CHAPTER 10
CEQA Statutory Sections

This chapter summarizes the following categories of impacts resulting from implementation of the 2014 LRDP; significant and unavoidable environmental impacts; cumulative impacts; growth-inducing impacts; and significant irreversible environmental effects.

10.1 Significant and Unavoidable Impacts

Section 15126.2(b) of the CEQA Guidelines requires an EIR to identify significant environmental effects that cannot be avoided if the project is implemented, including those that can be mitigated, but not to a less-than-significant level. This section identifies significant impacts that could not be eliminated or reduced to a less-than-significant level by mitigation measures imposed by UCSF. The final determination of significance of impacts and of the feasibility of mitigation measures will be made by the Regents as part of their certification action for the EIR. The following significant and unavoidable impacts would result from implementation of the 2014 LRDP:

2014 LRDP

- **Impact AIR-LRDP-4:** Implementation of the 2014 LRDP would result in increased emissions of criteria air pollutants during demolition and construction activities.

- **Impact AIR-LRDP-5:** Implementation of the 2014 LRDP would result in increased emissions of criteria air pollutants during operation.

- **Impact CUL-LRDP-2:** Implementation of the 2014 LRDP could result in demolition of historical resources as defined in CEQA Guidelines Section 15064.5.

- **Impact NOI-LRDP-2:** Implementation of the 2014 LRDP would result in increased ambient noise levels during pile-driving activities.

2014 LRDP Proposals at the Parnassus Heights Campus Site

- **Impact CUL-PH-2:** Demolition of the Surge building at the Parnassus Heights campus site would result in a substantial adverse change in the significance of an historical resource.

- **Impact NOI-PH-1:** Demolition activities proposed under the 2014 LRDP at the Parnassus Heights campus site would result in a temporary increase in ambient noise levels.

- **Impact NOI-PH-2:** Construction activities proposed under the 2014 LRDP at the Parnassus Heights campus site would result in increases in ambient noise levels over the term of the exterior construction activities.
2014 LRDP Proposals at the Mission Bay Campus Site

- **Impact AIR-MB-3**: Operations at the Mission Bay campus site under the 2014 LRDP would result in increased emissions of criteria air pollutants.

- **Impact NOI-MB-2**: Construction activities proposed under the 2014 LRDP at the Mission Bay campus site would result in increases in ambient noise levels during pile-driving activities.

- **Impact UTIL-MB-2**: There may be impacts related to wastewater infrastructure as a result of 2014 LRDP development at the Mission Bay campus site.

2014 LRDP Proposals at the Mount Zion Campus Site

- **Impact CUL-MZ-1**: Demolition of the Hellman building at the Mount Zion campus site would result in a substantial adverse change in the significance of an historical resource.

- **Impact NOI-MZ-1**: Demolition activities proposed under the 2014 LRDP at the Mount Zion campus site would result in a temporary increase in ambient noise levels.

- **Impact NOI-MZ-2**: Construction activities proposed under the 2014 LRDP at the Mount Zion campus site would result in increases in ambient noise levels over the term of the exterior construction activities.

2014 LRDP Proposals at the Mission Center Campus Site

- **Impact NOI-MC-2**: Construction activities proposed under the 2014 LRDP at the Mission Center campus site would result in increases in ambient noise levels during pile-driving activities.

10.2 Cumulative Impacts

10.2.1 Introduction

The CEQA Guidelines define cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The Cumulative impact analysis required under CEQA is intended to describe the “incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects” which can result from “individually minor but collectively significant projects taking place over a period of time” (CEQA Guidelines Section 15355).

Cumulative impacts must be discussed when they could be significant, but the discussion may be more general than that for individual project impacts. The discussion should also reflect the potential extent, severity, and probability of the impact. The cumulative impact analysis must be based on either a list of reasonably foreseeable projects, or projections from a General Plan or a contribution to significant cumulative impacts must also be proposed.
This chapter contains the cumulative impact analysis for the environmental topics addressed in Sections 5.1 through 5.15 of this EIR. The cumulative impact analyses consider the impacts from implementation of the 2014 LRDP (either significant or less than significant), plus:

- Impacts from other projects similar to the project, including those from other on-going UCSF projects or activities;
- Impacts such as traffic generation or demand for public services, that are similar to project impacts, but which result from other projects independent of the proposed project;
- The interaction of these impacts to create a cumulative impact affecting the same geographic area as the impact of the proposed project; and
- Whether the project’s contribution to a significant cumulative impact is cumulatively considerable.

### 10.2.2 General and Regional Plans Considered in the Cumulative Analysis

Consistent with CEQA Guidelines Section 1530(b)(1)(B), the cumulative impact analysis in this EIR considers the 2014 LRDP’s effects in combination with the projections contained within previously approved local and regional planning documents and forecasting models, including, but not limited to the San Francisco General Plan, the Mission Bay Redevelopment Plan, the San Francisco County Transportation Authority (SFCTA) Forecast Model, Port of San Francisco plans and regional planning documents from the Association of Bay Area Governments (ABAG), Bay Area Air Quality Management District (BAAQMD) and California Department of Transportation (Caltrans), as well as all associated environmental review documents.

