18-1

The EIR could also include a mitigation measure that requires University Security to patrol surrounding neighborhoods for enforcement of neighborhood permitting and prevention of student parking in these neighborhoods.

Bellflower/Stearns Traffic Impacts

The traffic study concludes that there is no adequate right-of-way to mitigate the project's traffic impacts at the intersection of Bellflower Boulevard and Stearns Street so no traffic improvements are proposed. City traffic engineers have reviewed the intersection and determined that sufficient right-of-way is indeed available to allow for the reconfiguration of the intersection to provide for a new southbound right-turn lane by reducing the size of the center median and west side sidewalk. It is unclear if this new southbound right-turn lane would fully mitigate the projects' traffic impacts at the intersection; however, the improvement would make a significant enhancement in the traffic flow destined to the University. This alternative mitigation measure should be investigated and considered for implementation.

18-2

Comments on Campus Master Plan Update Draft EIR
 February 28, 2008
 Page 2

Special Event Activity – Lower Campus Traffic Impacts

The lower Campus is an area of frequent event activity, and as such there has been discussion in the past between the University and the City about reconfiguring and signalizing the intersection of Atherton Street and Earl Warren Drive/Britton Drive to improve Campus access during special events and other times of significant traffic congestion. The Draft EIR traffic study does not address the operational issues associated with such events at the Pyramid or at other lower Campus facilities that typically contribute to evening peak period traffic congestion around the University's campus. A reconfiguration of the Atherton Street and Merriam Way/Fanwood Drive Intersection to remove a portion of the center median Island and create a full access signalized intersection would improve access to and from the Campus, help to balance traffic loads at the Atherton Street and Merriam Way/Fanwood Drive intersection during periods of normal activity, and provide a "safety valve" for traffic entering or leaving the Campus during event periods. It is strongly suggested that the University include this key access improvement to the lower Campus as a part of the Master Plan effort.

18-3

Studebaker/Atherton Traffic Impacts

The potential traffic impacts of the project at the Studebaker Road and Atherton Street intersection appear to be underestimated. When the University is in session many students use Studebaker Road to access the Campus due to its proximity to freeways and on-Campus parking structures. In recent traffic investigations conducted by City traffic engineers there appears to be heavy southbound right turn and northbound left-turn movements by students heading toward the Campus during the morning peak and heavy eastbound left-turns and right turns by students heading away from the Campus during the evening peak period. These heavy movements are critical at this intersection considering that they conflict with elementary-aged children walking to and from Tincher Preparatory Academy. A recent review of traffic conditions at the intersection by the City's Pedestrian Safety Advisory Committee (PSAC) found that aggressive turning movement behavior by University students across crosswalks at the intersection constituted a hazard and necessitated the staffing of the intersection by a crossing guard. Since the existing hazard is generated by student drivers and it likely to worsen with a higher student population, it is suggested that the University partner with the City to contribute its fair share (based on total University generated traffic at the intersection) of the costs to address this hazard through the modernization of the traffic signal and the provision of turn arrows controlling key movements, thus enhancing pedestrian safety.

18-4

Traffic Growth Rates

The ambient traffic growth rate per year used in the study was one-half of one percent. The Southern California Association of Governments estimates that the ambient traffic growth rate in the Long Beach area to be closer to two-thirds of a percent and the City of Long Beach mandates a one percent traffic growth rate be used in analyzing traffic impacts of new development. It is suggested that the ambient traffic growth rate used for the University's Master Plan environmental review follow the City of Long Beach guidelines to be consistent with other traffic studies conducted in the area.

18-5

AESTHETICS, LIGHT AND CLARE

The Draft EIR includes a discussion on lighting installed at the sports fields for evening events. While the EIR states that all proposed lighting standards will be restricted in usage to the hours of sports events only and will incorporate design features regarding height, shielding and downward direction to avoid spillover impacts, no mitigations are proposed to ensure that these operational and design features are a project requirement. Therefore, the following mitigation measures are recommended:

18-6

Comments on Campus Master Plan Update Draft EIR
 February 28, 2008
 Page 3

- All project lighting standards shall not exceed a height of 85 feet measured from the ground surface, whether paved or unpaved.
- All project lighting standards shall be shielded and directed downwards to adequately prevent light spillover into surrounding areas.
- No project sports field lighting shall be on or illuminated in any manner between the hours of 10:00 p.m. to 7:00 a.m. daily.

