

CHAPTER 6

Alternatives

6.1 CEQA and Development of Alternatives

6.1.1 CEQA Requirements

The California Environmental Quality Act (CEQA) requires an evaluation of the comparative effects of a range of reasonable alternatives to the proposed project that would feasibly attain most of the basic objectives of the proposed project and avoid or substantially lessen one or more of the significant adverse effects of the proposed project, including alternatives that are more costly or could otherwise impede the attainment of the project's objectives (CEQA Section 15126.6).

This chapter reviews the alternatives that were discussed and analyzed in the *2005 EIR*, and considers additional alternatives developed for inclusion in this EIR for the UCSF Medical Center at Mission Bay project.¹ These alternatives are described below, followed by a discussion of their impacts and how the impacts would differ from those of the proposed project. Other alternatives considered but not carried forward for detailed evaluation are also discussed in this chapter.

6.2 Alternatives to the Project

The *2005 EIR*, which is hereby incorporated by reference, discussed and analyzed, at an equal level of detail, a number of hospital replacement scenarios at Mission Bay and Parnassus Heights that, for purposes of CEQA, were alternatives to one another. These "project scenarios" included a 250-bed and 400-bed scenario at the Mission Bay North and South sites, a 650-bed scenario at the Mission Bay South site, and 250 and 400-bed scenarios at the Parnassus East and West sites.

Furthermore, that EIR presented three additional alternatives:

- (1) No Project / No Action Alternative.** This alternative assumed continued development as approved under the 1996 LRDP, with the exception of a new hospital at Mount Zion. Under this alternative, the existing hospital facilities at Moffitt (at Parnassus Heights) and Mount Zion would not be renovated or re-built to meet SB 1953 requirements and instead would be demolished or reprogrammed for other uses. No hospital facilities would be constructed at Mission Bay.

¹ As described in Section 1, Introduction, the LRDP EIR as amended includes the 1996 LRDP EIR, 2002 Amendment #1 SEIR and 2005 LRDP Amendment #2 EIR; however, the facility needs of the Medical Center are addressed in detail in the *2005 EIR* and therefore the *2005 EIR* is specifically referenced in this analysis. The LRDP does not adopt projects, rather makes recommendations regarding development.

- (2) **No Project / Action Alternative.** This alternative would implement all actions approved under the LRDP, including the approved hospital replacement at Mount Zion. This alternative proposed a smaller 250-bed hospital at Mount Zion on the main block (bounded by Sutter Street to the north, Scott Street to the east, Post Street to the south, and Divisadero Street to the west), rather than the 408-bed Mount Zion hospital recommended and analyzed under the 1996 LRDP EIR. Under this alternative, Moffitt Hospital would not be renovated or re-built to meet SB 1953 requirements and instead would be demolished or reprogrammed for other uses. No hospital facilities would be constructed at Mission Bay.
- (3) **Off-Site Alternative - Hospital at Mount Zion South Block.** This alternative proposed the construction of a 250-bed hospital outside of University-owned property on the block south of the Mount Zion main block. The south block is bounded by Post Street to the north, Geary Boulevard to the south, Scott Street to the east and Divisadero Street to the west. Under this alternative, Mount Zion hospital on the main block would not be renovated to meet SB1953 requirements, nor would Moffitt Hospital. Ultimately these facilities would be decommissioned from inpatient use and either demolished or reprogrammed for other uses. No hospital facilities would be constructed at Mission Bay.

The various scenarios and alternatives, including the No Project/No Action and No Project/Action Alternatives, analyzed in the *2005 EIR* continue to be alternatives to the proposed project. The *2005 EIR* analyzed a 650-bed and a 400-bed hospital complex on the Mission Bay South site, the current project site. The 400-bed scenario is similar to the proposed project (*LRDP Phase* of 289 beds and *Future Phase* of 550 beds) and was identified in the EIR as the Environmentally Superior Alternative.