### 10.2.3 Specific Projects Considered in the Cumulative Analysis

Consistent with CEQA Guidelines Section 15130(b)(1)(A), this cumulative impact analysis also considers other known or reasonably foreseeable projects that could combine with potential impacts from implementation of the 2014 LRDP within the same geographic area. These include the following:

- UCSF projects underway at the Parnassus Heights and Mission Bay campus sites
- Mission Bay Redevelopment Plan (North and South) projects
- Proposed Golden State Warriors Event Center Project – an arena and other development on a 12-acre site bounded by Third, 16th and South streets and Terry Francois Boulevard. Blocks 29-32 in the Mission Bay South Redevelopment Area. The Warriors project, now in environmental review by the City, proposes to construct an arena and other development on its site, rather than the general office / research and development uses in the Mission Bay Redevelopment Plan.
10.2.4 Areas of Potential Cumulative Impacts

10.2.4.1 Aesthetics
The Parnassus Heights, Mount Zion and Mission Center campus sites are located in urban settings surrounded by a mix of institutional, residential, neighborhood commercial and open space uses. These areas are built-out and opportunity for new development is limited, requiring reuse or redevelopment of existing buildings rather than new construction on undeveloped tracts of adjacent land. As such, potential growth in the vicinity of the these three campus site would be limited to the intensification or rebuilding of existing uses, which could result in changes in the size or architectural character of several individual buildings. However, development proposed under the 2014 LRDP at the Parnassus Heights, Mount Zion or Mission Center campus sites would not be visually incompatible or result in adverse effects to the future aesthetic character of these neighborhoods, thus the 2014 LRDP does not contribute to cumulative aesthetic impacts at these campus sites.

The Mission Bay South Redevelopment Plan and the Port of San Francisco’s Waterfront Land Use Plan call for a future mix of land uses and increased density in the Mission Bay area. Development proposed under the 2014 LRDP at the Mission Bay campus site would be designed in accordance with UCSF’s design guidelines to generally be visually consistent with the development patterns and urban environment planned for in the Mission Bay South Redevelopment Plan. The 2014 LRDP would generally be consistent with the Mission Bay South Redevelopment Plan in terms of scale and architectural design, so implementation of the 2014 LRDP would not substantially degrade the existing visual character of the surrounding area, and the visual effects would not be cumulatively considerable.

10.2.4.2 Air Quality
As detailed in Section 5.2 and Sections 7.2 and 8.2, site-specific construction and demolition activities at the Mission Bay and Mount Zion campus sites would have local, significant cumulative impact on air quality. Project construction would be a temporary significant impact at these sites, but could be mitigated through identified measures, including avoiding overlapping construction schedules at the Mission Bay campus site. The impacts would be cumulatively considerable when considered in combination with other construction proposed in the immediate area of each campus site.

Operations under the 2014 LRDP would increase emissions within the San Francisco Bay Area Air Basin which is designated as a non-attainment region for state and federal ozone and particulate matter standards. As stated in Impact AIR-LRDP-5, the increase in non-attainment criteria air pollutant and precursor emissions resulting from operations under the 2014 LRDP would be considered a significant and unavoidable impact because emissions would exceed BAAQMD’s proposed thresholds of significance. In developing its proposed thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project’s individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant
adverse air quality impacts to the region’s existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary (BAAQMD, 2011) and implementation of the 2014 LRDP would be considered to have a significant and unavoidable cumulative impact with respect to air quality.

**Proposed Golden State Warriors Event Center on Blocks 29-32 at Mission Bay.** Given the proximity of the Warriors project site to the UCSF Mission Bay campus site, if construction of large elements of both projects were to occur during the same time frames, the construction emissions of the two projects could have local, significant cumulative impact on air quality. Further, the operations emissions of that Warriors Event Center project would add to the already cumulatively considerable operations emissions from the 2014 LRDP. Because the Warriors EIR analysis has yet to be done, the magnitude of this potential impact is not yet known. Therefore, it is conservatively assumed that this impact may be significant and unavoidable.

### 10.2.4.3 Biological Resources

Implementation of 2014 LRDP proposals would occur at already developed campus sites within an urban setting. Small areas of special or sensitive habitat are present within the City, but not at or in the vicinity of the campus sites for which proposals are included under the 2014 LRDP.

For the most part, the LRDP proposals at the Parnassus Heights campus site are the only ones with potential to adversely affect biological resources. Construction and demolition proposals, as well as open space and utilities activities within and near the Reserve at the Parnassus Heights campus site, could have potentially adverse impacts on special-status wildlife and plant species in the Reserve. However, these impacts are limited to small portions of the campus site, and would be considered less than significant with mitigation.

2014 LRDP proposals at the Mission Bay, Mount Zion or Mission Center campus sites would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Given that all 2014 LRDP actions would take place within the developed urban area of San Francisco, cumulative biological impacts within the City would be less than significant and the contribution from implementation of 2014 LRDP proposals would not result in a significant cumulative impact.