In addition, the project would further buffer potential lighting spillover effects to nearby residential neighborhoods as well as enhance the visual character of the northern campus area by providing a tree-lined buffer along Atherton Street, similar to the landscape improvements made along Palo Verde Avenue. A mitigation measure could be included that would require project design to provide for installation and maintenance of evergreen/perennial trees (not deciduous) in sufficient height and canopy spread to ensure a continuous green buffer between the northern campus boundary and abutting public rights-of-way along Atherton Street.

18-6

NOISE

In order to ensure this project will not create any nighttime noise nuisances, it is recommended that Mitigation Measure No. 1 for Noise on page 59 be revised to prohibit ALL outdoor events and public address system operations between the hours of 10:00 p.m. to 7:00 a.m. daily.

18-7

SUSTAINABILITY

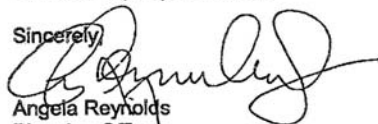
The City of Long Beach is committed to encouraging the incorporation of sustainable "green building" practices into the construction and operation of all large projects. At a minimum, this would include the following provision for on-site renewable energy:

- Require all new building roof designs to account for future solar photovoltaic system installation (with a conduit from the roof to the electrical room/electrical panels installed at the time of construction).

18-8

All questions regarding the City's comments on this Draft EIR should be directed to either Angela Reynolds, Planning Officer, at (562) 570-6357 or Craig Chalfant, Environmental Planner, at (562) 570-6368.

Sincerely,



Angela Reynolds
 Planning Officer

AR:cc

19. Sam Dunlap, Gabrielino/Tongva Tribal Council. February 28, 2008.

- 19-1 The comment that the measures described in the EIR are adequate is acknowledged. The University understands the issues relative to the recorded archaeological data that have been collected over the past several years. The University will review these issues with the CSU Office of General Council.

Comment Letter No. 19



GABRIELINO/TONGVA TRIBAL COUNCIL

761 Terminal St., Building 1, 2nd FL., Los Angeles, CA 90021 • www.tongvatribes.net
Tel: (213) 489-5001 • Fax: (213) 489-5002 •

Tribal Council Members:

Virginia Carmelo
Tribal Chair

Martin Alcala
Tribal Vice Chair

Sam Dunlap
Tribal Secretary

John Aguirre
Tribal Council Member

Ronald Castillo
Tribal Council Member

Adam Loya
Tribal Council Member

Shirley Machado
Tribal Council Member

Richard Mackin
Tribal Council Member

Edgar Perez
Tribal Council Member

Senator Richard G. Polanco (Ret.)
CEO

Ms. Sue Brown, Director
Physical Planning & Facilities Mgmt.
CSU Long Beach
1250 Bellflower Blvd., BH-370
Long Beach, CA 90840-0127

Sent Via Fax: 562-985-7647

February 28, 2008

Re: DEIR Campus Master Plan Update
State Clearinghouse No. 2007061092

Dear Ms. Brown,


This letter is to provide comments on the DEIR currently being circulated for public review. Section 3.7 Archaeological Resources of the DEIR is the section that the Gabrielino Tongva Tribe has specific concerns. Our concerns revolve around future impacts to cultural resources due to proposed construction on campus.

After review of the mitigation measures proposed in the DEIR relating to archaeological resources it is viewed as adequate protection with the current monitoring measures described in the DEIR. However, the DEIR does not address the perceived need as to what is to become of all recorded archaeological data collected over the past several years. That is an academic question as to when is the Native American community ever to see a published report as to the findings of all the archaeological fieldwork and research that is mentioned in the DEIR.