For this UCSF Medical Center at Mission Bay project EIR, additional alternatives are discussed and analyzed, as follows:

- Off-Site Helipad Alternatives
- No Helipad Alternative
- 4th Street Closed to Through Traffic (No 4th Street) Alternative

6.3 Off-Site Helipad Alternatives

Under this alternative, the UCSF Medical Center at Mission Bay would be developed as proposed except that the helipad would be developed off-site. A number of off-site helipad locations were considered, but only two off-site locations in close proximity to the project site are included in this analysis:

- Block 25 on the UCSF Mission Bay research campus; and
- On the western end of 16th Street, either on land, or hypothetically, on a newly-constructed pier.

Block 25 is located on the 43-acre UCSF Mission Bay research campus, owned by the University. The site is directly across 16th Street from the project site, between 3rd and 4th Streets. The site currently contains surface parking and temporary offices of the UCSF Police Department. The LRDP, as amended, identifies Block 25 as future research space, although at this time there is no specific building proposal for this block. The South Plan Area site on the east side of 3rd Street

(not part of the UCSF Mission Bay campus) is approved for a building of up to 160 feet in height. In order to meet FAA obstruction clearance requirements, a helipad on Block 25 would need to be constructed on the roof of a building on the site, at a height of approximately 140 feet, as in the proposed project. Patients would be transported by ambulance from Block 25 to the hospital.

The eastern end of 16th Street is intersected by Terry Francois Boulevard, and adjacent to the intersection is a swath of vacant land, owned by the Port of San Francisco, at the edge of the Bay where the condemned Pier 64 previously existed. There is no pier there currently, but the Port's Waterfront Land Use Plan identifies the site as a future public open space. For purposes of this analysis, it is assumed that a helipad on Port property at the end of 16th Street would be constructed on land at ground level or on a newly constructed pier. Patients would be transported by ambulance from the helipad to the hospital.

Other helipad locations were considered but not included in this EIR for detailed analysis (for more information, see *Section 6.7*)

- Joint-use helipad with San Francisco General Hospital
- Existing Emergency Medical Services Agency (EMS) landing sites
- Hunters Point
- San Francisco International Airport

The 2005 EIR determined that the proposed project would expand emergency services and access to health care, thus resulting in a beneficial impact. Development of an off-site helipad would somewhat lessen this beneficial impact. An off-site helipad location adds risk to the patients being transported, compared to an on-site helipad, due to additional maneuvering and transfer of the patient from the helicopter to a ground ambulance, and from the ground ambulance to the hospital. This secondary transfer also adds time under time-critical conditions, delaying potentially life-saving treatment.

6.3.1 Aesthetics, Visual Quality, and Wind

The proposed project would result in less than significant aesthetic and visual quality (light and glare) impacts in the *LRDP Phase*. In the *Future Phase*, the development of up to two pedestrian bridges spanning 4th Street to connect the eastern portion of the site to the western portion of the site would result in a less than significant impact on a scenic vista. The proposed curved alignment of this segment of 4th Street would terminate the view corridor; nonetheless, the introduction of bridges would alter views for a small segment of 4th Street, a designated view corridor under the Mission Bay South Redevelopment Plan. regarding wind impacts, the proposed project would result in less than significant impacts on pedestrian-level wind speeds.

The development of an off-site helipad would not alter these conclusions. Development of a rooftop helipad, proposed on the northern portion of the project site closest to the UCSF Mission Bay research site, would represent a small component of the project and would have little effect on the overall visual quality and wind impacts of the project. Thus, its absence from the project site would have little consequence. On the other hand, development of a rooftop helipad on Block

25 instead of at the project site would result in a greater visual quality impact in that it would result in a much taller building on Block 25 than currently planned. The UCSF Mission Bay Campus Master Plan and Design Guidelines call for 85-foot-tall buildings on Block 25; however, within the Design Guidelines, up to 10% of the research site can be developed at a height of up to 160 feet. As discussed above, the helipad would need to be constructed at a height of about 140 feet in order to meet FAA obstruction clearance criteria given the potential for a 160-foot-tall building directly across the street from Block 25 on the east side of 3rd Street. Thus, the height of a building on Block 25 would need to be increased to accommodate the rooftop helipad requirements. However, this would be a less than significant impact given that planned nearby buildings would be of similar height, such as the proposed UCSF Medical Center at Mission Bay project (proposed at approximately 105 feet), and the allowed height of the development to the east across 3rd Street (allowed up to 160 feet).