### 10.2.4.4 Cultural Resources

Implementation of the 2014 LRDP could result in the demolition or substantial alteration of historic resources at the Parnassus Height and Mount Zion campus sites. There are no known or reasonably foreseeable projects in the Parnassus Heights or Mount Zion areas that could combine with the loss of the potentially historically significant structures (Surge on the Parnassus Heights campus site and the Hellman building on the Mount Zion campus site) to result in cumulatively significant impacts. The areas surrounding the Mission Bay campus site do not contain significant
cultural resources. Proposed development on the Mission Center campus site is not proximate to the primary grouping of contributors to the potential Showplace Square Heavy Timber and Steel-frame Brick Warehouse and Factory District. Therefore, cumulative impacts to cultural resources are considered less than significant.

10.2.4.5 Geology, Soils and Seismicity

Development under the 2014 LRDP, when combined with other foreseeable development in the vicinity of UCSF campus sites, could result in cumulative impacts with respect to exposure of more people to geologic and seismic hazards. As development projects under the 2014 LRDP are constructed throughout the LRDP horizon, additional people will come onto the campus sites and will be subjected to seismic risks and hazards. While the number of people visiting, living and working on UCSF campus sites will increase, incrementally exposing additional people to seismic and geological hazards over a short term, the construction of new facilities will substantially decrease the individual risks to people and property by upgrading or demolishing older buildings which are seismically unsafe. Older buildings will be seismically retrofitted and newer buildings will be constructed to stricter building codes. Therefore, the 2014 LRDP would not result in significant cumulative impacts on geology, soils and seismicity.

10.2.4.6 Greenhouse Gas Emissions

UCSF has developed a Climate Action Plan, a long-term strategy for voluntarily meeting the State of California’s goal for reducing greenhouse gas (GHG) emissions to 1990 levels by 2020, pursuant to the California Global Warming Solutions Act of 2006 (AB 32). In addition, as part of the 2014 LRDP, UCSF proposes a GHG Reduction Strategy (GHGRS) to provide streamlined analysis under CEQA for future development projects.

Consistent with Appendix G of the CEQA Guidelines, construction and operational GHG emissions related to development at the four affected campus sites under the 2014 LRDP were quantified and assessed relative to thresholds considered by the BAAQMD for impact assessment. Also, the consistency of the 2014 LRDP was qualitatively assessed with respect to applicable state and local plans, policies and regulations adopted for the purpose of reducing GHG emissions. The assessment of potential GHG impact acknowledges the existing CAP and proposed GHGRS as well as the policies and plans of the UC Regents and University of California Office of the President.

BAAQMD considers GHG impacts to be exclusively cumulative impacts; as such, assessment of significance is based on a determination of whether GHG emissions represent a cumulatively considerable contribution to the global atmosphere. The specific impacts found with respect to construction-related greenhouse gas emissions were less than significant with mitigation, while operational emissions were less than significant. Further, implementation of the 2014 LRDP would not conflict with the AB32 Scoping Plan, the UCSF Climate Action Plan, or the UCSF GHGRS, and would therefore be less than significant. Therefore, cumulative impacts of the 2014 LRDP on global climate change and GHG emissions would be less than significant.
10.2.4.7 Hazards and Hazardous Materials

The cumulative hazards and hazardous materials impacts from implementation of the 2014 LRDP, when combined with other foreseeable development in the vicinity of the campus sites would not be cumulatively considerable. Development under the 2014 LRDP would continue the handling, storage, use and transport of hazardous materials and hazardous waste as part of normal operations, which may expand with proposed growth. Hazardous substances would continue to be subject to oversight and regulation by federal, state, and local rules, regulations, and policies. Cumulative development could generate similar types of impacts from the use, storage, transport, and disposal of hazardous materials, as well as construction-related hazardous material impacts, all of which would be highly regulated by federal, state, and local laws. Compliance with all applicable federal, state, and local laws that regulate, control, or respond to hazardous waste, transport, disposal or cleanup would ensure that cumulative impacts from implementation of the 2014 LRDP would be less than significant. On the Mission Bay campus site, continued implementation of the Risk Management Plan would result in additional excavation and disposal of contaminated soil and groundwater in accordance with mitigation measures identified in the Mission Bay Subsequent EIR, but these impacts would be site-specific and therefore would not result in a significant cumulative impact.

10.2.4.8 Hydrology and Water Quality

Implementation of the 2014 LRDP, when combined with other foreseeable development in the vicinity of the campus sites, would not result in cumulatively considerable impacts on water quality or hydrologic resources.

The Parnassus Heights, Mount Zion and Mission Center campus sites are located in a highly urbanized environment that is almost entirely covered with impervious surfaces. Construction activities occurring under the 2014 LRDP coupled with other reasonably foreseeable projects in neighborhoods surrounding these campus sites would therefore not cumulatively increase impervious surface area or increase non-point source urban pollutants resulting in adverse water quality impacts.