19-1

We will continue to follow the progress of this environmental review process and will anticipate future involvement.

Sincerely,


Sam Dunlap
Gabrielino Tongva Tribal Council

**The Gabrielino-Tongva
Nation for all Gabrielinos**

20. Elizabeth Jones. February 8, 2008.

- 20-1 With respect to the comment regarding the traffic volumes, Atherton Street is classified as a minor arterial in the City of Long Beach's functional classification system. As such, it is designed to carry a relatively large amount of traffic on a daily basis in comparison to local neighborhood streets. Please, refer also to Response No. 4-1.

Peak period traffic counts were conducted on Atherton Street between the hours of 7-9 a.m. and 4-6 p.m. The highest consecutive 60-minute traffic period was analyzed to compute the LOS value for the intersection of Atherton Street & Merriam Way. Using the methodology in accordance with the City of Long Beach traffic study guidelines, LOS D was computed for both the AM and PM peak hours. This LOS rating reflects an acceptable operating condition at this location under City of Long Beach standards.

Regarding the frontage road cut through traffic comment, traffic count data was collected at the intersection of Atherton Street and Merriam Way/Fanwood Drive. The intersection traffic count indicates that there are 53 a.m. peak hour trips from Fanwood Drive into the University. This is very small number of vehicle trips in comparison to the eastbound and westbound trips onto Merriam Way (457 and 826, respectively). These trips represent approximately 4% of inbound Merriam Way trips during the morning peak hour.

The p.m. peak hour has 13 trips that travel across Atherton Street from the University onto Fanwood Drive, amounting to approximately 1% of the traffic leaving the Merriam Way driveway in this afternoon peak hour. Cut-through traffic is typically the worst during the regular traffic peak hours and these numbers indicate that cut-through traffic is not an issue during this timeframe.

The University agrees with the City that the signalization of Atherton Street and Earl Warren Drive would relieve the pressure on the intersection of Atherton Street and Merriam Way, and a mitigation measure identifying a fair-share contribution to the entire Atherton Corridor Improvement Project, which includes signalization at this intersection, has been included in the Final EIR.

- 20-2 The University actively discourages off-campus parking via an information program for students. Moving forward, CSULB will be expanding this program. Please, refer also to Common Response No. 1 and 2.

Comment Letter No. 20

February 28, 2008

Ms. Susan Brown
 Director, Physical Planning and Facilities Management, BH370,
 California State University Long Beach
 1250 Bellflower Boulevard,
 Long Beach, CA 90840-012
 sbrown@csulb.edu

Dear Ms. Brown,

The letter is to provide comments in regards to the DEIR of the Cal State Long Beach Campus Master Plan.

As a citizen of Long Beach and a neighbor to the campus, I applaud the universities overall plans for expansion. However I think the DEIR plan is flawed as it does not adequately address the following issues: traffic egress to campus specific to Atherton / Fanwood / Merriem Way, off campus parking by students in residential neighborhoods.

I have reviewed the Master Plan and DEIR, my comments are as follows:

Traffic Egress

While the DEIR contains studies in traffic flow, I believe the study is flawed as it fails to address the egress of flow of traffic on Atherton. In addition if student parking and housing is expanded at the North West section of campus, the flow of traffic will further impact this area.

Today Atherton area is already overloaded, so much so, that during peak times cars are lined up almost ½ mile east to Palo Verde to enter campus or ¼ mile West to Bellflower. The result of this overloading is that commuter students routinely veer onto the adjacent service road of Atherton, travelling at unsafe speeds. In addition Atherton is also impacted during the morning peak hours by parents of students taking their children to Minnie Gant elementary school or the Isabelle Patterson Day Care Center which seemingly was not taken into consideration.

For this I believe that the rating of this intersection should be reevaluated, and possibly changed from a Los C to Los E or Los F rating.

I am requesting additional studies to be conducted that address egresses to campus in residential areas and further request improvements to the plan in this area.