Development of an off-site helipad at the end of 16th Street would require displacement of planned open space or the development of a pier to support the helipad. Developed open space does not exist there currently. Under this alternative, there would be no (or minimal) structure other than a flat paved pad, lights, windcone, and potentially a new pier. While these features would have a somewhat negative effect on visual quality, they would be a small part of the overall visual landscape and would not substantially degrade the visual quality of the site or its surroundings, have a substantial adverse effect on a scenic vista, or adversely affect wind conditions.

6.3.2 Air Quality

Criteria Pollutants

The proposed project would result in significant and unavoidable air quality impacts regarding criteria air pollutants. Similarly, development of a project with an off-site helipad also would result in significant unavoidable impacts on local air quality. This alternative, compared to the proposed project, would not create more air emissions from helicopter operations.

Toxic Air Pollutants

The proposed project would have less than significant impacts regarding toxic air contaminants. However, for the off-site helipad location at the end of 16th Street, given that it would be a ground level location directly adjacent to public open space, it is unclear whether human exposure to close-range air pollutants generated by helicopter operations would represent a significant impact and further analysis would be required if this off-site alternative is pursued.

Greenhouse Gas Emissions

Impacts associated with greenhouse gas emissions would be similar for this alternative as those identified for the proposed project, which were determined to be less than significant.

6.3.3 Helicopter/Aeromedical Flight Safety

This EIR evaluated safety risks regarding helipad operations, and found that risks of death or injury to third parties, and risk of property damage to structures near the project site, resultant from the project, is not zero, but is small enough to be considered less than significant. Impacts regarding the safety of helicopter flights would be similar for an off-site helipad, compared to the proposed project. Any off-site helipad designed for routine use by a medical center must meet FAA criteria for obstruction clearance, and required permits must be obtained. Thus, as with the project, it is anticipated that an off-site helipad location at Block 25 or at the end of 16th Street would have a similarly small risk to the public and that impacts would continue to be less than significant. In addition, an off-site helipad at the end of 16th Street would be slightly farther from existing research and office buildings and from residential uses south of the medical center site. It should be noted that the off-site alternative at the end of 16th Street would require low-level helicopter operations over the water, and aircraft performing these operations should have emergency flotation systems installed.

6.3.4 Land Use and Planning

The proposed project would result in less than significant impacts associated with land use and planning.

Development of an off-site helipad on Block 25 would similarly have a less than significant impact on land use and planning. Block 25 is part of the UCSF Mission Bay research campus, owned by the University. The UCSF Mission Bay Campus Master Plan and Design Guidelines call for 85-foot-tall buildings on Block 25. As discussed, a helipad at this location would need to be constructed at a height of about 140 feet. Although the Contribution Agreement between Catellus and The Regents allows 10% of the campus site to be built up to 160 feet in height, the Campus Master Plan would need to be changed to reflect new heights for Block 25 from the planned 85-feet to the new 140-feet. However, these changes would not represent a substantial incompatibility with the current LRDP and Campus Master Plan and therefore would not be considered a significant environmental effect. (Physical changes, such as aesthetic and noise impacts, are analyzed under the appropriate topic headings.)