Development activities are on-going in Mission Bay and would continue to intensify gradually until buildout is complete in the Mission Bay Redevelopment Area, which surrounds the Mission Bay campus site. Compliance with regulatory requirements and applicable water quality laws, e.g., National Pollution Discharge Elimination System and the City’s Wastewater Master Plan, would ensure that potential cumulative impacts to water quality and hydrology would be less than significant.

10.2.4.9 Land Use and Planning

The Parnassus Heights, Mount Zion and Mission Center campus sites are situated in built-out urban areas surrounded by a mix of land uses. Generally, opportunities for new development are limited, and would require building replacement rather than new construction on undeveloped tracts of land. Potential growth in the vicinity of these three campus site would be limited to the intensification of existing uses rather than a substantial change from established land uses. The
San Francisco General Plan does not propose land use changes that would affect the neighborhoods adjacent to these areas. Existing uses can therefore be assumed during the LRDP horizon. Therefore, the implementation of the 2014 LRDP combined with cumulative growth would not physically divide an established community. No cumulative land use impact is anticipated.

The Mission Bay campus site is surrounded by the Mission Bay Redevelopment South project area, which guides redevelopment of the former industrial area as a mixed-use neighborhood including research and development, biomedical, academic, commercial industrial, office, residential and open space uses. Development under the 2014 LRDP would intensify institutional uses and would also expand residential and open space areas. These uses would be compatible with existing adjacent land uses and with the redevelopment plans for the Mission Bay area; therefore, the cumulative impact would be less than significant.

10.2.4.10 Noise

As detailed in Section 5.10, site-specific construction and demolition activities at each campus site would have a local, significant impact on the noise environment. Project construction would be a temporary significant impact at all proposed project sites. The impacts would be cumulatively considerable in combining with other construction proposed in the immediate area of each proposed demolition or construction proposal.

At the Parnassus Heights campus site, planned activities include the potential simultaneous demolition of the Radiobiology Laboratory, Medical Research 4 building, Surge, and Woods buildings, as well as the construction of new housing at Fifth and Parnassus Avenues. These construction and demolition projects, which could occur concurrently, would lead to a significant cumulative impact on the noise environment in the site vicinity.

At the Mission Bay campus site, proposed construction activities between 2015 and 2019 include new construction at Block 15 housing, Block 33 research building, Block 33/34 parking garage, and the cancer outpatient building. These construction projects, which could occur concurrently, would lead to a significant cumulative impact on the noise environment in the site vicinity.

Project operations would increase noise levels in the area of each campus site. Based on the low levels of noise increases seen in Tables 6.10-5, 7.10-5, 8.10-3, and 9.10-3 for the cumulative traffic plus the project surface traffic, the operations at all four main campus sites would not be cumulatively considerable.

Proposed Golden State Warriors Event Center on Blocks 29-32 at Mission Bay. Given the proximity of the Warriors project site to the Mission Bay campus site, if construction of the Warriors project occurred concurrent with construction of buildings at the campus site, the construction of the Warriors project could add to the potential cumulatively considerable construction noise impact of the 2014 LRDP. Because the Warriors EIR analysis has yet to be done, the magnitude of this potential impact is not yet known. Therefore, it is conservatively assumed that this impact may be significant and unavoidable. Noise from operation of the Golden
State Warriors project would come from building operations and daily activities, as well as daytime and nighttime noise associated with identifiable events. Event noise would include noise from people, the traffic supplying the facility, and traffic carrying people to and from events. Event noise likely could be identifiable even amidst other normal operational noise under the 2014 LRDP. Although noise from specific events may be identifiable as being caused by the event, the associated long-term noise levels may not differ from to noise levels anticipated with office/R&D development under the Mission Bay South Redevelopment Plan, but Warriors project operational noise would increase the cumulative noise levels in the UCSF Mission Bay campus site vicinity. Because the Warriors EIR analysis has yet to be done, the magnitude of this potential impact is not yet known. Therefore, it is conservatively assumed that this impact may be significant and unavoidable.

10.2.4.11 Population and Housing

As discussed in Section 5.11, the 2014 LRDP would accommodate an increase in employment and students at all campus sites from the current approximately 30,840 to approximately 42,270 by 2035, or an increase of about 11,430. Population and housing volumes identified in Section 5.11 were based on Plan Bay Area forecasts through the year 2040, which includes all planned and approved cumulative development and associated population and housing information. The UCSF share of employment growth in San Francisco at the 2014 LRDP horizon in 2035 is approximately 7%; the share of total population associated with UCSF growth under the 2014 LRDP would be less than 2%. Some of the additional population associated with the LRDP would be housed in the approximately 852 new units proposed by UCSF on the Parnassus Heights and Mission Bay campus sites, thereby reducing demand for off-campus housing in San Francisco and the Bay Area. Although implementation of the 2014 LRDP would induce population growth in the Bay Area, the cumulative contribution of UCSF would not be considerable and the impact would be less than significant.