20-1

I would like the campus to consider an additional point of egress that does not impact Atherton for the planned parking garages.

20-1

Off Campus Parking

While the Master plan does include additional parking for students, the master plan does not address how the campus intends to work with the City to encourage or regulate student parking on the adjacent residential streets. In the past few years since the campus has raised its parking pass fees, the amount of street parking by students has increased dramatically. It is common occurrence for residents not to be able to park in front of their own homes and many residents report students using their vehicles off campus to participate in illegal activities such as drug use and sexual activities between classes.

In addition to student parking, guests of the Carpenter Center and the Pyramid also park on the city streets. There have been several pedestrian involved accidents with people crossing Atherton to reach campus as well as theft and vandalism of residential property. I would expect that the new soccer stadium will compound this problem.

20-2

The DEIR is devoid of any data on the impact that off campus parking is having on the quality of life for the residents in the area. It also fails to address how the residents of the areas will be further impacted by this significant issue once the expansion is complete. I am requesting additional studies and improvements to the Master plan that would address these issues in collaboration with the city to the satisfaction of the residents.

I thank you for your consideration of my comments and look forward to having my concerns addressed as this project continues to move forward.

Sincerely,

Elizabeth Jones (via: e-mail)

Elizabeth Jones
 1898 College Circle
 Long Beach CA 90815
 562-598-9667
 Eliz.Jones@verizon.net

cc: Patrick O'Donnell – 4th District, City of Long Beach

21. Terry Roberts, Director, State Clearinghouse, Governor's Office of Planning and Research. February 29, 2008.

21-1 The comment that the University has complied with the State Clearinghouse review requirements for the draft environmental documents is acknowledged. Responses to the attached letters are provided previously.

Comment Letter No. 21



ARNOLD SCHWARZENEGGER
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT
DIRECTOR

February 29, 2008

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Susan Brown
California State University, Long Beach
Physical Planning and Facilities Management
1250 Bellflower Boulevard, BH 370
Long Beach, CA 90840-0127

PHYSICAL PLANNING AND
FACILITIES MANAGEMENT

Subject: Campus Master Plan Update
SCH#: 2007061092

Dear Susan Brown:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on February 28, 2008, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

21-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

SCH# 2007061092
Project Title Campus Master Plan Update
Lead Agency California State University, Long Beach

Type EIR Draft EIR
Description Due to area-wide and regional growth in student population, new academic, support, and other campus facilities are needed to accommodate a gradual growth in enrollment up to 31,000 FTE (full time equivalent) students on the CSULB campus. The Campus Master Plan update provides for required instructional, research, faculty office and administrative space, student services areas, student housing, sports and recreation, parking, and support facilities.

Lead Agency Contact

Name Susan Brown
Agency California State University, Long Beach
Phone (562) 985-4131 **Fax**
email
Address Physical Planning and Facilities Management
 1250 Bellflower Boulevard, BH 370
City Long Beach **State** CA **Zip** 90840-0127

Project Location

County Los Angeles
City Long Beach
Region
Cross Streets Generally bounded by Bellflower Blvd., Atherton St., Palo Verde Ave., and 7th St.
Parcel No. Various

Township	Range	Section	Base

Proximity to:

Highways I-405, I-605, CA-1, CA-22
Airports Long Beach Airport
Railways
Waterways Los Cerritos Channel, San Gabriel River, Alamitos Bay
Schools Various
Land Use Campus Master Plan

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Drainage/Absorption; Noise; Public Services; Schools/Universities; Sewer Capacity; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Growth Inducing; Cumulative Effects

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received 01/15/2008 **Start of Review** 01/15/2008 **End of Review** 02/28/2008



Linda S. Adams
Secretary for
Environmental Protection



Department of Toxic Substances Control

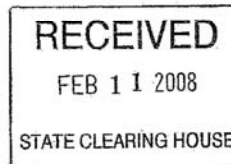
Maureen F. Gorsen, Director
9211 Oakdale Avenue
Chatsworth, California 91311