Development of an off-site helipad at the end of 16th Street on Port property would result in greater land use and planning impacts than the proposed on-site helipad. Use of property under the jurisdiction of the Port of San Francisco is guided by the Waterfront Land Use Plan, which was adopted in 1997 by the Port Commission. The Port staff has indicated that a hospital helipad is not a Port-related use. Further, helipads have been deemed an unacceptable use under the Waterfront Land Use Plan.² To change that designation would require an amendment to the Plan to

² The Port of San Francisco Waterfront Land Use Plan indicates that heliports are an unacceptable use on piers or within 100 feet of the shoreline, but includes an exception for “landings for emergency or medical services.” According to Port staff, this exception was included in the Plan to accommodate rare usage of the designated San Francisco Emergency Medical Services (EMS) Agency landing site at Pier 32. EMS landing sites are limited to an average of 6 landings per month (California Code of Regulations, Title 21, Section 3527(g)). A UCSF helipad with more frequent usage for interfacility transfers would not be included in this exception. It should be noted that the City has since removed Pier 32 from the list of EMS landing sites.

delete helipads from the list of unacceptable uses. BCDC review and approval would be required, as well.

In addition, the waterfront area at the end of 16th Street is programmed for public open space according to the Waterfront Land Use Plan. A helipad at that location would displace potential future public open space, and would be adjacent to what open space might still be developed. Due to these incompatibilities and the need to amend the Waterfront Land Use Plan, which is outside the jurisdiction of the University of California, this alternative would result in a significant land use and planning impact.

6.3.5 Noise

The proposed project would result in significant unavoidable noise impacts with regard to (1) demolition and construction activities and (2) nighttime helicopter operations. Operational noise impacts would be less than significant. Noise impacts associated with helicopter operations were less than significant using the 24-hour CNEL metric. However, noise impacts associated with nighttime helicopter operations were determined to be significant and unavoidable using the SENEL metric for single-event noise. This determination was conservative for several reasons: (1) there are no Federal or State regulatory standards that establish significance criteria utilizing the SENEL metric; (2) only a few residential buildings located south of the project site fall within the 95dB noise contour; and (3) the analysis does not account for the proposed project buildings that may shield noise from residential buildings south of the project site. Even with mitigation measures to limit the types of landings to incoming interfacility transfers of critically ill patients, to follow the flight paths described in the EIR unless safety precautions require a diversion, to maintain a log of UCSF helicopter activity, and to respond to and investigate UCSF helicopter noise complaints, helicopter noise impacts would be significant and unavoidable.

Development of an off-site helipad on the roof of a building on Block 25 would have similar noise impacts as the proposed project (see Appendix, *Helicopter Noise Analysis for UCSF Mission Bay Hospital Site*, Figures 10, 11 and 15). Block 25 is about 120 feet to the north of the proposed on-site helipad. The nearest residents would be UCSF's housing development on Block 20 located a block to the north, about 600 feet from Block 25. Block 25 is about a quarter mile from residential uses in the Dogpatch neighborhood, farther than the proposed helipad location, but closer to the existing houseboat community along Mission Creek Channel (about a half mile from Block 25 to houseboats) and to future residential uses north of Mission Bay Boulevard North. As with the project, this alternative would result in significant unavoidable construction noise, and operational noise would be less than significant. Helicopter noise impacts using the CNEL metric would be less than significant, and would be significant and unavoidable using the SENEL metric.

An off-site helipad at the end of 16th Street would be located about 500 yards east of the proposed helipad site, and thus would be slightly farther from existing residential uses south of the project site. Under this alternative, construction of the medical center would continue to have significant unavoidable construction noise impacts. Operational noise would be less than

significant. Helicopter noise impacts using the CNEL metric would be less than significant. Helicopter noise impacts using the SENEL metric would be less than significant as no residents would fall within the 95dB noise contour (see Appendix, *Helicopter Noise Analysis for UCSF Mission Bay Hospital Site*, Figures 12, 13 and 16).

6.3.6 Transportation

Parking and circulation impacts associated with construction activities for the proposed project would be significant. However, with the implementation of mitigation measures identified in this EIR, such impacts would be reduced to less than significant levels. A significant traffic impact was identified at 16th/Owens Street in the *Future Phase*, but the impact would be reduced to less than significant levels with the mitigation measure to re-stripe the southbound lanes. A potentially significant traffic impact at the Owens Street/Center Garage Access intersection was identified in the *Future Phase*, but because the amount of parking for the *Future Phase* has not yet been determined and site planning has not begun, it cannot be determined at this time whether the impact would occur. UCSF would monitor this intersection and conduct further environmental review at the appropriate time to determine the significance of this potential impact. All other transportation-related impacts were determined to be less than significant.

Development of an off-site helipad would have no effect on this environmental topic. While an off-site helipad would result in more ambulance trips, the increased number of ambulance transports would be negligible (on average about 1.4 transports per day) and would not affect the conclusions of the traffic analysis.

6.3.7 Utilities

Project impacts associated with utilities, energy and services systems would be less than significant.

Development of an off-site helipad at the end of 16th Street would require utility connections to provide for lighting and any other necessary support facilities. Provision of such connections is not likely to result in a significant impact with regard to utilities.

UCSF believes the off-site helipad alternatives are unacceptable because of additional risks to the patient being transported, compared to an on-site helipad. An off-site helipad would require a secondary transfer of the patient from the helicopter to a ground ambulance, and from the ground ambulance to the hospital, which adds time to the transport and delays potentially life-saving treatment. In addition, during such transfers, patients must be unhooked and rehooked to emergency medical devices, and there is the potential during maneuvers to dislodge medical tubes.

An off-site helipad alternative would not meet the Project Objectives to:

- Continue to strengthen UCSF's position as a leading patient care and health science center;

- Accommodate helicopter access directly to the facility to accept hospital-to-hospital patient transfer;
- Design facilities to incorporate an on-site helipad to facilitate inter-hospital transfers of pregnant women, newborns, infants, and children;
- Locate the helipad so as to avoid transfers of patients from one mode of travel to another (i.e. helicopter to ambulance); and
- Locate the helipad to meet the functional needs of the children's hospital and emergency department and women's hospital.

6.4 No Helipad Alternative

Under this alternative, the UCSF Medical Center at Mission Bay would be developed as proposed except that the helipad would not be constructed. Building height of 140 feet at the northernmost portion of the Outpatient Building to accommodate the helipad would not be necessary. Instead, the building height at this location would be 105 feet, the same as the rest of the proposed project.

6.4.1 Aesthetics, Visual Quality and Wind

The proposed project would result in less than significant aesthetic and visual quality (including light and glare) impacts in the *LRDP Phase*. In the *Future Phase*, the development of up to two pedestrian bridges spanning 4th Street to connect the eastern portion of the site to the western portion of the site would result in a less than significant impact on a scenic vista. The proposed curved alignment of this segment of 4th would terminate the view corridor; nonetheless, the introduction of bridges would alter views for a small segment of 4th Street, a designated view corridor under the *Mission Bay South Redevelopment Plan*. Regarding wind impacts, the proposed project would result in less than significant impacts on pedestrian-level wind speeds.

The No Helipad Alternative would not alter these conclusions. Development of a rooftop helipad, proposed on the northern portion of the project site closest to the UCSF Mission Bay research campus, would represent a small component of the project and would have little effect on the overall visual quality and wind impacts of the project. Thus, its absence from the project site would have little consequence. Aesthetic, visual quality and wind impacts would be less than significant, as with the proposed project.

6.4.2 Air Quality

Criteria Pollutants

The proposed project would result in significant and unavoidable air quality impacts regarding criteria air pollutants. Under this alternative, with no helicopter activity at the project site, criteria air pollutant emissions would be incrementally less than with the proposed project, but still anticipated to be significant and unavoidable.

Toxic Air Pollutants

The proposed project would result in less than significant air quality impacts regarding toxic air contaminants. Under this alternative, with no helicopter activity at the project site, toxic air contaminant emissions would be incrementally less than with the proposed project, and would be less than significant, as with the proposed project.

Greenhouse Gas Emissions

Impacts associated with greenhouse gas emissions would be similar for this alternative as those identified for the proposed project, which were determined to be less than significant.

6.4.3 Helicopter/Aeromedical Flight Safety

This EIR evaluated safety risks regarding proposed project helipad operations, and found that risks of death or injury to third parties and risk of property damage to structures near the project site, resultant from the project, is not zero, but is small enough to be considered less than significant. Under this alternative, helicopter/aeromedical flight safety risks resulting from the proposed project would be zero and would be less than significant, as with the proposed project.

6.4.4 Land Use and Planning

The proposed project would result in less than significant impacts associated with land use and planning. Under this alternative, land use and planning impacts would be less than significant, as with the proposed project.

6.4.5 Noise

The proposed project would result in significant unavoidable noise impacts with regard to (1) demolition and construction activities and (2) nighttime helicopter operations. Operational noise impacts would be less than significant. Noise impacts associated with helicopter operations were less than significant using the 24-hour CNEL metric. However, noise impacts associated with nighttime helicopter operations were significant and unavoidable using the SENEL metric for single-event noise. This determination was conservative for several reasons: (1) there are no Federal or State regulatory standards that establish significance criteria utilizing the SENEL metric; (2) only a few residential buildings located south of the project site fall within the 95dB noise contour; and (3) the analysis does not account for the proposed project buildings that may shield noise from residential buildings south of the project site. Even with mitigation measures to limit the types of landings to incoming interfacility transfers of critically ill patients, to follow the flight paths described in the EIR unless safety precautions require a diversion, to maintain a log of UCSF helicopter activity, and to respond to and investigate UCSF helicopter noise complaints, helicopter noise impacts would be significant and unavoidable.

This alternative would not involve construction of a helipad. Therefore, there would be no project noise impacts from nighttime helicopter operations.

6.4.6 Transportation

Parking and circulation impacts from construction activities for the proposed project would be significant. However, with the implementation of mitigation measures identified in this EIR, such impacts would be reduced to less than significant levels. A significant traffic impact was identified at 16th/Owens Street in the *Future Phase*, but the impact would be reduced to less than significant levels with the mitigation measure to re-stripe the southbound lanes. A potentially significant traffic impact at the Owens Street/Center Garage Access intersection was identified in the *Future Phase*, but because the amount of parking for the *Future Phase* has not yet been determined and site planning has not begun, it cannot be determined at this time whether the impact would occur. UCSF would monitor this intersection and conduct further environmental review at the appropriate time to determine the significance of this potential impact. All other transportation-related impacts were determined to be less than significant.

The No Helipad Alternative would have no effect on this environmental topic.

6.4.7 Utilities

Project impacts associated with utilities, energy, and service systems would be less than significant. This alternative would have no effect on this environmental topic.

UCSF believes the No Helipad Alternative to be unacceptable. Effectively, this alternative represents the status quo, in which UCSF uses the off-site helipad at San Francisco International Airport. As discussed in the Off-Site Helipad Alternatives, the off-site helipads are unacceptable because of additional risks to the patient being transported compared to an on-site helipad. An off-site helipad would require a secondary transfer of the patient from the helicopter to a ground ambulance, and from the ground ambulance to the hospital, which adds time to the transport and delays potentially life-saving treatment. In addition, during such transfers, patients must be unhooked and rehooked to emergency medical devices, and there is the potential during maneuvers to dislodge medical tubes.

6.5 4th Street Closed to Through Traffic (No 4th Street)

As part of the overall Mission Bay South Plan, 4th Street is planned to be extended south of 16th Street to connect with Mariposa Street. This extension of 4th Street would bisect the hospital site and prevent a direct connection between project blocks at the ground level. Under this alternative, the proposed project would be developed without building 4th Street through the site. Instead of carrying through traffic, the street right of way would be developed with two separate permanent loading/dropoff cul-de-sacs which would not connect to each other or to through traffic. Patient access would be provided from Mariposa Street, via the 4th Street right of way, to the Children's, Women's and Cancer hospitals and from 16th Street, via the 4th Street right of way, to the outpatient buildings. In the *Future Phase* under this alternative, the two pedestrian bridges would not be constructed. Instead, the medical center facilities on the east and west

blocks would be connected with a connector building that would span two levels above ground across 4th Street (at levels 2 and 3), while maintaining north/south foot traffic and bicycle traffic at grade.

The impacts of the 4th Street Closed to Through Traffic Alternative would be the same or less than with the proposed project, with the exception that this alternative would result in significant and unavoidable land use impacts, compared to less than significant land use impacts with the proposed project. Impacts specific to this alternative are discussed below.

6.5.1 Aesthetics, Visual Quality, and Wind

The proposed project would result in less than significant aesthetics and visual quality impacts in the *LRDP Phase*. In the *Future Phase*, the proposed project would result in less than significant impacts, including the obstruction of the 4th Street view corridor at the second and third-floor levels with two pedestrian bridges south of 16th Street spanning east to west across 4th Street. The proposed project would result in less than significant impacts on pedestrian-level wind speeds.

Under the No 4th Street Alternative, the connector building would terminate views south of 16th Street in a manner similar to the proposed project bridges (see Figure 6-1).



SOURCE: Anshen + Allen Architects

UCSF Medical Center at Mission Bay / 207192

Figure 6-1
Connector Building Visual Simulation

Under the No 4th Street Alternative, the aesthetics at the pedestrian level could be enhanced over the proposed project conditions because through traffic would not be accommodated and the street right of way could be developed with additional landscaping and plazas that would not be feasible with 4th Street open to through traffic.

Pedestrian level wind speeds would be the same as the proposed project or could be reduced due to the additional landscaping and other fixtures that could provide additional shielding from the wind at the pedestrian level that would not be possible under the proposed project with 4th Street open to traffic.

Therefore, the No 4th Street Alternative would result in similar aesthetic, visual quality, and wind impacts to the proposed project.

6.5.2 Air Quality

Criteria Pollutants

The proposed project would result in significant and unavoidable air quality impacts. The No 4th Street Alternative would result in the same impacts as with the proposed project because there would be no substantial change in the physical facilities as compared to the proposed project and, therefore, the emissions from project operation would be the same. Furthermore, there would be no changes to traffic volumes; therefore, traffic-related emissions would also be the same as with the proposed project.

Toxic Air Contaminants

Impacts associated with toxic air pollutants would be similar for this alternative as those identified for the proposed project because there would be no substantial change in the physical facilities as compared to the proposed project and, therefore, the emissions from project operation would be the same. Furthermore, there would be no changes to traffic volumes; therefore, traffic-related emissions would also be the same as with the proposed project.

Greenhouse Gas Emissions

Impacts associated with greenhouse gas emissions would be similar for this alternative as those identified for the proposed project because there would be no substantial change in the physical facilities as compared to the proposed project and, therefore, the emissions from project operation would be the same. Furthermore, there would be no changes to traffic volumes; therefore, traffic-related emissions would also be the same as with the proposed project.

6.5.3 Helicopter/Aeromedical Flight Safety

The proposed project would result in a less than significant impact. The No 4th Street Alternative would result in the same impacts as compared with the proposed project because there would be no difference in helicopter operations as compared to the proposed project.

6.5.4 Land Use and Planning

The proposed project would result in less than significant land use impacts. As described for the proposed project, the MOU between UCSF and the SFRA includes a scenario where, in the *Future Phase*, direct pedestrian access and/or utility system connections between structures on Blocks 36 and X3 to the east and structures on Blocks 38 and 39 to the west could be established. In the MOU, the parties agreed that UCSF may propose a dedicated means of connecting buildings under, on and/or over 4th Street, subject to approval by the required governmental agencies. However, in the case of the No 4th Street Alternative, the University would need to acquire the 4th Street right of way from the CCSF, and obtain a variety of approvals from the SFRA, including an amendment of the Redevelopment Plan to remove 4th Street between 16th and Mariposa Street from the street grid. In addition, amendments to existing plans and policies of the CCSF and the State Lands Commission (regarding its designation as a public trust parcel) would be needed before proceeding with implementation of this alternative. Because the No 4th Street Alternative would not be consistent with these plans at present and would require changes to the plans which is out of the control of the University, this Alternative would result in a significant unavoidable land use impact. Thus, land use impacts under this alternative would be greater than with the proposed project.

6.5.5 Noise

The proposed project would result in significant construction and operational noise impacts that would be reduced to less than significant levels with mitigation. Helicopter noise would be less than significant using the CNEL noise metric, but significant and unavoidable using the SENEL noise metric. The No 4th Street Alternative would result in the same or similar impacts as compared with the proposed project because there would be little difference in operations as compared to the proposed project.

6.5.6 Transportation

Parking and circulation impacts from construction activities for the proposed project would be significant. However, with the implementation of mitigation measures identified in this EIR, such impacts would be reduced to less than significant levels. A significant traffic impact was identified at 16th/Owens Street in the *Future Phase*, but the impact would be reduced to less than significant levels with the mitigation measure to re-stripe the southbound lanes. A potentially significant traffic impact at the Owens Street/Center Garage Access intersection was identified in the *Future Phase*, but because the amount of parking for the *Future Phase* has not yet been determined and site planning has not begun, it cannot be determined at this time whether the impact would occur. UCSF would conduct project-level CEQA review at the time the *Future Phase* development is considered for approval. In addition, in order to determine the need for LOS improvements on Owens Street, such as a traffic signal, UCSF would participate in the periodic update of the Mission Bay trip triggers survey and UCSF would conduct periodic on site parking surveys to monitor medical center parking access and circulation. Updated information regarding parking needs and potential traffic and circulation impacts would be analyzed further in

the next LRDP EIR and in the project-specific environmental review of the *Future Phase* project. If a traffic signal appears to be required to meet LOS standards, the University would be obligated to mitigate the impact.

- Although not required as mitigation for the proposed project, the proposed project would voluntarily implement in the *LRDP Phase* certain traffic improvement measures identified in Section 4-6, *Transportation and Traffic*, which would already be in place by the time the *Future Phase* development is considered for approval. These measures include an additional southbound right-turn lane on Third Street at Mariposa Street, an additional center turn lane on Owens Street and the Center Garage Access, an additional southbound left turn traffic lane on Owens at the South Garage Access intersection, and an additional northbound left turn lane on Owens at 16th Street.

Under the No 4th Street Alternative, Figures 6-2 and 6-3 show the Site Plan Circulation diagrams in the *LRDP Phase* and the *Future Phase* of the project with 4th Street closed to through traffic and development of two cul-de-sacs, the “north access road” and the “south access road.” As shown diagrammatically in these Figures, a combination of Class I (separate right of way for the exclusive use of bicycles) and Class II (striped bicycle lane adjacent to the traffic lane within the street right-of-way) bicycle facilities would connect 16th and Mariposa Streets following a north-south alignment. Bicycle lanes (Class II) would be provided between 16th Street and the north access road and between the south access road and Mariposa Street. A dedicated path (Class I) for the exclusive use of bicyclists would connect the north and south access roads through the center of the UCSF Medical Center complex.

Intersection Operating Conditions

The 10 intersections analyzed under proposed project conditions (see *Section 4.6*) were evaluated assuming implementation of the No 4th Street Alternative. In addition, the intersections that would be created where the South and North Access Roads would intersect Owen Street were also analyzed.

- Mariposa St. / 3rd St
- Mariposa St. / Minnesota St.–4th St.
- Mariposa St. / I-280 NB off-ramp–Owens St.
- Mariposa St. / I-280 SB on-ramp
- 7th St./Commons
- 16th St. / 3rd St.
- 16th St. / 4th St.
- 16th St./7th St./Mississippi St.
- 16th St. / Owens St.
- Owens Street / North Access Road
- Owens Street / Center Garage Access
- Owens Street / South Access Road