10.2.4.12 Public Services

Development under the 2014 LRDP, when combined with foreseeable growth in the vicinity of the campus sites, could increase the demand for public services. However, this increased demand would not result in the need for new or physically altered facilities, the construction of which could cause significant environmental impacts. The Parnassus Heights, Mount Zion and Mission Center campus sites are located within built-out urban areas. Land use intensification in the vicinity of these campus sites would result in incremental changes to population and the associated demand for public services. As discussed further in Section 5.12, implementation of the 2014 LRDP would result in increased population on UCSF campus sites that could result in corresponding increases in the need for police and fire protection services, as well as public schools. Regarding the Mission Bay campus site, the City is currently constructing a new Public Safety Building at Third Street and Mission Rock Street that will house a new fire station and become the new San Francisco Police Department headquarters, as well as the new Southern District Station. The new station will serve all new development in the Mission Bay area, including the Mission Bay campus site, and is planned to be operational in fall 2014. The 2014 LRDP would not result in demand for public services that would result in the construction of new
or physically altered facilities. Although implementation of the 2014 LRDP would result in increased demand for public services, the cumulative contribution of UCSF would not be considerable and the impact would be less than significant.

10.2.4.13 Recreation

Development under the 2014 LRDP, when combined with cumulative growth in the vicinity of the campus sites, could increase the demand for recreation facilities. However, this increased demand would not cumulatively result in the substantial physical deterioration of such facilities. Population growth at the Parnassus Heights, Mount Zion, and Mission Center campus sites would not be substantial; therefore, demand on existing recreation facilities in combination with cumulative growth in the vicinity of these campus sites would not be significant. Residential growth at the Mission Bay campus site would be served primarily by existing facilities on the campus site in addition to new facilities proposed under the 2014 LRDP, such as the proposed sports field on Block 18C. Therefore, development under the 2014 LRDP, when combined with cumulative growth in the vicinities of the main campus sites, would not result in a significant cumulative impact to recreation.

10.2.4.14 Transportation and Traffic

In addition to foreseeable increases in traffic volumes and transit ridership by 2040 (estimated based on cumulative development and growth identified by the SFCTA SF-CHAMP travel demand model), there are foreseeable changes to the transportation network (roads, intersections, transit service, and bicycle facilities) that will affect potential cumulative impacts. Regarding changes to the transportation network, of note is the transit enhancement treatment visions for Sixteenth Street (two alternatives) under study by the SFMTA, one of which will be selected by the SFMTA Board prior to implementation. The treatments are referred to as the Moderate and Expanded Alternatives in the TEP EIR. The Mission Bay Year 2040 traffic analysis includes both alternatives, referred to (in the TEP EIR) as the Moderate Alternative and Expanded Alternative.

Traffic Conditions

Impact TRAF-MB-C-1: Implementation of the 2014 LRDP on the Mission Bay campus site in combination with foreseeable 2040 traffic volumes would increase traffic at intersections on the adjacent roadway network. (Potentially Significant)

The 2014 LRDP’s contributions to the 2040 traffic conditions would be less than significant for the Parnassus Heights, Mount Zion, and Mission Center campus sites. The 2014 LRDP’s cumulative contributions to the 2040 traffic conditions for the Mission Bay campus site would be potentially significant at the following five intersections (numbered to match intersection numbers in Table 7.14-2):

26. Brannan Street / Seventh Street (PM peak hour)
35. 16th Street / Fourth Street (AM peak hour)
36. 16th Street / Owens Street (AM and PM peak hours)
37. 16th Street / Seventh Street (AM and PM peak hours)
40. 16th Street / Potrero Avenue (AM and PM peak hours)

The 2014 LRDP’s potentially-significant cumulative impacts at the above-cited intersections would be mitigated by the following mitigation measure:

**Mitigation Measure TRAF-MB-C-1: Implement the Moderate Alternative of the TEP Sixteenth Street Proposal.**

The City of San Francisco would implement the TEP Moderate Alternative, which would provide two mixed-flow travel lanes in each direction on Sixteenth Street, thereby maintaining the requisite traffic carrying capacity (and acceptable traffic level of service) on Sixteenth Street for the forecasted traffic demand with the 2014 LRDP in place.

However, implementation of this mitigation measure will require further study and coordination with other agencies for approval and is outside the jurisdiction of UCSF. Therefore, the impacts are considered significant and unavoidable.

**Significance after Mitigation: Significant and Unavoidable**

The following mitigation measures, implemented by UCSF, would lessen the significant and unavoidable impacts, but would not mitigate the impacts to less-than-significant levels:

**Mitigation Measure TRAF-MB-C-2: Implement Additional TDM Strategies to Reduce Single Occupancy Vehicle Trips.**

UCSF shall continue to investigate TDM measures targeted at reducing SOV trips. Although UCSF has already identified those TDM measures it can feasibly implement and has included those measures as part of the proposed 2014 LRDP, more measures may be developed or become evident over the 20-year horizon of the LRDP.

**Mitigation Measure TRAF-MB-C-3: Manage Parking Supply.**

UCSF shall continue to monitor the parking supply at the Mission Bay campus site so as not to oversupply parking at this campus site. Currently there is a downward trend in parking supply at the Mission Bay campus site, as it is expected to grow at a lower rate than total population. Monitoring and reducing the future parking supply per person at the Mission Bay campus site would improve traffic operations along Sixteenth Street by reducing SOV trips to and from the Mission Bay campus site.

However, implementation of these mitigation measures would not be reasonably expected to achieve the required reduction in vehicle trips on Sixteenth Street to lessen the impact to less-than-significant levels. Therefore, the potential impacts are considered significant and unavoidable.

**LRDP Variant.** Traffic conditions associated with the LRDP Variant would be similar to those described for the 2014 LRDP. The LRDP Variant’s contributions to volumes at the critical intersection movements operating poorly (i.e., at LOS E or LOS F) for the intersections operating at LOS E or LOS F under Year 2040 conditions would be approximately 2% higher than those calculated for the 2014 LRDP. All but two of the Mission Bay campus site study intersections would continue to operate at the same levels of service, and have the same impacts (significant or
not) as under 2040 Plus 2014 LRDP conditions. The exceptions (Sixteenth Street / Seventh Street and Mariposa Street / Third Street) are discussed here.

Impact TRAF-MB-C-2: Implementation of the 2014 LRDP with the LRDP Variant on the Mission Bay campus site in combination with foreseeable 2040 traffic volumes would increase traffic at the Sixteenth Street / Seventh Street and the Mariposa Street / Third Street intersections on the adjacent roadway network. (Potentially Significant)

Sixteenth Street / Seventh Street. The LRDP Variant would contribute considerably to the AM peak-hour operations at this intersection under the TEP Moderate Alternative, a significant impact. By comparison, the 2014 LRDP impact would be less than significant under the TEP Moderate Alternative, but significant under the TEP Expanded Alternative.

Capacity-enhancing measures were investigated, but were found to be infeasible because of physical constraints (I-280 freeway support structures) that prohibit further widening of the Sixteenth Street right-of-way, and policy constraints (the City’s Transit First Policy regarding transit and pedestrian environments) that would prohibit the narrowing of sidewalks and/or removal of the Class II bicycle lanes on Sixteenth Street.

Mariposa Street / Third Street. The LRDP Variant would contribute considerably to the AM peak-hour operations at this intersection under both the TEP Moderate and Expanded Alternatives, a significant impact. By comparison, the 2014 LRDP impact would be less than significant at this intersection under both the TEP Moderate and Expanded Alternatives.

Capacity-enhancing measures were investigated, but were found to be infeasible because of policy constraints (the City’s Transit First Policy) that would prohibit the narrowing of sidewalks on Mariposa Street. The following mitigation measure, unique to the LRDP Variant, would be implemented by UCSF:

Mitigation Measure TRAF-MB-C-4: Implement Additional TDM Strategies to Reduce Single Occupancy Vehicle Trips (LRDP Variant)

- UCSF shall continue to investigate TDM measures targeted at reducing SOV trips. Although UCSF has already identified those TDM measures it can feasibly implement and has included those measures as part of the proposed 2014 LRDP, more measures may be developed or become evident over the 20-year horizon of the LRDP.

- UCSF will monitor traffic conditions within and immediately surrounding the Mission Bay campus site. Should traffic conditions approach unacceptable levels, (LOS E or F), and should UCSF’s contribution to this cumulative impact be significant, UCSF shall implement additional TDM strategies that it investigates (beyond those identified in its existing TDM program and beyond those proposed in the 2014 LRDP, as described in Section 5.14) and finds could reasonably result in a reduction in SOV trips. The additional TDM strategies shall target a reduction in SOV trips by encouraging persons to select other modes of transportation, including: walking, bicycling, transit, car-share, carpooling, and/or to travel during non-peak periods.
Significance after Mitigation: Less than Significant at Sixteenth Street / Seventh Street and at Mariposa Street/Third Street. The implementation of this mitigation measure would improve traffic operations surrounding and within the Mission Bay campus site by reducing SOV trips by approximately 5 to 10%, which would represent a 4 to 8% reduction in the overall vehicle trips generated by the campus site. The implementation of this measure by UCSF and the associated 4% reduction in vehicle trips to the Mission Bay campus site would improve traffic operations at Sixteenth Street / Seventh Street from LOS E to LOS D in the AM peak hour and reduce the impacts to less-than-significant levels.

To summarize and compare the traffic impacts of the 2014 LRDP versus the LRDP Variant at the Sixteenth Street study intersections: 1) under the TEP Expanded Alternative, all five study intersections on Sixteenth Street would have significant and unavoidable impacts under either the 2014 LRDP or the LRDP Variant; and, 2) under the TEP Moderate Alternative, all five study intersections on Sixteenth Street would have less than significant impacts under the 2014 LRDP, and four would have less than significant impacts under the LRDP Variant, while the fifth (Sixteenth Street / Seventh Street) would have a significant impact that would be reduced to less than significant by Mitigation Measure TRAF-MB-C-4.

Other 2040 Impacts. The LRDP Variant, similar to the 2014 LRDP, in combination with past, present and reasonably foreseeable development, would have less than significant impacts to transit conditions (Muni, regional, and UCSF and MBTMA shuttle buses), pedestrian conditions, bicycle conditions, loading (commercial and passenger) conditions, and parking conditions.

Proposed Golden State Warriors Event Center on Blocks 29-32 at Mission Bay. In April 2014, the Golden State Warriors (GS Warriors) announced the purchase of 12 acres of land in the Mission Bay South Redevelopment Project Area where the team intends to build a new sports and entertainment center. The GS Warriors have just started the planning and design, and environmental studies, for the new site, so the division of square footage of development allowed for the site among the arena, office, and retail uses has not yet been established. The transportation effects of the GS Warriors development are not yet known, but there is a potential for cumulative transportation impacts associated with the GS Warriors event center. In addition the GS Warriors are in the process of developing as part of the project a Transportation Management Program to address potential transportation impacts of the event center. A qualitative discussion of the potential effects of the development of a Golden State Warriors event center at Mission Bay Blocks 29-32 is presented for general information.

The SF-CHAMP travel demand forecasting model developed in 2013 by the SFCTA and the SF Planning Department and used in this study to estimate future cumulative transportation conditions assumes approximately one million square feet of office/R&D with ground floor retail to occur by the year 2040 within Blocks 29 through 32. As such, the traffic and transit data used in the analysis of cumulative transportation impacts of the 2014 LRDP can be deemed as valid representative of a typical day when no events take place at the proposed arena.

Based on data taken from surveys of SF Giants game attendees, spectators at a sellout game at the new arena could be expected to generate about 3,200 vehicle trips and 8,300 transit trips. Based
on previous data for Piers 30 and 32, the event vehicle and transit demand would be inbound during the evening (starting around 6:00 PM) and outbound late at night (after 10:00 or 10:30 PM) because most games and concerts would start around 7:30 PM and last for 2½ to 3 hours. The exact contribution of the new arena to the PM peak-hour cumulative traffic and transit conditions is not known at this time, as the arena project analysis have just started. In addition, the GS Warriors are in the process of developing as part of the project a Transportation Management Program to address potential transportation project impacts.

Several key intersections in the Mission Bay South Area, such as Sixteenth Street/Third Street, Sixteenth/Seventh/Mississippi streets, Mariposa Street/Third Street, and Seventh Street/Mission Bay Drive, would be expected to operate at a high LOS D by year 2040 during the PM peak hour. Thus, it is possible that an increase in inbound traffic due to an arena event would cause those intersections to degrade to LOS E or F instead of LOS D. If inbound arena event traffic causes significant traffic impacts at these intersections, the contribution of 2014 LRDP traffic, with or without the LRDP Variant, to the cumulative conditions at these intersections would be substantial, and the 2014 LRDP's impact to cumulative traffic impacts would be considered significant. Because the significant impact may not be able to be mitigated to a less than significant level, the cumulative impacts potentially would be significant and unavoidable.

**Transit Conditions.** While there would be a general increase in ridership, the 2014 LRDP would not create excess demand for public transit that would require the development or expansion of mass transit facilities, the development of which would cause significant environmental impacts.

The SFMTA conducted a facilities needs assessment study\(^1\) in 2013. This study determined that many of Muni’s storage, maintenance, and operations facilities are at maximum capacity and not seismically safe and therefore Muni will need to upgrade existing facilities and build new facilities to accommodate transit demand associated with City-wide development.

While the 2014 LRDP would increase ridership on the SF Muni routes serving the four campus sites, this increase in ridership would not exceed the existing or planned capacity of routes serving UCSF. UCSF Transportation Services performs monthly auditing. Should they find that public transit to and from UCSF campus sites does not meet demand, they will adjust shuttle operations (which may include providing additional shuttle service) where necessary to meet demand. Therefore, the 2014 LRDP would not require the expansion or replacement of public transit facilities. If UCSF demand for public transit service requires the construction of facilities that would cause physical impacts, UCSF would contribute its proportionate share towards the cost.

For the above reasons, the 2014 LRDP, in combination with past, present and reasonably foreseeable development in San Francisco, would have less-than-significant cumulative impacts on SF Muni, regional transit, or UCSF shuttle services.

\(^1\) *The SFMTA’s Real Estate and Facilities Vision for the 21st Century* (SFMTA and Parsons Brinckerhoff), January 2013.)
The 2014 LRDP would have less-than-significant cumulative impacts to pedestrian flow and safety, bicycle flow and safety, loading access, and parking.

10.2.4.15 Utilities and Service Systems

Development under the 2014 LRDP, when combined with cumulative growth in the vicinity of the campus sites, could increase the demand for utilities and service systems. The 2014 LRDP would accommodate an increase in employment and students of about 11,400 at LRDP horizon in 2035, which would represent approximately 5% of the growth anticipated in the City by 2040. As discussed in Section 5.15, development at the Parnassus Heights, Mount Zion, and Mission Center campus sites would occur as replacement or in-fill on otherwise built-out sites. The necessary City utilities have sufficient capacities to serve those sites and the proposed 2014 LRDP development. To the extent that cumulative demands on wastewater or stormwater conveyance systems from reasonably foreseeable growth in the City would require the construction of new facilities, such construction may have the potential to cause environmental impacts. In general, impacts would be limited to temporary construction effects.

At the Mission Bay campus site, a significant and unavoidable impact was found because there is a question whether the capacity of the pump station on Block P15 or the Mariposa Pump Station and associated sanitary collection system are adequate to handle flows resulting from 2014 LRDP development at the Mission Bay campus site. UCSF has conservatively concluded that potential improvements to the pump stations may be required that may also result in physical environmental effects. It is not yet known whether other cumulative development, including the Warriors project, would encounter this or other utilities impacts. Therefore, it is conservatively assumed that this impact may be significant and unavoidable.

10.3 Significant Irreversible Environmental Effects

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Generally, a project would result in significant irreversible environmental changes if

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project (e.g., highway improvements that provide access to a previously inaccessible area); or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy)

Development under the 2014 LRDP would intensify uses on UCSF campus sites consistent with development in San Francisco’s urban environment and, for the Mission Bay campus site,
consistent with the *Mission Bay Redevelopment Plan*. The 2014 LRDP would commit future generations to the same land uses for at least the LRDP horizon. Implementing the 2014 LRDP would result in an irreversible commitment of energy resources, primarily in the form of fossil fuels, including fuel oil, natural gas and gasoline or diesel fuel for construction equipment and automobiles during demolition, construction and on-going use of the campus sites.

Development under the 2014 LRDP would comply with the UC Presidents Policy on Sustainable Resources, which requires 20% or better energy performance than California Code of Regulations Title 24 for new construction and renovations, and strives to achieve 30%; requires new laboratory buildings to meet Labs21 Environmental Performance Criteria; and requires all new construction and major renovations to meet a minimum standard of LEED-NC Silver and strive for LEED-NC Gold when possible. Therefore, development under the 2014 LRDP would not use energy in a wasteful, inefficient or unnecessary manner. The consumption or destruction of other non-renewable or slowly renewable resources would also result during construction activities and operations under the 2014 LRDP. These resources include, but are not limited to, lumber, concrete, sand, gravel, asphalt, masonry, metals and water. The 2014 LRDP would also irreversibly use water resources. However, the plan would not involve a large commitment of those resources relative to supply, nor would it consume any of those resources wastefully, inefficiently or unnecessarily.

### 10.4 Growth Inducement

As required by the CEQA Guidelines, an EIR must include a discussion of the ways in which the proposed project could directly or indirectly foster economic or population growth, or the construction of additional housing and how that growth would, in turn, affect the surrounding environment (CEQA Guidelines Section 15126.2(d)). Growth can be induced in a number of ways, including the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in growth unforeseen at the time of project approval. Under CEQA, induced growth is not necessarily considered beneficial, detrimental, or of little significance to the environment.

The 2014 LRDP would not extend utilities or transportation infrastructure to previously undeveloped areas. As discussed in Section 7.15, UCSF is proposing to modify the pump station on Mission Bay Redevelopment Area Block P15. The pump station would be modified without structural or piping modifications by replacing existing pumps with more powerful pumps. These more powerful pumps are physically the same size as the existing pumps and can be connected to the existing discharge piping. Replacement of existing pumps with the proposed more powerful pumps would increase the pump station capacity to 7.34 million gallons per day, which is approximately 0.7 million gallons per day greater than the capacity needed for development under the 2014 LRDP (Freyer & Laureta, Inc, 2013).

The increases in population and intensification of activity at the UCSF campus sites would reinforce existing urban development patterns in San Francisco, concentrating economic activity
in the already-built environment of one of the Bay Area’s central cities. As described in Section 5.11, *Population and Housing*, UCSF’s share of additional employment in San Francisco (including students) in 2035 would be approximately 6%, and its share of population growth would be approximately 5%. The increase in employment associated with the 2014 LRDP would not result in significant increases in regional population or housing demand that could not be accommodated by planned and potential housing supply within the regional market area.

The *Mission Bay Redevelopment Plan* predicates its future buildout on the assumption that UCSF’s development of the Mission Bay campus site would strongly stimulate more biotechnical and related research and development, as well as related retail and commercial business activity within and adjacent to the greater Mission Bay Redevelopment Area, in San Francisco and in the Bay Area region. San Francisco’s land use planning for the Mission Bay area and for adjacent areas has considered and is intended to focus and accommodate the projected development. The *Mission Bay Subsequent EIR* identifies the fact that the *Mission Bay Redevelopment Plan* is not growth-inducing, so it follows that UCSF campus development in general accord with the Plan is also not growth-inducing.