Arnold Schwarzenegger
Governor

February 11, 2008

Ms. Susan Brown
California State University Long Beach
Physical Planning and Facilities Management
1250 Bellflower Boulevard, BH30
Long Beach, California, 90840



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DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CAMPUS MASTER PLAN
UPDATE, LONG BEACH, LOS ANGELES COUNTY, CALIFORNIA (SCH 2007061092)

Dear Ms. Brown:

The Department of Toxic Substances Control (DTSC) has reviewed the Draft Environmental Impact Report (DEIR), dated January 15, 2008, for the subject project. The due date to submit comments is February 28, 2008. Based on a review of the DEIR, DTSC would like to provide the following comments:

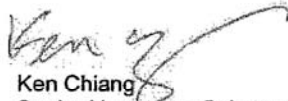
1. The project includes an update to California State University Long Beach (CSULB) Campus Master Plan involving the various improvements to the campus.
2. If demolition of old structures will occur, lead based paint and organochlorine pesticides from termiticide applications may be potential environmental concerns at the site. DTSC recommends that these environmental concerns be investigated and possibly mitigated, in accordance with DTSC's *"Interim Guidance, Evaluation of School Sites with Potential Soil Contamination as a Result of Lead From Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers, dated June 9, 2006."*
3. Since the project is school site related, California State University Long Beach (CSULB) is invited to participate in DTSC's School Property Evaluation and Cleanup Program. If CSULB elects to proceed to conduct a PEA at the site, it shall enter into a Voluntary Cleanup Agreement (VCA) with DTSC to oversee the preparation of the PEA. For additional information on the VCA Program, please visit DTSC's web site at www.dtsc.ca.gov.

♻️ Printed on Recycled Paper

Ms. Susan Brown
February 11, 2008
Page 2

If you would like to discuss this matter further, please contact me at (818) 717-6617.

Sincerely,



Ken Chiang
Senior Hazardous Substances Scientist
School Program and Engineering/Geology Support Division

cc: State Clearinghouse (State.clearinghouse@opr.ca.gov)
Office of Planning and Research

Ms. Gabriella Lopez (GLopez3@CSULB.edu)
California State University Long Beach

Mr. Guenther W. Moskat (Gmoskat@dtsc.ca.gov)
CEQA Tracking Center -- Sacramento HQ

SPEGSD Reading File - Glendale

CEQA Reading File -- Glendale

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

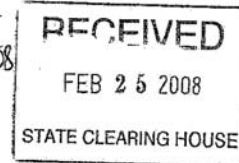
NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-6251
 Fax (916) 657-5390
 Web Site www.nahc.ca.gov
 e-mail: ds_nahc@pacbell.net



February 19, 2008

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Ms. Susan Brown, Director of Physical Planning
CALIFORNIA STATE UNIVERSITY LONG BEACH
 1250 Bellflower Boulevard, BH370
 Long Beach, CA 90840-0127

Re: SCH#2007061092: CEQA Notice of Completion: draft Environmental Impact Report (DEIR) for the Campus Master Plan Update: California State University Long Beach, Los Angeles County, California

Dear Ms. Brown:

The Native American Heritage Commission is the state agency designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c) (CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

- √ Contact the appropriate California Historic Resources Information Center (CHRIS) for possible 'recorded sites' in locations where the development will or might occur.. Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ <http://www.ohp.parks.ca.gov>. The record search will determine:
 - If a part or the entire APE has been previously surveyed for cultural resources.
 - If any known cultural resources have already been recorded in or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- √ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- √ Contact the Native American Heritage Commission (NAHC) for:
 - * A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section.
 - The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s).
- √ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
 - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
 - A culturally-affiliated Native American tribe may be the only source of information about a Sacred Site/Native American cultural resource.
 - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

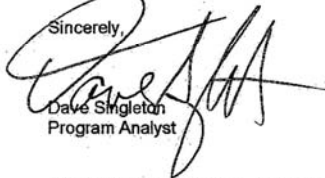
* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American.

Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.
√ Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse