UCSF 2014 Long Range Development Plan

Building on 150 Years: UCSF Plans for 2035

November 2014
Updated to reflect LRDP Amendments #1–#7 (through January 2021)
Tejal Desai, PhD, Professor, Department of Bioengineering and Therapeutic Sciences, in the UCSF School of Medicine.
1 EXECUTIVE SUMMARY

Executive Summary .................................................. 3

2 PLANNING CONTEXT

2.1 Purpose of the LRDP ............................................. 11
2.2 UCSF Overview .................................................. 12
2.3 UCSF Historic Development ................................. 15
2.4 UCSF Long Range Development Plans ....................... 17
2.5 UCSF Physical Design Framework ......................... 18
2.6 UCSF Academic and Clinical Programs ..................... 19
   2.6.1 Schools ...................................................... 19
2.6.2 Graduate Division .......................................... 22
2.6.3 Research ..................................................... 22
2.6.4 Patient Care .................................................. 22

2.7 LRDP Planning Process ........................................... 24
   2.7.1 Summary of Planning Process ........................... 24
   2.7.2 Campus Participation ....................................... 24
   2.7.3 Community Participation ................................. 25

3 LRDP FRAMEWORK

3.1 LRDP Objectives .................................................. 29
   3.1.1 Objective 1: Respond to the City and Community Context ............................... 30
   3.1.2 Objective 2: Accommodate UCSF’s Growth Through 2035 ................................. 31
   3.1.3 Objective 3: Ensure UCSF’s Facilities are Seismically Safe ............................... 31
   3.1.4 Objective 4: Promote Environmental Sustainability ........................................ 32
   3.1.5 Objective 5: Minimize Facility Costs ......................................................... 33
3.2 Plan Elements ...................................................... 36
   3.2.1 Land Use ...................................................... 36

3.2.2 Open Space ..................................................... 38
   3.2.3 Circulation, Transportation, and Parking ................................................. 38
   3.2.4 Utilities and Other Infrastructure ................................................... 38

3.3 LRDP Existing and Proposed Space Program .................. 39
   3.3.1 Existing Space and Buildings Under Construction ......................................... 39
   3.3.2 Proposed Space Program ....................................... 40

3.4 Existing and Projected Population .................................. 43

3.5 Community Planning Principles ................................... 44
   3.5.1 Background ................................................... 44
   3.5.2 Overarching Principles ......................................... 44

3.6 Measurement And Accountability .................................. 66

4 PARNASSUS HEIGHTS\1

4.1 Existing Setting .................................................... 49

4.2 Parnassus Heights Site-Specific Objectives .................... 50

4.3 The Comprehensive Parnassus Heights Plan ................. 50

4.4 Parnassus Heights Plan Elements ............................... 52
   4.4.1 Land Use .................................................... 52
   4.4.2 Open Space .................................................. 57
   4.4.3 Circulation, Transportation, and Parking ........................................... 58
   4.4.4 Utilities And Other Infrastructure ........................................ 61

4.5 Regents’ Resolution Regarding the Parnassus Heights Campus Site ......................... 62

4.6 Measurement And Accountability .................................. 66

\1 Updated to reflect LRDP Amendment #7.
# TABLE OF CONTENTS

## MISSION BAY

5.1 Existing Setting .......................................................... 71
5.2 Existing Planning Agreements ......................................... 75
  5.2.1 Mission Bay North and South Redevelopment Area Plans ........ 75
  5.2.2 Agreements Related to the North Campus ...................... 75
  5.2.3 Agreements Related to the South Campus ..................... 75
  5.2.4 Agreements Related to the East Campus ....................... 75
  5.2.5 Mission Bay Community Planning Principles ................. 77
5.3 Mission Bay Site-Specific Objectives ................................ 78
5.4 Mission Bay Plan Elements ............................................ 79
  5.4.1 Land Use ............................................................ 79
  5.4.2 Open Space ....................................................... 82
  5.4.3 Circulation, Transportation, and Parking ...................... 82
  5.4.4 Utilities and Other Infrastructure ................................. 82
  5.4.5 Block 14 School Site ............................................ 82
5.5 Population ............................................................... 86

## MOUNT ZION

6.1 Existing Setting .......................................................... 89
6.2 Mount Zion Site-Specific Objectives ................................. 91
6.3 Mount Zion Plan Elements ............................................. 92
  6.3.1 Land Use ............................................................ 92
6.4 Population ............................................................... 98

## SAN FRANCISCO GENERAL HOSPITAL

7.1 Existing Setting .......................................................... 101
7.2 SFGH Planning Efforts .................................................. 103

## VETERANS AFFAIRS MEDICAL CENTER

8.1 Existing Setting .......................................................... 107
8.2 SFVAMC Planning Efforts ............................................... 108

## SMALLER OWNED SITES

9.1 Mission Center ............................................................ 111
  9.1.1 Existing Setting ..................................................... 111
  9.1.2 Mission Center Plan Elements .................................... 111
  9.2 654 Minnesota Street ................................................. 116
  9.3 Buchanan Dental Center ............................................... 116
  9.4 Hunters Point .......................................................... 117
  9.5 Oyster Point ............................................................ 118
9.6 UCSF Fresno Center for Medical Education and Research ....... 119
9.7 2130 Third Street ......................................................... 120
9.8 Minnesota Street Housing .............................................. 120
9.9 2130 Post Street ........................................................ 120
9.10 777 Mariposa ............................................................ 120

---

2 Added by LRDP Amendment #3.
3 Added by LRDP Amendment #4.
4 Added by LRDP Amendment #5.
5 Added by LRDP Amendment #6.
10 LEASED SITES

10.1 Space Leased By UCSF ........................................ 123
10.2 Leases Within 1/4 Mile of a Main Campus Site .................. 124
10.2.1 Parnassus Heights .......................................... 124
10.2.2 Mission Bay .............................................. 124
10.3 Leases Farther Than 1/4 Mile from a Main Campus Site ....... 125
10.3.1 San Francisco ............................................. 125
10.3.2 Emeryville ............................................... 126

11 CROSS-CAMPUS SUPPORT

11.1 Housing ....................................................... 129
11.1.1 Existing Setting ........................................... 129
11.1.2 Proposed Plan ............................................ 130
11.2 Child Care ..................................................... 132
11.2.1 Existing Setting ........................................... 132
11.2.2 Proposed Plan ............................................ 132
11.3 Transportation ............................................... 133
11.3.1 UCSF Transportation Demand Management (TDM) Program ........................................ 133
11.3.2 UCSF Shuttle System .................................... 133
11.3.3 Bicycles .................................................... 134
11.3.4 Parking ..................................................... 134
11.3.5 Loading .................................................... 136
11.4 Food Service ................................................... 136
11.5 Recreation and Fitness ........................................ 137
11.6 Public Safety ................................................... 137
11.7 Information Technology ....................................... 138

12 ACKNOWLEDGEMENTS

12.1 Contributors ................................................... 141
12.2 Photo Credits .................................................. 145

APPENDICES

Appendix A: Existing And Proposed Space Program6 .......... 149
Appendix B: Buildings by Campus Site ............................ 151
Appendix C: 1987 Memorandum of Understanding ............... 155
Appendix D: Community Planning Principles ....................... 157
Appendix E: UCSF Climate Action Plan & Greenhouse Gas Reduction Strategy7 ........................................ 161
Appendix F: References ............................................. 195

6 Updated to reflect LRDP Amendment #6 and LRDP Amendment #7.
7 Updated to reflect LRDP Amendment #7.
TABLE OF CONTENTS

TABLES

Table 1: Summary of LRDP Proposals\textsuperscript{8} ..................... 6
Table 2: Departments & Organized Research Units by School...................... 21
Table 3: Predominant & Secondary Uses in Functional Zones ....................... 37
Table 4: Existing & Projected Enrollment ........................................... 41
Table 5: Existing & Projected Population ............................................. 43
Table 6: Parnassus Heights Existing and Projected Average Daily Population\textsuperscript{9} .................. 65

(The is no Table 7)\textsuperscript{10}
Table 8: Existing & Proposed Campus Housing ..................... 131
Table 9: Campus Housing Goals – Status as of 2014 .............................. 131
Table 10: Additional Housing Needed to Meet Campus Housing Goals by 2035 ............... 131
Table 11: Existing & Proposed Child Care ........................................... 132
Table 12: Existing & Proposed Parking Facilities ................................. 135

FIGURES

Figure 1: UCSF Locations\textsuperscript{11} ............................................... 14
Figure 2: UCSF Existing Academic & Clinical Configurations ..................... 20
Figure 3: Existing Space at All Sites in 2014 ........................................ 39
Figure 4: Proposed Space at All Sites in 2035 ....................................... 40
Figure 5: CPHP Districts\textsuperscript{12} .................................................. 51
Figure 6: Parnassus Heights Proposed Functional Zones\textsuperscript{13} .............. 53
Figure 7: Parnassus Heights Proposed Building Demolitions\textsuperscript{14} .......... 54
Figure 8: Parnassus Heights Proposed Open Space Plan\textsuperscript{15} .................. 56
Figure 9: Parnassus Heights Proposed Circulation Plan\textsuperscript{16} .................. 59
Figure 10: Parnassus Heights Proposed Parking & Loading Plan ................. 60
Figure 11: Parnassus Heights Planning Agreements\textsuperscript{17} ...................... 63
Figure 12: Mission Bay 1996 LRDP Functional Zones (as Amended) ............ 72
Figure 13: Mission Bay Existing Ownership & Leases\textsuperscript{18} .................. 73

Figure 14: Mission Bay Planning Agreements\textsuperscript{20} .......................... 76
Figure 15: Mission Bay Proposed Functional Zones\textsuperscript{21} ..................... 80
Figure 16: Mission Bay Proposed Open Space Plan ................................... 83
Figure 17: Mission Bay Proposed Circulation Plan .................................. 84
Figure 18: Mission Bay Proposed Parking & Loading Plan ......................... 85
Figure 19: Mount Zion Existing Ownership & Leases ................................ 90
Figure 20: Mount Zion Proposed Functional Zones .................................. 93
Figure 21: Mount Zion Proposed Open Space Plan ................................. 95
Figure 22: Mount Zion Proposed Circulation Plan ................................... 96
Figure 23: Mount Zion Proposed Parking & Loading Plan ......................... 97
Figure 24: San Francisco General Hospital Existing Conditions .................. 102
Figure 25: Mission Center Building Proposed Plan .................................. 112

(There is no Figure 26)\textsuperscript{22}
Figure 27: Hunters Point Existing Conditions ....................................... 117
Figure 28: Oyster Point Existing Conditions ......................................... 118
Figure 29: Fresno Location Map ......................................................... 119

\textsuperscript{8} Updated to reflect LRDP Amendment \#7.
\textsuperscript{9} Ibid.
\textsuperscript{10} Updated to reflect LRDP Amendment \#6.
\textsuperscript{11} Updated to reflect LRDP Amendment \#3, LRDP Amendment \#4, LRDP Amendment \#5, and LRDP Amendment \#6.
\textsuperscript{12} Updated to reflect LRDP Amendment \#7.
\textsuperscript{13} Ibid.
\textsuperscript{14} Ibid.
\textsuperscript{15} Ibid.
\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid.
\textsuperscript{18} Ibid.
\textsuperscript{19} Updated to reflect LRDP Amendment \#3 and LRDP Amendment \#4.
\textsuperscript{20} Ibid.
\textsuperscript{21} Updated to reflect LRDP Amendment \#1 and LRDP Amendment \#2.
\textsuperscript{22} Updated to reflect LRDP Amendment \#6.
EXECUTIVE SUMMARY
This is the 2014 Long Range Development Plan (LRDP) for UC San Francisco. The LRDP is a comprehensive physical land use plan intended to guide UCSF’s growth and other physical changes through the year 2035, applying specific strategies to achieve the academic, clinical, and research missions of the university. The LRDP estimates overall growth in square footage and population, and provides guidance for the siting of individual projects in the future.

The LRDP, if fully implemented over the next 20 years, would result in an additional 2.39 million gross square feet (gsf) in owned and leased buildings, for a total of 11.56 million gsf across all UCSF’s sites. The 11.56 million gsf includes 1.13 million gsf that is currently under construction at the Mission Bay campus site. The majority of the LRDP increase in capacity is proposed for clinical and research use, followed by campus housing. A substantial amount of support space is also proposed, along with a modest amount of new instruction area. The LRDP proposes to accommodate most of this growth in new buildings at the Mission Bay campus site, where there is undeveloped land available and infrastructure planned to support such growth. Additional space in new buildings is proposed at the Parnassus Heights, Mount Zion, and Mission Center campus sites. At Parnassus Heights and Mount Zion, some existing buildings would need to be demolished to allow for new construction. A general description of how this growth is distributed is outlined below.

New clinical space would be distributed among the Parnassus Heights, Mission Bay, and Mount Zion campus sites so as to maintain or improve operational efficiency and enhance adjacencies with related research programs. Clinical space would be developed at Parnassus Heights related to adult inpatient services, UCSF’s professional schools, and outpatient and research programs located at this site. The Mission Bay campus site would add clinical capacity related to children’s, women’s, or cancer outpatient services. Clinical space would be developed at Mount Zion related to existing outpatient services and research programs already located there. Some outpatient services also would be relocated to Mount Zion from other campus sites to further strengthen that site as an outpatient hub.

New research space would be developed at Mission Bay and possibly Mount Zion. In addition, a new research building is being considered at San Francisco General Hospital and Trauma Center (SFGH) to provide seismically safe space for UCSF employees there. Classroom instruction is expected to remain primarily at Parnassus Heights; therefore, some new instruction space is expected there, as well as some at Mission Bay and Mount Zion, to support overall growth. Support spaces would be developed as secondary uses where needed, and at Mission Center if UCSF determines that more support space is required.

New campus housing would be developed at Parnassus Heights and at Mission Bay. Housing proposed at Parnassus Heights and Mission Bay would help strengthen campus life for the residents at these two sites and reduce commute traffic, among other benefits.

New parking is proposed at the Mission Bay, Mount Zion, SFGH, and Mission Center sites to support program expansion at those locations. In addition, existing Transportation Demand Management programs will be expanded to further enhance and encourage alternatives to single-occupancy vehicles. New open space is envisioned at all the campus sites where new development is planned, other than SFGH.

During the horizon of this LRDP, UCSF is also considering reducing the number of its overall sites, both leased and owned, in an effort to improve operational efficiency, collaboration, and programmatic flexibility, and to reduce the cost of reinvestment. UCSF is reviewing its long-term occupancy of the Laurel Heights campus site and could potentially discontinue its use. Because no change in UCSF uses at Laurel Heights is contemplated in the short-term, and because this option is subject to a separate planning process, still underway, it is not addressed in this LRDP. UCSF also will consider the termination of the uses of its smaller outlying sites at Hunters Point and Oyster Point (South San Francisco), along with the non-renewal of leases, for the same reasons.

LRDP proposals for the Parnassus Heights campus site advance UCSF’s work toward compliance with the 3.55 million gsf space ceiling, compliance with state seismic laws (California Senate Bill 1953, an amendment to the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983 [Alquist Seismic Safety Act]) through the decommissioning of Moffitt

---

1 “Gross Square Feet” is the sum of all areas on all floors of a building within the exterior walls. However, this excludes any covered unenclosed space like balconies. Note: With the exception of Appendix B, which gives raw data, gsf numbers throughout the LRDP are rounded to the nearest 100 (with numbers greater than 1 million rounded to the nearest 2nd decimal place [e.g., 2.39 million]) unless otherwise noted.

2 Although the potential new building is discussed in this LRDP, UCSF does not currently own any space at SFGH, and environmental review for the new building that is under consideration at SFGH is to occur separately from the LRDP EIR.

3 A list of references is provided (with sources) in Appendix F: References.
Hospital as an inpatient facility and construction of a new addition to Long Hospital, and further measures to reduce traffic, parking, and loading impacts.

The total population across all campus sites is anticipated to increase by about 14,900, from 39,400 to 54,300, within the time horizon of this LRDP. UCSF’s population includes students, clinical residents, faculty, staff, postdoctoral scholars, patients, and visitors.

In preparing the LRDP, UCSF explored in detail a variety of potential projects for each campus site. The proposed LRDP accommodates potential projects, while also providing flexibility for other ways of accommodating programmatic needs as they may evolve over time. All proposed square footage under the LRDP is subject to funding availability and environmental evaluation pursuant to the California Environmental Quality Act (CEQA). Approval of the LRDP by the Board of Regents of the University of California (Regents) represents an endorsement of the overall land use plan for UCSF at main campus sites. Subsequent to approval of the LRDP, individual projects implementing the LRDP will be separately proposed and evaluated under CEQA as funding is identified and then the projects are brought forward for approval.

The LRDP proposals contained herein represent the current list of activities anticipated by the campus to be proposed as part of implementing the LRDP, and do not reflect project approval or a financial commitment to any of these projects. UCSF’s Capital Financial Plan, which is updated annually, will provide a rolling ten-year picture of financial planning for UCSF’s capital program, and will serve as a roadmap for specific capital projects to be brought forward for approval as project details are developed and funding is secured. While the specific projects to implement the LRDP will change over time, projects are expected to be consistent with the functional zone maps and space and population projections contained in the LRDP.

A project is generally found to be in conformance with the LRDP if the proposed land use is consistent with established land use designations and complies with the five LRDP objectives listed on the next page.
# Executive Summary

## Objective 1: Respond to the City and Community Context

UCSF operations and growth impact the local communities in which UCSF is located. UCSF seeks to employ strategies for working towards compliance with the space ceiling at Parnassus Heights, managing traffic and parking impacts, and addressing other issues that have been raised by the community. Other strategies involve future buildings, open space improvements, and other proposals in which the community is expected to have an interest in planning and design.

## Objective 2: Accommodate UCSF’s Growth Through 2035

The LRDP proposes new buildings and infrastructure expansion to accommodate UCSF’s growth in instruction, research, clinical, support, and housing space through 2035. As explained in Chapter 3, the total amount of building space proposed at the Mission Bay, Mount Zion, and Mission Center campus sites is more than what may actually be needed through the LRDP horizon, but the projected square footage represents the amount which could be accommodated at the sites should UCSF be successful in funding all of this space.

## Objective 3: Ensure UCSF’s Facilities Are Seismically Safe

UCSF needs to comply with the University of California’s Seismic Safety Policy to provide an acceptable level of earthquake safety in campus buildings, and with the Alquist Seismic Safety Act. State law requires inpatient facilities to be structurally sound and reasonably capable of offering uninterrupted service after an earthquake. Compliance will require building renovations and demolitions, as well as construction of new buildings.

## Objective 4: Promote Environmental Sustainability

As part of UCSF’s commitment to responsible stewardship of its physical resources and compliance with the UC Sustainable Practices Policy, LRDP project proposals will be evaluated for their environmental sustainability. A number of strategies will be implemented to achieve the goal of reducing UCSF’s greenhouse gas emissions over the life of the LRDP, with an emphasis on sustainable growth and traffic mitigation. This includes further Transportation Demand Management measures and more campus housing. UCSF also proposes to create additional open space to enhance the physical environment.

## Objective 5: Minimize Facility Costs

In light of shrinking financial resources and the rising cost of construction, maintenance, and operations, the LRDP emphasizes the need for investment in existing facilities. UCSF has a large inventory of old buildings with a significant backlog of deferred maintenance and renewal projects, as well as a growing number of new buildings that will soon begin to require more maintenance. To help minimize facility costs, the LRDP promotes UCSF’s policy to optimize the use of existing and new space. It also proposes consolidating staff currently located in leased and remote sites to reduce operating and occupancy costs, improve efficiency and collaboration, and provide greater programmatic flexibility among its campus sites.
## Table 1: Summary of LRDP Proposals

<table>
<thead>
<tr>
<th>LRDP PROPOSALS</th>
<th>LRDP OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Responds to the City and Community Context</td>
</tr>
<tr>
<td>PARNASSUS HEIGHTS</td>
<td>√</td>
</tr>
<tr>
<td>Demolish the Surge, Woods, Environmental Health and Safety (EHS), Kirkham Child Care, Lucia Child Care, Dental Clinics, UC Hall, Langley Porter Psychiatric Institute (LPP), Mechanical Annex, Koret Vision Research (Koret), School of Nursing, Proctor, and Aldea Housing buildings, and the Millberry Union East and West Towers</td>
<td></td>
</tr>
<tr>
<td>Construct a new hospital building adjacent to Long Hospital, and renovate and reuse Moffitt Hospital</td>
<td>√</td>
</tr>
<tr>
<td>Construct a new Research and Academic Building on the site of UC Hall as well as additional research facilities to the west and south of the UC Hall site</td>
<td>√</td>
</tr>
<tr>
<td>Improve the connection between Irving Street and Parnassus Avenue through an Irving Street Arrival project with vertical transportation</td>
<td>√</td>
</tr>
<tr>
<td>Develop new campus housing (densify Aldea Housing and construct new housing in the West Side district)</td>
<td>√</td>
</tr>
<tr>
<td>Construct a new child care facility on the site of the current Proctor building and/or at Aldea</td>
<td>√</td>
</tr>
<tr>
<td>Complete the conversion of Fifth Avenue houses to faculty housing</td>
<td>√</td>
</tr>
<tr>
<td>Seismically retrofit the Faculty Alumni House</td>
<td>√</td>
</tr>
<tr>
<td>Renovate the Parnassus Avenue level of Millberry Union, including the top deck of the Millberry Union garage to provide a public open space (Millberry Terrace)</td>
<td>√</td>
</tr>
<tr>
<td>Maintain the designation of the Mount Sutro Open Space Reserve as permanent open space, including adjustment to the Reserve boundary while maintaining a minimum of 61 acres in the Reserve</td>
<td>√</td>
</tr>
<tr>
<td>Continue to manage the Mount Sutro Open Space Reserve, and create new/restored trails</td>
<td>√</td>
</tr>
<tr>
<td>Renovate Saunders Court and enhance circulation through the inclusion of a pedestrian-oriented Promenade that opens views and access to the west side of campus</td>
<td>√</td>
</tr>
<tr>
<td>Implement the Parnassus Avenue Streetscape Plan</td>
<td>√</td>
</tr>
<tr>
<td>Manage UCSF traffic by enhancing Transportation Demand Management (TDM) programs</td>
<td>√</td>
</tr>
<tr>
<td>Manage congestion through parking and loading improvements, including a Service Corridor and additional off-street loading areas</td>
<td>√</td>
</tr>
<tr>
<td>Install a new signal at the loop exit for the New Hospital drop-off and at Parnassus Avenue and Fifth Avenue and/or Fourth Avenue, if future traffic conditions warrant it</td>
<td>√</td>
</tr>
<tr>
<td>Consider impacts on neighborhood street parking when developing new housing</td>
<td>√</td>
</tr>
<tr>
<td>Re-establish Fourth Avenue on the south side of Parnassus Avenue</td>
<td>√</td>
</tr>
<tr>
<td>Develop a bridge across, and tunnel beneath, Parnassus Avenue associated with the New Hospital</td>
<td>√</td>
</tr>
</tbody>
</table>

1 Parnassus Heights LRDP Proposals amended by Long Range Development Plan Amendment #7.
Table 1: Summary of LRDP Proposals (continued)

<table>
<thead>
<tr>
<th>LRDP PROPOSALS</th>
<th>LRDP OBJECTIVES</th>
<th>Responds to the City and Community Context</th>
<th>Accommodates UCSF’s Growth Through 2035</th>
<th>Ensures UCSF’s Facilities are Seismically Safe</th>
<th>Promotes Environmental Sustainability</th>
<th>Minimizes Facility Costs</th>
<th>Other Primary Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISSION BAY</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop additional research capacity (Blocks 16, 18A, 23A, and 25B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop new housing (Block 15)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Phase 1 of the Medical Center (South Campus)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expand the Mission Bay campus site to include Blocks 33 and 34 (East Campus)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop additional open space (Blocks 15, 16, and 23A)</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop outdoor recreation space (Block 18C)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop additional structured parking (Block 18B)</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete the street network</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase bicycle and motorcycle parking capacity</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOUNT ZION</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renovate and reuse the existing hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolish the Hellman, Harold Brunn Institute, and Dialysis Center buildings</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct new clinical and/or research space</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retrofit or demolish the building at 2255 Post Street</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop open space</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide additional parking</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAN FRANCISCO GENERAL HOSPITAL</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct a new research building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISSION CENTER</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop a new building, structured parking, and open space</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAUREL HEIGHTS</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinvest in existing facilities, or relocate functions and sell or lease property</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>654 MINNESOTA STREET</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue programs and uses in existing building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUCHANAN DENTAL CENTER</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue clinic in existing building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUNTERS POINT</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinvest in existing facilities, or relocate functions and relinquish property</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OYSTER POINT</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinvest in existing facilities, or relocate functions and relinquish property</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRESNO CENTER FOR MEDICAL EDUCATION AND RESEARCH</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue programs and uses in existing building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEASES</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where and when possible and appropriate, relocate occupants into UCSF-owned space</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UCSF 2014 FINAL LRDP 7
CHAPTER OVERVIEW

The LRDP consists of 12 chapters, including this Executive Summary, plus several appendices. Chapter 2 provides an overview of UCSF's regional and national importance, historic development, and academic, research, and clinical programs. It also summarizes prior LRDPs and describes the relationship between this LRDP and UCSF’s 2010 Physical Design Framework. Chapter 3 contains further explanation of the five LRDP Objectives, which are designed to provide overarching guidance for UCSF's physical development and enable the evaluation of future projects for general conformance with the LRDP. The five LRDP Objectives also are included in Table 1 (previous pages), which shows how each LRDP proposal addresses these objectives.

The Community Planning Principles, discussed in Chapter 3 and included in full as Appendix D, were produced in collaboration with the UCSF Community Advisory Group. These principles will be used to aid in future planning as a framework for addressing neighborhood concerns that may arise as a result of UCSF’s development under the LRDP. The Community Planning Principles support the LRDP Objectives by helping the University complement and advance the planning priorities of both its neighbors and the City and County of San Francisco (City).

Chapters 4, 5, 6, 9, and 10 describe the existing conditions and LRDP proposals for UCSF’s owned campus properties and significant leased sites. The three main campus sites, Parnassus Heights, Mission Bay, and Mount Zion, are addressed in Chapters 4, 5, and 6, respectively, which include site-specific objectives and proposed functional zones to guide future development. Chapters 7 and 8 lay out UCSF’s plans for SFGH and the San Francisco Veterans Affairs Medical Center. Chapter 9 focuses on smaller owned sites while Chapter 10 discusses leased sites. Cross-campus support functions, such as child care and transportation, are addressed in Chapter 11. Chapter 12 contains Acknowledgements, and includes the membership of the LRDP Oversight Committee and its Subcommittees, the Community Advisory Group, and others who have contributed to the preparation of the LRDP.
PLANNING CONTEXT
2.1 PURPOSE OF THE LRDP

Each University of California (UC) campus is required periodically to prepare a Long Range Development Plan (LRDP) to guide campus growth and future physical development. This LRDP is a comprehensive physical land-use plan and policy document that articulates a long-term development strategy for achieving the academic, clinical, and research missions of UC San Francisco (UCSF) through the year 2035. It contains objectives to guide decisions for future facilities to meet UCSF’s needs over the next 20 years, and projects the quantities and uses of new building space needed during this timeframe. Future individual construction projects will be evaluated for general conformity with the LRDP and considered for approval following a community process and any environmental analysis and public review required by the California Environmental Quality Act (CEQA). A project is generally found to be in conformance with the LRDP if the proposed land use is consistent with established land use designations and complies with the LRDP objectives. The 2014 LRDP also includes Community Planning Principles (included in full as Appendix D), which were produced in collaboration with the UCSF Community Advisory Group. These will be used to aid in future planning as a framework for addressing neighborhood concerns that may arise as a result of UCSF’s development under the LRDP.

The 2014 LRDP is an opportunity for UCSF to assess its needs, establish goals for the future, and provide a forum to discuss issues of mutual concern to UCSF, the City and County of San Francisco (City), and the communities surrounding UCSF’s campus sites. The LRDP serves as UCSF’s request to the Board of Regents of the University of California (Regents) for approval of proposed land use designations, program square footage, and population growth during the LRDP planning horizon.

Land use designations are described in the LRDP using functional zones, which provide guidance for where certain types of uses are best located based on desired land use adjacencies and other geographic considerations. The LRDP includes six categories of functional zones: research, clinical, support, housing, open space, and parking. Functional zone maps are provided for the three main campus sites (Parnassus Heights, Mission Bay, and Mount Zion) to guide the location of future capital construction and infrastructure development.

The 1996 LRDP focused on the acquisition of, and planning for, a major new site, which led to the development of the Mission Bay campus site, toward which UCSF has directed most of its capital resources in the intervening years. This LRDP contemplates investment in existing facilities and older sites, along with further development at Mission Bay.

The 2014 LRDP Environmental Impact Report (EIR) was prepared in accordance with CEQA to analyze potential environmental impacts that could result from implementation of the LRDP. Following public review, the EIR and LRDP will be finalized and submitted to the Regents for their review and consideration. Upon adoption by the Regents, the 2014 LRDP will replace UCSF’s 1996 LRDP, as amended.

1 resources.ca.gov/ceqa/guidelines
2 www.ucsf.edu/content/lrdp-environmental-impact-report-downloads
3 www.ucsf.edu/sites/default/files/legacy_files/UCSF_LRDP_as%2520amended_web.pdf
2.2 UCSF OVERVIEW

UCSF is one of 10 campuses in the University of California system. It is the only UC campus devoted exclusively to health sciences, with professional degree programs in dentistry, medicine, nursing, and pharmacy, as well as interdisciplinary graduate programs and numerous postdoctoral programs. Unlike other UC campuses, UCSF has no undergraduate students, but instead has a small population of graduate and professional students, clinical residents, postdoctoral scholars, and clinical fellows (6,310 in 2013: 3,080 students enrolled in degree programs, 1,680 clinical residents, 1,100 postdoctoral scholars, and 450 clinical fellows). UCSF’s biomedical research enterprise is considered among the best in the world and performs well among its peers in highly competitive grant funding. UCSF’s contracts with and grants from the National Institutes of Health (NIH) more than doubled between 1997 and 2013, to $517 million. In 2013, UCSF ranked first among public recipients and second overall in funds from the NIH, while each of its four schools received the most NIH research funding in their fields. This was the 34th consecutive year in which the UCSF School of Pharmacy ranked first, and the 22nd year for the School of Dentistry.

In educational rankings, U.S. News and World Report ranked the UCSF School of Pharmacy as the premier PharmD education program in its field in 2012, which was the last time pharmacy schools were ranked. Over the years, the School of Pharmacy has consistency been ranked number one nationwide. The School of Medicine ranked fourth, for both research and primary care education, as did the School of Nursing per U.S. News and World Report’s most recent assessments. (Dental schools are not evaluated). UCSF’s graduate programs in the biological sciences ranked seventh overall, and eight of its specialty programs in biology and biochemistry ranked among the top 10 in the nation.

The UCSF clinical enterprise consists of the UCSF Health System – UCSF Medical Center (the hospitals plus all clinics and physician practices operated by the medical center and the School of Medicine) and UCSF Benioff Children’s Hospital – and the UCSF Dental Center. UCSF Medical Center is recognized as a world leader in health care, and in 2013, was ranked the seventh-best hospital in the nation by U.S. News and World Report. The medical center consists of existing inpatient facilities at Parnassus Heights and Mount Zion, three new specialty hospitals under construction at Mission Bay (the new UCSF Benioff Children’s Hospital facility at Mission Bay, plus the UCSF Betty Irene Moore Women’s Hospital and the UCSF Bakar Cancer Hospital), and outpatient clinics at those and numerous other locations throughout the city. UCSF Benioff Children’s Hospital also entered into an affiliation agreement in January 2014 with Children’s Hospital and Research Center Oakland (CHRRCO), expanding UCSF’s pediatric network in the Greater Bay Area. UCSF has longstanding affiliations with San Francisco General Hospital and Trauma Center (SFGH), operated by the City; San Francisco Veterans Affairs Medical Center (SFVAMC), operated by the U.S. Department of Veteran Affairs, where UCSF faculty provide patient care and conduct professional teaching and research programs; and with research entities such as the J. David Gladstone Institutes. UCSF also operates the UCSF Fresno Center for Medical Education and Research in the Central San Joaquin Valley, which provides training for doctors and other health professionals.

UCSF’s internationally recognized research enterprise conducts basic research in biology, biochemistry, and other disciplines related to health and disease; carries out translational medicine studies in epidemiology, behavioral, and social sciences; studies health care policies; and provides training in each of these fields. Faculty members are acclaimed for their excellence, achievements, and leadership in health sciences, with honors that include five Nobel Prizes, five MacArthur Fellowships, and numerous National Academy of Sciences and Institute of Medicine memberships.

The administrative units of UCSF are: the Chancellor’s office and associated operations units; the Schools of Dentistry, Medicine, Nursing, and Pharmacy; the Graduate Division; UCSF Medical Center; UCSF Benioff Children’s Hospital; UCSF Global Health Sciences; the UCSF faculty; and the headquarters of the California Institute for Quantitative Biosciences. UCSF’s education, research, and patient care activities are supported or occur across these units.

As the second-largest employer in San Francisco (after the City itself), UCSF employs about 22,500 faculty and staff, approximately half of whom live in the city, and contributes an estimated $6.2 billion annually directly and indirectly to the Bay Area economy. More than half of UCSF’s 2014 total revenue of $4.91 billion was generated by UCSF Medical Center and CHRRCO ($2.75 billion); grants and contracts – the majority from the NIH – account for another $1.2 billion. These funds would not have come to the Bay Area were it not for

4 Professional students are those attending the four schools (UCSF Schools of Dentistry, Medicine, Nursing, and Pharmacy) in pursuit of state licenses to practice dentistry, medicine, etc.; they earn professional degrees (DDS, MD, etc.). Graduate students are those students seeking Certificate, Master, or PhD degrees, or conducting postdoctoral scholarship, who are pursuing a research track in basic, translational, clinical, social, and population sciences, either at the schools or in other UCSF programs.

the presence of UCSF and its affiliates. UCSF was integral to launching the biotechnology industry through the co-discovery (with a Stanford University researcher) of recombinant DNA; the launch of the world’s first biotech company based on that discovery, Genentech Inc.; and fundamental research that led to the first biotech drug, recombinant insulin. UCSF’s Mission Bay campus site has become a regional hub to the biotech field, a central element of the City’s economy and employment base, and a key generator of life-science start-up companies.

UCSF is a distinctly urban institution with campus sites throughout the city and some locations beyond the city limits (Figure 1). These sites comprise a total of 202.2 acres, 61 of which are the Mount Sutro Open Space Reserve. UCSF occupies nearly 8.04 million square feet of building space (excluding structured parking) in both owned and leased buildings. In addition to the three primary campus sites of Parnassus Heights, Mission Bay, and Mount Zion, UCSF owns buildings at Mission Center (1855 Folsom Street), Laurel Heights (3333 California Street), and 654 Minnesota Street, which are predominantly offices; animal care and research facilities at Hunters Point (830 and 831 Palou Street); a materiel management facility at Oyster Point (612 Forbes Boulevard in South San Francisco); and the Buchanan Dental Center (100 Buchanan Street). UCSF also leases more than a million square feet of space for a variety of purposes at numerous locations in San Francisco. UCSF is actively engaged in an effort to reduce the number of leased locations by consolidating operations into fewer locations and relocating programs into UCSF-owned facilities, to improve operational efficiencies and achieve programmatic adjacencies. Approximately 350,000 gsf6 of the existing lease portfolio represents community-based leased facilities, where programs must remain to provide neighborhood-focused clinical services or community-based research serving local populations.

Over the next five years, UCSF anticipates a reduction in San Francisco leases from about a million gsf to about 550,000 gsf due to lease consolidation and moves into UCSF-owned space. However, over the LRDP horizon, leased space is projected to be about 750,000 gsf, an increase from the near-term reduction but an overall decrease from the current million gsf. This projection is not intended to represent the maximum amount of leased square footage at any particular point in time within the LRDP horizon, since UCSF’s leased space inventory is expected to fluctuate above and below this amount at various points in time as determined by the University’s programmatic needs. UCSF leases facilities to accommodate for fluctuations in its space requirements associated with short-term changes in community clinical service needs, growth in community-based clinical and research programs, and other unforeseen needs, which could include new affiliations with other health providers.

In the fall of 2013, UCSF launched an initiative called UCSF 2.0,7 to form the basis of a strategic plan for continued leadership in each of its fields and continued innovation across its mission areas of patient care, research, and education over the upcoming decades. The initiative began with UCSF2025,8 an interactive online exercise that leveraged the power of social media to generate more than 25,000 suggestions from more than 2,500 participants both inside and outside the University.

Five key themes emerged from UCSF2025:

- **Negotiate new partnerships:** Collaborate within UCSF and other institutions on health data, leverage resources within and across the UC system, contribute to the creation of the “bio-Silicon Valley” and partner with K-12 institutions to bring science education to the classroom.
- **Pioneer new funding models:** Leverage/build upon expertise in health care for seniors, master “crowdfunding”9 for innovative initiatives, and explore other potential revenue streams.
- **Rethink research and publication:** Advance simulation models in research, revamp the publishing process to create greater access to discoveries, create shared platforms for protocols, and further develop strength in translating basic research into practical applications (and often start-ups) to enhance human health and well-being.
- **Re-envision health sciences education:** Create open learning systems, strategically leverage massively open online courses (MOOCs) and creatively utilize UCSF’s available physical space.
- **Transform patient care:** Advance precision medicine, harnessing the wealth of information from the human genome, environmental data, and medical records to make patient care more predictive and precise worldwide; create more opportunities to contribute to and connect with the community; and innovate technology infrastructure for learning and patient-centered care.

---

6 For the sake of simplicity, the LRDP will refer to all space, owned and leased, in terms of gsf, even though leased space is sometimes measured in sf rather than gsf, depending on type of space and/or lease. Note: With the exception of Appendix B, which gives raw data, gsf numbers throughout the LRDP are rounded to the nearest 100 (with numbers greater than 1 million rounded to the nearest 2nd decimal place [e.g., 2.39 million]) unless otherwise noted.
7 [www.ucsf.edu/blog/2014/01/ucsf-20-pursues-big-ideas-chart-its-direction-2025](http://www.ucsf.edu/blog/2014/01/ucsf-20-pursues-big-ideas-chart-its-direction-2025)
9 Crowdfunding is the practice of funding a project or venture by raising many small amounts of money from a large number of people, typically done via the web or online.
Figure 1: UCSF Locations
(updated to reflect LRDP Amendment #3, LRDP Amendment #4, LRDP Amendment #5, and LRDP Amendment #6)
These themes are being further developed through a series of workshops to help craft the vision for UCSF 2.0, which will be a multi-phased project to chart the future direction of UCSF.

The resulting themes will augment the LRDP objectives, elements, and proposals in providing guidance on the future priorities and space needs of UCSF through 2035.

In 1864, Dr. Hugh H. Toland opened a medical school at Stockton and Francisco streets in San Francisco, opposite the City and County Hospital. Toland Medical School became affiliated with the newly created University of California, in Berkeley, in 1873, along with the California College of Pharmacy. By 1895, the medical school had doubled in enrollment, but was unable to grow because of surrounding development. Mayor Adolph Sutro donated thirteen acres for a new facility at Parnassus Heights, where three new buildings housing Dentistry, Medicine, and Pharmacy were completed in 1897. After the 1906 earthquake, it became clear that UCSF needed both a patient care facility and the ability to train nurses, leading to its first medical center and the School of Nursing. As various hospitals were rebuilt after the 1906 earthquake – including SFGH at Potrero Hill, rebuilt in 1915, and the Veterans Administration Hospital at Fort Miley in 1934 – UCSF students and faculty began to staff those hospitals, beginning UCSF’s 100-year history of providing care at multiple sites throughout the City of San Francisco.

After the turn of the century, the area surrounding the Parnassus Heights campus site began rapidly developing into a dense, residential neighborhood. In 1914 UCSF purchased additional land, and in 1917 built a long, low-rise hospital (now referred to as UC Hall). A master plan was completed in 1921 that envisioned a street-wall of large buildings along both sides of Parnassus Avenue. Several such buildings were built in the 1930s and 1940s; UCSF did not diverge from this plan until the first modern high-rise on the campus, Moffitt Hospital, was finished in 1958. Long Hospital was constructed next-door in the early eighties. Moffitt and Long Hospitals are physically connected to each other, and together form what is essentially one hospital facility. In this document, “Moffitt Hospital” and “Long Hospital” will be used as necessary to refer specifically to each building.

UCSF’s expansion at Parnassus Heights continued at a rapid pace during the 1960s and early 1970s. In response to community concerns that the size of UCSF’s campus was beginning to overwhelm the area, the Regents adopted the 1976 Regents’ Resolution,10 which established permanent boundaries for the campus site, imposed a “space ceiling” on further growth within these boundaries, prohibited UCSF from acquiring additional property in the surrounding area, designated Mount Sutro as an Open Space Reserve, and required that other conditions be met, as described in more detail in Chapter 4. UCSF also agreed to design new buildings that would step up the slopes of the campus site, to help create a transition between the adjacent low-rise residential

---

10 The 2014 LRDP proposes to update the 1976 Regents’ Resolution as the Regents’ Resolution Regarding the Parnassus Heights Campus Site, as described in Section 4.5.
neighborhood west of the campus site and the taller institutional buildings to the east.

Subsequently, UCSF sought to decentralize the campus and release space for academic and clinical uses by moving administrative and support units off the Parnassus Heights campus site. During this period (1982-1996), UCSF acquired most of its owned sites, except for Mission Bay, and expanded its leaseholds throughout the city.

As pressures mounted to further decentralize Parnassus Heights, and to allow for basic-research growth and expansion, UCSF began the search for one large site to develop as a major new campus site. Three potential locations for a major new campus site were identified in the 1996 LRDP and analyzed in the 1996 LRDP EIR. These three sites included Brisbane Baylands-Executive Park in the City of Brisbane, Harbor Bay Business Park in the City of Alameda, and the location in the then-largely-undeveloped Mission Bay neighborhood of San Francisco. In May 1997, the Regents approved the Mission Bay site as UCSF’s major new campus site, and in September of that year agreed to accept the donation of 30 acres from Catellus Development Corporation and 13 acres from the City to create a 42.3-acre biomedical research campus site. Since that time, 2.2 million gsf of the 2.65 million gsf that UCSF was entitled to develop on the 42.3-acre North Campus has been built (or is under construction), spurring extensive development of the surrounding area, as had been hoped. In 2007, UCSF acquired an additional 14 acres immediately south of the original campus site to build a new Medical Center at Mission Bay, the first phase of which will open in February 2015. In 2014, the 3.8 acres east of Third Street (East Campus) was acquired for further campus development.
2.4 UCSF LONG RANGE DEVELOPMENT PLANS

UCSF’s first LRDP was completed in 1964. It called for the expansion of the Parnassus Heights campus site, the only site owned by UCSF at the time, through the use of eminent domain. In response to neighborhood groups who opposed UCSF’s expansion and organized an effort to halt construction of the School of Dentistry and Long Hospital, the 1976 LRDP contained policies to limit campus growth at this site, but allowed those and several other buildings to be completed. The 1982 LRDP limited use of the Parnassus Heights campus site to primarily academic and clinical functions, and called for the relocation of most campus-wide administrative functions to other sites that had to be subsequently purchased or leased. It highlighted programmatic needs, such as a new campus library, at Parnassus Heights.

Decentralization resulted in higher operating costs and reduced staff morale. Consequently, the 1996 LRDP emphasized:

- The consolidation of the widely dispersed sites to fewer locations;
- The decompression of space at Parnassus Heights by demolishing buildings that were seismically vulnerable or obsolete, and by converting offices in ‘the Avenues’ back to residential use; and
- The expansion of space at existing sites for meritorious and new programs by renovating buildings or constructing new ones.

The principal proposal of the 1996 LRDP was to acquire land to develop a new major campus site to fulfill these objectives. The site had to be of sufficient size to accommodate the space program of 2.65 million gsf for research, instruction, and support activities.

The Regents subsequently approved three major amendments to the 1996 LRDP, in order to:

1. Allow for the development of housing at the Mission Bay campus site, a use that was not included in the original space program (2002);
2. Articulate a new clinical configuration for UCSF, involving major inpatient services at Parnassus Heights and Mission Bay with a major outpatient hub at Mount Zion (2005); and

To a large degree, the 2014 LRDP is an extension of the principles in the 1996 LRDP, in that UCSF will continue to work towards compliance with the space ceiling at Parnassus Heights, expand at Mission Bay, and consolidate its facilities to fewer locations. The primary difference between the two LRDPs is that, whereas the 1996 LRDP focused on the acquisition of, and planning for, a major new site (to which UCSF has directed most of its capital resources in the intervening years), this LRDP contemplates investment in existing facilities and older sites, along with further development at Mission Bay.

The 2014 LRDP also is driven by the pursuit of compliance with the requirements of California’s Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983 (Alquist Seismic Safety Act) and subsequent amendments,12 the UC Seismic Safety Policy,13 the UC Sustainable Practices Policy,14 and the 1976 Regents’ Resolution regarding the Parnassus Heights space ceiling, as well as numerous other state and local policies, codes, and plans. Also, with increased constraints on operating budgets, this LRDP strives to address UCSF’s goal to improve operational efficiency through better utilization and consolidation of, and investment in, existing facilities. Further development at the Mission Bay campus site is secondary to these objectives, but serves as a mechanism to accomplish these goals while also providing opportunity for growth.

---

12 codes.lp.findlaw.com/cacode/HSC/1/d107/7/1#sthash.JD9GWiK.dpuf
13 policy.ucop.edu/doc/3100156/SeismicSafety
14 policy.ucop.edu/doc/3100155/Sustainable%20Practices
The 2010 UCSF Physical Design Framework\textsuperscript{15} supplements the LRDP in that it articulates more specific design guidance for the physical development of UCSF’s sites and facilities. It guides UCSF in planning and designing future development projects, providing detailed principles and guidelines that are universally applicable to all owned campus sites. It also includes strategies for implementing the universal principles, along with campus site-specific design guidelines, for two of UCSF’s main campus sites, Parnassus Heights and Mission Bay. (The Physical Design Framework will be updated to include design guidance for Mount Zion prior to any proposed development at that site.)

Despite considerable diversity in the character and context of UCSF’s campus sites, they are all urban campuses “in and of the city,” with common planning and design objectives. These UCSF-wide planning and design principles are as follows:

- Respond to CONTEXT while reinforcing identity.
- Welcome the COMMUNITY.
- Ensure CONNECTIVITY to and within the campus.
- Improve campus COHESIVENESS.
- Create spaces to promote COLLEGIALITY.
- Lead through CONSERVATION and sustainability.

Chapter 5 of the Physical Design Framework, “Physical Planning and Design Process,” contains a detailed description of the process used by the campus to develop and review capital projects.

\textsuperscript{15} campusplanning.ucsf.edu/pdf/UCSF_Physical_Design_Framework.pdf
2.6 UCSF ACADEMIC AND CLINICAL PROGRAMS

The four schools and the Graduate Division of UCSF offer clinical, professional, and research-based graduate education programs; they sponsor advanced academic programs in biomedical research; and they are also involved in clinical care. UCSF Medical Center trains physicians and other clinical staff in support of UCSF’s missions of public service and patient care. Figure 2 illustrates the general configuration of programs, services, and facilities at UCSF’s three primary sites. The original campus site, Parnassus Heights, is home to Moffitt and Long Hospitals, outpatient clinics, research facilities, graduate and professional programs, and support. Mount Zion has inpatient, outpatient, and research facilities, although the inpatient functions will move to Mission Bay when the new hospital there is operational (2015). Mission Bay was initially intended to be a basic science research campus, but since the new hospital was proposed to help meet state seismic mandates, UCSF began to develop space for outpatient clinics, translational research, and related graduate programs. Clinical and research programs are also located throughout the city in numerous individual buildings owned or leased by UCSF, as well as at the San Francisco General Hospital and Trauma Center and San Francisco Veterans Affairs Medical Center sites.

As an academic medical center and graduate health sciences campus, UCSF has a broad and special set of responsibilities that differ from community hospitals whose primary missions are patient care. UCSF is committed to educating and training the next generation of health care professionals and health scientists; conducting research and advancing biomedical science and technology; translating those advancements into improved patient care; and providing the highest quality evidence-based, competitively priced patient care. Ensuring that the ideas under consideration in UCSF 2.0 are also being considered in the LRDP and that the needs of the schools and Medical Center are met are basic concerns of the LRDP.

2.6.1 SCHOOLS

Each of the four schools and the Graduate Division offers professional training for health care practitioners and graduate students in basic, translational, clinical, social, and population sciences. Each operates extensive research programs in fundamental and applied research, and contributes to patient care and community service. School departments and organized research units are listed in Table 2.

DENTISTRY

The School of Dentistry consists of four academic departments in the basic and clinical sciences. It offers professional education through its four-year Doctor of Dental Surgery (DDS) program, a two-year international dentist program leading to the DDS, a Master’s degree program in dental hygiene, and Master’s and PhD programs in Oral and Craniofacial Sciences (in coordination with the Graduate Division), as well as postgraduate and residency/fellowship programs. To achieve its mission to advance oral, craniofacial, and public health excellence in dental education, discovery, and patient-centered care, the School of Dentistry’s strategic objectives are to:

1. Provide professional, comprehensive, high-quality, patient-centered oral health care, and collaborate with local, regional, and global community partners to promote oral health worldwide.
2. Be a world leader in scientific discovery and its translation into health benefits for patients and society.
3. Provide an excellent education that equips students, residents, and postgraduates to be future leaders in health care delivery, research, and education.
4. Provide a supportive learning and work environment that attracts the best students, faculty, and staff who can meet the changing needs of the School of Dentistry and the profession.
5. Enhance resource management and business practices.

MEDICINE

The School of Medicine is the largest of UCSF’s schools, with departments and programs in three main categories: basic biomedical science, clinical science, and social and population science. The School of Medicine offers the Doctor of Medicine (MD) professional degree, the Doctor of Physical Therapy (DPT) professional degree, graduate academic degrees (MS and PhD) in coordination with the Graduate Division, and residency programs in medical specialties. The four-year MD curriculum consists of two phases: two years of integrated coursework organized around organ systems and clinical themes, and two years of clerkships offered in ambulatory and hospital settings in San Francisco and other locations. The School of Medicine trains clinical residents and fellows in graduate medical education programs, and oversees the work of postdoctoral scholars.

The School of Medicine strives to advance human health through a fourfold mission of education, research, patient care, and public service.
Figure 2: UCSF Existing Academic & Clinical Configurations
Table 2: Departments & Organized Research Units by School

<table>
<thead>
<tr>
<th>SCHOOL OF DENTISTRY</th>
<th>ORGANIZED RESEARCH UNITS *</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPARTMENTS</td>
<td></td>
</tr>
<tr>
<td>Cell &amp; Tissue Biology</td>
<td></td>
</tr>
<tr>
<td>Oral &amp; Maxillofacial Surgery</td>
<td></td>
</tr>
<tr>
<td>Orofacial Sciences</td>
<td></td>
</tr>
<tr>
<td>Preventive &amp; Restorative Dental Sciences</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOOL OF MEDICINE</th>
<th>DEPARTMENTS</th>
<th>ORGANIZED RESEARCH UNITS *</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPARTMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomy</td>
<td>Cancer Research Institute</td>
<td></td>
</tr>
<tr>
<td>Anesthesia &amp; Perioperative Care</td>
<td>Cardiovascular Research Institute</td>
<td></td>
</tr>
<tr>
<td>Anthropology, History &amp; Social Medicine</td>
<td>Center for Reproductive Sciences</td>
<td></td>
</tr>
<tr>
<td>Biochemistry &amp; Biophysics</td>
<td>Diabetes Center</td>
<td></td>
</tr>
<tr>
<td>Bioengineering &amp; Therapeutic Sciences</td>
<td>GW Hooper Foundation</td>
<td></td>
</tr>
<tr>
<td>Cellular &amp; Molecular Pharmacology</td>
<td>Human Genetics</td>
<td></td>
</tr>
<tr>
<td>Dermatology</td>
<td>Philip R. Lee Institute for Health Policy Studies</td>
<td></td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>Institute for Neurodegenerative Diseases</td>
<td></td>
</tr>
<tr>
<td>Family &amp; Community Medicine</td>
<td>Institute for Global Health</td>
<td></td>
</tr>
<tr>
<td>Laboratory Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>INTERDISCIPLINARY CENTERS</td>
<td></td>
</tr>
<tr>
<td>Microbiology &amp; Immunology</td>
<td>AIDS Research Institute</td>
<td></td>
</tr>
<tr>
<td>Neurological Surgery</td>
<td>Center for Health and Community</td>
<td></td>
</tr>
<tr>
<td>Neurology</td>
<td>Clinical &amp; Translational Science Institute</td>
<td></td>
</tr>
<tr>
<td>Obstetrics, Gynecology &amp; Reproductive Sciences</td>
<td>Developmental and Stem Cell Biology Program</td>
<td></td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>Osher Center for Integrative Medicine</td>
<td></td>
</tr>
<tr>
<td>Orthopaedic Surgery</td>
<td>Sandler Asthma Basic Research Center</td>
<td></td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>Sandler Program for Asthma Research</td>
<td></td>
</tr>
<tr>
<td>Pathology</td>
<td>Wheeler Center for the Neurobiology of Addiction</td>
<td></td>
</tr>
<tr>
<td>Pediatrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Therapy &amp; Rehabilitation Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiology and Biomedical Imaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOOL OF NURSING</th>
<th>DEPARTMENTS</th>
<th>ORGANIZED RESEARCH UNITS *</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPARTMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health Systems</td>
<td>Institute for Health and Aging</td>
<td></td>
</tr>
<tr>
<td>Family Health Care Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiological Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOOL OF PHARMACY</th>
<th>DEPARTMENTS</th>
<th>ORGANIZED RESEARCH UNITS *</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPARTMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioengineering and Therapeutic Sciences</td>
<td>Molecular Design Institute</td>
<td></td>
</tr>
<tr>
<td>Clinical Pharmacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical Chemistry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER</th>
<th>ORGANIZED RESEARCH UNITS *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proctor Foundation</td>
</tr>
</tbody>
</table>

* An Organized Research Unit (ORU) is a formal academic agency with a separate budget and administration, officially established by the Regents, consisting of an interdepartmental group of faculty, students, and staff engaged in research.
NURSING

The School of Nursing offers Master's and PhD degrees in nursing, and PhDs in sociology, in coordination with the Graduate Division, preparing students for positions in nursing clinical practice, administration, teaching, and research. The School of Nursing's mission plan is centered on four primary areas:

1. Symptom management: how to manage issues like pain;
2. Interface: how nurses can serve as the connection between technology and patients;
3. Transitions: how to ease the path for patients from the hospital to home, and how to prevent re-hospitalization; and
4. Prevention and public health: how to have an impact on health at the community level.

PHARMACY

The School of Pharmacy focuses on: 1) basic, translational, clinical, and health policy research; 2) patient care; and 3) graduate-level education. Its vision is to realize a time when precise therapeutics – used safely and effectively – improve the health of people everywhere. Its three departments are research-intensive, and are responsible for the delivery of the Doctor of Pharmacy (PharmD) degree program, the top-ranked program of its kind in the nation. The School offers two combined degrees (PharmD/MSCR and PharmD/PhD), co-directs an MS degree program in translational medicine, and administers five interdisciplinary PhD graduate programs (bioengineering, bioinformatics, biophysics, chemistry and chemical biology, and pharmaceutical sciences and pharmacogenomics) in coordination with the Graduate Division. Its postdoctoral agenda includes a PharmD residency program, positions for postdoctoral scholars and fellows, and a Pharmacy Leadership Institute. The School of Pharmacy also offers two curricula for seasoned professionals in industry, regulatory agencies, academia, and health care. The School and UCSF Medical Center collaborate closely on new models of pharmaceutical care and on maintaining the preceptorship of the School’s PharmD students. In addition, the School of Pharmacy administers six enabling technology centers as campus resources while it conducts research to further refine the tools and techniques the centers offer. The six enabling technology centers are:

1. Antibiome Center
3. Nuclear Magnetic Resonance Laboratory
4. Resource for Biocomputing, Visualization, and Informatics
5. Sequence Analysis and Consulting Service
6. Small Molecule Discovery Center

2.6.2 GRADUATE DIVISION

The Graduate Division supports and oversees students in 26 graduate academic degree programs (as of 2014), and offers Certificates, Master’s (MS, MA, MAS, MTM)16 degrees, and Doctoral (PhD and DPT) degrees. Nearly all graduate programs are interdisciplinary, with many faculty members having appointments across departments and schools. The Graduate Division functions as the institutional home for graduate education and postdoctoral scholarship at UCSF. It serves as the primary advocate for graduate students and postdoctoral scholars, and promotes excellence in all graduate and postdoctoral scholar training programs.

2.6.3 RESEARCH

UCSF has created powerful, globally recognized research programs in biological, clinical, social and behavioral, and population sciences. Its researchers, who hold faculty appointments in the schools, are internationally acclaimed for their excellence, achievements, and leadership in health sciences.

Increasingly, UCSF research endeavors are multidisciplinary and aimed at translating basic discoveries into innovations that improve human health. For example, the Clinical and Translational Science Institute (CTSI) and the California Institute for Quantitative Biosciences (QB3) were created to bring together large teams of experts from a variety of disciplines to tackle major scientific and health issues. CTSI is a cross-campus institute established to facilitate translational clinical research and bring better health to more people more quickly; QB3 is a state institute headquartered on the UCSF Mission Bay campus site that includes faculty from UCSF, UC Berkeley, and UC Santa Cruz, and links the quantitative sciences – mathematics, physics, chemistry, and engineering – with the biosciences to address complex scientific problems and spawn potent new technologies.

UCSF’s leadership in biomedical research is evidenced by its success in achieving research support and recognition in relation to peer institutions. Contracts and grants from the NIH and other funds enable UCSF scientists to continue their pioneering efforts to understand the underlying causes of diseases such as cancer, cardiovascular disease, diabetes, HIV, Parkinson’s, and Alzheimer’s disease, and to work to develop improved therapies for patients.

2.6.4 PATIENT CARE

The UCSF clinical enterprise consists of the UCSF Health System – UCSF Medical Center (the hospitals plus all clinics

---

16 MS = Master of Science; MA = Master of Arts; MAS = Master of Advanced Studies; MTM = Medication Therapy Management; DPT=Doctor of Physical Therapy.
and physician practices operated by the Medical Center and the School of Medicine) and UCSF Benioff Children’s Hospital — and the UCSF Dental Center. UCSF Medical Center is the leading hospital in San Francisco and Northern California, and provides excellent primary care, in addition to being a destination for patients with complex health conditions from around the world.

UCSF provides medical expertise and treatment for all human conditions including cancer, heart disease, neurological disorders, organ transplantation, and orthopedics, as well as specialty services for women and children. UCSF Medical Center is a tertiary referral center17 with major clinical sites at Parnassus Heights and Mount Zion. It is licensed for 722 beds, with 659 in use in 2013: 568 in Moffitt and Long Hospitals at Parnassus Heights and 91 at Mount Zion. In 2012, the Medical Center provided care for 28,900 hospital patients and 844,700 outpatients. These patients were attended to by approximately 1,000 faculty physicians from the UCSF Medical Group, a faculty practice organization within the School of Medicine. Similarly, faculty from the Schools of Nursing, Dentistry, and Pharmacy provide clinical care and student training in a variety of clinics and hospitals.

UCSF Medical Center has embarked on an ambitious plan to construct a new hospital complex at Mission Bay, the first phase of which is to open in February 2015. The new facilities address the mandates of the California Alquist Seismic Safety Act, which require that older inpatient hospitals (such as Moffitt Hospital and inpatient facilities at Mount Zion) either be upgraded to higher, more stringent seismic standards, or be decommissioned. Construction of UCSF Medical Center at Mission Bay will accommodate inpatient programs from Mount Zion and allow the vacated inpatient space to be reassigned to outpatient use. Inpatient care at Moffitt and Long Hospitals will continue after the Medical Center at Mission Bay is operational. UCSF Medical Center at Mission Bay will be the first new hospital built in San Francisco in 30 years, and will establish Mission Bay as a major site for patient care. The first phase consists of the new hospital complex, comprising the new UCSF Benioff Children’s Hospital facility, UCSF Betty Irene Moore Women’s Hospital, and UCSF Bakar Cancer Hospital, with a combined total of 289 beds; outpatient facilities; an energy center (central plant); parking; and a large public plaza along Fourth Street. Additional inpatient and outpatient facilities, support space, and parking will be developed in subsequent phases.

UCSF entered into an affiliation agreement with CHRCO in January 2014. Under the affiliation agreement, the University is responsible for CHRCO’s Board appointments and financial obligations. CHRCO, located at 747 52nd Street at Martin Luther King Jr. Way in Oakland, operates the main Children’s Hospital, an outpatient center, and adjacent clinics, as well as five satellite locations around the Bay Area. UCSF does not directly own or control the CHRCO facilities and site. The facilities are entirely staffed by CHRCO employees, and will remain a separate 501(c)3 not-for-profit corporation that is separately licensed. Upon the opening of the Mission Bay Medical Center in 2015, the San Francisco hospital will be called UCSF Benioff Children’s Hospital San Francisco, and CHRCO will be named UCSF Benioff Children’s Hospital Oakland. Together, it will be known as UCSF Benioff Children’s Hospitals. The CHRCO site is subject to the jurisdiction of the City of Oakland; any future projects at the site would require review and entitlement under the City of Oakland’s land-use regulations. For these reasons, CHRCO is not included in the LRDP.

17 This refers to specialized consultative care, usually on referral from primary or secondary medical care personnel. Specialist cancer care and neurosurgery are examples of tertiary care services.
CHAPTER 2

2.7 LRDP PLANNING PROCESS

2.7.1 SUMMARY OF PLANNING PROCESS

Preparation of the LRDP involves four phases of work. The first phase – collecting and reviewing background data with a campus LRDP Oversight Committee and subcommittees focusing on instruction, research, and clinical needs – was initiated in the fall of 2010 and continued into the winter of 2012. Phase 2, in which UCSF’s long-term space needs and academic site theme recommendations for UCSF’s major locations were identified, began in the spring of 2012. In the third phase, which began in the summer of 2012, physical options capable of accommodating the space needs were developed, with the preferred plan for each site identified by spring 2013. Near the end of this phase, UCSF made presentations to the San Francisco Planning Commission and San Francisco Commission of Community Investment and Infrastructure to apprise them of the LRDP. Preparation of the LRDP and EIR, the last phase, began in the summer of 2013 and is expected to be complete by fall 2014.

2.7.2 CAMPUS PARTICIPATION

In addition to the guidance of the LRDP Oversight Committee and its subcommittees, the 2014 LRDP was prepared with input from the UCSF Academic Senate, senior leadership, Faculty Councils of the Schools, the Graduate Division, a work group focusing on administrative space, and many other groups and individuals. The UCSF Foundation Real Estate Committee and UC Office of the President also advised on the LRDP. Reaching beyond the campus, community feedback was provided by UCSF’s Community Advisory Group (CAG), and from the public at large throughout the planning process, in numerous meetings and workshops held at UCSF’s main campus sites.

LRDP OVERSIGHT COMMITTEE

The charge of the LRDP Oversight Committee was fourfold:

1. Prepare recommendations for ultimate consideration by the Regents regarding UCSF’s physical development through the year 2035.
2. Oversee the preparation of the LRDP and the EIR.
3. Work closely with the CAG to achieve a consensus on proposals for physical development.
4. Appoint subcommittees as appropriate.

The LRDP Oversight Committee was directed to take into consideration the optimal configuration of academic programs across UCSF sites, as well as the need to replace Moffitt Hospital by 2030 in light of the Alquist Seismic Safety Act; to address other seismically deficient buildings at Parnassus Heights, Mount Zion, and SFGH; and to respond to UCSF Climate Action Plan19 goals and the UC Sustainable Practices Policy.

The LRDP Oversight Committee consisted of 44 Campus and Medical Center administrators, faculty, and staff. In the first phase of planning, they reviewed and discussed UCSF’s existing sites and facilities; the Campus and Medical Center financial outlooks; the anticipated educational, research, and clinical space program needs; trends in health care, NIH funding, and philanthropy; Deans’ reports on major plans and initiatives; community considerations; and environmental sustainability. In the second phase, they reviewed three subcommittees’ projected needs for instruction, research, and clinical space, and then recommended themes for each campus site.

It was the responsibility of the LRDP Oversight Committee to ensure that space needs would be distributed appropriately across all sites. When the physical options were developed in the third phase, the committee provided their feedback, which helped inform the preferred proposals.

INSTRUCTION, RESEARCH, AND CLINICAL SUBCOMMITTEES

The LRDP Oversight Committee formed three subcommittees to discuss, respectively, instruction, research, and clinical needs across UCSF’s sites. The subcommittees were tasked with determining the optimal quantities of their respective types of use, and preferred configurations of academic or inpatient and outpatient programs at each site. The clinical subcommittee also had to consider the next phase of the clinical strategy, following the proposed discontinued use of Moffitt Hospital as an inpatient facility. In developing the major site theme recommendations, the subcommittees considered programs that need to remain at their current locations; the buildings and facilities needed to support them, including space for campus life, administrative, and other support functions; required program adjacencies and affiliations; and the desired relocation of programs from other sites to strengthen programmatic relationships.

The subcommittees generated guiding principles that served as the foundation of their program recommendations, which also addressed quality-of-life issues, including meeting space;

---

18 The membership of the LRDP Oversight Committee and the Clinical Facilities Planning, Instruction Planning and Research Planning Subcommittees appears in Section 12.1.

19 sustainability.universityofcalifornia.edu/documents/ucsf_cap_09.pdf
support services such as child care, recreation, and fitness facilities; and open space. The outcomes of these sessions and subsequent LRDP Oversight Committee discussions were recommendations for program space and facilities at key campus sites, based on the anticipated role of the sites in the overall mission of UCSF through the life of the LRDP.

ADMINISTRATIVE WORK GROUP

A work group of high-level administrators was convened to develop assumptions for future academic and campus administrative space needs, to determine the optimal amount of such space needed through 2035 based on those assumptions, and to identify the optimal configuration across UCSF’s sites. Much of the discussion focused on the requirement to improve operational efficiency and potential changes in the administrative delivery model, particularly in regard to the “activity based workplace” model being applied to the new academic building at Mission Bay, which is designed with open work stations and private activity rooms, instead of private offices. The work group recommended the relocation and consolidation of administrative space proximate to the programs they serve, in consideration of costs to renovate existing space and build new space.

OTHER UNIVERSITY CONSULTATION

Additional meetings were held throughout the planning process to inform leadership of the LRDP deliberations and conclusions, and to obtain further input. These leadership groups included the Chancellor’s Executive Cabinet (CEC), the Budget and Investment Committee of the CEC, the Academic Senate Committee on Academic Planning and Budget, Faculty Councils, the UCSF Foundation Real Estate Committee, and the UC Office of the President.

2.7.3 COMMUNITY PARTICIPATION

UCSF developed physical site plan options for the Parnassus Heights, Mission Bay, Mount Zion, and Mission Center campus sites based on the amount and types of space needed at each within the time-span of the LRDP. Seven LRDP community workshops were held at four campus sites beginning in the fall of 2012: three at Parnassus Heights, two at Mission Bay, and one each at Mount Zion and Mission Center. At the workshops, these options were presented to the public, who reviewed them and provided feedback that helped shape the LRDP proposals. This community input is valued by UCSF and is reflected throughout this LRDP.

In separate ongoing planning efforts, UCSF is seeking community input on proposals for a new research facility...
under consideration on the San Francisco General Hospital campus and for conveyance of the Laurel Heights campus site to a developer for non-UCSF uses. UCSF has also solicited community feedback on management and hazard reduction plans for the Mount Sutro Open Space Reserve.

**UCSF Community Advisory Group**

Since 1992, UCSF has benefitted from the advice of its Community Advisory Group (CAG), described in Chapter 3. LRDP physical options were shared with the CAG prior to the community workshops so they could express their concerns, give feedback on the options, and identify preferred proposals. The CAG’s input was exceptionally valuable in helping UCSF anticipate and resolve various issues, including the need for more information in preparation for the community workshops. The CAG also reviewed the LRDP Community Planning Principles prepared by the Joint Delegation, described below.

**LRDP Joint Delegation**

Eleven members each of the CAG and the LRDP Oversight Committee drafted a set of LRDP Community Planning Principles, provided in Appendix D. Over the course of nearly a year, the Joint Delegation worked together to craft guiding principles designed to alleviate concerns expressed by neighbors about UCSF’s future growth and development. The LRDP Community Planning Principles balance community concerns with UCSF’s physical development goals and desire for flexibility to respond to and accommodate unforeseen conditions and needs. The resulting set of LRDP Community Planning Principles will be used to aid future planning as a framework for addressing neighborhood concerns that may arise as a result of UCSF’s development under the LRDP.

**Mission Bay Citizens Advisory Committee**

The Mission Bay Citizens Advisory Committee was originally convened by the San Francisco Redevelopment Agency (no longer in existence) to provide advice to the City on planning for the Mission Bay Redevelopment Area. It continues to meet monthly under the auspices of the Office of Community Investment and Infrastructure, which serves as Successor Agency to the San Francisco Redevelopment Agency.

Throughout the LRDP planning process, UCSF has periodically updated the Mission Bay Citizens Advisory Committee on UCSF’s planning for the Mission Bay campus site, and encouraged interested individuals and organizations to attend UCSF’s community meetings for additional detail.
LRDP FRAMEWORK
3.1 LRDP OBJECTIVES

The five objectives listed below will be used to guide UCSF’s physical development. The objectives are:

1. **Respond to the City and Community Context**
   
   A. Coordinate with City agencies in areas of mutual interest
   
   B. Acknowledge and respond to local zoning and height and bulk limitations to the extent possible
   
   C. Design new buildings to be sensitive to the surrounding neighborhood and landscape, taking into account use, scale, potential noise generation, and density
   
   D. Incorporate pedestrian-friendly urban design principles to relate campus buildings to surrounding streetscape and neighborhoods
   
   E. Consult with neighbors in proximity to UCSF’s sites, guided by Community Planning Principles (described in Section 3.5)
   
   F. Consider neighborhood and city-wide impacts related to UCSF’s physical growth

2. **Accommodate UCSF’s Growth Through 2035**

   A. Meet physical needs for growth in research, clinical, and instructional programs at appropriate locations
   
   B. Address the need for campus housing for students, postdoctoral scholars, house staff and junior and incoming faculty at main campus sites by constructing an adequate number of new units while taking into account financial feasibility and physical site constraints
   
   C. Provide additional amenities such as retail, permanent child care facilities, recreation and fitness facilities, improved outdoor areas, and other support services to the extent feasible, to enhance the quality of campus life and the public realm
   
   D. Locate programs and activities at campus sites where they are suitable and compatible with UCSF’s missions, and best foster collaboration, accommodate interdependent programs and reinforce academic and operational relationships
   
   E. Locate buildings in accordance with campus site-specific objectives, functional zones, and other LRDP elements related to open space, transportation, and utilities
   
   F. Site and design buildings and develop open space in accordance with the universal planning and design principles contained in the UCSF’s Physical Design Framework

3. **Ensure UCSF’s Facilities are Seismically Safe**

   A. Ensure inpatient facilities meet state seismic requirements, as set forth in the Alquist Seismic Safety Act (SB 1953), by constructing and maintaining modern, seismically safe hospitals and facilities that will remain operational in the event of a major earthquake
   
   B. Plan new facilities and implement improvements to comply with UC’s Seismic Safety Policy, to ensure a seismically safe environment for UCSF patients, visitors, physicians and staff
   
   C. Designate buildings for renovation, demolition, and replacement as warranted

4. **Promote Environmental Sustainability**

   A. Optimize the use of existing facilities, sites, and campus space through repurposing, renovation, densification and consolidation where appropriate
   
   B. Reduce commute travel by providing additional campus housing
   
   C. Reduce the number of UCSF remote locations by consolidation of owned and leased sites, thereby reducing travel between sites
   
   D. Enhance the Transportation Demand Management program by developing adequate facilities and transportation demand reduction policies, to emphasize transportation alternatives that will lessen auto traffic in and around campus sites and to meet changing needs consistent with the City’s Transit First policy
   
   E. Continue to prioritize scarce parking for use by patients and essential healthcare providers
   
   F. Facilitate growth in an environmentally responsible manner while reducing UCSF’s greenhouse gas emissions in compliance with the UC Sustainable Practices Policy and the goals of Assembly Bill 32 (AB 32), the California Global Warming Solutions Act

5. **Minimize Facility Costs**

   A. Invest in existing facilities to reduce future maintenance costs
   
   B. Optimize use of existing space to forestall the construction of new buildings
   
   C. Consolidate leases at owned facilities when appropriate and cost-effective
   
   D. Eliminate remote campus sites
   
   E. Target site expansion in areas that strengthen programmatic relationships, allowing resources and support to be shared
These objectives are intended to guide the development of future projects under the 2014 LRDP and enable the evaluation of future projects for general conformance with the LRDP.

3.1.1 OBJECTIVE 1: RESPOND TO THE CITY AND COMMUNITY CONTEXT

UCSF’s owned and leased facilities are dispersed throughout San Francisco, a dense urban area with over 825,000 residents living in roughly 49 square miles. Because UCSF facilities are physically integrated into the fabric of the city, and UCSF provides clinical and research services that complement City services (e.g., community clinics) or are located in facilities owned by the City (e.g., San Francisco General Hospital [SFGH]), there is close collaboration between the two entities. In 1987, the City and UCSF entered into a Memorandum of Understanding, or MOU (attached hereto as Appendix C) to foster harmonious relations between the City and UCSF regarding the growth and development of UCSF facilities within the City’s boundaries. The MOU describes the responsibilities of the City and UCSF for the oversight of their respective land uses and of the development, maintenance, and use of physical facilities, including methods of communication and consultation regarding UCSF’s development.

UCSF consults with the City when planning new development, especially if improvements are being proposed within City rights-of-way adjacent to campus sites. The City coordinates with UCSF whenever changes are being planned in the public streets that run through or adjacent to campus sites. UCSF coordinates on a regular basis with the City of San Francisco Planning Department, Municipal Transportation Agency, Department of Public Works, and Office of Community Planning Department, Municipal Transportation Agency, coordinates on a regular basis with the City of San Francisco residential development and transportation departments and agencies.

It is UCSF’s intent to adhere, to the extent practicable, to City zoning codes related to building use, height, and bulk limitations; floor area ratios; and parking requirements or restrictions. At Mission Bay, campus development is subject to agreements that were negotiated by UCSF with the City and the developer as part of the Mission Bay Redevelopment Area North and South Plans. UCSF is particularly sensitive to traffic impacts, which are considered along with other environmental impacts whenever new projects are proposed, as required by the California Environmental Quality Act (CEQA). At Mission Bay, UCSF has coordinated with the City to ensure that the proposed increase in development capacity on the campus site would not generate traffic and infrastructure impacts that could not be mitigated. UCSF respects the City’s Transit First policy, and employs an aggressive Transportation Demand Management (TDM) program that includes an extensive shuttle system, among other alternative transportation opportunities. UCSF is also fully aware of the limited housing supply in the City and endeavors to address the need for campus housing by providing campus housing at Parnassus Heights and Mission Bay. For all these reasons, the relationship between UCSF and the City is a strong and supportive one.

COMMUNITY ADVISORY GROUP

UCSF also works closely with surrounding community members in acknowledgement that UCSF impacts neighbors in both positive and negative ways. Based on UCSF’s experience, neighbors’ concerns regarding UCSF’s physical development include: traffic and parking; building scale and design; open space treatment, and other impacts that an urban, densely populated institution can have on nearby residents, such as construction and operational noise. UCSF regularly consults with its Community Advisory Group (CAG), a diverse collection of neighborhood, labor, ethnic, and business leaders from throughout San Francisco who have an active interest in UCSF’s activities and physical development (see Chapter 12: Acknowledgements). CAG members typically provide feedback on all UCSF projects, not just those proposed in their own neighborhoods.

The mission of the CAG is to:

- Serve as a community advisory body and sounding board for UCSF administration on planning issues based on both a neighborhood and city-wide perspective
- Assist UCSF in strengthening communication with and engagement of the public on broader issues of community concern
- Provide essential and relevant feedback on programs, campus planning and development activities
- Identify strategies and actions for addressing community concerns

In addition, UCSF regularly conducts community meetings for neighbors near campus sites regarding upcoming projects such as construction projects, building demolitions, and other issues of potential neighborhood concern. UCSF will continue to conduct City and community outreach as projects implementing the LRDP are proposed over time.

2 North plan: www.sfocii.org/Modules/ShowDocument.aspx?documentid=775
South plan: www.sfocii.org/Modules/ShowDocument.aspx?documentid=777

3 The City’s Transit First policy was adopted as part of the Transportation Element of the San Francisco General Plan. www.sf-planning.org/ftp/general_plan/I4_Transportation.html#TRA_TF
3.1.2 OBJECTIVE 2: ACCOMMODATE UCSF’S GROWTH THROUGH 2035

To achieve UCSF’s mission over the next 20 years, the LRDP proposes an additional 2.39 million gross square feet (gsf) in owned and leased buildings,\(^4\) for a total of 11.56 million gsf, across all of UCSF’s sites. The largest proportion of the LRDP increase in capacity is proposed as clinical space, closely followed by research and campus housing space. A substantial amount of support space is proposed, along with a minor amount of instruction space. The LRDP proposes to accommodate most of this growth in new buildings at the Mission Bay campus site, where there is undeveloped land available and infrastructure planned that will support such growth. Additional space in new buildings is proposed at the Parnassus Heights, Mount Zion, and Mission Center campus sites. At Parnassus Heights and Mount Zion, some existing buildings would need to be demolished to allow for new uses. A general description of how this growth is distributed by LRDP space categories is outlined below.

New clinical space would be distributed among the Parnassus Heights, Mission Bay, and Mount Zion campus sites as appropriate to maintain or improve operational efficiency and enhance adjacencies with related research programs. Clinical space would be developed at Parnassus Heights related to adult inpatient services, the Schools, and outpatient and research programs located at this site. The Mission Bay campus site would add clinical space related to children’s, women, or cancer outpatient services. Clinical space would be developed at Mount Zion related to existing outpatient services or research programs located there, and some outpatient services would be relocated to Mount Zion from other campus sites to further strengthen that site as an outpatient hub.

New research space would be developed at Mission Bay and at Mount Zion. The LRDP proposes clinical expansion at the Mount Zion campus site, as well as the demolition of several older buildings. A new research building is being considered at SFGH to provide seismically safe research areas for UCSF employees.\(^5\) Didactic instruction is expected to remain primarily at Parnassus Heights, and new instruction space is expected there, as well as at Mission Bay and Mount Zion, to support overall growth.

New campus housing is to be developed at Parnassus Heights and at Mission Bay.

Section 3.2.1 provides an overview of the functional zones and land use space categories. Section 3.3 describes UCSF’s existing and proposed space allocation. UCSF’s current population and projected population through 2035 are described in Section 3.4.

3.1.3 OBJECTIVE 3: ENSURE UCSF’S FACILITIES ARE SEISMICALLY SAFE

Many of the projects proposed under the LRDP are for building renovation and demolition in response to UCSF’s need to ensure that its facilities are seismically safe.

UC SEISMIC SAFETY POLICY

The purpose of the UC Seismic Safety Policy is to provide an acceptable level of earthquake safety, to the maximum extent feasible by present earthquake engineering practice and university resources, for students, employees, and the public who occupy university buildings and other facilities. Feasibility is determined by weighing practicality and the cost of protective measures against severity and probability of injury resulting from seismic occurrences.

In 2012, UCSF updated the seismic evaluations of buildings that had already been assessed, and evaluated those that had not, using a new rating system. This system has seven levels of earthquake damageability, with level V being “Serious,” level VI “Severe,” and level VII “Dangerous.” The highest-priority buildings (those rated level V and above) identified for seismic retrofit, removal, or other appropriate action are:

- **Parnassus Heights**: 735 and 374 Parnassus Avenue, which have since been removed; Clinical Sciences, for which retrofit plans are underway; and UC Hall and the Faculty Alumni House (745 Parnassus Avenue), which are proposed to be retrofitted
- **Mount Zion**: the Hellman and Brunn buildings, which are planned for demolition, and the building at 2255 Post Street, which is proposed to be retrofitted or demolished
- **Mission Center**: the Mission Center building, which is proposed to be retrofitted
- **SFGH**: five City-owned buildings in which UCSF leases space; UCSF is considering a replacement building

CALIFORNIA SENATE BILL 1953

In 1994, Senate Bill (SB) 1953 was passed by the California legislature as an amendment to the Alquist Seismic Safety Act of 1983. The law was in direct response to the Northridge earthquake, which damaged many hospitals in...
the Los Angeles area. SB 1953 requires hospitals to meet progressively higher levels of seismic safety by retrofitting or replacing facilities that do not meet the newer standards. The intent of the law is to ensure that hospitals are structurally sound and are able to offer uninterrupted service after an earthquake.

Moffitt Hospital and the hospital at Mount Zion have a Structural Performance Category (SPC) rating of SPC-2.6 These buildings do not significantly jeopardize life, but may not be repairable or functional following strong ground motion. To comply with SB 1953, UCSF is building a new hospital at Mission Bay by the first deadline of 2015, into which inpatient facilities from both Mount Zion and Parnassus Heights will relocate. To meet the 2030 deadline, rather than undergoing an extensive, expensive, and extremely disruptive retrofit of Moffitt Hospital, the UCSF Medical Center plans to build a New Hospital Addition to Long Hospital, which does comply with the higher seismic standards, and to decommission Moffitt Hospital for clinical uses. This addition will be built on the site of the aged Langley Porter Psychiatric Institute after it is demolished.

3.1.4 OBJECTIVE 4: PROMOTE ENVIRONMENTAL SUSTAINABILITY

The University of California is committed to responsible stewardship of its physical resources and to demonstrating leadership in sustainable practices. To that end, the UC President has adopted a detailed Sustainable Practices Policy that establishes goals for the individual campuses in nine areas of sustainable practices: green building, clean energy, transportation, climate protection, sustainable operations, waste reduction and recycling, environmentally preferable purchasing, sustainable foodservice, and sustainable water systems. In addition, UCSF is striving to reduce the generation of hazardous materials and the use of toxic cleaning and other products. UCSF’s Living Green program is intended to inform and engage the campus and medical center community to act more sustainably.

UCSF’s Sustainability Governance consists of the Academic Senate Committee on Sustainability and the Chancellor’s Advisory Committee on Sustainability (CACS). The Academic Senate Committee on Sustainability identifies faculty recommendations on improving sustainability at UCSF. The CACS is charged to:

- Annually examine UCSF’s effect on the environment from a comprehensive perspective;
- Evaluate existing UCSF policies, procedures, and programs that affect the environment;
- Serve as a coordinating body for groups or individuals concerned with sustainability issues;
- Advise selected work groups in the development and implementation of UCSF’s sustainability initiatives and goals; and
- Support reduction of greenhouse gas emissions to 1990 levels by 2020.

UCSF CLIMATE ACTION PLAN AND GREENHOUSE GAS REDUCTION STRATEGY

As part of implementing the UC Sustainable Practices Policy, UCSF is required to develop 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).7

In 2007, UCSF signed the American College and University President’s Climate Commitment (ACUPCC)8 to complete an emissions inventory, set target dates and interim milestones for becoming climate-neutral,9 take steps to reduce GHG emissions, and prepare public progress reports. As an intermediate target, UCSF established the goal of reducing GHG emissions to 2000 levels by 2014, and intends to achieve climate neutrality as soon as possible after achieving the 2014 and 2020 reduction targets.10 UCSF GHG emissions reduction goals pertain to emissions of the six Kyoto greenhouse gases originating from sources specified in the ACUPCC.11 The sustainability policy specifies that these goals will be pursued while maintaining the primary research and education mission of the University.

As part of the LRDP, UCSF is updating its portfolio of GHG reduction strategies (Appendix E: UCSF Greenhouse Gas Reduction Strategy). These strategies include the

---

6 Buildings with SPC-2 ratings must be brought into compliance with the structural provisions of the Alquist Seismic Safety Act, its regulations or its retrofit provisions by January 1, 2030, or be removed from acute care service. www.oshpca.ca.gov/FDD/seismic_compliance/SB1953/SesPer#Ratings-v3-2.html#SPC2
7 www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf
8 www.presidentsclimatecommitment.org/about/commitment
9 Climate neutrality for UCSF is defined as the University having a net-zero impact on the Earth’s climate; it will be achieved by minimizing GHG emissions as much as possible and using carbon offsets or other measures to mitigate the remaining GHG emissions (UCSF Climate Action Plan, December 2009).
10 CA Executive Order S-3-05 calls for reducing GHG emissions in stages, down to 80 percent below 1990 levels by 2050. gov.ca.gov/news.php?id=1861
11 The six greenhouse gases identified in the Kyoto Protocol/ACUPCC are carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons.
following: campus infrastructure improvements, renewable energy facilities construction, renewable energy purchase, equipment retrofits, operational energy efficiencies, new construction energy efficiency, and measures that can be applied to individual projects with the goal of incrementally reducing UCSF’s overall GHG emissions over the LRDP horizon. UCSF has prepared and previously published comprehensive emissions inventories covering Scope 1 and 2 for the 1990 baseline,12 2000 interim year, year 2012, and future projections (2020 and 2035). UCSF’s emissions make up about 2.8 percent of the City’s estimated total emissions of 5.3 million metric tons of CO₂e/year. UCSF per capita emissions for 2013 were 5.5 metric tons of CO₂e/year, slightly lower than the 6.5 metric tons of CO₂e/year per capita emissions for the City of San Francisco.

UC’s goal is to conform with AB 32 and the California Air Resource Board’s (CARB) scoping plan.

UCSF has one facility – the Parnassus Central Utility Plant (CUP) – that increases UCSF emissions to a level that makes it subject to cap-and-trade rules under AB 32. The Central Utility Plant is a co-generation facility that burns natural gas and generates electricity and steam efficiently, but nonetheless generates emissions from the combustion of natural gas. UCSF has pre-purchased cap-and-trade allowances for this facility for future years. UCSF has also committed to purchasing bio-methane to meet its 2014 interim Sustainable Practices Policy goal. Despite the addition of significant space and population over time, UCSF intends to meet its 2020 emissions goals.

The UC President has set a goal for UC to become a zero net energy consumer by 2025 and use only clean energy.13 UC is actively working on the President’s initiative to be the first university to achieve net energy and carbon neutrality,14 with efforts planned or underway to:

- Create a shared service center, which both owns electricity-generation resources and purchases long-term forward contracts, and which will manage the supply of wholesale electricity to campuses eligible for direct access.
- Continue energy-efficient projects and expand them to include small- to medium-scale renewable energy sources at all campus sites, and seek additional funding sources for these projects.
- Effectively manage the purchase of natural gas to mitigate risk of price increases, develop renewable natural gas (biogas) use and purchase biogas contracts through outside producers.
- Manage energy allowances and offsets, comply with California’s cap-and-trade program and other environmental attribute programs, and generate new funds to support projects resulting in GHG emission reductions.

SUSTAINABLE GROWTH AND TRAFFIC MITIGATION

To grow as sustainably as possible, UCSF will minimize new development by reinvesting in existing facilities and utilizing them more efficiently. This will be accomplished by implementing a new campus space policy to ensure optimal use of space, and by increasing the density of occupants, as described in Section 3.1.5: Objective 5: Minimize Facility Costs.

To further promote sustainable transportation and mitigate traffic, UCSF will:

- Seek opportunities to consolidate its campus population to fewer locations by terminating leases and vacating sites in more remote locations, which will reduce the amount of private vehicle and UCSF shuttle traffic throughout the day between campus sites.
- Build additional campus housing at the Parnassus Heights and Mission Bay campus sites to reduce commute travel.
- Implement more robust Transportation Demand Management (TDM) measures to discourage the use of private vehicles and drive-alone commuting: enhance the City CarShare and UCSF’s carpool programs; expand bicycle parking and access to showers and lockers; promote ridesharing participation; and, with new campus development, enhance the shuttle system.
- Regularly monitor UCSF-generated traffic to ensure that traffic volumes do not increase beyond what is projected in the LRDP Environmental Impact Report (EIR); if it does, mitigate per LRDP EIR measures.
- Reduce truck deliveries to campus sites, and reduce the impact of such deliveries on neighbors.
- Prioritize scarce parking for use by patients and essential healthcare providers at those sites with Medical Center facilities, and keep parking-space-to-building-space ratios low.

3.1.5 OBJECTIVE 5: MINIMIZE FACILITY COSTS

To achieve UCSF’s mission to advance health worldwide at a time of shrinking financial resources and increasing construction, maintenance, and operating costs, UCSF’s financial strategy for facilities seeks to:

- Control maintenance costs by investing in existing facilities;
- Limit new construction by using existing and future space more efficiently;

12 Scope 1 (Direct Emissions), includes stationary combustion such as boilers, hydrofluorocarbon (HFC) refrigerant use, or combustion of fuels in UCSF-owned vehicles; Scope 2 (Indirect Emissions) includes purchased electricity for leased facilities (UCSF Climate Action Plan, December 2009).
13 sustainability.universityofcalifornia.edu/documents/carbon-neutrality2025.pdf
14 University of California, Office of the President Business Operations, November 2013.
• Minimize the cost of building leases by moving programs into UCSF-owned buildings and consolidating leases; and
• Avoid expensive investment and operational costs by reducing the number of remote campus sites, such as Hunters Point and Oyster Point, if feasible. Oyster Point houses a warehouse which provides distribution, storage, and mail services to UCSF campus sites. Should Oyster Point be relinquished as part of UCSF’s strategy to reduce the number of its remote sites, a suitable relocation plan for these activities would need to be identified in order to accommodate these functions and promote sustainable growth and traffic mitigation goals.

INVESTMENT IN EXISTING FACILITIES

New construction, unless related to opportunities to consolidate space or when gifts for new buildings are secured, will take a back seat to investment in existing facilities in the next 10-year funding period, and possibly through the remainder of the life of the LRDP, depending on the availability of financial resources. UCSF has significantly increased its inventory of new buildings over the past decade, but continues to have an enormous backlog of deferred maintenance and renewal projects, which are needed to keep buildings operating reliably and efficiently. There is also a backlog of projects for life-safety systems, accessibility, and environmental compliance. These projects exceed normal operating costs and require unprecedented investment to extend the useful life of aging buildings.

UCSF maintains a comprehensive list of Facility Investment Needs (FIN) to quantify and prioritize deferred maintenance and capital improvement infrastructure projects. This list is generated with information from the Facilities Infrastructure and Renewal Model (FIRM), a planning tool used by UC campuses and maintained by the Office of the President to plan for the renewal or replacement of aging building systems in state-supported buildings, with input from knowledgeable staff. It is updated annually as new needs arise and facility condition assessments are performed.

The 2013 FIN list contains more than one hundred projects listed in order of priority based on a number of weighted criteria. About 30 projects across campus sites were identified as top priorities, including projects associated with seismic retrofits for the Clinical Sciences and UC Hall buildings at Parnassus Heights. With a total of approximately $450 million (in 2012 dollars) to implement all the high-priority projects, it is understood that only a few projects can be funded in any given year.

In 2009, the UCSF Medical Center produced a multi-year investment plan for the Parnassus Heights and Mount Zion campus sites. The Building Portfolios report called for a shift from expanding and improving programs to investing in building systems and infrastructure after the new Medical Center at Mission Bay becomes operational, and portions of Moffitt and Long Hospitals are vacated. The report also addresses the future transition to outpatient use of the hospital at Mount Zion, and the need for seismic upgrades and extensive code-compliance work associated with the adaptive reuse of facilities at that site. Building Portfolios identified a “must do” list with nearly $200 million of projects that might be accomplished in seven years, which the Medical Center is attempting to implement.

During preparation of the LRDP, UCSF buildings were evaluated to determine which buildings should be considered for demolition versus investment. This assessment relied upon the Facilities Condition Index (FCI) of each building, a tool that helps identify the relative condition of a building. A “good to

15 Sightlines, LLC. UCSF Medical Center Building Portfolios Report, 2009.
excellent” facility typically has an FCI value of zero percent to 10 or 15 percent, but must be tailored to the set of buildings being compared and their conditions. Of the 40 buildings evaluated, over half had FCI values exceeding 15 percent, an indication of the overall poor condition of UCSF buildings.

UCSF will continue to rigorously assess the condition of existing space to establish budget priorities for capital projects, including demolitions. UCSF’s 2013-23 Capital Financial Plan16 prioritizes projects that address the seismic problems and infrastructure deficiencies, particularly at Parnassus Heights and San Francisco General Hospital, and the backfilling of space at Parnassus Heights and Mount Zion after some clinical programs relocate to Mission Bay.

EFFICIENT USE OF EXISTING SPACE

In 2013, UCSF implemented a revised campus space policy17 to ensure that existing space is economically sustainable and optimally allocated, used, and managed for its stated purpose in alignment with UCSF’s strategic priorities. The policy provides a framework for equitable, transparent, and effective governance of space throughout UCSF and applies to the allocation, evaluation, and retention of space for all uses. Better utilization of space will be achieved in part by holding all units accountable for the same economic performance for the same type of space (e.g., wet-lab economic performance should be identical across Schools). In addition to implementing this policy, UCSF will renovate obsolete labs, and repurpose vacant and underutilized space. Increased efficiency will help release space for some of the LRDP’s projected growth.

EFFICIENT USE OF FUTURE SPACE

Under this LRDP, growth will occur at campus sites where new buildings can be reasonably accommodated: primarily at Mission Bay; to a limited extent at Parnassus Heights and Mount Zion; and, if needed, in a new building at Mission Center. UCSF intends to build more densely in the future, especially at Mission Bay, by constructing taller buildings than originally planned in the Mission Bay Campus Master Plan and Design Guidelines.18

Because of limited resources for new space, the future Mission Hall building on the North Campus of the Mission Bay site was designed using the Activity Based Workplace (ABW) model. In lieu of traditional private offices, the ABW model provides designated workstations to all employees in the building, but in smaller, more open environments. Employees have access to special rooms in the building for privacy and various group activities. This model has the advantage of accommodating more occupants in the same amount of space as traditional office buildings. Mission Hall will serve as a test case to determine how successful the model is in terms of productivity, employee morale, and collaboration. Regardless of the outcome, UCSF will continue to evaluate ways to use future space efficiently, as well as to design energy- and water-efficient buildings.

FEWER LEASES AND SITES

UCSF will seek opportunities to consolidate leases and relocate occupants of leased space into buildings owned by UCSF. These actions, where practicable, will help control long-term occupancy costs through ownership, and will improve UCSF’s overall efficiency.

UCSF will also explore opportunities to consolidate owned space into fewer locations by relocating functions from remote sites and relinquishing those sites where feasible. This long-term goal for consolidation will help guide future decisions for UCSF’s remote sites and leases.


18 campusplanning.ucsf.edu/physical/missionbayplan.php
3.2 PLAN ELEMENTS

The four required elements of an LRDP are: (1) land use, (2) open space, (3) circulation, transportation, and parking, and (4) utilities and other infrastructure. The land use element includes functional zone maps that illustrate the general location of proposed uses, which serves to guide future decisions as to where to locate buildings and uses. The open space element indicates the locations of open space, and how it relates to campus buildings and the campus as a whole. The circulation and transportation element considers how people get to and from and around campus sites using various modes of travel, and includes parking. The utilities and other infrastructure element addresses significant utility system or infrastructure facilities needed to accommodate growth. These elements are described in general terms below. Site-specific discussions of the elements as they pertain to the three main campus sites appear in Chapters 4, 5, and 6.

3.2.1 LAND USE

LRDP SPACE CATEGORIES

UCSF building space is occupied for various institutional uses according to the following major categories:19

- **Instruction**, including classrooms, teaching laboratories, seminar rooms, and academic offices
- **Research**, including research conducted in laboratories and offices
- **Clinical**, including space for services provided to patients in hospitals or clinics such as inpatient rooms, surgical rooms, radiation services, diagnostic laboratories, and treatment rooms, and for functions that directly support patient care such as nursing stations, administrative offices, and conference rooms
- **Support**, consisting of the following types of uses:
  - **Academic Support**, including library and animal care space
  - **Academic and Campus Administration**, including all administrative space at the department, school, and campus levels: deans’ and directors’ offices, conference rooms, copying facilities, etc., as well as non-academic support space such as police, personnel, and accounting offices
  - **Campus Community**, including campus amenities such as recreation, fitness, child care, conference centers, food service, and retail

- **Logistics**, including space devoted to the delivery of materials and physical plant space such as machine shops, service yards, laundry services, utilities, and storage
- **Housing**, including residential facilities for students, postdoctoral scholars, clinical residents, and faculty

FUNCTIONAL ZONES

Land use designations are described in the LRDP using functional zones, which provide guidance for where certain types of uses are best located, based on desired land use adjacencies and other geographic considerations. The LRDP includes six categories of functional zones: research, clinical, support, housing, open space, and parking. For program and operational efficiencies, clinical and research functional zones tend to cluster in an area. For circulation reasons, parking functional zones are typically situated on campus edges. To create an active and inviting campus setting, housing, open space and support zones are located throughout the campus sites. Table 3 describes the land use functional zones for UCSF’s main campus sites at Parnassus Heights, Mission Bay, and Mount Zion, and the predominant and secondary uses that are permitted within each zone. The space categories above are generally consistent with these functional zones, except instruction space, which is distributed throughout the research, clinical, and support zones. Functional zone maps are provided for each main campus site to guide the location of future capital construction and infrastructure development. The functional zones for these three campus sites are described and illustrated in figures in Chapters 4, 5, and 6, respectively, and represent the desired spatial organization of uses to optimize use of UCSF’s limited land resources and promote efficient operations. Future proposed projects will be considered to be in general conformance with the LRDP if its land use is consistent with the established functional zone and LRDP objectives.

No functional zone is specifically identified for instruction since medical education occurs in a variety of settings, including research labs and support space (such as the Teaching and Learning Center in the Library), as well as in the clinics and hospitals. This is also a reflection of assumptions made by the LRDP Instruction subcommittee, as discussed in Section 3.3.2, about the future of teaching and learning being even more dispersed in various locations, with the possibilities for virtual interaction and the need for flexible, technology-enabled learning space throughout campus sites.

---

19 UCSF’s building space database relies on room use codes that fall within these categories.
### Table 3: Predominant & Secondary Uses in Functional Zones

<table>
<thead>
<tr>
<th>FUNCTIONAL ZONE</th>
<th>PREDOMINANT USE</th>
<th>SECONDARY USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Research activities</td>
<td>Offices, Clinics, Instruction space, Support uses, Open space, Parking</td>
</tr>
<tr>
<td>Clinical</td>
<td>Clinical activities</td>
<td>Offices, Research activities, Instruction space, Support uses, Open space, Parking</td>
</tr>
<tr>
<td>Support</td>
<td>Offices, Food services, Retail, Child care, Recreation and fitness, Conference space, Library, Police services, Animal care, Utilities, Other support activities</td>
<td>Instruction space, Housing, Open space, Parking</td>
</tr>
<tr>
<td>Housing</td>
<td>Campus housing</td>
<td>Support uses, Open space, Parking</td>
</tr>
<tr>
<td>Open Space *</td>
<td>Major open space areas</td>
<td>Recreation and fitness, Retail, Parking</td>
</tr>
<tr>
<td>Parking</td>
<td>Structured parking</td>
<td>Support uses, Open space, Surface Parking</td>
</tr>
</tbody>
</table>

* The area designated as Mount Sutro Open Space Reserve shall be kept free of any permanent structures or facilities except footpaths and appropriate landscape construction intended to enhance its use as a natural area.
3.2.2 OPEN SPACE

UCSF’s open spaces vary widely in size and character. The Mission Bay campus site has a great deal of open space, including Koret Quad and open space plazas at all building entrances; open space and connectivity has been integral to every plan and design for the campus site. The 61-acre Mount Sutro Open Space Reserve, an urban forest under the stewardship of UCSF, is located at the Parnassus Heights campus site; it includes a popular public trail system for hiking and biking. Otherwise, however, UCSF’s open spaces are mainly limited to relatively small courtyards and plazas surrounded by campus buildings, and some tree-lined streets and landscaped areas. These open spaces and landscaped areas provide valuable opportunities for people to relax, socialize, eat lunch, study, play, heal, or otherwise be outdoors.

Under this LRDP, UCSF is committed to improving existing open space and creating new open space areas as part of new building proposals. These will be improved or developed in accordance with the universal planning and design principles in the UCSF 2010 Physical Design Framework. Because of the lack of outdoor recreation and fitness facilities, one priority is a sports field, which can best be accommodated at the Mission Bay campus site.

Proposed open space areas are depicted on functional zone maps and other figures in Chapters 4, 5, 6, and 7.

3.2.3 CIRCULATION, TRANSPORTATION, AND PARKING

Being multi-site and integral to the city, UCSF is acutely aware of its impact on the street network and parking supply. UCSF proposes to continue to enhance its Transportation Demand Management program and encourage its faculty, staff and students to use alternative modes of travel to driving alone to campus sites. Growth would require some additional parking, but consistent with UCSF’s parking policy, parking would be prioritized for patients and essential healthcare providers. The LRDP also proposes to reduce congestion and truck deliveries to campus sites through transportation improvement measures. A critical transportation goal is to reduce UCSF’s greenhouse gas emissions.

Direct, aesthetic, and experiential pedestrian connectivity is stressed in the UCSF 2010 Physical Design Framework and will be considered as buildings and open space are developed. The needs of pedestrians on public streets that pass through campus sites and have UCSF shuttle and Muni stops, particularly Parnassus Avenue at Parnassus Heights, Fourth Street at Mission Bay, and Sutter and Divisadero streets at Mount Zion, would be given the greatest consideration.

3.2.4 UTILITIES AND OTHER INFRASTRUCTURE

Under the 2014 LRDP, UCSF intends to invest considerable financial resources in improving and expanding its infrastructure. This would include utilities within and between existing buildings, as well as utilities to serve new structures. A goal of the LRDP is to shift away from equipping new buildings at Mission Bay campus site with utilities that could be incorporated more efficiently in a central utility plant, and to install redundant utility loops at the Mission Bay and Parnassus Heights campus sites to increase service reliability.
3.3 LRDP EXISTING AND PROPOSED SPACE PROGRAM

3.3.1 EXISTING SPACE AND BUILDINGS UNDER CONSTRUCTION

As of 2014, UCSF occupies approximately 8.04 million gsf in owned and leased space at all of its campus sites as seen below in Figure 3 and detailed in Appendix A, excluding approximately 1.62 million gsf in structured parking.

In addition to this, approximately 1.13 million gsf of new construction is underway at Mission Bay: Phase 1 of the UCSF Medical Center at Mission Bay, scheduled for completion in 2015, and Mission Hall, scheduled for completion in late 2014.

Figure 3: Existing Space at All Sites in 2014
3.3.2 PROPOSED SPACE PROGRAM

This LRDP proposes an additional 2.39 million gsf, for a total of 11.56 million gsf, in owned and leased buildings across all of UCSF’s sites through 2035. The 11.56 million gsf includes 1.13 million gsf that is currently under construction at the Mission Bay campus site. The allocation of this space for instruction, clinical, research, and support uses is described below in Figure 4 and summarized in Appendix A by site and LRDP space category. In order to provide development flexibility for unforeseen needs over the life of the LRDP, the proposed space program provides for more space than what was projected by the LRDP Oversight Committee and its subcommittees. All square footage proposed under the LRDP is subject to funding availability and CEQA evaluation as individual projects arise for consideration.

Including the 1.13 million gsf currently under construction, UCSF’s total space program would increase by approximately 3.52 million gsf, or 44 percent over the existing (2014)


program amount (Appendix A). It is important to note that the ability of UCSF to implement the proposed LRDP space program is dependent on the availability of future funding to support all of the potential capital projects generally described in subsequent chapters. Some near-term LRDP proposals are currently included in the 10-year Capital Financial Plan, which will be updated annually.

Although a major portion of the additional space would be accommodated in new buildings on campus sites, new construction will take a back seat to investment in existing facilities in the next 10-year funding period, and possibly through the remainder of the life of the LRDP, because of financial constraints. For this reason, some of the need for space would be met by improving utilization of existing vacant or underutilized space, consolidating existing functions or leases, converting existing space to other uses to meet changing priorities (e.g., converting office space at Parnassus Heights to housing, and renovating Moffitt Hospital to provide hospital support areas after 2030).

Figure 4: Proposed Space at All Sites in 2035

![Figure 4: Proposed Space at All Sites in 2035](image)
INSTRUCTION

The proposed space program for instruction space is approximately 101,300 gsf over the existing amount of 607,500 gsf, for a 2035 total of 708,800 gsf. This number is based on projected student enrollment (Table 4), UCSF’s financial ability to renovate academic space to accommodate the increase in the number of students, current classroom utilization rates, and other factors. An increase of about 13 percent in enrollment is expected by 2025. (It is assumed for the purposes of these calculations that enrollment after 2025 would remain relatively flat.) Unlike general campus students, graduate health science students rely largely on National Institutes of Health (NIH) funding and other self-supporting programs. A substantial amount of the enrollment growth will be in self-supporting master’s degree programs, with some growth in professional school and graduate programs. Classroom instruction for all four Schools would continue to occur primarily at Parnassus Heights, but would increase over time at Mission Bay with the opening of the new hospital in 2015.

The Instruction Subcommittee made assumptions about the future of educational and instructional programs, and recommended an optimal amount and configuration of instruction space to propose across UCSF campus sites based on those assumptions. The subcommittee assumed that teaching and learning will change dramatically due to the influence of new technologies, mobile and distance learning, a shift away from traditional instructor-centered teaching toward student-centered learning, and the increased use of team- and project-based methods in virtual and workplace environments (e.g., clinical and community settings). Learning is expected to occur less at fixed locations because of mobile devices and access to online resources. There will be a need for more flexible, technology-enabled learning space on campus. With the exception of new instruction space planned at Mission Bay, much of the need for future instruction space is to be met by the conversion or reconfiguration of existing space.

RESEARCH

The existing amount of research space is about 2.12 million gsf. The proposed research space program is an additional 951,500 gsf over the existing amount, for a 2035 total of 3.07 million gsf. This includes space for wet and dry research laboratories, translational research, clinical trials, and administrative and technology support. The Research Subcommittee took into consideration such factors as emerging areas of research, anticipated levels of federal and private funding, and the pace of faculty retirement and recruitment efforts. To optimize use of existing resources, the subcommittee assumed that research growth would be met in existing facilities and that construction of new buildings would be limited to those with secured funding until 2021. Between 2021 and 2030, the subcommittee assumed an annual growth rate of 2.5 percent. The subcommittee made no projection for additional space beyond 2030 due to the uncertainty in funding and unforeseen industry trends that far into the future. To encourage collaboration, the subcommittee also recommended that future resources be directed toward more centralized research programs.

Research growth would occur at Mission Bay, both in support of existing research programs and where programs such as early human development and cancer research would align with the new Medical Center. New research space could also be developed at Mount Zion to support the existing research projects and new outpatient programs.

CLINICAL

The existing amount of clinical space is about 1.95 million gsf. The proposed clinical space program, including inpatient, outpatient, and office space, is an additional 1.08 million gsf over the existing amount. The Clinical Subcommittee considered major initiatives that were underway, the possible impacts of health care reform, projected changes in patient enrollment levels, the plans of other healthcare providers, and

Table 4: Existing & Projected Enrollment

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>FALL 2013</th>
<th>PROJECTED 2025-2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Dentistry</td>
<td>477</td>
<td>696</td>
</tr>
<tr>
<td>School of Medicine</td>
<td>2,926</td>
<td>2,840</td>
</tr>
<tr>
<td>School of Nursing</td>
<td>726</td>
<td>870</td>
</tr>
<tr>
<td>School of Pharmacy</td>
<td>630</td>
<td>962</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,759</strong></td>
<td><strong>5,388</strong></td>
</tr>
</tbody>
</table>

* Enrollment figures exclude postdoctoral scholars, clinical fellows, and some international students in self-supporting programs.
other market considerations in developing assumptions for the long-term growth of UCSF’s clinical enterprise. The clinical enterprise consists of the UCSF Health System – the UCSF Medical Center (the hospitals plus all clinics and physician practices operated by the Medical Center and the School of Medicine) – and the UCSF Dental Center.

By 2035, the hospital average daily census is expected to increase the inpatient space need by 23 percent, based on current activity, historical growth, and staff estimates of future growth for pediatric, obstetric, and other adult programs. This projection reflects plans to: 1) move some programs from Moffitt and Long Hospitals at Parnassus Heights and from the hospital at Mount Zion to new facilities at Mission Bay when these open in early 2015; 2) backfill the clinical space vacated by these moves with new clinical activity in Moffitt and Long Hospitals; and 3) occupy a New Hospital Addition planned at Parnassus Heights by 2030, to respond to the seismic deadline for inpatient facilities. Clinical growth is expected to be highest in the near term with the opening of the Medical Center at Mission Bay, followed by less growth thereafter until the construction of the New Hospital Addition at Parnassus Heights. Between 2030 and 2035, the inpatient average daily census is projected to grow by only 4 percent, and would be accommodated in these facilities. Considering the financial resources that will be needed to complete the New Hospital Addition at Parnassus Heights, it is likely that Phase 2 of the UCSF Medical Center at Mission Bay will be built after 2035, beyond the LRDP horizon.

Outpatient visits are projected to grow 34 percent by 2020, 22 percent between 2020 and 2030, and another 5 percent through 2035. The projected outpatient growth through 2020 would be accommodated in buildings that are planned or under construction as part of Phase 1 of the Medical Center at Mission Bay. Future outpatient programs would be co-located with their respective inpatient activities and research programs at Mission Bay and Parnassus Heights. Outpatient growth after 2020 would be met at Mount Zion, which would be developed as an ambulatory care center with a focus on high-volume outpatient programs. After 2030, the inpatient space vacated in Moffitt Hospital would be available for hospital support and additional outpatient demand.

SUPPORT

As program space grows, additional support space will be needed. UCSF estimates a need for roughly 710,400 gsf of new support space, including additional administration, child care, retail, recreation and fitness, and conference space. Structured parking is under its own functional zone category and is not included as support. Cross-campus support space is discussed in more detail in Chapter 11.

HOUSING

The projected growth of 667,600 gsf for housing is based on the potential capacity for new housing at Parnassus Heights and Mission Bay, and non-residential uses that could be converted to housing at Parnassus Heights. A more complete discussion of housing needs and proposals are in Chapter 11.

PARKING

Surface parking is proposed to be accommodated within each functional zone as an allowable secondary use. Structured parking (i.e., garages) is proposed in the Parking functional zone and is generally proposed to be located at the periphery of main campus sites to enable easier pedestrian movement within the campus core. Smaller garages would be allowed in non-parking zones if built as part of a larger structure such as faculty housing. A summary of existing and proposed parking facilities is shown in Table 12 in Section 11.3.4.

21 Some of this space need was determined by applying multipliers to base space needs (e.g., research), or by assuming a constant ratio to the amount of existing space (e.g., logistics).
3.4 EXISTING AND PROJECTED POPULATION

UCSF’s population across all sites in 2012-13 and the estimated population upon full implementation of the LRDP space program are provided by population type in Table 5. The total population across all campus sites is projected to increase by approximately 14,900. UCSF population includes students, clinical residents, faculty, staff, postdoctoral scholars, patients, and visitors.

### Table 5: Existing & Projected Population

<table>
<thead>
<tr>
<th>POPULATION TYPE</th>
<th>EXISTING 2013 POPULATION</th>
<th>PROJECTED POPULATION IN 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students *</td>
<td>4,760</td>
<td>5,390</td>
</tr>
<tr>
<td>Faculty b</td>
<td>3,170</td>
<td>4,220</td>
</tr>
<tr>
<td>Staff c</td>
<td>16,440</td>
<td>24,570</td>
</tr>
<tr>
<td>Unpaid Faculty d</td>
<td>4,920</td>
<td>5,340</td>
</tr>
<tr>
<td>Postdoctoral Scholars and Clinical Fellows e</td>
<td>1,550</td>
<td>1,550</td>
</tr>
<tr>
<td>Patients f</td>
<td>3,560</td>
<td>5,850</td>
</tr>
<tr>
<td>Visitors g</td>
<td>5,020</td>
<td>7,350</td>
</tr>
<tr>
<td><strong>TOTAL h</strong></td>
<td><strong>39,420</strong></td>
<td><strong>54,270</strong></td>
</tr>
</tbody>
</table>

Note: Numbers rounded to nearest 10.

* Students as of fall 2013; includes all Clinical Residents.
  
  b Does not include volunteer faculty or community health providers.
  
  c Full-time equivalent staff as of fall 2013. Population categories are not additive to total number of employees.
  
  d The majority of unpaid faculty are not physically present on campus daily.
  
  e Clinical fellows are postgraduate medical trainees undertaking post-certification educational training.
  
  f Average daily inpatient population and outpatient visits to outpatient care clinics, private practice physicians, dental clinics, and other referred visits.
  
  g Includes visitors to patients, faculty, students, and staff; conference center visitors; participants in continuing education and recreation programs; volunteers; children at child care facilities; and vendors.
  
  h Does not include Phase 2 of the Medical Center at Mission Bay, which is assumed to be completed beyond the 2035 horizon of the LRDP.
3.5 COMMUNITY PLANNING PRINCIPLES

3.5.1 BACKGROUND

While the LRDP Objectives described above are intended to guide UCSF’s physical development under the 2014 LRDP and serve as criteria for evaluating future projects for general conformity with the LRDP, UCSF has partnered with its neighbors to also prepare Community Planning Principles. These Principles formalize UCSF’s commitment to communicate with neighbors regarding its space needs and potential future development, in order to identify potential community concerns that may arise from UCSF’s physical development prior to the time that individual projects are brought forward for approval.

The Community Planning Principles are intended to aid UCSF in both complementing and advancing the planning priorities of the City and of its campus neighbors, and were jointly developed by the UCSF Community Advisory Group and the UCSF LRDP Oversight Committee. They are inspired by the 1996 LRDP Goals and Objectives as well as by the 2008 UCSF Mission Bay Community Planning Principles—all of which resulted from campus-community collaboration. The Community Planning Principles supersede the 1996 LRDP Goals and Objectives and the 2008 UCSF Mission Bay Community Planning Principles, and apply to UCSF’s development throughout San Francisco, including at existing campus sites (“on-campus development”) as well as at other locations (“off-campus development”), as of adoption of the 2014 LRDP and at locations which may be proposed in the future.

3.5.2 OVERARCHING PRINCIPLES

The Community Planning Principles include five Overarching Principles, augmented by Community Planning Goals. The five Overarching Principles, below, describe how UCSF will communicate with neighbors about its physical development plans both on- and off-campus, and consider the cushioning of impacts that result from UCSF’s development. In order to support the implementation of these five Overarching Principles, Community Planning Goals are also identified covering a range of potential topic areas, representing what UCSF will strive for in implementing the overarching principles. The Community Planning Principles are presented together in Appendix D.

OP1. COMMUNITY CONSULTATION

Recognizing community concerns about the potential negative effects of UCSF’s development on adjacent neighborhoods:

- To the extent allowed by confidentiality agreements governing real estate transactions, UCSF will consult with the community before initiating a project that could result in property acquisition if the proposed project might not conform to the use, height, bulk, density, design or open space restrictions established for the site by City zoning; would affect historic resources; or would require conditional use authorization or variance were the project to be developed by a private party.

- UCSF will consult with the community before decisions are made to intensify use of existing property. Optimizing use of its space and physical assets is a critical objective of UCSF during this next LRDP period.

This principle is not intended to eliminate the normal communication between UCSF and its neighbors during the life of a project regarding exterior design, landscaping, parking and traffic, or other project elements.

OP2. COMMUNITY NOTIFICATION

When UCSF acquires property it will list these acquisitions on a website and notify the Community Advisory Group (CAG) and other neighbors as requested.

OP3. CUSHIONING OF IMPACTS

When UCSF acquires property,22 or intensifies use of existing property,23 it will, on a case-by-case basis, enter into discussions with community groups representing adjoining neighborhoods and/or with the City to identify neighborhood impacts, if any, of such lease, acquisition, development, and operations.

In the event that UCSF, the community groups, and/or the City agree that such impacts are likely to occur, UCSF will enter into further discussions with the community groups and/or the City to identify potential cushioning actions to offset such impacts. Any agreements by UCSF to undertake cushioning actions will be documented in a formal agreement between UCSF, the community groups, and/or the City. These agreements could utilize a community benefits district, if one were to be established by the City.

---

22 “Acquire property”: acquire property through lease or purchase, or acquire property by gift, and develop such property for UCSF use.

23 “Intensify use of existing property”: develop or change the use of an existing property, if the proposed project would increase the square footage or population of the campus site in a manner that could reasonably be expected to trigger community concern.
Volunteers with the non-profit Sutro Stewards maintain trails and habitat on Mount Sutro.
The cushioning of impacts could be in addition to any mitigation measures that might otherwise be required to reduce significant impacts to a less-than-significant level as a result of any required CEQA review of a proposed project. OP3-guided actions are considered separate from and in addition to the proportional share funding described below in OP4.

As a state-supported institution, UCSF must manage its resources in a manner consistent with its mission. Therefore, monetary and non-monetary contributions to community facilities or programs must be consistent with UCSF’s mission and directly benefit UCSF, its students, and its employees. Examples of voluntary community assistance measures might include (but are not limited to) physical improvements to open space facilities near UCSF sites; enhanced street lighting, landscaping, and street fixtures around the perimeter of campus facilities; shared open space on the UCSF campus; joint use of UCSF facilities for community and campus functions; and employment programs that serve the community and provide skilled workers for UCSF’s programs.

**OP4. “PROPORTIONAL SHARE” FUNDING**

UCSF will provide “proportional share” funding24 to the City to pay for adopted mitigation measures that are the responsibility of the City and identified in CEQA documents prepared for UCSF projects to reduce or avoid UCSF’s share of significant off-campus environmental impacts caused by UCSF development.

**OP5. COMMUNITY INVOLVEMENT MECHANISM**

The mechanism for ongoing community involvement in monitoring the UCSF development process and in negotiating agreements with adjoining neighborhoods is the UCSF CAG and/or its sub-committees, the CAG Action Teams. UCSF is responsible for the ongoing coordination and inclusion of neighborhood and community-based organizations in these planning efforts. Prior to development, UCSF will consult with CAG members for advice on appropriate community representatives for community consultation processes, depending on the location of the projects to be discussed.

---

24 CEQA Guidelines, Section 15126.4(a)(4)(B)
PARNASSUS HEIGHTS
4.1 EXISTING SETTING

Parnassus Heights is the oldest campus site belonging to UC San Francisco. It comprises approximately 107 acres of land at the base of Mount Sutro, in the Inner Sunset mixed-use neighborhood. The irregularly shaped campus site is roughly bounded by Carl and Irving streets to the north; Fifth Avenue to the west; and Clarendon Avenue, Christopher Drive, and Crestmont Drive to the south (Aerial photo; left). The eastern boundary abuts the Cole Valley neighborhood and the City’s Interior Greenbelt Natural Area. UCSF’s facilities are concentrated at the north end of the campus site, where Moffitt and Long hospitals, the four health sciences schools, clinics, research, housing, parking, and other support uses are located. The 61-acre Mount Sutro Open Space Reserve (the Reserve) occupies the central and southern portion of the campus site, reaching 400 feet in elevation above Parnassus Avenue. The Reserve is designated as permanent open space and is available for public use. Aldea Housing (formally the Aldea San Miguel apartment complex), the Aldea Center on Mount Sutro, and several small office and support buildings are located adjacent to (and partially surrounded by) the Reserve. These are accessible via Clarendon Avenue and Medical Center Way, a narrow, two-lane campus road.

Parnassus Avenue, a public street, runs east/west through the middle of the most densely developed portion of the campus site. Buildings here vary considerably in age, design, massing, and height. Approximately half of them are over 50 years old, and five of the buildings are more than 12 stories tall. Many of the buildings on the south side of Parnassus Avenue are interconnected at multiple levels. These connections allow convenient, weather-protected movement through much of the site, but can make wayfinding challenging for patients and visitors.

The physical core of the campus is on Parnassus Avenue, where clinical, research, instructional, and support uses interface. Clinical space in Moffitt and Long Hospitals, Langley Porter Psychiatric Institute (LPPI), and Medical Building 1 (ACC) predominates in the eastern portion of the site. Most of the research, all four schools, and additional clinical space are located in the central and western parts of the campus site, south of Parnassus Avenue. While classrooms and other instruction space are concentrated here, they are also scattered throughout the campus site. Support functions are located near the center of the campus on the north side of Parnassus Avenue, specifically in Kalmanovitz Library and in Millberry Union, which contains conference, food service, recreation and fitness, and office space. Campus housing, with the exception of Aldea Housing, occupies the western edges of the site, serving as a buffer between the campus and adjacent residential neighborhoods. Logistical support is concentrated south of Moffitt and Long hospitals. Structured parking is accessible from Irving Street and Parnassus Avenue, and there are a number of parking lots elsewhere around the site. The total amount of existing space on the Parnassus Heights site constitutes about 3.92 million gsf including 653,700 gsf of structured parking. UCSF also leases an additional 56,000 gsf in the privately owned nine-story Medical Building 2 at 350 Parnassus Avenue.

1 Chapter 4 amended by Long Range Development Plan Amendment #7.
4.2 PARNASSUS HEIGHTS SITE-SPECIFIC OBJECTIVES

Under the LRDP, Parnassus Heights is to remain UCSF’s home for classroom instruction, the four schools, adult inpatient and diagnostic facilities, a variety of outpatient clinics, research, housing, and support amenities. Space at Parnassus Heights is proposed to continue to evolve through the periodic demolition of buildings, new construction, and the relocation to other sites of programs that are not essential to this campus site. New construction would support the need to comply with state seismic legislation and to better meet campus housing goals as well as provide much-needed modern clinical and research space. UCSF plans to continue to make efforts to address issues facing cities, including managing its transportation-related impacts on the neighborhood, and Parnassus Avenue is the focus of proposed streetscape improvements to enhance the quality of campus life and the neighborhood’s cultural and economic vitality.

Site-specific objectives for the Parnassus Heights campus site are:

A. Continue to promote excellence and leadership in health science education, maintaining the Parnassus Heights campus site as the central location for classroom instruction.

B. Ensure that adequate space is provided to foster collaboration and to facilitate the interdependence and connectivity for operational efficiency and effectiveness of instruction, clinical, research, and support uses in close physical proximity to each other.

C. Ensure that Long Hospital and the New Hospital Addition have adequate clinical and administrative support, and are aligned with education, research, and specialized care programs that remain at this campus site.

D. Provide additional campus housing and improve campus life amenities, including outdoor space.

E. Conform to the space limits and population estimates established in the Regents’ Resolution Regarding the Parnassus Heights Campus Site, as amended.

F. Preserve the Mount Sutro Open Space Reserve as permanent open space, and serve as the steward of the Reserve by maintaining and expanding the trail system and by ensuring the safety of visitors and neighboring structures.

4.3 THE COMPREHENSIVE PARNASSUS HEIGHTS PLAN

Following the adoption of the 2014 LRDP and certification of the 2014 LRDP Final EIR, UCSF initiated a highly inclusive planning process to re-envision Parnassus Heights as a whole, seeking ways to renovate and reorganize campus facilities to better respond to UCSF’s clinical, educational, and research mission, building upon the 2014 LRDP. In order to ensure that the University can continue to serve the public good as a leading health science institution both nationally and internationally, and build upon its legacy of innovation in scientific research, education, and clinical programs that are present at Parnassus Heights, improvements must be made at this campus site to address its aging and inadequate facilities and provide a teaching hospital that can adequately support the education and research missions while providing expanded and improved care to the region. This planning process resulted in the development of the Comprehensive Parnassus Heights Plan\(^2\) (CPHP), which provides a vision for the future of the campus site, ensuring that a modernized Parnassus Heights enhances UCSF’s status as an anchor institution in San Francisco: one that is anchored to its community and committed to its long-term health and viability. The CPHP contains master plan-level guidance for the overall physical environment at Parnassus Heights. It focuses on the configuration of buildings and open space areas and the major types of uses within buildings (e.g., inpatient, outpatient, research, instruction, support services/amenities, housing, and parking), with special attention paid to the adjacency of uses especially at the intersection of clinical, research, and instruction uses. A subsequent Parnassus Heights Design Guidelines effort was completed in 2020 to ensure landscape and architectural excellence, strengthen the UCSF identity, and ensure a cohesive human experience on the campus. These design guidelines outline design goals and guidelines for all future landscape and building projects at Parnassus Heights.

The CPHP provides the basis for physical planning concepts and proposals at the Parnassus Heights campus site through the next 30 years, or an approximate horizon year of 2050. All other UCSF campus sites would continue to have an approximate horizon year of 2035.

\(^2\) https://ucsf.app.box.com/v/parnassusplan
CPHP DISTRICTS

The CPHP identifies districts (Figure 5) in the developed portions of the Parnassus Heights campus site as a way of organizing planned land uses in a rational manner based in part on existing land use patterns.

- **Research and Academic Commons**: The location for the convergence between research programs and the academic and clinical missions, oriented around a central “campus heart.”

- **The North Side Gateway**: This district provides amenity spaces available to patients, visitors, employees, learners, and the public, and leverages future hospital ancillary functions. The district also supports a prominent arrival sequence from Irving Street, maximizing visual connectivity to destinations.

- **The Clinical East End**: This district consolidates uses focused on outpatient and inpatient treatment and prioritizes patient-oriented uses with direct access from public streets and visitor parking areas.

- **The West Side (including Aldea)**: This district diversifies and intensifies land uses to support the UCSF mission with housing, child care, and other campus life amenities.

- **Service Corridor**: To improve campus function, efficiency, and internal circulation, loading, delivery, service vehicle parking, and other supporting functions are located in a more centralized and expanded service corridor.
PROPOSALS FOR PARNASSUS HEIGHTS

- Demolish the Surge, Woods, Environmental Health and Safety (EHS), Kirkham Child Care, Lucia Child Care, Dental Clinics, UC Hall, Langley Porter Psychiatric Institute (LPPI), Mechanical Annex, Koret Vision Research (Koret), School of Nursing, Proctor, and Aldea Housing buildings, and the Millberry Union East and West Towers.
- Construct a new hospital building adjacent to Long Hospital, and renovate and reuse Moffitt Hospital.
- Construct a new Research and Academic Building on the site of UC Hall as well as additional research facilities to the west and south of the UC Hall site.
- Improve the connection between Irving Street and Parnassus Avenue through an Irving Street Arrival project with vertical transportation.
- Develop new campus housing (densify Aldea Housing and construct new housing in the West Side district).
- Construct a new child care facility on the site of the current Proctor building and/or at Aldea.
- Construct a hotel for patients and their families on the site of the current Lucia Child Care building.
- Complete the conversion of Fifth Avenue houses to faculty housing.
- Seismically retrofit the Faculty Alumni House.
- Renovate the Parnassus Avenue level of Millberry Union, including the top deck of the Millberry Union garage to provide a public open space (Millberry Terrace).
- Maintain the designation of the Mount Sutro Open Space Reserve as permanent open space, including adjustment to the Reserve boundary while maintaining a minimum of 61 acres in the Reserve.
- Continue to manage the Mount Sutro Open Space Reserve, and create new/restored trails.
- Renovate Saunders Court and enhance circulation through the inclusion of a pedestrian-oriented Promenade that opens views and access to the west side of campus.
- Implement the Parnassus Avenue Streetscape Plan.
- Manage UCSF traffic by enhancing Transportation Demand Management (TDM) programs.
- Manage congestion through parking and loading improvements, including a Service Corridor and additional off-street loading areas.
- Install a new signal at the loop exit for the New Hospital drop-off and at Parnassus Avenue and Fifth Avenue and/or Fourth Avenue, if future conditions warrant it.
- Consider impacts on neighborhood street parking when developing new housing.
- Re-establish Fourth Avenue on the south side of Parnassus Avenue.
- Develop a bridge across, and tunnel beneath, Parnassus Avenue associated with the New Hospital.

4.4 PARNASSUS HEIGHTS PLAN ELEMENTS

4.4.1 LAND USE

Proposed functional zones for the Parnassus Heights campus site are depicted in Figure 6 and reflect the organizational structure of the Comprehensive Parnassus Heights Plan, which was prepared in 2019 to guide campus site growth and redevelopment. These zones reflect planned predominant land uses through 2050; secondary uses may also occur in these zones as indicated in Table 3 in Chapter 3.

Clinical uses are clustered within the Clinical functional zone at the eastern end of the site, including major inpatient and outpatient buildings along either side of Parnassus Avenue. Research uses occupy the central portion of the campus site along the south side of Parnassus Avenue, surrounding Saunders Court and the Promenade, the main developed open space area on the south side of Parnassus Avenue.

Campus housing is located along the western edge of the site along Fourth, Fifth, Parnassus and Third avenues, serving as a buffer between the adjacent residential neighborhood and UCSF’s institutional uses. Aldea Housing, at the southern edge of the site near Christopher and Claremont avenues is also designated as Housing.

Structured parking is located along the northern periphery of the site, along Irving and Carl streets. All buildings planned for demolition are identified in Figure 7.

PLANNED SPACE GROWTH

In total, development of approximately 2.9 million gsf of new building space at Parnassus Heights is proposed and the net increase in building space at the campus site would be approximately 2.0 million gsf, when accounting for demolitions. The total amount of campus space upon full implementation of the proposed projects would be approximately 6.0 million gsf, including instruction, research, clinical, and support space; housing; and structured parking.

The following LRDP proposals describe the current approach for fulfilling the site-specific objectives described above for the Parnassus Heights campus site:

- Demolish the Surge, Woods, Environmental Health and Safety (EHS), Kirkham Child Care, Lucia Child Care, Dental Clinics, UC Hall, Langley Porter Psychiatric Institute (LPPI), Mechanical Annex, Koret Vision Research (Koret), School of Nursing, Proctor, and Aldea Housing buildings, and the Millberry Union East and West Towers. The approximately 10,700-gsf Surge, 4,200 gsf Woods, and 6,100-gsf EHS buildings are proposed for demolition, and their footprints would be...
Figure 6: Parnassus Heights Proposed Functional Zones
Figure 7: Parnassus Heights Proposed Building Demolitions

- Existing Building To Remain
- Existing Building To Be Demolished
The LPPI building and three small associated support buildings are proposed to be demolished in order to provide a building site to construct the New Hospital building adjacent to Long Hospital, described below. The seven-story LPPI building, which houses psychiatric inpatient and outpatient uses, as well as instruction, research, and administrative space, constitutes about 104,800 gsf. The three support buildings contain an additional 3,900 gsf.

The four-story, 43,100 gsf Koret building is proposed to be demolished after the New Hospital building is complete and Moffitt Hospital is renovated. The Proctor building, which comprises approximately 9,900 gsf, may be demolished for a child care facility.

- **Construct a new hospital building adjacent to Long Hospital, and renovate and reuse Moffitt Hospital.**

In order to comply with the requirements of the State of California Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983, as amended, the New Hospital building, containing approximately 955,000 gsf and connected to Long Hospital, is proposed on the LPPI site, to replace inpatient facilities currently in Moffitt Hospital. In addition, UCSF’s medical center – ranked as one of the nation’s top hospitals for the past 21 years – must be expanded to meet demand of the Bay Area’s projected growing and aging population. Currently, Moffitt and Long hospitals at UCSF Helen Diller Medical Center at Parnassus Heights lacks enough bed capacity to meet demand of the Bay Area’s projected growing and aging population. In order to meet program requirements and have a fully functional inpatient hospital, the building would exceed the City’s height limit of 65 feet. Although the building is not yet designed, current estimates are that it would be up to 16 stories tall and consideration will be given to ensure that the New Hospital building has an attractive appearance and pedestrian scale along Parnassus Avenue, and the upper portion of the building be designed to minimize shade and wind on the street, to the extent possible. As the eastern gateway to the campus site, the building would be designed to be architecturally prominent. After the New Hospital building is complete, Moffitt Hospital would be renovated and reused for clinical and other campus uses.

There is the potential for the proposed New Hospital and associated widening of Medical Center Way adjacent to the New Hospital (which must be done for safety purposes) to require modification of the Reserve Boundary. UCSF proposes to replace any area of the Reserve that is lost due to new development under the CHP by designating new Reserve area elsewhere on the campus site in an amount equal to or greater than the area lost. In order to accommodate the construction of the New Hospital, the boundary of the Reserve is proposed to be modified to remove an approximately 0.15-acre area east of Medical Center Way into which the New Hospital may extend, and in exchange add an approximately 0.4-acre area between the Surge/Woods parking areas to the Reserve as shown on Figure 8, to ensure that the Reserve will continue to contain at least 61 acres.

- **Conduct a new Research and Academic Building on the site of UC Hall** as well as additional research facilities to the west and south of the UC Hall site.

The proposed Research and Academic Building (RAB) would be approximately 271,000 gsf and located on the current site of UC Hall, following the proposed demolition of this building. The School of Nursing building would also be demolished as part of this Initial Phase project.

The RAB would contain primarily research, academic, and education space.

- **Improve the connection between Irving Street and Parnassus Avenue** through an Irving Street Arrival project with vertical transportation. The Irving Street Arrival project would create a welcoming arrival experience at Parnassus Heights and further promote use of transit by UCSF personnel and visitors. The proposal includes modification of the portion of the existing Medical Building 1 that functions as a pedestrian entrance extending from Irving Street to Parnassus Avenue. Modifications to or demolition of this space would provide a new and/or reconfigured multi-story vertical circulation space to include express elevators or escalators, stairs, arrival features such as information and orientation areas, and program space.

- **Develop new housing** (densify Aldea Housing and construct new housing in the West Side district).

  - **Density Aldea.** Increase the supply of housing for UCSF students and potentially faculty and staff by demolishing the existing student housing structures (note that University House would remain), and constructing higher-density student housing in new buildings, in the approximate location of existing building foundations. This development would be phased over time to avoid displacement of housing residents and to minimize the amount of disruption caused by construction activities. In the initial phase, the number of dwelling units would be increased by up to 142 units (i.e., from 42 existing units to a proposed 184 units).

  - In the future, an additional 190 dwelling units are proposed. A small child care center of about 15,000 gsf is also planned within the complex.
Figure 8: Parnassus Heights Proposed Open Space Plan
The total number of dwelling units in the Aldea Housing complex is proposed to increase from 172 units to 504 units; a total of about 378,000 gsf new building space.

West Side Housing: Approximately 281,000 gsf of new housing within the West Side district would be located on both sides of the proposed Fourth Avenue extension. Approximately 430 units of housing are planned. The structures would step down (east to west) along the slope. Development on the site would require demolition of the Kirkham Child Care center and the West Side Parking Lot. Parking spaces lost from demolition of the West Side Parking Lot and from alterations of the Millberry Union garage would be replaced at the West Side Housing site; approximately 190 parking spaces at this site are proposed.

- **Construct a new child care facility** on the site of the current Proctor building and/or at Aldea, including an outdoor play area, and a drop-off area.

- **Construct a hotel for patients and their families** on the site of the current Lucia Child Care building to provide lodging for both patients and families of patients who are receiving treatment at the hospital for an extended period.

- **Complete the Conversion of Fifth Avenue houses to faculty housing.** UCSF owns 17 houses along Fifth Avenue between Parnassus Avenue and Kirkham Street, of which approximately two-thirds are rented to faculty. Over the LRDP horizon, UCSF proposes to continue to promote the remaining houses on Fifth Avenue for faculty use.

- **Seismically retrofit the Faculty Alumni House.** UCSF proposes to retrofit the Faculty Alumni House at 745 Parnassus Avenue to meet seismic standards.

### OPEN SPACE

Existing and proposed open space and landscape zones are illustrated in Figure 8. At Parnassus Heights, there are opportunities to create open space areas where building demolitions occur (if sites are not proposed for surface parking, new buildings, or incorporation into the Reserve), as well as opportunities to improve existing open space and streets.

Open space improvement proposals are to be implemented in a manner consistent with the applicable Physical Design Framework universal planning and design principles and the Parnassus Heights Design Guidelines. In addition, open space improvements should further the goal of “Park to Peak” connections that create clarity and wayfinding from Golden Gate Park to Mount Sutro. Porosity and a sense of welcome should be promoted in the open space network at Parnassus Heights.

The LRDP proposes to demolish the Surge, Woods, and EHS buildings, which are located on Medical Center Way, within the larger boundary of the Reserve but not actually in the area designated as the 61-acre Reserve. After the buildings are demolished, the building footprints are proposed to be restored to open space and the areas added to the Reserve (Figure 8). In addition, in order to accommodate the construction of the New Hospital, the boundary of the Open Space Reserve is proposed to be modified to remove an approximately 0.15-acre area east of Medical Center Way into which the New Hospital may extend, and in exchange add an approximately 0.4-acre area within the Surge/Woods parking area to the Reserve as shown on Figure 8, to ensure that the Reserve will continue to contain at least 61 acres.

- **Renovate the Parnassus Avenue level of Millberry Union, including the top deck of the Millberry Union Garage to provide a public open space (Millberry Terrace).** The terrace would be on top of a new or altered Millberry Union garage structure, extending to Parnassus Avenue, replacing current uses such as the food court, the fitness center, the conference center and, potentially, other uses.

- **Maintain the designation of the Mount Sutro Open Space Reserve as permanent open space, including adjustment to the Reserve boundary while maintaining a minimum of 61 acres in the Reserve.** As described above, in order to accommodate the construction of the New Hospital the boundary of the Open Space Reserve is proposed to be modified while ensuring the Reserve will continue to contain at least 61 acres. As part of the 61-acre minimum, following demolition of the Surge, Woods, and EHS buildings, their footprint areas are proposed to be restored to open space and added to the Reserve (the existing adjacent surface parking lots and Annex building would remain).

- **Continue to manage the Mount Sutro Open Space Reserve, and create new/restored trails.** UCSF is committed to maintaining the Mount Sutro Open Space Reserve so it can be enjoyed by visitors from throughout the city, the Bay Area, and elsewhere. To achieve this, UCSF is implementing its Mount Sutro Open Space Reserve Vegetation Management Plan (March, 2018), developed with a professional forester and arborist in an extensive community process, along with a technical advisory committee of experts in vegetation and forest management. The purpose of the Vegetation Management Plan is to provide a management framework to ensure the long-term health and sustainability of the Reserve. The plan outlines strategies for increasing the biodiversity of the Reserve, conserving existing native plants, improving the regeneration and recruitment of tall tree species, and managing insects and disease.

UCSF’s primary responsibility as the steward of the Reserve must be to increase the safety of students, employees, patients, visitors, and neighbors, as well as...
increase the safety of campus and neighboring structures, particularly in light of the elevated fire danger resulting from California’s periodic drought conditions. The Vegetation Management Plan continues the University’s programs of tree risk assessment and hazardous tree removal, creation and management of defensible space, and maintaining trail access. Also, as part of the then-planned renovation and reuse of UC Hall (current plans call for the demolition of UC Hall), UCSF worked with the community to arrive at a number of actions to help cushion UCSF’s impacts on neighbors and to respond to some of their requests. These actions include building the new Sunset Trail, a trail and a staircase from Koret Way to Medical Center Way in order to enhance connectivity to the Reserve’s trail system from neighborhoods west and north of the campus site. In addition, as a result of a separate community process, other trails, including the Clarendon Trail, were restored or created to improve access throughout the Reserve for the enjoyment of all visitors. In response to community feedback, a seed propagation nursery has also been developed on a vacant parcel in the Aldea Housing complex.

- **Renovate Saunders Court and enhance circulation through the inclusion of a pedestrian-oriented Promenade** that opens views and access to the west side of campus. The proposed east-west Promenade would be located to the west of Saunders Court and south of the RAB, and provide pedestrian access between the principal campus site research/hospital uses and the West Side district.

### 4.4.3 CIRCULATION, TRANSPORTATION, AND PARKING

The greatest challenge to pedestrian circulation on the Parnassus Heights campus site (Figure 9) is directing the high volume of patients and visitors from the garages and transit stops to their clinical destinations and back. Another significant issue is providing safe and convenient access across Parnassus Avenue. UCSF Health implemented an extensive Pathways program to help people navigate the clinical uses on campus, which will be augmented by new campus signage and wayfinding projects, and intends to further improve pedestrian safety and enjoyment on Parnassus Avenue by implementing the Parnassus Avenue Streetscape Plan. This plan would also take into consideration the needs of bicyclists and reducing congestion on this street where there are currently six Muni bus stops, three UCSF shuttle stops, several garage and driveway entrances and exits, and six crosswalks. Despite numerous parking and loading spaces on the street, the overall demand for both exceeds the supply at certain times of day, and double parking and trucks parking in the middle of the street are common occurrences. A major organizing principle of the CHPH is the “Park to Peak” concept which promotes strategies to enhance the campus landscape while strengthening its relationship with Mount Sutro and Golden Gate Park. This includes providing public realm areas of the campus as amenities available to nearby residents, as well as learners, faculty, patients, researchers, and visitors, connecting through the campus. Wayfinding and visitor experiences will be enhanced due to the additional clarity provided.

Other important transportation issues that the following LRDP proposals address include parking and UCSF-generated traffic volumes related to commuting, inter-site travel, and deliveries. Balancing the need to minimize parking in order to manage single-occupancy vehicle commuting with the need to provide enough parking to avoid spillover effects in adjoining neighborhoods is challenging. This conflict is inherent in the debate over how much, if any, parking to construct with new housing. (A successful model of UCSF housing without tenant parking is the 145 Irving Street housing project and the recently completed Tidelands housing project in Dogpatch.) In another model, UCSF staff worked with Fifth and Kirkham neighbors to develop conceptual plans for pedestrian safety and traffic-calming improvements at this intersection, which were funded by UCSF and implemented by the City, and additional proposals are being considered to further manage traffic impacts, improve safety and mobility options to and from campus. Since the LRDP will be implemented over time, a phased approach that is designed to be flexible and adaptable in response to future changes in travel behavior, feedback or input from UCSF staff or community advisory groups, or lessons learned from earlier phases of the project is proposed.

- **Implement the Parnassus Avenue Streetscape Plan.** The first segment of the Parnassus Avenue Streetscape Plan will be implemented with the completion of the Clinical Sciences Building. This plan calls for improvements that make crossing the street safer and more convenient for pedestrians, increase bicycle safety, reorganize and improve transit and UCSF shuttle operations, create more usable outdoor space, strengthen UCSF’s identity, and enhance the public realm as called for in the Physical Design Framework. Improvements may include new paving, street furniture, lighting, and street trees, as well as sidewalk and crosswalk widening and better-defined campus gateways. These improvements are proposed to occur in phases and improvements within the City right-of-way would require approval by the City.

- **Manage UCSF traffic by enhancing Transportation Demand Management (TDM) programs.** Traffic on streets in and around the campus site is an ongoing issue with neighbors. UCSF has a comprehensive and effective TDM program (described in Chapter 11) to minimize drive-alone vehicle commuting, and to limit parking supply on
Figure 9: Parnassus Heights Proposed Circulation Plan
Figure 10: Parnassus Heights Proposed Parking & Loading Plan

- Milberry Union Garage
- Medical Building 1 (ACC) Garage
- Surge Parking Lot
- Woods Parking Lot
- Aldea Parking Lots

△ Existing Loading/Service Areas
the campus site. Existing TDM programs such as market-priced permit parking, carpool/vanpool, and telecommuting programs, which have historically been effective TDM strategies to reduce the number of drive-alone trips to/from the campus site are proposed to continue. Coordination with relevant local and regional agencies to advance San Francisco’s Transit First policy, minimize congestion, and provide viable sustainable transportation options to single-occupancy vehicles will continue. Finally, by reducing net parking supply on the campus site, parking will not be in excess of anticipated need.

UCSF will monitor changes in its Vehicle Miles Traveled (VMT) per capita rates on an annual basis and will implement enhancements to the UCSF TDM program to include strategies that reduce drive-alone, taxi/ridehail services, and drop-off trips that contribute most to the total and VMT per capita. UCSF will also measure campus generated vehicle trips by conducting regular commute survey and patient/visitor surveys.

- **Manage congestion through parking and loading improvements, including a Service Corridor and additional off-street loading areas (Figure 10).**

Loading improvements proposed include active loading management with traffic attendant(s) at key locations. In order to improve both loading and delivery operations, UCSF expects to continue to implement a cross-docking model in which vendors deliver goods to Oyster Point and goods are consolidated onto UCSF vehicles for delivery, limiting the number of individual deliveries to this and other campus sites. Oyster Point houses the Supply Chain warehouse, which provides distribution, storage, and mail services to UCSF campus sites. Should Oyster Point be relinquished as part of UCSF’s strategy to consolidate its remote sites, a suitable site and relocation plan would need to be identified in order to accommodate these functions. UCSF also proposes to reconfigure the existing Central Receiving area, located at the back of Moffitt and Long Hospitals; station a dockmaster; and implement a scheduling system to restrict on-site delivery times and vehicle sizes. These loading and delivery improvements would manage campus congestion, creating a safer, more attractive, and more efficient campus.

A proposed multi-level service corridor would extend from roughly Medical Center Way to Koret Way and the new extension of Fourth Avenue to facilitate transport of goods and materials for back-of-house functions and to provide easy access to major utility lines serving the campus. The service corridor is envisioned to be located above ground on its east end. Given the existing topography, several options are being considered for its routing on the western end. On the west end, the service corridor would be located underground and could extend north below the proposed Promenade, and/or could extend to the south to Koret Way before terminating at the new Fourth Avenue extension. Medical Center Way may also be widened to provide improved access.

- **Install a new signal** at the loop exit for the New Hospital drop-off and at Parnassus Avenue and Fifth Avenue and/or Fourth Avenue for traffic control if future conditions warrant it.

- **Consider impacts on neighborhood street parking when developing new housing.** When designing new campus housing, endeavor to minimize impacts on neighborhood street parking. For student housing, where appropriate, consider working with the City to limit neighborhood parking permits for students. For faculty housing, design housing to include parking wherever possible.

- **Re-establish Fourth Avenue on the south side of Parnassus Avenue.** The extension of Fourth Avenue as a campus street between Parnassus Avenue and Kirkham Street would serve as the main access point for future new buildings to the west of the proposed RAB, including the new housing structures on the West Side.

- **Develop a bridge across, and tunnel beneath, Parnassus Avenue associated with the New Hospital.** To facilitate pedestrian safety, ease of crossing Parnassus Avenue, and patient transport, a pedestrian bridge over Parnassus Avenue is proposed connecting the New Hospital to the Irving Street Arrival. A tunnel beneath Parnassus Avenue connecting the south side of the campus to the north side is also proposed. The tunnel is intended for pedestrians, utility lines, and the movement of goods and materials, to manage the amount of activity and congestion that occurs on Parnassus Avenue and to provide a safer crossing experience for patients, visitors, employees, and students.

### 4.4.4 UTILITIES AND OTHER INFRASTRUCTURE

The greatest amount of deferred maintenance and renewal is at Parnassus Heights, the site of UCSF’s oldest buildings. UCSF proposes to continue to implement high-priority deferred maintenance and other Facility Investment Need (FIN) projects, so long as funding continues to be available. For example, the relocation and expansion of medical gas storage tanks near the hospital, the removal, replacement, and relocation of the Mechanical Annex building at the intersection of Parnassus Avenue and Medical Center Way, and the replacement of underground diesel fuel storage tanks and underground lines connecting the tanks to the Parnassus Central Utility Plant (PCUP) to meet state and local codes are priority projects. Parnassus Heights also has a high demand for building renewals and renewal projects will also continue with available funding.

In addition, a new service corridor would be a key component of a campus-wide utility loop that would connect into existing utility lines. Utilities anticipated in the service corridor include steam, chilled water, condensate return pipes, domestic and...
fire water, electrical, and communications. Existing utilities in the vicinity of the New Hospital site would be modified or relocated to enhance functionality of utilities serving the campus site and to improve aesthetics along Parnassus Avenue.

Additional detail on notable utility improvements throughout the campus site is provided below.

**Fuel Tank Replacement:** UCSF currently has five underground diesel storage tanks located beneath Medical Center Way that provide fuel for backup power in the event of an emergency. These tanks do not meet current code requirements and must be replaced with new code-compliant tanks by 2025. UCSF proposes to remove the existing tanks and install new code-compliant tanks. Above-ground tanks are also being considered to replace the underground tanks.

**Mechanical Annex Building Replacement:** An ammonia tank located in the small Mechanical Annex building near the intersection of Parnassus Avenue and Medical Center Way is proposed to be demolished. The Central Utility Plant (CUP) would be the replacement site and urea, a non-toxic alternative, would replace the use of ammonia. With the new urea equipment located within the CUP, the site of the Mechanical Annex could be repurposed.

### 4.5 REGENTS’ RESOLUTION REGARDING THE PARNASSUS HEIGHTS CAMPUS SITE

In the 1976 Regents’ Resolution, which was adopted to address potential impacts associated with development of the Parnassus Heights campus site, the Regents designated the Mount Sutro Open Space Reserve as a permanent open space; defined campus boundaries to prohibit further property acquisition (by purchase, condemnation or gift) and leasing of private residential properties outside this area by UCSF (Figure 11); directed that the houses acquired and occupied by UCSF on Third Avenue, Fifth Avenue, Parnassus Avenue, Irving Street, and Kirkham Street be returned to residential use, and that some be sold; and adopted a limit on the amount of built space of 3.55 million gsf, commonly referred to as the “space ceiling,” within the newly designated campus site boundaries. At that time, the space ceiling applied to all building space, including parking structures, but excluding residential uses in UCSF buildings on Third, Fourth, Fifth, and Parnassus venues and Kirkham and Irving streets.

The 2014 LRDP revised the Regents’ Resolution to exclude all other residential square footage within the campus site from the space ceiling (i.e., Aldea Housing and University House). At the time of adoption of the 2014 LRDP, Parnassus Heights contained approximately 3.84 million gsf of space subject to the space ceiling, approximately 294,800 gsf or 8.3 percent above the space ceiling limit. The 2014 LRDP identified strategies to reduce the space ceiling overage over the life of the 2014 LRDP. Currently, Parnassus Heights contains approximately 3.68 million gsf of space, approximately 132,100 gsf or 3.7 percent above the space ceiling limit.3,4

The 1976 Regents’ Resolution also recognized the principle of administering the Parnassus Heights campus site in accordance with average daily population projections contained in the LRDP EIR. The 2014 LRDP reaffirms this principle and updated the Regents’ Resolution to tie average daily population projections for the Parnassus Heights campus site to the then-current LRDP EIR as it may be updated from time to time. Currently, the average daily population at Parnassus Heights is about 17,440 persons.

UCSF proposes to ask the Regents to update the Regents’ Resolution to:

- Increase the space ceiling limit from 3.55 million gsf to 5.05 million gsf, excluding housing (an increase of 1.5 million gsf above the current space ceiling limit) in recognition of the tremendous need for program space at the campus site in order for UCSF to retain its leadership position in patient care, research, and education.
- Reaffirm the designation of the Mount Sutro Open Space Reserve as permanent open space with a minimum size of 61 acres, however in order to accommodate the New Hospital the boundary of the Reserve is proposed to be modified to remove an approximately 0.15-acre area east of Medical Center Way into which the New Hospital may extend, and in exchange add an approximately 0.4-acre area within the Surge/Woods parking area to the Reserve, so that the Reserve will continue to contain a minimum of 61 acres.
- Reaffirm all other aspects of the Regents’ Resolution as amended in the 2014 LRDP, including continuing to respect the Parnassus Heights campus boundary established in 1976 and continuing to adhere to the expansion restriction area within which UCSF would not acquire property or lease residential property.

The proposed text of the updated resolution is shown in the sidebar on the following page.

---

3 Space subject to the Parnassus Heights space ceiling includes some structured parking.

4 Non-residential space subject to the space ceiling is measured using Basic Gross Area, which is the sum of all area, finished and unfinished, on the floors of the building included within the outside face of the environmentally controlled envelope for all stories or areas which have floor surfaces. Basic Gross Area includes garages, lobbies and other such spaces, but excludes all open to the weather spaces, such as light wells, courts, balconies, plazas, etc.
Figure 11: Parnassus Heights Planning Agreements
REGENTS’ RESOLUTION REGARDING THE PARNASSUS HEIGHTS CAMPUS SITE

1. The 61-acre reserve on Mount Sutro is reaffirmed as permanent open space.

2. The Parnassus Heights campus site boundary is reaffirmed as shown on Figure 11.

3. The space ceiling for the Parnassus Heights campus site is 5.05 million gross square feet. The space ceiling includes space in non-residential buildings within the boundary of the Parnassus Heights campus site.

4. The Third and Fifth avenue edges of the Parnassus Heights campus site will be consistent with the Housing functional zone designated for that area, to serve as a transition to the adjacent residential neighborhood in terms of use, character and scale.

5. UCSF is prohibited from expanding the Parnassus Heights campus site by purchase or condemnation or gift of any property or lease of private residential property not only contiguous with the campus site boundaries, but anywhere within the surrounding area bounded by Golden Gate Park, Oak Street, Ninth Avenue, Clayton Street, and Clarendon Avenue. This does not prohibit the use of commercial properties or the affiliation with other public agencies within the area described.

6. The Regents recognize the principle that the Parnassus Heights campus site will be administered so that the annual average of the daily campus population at the site will remain substantially in accordance with the projections set forth in the then-current Environmental Impact Report related to the Long Range Development Plan for the campus, as updated from time to time and approved by the Regents.

PARNASSUS HEIGHTS AVERAGE DAILY POPULATION

The average daily population at Parnassus Heights is about 17,440 persons as of 2018 and is projected to grow 45 percent to 25,290 persons in 2050 (Table 6). Changes in population would reflect changes in the types and uses of space at the site.

As of 2018, approximately 80 percent of UCSF’s 4,900 students (including post-doctoral scholars) are educated at Parnassus Heights. The majority of growth in student enrollment is projected to occur at Parnassus Heights, with approximately 500 additional students expected. There are more than 7,400 UCSF faculty and staff employed at Parnassus Heights, a number expected to increase to 12,070 by 2050. UCSF provides 222 housing units for over 580 individuals at Parnassus Heights. This number could grow to about 980 units with the future conversion of existing program space into housing, plus new housing construction, for an additional 762 net new housing units. More than 256,000 outpatient visits per year occur at clinics at Parnassus Heights. Approximately 2,600 daily outpatient visits occur at clinics at Parnassus Heights. Depending on the future mix of services and how services are provided, this number could increase to 3,100 daily visits by 2050.
Table 6: Parnassus Heights Existing and Projected Average Daily Population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENTS AND POSTDOCTORAL SCHOLARS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>3,077</td>
<td>3,356</td>
<td>3,662</td>
<td>3,662</td>
</tr>
<tr>
<td>Postdoctoral Scholars</td>
<td>426</td>
<td>327</td>
<td>525</td>
<td>525</td>
</tr>
<tr>
<td>Subtotal Students and Postdoctoral Scholars</td>
<td>3,503</td>
<td>3,683</td>
<td>4,167</td>
<td>4,167</td>
</tr>
<tr>
<td>FACULTY AND STAFF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>1,189</td>
<td>1,056</td>
<td>1,570</td>
<td>1,725</td>
</tr>
<tr>
<td>Staff*</td>
<td>7,134</td>
<td>6,339</td>
<td>9,422</td>
<td>10,350</td>
</tr>
<tr>
<td>Subtotal Faculty and Staff</td>
<td>8,323</td>
<td>7,395</td>
<td>10,992</td>
<td>12,075</td>
</tr>
<tr>
<td>PATIENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatients</td>
<td>498</td>
<td>407</td>
<td>675</td>
<td>675</td>
</tr>
<tr>
<td>Outpatients</td>
<td>2,074</td>
<td>2,577</td>
<td>2,600</td>
<td>3,135</td>
</tr>
<tr>
<td>Subtotal Patients</td>
<td>2,572</td>
<td>2,984</td>
<td>3,275</td>
<td>3,810</td>
</tr>
<tr>
<td>VISITORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitors to Patients</td>
<td>2,575</td>
<td>2,281</td>
<td>3,508</td>
<td>3,882</td>
</tr>
<tr>
<td>Other Visitors</td>
<td>974</td>
<td>1,094</td>
<td>1,263</td>
<td>1,339</td>
</tr>
<tr>
<td>Subtotal Visitors</td>
<td>3,549</td>
<td>3,375</td>
<td>4,771</td>
<td>5,221</td>
</tr>
<tr>
<td>Total</td>
<td>17,947</td>
<td>17,437</td>
<td>23,225</td>
<td>25,293</td>
</tr>
</tbody>
</table>

a Includes clinical residents
b Includes clinical fellows

(There is no Table 7)
4.6 MEASUREMENT AND ACCOUNTABILITY

In order to further its commitment to manage the impacts of its development of the Parnassus Heights campus site and to communicate with neighbors on the progress of efforts to manage impacts, UCSF will:

• Continue to measure the percentage of UCSF employees who commute to and from the Parnassus Heights campus site via single-occupancy vehicles versus other modes of travel.

• Measure the percentage of patient and visitor trips to and from the Parnassus Heights campus site via single-occupancy vehicles versus other modes of travel.

• Monitor the success of proposed loading and delivery improvements by measuring the number of vehicles making deliveries through key gateways every two years (starting in 2016).

• Prior to starting construction of the New Hospital building, complete the demolition of the Surge, Woods, and LPPI buildings.

• Hold an annual community discussion, via the Community Advisory Group, on the revitalization of the Parnassus Heights campus site and efforts to manage transportation impacts.

• Publicly communicate UCSF’s ongoing allocation of financial resources (via UCSF’s multi-year Capital Financial Plan) towards the implementation of LRDP proposals.
This page intentionally left blank.
This page intentionally left blank.
MISSION BAY
5.1 EXISTING SETTING

The 60.2-acre UCSF Mission Bay campus site is generally bounded by Mission Bay Boulevard South to the north, Owens Street to the west, Mariposa Street to the south, and Illinois and Third streets to the east (Figure 12). The campus site is within the Mission Bay South Redevelopment Area, which is part of the larger 303-acre Mission Bay Redevelopment Area in the Mission Bay neighborhood, north of the Potrero Hill and Dogpatch neighborhoods. It is approximately 3.8 miles east of the Parnassus Heights campus site and 3.6 miles southeast of the Mount Zion campus site.

The site comprises the original 42.3 acres north of Sixteenth Street (North Campus, formerly known as the Research Campus), the 14 acres south of Sixteenth Street (South Campus) acquired for the UCSF Medical Center at Mission Bay, and the 3.8 acres east of Third Street (the East Campus) subsequently acquired for further campus development. UCSF also leases space for research and clinical purposes in the nearby China Basin Building (185 Berry Street), at 1500 Owens Street, and at 499 Illinois Street; and owns an office building at 654 Minnesota Street (Figure 13).

The Mission Bay campus site is flat, unlike Parnassus Heights, and located in a warmer part of the city. Here, warehouses have been demolished to make way for the campus site and surrounding commercial, light industrial, residential, retail, and civic uses in large new buildings. The site was originally San Francisco Bay tidelands, and groundwater is generally only seven feet below the surface; this makes below-ground levels in buildings prohibitively expensive to construct. Buildings require extensive piles driven up to 100 feet deep (and sometimes more) for structural and seismic support. The site was partially filled with debris from the 1906 earthquake and then used as an industrial rail yard, resulting in contaminated soils that must be capped or removed and replaced with clean soil prior to new uses on the site.

The north and south portions of the campus site are separated by Sixteenth Street, a city street that serves as a primary gateway from the west into the Mission Bay area. The North Campus is bifurcated by Fourth Street, a city street that connects the campus site to the area further north. When Fourth Street is completed through the South Campus, it will transition into a large public pedestrian plaza and bicycle route, which will serve the UCSF Medical Center, scheduled to open in 2015, and the broader community. Fourth Street and several private campus streets help disperse traffic, reinforce the urban pattern of the area, and provide view corridors. The East Campus is across Third Street, an important city street that connects Mission Bay to the South of Market and Bayview districts of San Francisco.

The initial vision for UCSF’s original 42.3 acres in Mission Bay was of a major new research site that would be large enough to house a critical mass of scientific programs and could also accommodate UCSF’s growth into the initial decades of the 21st century. Realization of this vision began in 1998, with the gifts of 13 acres of land from the City and 30 acres from the Catellus Development Corporation (Catellus) – what is now the North Campus. Because fundraising was more successful than had been expected, and with the growth in UCSF research funding, the North Campus has developed much faster than was predicted. Over the past 15 years, Mission Bay has become home to many of UCSF’s basic-science research and graduate programs, including programs in biological sciences, biochemistry and biophysics, cellular and molecular pharmacology, the Helen Diller Family Comprehensive Cancer Center’s Research Building (Diller Cancer Research), the Cardiovascular Research Institute (CVRI), and the Neurosciences Center, among others. The plans for the Mission Bay campus site further evolved with the establishment of the California Institute for Quantitative Biosciences (QB3), which fosters new research enterprises through the development of incubator space at and near the Mission Bay campus site, and through efforts to engage in industry partnerships at an unprecedented level.

Under the 1996 LRDP and the 1998 Mission Bay South Redevelopment Plan, the North Campus was entitled for 2.65 million gsf for research, instruction, and support uses (excluding structured parking). Of that, 1,926,600 gsf, representing 73 percent of the 1996 LRDP approved entitlement, has been built: six research buildings, a campus community center (known formally as the William J. Rutter Center, or simply as the Rutter Center) on Owens Street, and about 430 units of housing between Third and Fourth streets. Research is currently the dominant use of space at Mission Bay, as indicated in Appendix A. Housing was not in the original space program, but approximately 400,000 gsf of housing was added in the 2001 LRDP Amendment #1 to help meet UCSF demand, and to minimize pressure on neighborhood housing demand and traffic impacts. A child care center temporarily housed in a modular building on Block 18 is excluded from the square footage because it is expected to move into a permanent facility. There are also two parking structures, on Owens and Third streets, with a total of approximately 1,300 parking spaces (and a minor amount of shell space that could be developed for retail or offices). Currently, 34 percent of the UCSF Mission Bay population drives alone, and the existing parking demand is 1.15 parking spaces per 1,000 square feet of built space. Parking demand is expected to decrease in the future and be closer to 0.75 spaces per 1,000 square feet as more transit options such...
Figure 12: Mission Bay 1996 LRDP Functional Zones (as Amended)
Figure 13: Mission Bay Existing Ownership & Leases
(updated to reflect LRDP Amendment #3 and LRDP Amendment #4)
as Bike Share, a direct connection to the rerouted 22 Fillmore bus line, and the temporary 55 motor coach bus line become available, and parking becomes less available and more expensive. Any reduction in the parking demand factor would be consistent with the City’s *Transit First* policy and UCSF’s transportation goals.

Mission Hall, an academic office building of 264,800 gsf at the northeast corner of Fourth and Sixteenth streets, is expected to open in late 2014. Upon its completion, the total development on the North Campus will be approximately 2.19 million gsf, or about 82 percent of the existing allowable entitlement of 2.65 million gsf. Only 464,600 gsf\(^1\) of this entitlement will remain to accommodate substantial unmet academic needs that could benefit from a presence at Mission Bay.

Since the original Mission Bay campus site was envisioned, clinical programs have been introduced and an additional 14 acres of adjacent land (the South Campus) was acquired for the UCSF Medical Center at Mission Bay. The 2008 LRDP Amendment #3 included 1,787,000 gsf of clinical uses for the South Campus. Phase 1 of the UCSF Medical Center at Mission Bay is expected to open in 2015. Located on the east side of the South Campus, Phase 1 comprises the future UCSF Benioff Children’s Hospital, UCSF Betty Irene Moore Women’s Hospital, and UCSF Bakar Cancer Hospital, which together form a 289-bed hospital complex; a future outpatient cancer building (sometimes called Phase 1B); and an energy center – a total of 869,000 gsf, or 49 percent of the South Campus entitlement. Over 1,100 parking spaces will be provided in a surface lot and existing garage. Phase 2 of the Medical Center at Mission Bay will be constructed across the Fourth Street Public Plaza, likely sometime after 2035. Development of these UCSF Medical Center facilities will result in the integration of patient care into the Mission Bay research community.

In summary, a total of approximately 1.13 million gsf is under construction at the Mission Bay campus site. When completed, there will be approximately 3 million gsf of UCSF-occupied space, excluding structured parking and the temporary child care center.

In August, 2014, UCSF acquired Mission Bay Blocks 33 and 34, a 3.8-acre parcel referred to as the East Campus, located directly across Third Street from the South Campus. The East Campus is projected to accommodate 500,000 gsf of development plus 500 parking spaces, and is expected to serve as a consolidation location for both owned and leased properties to reduce operating and occupancy costs, improve efficiency and collaboration, and provide programmatic flexibility among its campus sites.

In April, 2014, the Golden State Warriors announced their intention to purchase a 12-acre site in Mission Bay across Third Street from the North Campus, for development, as a sports and entertainment center. The development of that site would be subject to review and approval by the City.

---

\(^1\) 464,600 gsf is the sum of the total remaining entitlement plus approximately 5,900 gsf of temporary structures, which are currently included in the “existing” total but which will be removed as construction of the Mission Bay campus site progresses.
5.2 EXISTING PLANNING AGREEMENTS

There are a number of plans, design standards, and agreements that were prepared for development in the Mission Bay North and Mission Bay South Redevelopment Areas, at the center of which lies the UCSF Mission Bay campus site. Many of these required considerable negotiation among the affected parties as well as input from the Mission Bay community.

5.2.1 MISSION BAY NORTH AND SOUTH REDEVELOPMENT AREA PLANS

The Mission Bay North and South Redevelopment Area Plans were prepared by the City and approved by the San Francisco Board of Supervisors in the fall of 1998. The overall objective of these plans is to remove industrial blight and stimulate development, employment, and economic growth. Retaining and promoting UCSF academic and research activities within the City by providing a major new campus site large enough to accommodate a critical mass of scientific programs into the initial decades of the 21st century was both an integral part of achieving that objective and a highly desirable outcome for the City. A site for the major new campus site was identified within the Mission Bay South Redevelopment Area located south of the China Basin Channel (Figure 14). (The UCSF Mission Bay campus site lies within the boundaries of the Mission Bay South Redevelopment Area.)

Together, the plans for Mission Bay North and Mission Bay South call for more than 6,000 residential units (including affordable housing); commercial, retail, and entertainment uses; a large hotel; and over 40 acres of publicly accessible open space in the 303-acre area.

5.2.2 AGREEMENTS RELATED TO THE NORTH CAMPUS

With the transfer of 30 acres from Catellus to UCSF for the North Campus, a Contribution Agreement was prepared outlining the conditions associated with this transfer of property. This agreement describes UCSF’s financial obligations, including contributions towards the construction of public infrastructure (streets and utilities), maintenance of the open space system throughout Mission Bay, and the development of a public fire station located at Third and Mission Rock streets. Also included in the Contribution Agreement are UCSF’s obligations to provide a minimum of eight acres of publicly accessible open space (already completed) on the North Campus, and to donate Block 14 to the San Francisco Unified School District, should the School District request the property for a public school by 2027. A Donation Agreement was also prepared between UCSF and the City for the City’s donation of 13 additional acres for the North Campus, consisting of rights-of-way of public streets that were previously planned but had not been developed.

The Contribution Agreement allows building heights up to 85 feet (exclusive of rooftop mechanical equipment) on the North Campus, with further height up to 110 feet allowed on 20 percent (5.2 acres) of the developable area of the North Campus, and up to 160 feet allowed on 10 percent (2.6 acres). With only 0.3 and 0.16 acres, respectively, of the campus site developed within the 110- and 160-foot height categories, there is considerable development opportunity for taller buildings.

5.2.3 AGREEMENTS RELATED TO THE SOUTH CAMPUS

As part of the acquisition of property for the South Campus, UCSF entered into a ground lease for Blocks 36-39 with Catellus and a Memorandum of Understanding (MOU) with the former San Francisco Redevelopment Agency to establish UCSF’s obligations, including contributions towards the construction of public infrastructure; affordable housing; maintenance of the open space system throughout Mission Bay; and limitations on building heights, massing, and signage for development of the South Campus. UCSF subsequently acquired Block X3 to complete parcel assembly of the South Campus, and the MOU with the City was then amended to cover that property as well.

In addition, after a lengthy community planning and environmental review process, UCSF developed and adopted the Residential Sound Reduction Program for Helicopter Operations2 to address the potential impact on nearby residents of helicopter noise associated with the UCSF Medical Center at Mission Bay helipad.

5.2.4 AGREEMENTS RELATED TO THE EAST CAMPUS

In connection with the acquisition of Blocks 33 and 34 for the East Campus, UCSF entered into a Memorandum of Understanding with the Successor Agency to the San Francisco Redevelopment Agency (also known as the Office of Community Investment and Infrastructure) regarding UCSF’s financial obligations, including contributions towards the construction of public infrastructure; affordable housing; maintenance of the open space system throughout Mission Bay; and agreement to follow the Mission Bay South Redevelopment Area Plan “Design for Development” regarding

---

2 campusplanning.ucsf.edu/physical/Final_SEIR_RSPP.pdf
Figure 14: Mission Bay Planning Agreements
(updated to reflect LRDP Amendment #3 and LRDP Amendment #4)
building height, bulk, setbacks, maximum tower floorplate areas, and other design matters for buildings on the East Campus. UCSF also entered into an Infrastructure Agreement with the infrastructure developer for Mission Bay (FOCIL-MB, LLC) regarding UCSF’s contribution towards public infrastructure.

5.2.5 MISSION BAY COMMUNITY PLANNING PRINCIPLES

In response to community concern regarding UCSF’s acquisition of land for the South Campus and 654 Minnesota Street, UCSF partnered with its Community Advisory Group (CAG) to convene the UCSF Mission Bay Community Task Force (Task Force). The purpose of the Task Force was to identify community issues related to UCSF’s development in the Mission Bay area and to produce planning principles to address these issues. These Mission Bay Community Planning Principles were adopted as part of the 2008 LRDP Amendment #3. The Community Planning Principles (discussed in Chapter 3 and included in full as Appendix D) addresses community concerns across all campus sites. They are to supersede the Mission Bay Community Planning Principles.
5.3 MISSION BAY SITE-SPECIFIC OBJECTIVES

The majority of UCSF’s growth under the 2014 LRDP is expected to occur at the Mission Bay campus site, where the most undeveloped land is available to accommodate significant growth in close proximity to existing and planned research, clinical, and other activities. Development of the Mission Bay campus site will not only meet the substantial need for more research space, but will also provide capacity for additional clinical space, campus housing, administrative and other support space, and instruction space. The ability to focus growth at an existing campus site rather than at remote locations is highly desirable, as it improves efficiency and strengthens collaboration. Furthermore, research and clinical uses at the site are expected to benefit from their proximity to the growing private-sector bioscience community within the Mission Bay Redevelopment Area.

As noted previously, UCSF has acquired Mission Bay Blocks 33 and 34, a 3.8-acre parcel across Third Street from the South Campus. In contrast to the increased development capacity on the existing Mission Bay campus site, which is expected to accommodate much of UCSF’s growth through the LRDP horizon, the expansion of the campus site through the acquisition of Blocks 33 and 34 is intended to allow for the consolidation of some of UCSF’s leased and remote sites and relocation of functions to Mission Bay, in order to reduce operating and occupancy costs, improve efficiency and collaboration, and provide programmatic flexibility among UCSF’s campus sites.

Site-specific objectives for the Mission Bay campus site are:

A. Accommodate the majority of UCSF’s growth through the LRDP horizon.
B. Allow for the consolidation of some of UCSF’s leased and remote sites to Mission Bay to reduce operating and occupancy costs.
C. Continue UCSF’s commitment to excellence, innovation, and collaboration as the university grows and expands the research and education programs at Mission Bay, and continue to support the new UCSF Medical Center at Mission Bay.
D. Strategically expand the existing North Campus at Mission Bay by maximizing the development capacity under the 2014 LRDP, while increasing efficiency by aligning and locating interdependent research and clinical teams and joint endeavors at the Mission Bay campus site.
E. Complete Phase 1 of the Medical Center on the South Campus and consolidate specialized services associated with women’s, children’s and cancer services.
F. Expand campus housing and child care on the North Campus and continue to develop the campus site with other campus life amenities, such as retail, and outdoor recreation and fitness facilities.
G. Relocate programs from Parnassus Heights to Mission Bay, if they complement programs already located at Mission Bay and are not required to be at Parnassus Heights to function efficiently.
5.4 MISSION BAY PLAN ELEMENTS

5.4.1 LAND USE

Figure 15 illustrates the proposed campus boundary and functional zones of the Mission Bay campus site, including the recently acquired East Campus.

Functional zones on the North Campus reflect the organizational structure of the original Mission Bay Master Plan and Design Guidelines, which were prepared in 1999 to guide campus site growth and envisioned research buildings clustered to the north and south of a network of large open space areas, with parking at the periphery along Owens and Third streets. The large areas in the Research functional zone would also contain smaller amounts of secondary uses such as instruction, administration, retail, and other support space. The existing Rutter Center is in the Support functional zone, and existing campus housing between Third and Fourth streets is in the Housing zone. A second Housing functional zone is proposed on the northern edge of the North Campus on Block 15, identified for future housing use because of its proximity to off-site residential development under construction north of the campus site, and proximity to on- and off-site open space and a potential public school site on Block 14.

The majority of clinical uses are expected to be located on the South Campus in the Clinical functional zone, in support of the UCSF Medical Center at Mission Bay. However, several clinics have been developed as a secondary use within the Research functional zone in cases where there is a close functional relationship between clinical and research programs, and this is likely to continue in the future.

Parking functional zones are located near the periphery of the campus site so as to minimize vehicular traffic within the campus site. The two parking zones on Owens Street provide for parking expansion when it is needed to support future program growth.

The East Campus is proposed to be functionally zoned for research and parking use, shown as a striped pattern on Figure 15 because the exact footprints for those uses have not yet been determined. When the locations of specific uses on the parcel are identified, the functional zones for the East Campus will be updated accordingly.

UCSF’s existing and proposed space program for Mission Bay, including the North, South, and East campuses, are described in Appendix A. Since the Medical Center at Mission Bay Phase 2 construction is not expected until after 2035, it is not included in the proposed space program. However, for a conservative analysis of potential impacts, it is included in the LRDP Environmental Impact Report (EIR).
Figure 15: Mission Bay Proposed Functional Zones  
(updated to reflect LRDP Amendment #1 and LRDP Amendment #2)
The 2014 LRDP proposes to increase the square footage of the North Campus by 1,456,400 gsf, which includes 464,600 gsf of existing remaining entitlement plus 991,800 gsf of new entitlement, sized to make efficient use of the land while avoiding traffic and city-wide infrastructure impacts. This increase would help UCSF meet its space needs through the LRDP horizon of 2035, but is unlikely to accommodate all of UCSF’s programmatic needs at Mission Bay. Development of the North Campus for research and other uses will depend on funding that may or may not fully materialize during the LRDP horizon.

With the 991,800 gsf of new entitlement described above, under this LRDP the development capacity for the North Campus is proposed to increase from 2,650,000 gsf to 3,641,800 gsf. Although housing was not included in the original entitlement for the Mission Bay campus site (it was added in 2002 with LRDP Amendment #1), 786,100 gsf of the total capacity will be devoted to housing (387,400 gsf of existing housing on Block 20 and 398,700 gsf of new housing on Block 15).

On the South Campus, construction of a 124,500-gsf cancer outpatient building is anticipated prior to 2035, which will complete Phase 1 of the UCSF Medical Center at Mission Bay. This will bring the total space for Phase 1 to 993,500 gsf. Phase 2 facilities will be located on the west side of the South Campus, across the Fourth Street Public Plaza. Phase 2 Medical Center at Mission Bay is planned for after 2035 as a 261-bed hospital with additional outpatient space, totaling 793,500 gsf.

Development of the East Campus would accommodate 500,000 gsf. As a result, the total anticipated development through 2035 with the proposed expansion of the Mission Bay campus site (North, South, and East campuses) would be 5,135,200 gsf. (As explained above, this does not include Phase 2 of the Medical Center at Mission Bay, which is projected to occur after 2035.)

The following LRDP proposals describe the approach for fulfilling the site-specific objectives described above for the Mission Bay campus site:

- **Develop additional research capacity (Blocks 16, 18A, 23A, and 25B).** Develop approximately 1,017,200 gsf of additional research capacity on Blocks 16, 18A, 23A, and 25B. Building heights would be within the parameters described in Section 5.2.2 above, and designed to minimize shading on open space areas. The tallest buildings (up to 160 feet, exclusive of rooftop mechanical equipment) would be located along major arterials (18A on Owens Street, and 25B at the corner of Third and Sixteenth streets). In accordance with the Mission Bay Campus Master Plan and Design Guidelines, buildings along Mission Bay Boulevard South (Block 16) would include a 30-foot step-back from the property line above 55 feet.

- **Develop new housing (Block 15).** A housing complex of approximately 418,200 gsf (which includes 398,700 of housing and 19,500 gsf of support), with approximately 774 beds in 523 units, is proposed on Block 15. The project would comprise multiple buildings framing an interior courtyard. Building heights would be within the parameters described in Section 5.2.2 above, and designed to minimize shading on open space areas. In accordance with the Mission Bay Campus Master Plan and Design Guidelines, development along Mission Bay Boulevard South would include a 30-foot step-back from the property line above 55 feet. The complex may include a child care center with approximately 200 child care slots. In addition, a small amount of space could be considered on this block for occupancy by UCSF police.

- **Complete Phase 1 of the Medical Center (South Campus).** The UCSF Medical Center proposes to build a 124,500-gsf cancer outpatient building at Third and Sixteenth streets, which would physically adjoin the hospital structure currently under construction and due to open in 2015. The outpatient cancer building would be the final building planned as part of Phase 1 of the UCSF Medical Center at Mission Bay. Phase 2 of the UCSF Medical Center at Mission Bay, which would include additional inpatient and outpatient facilities and a parking garage expansion, is proposed to occur after 2035, beyond the LRDP horizon, and therefore is not proposed as part of the LRDP.

- **Expand the Mission Bay campus site to include Blocks 33 and 34 (East Campus).** UCSF has acquired Mission Bay Blocks 33 and 34, known as the East Campus. This area is projected to accommodate up to 500,000 gsf and 500 parking spaces, and is functionally zoned for research and parking use. (The East Campus functional zone is shown in a striped pattern on Figure 15 because the exact footprints for those uses have not yet been determined. When the locations of specific uses on the parcel are identified, the functional zone for the East Campus will be updated accordingly.)

All of these proposals taken together would result in approximately 2.07 million gsf of new program space...
that may be built at the Mission Bay campus site through 2035. Including the 1.13 million gsf that is currently under construction, the Mission Bay campus site would grow to 5.14 million gsf by 2035.

5.4.2 OPEN SPACE

Existing and proposed open space and landscape zones are illustrated in Figure 16, along with proposed retail space and pedestrian paths. As buildings are proposed in the future, consideration will be given to the development of open space in Blocks 15, 16, and 23A, landscape improvements in the adjacent streets, and pedestrian connections per the applicable Physical Design Framework universal planning and design principles. In addition, outdoor recreation and fitness facilities are proposed to be developed on Block 18C.

- Develop additional open space (Blocks 15, 16, and 23A). When Blocks 15, 16, and 23A are developed, courtyards are to be considered on those blocks to provide additional open space. If a child care center is included as part of proposed housing on Block 15, an estimated 15,000 square feet of the courtyard could be dedicated as an outdoor play yard for the child care center, unless designated at another nearby location. If a central utility plant is built on a portion of Block 16, a portion of the courtyard may be needed by Facilities Services for outdoor storage and other support uses, or alternatively that function could be accommodated elsewhere.

- Develop outdoor recreation space (Block 18C). A regulation-size sports field for soccer and other games is under consideration on the eastern portion of the block, providing outdoor recreation and fitness space between the Rutter Center and future campus housing on Block 15.

5.4.3 CIRCULATION, TRANSPORTATION, AND PARKING

Existing and proposed streets and shuttle, bicycle, and transit routes are depicted in Figure 17. Proposed parking and loading are shown in Figure 18. The following proposals address the need for more vehicular, shuttle, bicycle, and motorcycle parking to support future growth.

- Develop additional structured parking (Block 18B). To support the future growth of the campus site and as existing surface parking lots are replaced by buildings, new structured parking is proposed on Block 18B, just east of the proposed research building on Block 18A. It may contain approximately 1,540 parking spaces. The ground floor of the garage may be sized to accommodate about 60 UCSF shuttles. Garage entrances and exits would be proposed on Nelson Rising Lane and mid-block on Owens Street to avoid conflicts with Gene Friend Way, a pedestrian corridor. A portion of the garage may be used for storage by Facilities Services.

- Complete the street network. On the North Campus, Nelson Rising Lane (from Owens Street to the Sandler Neurosciences Center) and one-block segments of Fifth and Sixth streets (between Nelson Rising Lane and Mission Bay Boulevard South) are proposed for development. Nelson Rising Lane would continue to serve as a loading street for future buildings located there. Once these campus streets are completed, UCSF shuttle routes and stops may change in order to provide more direct access to these new buildings.

- Increase bicycle and motorcycle parking capacity. As Mission Bay is further developed, UCSF plans to continue to add bicycle and motorcycle parking around new buildings, in the proposed garage on Block 18B, and in open space areas.

5.4.4 UTILITIES AND OTHER INFRASTRUCTURE

UCSF needs to complete planned underground utility lines to serve new buildings at Mission Bay, and is exploring the possibility of building a central utility plant and redundant utility loop.

- Consider a central utility plant (Block 16). UCSF is considering a central utility plant on a portion of Block 16, potentially using cogeneration technology, as well as a redundant utility distribution loop for steam, chilled water, and high-temperature hot water, to help ensure that utility supplies to future buildings on the North Campus are not interrupted should a break or power outage in existing lines occur. If a central utility plant is determined not to be needed, as discussed previously, the site would be developed with research capacity.

5.4.5 BLOCK 14 SCHOOL SITE

Block 14, in the northwest corner of the North Campus, is reserved for use by the San Francisco Unified School District (SFUSD) as a public school site. Per the Contribution Agreement (described in Section 5.2.2) through which the Mission Bay campus site was acquired by the Regents, the SFUSD has until 2027 to request conveyance of the school site. UCSF fully expects SFUSD to develop the site for a school. However, if the SFUSD does not request Block 14 during that timeframe, UCSF may develop Block 14 for its...
Figure 16: Mission Bay Proposed Open Space Plan
Figure 17: Mission Bay Proposed Circulation Plan
Figure 18: Mission Bay Proposed Parking & Loading Plan

1 Block 18 Garage
2 Community Center Garage
3 Third Street Garage
4 Owens Street Garage
△ Loading/Service Area
own use after the necessary planning, environmental review, and amendment of the LRDP. The use and configuration of the site would be determined at that time.

## 5.5 Population

The 2013 daily population of the Mission Bay campus site was more than 3,900, including students, faculty, staff, and campus housing occupants. With the inclusion of UCSF employees in nearby leased and owned sites, the total daily population is more than 5,000. The total population of the Mission Bay site is expected to grow substantially over the life of the LRDP, a reflection of the growth in the space program.

During the life of the 2014 LRDP, the number of UCSF faculty and staff employed at the site is expected to rise from 3,900 (in 2013, the latest year for which there are data) to an estimated 14,200 employees, assuming completion of construction underway and the implementation of the LRDP proposals for the North, South, and East campuses. The number of residents living in on-site UCSF housing – some of whom work or study at the Mission Bay campus site – may double by 2035, from 900 to 1,900, once additional campus housing is constructed. Approximately 70,000 outpatient visitors were seen in 2013 at UCSF clinics in owned and nearby leased space at Mission Bay. The Medical Center projects that outpatient visits would grow to 450,000 outpatient visits per year during the life of the LRDP, primarily due to the new UCSF Medical Center at Mission Bay (including the future outpatient cancer building). UCSF projected population at the Mission Bay campus site (including employees, patients, and visitors) could grow to 19,700 by 2035.
6.1 EXISTING SETTING

The UCSF Mount Zion campus site is approximately 7.6 acres on six contiguous city blocks in the Western Addition neighborhood of San Francisco (Figure 19). It is located approximately two miles northeast of the Parnassus Heights campus site and one mile east of the Laurel Heights campus site. The Mount Zion campus site is generally bounded by Bush Street to the north, Scott Street to the east, Post Street to the south, and Broderick Street to the west. UCSF-owned buildings are concentrated on a ‘main block’ bounded by Sutter, Scott, Post, and Divisadero streets.

The Mount Zion campus site is located in the commercial district of a mixed-use neighborhood, and is fully integrated with the city street grid. Most non-UCSF buildings along Divisadero Street consist of residential and office uses above ground-floor retail. Also in the vicinity of the site are private medical office buildings that are not affiliated with UCSF. Kaiser Permanente Medical Center is located on Geary Boulevard, one block to the southwest. Residential uses are widespread to the north and west, as well as directly across Scott Street to the east of the main block.

Clinical uses are predominant on the campus site. UCSF owns buildings at Mount Zion comprising 777,200 gsf (Appendix A), and leases another 45,300 square feet of space within a quarter-mile of the site, for a total of 822,500 gsf. The UCSF Medical Center at Mount Zion is the home of the Helen Diller Family Comprehensive Cancer Center,1 with 91 licensed inpatient beds and an average daily census of 50 patients; the UCSF Women’s Health Center, Northern California’s only nationally designated Center of Excellence in Women’s Health; the Osher Center for Integrative Medicine (Osher); the Pain Management Center, Sleep Disorders Center, and Dialysis Center; and other outpatient programs. Cancer research is conducted in a building on Sutter Street.

Buildings at Mount Zion vary considerably in age, height (one to eight stories), and architectural style. Overall, development is moderately dense, with limited open space that includes a small courtyard adjacent to the Women’s Health Center, north of Sutter Street, and a rooftop garden on the Osher building, at the corner of Post and Divisadero streets. The main block has no useable open space; the center of the block is paved and used to accommodate the delivery of supplies and a small amount of parking.

Some buildings at Mount Zion are seismically compromised and must be retrofitted or demolished to comply with the UC Seismic Safety Policy. These are the Hellman building, located at the southeast corner of the main block; the Harold Brunn Institute building (Brunn), located north of the Hellman building; and the building at 2255 Post Street. The Hellman building has been determined to be potentially eligible for the California Register of Historical Resources.

In addition, the main hospital must be decommissioned or seismically retrofitted by 2030 to address state seismic regulations for acute care facilities.

The Dialysis Center building, while not seismically compromised, is considered obsolete and proposed for demolition.

UCSF owns and operates three parking garages and several surface parking areas totaling 475 parking spaces. Other garages, lots, and street parking are available nearby. Because parking in the vicinity is in high demand, patients and essential healthcare providers are given priority access to parking under UCSF’s control.

Mount Zion is well served by public transit. A UCSF shuttle stop is located on the south side of Sutter Street with direct connections to other UCSF sites. Parking is available for UCSF vanpools. Because of these available resources, about 70 percent of the Mount Zion employee population uses modes of transportation other than single-occupancy vehicles, including 10 percent who commute by walking or biking to the campus site.

---

1 Helen Diller Family Comprehensive Cancer Center (Helen Diller Cancer Center) patient care services are integrated throughout UCSF; services are provided at UCSF Medical Center at Mount Zion, UCSF Medical Center at Parnassus Heights, the San Francisco General Hospital Medical Center, and the San Francisco Veterans Affairs Medical Center. Some of the patient care cancer activity will move to the Medical Center at Mission Bay when it opens in 2015. As for research, at the Mission Bay campus site, the Helen Diller Family Cancer Research Building (Diller Cancer Research) is a state-of-the-art research facility that opened in 2009, housing researchers who focus on the basic biological mechanisms of cancer. The Cancer Center’s laboratory research building at UCSF/Mount Zion includes more than 250 lab work stations and offices for 48 principal investigators. Cancer Center faculty investigators also conduct research at Parnassus Heights, in other facilities at Mission Bay, at San Francisco General Hospital, and at the San Francisco Veterans Affairs Medical Center.
Figure 19: Mount Zion Existing Ownership & Leases
6.2 MOUNT ZION SITE-SPECIFIC OBJECTIVES

The Mount Zion campus site was identified as an outpatient hub in the 2005 LRDP Amendment #2, which proposed the elimination of inpatient facilities at this site after relocation to the UCSF Medical Center at Mission Bay or Parnassus Heights. Accordingly, future development at Mount Zion is expected to be for clinical use, driven by the demand for outpatient space. It is estimated that approximately 75,500 gsf of additional outpatient space will be needed at Mount Zion through 2035.

Demolition of seismically compromised and obsolete buildings would allow the construction of new space to accommodate not only the outpatient growth described above, but also clinical programs at Parnassus Heights that may be relocated to Mount Zion, and the consolidation of functions from nearby leased space into owned space.

A primary driver of planning for Mount Zion is the need to enable patients to experience and navigate through the site with ease. To that end, clear connections between buildings, clustering of clinics whenever possible, and the thoughtful relationship of buildings to transit stops and parking facilities are important considerations.

Site-specific objectives for the Mount Zion campus site are:

A. Convert the Mount Zion campus site into a patient-friendly ambulatory care center to meet existing and future projected outpatient needs.
B. Address seismically compromised and obsolete buildings.
C. Develop new facilities to accommodate programmatic needs.
6.3 MOUNT ZION PLAN ELEMENTS

6.3.1 LAND USE

Figure 20 illustrates the proposed campus boundary and functional zones. The proposed boundary encompasses only those buildings owned by UCSF. Since the site is primarily devoted to inpatient and outpatient uses, most of the site is within the Clinical functional zone. Exceptions are the Cancer Research building on Sutter Street, in the Research functional zone; an open courtyard, part of the adjacent Women’s Health Center, in the Open Space functional zone; and two parking structures, located on Sutter and Post streets respectively, which are in the Parking functional zone.

The following LRDP proposals describe the current approach for fulfilling the site-specific objectives described above for the Mount Zion campus site:

- **Renovate and reuse the existing hospital.** The inpatient facilities at Mount Zion are provided in two interconnected buildings. Neither building will meet state seismic regulations after January 1, 2030, so both will require decommissioning as inpatient facilities by that date. Subsequent to the opening in 2015 of the UCSF Medical Center at Mission Bay, the inpatient uses at Mount Zion will be relocated to the Mission Bay campus site. UCSF proposes to repurpose the hospital as an ambulatory care center with ambulatory surgery. Vacated space would be backfilled with growth of the cancer program, expansion of outpatient services, and support space. The decommissioned hospital may also accommodate program space and clinics displaced from buildings proposed for demolition, and from nearby leased space if and when leases are not renewed.

- **Demolish the Hellman, Harold Brunn Institute, and Dialysis Center buildings.** The Hellman and Brunn buildings are seismically compromised, and both of these buildings plus the Dialysis Center building are considered obsolete. All three buildings are located on the east side of the main block. The LRDP proposes to demolish these three buildings, which total approximately 84,800 gsf.

- **Construct new clinical and/or research space.** One or more buildings (or a phased building) may be built on the east side of the main block where the Hellman, Brunn, and Dialysis Center buildings are located. Such a building(s) may accommodate up to 257,000 gsf of space for clinical and/or research uses. A building along Scott Street may be constructed up to 65 feet in height. To minimize the building scale at the street level, it would be designed with a 20-foot step-back at the 40-foot height level. It may also be set back from Post Street to align with the existing hospital building for a prominent landscaped entrance. A building on Sutter Street may be built up to 105 feet in height with a 20-foot setback along Sutter and Scott streets.
Figure 20: Mount Zion Proposed Functional Zones
streets. Although not subject to the City’s height and bulk restrictions, a building designed in this manner would comply with the City’s height limit, but not the bulk limit.

- **Retrofit or demolish the building at 2255 Post Street.**
The 7,450 gsf building at 2255 Post Street is seismically compromised, and will be retrofitted or demolished.

All of these proposals taken together, including the approximately 257,000 gsf of new program space that may be built at the Mount Zion campus site through 2035, would result in a net increase at Mount Zion of about 172,200 gsf, assuming the building at 2255 Post Street is retained and retrofitted. This would bring the total of UCSF-owned space at the Mount Zion campus site to 949,400 gsf in 2035.

### 6.3.2 OPEN SPACE

The development of new facilities at Mount Zion provides the opportunity to integrate open space into future designs, particularly on the main block, which currently has no useable open space. In addition to providing open space on the campus site, in order to enhance the public realm when planning major new facilities on the main block, UCSF expects to coordinate with the City to consider potential improvements in adjacent public street rights-of-way, such as street trees; a possible wider sidewalk, passenger drop-off space, and parallel or angled parking along the west side of Scott Street; a planted median along Divisadero Street; and an extended landscape strip along Post Street (Figure 21).

- Develop open space. When the new space is constructed on the main block, a central courtyard could be developed for both campus and public use. The courtyard, which could be open-air or covered, would provide pedestrian access through the block.

### 6.3.3 CIRCULATION, TRANSPORTATION, AND PARKING

Existing and proposed shuttle, bicycle, and transit routes are depicted in Figure 22. Parking and loading facilities at the Mount Zion campus site are shown in Figure 23.

- Provide additional parking. When planning new building(s) on the main block, the need for additional parking should be considered, which could be provided in the building, underground, or off-site. Parking demand would be assessed when new development is pursued, and the community’s input would be sought at that time. Patients and essential healthcare employees would continue to be given parking priority.

UCSF will continue to enhance its Transportation Demand Management program and to encourage even greater use of public transit, UCSF shuttles, and other alternative modes of transportation. To improve site circulation, the existing loading dock on the main block may be relocated from the north side of the old hospital on Post Street into new building space on Sutter Street between the shuttle stop and potential garage entrance (Figures 22 and 23). This would allow supplies to be distributed to UCSF buildings above and below grade.

### 6.3.4 UTILITIES AND OTHER INFRASTRUCTURE

No significant changes to utilities or other infrastructure are proposed at the Mount Zion campus site. Any new buildings will require utility connections to surrounding public and private utilities.
Figure 21: Mount Zion Proposed Open Space Plan
Figure 22: Mount Zion Proposed Circulation Plan
Figure 23: Mount Zion Proposed Parking & Loading Plan

1. 2420 Sutter St Garage (Owned)
2. 1701 Divisadero Garage (Owned)
3. Scott/Bush Lot (Owned)
4. 2325 Post St Garage/Osher (Owned)
5. 2300 Sutter St Garage (Non-UCSF Public Parking)
6. 2355 Post St Lot (Non-UCSF Public Parking)
7. 2186 Geary Blvd Lot (Non-UCSF Public Parking)
8. 2120 Geary Blvd Lot (Non-UCSF Public Parking)
9. 1515 Scott St Lot (Non-UCSF Public Parking)

▲ Loading/Service Area
6.4 POPULATION

About 1,800 UCSF faculty and staff are located at the Mount Zion campus site. There are about 1,300 daily and 314,000 annual visits to its outpatient facilities. It is estimated that Mount Zion has a daily population of nearly 4,760 employees, students, patients, and visitors.

Based on the Medical Center’s outpatient projections, the annual outpatient visits could rise to over 420,000 with the implementation of the proposed 2014 LRDP program. Approximately 650 additional UCSF faculty and staff would be needed to support this increase in outpatient visitors, for a total of up to 2,500 employees.
7.1 Existing Setting

San Francisco General Hospital and Trauma Center (SFGH) is located in the Mission district, bordering the western portion of the Potrero Hill neighborhood (Figure 24). The site is generally bounded by U.S. Highway 101 to the north and east, 23rd Street to the south, and Potrero Avenue to the west. The area immediately surrounding SFGH is mostly residential, with some ground-floor, neighborhood-serving commercial activity, especially along 24th Street.

SFGH is an acute care medical center owned and operated by the City and County of San Francisco. SFGH is one of the nation’s top public hospitals, renowned for top-tier trauma and HIV/AIDS treatment; it serves as a safety net for uninsured and underinsured patients, as well as being the city’s only trauma center. SFGH is the largest provider of psychiatric acute and rehabilitation services in the City and operates the only psychiatric emergency department.

UCSF and SFGH have been partners in public health since 1873. Through an affiliation agreement with the City, UCSF leases or otherwise occupies space in exchange for services. UCSF faculty and physicians provide all of the medical care at SFGH. UCSF faculty also conduct research aimed at improving health outcomes in hospitals with underserved populations, and at saving the lives of trauma patients everywhere. Approximately 2,000 UCSF faculty and staff are employed at SFGH, and more than 20 UCSF research centers, affiliated institutes, and major laboratories have programs here, overseen by about 160 UCSF principal investigators. Students from all UCSF schools complete regular clinical rotations at SFGH. One third of the School of Medicine’s clinical training for residents as well as elective rotations by medical students is completed at SFGH.

The City is building a new hospital to accommodate the acute care services located in the existing main hospital building, in order to meet the seismic safety requirement of SB 1953. Non-acute care uses, which are not subject to those requirements, would remain in the existing main hospital building, and other non-acute care uses would backfill the vacated space. As of this writing, the City plans to seismically retrofit the existing main hospital prior to backfilling. The new 284-bed hospital will be nine stories containing 453,000 square feet of space, and is scheduled for completion in 2015.

UCSF leases or otherwise occupies approximately 261,900 gsf¹ of clinical, research, and office space on the SFGH campus, in Buildings 1, 3, 5, 9, 10, 20, 30, 40, 80/90, and 100 (Appendix A). Because the University of California Office of the President considers SFGH to be an adjunct campus to UCSF, it is subject to UC’s Seismic Safety Policy, which requires that all personnel be located in seismically safe buildings. Out of the total space occupied by UCSF at the SFGH campus site, approximately 175,000 gsf is in seismically compromised buildings. UCSF intends to continue to occupy Building 3, which is seismically safe, and Building 5, which the City plans to retrofit. UC does not own the land where SFGH is located, thus no functional zones are applied to this site.

¹ For the sake of simplicity, the LRDP refers to all space, owned and leased, in terms of gsf, even though leased space is sometimes measured in sf rather than gsf, depending on type of space and/or lease.
Figure 24: San Francisco General Hospital Existing Conditions
7.2 SFGH PLANNING EFFORTS

To comply with the UC Seismic Safety Policy, UCSF will need to relocate its SFGH personnel. UCSF is considering relocation of its SFGH personnel to a new, UCSF-constructed and seismically robust research building of about 175,000 gsf. The building may also accommodate UCSF personnel now in off-site leased space. As of 2014, the building is proposed on the existing SFGH surface parking lot (B/C Lot) located between the existing hospital (SFGH Building 5) and 23rd Street (Figure 24). Due to the timing of the proposed project, the new research building will undergo its own environmental review process, separate and apart from the 2014 LRDP Environmental Impact Report.

Parking spaces displaced by the new building may be replaced on the SFGH campus. One option being explored is the expansion of the City’s parking structure on 23rd Street. This potential expansion would extend the garage footprint toward 24th Street on the surface parking lot of the garage site. This project would be undertaken by the City, as it is located on City property.

UCSF expects to maintain its activities and affiliation at SFGH, and no other changes in UCSF uses are proposed.
This page intentionally left blank.
8.1 EXISTING SETTING

The 29-acre San Francisco Veterans Affairs Medical Center (SFVAMC) Fort Miley Campus is located in the northwest area of the city, adjacent to the Outer Richmond district (Figure 1). It is bounded by Clement Street and Seal Rock Drive and the Outer Richmond neighborhood to the south, and otherwise by the National Park Service’s Golden Gate National Recreation Area (GGNRA). SFVAMC also leases space in 1700 Owens Street, west of UCSF’s Mission Bay campus site.

SFVAMC has four overarching missions: patient care, education, research, and Department of Defense Support/ Emergency Management. The SFVAMC is home to the Northern California Institute for Research and Education (NCIRE), a non-profit with the mission to improve the health and well-being of veterans and the general population by supporting world-class biomedical research programs conducted by UCSF faculty. SFVAMC-based faculty are supported by more National Institutes of Health grants than any other group in the VA system.

The SFVAMC is owned by the US Department of Veterans Affairs (the VA) and has been affiliated with UCSF as a teaching hospital for over 50 years. All physicians are recruited jointly by the VA and the UCSF School of Medicine. UCSF faculty and staff – 189 clinical residents and fellows and 40 allied health professionals – are SFVAMC employees. Annually, more than 700 UCSF trainees from 36 programs rotate through the SFVAMC, providing one-third of all of UCSF’s medical training. The SFVAMC has no independent training programs of its own.

Although UCSF faculty and their practices are physically located at the SFVAMC site, UC does not own, lease, or otherwise control any of the space. For these and other reasons, SFVAMC space is not part of the proposed space program in this LRDP, and no functional zones are proposed.
8.2 SFVAMC PLANNING EFFORTS

The SFVAMC 2012 LRDP\(^1\) and the updated 2014 LRDP\(^2\) (prepared by SFVAMC, U.S. Department of Veterans Affairs) identified the need to retrofit existing buildings, in order to meet the most recent seismic safety requirements, and to expand its research program at another off-site location. The SFVAMC’s LRDP has a planning horizon of 2027; it was developed to meet the SFVAMC’s particular requirements and is unrelated to UCSF’s LRDP. In 2013, the SFVAMC established a 42,000-square-foot research center at 1700 Owens Street in the Mission Bay area; the SFVAMC intends to lease this space for 10 years. SFVAMC also plans to begin construction of a 100,000 gsf laboratory building at the Fort Miley Campus in 2015 as part of its seismic upgrade requirements. Due to space limitations on the Fort Miley Campus, the SFVAMC is working to establish a larger, permanent academic presence in the Mission Bay area. Any real estate and operating transaction would require federal Office of Management and Budget approval and legislation would need to be approved by Congress.

UCSF expects to maintain its activities as an affiliated institution at the SFVAMC, and no changes in uses are proposed.

---

1. [www.sanfrancisco.va.gov/docs/SFVAMC_LRDP.pdf](http://www.sanfrancisco.va.gov/docs/SFVAMC_LRDP.pdf)

SMALLER OWNED SITES
San Francisco, 2012
(Map updated to reflect LRDP Amendment #3, LRDP Amendment #4, LRDP Amendment #5, and Amendment #6)
This section covers all UCSF-owned properties (Figure 1) other than the three main campus sites (i.e., Parnassus Heights, Mission Bay, and Mount Zion, which are discussed in Chapters 4 through 6).

Smaller owned sites are generally not assigned functional zones because they are typically developed with a single facility, and further development beyond that initial use would require future approvals.1

9.1 MISSION CENTER

9.1.1 EXISTING SETTING

The 3.1-acre Mission Center campus site is located at 1855 Folsom Street on the southern half of the block bounded by Fourteenth, Harrison, Fifteenth, and Folsom streets. The site is in the northeast portion of San Francisco’s mixed-use Mission District; it is located approximately three miles east of Parnassus Heights, 1.25 miles west of Mission Bay, and one mile northeast of San Francisco General Hospital.

The Mission Center campus site has only one building, which is six stories tall and constitutes approximately 290,900 gsf. The building fronts Folsom Street, but may also be entered from the 220-space parking lot, which makes up the rest of the site, and which can be accessed from Harrison and Fifteenth streets.

Approximately 800 employees work in the building in various departments, primarily campus and Medical Center administrative units (Appendix A). The building also contains a small amount of research space and a café.

9.1.2 MISSION CENTER PLAN ELEMENTS

The LRDP proposes that the existing building and its campus and Medical Center administrative units remain. As of 2014, UCSF has not identified any programmatic or space need at Mission Center. However, UCSF has evaluated options for developing this campus site should it be determined by UCSF in the future that such a need exists for additional program space. The capacity study analyzed the potential size and location of a new building and parking structure, and took into consideration urban design elements that would preserve the existing outdoor plaza, create additional open space, enhance the public realm, and improve shuttle circulation, while also respecting the City’s height and bulk limits. Because the new building would be constructed on an existing surface parking lot, the study also determined that the proposed parking structure would need to be built first so that some parking on the site would be available for the displaced spaces.

For planning purposes, the 2014 LRDP assumes that any new building would be no greater than the City’s height limit of 55 feet, which would allow for a four-story building of up to 100,000 gsf. Therefore, it is assumed that Mission Center would increase to 390,900 gsf from the current 290,900 gsf with implementation of the LRDP (Figure 25 and Appendix A). To help integrate the site into the surrounding fabric of the city, a small amount of retail space or another active use at the ground floor would be considered when this building is programmed. A five-story, approximately 96,000-gsf parking structure would be built between the existing and

PROPOSALS FOR SMALLER OWNED SITES

MISSION CENTER
- Develop a new building, structured parking, and open space

LAUREL HEIGHTS
- Reinvest in existing facilities, or relocate functions and sell or lease property

654 MINNESOTA STREET
- Continue programs and uses in existing building

BUCHANAN DENTAL CENTER
- Continue clinic in existing building

HUNTERS POINT
- Reinvest in existing facilities, or relocate functions and relinquish property

OYSTER POINT
- Reinvest in existing facilities, or relocate functions and relinquish property

FRESNO CENTER FOR MEDICAL EDUCATION AND RESEARCH
- Continue programs and uses in existing building

---

1 Paragraph added by LRDP Amendment #3 and LRDP Amendment #4.
Figure 25: Mission Center Building Proposed Plan
new buildings, with up to 294 parking spaces (assuming the existing parking ratio of 0.75 spaces per 1,000 gsf is maintained). Additional open space facing south may be developed between the buildings. The existing shuttle stop could be relocated along Fifteenth Street, removing two on-street parking spaces. Vehicular ingress and egress would be from Harrison Street, with an egress-only driveway on Fifteenth Street, utilizing the existing curb cut. Access to the existing service dock would remain from Harrison Street, with Folsom Street as the service exit.

Development of this new building is to occur only if additional program space is determined to be needed in the future, and if and when funding becomes available.

(There is no Figure 26)
This page intentionally left blank.
This page intentionally left blank.
9.2 654 MINNESOTA STREET

Located two blocks south of the Mission Bay campus site in the mixed-use Dogpatch neighborhood, the three-story 654 Minnesota Street building (Figure 13) constitutes 65,500 gsf (Appendix A) and sits on 0.92 acres. The building and its associated parking lot make up the south end of the block bounded by Indiana, Eighteenth, Minnesota, and Nineteenth streets. UCSF purchased the building in 2005 and renovated it to higher seismic standards that allow for the continuation of essential functions such as campus police and data services in the event of an earthquake. The building houses a variety of campus and Medical Center administrative units. There are approximately 200 UCSF personnel working in the building.

Programs and uses at 654 Minnesota Street are expected to remain unchanged under the LRDP.

9.3 BUCHANAN DENTAL CENTER

The Buchanan Dental Center is operated by UCSF’s School of Dentistry. It is located at 100 Buchanan Street, approximately two miles east of the Parnassus Heights campus site (Figure 1). The facility is located on a 0.6-acre parcel within the boundaries of a 5.4-acre parcel that was formerly occupied by UC Berkeley Extension’s San Francisco campus. UC Berkeley vacated the site in 2003. A private developer has undertaken a redevelopment project, 55 Laguna, on the remainder of the parcel, which will include 330 units of market-rate housing and 110 units for low-income seniors, as well as retail uses and a community center.

The two-story, 18,200-gsf clinic building was constructed in 1979 (Appendix A). The building contains dental laboratories, treatment and exam rooms, offices, and a classroom. There are approximately 25 UCSF personnel employed at the clinic. It is proposed that the clinic remain at this location for the foreseeable future.
The 3.8-acre Hunters Point site is located at 800 and 831 Palou Avenue, adjacent to the former Hunters Point Naval Shipyard in the Bayview/Hunters Point neighborhood (Figure 27). It is approximately 3.2 miles south of the Mission Bay campus site. The Hunters Point site contains two single-story buildings that total approximately 20,500 gsf (Appendix A). The property is used as an animal care facility (vivarium) employing approximately 14 UCSF personnel. The surrounding land use is primarily industrial, with a pocket of residential to the north of and above the low-lying site.

The City has approved the Candlestick-Hunters Point Shipyard Development Plan, an extensive mixed-use redevelopment plan for the surrounding area that would include housing, retail, office, commercial, industrial, and open space uses. Because UCSF's facilities on this site are in relatively poor condition, UCSF is exploring the relocation of those functions and occupants and potential relinquishment of the site as part of the strategy to consolidate remote sites.

Figure 27: Hunters Point Existing Conditions
9.5 OYSTER POINT

The 5.7-acre Oyster Point site is located at 616 Forbes Boulevard in the City of South San Francisco (Figure 28). This property includes a warehouse from which UCSF provides distribution, storage, and mail services; the warehouse has an adjacent parking lot. Some vendors deliver goods to Oyster Point that are then consolidated onto UCSF vehicles for delivery to campus sites. The building constitutes approximately 144,400 gsf (Appendix A). There are approximately 42 UCSF personnel working at the Oyster Point facility. Surrounding land uses include industrial, research, office, and distribution. Several biotechnology companies, such as Genentech, are located in close proximity to the site.

UCSF continues to evaluate other sites for centralized receiving, to potentially reduce the number of deliveries to each campus site. Relocation of the functions at Oyster Point is being considered as part of UCSF’s strategy to consolidate remote sites. Should Oyster Point be relinquished as part of that strategy, a suitable site and relocation plan would need to be identified in order to accommodate the existing functions and operations at Oyster Point.
9.6 UCSF FRESNO CENTER FOR MEDICAL EDUCATION AND RESEARCH

UCSF established a regional medical education program in Fresno in 1975 to provide training for doctors and other health care professionals in the Central San Joaquin Valley (Figure 29). The program was created with support from the California Legislature and the Veterans Administration to address the shortage of physicians practicing in California's San Joaquin Valley and to increase access to continuing medical education in the region. UCSF Fresno provides medical education and physician training programs through community and university partnerships. Training for clinical residents (and in some programs, fellows) is available in: emergency medicine, family practice, general surgery, internal medicine, obstetrics/gynecology, pediatrics, psychiatry, and surgical critical care. As a regional medical campus, UCSF Fresno carries out its training and patient care through a network of affiliation agreements with a number of hospitals in the area, including the Community Healthcare Network (Clovis Community Medical Center, Fresno Heart & Surgical Hospital, and University Medical Center), the Veterans Affairs Medical Center, Children’s Hospital Central California, Saint Agnes Medical Center, and Kaiser Permanente, as well as several community hospitals and other specialized facilities.

The UCSF Fresno Center for Medical Education and Research opened in 2004. The three-story, 84,200-gsf building sits on about 3.1 acres (Appendix A). It serves as the hub of medical education and research at UCSF Fresno, and includes a clinical skills lab, a standardized patient center, the digital medical library, virtual classrooms, and research facilities. UCSF expects to continue its academic, research, and clinical activities at Fresno, and UCSF uses are not anticipated to change under the LRDP.
CHAPTER 9

SMALLER OWNED SITES

9.7 2130 THIRD STREET

The Child, Teen, and Family Center and the Department of Psychiatry Building is located at 2130 Third Street, one block south of the Mission Bay campus site in the northern edge of San Francisco’s Dogpatch neighborhood. The 0.77-acre project site is located on the northern portion of the block bound by 18th Street, Third Street, 19th Street, and Tennessee Street. In April 2015, the University entered into a gift agreement with a donor who agreed to donate the site to the University for the purpose of constructing a building for the proposed uses. The proposed building would be about 170,000 gsf with one level of below grade parking for up to 41 spaces with valet operations. The building would range from three to five stories in height. The facility would include outpatient clinics, education, research, department administrative spaces and a small retail space. It is anticipated that approximately 512 faculty, staff, and students would work in the building.

9.8 MINNESOTA STREET HOUSING

The Minnesota Street Graduate Student and Trainee Housing project is located a block south of the Mission Bay campus site in the northern edge of San Francisco’s Dogpatch neighborhood, amidst a mix of industrial, residential and emerging commercial uses. The 1.8-acre project site is comprised of two parcels separated by 18th Street. UCSF acquired the parcels in October 2015. In response to the rapid increase in the cost of housing throughout San Francisco, UCSF proposes to develop the site with housing that is affordable to graduate students and trainees. The housing complex would be about 377,000 gsf and include about 600 units of housing, parking and a small retail space. The complex is expected to house up to 810 residents, which would include faculty along with spouses, partners and children.

9.9 2130 POST STREET

The 2130 Post Street site is located a block east of the Mount Zion campus site in the Lower Pacific Heights neighborhood of San Francisco, amidst a mix of residential, institutional, and open space uses. The 0.6-acre site contains a 119,000 GSF residential building including 71 units plus parking, and was acquired by UCSF in March 2018. In response to the rapid increase in the cost of housing throughout San Francisco, UCSF plans to use the existing building for faculty housing. The complex is expected to house approximately 135 residents, which would include faculty along with spouses, partners and children.

9.10 777 MARIPOSA

777 Mariposa Street is located along the northern edge of the Dogpatch neighborhood, just south of the UCSF Mission Bay campus site at the southwest corner of Mariposa and Minnesota Streets. The existing building, a one-story precast concrete structure of about 43,600 square feet, was acquired by the University in 2016. The site was previously used by a wholesale plumbing supply business and most recently used by UCSF for construction offices and storage. The future use of the site is to be determined.

---

2 Added by LRDP Amendment #3.
3 Added by LRDP Amendment #4.
4 Added by LRDP Amendment #5.
5 Added by LRDP Amendment #6.
LEASED SITES

10

LEASED SITES
10.1 SPACE LEASED BY UCSF

UCSF leases space for various reasons: 1) to provide services to specific locations and populations to meet community clinical needs; 2) to provide space for temporary uses; 3) to provide space in a cost-effective manner, when leasing is a more feasible option than constructing new space; and 4) to meet other unforeseen needs. As shown in Appendix A, UCSF leased approximately 1.05 million gsf in the city in 2014, including space at San Francisco General Hospital and Trauma Center (SFGH), addressed in Chapter 7. UCSF is actively engaged in an effort to reduce the number of leased locations by consolidating leases into fewer locations and relocating uses into UCSF-owned space when leases expire, to improve operational efficiencies and achieve programmatic adjacencies.

As part of the lease consolidation strategy, UCSF projects a potential reduction in San Francisco leases to about 550,000 gsf over the next five years. Approximately 350,000 gsf of the existing lease portfolio represents community-based leased facilities where programs must remain at their locations to provide neighborhood-focused clinical services or community-based research that serves local populations. However, over the LRDP horizon, a reduction in leased space is projected, from roughly 1 million gsf in 2014 to about 750,000 gsf by 2035. This projection is not intended to represent the maximum amount of leased square footage at any particular point in time within the LRDP horizon, since UCSF’s leased space inventory is expected to fluctuate above and below this amount at various points in time as determined by its programmatic needs. UCSF leases facilities to accommodate fluctuations in space requirements associated with short-term changes in community clinical service needs, growth in community-based clinical and research programs, and other unforeseen needs, which could include new affiliations with other health care providers.

1 For the sake of simplicity, the LRDP refers to all space, owned and leased, in terms of gsf, even though leased space is sometimes measured in sf rather than gsf, depending on type of space and/or lease.
10.2 LEASES WITHIN 1/4 MILE OF A MAIN CAMPUS SITE

As of July 2014, UCSF occupies a number of leases that are larger than 10,000 gsf and situated within a quarter-mile of a main campus site. These leases are discussed below, and locations are shown in Figure 1. (Leases that are smaller than 10,000 gsf are not addressed individually in the LRDP.)

10.2.1 PARNASSUS HEIGHTS

350 PARNASSUS AVENUE

UCSF leases approximately 56,000 gsf at 350 Parnassus Avenue (Medical Building 2). 350 Parnassus Avenue is immediately adjacent to the Parnassus Heights campus site. Programs include a variety of Medical Center uses such as hepatology, obstetrics and gynecology services, radiology, pediatric neurology, organ transplant, and various outpatient clinics. UCSF intends to remain at 350 Parnassus Avenue.

10.2.2 MISSION BAY

499 ILLINOIS STREET

UCSF leases approximately 36,000 gsf at 499 Illinois Street, adjacent to the Mission Bay East Campus, for programs in reproductive endocrinology and infertility. UCSF intends to remain at 499 Illinois Street.

1500 OWENS STREET

UCSF leases approximately 99,100 gsf at 1500 Owens Street, situated adjacent to and to the west of the Mission Bay campus site. Programs include the Orthopaedic Institute, Sports Medicine Clinic, obstetrics and gynecology services, an automated pharmacy, Executive Health, the Madison Clinic for Pediatric Diabetes, and neurology. UCSF intends to remain at 1500 Owens Street.

10.2.3 MOUNT ZION

1635 DIVISADERO STREET

UCSF leases approximately 14,000 gsf at 1635 Divisadero Street, located adjacent to and west of the Mount Zion campus site. Programs include obstetrics and gynecology services, the Surgical Movement Disorders Center, and other outpatient clinics. UCSF plans to remain at 1635 Divisadero Street.

2233 POST STREET

UCSF leases approximately 12,000 gsf at 2233 Post Street, located adjacent to and south of the Mount Zion campus site. Programs include otolaryngology and occupational health, and the nursing continuing education offices. UCSF plans to remain at 2233 Post Street.

2380 SUTTER STREET

UCSF leases approximately 10,300 gsf at 2380 Sutter Street, adjacent to the Mount Zion campus site at the northeast corner of Sutter and Divisadero streets. Programs include otolaryngology, cancer surgery clinics, and other outpatient clinics and services. UCSF plans to remain at 2380 Sutter Street.

China Basin Building.
10.3 LEASES FARTHER THAN 1/4 MILE FROM A MAIN CAMPUS SITE

The following is a summary of UCSF's leases that are greater than 10,000 gsf and that lie beyond a quarter of a mile from the three main campus sites (locations shown in Figure 1). (Leases that are smaller than 10,000 gsf are not addressed individually in the LRDP.)

10.3.1 SAN FRANCISCO

50 BEALE STREET
UCSF leases approximately 57,400 gsf at 50 Beale Street, in downtown San Francisco, for Global Health Sciences and the Center for AIDS Prevention Study. UCSF plans to continue to lease space at this location until 2017, and then to determine if the lease should be renewed or if occupants should be consolidated into owned space at Mission Bay as part of UCSF’s lease-consolidation strategy.

220 MONTGOMERY STREET
UCSF leases approximately 38,300 gsf at 220 Montgomery Street, in downtown San Francisco, for use by University Development and Alumni Relations. UCSF expects to continue to occupy this location until 2017, and then to determine if the lease should be renewed or if occupants should be consolidated into owned space at Mission Bay as part of UCSF’s lease-consolidation strategy.

250 EXECUTIVE PARK BOULEVARD
UCSF leases approximately 42,400 gsf at 250 Executive Park Boulevard in the Bayview / Candlestick Park area, located off U.S. Highway 101 near the San Francisco County line. Executive Park is part of a privately owned, mixed-use development. The space leased by UCSF is used by the Medical Center’s Information Technology Center. UCSF plans to remain at 250 Executive Park through the end of the term of its lease, after which the University anticipates vacating the building due to its seismic condition.

982 MISSION STREET
UCSF leases approximately 24,800 gsf at 982 Mission Street, in the South of Market district, for the Citywide Case Management and Community Focus Center, which is affiliated with UCSF and SFGH Department of Psychiatry programs. The center provides outpatient psychiatric care, crisis intervention, therapy, and clinical case management services. No changes are planned at this location.

1930 MARKET STREET
The UCSF Alliance Health Project Center is located in the Upper Market neighborhood at 1930 Market Street, on the north side of the street, between Guerrero Street and Duboce Avenue. UCSF leases approximately 14,800 gsf in this two-story building. It is a community-based clinic and counseling center (also known as the AIDS Health Center) affiliated with the Department of Psychiatry at UCSF, San Francisco General Hospital, and the UCSF AIDS Research Institute. UCSF plans to remain at this location.

2727 MARIPOSA STREET
The UCSF Trauma Recovery and Treatment Center, affiliated with SFGH, is located at 2727 Mariposa Street in the Mission District. UCSF currently leases approximately 12,000 gsf in this mixed-use building, and has no plans to relocate.

3360 GEARY BOULEVARD
UCSF leases approximately 19,300 gsf at 3360 Geary Boulevard, between Parker and Commonwealth streets. UCSF Medical Center administrative support units occupy the building space. For the present, UCSF intends to remain at this location, although the University may consider moving the occupants into owned space as part of UCSF’s lease-consolidation strategy.

CHINA BASIN BUILDING (185 BERRY STREET)
UCSF leases approximately 187,000 gsf at 185 Berry Street in the China Basin Building, situated between Third and Fourth streets, next to AT&T Park and one block from the Caltrain station. The UCSF Imaging Center, Department of Epidemiology and Biostatistics, and several other research, academic, and campus administration units are located in this building. Some of UCSF’s units at China Basin will be moving into owned space or other leased space. Other programs will likely remain at China Basin in the near-term, but may eventually move into owned space at Mission Bay or into other leased space as part of UCSF’s lease-consolidation strategy.

LAUREL HEIGHTS (3333 CALIFORNIA STREET)
Previously owned by UCSF, the property was acquired by a private developer in 2018 and the University transitioned from property owner to lessee. The University is vacating the building by moving departments to Parnassus Heights, Mission Bay, and other UCSF locations.

2 Paragraph added by LRDP Amendment #6
10.3.2 EMERYVILLE

2000 POWELL STREET
The UCSF Medical Center’s Medical Group Business Services (MGBS) department is located at 2000 Powell Street in Emeryville. UCSF currently leases approximately 15,600 gsf in this mixed-use building, and has no plans to relocate.

6425 CHRISTIE STREET
UCSF Medical Center accounting is located at 6425 Christie Street in Emeryville. UCSF currently leases approximately 27,900 gsf in this mixed-use building, and has no plans to relocate.
This section describes the UCSF functional elements that support UCSF’s research, clinical, and instruction endeavors across all campus sites: housing, child care, transportation, food services, recreation and fitness, public safety, and information technology.

11.1 HOUSING

11.1.1 EXISTING SETTING

Table 8 describes existing and proposed campus housing at Parnassus Heights and Mission Bay, and the number of beds, units, and gsf at each location.

The demand for on-campus rental housing at Parnassus Heights and Mission Bay exceeds the supply. Occupancy is generally 100 percent, with a wait-list of over 700 individuals. There is a correlation between the steep increases in the number of people on the wait-list and rising rents in the city over the past few years. This situation is exacerbated by the lack of available and affordable housing elsewhere in the city, where rental vacancy rates are only 3.4 percent.¹ The median rental price in June 2013 of a one-bedroom unit in San Francisco was $2,795, having risen 27 percent over the previous two years; two-bedroom units rose even more at 33 percent.² In response to the increasing demand for rental housing in San Francisco, over 6,000 residential units were under construction in October 2013, and another 32,000 had been granted entitlements.³ However, affordability is not expected to change substantially even with these new units, because of San Francisco’s ongoing desirability factor, increasing employment, and high cost of construction. Furthermore, most of the housing will be built in the eastern parts of the city and not around Parnassus Heights, where UCSF’s student housing demand remains greatest.

The provision of campus rental housing is a priority for UCSF because it helps to:

- Recruit and retain students, postdoctoral scholars, clinical residents, and faculty, all of whom want reasonably priced housing and the convenience of living within walking distance of where they attend class or go to work;
- Provide housing for incoming students, many of whom are from foreign countries or out of state and do not have the time, resources, or knowledge to search the city for housing;
- Create a vibrant 24-hour on-campus community;
- Meet environmental sustainability goals by reducing commute traffic, parking demand, and greenhouse gas emissions; and
- Support citywide housing goals, lessen traffic impacts, and enhance campus vitality.

¹ U.S. Census Bureau. Decennial Census on Housing, December 2010.
² Ibid.
A small amount of campus housing is offered for rent to new faculty. However, most faculty prefer to own a home rather than rent, although they find it difficult to obtain loans for expensive Bay Area housing; therefore, UCSF addresses the faculty housing need primarily through financial assistance. To assist qualifying faculty and senior managers in purchasing their first homes in the Bay Area, eligible applicants may obtain first deed of trust variable-rate loans through the UC Mortgage Origination Program (MOP). Applicants may also qualify for a Supplemental Home Loan Program (SHLP) in conjunction with a MOP loan. The administration of these two programs will be transferred in 2014 from the UC Office of Loan Programs at the Office of the President to a new nonprofit public benefit corporation, to be known as the UC Home Loan Program Corporation, so that more flexible underwriting criteria and Small Creditor Exemptions may be made available. In addition, UCSF has a Faculty Recruitment Allowance Program (FRAP) that offers grants to eligible participants. The primary purpose of FRAP is to provide support for housing costs, but an individual may also use the allowance for child care expenses, education or tuition assistance, or similar expenses.

11.1.2 PROPOSED PLAN

Goals for providing housing for UCSF students, postdoctoral scholars, clinical residents and faculty have been established by the Chancellor’s Housing Advisory Committee, based on a campus community survey regarding housing demand sponsored by the committee. After reviewing and vetting the survey results, the committee established goals for housing the following UCSF population categories:

- 40 percent of students;
- 25 percent of postdoctoral scholars, including clinical fellows;
- 25 percent of clinical residents; and
- 10 percent of faculty.

Table 8 indicates UCSF’s existing and proposed housing inventory, and Tables 9 and 10 identify the population currently housed and additional housing needed to meet campus housing goals for the projected 2035 campus population. UCSF currently houses 1,004 students, postdoctoral scholars, clinical residents, and faculty. Assuming that no additional beds would be provided for spouses, partners, children, or short-term tenants (visitors), this translates to a need for approximately 1,660 additional beds to meet the housing goals in 2035.

The LRDP proposes additional housing at the two campus sites at which overall demand is greatest, Parnassus Heights and Mission Bay. New housing at both sites will enable UCSF to better match the needs of specific populations with their place of study or employment. With more student housing at the Parnassus Heights campus site, where most of UCSF’s instruction occurs, existing housing at the Mission Bay campus site can be made available to clinical residents who will be working at the Medical Center at Mission Bay, as well as for graduate students, postdoctoral scholars, and faculty who will occupy new research buildings as the Mission Bay campus site grows. Providing additional housing at Parnassus Heights and Mission Bay will strengthen the sense of campus community at these locations, benefiting both UCSF tenants and residents of the surrounding neighborhoods.

UCSF has been studying options for developing housing on UCSF property. Table 8 summarizes the LRDP’s proposal for new housing that can be developed at the Parnassus Heights and Mission Bay campus sites through 2035. While these proposals will increase the total amount of housing considerably, there will still be a shortfall in meeting the campus housing goals, as shown in Table 10. UCSF has financial constraints including restrictions on annual debt, UC requirements that housing be self-supporting, and a limited housing stock across which to spread the costs of new development. In addition, the expectation is that new housing will be provided at below-market rental rates (comparable to existing campus housing), which makes financing of new housing challenging. Nonetheless, proposed housing would help meet some of UCSF’s housing goals while also reducing some of the pressure on the city’s housing demand. UCSF will also continue to seek opportunities at off-campus locations (such as master leases) to develop housing for campus populations.

In addition to increasing UCSF’s housing stock, strategies such as term limits for campus housing are being explored to make housing available to the maximum number of newly arrived students, clinical residents, postdoctoral scholars, and faculty as they join the UCSF community.

UCSF also intends to continue to provide financial assistance for eligible faculty to acquire homes, to participate in the MOP, and to make every effort to seek additional resources to recruit and retain faculty.
### Table 8: Existing & Proposed Campus Housing

<table>
<thead>
<tr>
<th>EXISTING HOUSING</th>
<th>BEDS</th>
<th>UNITS</th>
<th>GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARNASSUS HEIGHTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parnassus Heights - Aldeia Housing</td>
<td>172</td>
<td>172</td>
<td>132,400</td>
</tr>
<tr>
<td>Parnassus Heights - 145 Irving Street</td>
<td>35</td>
<td>18</td>
<td>17,800</td>
</tr>
<tr>
<td>Parnassus Heights Avenue Houses - Students</td>
<td>98</td>
<td>18</td>
<td>49,300</td>
</tr>
<tr>
<td>Parnassus Heights Avenue Houses - Faculty</td>
<td>20</td>
<td>14</td>
<td>42,500</td>
</tr>
<tr>
<td>Existing Parnassus Heights</td>
<td>325</td>
<td>222</td>
<td>242,000</td>
</tr>
<tr>
<td>MISSION BAY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mission Bay - Block 20</td>
<td>596</td>
<td>431</td>
<td>387,400</td>
</tr>
<tr>
<td>Existing Mission Bay</td>
<td>596</td>
<td>431</td>
<td>387,400</td>
</tr>
<tr>
<td>Existing Total</td>
<td>921</td>
<td>653</td>
<td>630,600</td>
</tr>
<tr>
<td>PROPOSED HOUSING</td>
<td>BEDS</td>
<td>UNITS</td>
<td>GSF</td>
</tr>
<tr>
<td>PARNASSUS HEIGHTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UC Hall (Upper 3 floors)</td>
<td>134</td>
<td>105</td>
<td>74,700</td>
</tr>
<tr>
<td>UC Hall (Lower 3 floors)</td>
<td>78</td>
<td>64</td>
<td>66,300</td>
</tr>
<tr>
<td>Millberry Union Towers Conversion</td>
<td>83</td>
<td>83</td>
<td>47,100</td>
</tr>
<tr>
<td>Fifth and Parnassus avenues</td>
<td>61</td>
<td>45</td>
<td>48,400</td>
</tr>
<tr>
<td>Proctor Site</td>
<td>32</td>
<td>32</td>
<td>30,400</td>
</tr>
<tr>
<td>Proposed Parnassus Heights</td>
<td>388</td>
<td>329</td>
<td>268,900</td>
</tr>
<tr>
<td>MISSION BAY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mission Bay - Block 15</td>
<td>774</td>
<td>523</td>
<td>398,700</td>
</tr>
<tr>
<td>Proposed Mission Bay</td>
<td>774</td>
<td>523</td>
<td>398,700</td>
</tr>
<tr>
<td>Proposed Total</td>
<td>1,162</td>
<td>852</td>
<td>667,600</td>
</tr>
<tr>
<td>FUTURE TOTAL (EXISTING AND PROPOSED)</td>
<td>2,083</td>
<td>1,505</td>
<td>1,297,000</td>
</tr>
</tbody>
</table>

Note: All gsf numbers are rounded to the nearest 100.

### Table 9: Campus Housing Goals – Status as of 2014

<table>
<thead>
<tr>
<th>EXISTING HOUSING BY POPULATION TYPE</th>
<th>APPROX. 2013 UCSF POPULATION</th>
<th>HOUSING GOAL</th>
<th>CURRENT % HOUSED</th>
<th>CURRENT HOUSING POPULATION a</th>
<th>SHORTFALL IN 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postdoctoral Scholars *</td>
<td>1,550</td>
<td>25%</td>
<td>19%</td>
<td>300</td>
<td>88</td>
</tr>
<tr>
<td>Students</td>
<td>3,080</td>
<td>40%</td>
<td>18%</td>
<td>543</td>
<td>689</td>
</tr>
<tr>
<td>Clinical Residents</td>
<td>1,680</td>
<td>25%</td>
<td>7%</td>
<td>115</td>
<td>305</td>
</tr>
<tr>
<td>Faculty</td>
<td>3,170</td>
<td>10%</td>
<td>1%</td>
<td>46</td>
<td>271</td>
</tr>
<tr>
<td>EXISTING TOTAL</td>
<td>9,480</td>
<td></td>
<td></td>
<td>1,004</td>
<td>1,353</td>
</tr>
</tbody>
</table>

Note: Numbers rounded to nearest 10.

* For the purposes of housing category, Postdoctoral Scholars (1,100) includes Clinical Fellows (450).

b Current housing population includes all occupants of housing.

### Table 10: Additional Housing Needed to Meet Campus Housing Goals by 2035

<table>
<thead>
<tr>
<th>PROPOSED HOUSING BY POPULATION TYPE</th>
<th>APPROX. 2035 UCSF POPULATION</th>
<th>HOUSING GOAL</th>
<th>2035 HOUSING POPULATION GOAL</th>
<th>CURRENT HOUSING POPULATION</th>
<th>ADDITIONAL HOUSING NEEDED TO MEET GOALS BY 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postdoctoral Scholars *</td>
<td>1,550</td>
<td>25%</td>
<td>388</td>
<td>300</td>
<td>88</td>
</tr>
<tr>
<td>Students</td>
<td>3,375</td>
<td>40%</td>
<td>1,350</td>
<td>543</td>
<td>807</td>
</tr>
<tr>
<td>Clinical Residents</td>
<td>2,015</td>
<td>25%</td>
<td>504</td>
<td>115</td>
<td>389</td>
</tr>
<tr>
<td>Faculty</td>
<td>4,220</td>
<td>10%</td>
<td>422</td>
<td>46</td>
<td>376</td>
</tr>
<tr>
<td>PROPOSED TOTAL</td>
<td>11,160</td>
<td></td>
<td>2,664</td>
<td>1,004</td>
<td>1,660</td>
</tr>
</tbody>
</table>

* For the purposes of housing category, Postdoctoral Scholars (1,100) includes Clinical Fellows (450).
11.2 CHILD CARE

11.2.1 EXISTING SETTING

UCSF has four child care centers: Lucia Child Care Center (formally known as Marilyn Reed Lucia Child Care Study Center) and Kirkham Child Care Center, both at Parnassus Heights; University Child Care Center at Laurel Heights; and University Child Care Center at Mission Bay, which is temporarily in a modular facility. The number of licensed child care slots at each center is shown in Table 11. The total of 297 slots represents slightly more than 1 percent of the total UCSF population, a relatively low proportion for comparable institutions based on research conducted by Campus Life Services.\(^4\)

The demand for campus child care has been increasing in concert with the steady rise in the numbers of young faculty and students with families at UCSF. The lack of affordable child care, along with the lack of affordable housing, is one of UCSF’s challenges to recruitment and retention. This situation is exacerbated by the lack of available child care in the area of Mission Bay. In 2013, there were over 1,500 families on the waiting list for UCSF child care slots, with the greatest demand at Mission Bay. Based on demographic trends, growing waiting lists at UCSF over the past few decades, and indications of those surveyed who plan to increase the sizes of their families, it is projected that the demand for child care at UCSF will rise in the foreseeable future.

\(^4\) Campus Life Services is the UCSF department responsible for overseeing child care, as well as many functions such as housing, transportation, retail services, and recreation and fitness. (Public safety and information technology are separate UCSF services.)

11.2.2 PROPOSED PLAN

UCSF’s goal for child care is to supply child care capacity for 2 percent of the campus employee and student population, excluding unpaid faculty, patients, and visitors. Child care slots are projected to be provided in a combination of on-campus child care facility slots and off-campus child care solutions, which could include sponsorship of slots at a non-UCSF center, a referral/placement program, or some other method. To help meet this goal, a permanent, larger child care center at Mission Bay with 200 slots is proposed on Block 15 as part of a new campus housing complex, unless child care space is acquired or leased off-campus. UCSF may also expand the Kirkham Child Development Center by converting its multi-purpose room to a classroom and increasing its outdoor play area.

As mentioned previously, UCSF is evaluating opportunities to consolidate remote sites to save operating and occupancy costs. As part of this effort, UCSF is reviewing its long-term occupancy of the Laurel Heights campus site. In the event that UCSF vacates its Laurel Heights campus site in the future, the 116 slots (with 11,500 indoor and 4,500 outdoor square feet) in the University Child Care Center at Laurel Heights would need to be accommodated at another location on or off property owned by UCSF.

<table>
<thead>
<tr>
<th>EXISTING CHILD CARE</th>
<th>CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucia Child Care Center at Parnassus Heights</td>
<td>24</td>
</tr>
<tr>
<td>Kirkham Child Care Center at Parnassus Heights</td>
<td>72</td>
</tr>
<tr>
<td>Mission Bay Child Care Center</td>
<td>85</td>
</tr>
<tr>
<td>Laurel Heights Child Care Center (^a)</td>
<td>116</td>
</tr>
<tr>
<td>Existing Total</td>
<td>297</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROPOSED CHILD CARE</th>
<th>CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net New Additional Slots Proposed at Parnassus Heights (Kirkham Child Care Center)</td>
<td>20</td>
</tr>
<tr>
<td>Net New Additional Slots Proposed at Mission Bay</td>
<td>115</td>
</tr>
<tr>
<td>Proposed Total</td>
<td>135</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FUTURE TOTAL (EXISTING &amp; PROPOSED)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>432</td>
</tr>
</tbody>
</table>

\(^a\) If UCSF were to vacate the Laurel Heights campus site, child care currently located there would need to be accommodated at another location on or off property owned by UCSF.
11.3 TRANSPORTATION

11.3.1 UCSF TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM

UCSF is a leader in sustainable transportation services in the UC system and across the country. Based on UCSF’s 2013 employee commute survey, 66 percent of the campus population commutes by means other than driving alone. In 2011, UCSF received the Gold level award from Best Workplaces for Commuters. Key features of UCSF’s existing TDM program include the following:

- 60 shuttles serving 17 locations, with over 2.3 million passengers per year
- 33 vanpools that travel as far as Sacramento and operate using the Green Road Safety System, which improves fuel consumption and safety
- 62 reserved carpool stalls at various sites
- Marin Commute Club buses with about 55 daily riders who live in Marin and Sonoma Counties to the north of the city
- 18 City CarShare vehicles with dedicated parking spaces, along with 1,500 UCSF members who can use these vehicles by scheduling their use online
- A fleet of 43 low-emitting alternative-fuel and hybrid vehicles, including cars, shuttles, golf carts, and trucks
- 18 electric-vehicle charging stations at Parnassus Heights, Mount Zion, and Mission Bay, with plans for another 20 at Mission Bay in the Owens Street Garage and 10 at other locations
- Over 1,900 UCSF users of the ZimRide online carpool matching program
- 972 bicycle parking spaces, with another 100 planned at Mission Bay, as well as bike racks on shuttles, a cyclist shower program that allows bicyclists to use UCSF showers at a discount, and other bicycle-related benefits
- Bay Area Bike Share station at Mission Bay, where members will have access to bicycles (and a regional network of stations) provided by the Bay Area Air Quality Management District; construction is dependent on the City’s ability to secure additional funding for the program
- More than 400 off-street motorcycle parking stalls in garages and surface parking lots
- An “emergency ride home” program to encourage use of alternative modes of transportation
- Clipper Card (public transit pass) sales at easily accessible locations, including through UCSF’s website
- Close to 1,800 UCSF employees that participate in a pretax transit program, which saved UCSF employees over $700,000 on public transit commute costs in 2013

In 1973, the City adopted the Transit First policy in the Transportation Element of the San Francisco General Plan, which promotes the use of public transit, ridesharing, walking, and bicycling over the use of private vehicles. UCSF proposes to continue to respond to the City’s Transit First policy by:

- Limiting parking at all campus sites, and prioritizing parking for patients and essential health care employees at sites with clinical facilities;
- Enhancing its TDM program and more aggressively promoting participation;
- Expanding the City CarShare and UCSF carpool programs;
- Increasing the number of bicycle racks and cages, and providing access to showers and lockers for bicyclists; and
- Encouraging more ridesharing.

11.3.2 UCSF SHUTTLE SYSTEM

The UCSF shuttle system provides service between all primary campus sites and to select secondary sites and public transit. Ridership is free to UCSF students, faculty, staff, patients, and visitors. The shuttles are not a substitute for City transit, which is used primarily for commuting between home and campus, but as an alternative to traveling by private vehicle between campus sites. On average, nearly 7,500 people ride the shuttle system daily. It is estimated that shuttle services eliminate 2,700 daily vehicle trips city-wide.

UCSF is sensitive to the concerns about noise and vibration impacts of its shuttles on residential routes, and will continue to make operational adjustments to minimize these impacts. However, because UCSF is obligated to provide frequent shuttle runs to meet accreditation requirements, passenger numbers can be low at non-peak times.

Shuttle operations will expand with the opening of Phase 1 of the UCSF Medical Center at Mission Bay and continued campus development. Based on anticipated campus growth, shuttle needs were projected for years 2020 and 2035. By 2020, it is estimated that ridership per shuttle route servicing Mission Bay will increase by between five and 12 percent, which will require an additional shuttle during the morning and afternoon commute periods on the direct route between Mission Bay and Parnassus Heights. In addition, the need for larger shuttles on various routes and additional service during peak periods is projected. In 2035, UCSF may need to utilize five of the larger shuttles throughout the day between Mission Bay and Parnassus Heights, and add larger and/or additional shuttle vehicles on other routes during peak and non-peak periods. UCSF will develop adequate facilities to support
increased shuttle operations. If UCSF increases shuttle operations, the community will be included in the planning process.

In response to UC policy and community interest in greater shuttle efficiency and clean energy, UCSF continues to monitor advances in biodiesel, compressed natural gas, hybrid electric, and fully electric technologies, and anticipates the procurement of new alternative-fuel vehicles as operating efficiency improves and reliability issues are resolved.

11.3.3 BICYCLES

UCSF's goal is to provide bicycle facilities at all campus sites adequate to meet demand. At Mission Bay, UCSF coordinated with the City, the San Francisco Bicycle Coalition, and others on the design of the public plaza in the Fourth Street right-of-way to accommodate bicycle traffic along the street and through the plaza as a Class 1 and 2 bicycle route. When the hospital construction is completed, this route will become a southward extension of the Class 2 and 3 bicycle route on Fourth Street north of Sixteenth Street. UCSF is also coordinating with the City and the Bicycle Coalition in planning the streetscape improvements for Parnassus Avenue, and is planning to install additional bicycle racks at that campus site.

11.3.4 PARKING

UCSF currently provides over 7,100 parking spaces campus-wide (Table 12), with a 90-percent overall occupancy rate during the peak period in the middle of the day. Parking demand exceeds supply at Parnassus Heights, where there is an ongoing wait-list of over 500 individuals waiting for parking permits. Demand is tempered by the cost of parking, particularly at Mount Zion, where on-street parking is challenging to find because it is less expensive than garage or surface-lot parking, which is generally available. The cost of parking is expected to continue to increase towards prevailing market rates. All UCSF parking must be financially self-supporting.

When warranted, additional off-street parking will be provided on campus sites at Parnassus Heights, Mission Bay, Mount Zion, San Francisco General Hospital, and Mission Center. The quantity of any new parking is to be determined when projects are proposed. Essential healthcare workers, patients, and patient visitors would be given parking priority at Parnassus Heights, Mission Bay South Campus, Mount Zion, and other sites where there are UCSF medical facilities.

Over time, UCSF's overall parking ratio of approximately 1.02 spaces per 1,000 gsf of owned space in 2014 is expected to decrease to approximately 0.86 spaces per 1,000 gsf in 2035. In addition, UCSF will monitor parking demand over time, to avoid building more parking than is necessary should demand decline further over time.

---

5 Excludes leased sites and SFGH, since UCSF does not control parking at those locations.
Table 12: Existing & Proposed Parking Facilities

<table>
<thead>
<tr>
<th>OWNED PARKING SPACES</th>
<th>EXISTING</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PARNASSUS HEIGHTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millberry Union Garage</td>
<td>1,075</td>
<td>1,075</td>
</tr>
<tr>
<td>Medical Building 1 (ACC) Garage</td>
<td>1,007</td>
<td>1,007</td>
</tr>
<tr>
<td>Surface Spaces</td>
<td>650</td>
<td>680</td>
</tr>
<tr>
<td><strong>Total Parnassus Heights</strong></td>
<td>2,732</td>
<td>2,762</td>
</tr>
<tr>
<td><strong>MISSION BAY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Center Garage</td>
<td>593</td>
<td>593</td>
</tr>
<tr>
<td>Third Street Garage</td>
<td>732</td>
<td>732</td>
</tr>
<tr>
<td>Owens Street Garage</td>
<td>621</td>
<td>621</td>
</tr>
<tr>
<td>Surface Spaces</td>
<td>920</td>
<td>520</td>
</tr>
<tr>
<td>Future Block 18 Garage</td>
<td>--</td>
<td>1,600</td>
</tr>
<tr>
<td>Future Blocks 33/34 Garage</td>
<td>--</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total Mission Bay</strong></td>
<td>2,866</td>
<td>4,566</td>
</tr>
<tr>
<td><strong>MOUNT ZION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2420 Sutter Street Garage</td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>1701 Divisadero Street (Medical Building 2) Garage</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>2325 Post Street Garage</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>Surface Spaces</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Future Mount Zion Garage</td>
<td>--</td>
<td>185</td>
</tr>
<tr>
<td><strong>Total Mount Zion</strong></td>
<td>475</td>
<td>660</td>
</tr>
<tr>
<td><strong>MISSION CENTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Spaces</td>
<td>220</td>
<td>--</td>
</tr>
<tr>
<td>Future Mission Center Garage</td>
<td>--</td>
<td>294</td>
</tr>
<tr>
<td><strong>Total Mission Center</strong></td>
<td>220</td>
<td>294</td>
</tr>
<tr>
<td><strong>LAUREL HEIGHTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laurel Heights Garage</td>
<td>212</td>
<td>212</td>
</tr>
<tr>
<td>Surface Spaces</td>
<td>329</td>
<td>329</td>
</tr>
<tr>
<td><strong>Total Laurel Heights</strong></td>
<td>541</td>
<td>541</td>
</tr>
<tr>
<td>654 MINNESOTA STREET (Surface Spaces)</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>BUCHANAN DENTAL CENTER</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>HUNTERS POINT (Surface Spaces)</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>OYSTER POINT (Surface Spaces)</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>FRESNO (Surface Spaces)</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td><strong>EXISTING AND PROPOSED TOTALS</strong></td>
<td>7,175</td>
<td>9,164</td>
</tr>
</tbody>
</table>

* Does not include leased parking spaces, or parking spaces at leased sites.
* Also includes Kalmanovitz Library Garage.
* Does not include Owens Street Garage expansion, which is projected to occur after the 2035 horizon of the LRDP.
* Figures do not include bicycle or motorcycle parking spaces.
11.4 FOOD SERVICE

In recent years, UCSF has endeavored to ensure that food is available at all campus sites to reduce the need to travel off campus for food, thus reducing traffic impacts. At many campus sites, food services are provided by vendors in retail spaces. Campus Life Services also promotes farmers’ markets at Parnassus Heights and Mission Bay, and accommodates a limited number of food trucks. It is proposed that food-service facilities be considered at all sites where future buildings are planned, and be located so as to enhance the public realm and promote social activity. UCSF also proposes to increase food services near proposed housing.

11.3.5 LOADING

UCSF must ensure mission-critical deliveries are received in a timely manner, but will continue to make efforts to reduce truck trips to all campus sites and ensure that no single neighborhood is overly burdened. Ongoing efforts include, among other considerations, delivery consolidation, more cross-docking (in which vendors deliver goods to Oyster Point or another remote location and goods are consolidated onto UCSF vehicles for delivery to campus sites), new vendor contract requirements and restrictions (for example, restricting vendors to specific delivery times, and requiring them to consolidate loads), and increasing off-street loading capacity. At Parnassus Avenue, UCSF proposes to build two new loading areas accessible from Parnassus Avenue. In addition, some of the current loading areas may be redesigned or repurposed to provide additional loading space for the New Hospital Addition accessible from Parnassus Avenue and/or Medical Center Way. At other campus sites, the number of loading docks would be determined as each new building is planned.
11.5 RECREATION AND FITNESS

UCSF has a goal to promote fitness at all but the most remote campus sites. At some locations, this means simply designating a room for fitness equipment or where a group exercise class can take place. At Mission Bay, the goal is to supplement UCSF’s existing indoor recreation and fitness facilities with outdoor facilities. It is anticipated that this will include a regulation-sized soccer field that can also be used for softball, summer youth programs, and other recreational purposes both by the UCSF community and by members of the public. There is also interest in providing a playground on the Mission Bay campus site to serve young children of housing tenants, children in the University Child Care Center, and families in the vicinity.

11.6 PUBLIC SAFETY

The UC Police Department (UCPD) has four separate divisions that handle all patrols, investigations, crime prevention, emergency management, homeland security, and related law-enforcement duties. UCPD is located at multiple campus sites, including Parnassus Heights and 654 Minnesota Street (south of the Mission Bay campus site); the latter also doubles as an Emergency Communications Center. There is also some police administrative space located at the Mission Center building.

UCPD has a mutual-aid agreement with the San Francisco Police Department (SFPD) to provide cooperative assistance within a one-mile radius of each UCSF campus site. A Memorandum of Understanding (MOU) between the UCPD and the SFPD establishes that UCPD has exclusive jurisdiction over police service on UCSF properties. Depending on the nature of the emergency, the UCPD may request assistance from the SFPD.

One of UCSF’s goals is to locate its police facilities in buildings that qualify as “essential services buildings,” which meet higher seismic standards, so that police functions can continue to operate in the event of an earthquake. As the Mission Bay campus site grows, it is anticipated that a minor amount of space will be needed for some police services in a building on the North Campus, in addition to the existing space at 654 Minnesota Street.

Yoga class at the Osher Building, Mount Zion campus site.
11.7 INFORMATION TECHNOLOGY

The provision of sophisticated, connective, and reliable information technology is critical to the function of UCSF research, clinical, and administrative endeavors. UC’s Information Technology unit provides wide-ranging services for voicemail, video conferencing, pagers, email, websites, networks, wireless communication, desktop assistance, and security. Its mission is to support today’s needs and to forecast future needs for telemedicine, centralized services, and cloud-based services.

Not all UCSF buildings have routers, videoconference, and teleconference capability and other updated information technology infrastructure. The Building Network Improvement Project is a long-term project to upgrade equipment in UCSF buildings to improve network connectivity within buildings as well as between each building and the rest of UCSF. Connectivity provides the important secondary benefit of minimizing commute traffic and travel between campus sites. Reliability, another important objective, can be achieved by locating server farms in buildings such as 654 Minnesota, where services would have an increased likelihood of continuing uninterrupted following a seismic event.

New buildings are to be planned to take advantage of existing systems and evolving technology. Videoconferencing and other infrastructure support will continue to be promoted as a means to reduce travel and become more environmentally sustainable.
12.1 CONTRIBUTORS

LRDP PROJECT TEAM

Lori Yamauchi, Associate Vice Chancellor, Campus Planning
Kevin Beauchamp, AICP, Director of Physical Planning and
LRDP Project Manager, Campus Planning

Barbara Bagot-López, Community & Government Relations
Tammy Chan, Campus Planning
Kevin Cox, Transportation Services
Michele Davis, Community & Government Relations
Judy deReus-Orsini, Campus Planning
Paul Franke, Campus Planning
Christine Gasparac, Community & Government Relations
Elisabeth Gunther, UC Office of General Counsel
Mary O’Keefe, AICP, UC Office of the President
Sharon Priest, AICP, Campus Planning
Charlotte Strem, UC Office of the President
Kamala Subbarayan, AICP, LEED AP BD+C, Campus Planning
Paul Takayama, Community & Government Relations
Diane Wong, Campus Planning

CONSULTANT TEAM

Adavant Consulting
Elise Alschuler
Fehr & Peers
lowercase productions
MIG
Nelson\Nygaard
Perkins+Will
Lubin Olson & Niewiadomski LLP
LRDP OVERSIGHT COMMITTEE
Co-Chairs: Kathleen Giacomini and Bruce Wintroub

Michael Bade
Allan Basbaum
Robert Blelloch
Jeffrey Bluestone
Claire Brett
Claire Brindis
Patricia Calarco
Sue Carlisle
Peter Carroll
Farid Chehab
Steven Cheung
Teresa Costantinidis
Shaun Coughlin
Kathleen Dracup
Janice Eisele
John Featherstone
Susan Fisher
John Ford
Barbara French
Elena Fuentes-Afflick
Don Ganem
Linda Giudice
Mary Gray
Deborah Greenspan
Joseph Guglielmo
Jay Harris
Sam Hawgood
Angela Hawkins
Matthias Hebrok
David Irby
Clay Johnston
Ken Jones
Mary Anne Koda-Kimble
Mark Laret
Janice Lee
Catherine Lucey
Tim Mahaney
Christine Miaskowski
Zina Mirsky
Esther Morales
Carol Moss

Robert Newcomer
Dorothy Perry
John Plotts
Kevan Shokat
Matthew State
Barrie Strickland
Jason Tien
Lowell Tong
Eric Vermillion
David Vlahov
Elizabeth Watkins
Lori Yamauchi
LRDP CLINICAL FACILITIES PLANNING SUBCOMMITTEE
Co-Chairs: Bruce Wintroub and Ken Jones

Josh Adler
Sheila Antrum
Ronald Arenson
Nancy Ascher
Mitchel Berger
Pilar Bernal de Pheils
Peter Carroll
Pamela Den Besten
Kathleen Giacomini
Joseph Guglielmo
Jay Harris
Mike Hindery
Talmadge King
Ron Lipsy
Tim Mahaney
Bonnie Maler
Mervyn Maze
Nancy Milliken
David Morgan
Eric Nakakura
Jeff Pearl
Steven Pletcher
John Plotts
Anthony Pogrel
Patricia Sparacino
Barrie Strickland
Shannon Thyne
Thomas Vail
Lori Yamauchi

LRDP INSTRUCTION PLANNING SUBCOMMITTEE
Co-Chairs: David Irby and Dorothy Perry

Robert Baron
Michael Blum
Tina Brock
Karen Butter
Peter Carroll
Joe Castro
Molly Cooke
Kathleen Giacomini
Beth Harleman
Mehran Hossaini
Jonathan Johnson
Navneet Khangura
Judy Martin-Holland
Susan Masters
Kevin Souza
Kimberly Topp
Michael Villanueva
Lori Yamauchi
LRDP RESEARCH PLANNING SUBCOMMITTEE

Co-Chairs: Allan Basbaum and Linda Giudice

Abul Abbas
Julie Auger
Diane Barber
Peter Carroll
Joe DeRisi
Dan Dohan
Barbara Drew
John Engstrom
Michael Fischbach
Kathleen Giacomini
Deborah Grady
Carl Grunfeld
Susanne Hildebrand-Zanki
Ajay Jain
Richard Jordan
Arnold Kriegstein
Tippi Mackenzie
Teri Melese
Jennifer Puck
Jeremy Reiter
Teri Reynolds
Neil Risch
Jerome Sak
William Seaman
Kevin Shannon
Caroline Shiboski
Eric Small
Paul Volberding
James Wells
Kristine Yaffe
Keith Yamamoto
Lori Yamauchi
William Young

UCSF COMMUNITY ADVISORY GROUP

Dennis Antenore
Howard Ash
Charles Bush
Chuck Canepa
Gabriela Cardona
Janet Carpinelli
Craig Dawson
Philip DeAndrade
Martha Ehrenfeld
Susan Eslick
Gina Fromer
Kevin Hart
Karl Huntzicker
Elaine Johnson
Beatrice Laws
Susan Maerki
Gabriel Medina
Jim Meko
Lucia Mele
Dick Millet
Toye Moses
Norman Pearce
Rosabella Safont
Jim Salinas
Carol Tatum
Norman Ten
Dorris Vincent
Tes Welborn
Kimberly Wilson
Corinne Woods
David Zimmerman
12.2 PHOTO CREDITS

Cal-Pictures  16
Cindy Chew  18, Cover, Inside Cover
Brooke Duthie  Cover
Elizabeth Fall  Back Cover
Deanna Fitzmaurice  140
Hawkeye Aerial Photography  28
San Francisco General Hospital, Perretti & Park Pictures  103
San Francisco Veterans Affairs Medical Center  105, 107
SkyHawk Photography  99
Sutro Stewards  45
UCSF Archives & Special Collections  10, 15
UCSF Campus Planning  77
UCSF Campus Planning, Sharon Priest  116
UCSF Capital Programs, Eileen Jue  136
UCSF Community and Government Relations, Barbara Bagot-López  25, Cover, Inside Back Cover
UCSF Document & Media, Tracy Long  127
UCSF Housing Services, Todd McGregor  67, 128
UCSF School of Medicine, Sarah Paris  47
UCSF School of Pharmacy, Frank Farm  109, 113
UCSF Transportation Services  38, 134
UCSF University Relations, Leland Kim  137
UCSF University Relations, Susan Merrell  1, 2, 3, 5, 6, 9, 91, 94, 114, 121, 124, 139, 147, 148
APPENDICES
### APPENDIX A: EXISTING AND PROPOSED SPACE PROGRAM

#### LEARNING SPACE CATEGORY

<table>
<thead>
<tr>
<th>Space Category</th>
<th>Existing 2014 Total GSF</th>
<th>LRDP Total GSF</th>
<th>Existing ZSF</th>
<th>LRDP ZSF</th>
<th>Existing 2014 Leased GSF</th>
<th>LRDP Lease GSF</th>
<th>Existing 2014 Owned GSF</th>
<th>LRDP Owned GSF</th>
<th>Existing 2014 Vacant &amp; Alteration GSF</th>
<th>LRDP Vacant &amp; Alteration GSF</th>
<th>Existing 2014 Vacant/Alteration Parking GSF</th>
<th>LRDP Vacant/Alteration Parking GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>201,100</td>
<td>201,100</td>
<td>102,000</td>
<td>102,000</td>
<td>98,100</td>
<td>98,100</td>
<td>37,400</td>
<td>37,400</td>
<td>1,500</td>
<td>1,500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Research</td>
<td>201,100</td>
<td>201,100</td>
<td>102,000</td>
<td>102,000</td>
<td>98,100</td>
<td>98,100</td>
<td>37,400</td>
<td>37,400</td>
<td>1,500</td>
<td>1,500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Clinical</td>
<td>1,089,000</td>
<td>1,089,000</td>
<td>545,000</td>
<td>545,000</td>
<td>500,000</td>
<td>500,000</td>
<td>200,000</td>
<td>200,000</td>
<td>10,000</td>
<td>10,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Academic Support</td>
<td>543,900</td>
<td>543,900</td>
<td>278,000</td>
<td>278,000</td>
<td>250,000</td>
<td>250,000</td>
<td>120,000</td>
<td>120,000</td>
<td>10,000</td>
<td>10,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Academic &amp; Campus Administration</td>
<td>146,200</td>
<td>146,200</td>
<td>70,000</td>
<td>70,000</td>
<td>65,000</td>
<td>65,000</td>
<td>30,000</td>
<td>30,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Campus Logistics</td>
<td>543,800</td>
<td>543,800</td>
<td>278,400</td>
<td>278,400</td>
<td>250,000</td>
<td>250,000</td>
<td>120,000</td>
<td>120,000</td>
<td>10,000</td>
<td>10,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Housing</td>
<td>240,500</td>
<td>240,500</td>
<td>120,000</td>
<td>120,000</td>
<td>105,000</td>
<td>105,000</td>
<td>45,000</td>
<td>45,000</td>
<td>15,000</td>
<td>15,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vacant/Alteration</td>
<td>700</td>
<td>700</td>
<td>350</td>
<td>350</td>
<td>325</td>
<td>325</td>
<td>150</td>
<td>150</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Space Existing Parking</td>
<td>3,366,000</td>
<td>3,366,000</td>
<td>1,723,000</td>
<td>1,723,000</td>
<td>1,574,000</td>
<td>1,574,000</td>
<td>750,000</td>
<td>750,000</td>
<td>150</td>
<td>150</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Structured Parking</td>
<td>683,700</td>
<td>683,700</td>
<td>341,000</td>
<td>341,000</td>
<td>319,000</td>
<td>319,000</td>
<td>122,000</td>
<td>122,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

---

1 Appendix A amended by Long Range Development Plan Amendment #7

Tidelands Housing is also known as Minnesota Street Housing.

For the sake of simplicity, the LRDP refers to all space, owned and leased, in terms of gsf, even though leased space is sometimes measured in sf rather than gsf, depending on type of space and/or lease.
## APPENDIX A: EXISTING AND PROPOSED SPACE PROGRAM (CONTINUED)

<table>
<thead>
<tr>
<th>LRDP Space Category</th>
<th>MAIN CAMPUS SITES</th>
<th>SMALLER OWNED SITES</th>
<th>LEASED SITES</th>
<th>ALL SITES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PARNASSUS HEIGHTS</td>
<td>MISSON BAYa</td>
<td>MOUNT ZION</td>
<td>MISSON CENTER</td>
</tr>
<tr>
<td>Instruction</td>
<td>290,300</td>
<td>249,100</td>
<td>65,000</td>
<td>1,700</td>
</tr>
<tr>
<td>Research</td>
<td>1,018,700</td>
<td>1,919,800</td>
<td>139,300</td>
<td>27,300</td>
</tr>
<tr>
<td>Clinical</td>
<td>1,872,700</td>
<td>1,001,700</td>
<td>518,100</td>
<td>33,300</td>
</tr>
<tr>
<td>Academic Support</td>
<td>193,800</td>
<td>222,400</td>
<td>45,700</td>
<td>26,100</td>
</tr>
<tr>
<td>Academic &amp; Campus Administration</td>
<td>524,400</td>
<td>478,000</td>
<td>111,100</td>
<td>245,300</td>
</tr>
<tr>
<td>Campus Community</td>
<td>170,500</td>
<td>255,400</td>
<td>17,400</td>
<td>23,300</td>
</tr>
<tr>
<td>Logistics</td>
<td>150,900</td>
<td>187,800</td>
<td>44,100</td>
<td>33,800</td>
</tr>
<tr>
<td>Housing</td>
<td>915,300</td>
<td>786,100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vacant/ Alteration</td>
<td>109,000</td>
<td>34,900</td>
<td>9,000</td>
<td>-</td>
</tr>
<tr>
<td>Total Space Excluding Parking</td>
<td>5,245,600</td>
<td>5,135,200</td>
<td>949,700</td>
<td>390,900</td>
</tr>
<tr>
<td>Structured Parking</td>
<td>719,700</td>
<td>1,388,400</td>
<td>254,500</td>
<td>96,000</td>
</tr>
</tbody>
</table>

Note: Does not include Phase 2 of the Medical Center at Mission Bay, which is assumed to be completed beyond the 2035 LRDP horizon.

a Tidelands Housing is also known as Minnesota Street Housing.

* For the sake of simplicity, the LRDP refers to all space, owned and leased, in terms of gsf, even though leased space is sometimes measured in sf rather than gsf, depending on type of space and/or lease.
## APPENDIX B: BUILDINGS BY CAMPUS SITE

### PARNASSUS HEIGHTS

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>YEAR BUILT</th>
<th>BUILDING GSF</th>
<th>PARKING GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 Kirkham Street</td>
<td>1923</td>
<td>3,782</td>
<td></td>
</tr>
<tr>
<td>145 Irving Street</td>
<td>2006</td>
<td>17,782</td>
<td></td>
</tr>
<tr>
<td>1320 Third Avenue</td>
<td>1912</td>
<td>3,679</td>
<td></td>
</tr>
<tr>
<td>1322-24 Third Avenue</td>
<td>1911</td>
<td>3,089</td>
<td></td>
</tr>
<tr>
<td>1326 Third Avenue</td>
<td>1912</td>
<td>3,412</td>
<td></td>
</tr>
<tr>
<td>1332 Third Avenue</td>
<td>1915</td>
<td>3,034</td>
<td></td>
</tr>
<tr>
<td>1338 Third Avenue</td>
<td>1913</td>
<td>4,273</td>
<td></td>
</tr>
<tr>
<td>1344 Third Avenue</td>
<td>1912</td>
<td>3,011</td>
<td></td>
</tr>
<tr>
<td>1350 Third Avenue</td>
<td>1912</td>
<td>2,915</td>
<td></td>
</tr>
<tr>
<td>1356 Third Avenue</td>
<td>1911</td>
<td>2,851</td>
<td></td>
</tr>
<tr>
<td>1362 Third Avenue</td>
<td>1909</td>
<td>2,597</td>
<td></td>
</tr>
<tr>
<td>1420 Fifth Avenue</td>
<td>1911</td>
<td>3,224</td>
<td></td>
</tr>
<tr>
<td>1422-24 Fifth Avenue</td>
<td>1915</td>
<td>4,993</td>
<td></td>
</tr>
<tr>
<td>1428 Fifth Avenue</td>
<td>1915</td>
<td>2,913</td>
<td></td>
</tr>
<tr>
<td>1432-34 Fifth Avenue</td>
<td>1911</td>
<td>4,343</td>
<td></td>
</tr>
<tr>
<td>1440 Fifth Avenue</td>
<td>1911</td>
<td>6,210</td>
<td></td>
</tr>
<tr>
<td>1442 Fifth Avenue</td>
<td>1911</td>
<td>3,366</td>
<td></td>
</tr>
<tr>
<td>1452 Fifth Avenue</td>
<td>1920</td>
<td>3,252</td>
<td></td>
</tr>
<tr>
<td>1454 Fifth Avenue</td>
<td>1911</td>
<td>2,711</td>
<td></td>
</tr>
<tr>
<td>1460 Fifth Avenue</td>
<td>1911</td>
<td>3,085</td>
<td></td>
</tr>
<tr>
<td>1464 Fifth Avenue</td>
<td>1911</td>
<td>3,206</td>
<td></td>
</tr>
<tr>
<td>1468 Fifth Avenue</td>
<td>1920</td>
<td>6,208</td>
<td></td>
</tr>
<tr>
<td>1472-74 Fifth Avenue</td>
<td>1922</td>
<td>4,138</td>
<td></td>
</tr>
<tr>
<td>1478-80 Fifth Avenue</td>
<td>1923</td>
<td>4,537</td>
<td></td>
</tr>
<tr>
<td>1482 Fifth Avenue</td>
<td>1922</td>
<td>2,696</td>
<td></td>
</tr>
<tr>
<td>1486-88 Fifth Avenue</td>
<td>1924</td>
<td>3,121</td>
<td></td>
</tr>
<tr>
<td>1490 Fifth Avenue</td>
<td>1905</td>
<td>2,406</td>
<td></td>
</tr>
<tr>
<td>Aldea Center on Mount Sutro (Aldea Center)</td>
<td>2011</td>
<td>2,807</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 1</td>
<td>1999</td>
<td>10,124</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 2</td>
<td>1998</td>
<td>11,595</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 3</td>
<td>1998</td>
<td>11,595</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 4</td>
<td>1998</td>
<td>11,796</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 5</td>
<td>1999</td>
<td>11,595</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 6</td>
<td>1998</td>
<td>11,876</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 7</td>
<td>1999</td>
<td>10,118</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 8</td>
<td>1960</td>
<td>7,950</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 10</td>
<td>1960</td>
<td>7,948</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 11</td>
<td>1999</td>
<td>11,592</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 12</td>
<td>1960</td>
<td>7,948</td>
<td></td>
</tr>
<tr>
<td>Aldea Housing SMG 14</td>
<td>1999</td>
<td>11,592</td>
<td></td>
</tr>
<tr>
<td>Central Utility Plant (CUP)</td>
<td>1998</td>
<td>39,311</td>
<td></td>
</tr>
<tr>
<td>Clinical Sciences</td>
<td>1933</td>
<td>108,007</td>
<td></td>
</tr>
<tr>
<td>Dental Clinics</td>
<td>1979</td>
<td>134,951</td>
<td></td>
</tr>
<tr>
<td>Dolby Regeneration Medicine</td>
<td>2010</td>
<td>69,084</td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX B: BUILDINGS BY CAMPUS SITE (CONTINUED)

### PARNASSUS HEIGHTS (CONTINUED)

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>YEAR BUILT</th>
<th>BUILDING GSF</th>
<th>PARKING GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Health &amp; Safety (EHS)</td>
<td>1971</td>
<td>6,120</td>
<td></td>
</tr>
<tr>
<td>Environmental Health &amp; Safety Annex (Annex)</td>
<td>1953</td>
<td>2,599</td>
<td></td>
</tr>
<tr>
<td>Faculty Alumni House (745 Parnassus Avenue)</td>
<td>1915</td>
<td>7,210</td>
<td></td>
</tr>
<tr>
<td>Health Sciences East</td>
<td>1964</td>
<td>204,721</td>
<td></td>
</tr>
<tr>
<td>Health Sciences West</td>
<td>1964</td>
<td>237,437</td>
<td></td>
</tr>
<tr>
<td>Kalmanovitz Library</td>
<td>1991</td>
<td>132,438</td>
<td>52,416</td>
</tr>
<tr>
<td>Kirkham Child Care Center</td>
<td>2009</td>
<td>7,227</td>
<td></td>
</tr>
<tr>
<td>Koret Vision Research (Koret)</td>
<td>1986</td>
<td>43,108</td>
<td></td>
</tr>
<tr>
<td>Laboratory of Radiobiology</td>
<td>1953</td>
<td>19,673</td>
<td></td>
</tr>
<tr>
<td>Langley Porter Psychiatric Institute (LPPI)</td>
<td>1941</td>
<td>104,757</td>
<td></td>
</tr>
<tr>
<td>Long Hospital</td>
<td>1962</td>
<td>365,786</td>
<td></td>
</tr>
<tr>
<td>LPPI Butler</td>
<td>1964</td>
<td>1,013</td>
<td></td>
</tr>
<tr>
<td>LPPI OPC</td>
<td>1979</td>
<td>2,723</td>
<td></td>
</tr>
<tr>
<td>LPPI Paint Shop</td>
<td>1966</td>
<td>214</td>
<td></td>
</tr>
<tr>
<td>Lucia Child Care Center</td>
<td>1978</td>
<td>3,704</td>
<td></td>
</tr>
<tr>
<td>Mechanical Annex (Ammonia Tank)</td>
<td>1997</td>
<td>790</td>
<td></td>
</tr>
<tr>
<td>Medical Building 1 (ACC)</td>
<td>1972</td>
<td>262,985</td>
<td>338,929</td>
</tr>
<tr>
<td>Medical Research 4 (MR4)</td>
<td>1944</td>
<td>12,107</td>
<td></td>
</tr>
<tr>
<td>Medical Sciences</td>
<td>1954</td>
<td>392,409</td>
<td></td>
</tr>
<tr>
<td>Millberry Union</td>
<td>1955</td>
<td>114,715</td>
<td></td>
</tr>
<tr>
<td>Millberry Union Garage</td>
<td>1955</td>
<td>38,263</td>
<td>262,382</td>
</tr>
<tr>
<td>Moffitt Hospital</td>
<td>1955</td>
<td>387,035</td>
<td></td>
</tr>
<tr>
<td>Parnassus Services (PSSRB)</td>
<td>2005</td>
<td>88,813</td>
<td></td>
</tr>
<tr>
<td>Proctor</td>
<td>1956</td>
<td>9,916</td>
<td></td>
</tr>
<tr>
<td>School of Nursing</td>
<td>1972</td>
<td>88,099</td>
<td></td>
</tr>
<tr>
<td>Surge</td>
<td>1966</td>
<td>10,730</td>
<td></td>
</tr>
<tr>
<td>UC Hall</td>
<td>1917</td>
<td>148,236</td>
<td></td>
</tr>
<tr>
<td>University House</td>
<td>1966</td>
<td>6,683</td>
<td></td>
</tr>
<tr>
<td>Woods</td>
<td>1962</td>
<td>4,159</td>
<td></td>
</tr>
<tr>
<td><strong>PARNASSUS HEIGHTS TOTAL</strong></td>
<td></td>
<td><strong>3,294,411</strong></td>
<td><strong>653,727</strong></td>
</tr>
</tbody>
</table>
### APPENDIX B: BUILDINGS BY CAMPUS SITE (CONTINUED)

#### MISSION BAY

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>YEAR BUILT</th>
<th>BUILDING GSF</th>
<th>PARKING GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthur and Toni Rembe Rock Hall (Rock Hall)</td>
<td>2003</td>
<td>170,565</td>
<td></td>
</tr>
<tr>
<td>Byers Hall</td>
<td>2005</td>
<td>154,434</td>
<td></td>
</tr>
<tr>
<td>Central Utility Plant</td>
<td>2008</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>Community Center Garage</td>
<td>2005</td>
<td>2,603</td>
<td>206,397</td>
</tr>
<tr>
<td>Genentech Hall *</td>
<td>2002</td>
<td>384,879</td>
<td></td>
</tr>
<tr>
<td>Helen Diller Family Cancer Research Building</td>
<td>2008</td>
<td>160,540</td>
<td></td>
</tr>
<tr>
<td>Mission Bay Child Care Center</td>
<td>2006</td>
<td>7,100</td>
<td></td>
</tr>
<tr>
<td>Mission Bay Housing East (Block 20)</td>
<td>2005</td>
<td>105,420</td>
<td></td>
</tr>
<tr>
<td>Mission Bay Housing North (Block 20)</td>
<td>2005</td>
<td>142,197</td>
<td></td>
</tr>
<tr>
<td>Mission Bay Housing South (Block 20)</td>
<td>2005</td>
<td>96,801</td>
<td></td>
</tr>
<tr>
<td>Mission Bay Housing West (Block 20)</td>
<td>2005</td>
<td>65,866</td>
<td></td>
</tr>
<tr>
<td>Owens Street Garage (Hospital)</td>
<td>2013</td>
<td>100</td>
<td>223,772</td>
</tr>
<tr>
<td>Sandler Neurosciences Center</td>
<td>2012</td>
<td>237,000</td>
<td></td>
</tr>
<tr>
<td>Smith Cardiovascular Research</td>
<td>2010</td>
<td>238,000</td>
<td></td>
</tr>
<tr>
<td>Third Street Garage (Hospital)</td>
<td>2005</td>
<td>4,247</td>
<td>250,251</td>
</tr>
<tr>
<td>William J. Rutter Center</td>
<td>2005</td>
<td>158,605</td>
<td></td>
</tr>
<tr>
<td><strong>MISSION BAY TOTAL</strong></td>
<td></td>
<td><strong>1,926,577</strong></td>
<td><strong>680,420</strong></td>
</tr>
</tbody>
</table>

* Does not include 53,482 sf of penthouse mechanical space.

#### MOUNT ZION

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>YEAR BUILT</th>
<th>BUILDING GSF</th>
<th>PARKING GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600 Divisadero, Main Hospital (A)</td>
<td>1949</td>
<td>118,800</td>
<td></td>
</tr>
<tr>
<td>1600 Divisadero, Main Hospital (B)</td>
<td>1949</td>
<td>106,400</td>
<td></td>
</tr>
<tr>
<td>1600 Divisadero (D)</td>
<td>1949</td>
<td>9,600</td>
<td></td>
</tr>
<tr>
<td>1600 Divisadero (R)</td>
<td>1981</td>
<td>16,956</td>
<td></td>
</tr>
<tr>
<td>1657 Scott Street, Harold Brunn Institute (E)</td>
<td>1930</td>
<td>13,500</td>
<td></td>
</tr>
<tr>
<td>1675 Scott Street, Dialyisis Center (G)</td>
<td>1962</td>
<td>5,300</td>
<td></td>
</tr>
<tr>
<td>1701 Divisadero</td>
<td>1997</td>
<td>57,980</td>
<td>60,160</td>
</tr>
<tr>
<td>2200 Post Street, Hillman Building (C)</td>
<td>1912</td>
<td>65,950</td>
<td></td>
</tr>
<tr>
<td>2255 Post Street (N)</td>
<td>1948</td>
<td>7,450</td>
<td></td>
</tr>
<tr>
<td>2325 Post Street Parking Garage</td>
<td>1980</td>
<td>10</td>
<td>15,024</td>
</tr>
<tr>
<td>2330 Post Street (Medical Building 1)</td>
<td>1996</td>
<td>50,491</td>
<td></td>
</tr>
<tr>
<td>2356 Sutter Street, Women’s Health Center (J)</td>
<td>1996</td>
<td>53,500</td>
<td></td>
</tr>
<tr>
<td>2375 Post Street (P)</td>
<td>1935</td>
<td>20,800</td>
<td></td>
</tr>
<tr>
<td>2420 Sutter Parking Garage</td>
<td>2012</td>
<td>900</td>
<td>101,363</td>
</tr>
<tr>
<td>Cancer Research</td>
<td>1996</td>
<td>109,671</td>
<td></td>
</tr>
<tr>
<td>Helen Diller Family Comprehensive Cancer Center</td>
<td>1999</td>
<td>89,862</td>
<td></td>
</tr>
<tr>
<td>Osher Building</td>
<td>2010</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td><strong>MOUNT ZION TOTAL</strong></td>
<td></td>
<td><strong>777,170</strong></td>
<td><strong>176,547</strong></td>
</tr>
</tbody>
</table>
### SMALLER OWNED SITES

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>YEAR BUILT</th>
<th>BUILDING GSF</th>
<th>PARKING GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>654 Minnesota Street</td>
<td>1982</td>
<td>65,525</td>
<td></td>
</tr>
<tr>
<td>Buchanan Dental Center</td>
<td>1979</td>
<td>18,235</td>
<td></td>
</tr>
<tr>
<td>Hunters Point 830 Palou Street</td>
<td>1966</td>
<td>19,332</td>
<td></td>
</tr>
<tr>
<td>Hunters Point 831 Palou Street</td>
<td>1966</td>
<td>1,215</td>
<td></td>
</tr>
<tr>
<td>Laurel Heights Annex</td>
<td>1955</td>
<td>13,958</td>
<td></td>
</tr>
<tr>
<td>Laurel Heights Building</td>
<td>1955</td>
<td>348,777</td>
<td>107,400</td>
</tr>
<tr>
<td>Mission Center</td>
<td>1928</td>
<td>290,883</td>
<td></td>
</tr>
<tr>
<td>Oyster Point</td>
<td>1973</td>
<td>144,429</td>
<td></td>
</tr>
<tr>
<td>UCSF Fresno Center for Medical Education and Research</td>
<td>2005</td>
<td>84,175</td>
<td></td>
</tr>
<tr>
<td><strong>SMALLER OWNED SITES TOTAL</strong></td>
<td></td>
<td><strong>986,529</strong></td>
<td><strong>107,400</strong></td>
</tr>
</tbody>
</table>
APPENDIX C: 1987 MEMORANDUM OF UNDERSTANDING

On February 17, 1987, UCSF entered into a Memorandum of Understanding (MOU) with the City and County of San Francisco regarding communication and oversight of University master planning, construction and real estate utilization. The MOU was signed by the Chancellor and the Vice Chancellor for Resource Management and Planning Services of UCSF and by the Mayor and Director of Planning of San Francisco. Because of its brevity and importance, the MOU is included here in its entirety:

I. The intent of this memorandum of understanding is to foster harmonious relations between the City and County of San Francisco (hereafter City) and the University of California, San Francisco (hereafter UCSF) regarding the growth and development of UCSF facilities within the City's boundaries.

II. Each party is chartered to operate under provisions of the State Constitution which govern their cooperation with neighboring communities, and these factors are recognized by all parties.

1. The University of California, Board of Regents, is the overseeing body of UCSF.

2. Transfer of title to any lands of UCSF must be accomplished in accordance with existing statutes or through the Board of Regents.

3. The City Charter spells out the duties, responsibilities, and limitations of the Mayor, Board of Supervisors, and Department of City Planning.

4. The Director of the Department of City Planning is responsible to the City Planning Commission and he is required at all times to represent the best City planning interest.

5. Existing direct relationships between City departments and UCSF programs located at UCSF will continue without reference to this memorandum of agreement. This specifically includes all health programs and routine operational matters.

III. The principal concerns of this agreement are the responsibilities of the City and UCSF for oversight of land uses and the development, maintenance and use of physical facilities.

1. The City is responsible for the reasonable development, maintenance and reuse of land in accordance with the Master Plan of the City and County, as adopted and modified from time to time by the City Planning Commission and as expressed in the City’s zoning ordinance. The City requires that all major institutions submit institutional master plans to the City Planning Commission for their review.

2. UCSF maintains a health science center and the requisite facilities to provide educational programs, research and medical services, which may require expansion, contraction or modification over time. The UCSF institutional master plan is submitted to the University of California, Board of Regents for review and approval. The UCSF campus agrees to continue submitting its long-range development plan to the City Planning Commission.

IV. In an effort to improve communication between UCSF and the City regarding changes in the land use and development plans of UCSF, the parties to this memorandum agree that:

1. UCSF staff and the City Planning Commission staff will meet at least once a year to review long-range development plans for UCSF and City development and services plans. Such meetings will be convened by UCSF and the results of them reported in writing to the City Planning Commission at a regularly scheduled meeting.

2. UCSF will advise the City in writing of all matters concerning master planning, construction and real property utilization initiated by UCSF which may have an impact on the City. The City Planning Commission will review such proposals and advise UCSF in writing as to the conformance of such development with the Master Plan of San Francisco and Planning Code Section 304.5 (Institutional Master Plans) with recommendations, if any, for amendment to the proposal.

3. UCSF will modify its 1982 Long Range Development Plan, as required over time, and the City Planning Commission may hold at least one public hearing on all such modifications prior to preparation of written comments.

4. UCSF shall notify the City of and the City shall attend hearings conducted by UCSF pursuant to the California Environmental Quality Act.

5. UCSF will maintain campus advisory committees, composed of neighborhood representatives, at both its Parnassus Heights and Laurel Heights campuses, and will invite the City Planning Commission, Municipal Railway and Department of Public Works to participate in those meetings. The Mayor will urge those City departments to participate on the Committees.

6. The City Planning Commission will advise UCSF in
writing of all matters coming to the Commission’s attention concerning master plans, construction and real estate utilization which may have an impact on UCSF.

7. Should the City Planning Commission and UCSF disagree on any matter which is the subject of this MOU, either party may request the participation of the Mayor and the Chancellor in attempting to resolve the dispute.

V. This memorandum does not confer or surrender any authority beyond that already possessed by each party concerned. Further, it does not abrogate any requirement by either party to coordinate matters of master planning with the Association of Bay Area Governments (ABAG) or other appropriate agencies.

1. For the City, the Director of City Planning shall be the responsible designee.

2. For UCSF, the Vice Chancellor for Resource Management and Planning Services shall be the responsible designee.
APPENDIX D: COMMUNITY PLANNING PRINCIPLES

ORGANIZATION OF THE COMMUNITY PLANNING PRINCIPLES

The five overarching principles describe how UCSF will communicate with neighbors about its physical development plans both on- and off-campus (as of adoption of the 2014 LRDP), and consider the cushioning of impacts that result from UCSF’s development. In order to support the implementation of these five Overarching Principles, Community Planning Goals are also identified covering a range of potential topic areas, representing what UCSF will strive for in implementing the overarching principles. The goals are presented in alphabetical order by category.

OVERARCHING PRINCIPLES

OP1. COMMUNITY CONSULTATION
Recognizing community concerns about the potential negative effects of UCSF’s development on adjacent neighborhoods:

- To the extent allowed by confidentiality agreements governing real estate transactions, UCSF will consult with the community before initiating a project that could result in property acquisition if the proposed project might not conform to the use, height, bulk, density, design, or open space restrictions established for the site by City zoning; would affect historic resources; or would require conditional use authorization or variance were the project to be developed by a private party.
- UCSF will consult with the community before decisions are made to intensify use of existing property. Optimizing use of its space and physical assets is a critical objective of UCSF during this next LRDP period.

This principle is not intended to eliminate the normal communication between UCSF and its neighbors during the life of a project regarding exterior design, landscaping, parking and traffic, or other project elements.

OP2. COMMUNITY NOTIFICATION
When UCSF acquires property, it will list these acquisitions on a website and notify the Community Advisory Group (CAG) and other neighbors as requested.

OP3. CUSHIONING OF IMPACTS
When UCSF acquires property or intensifies use of existing property, it will, on a case-by-case basis, enter into discussions with community groups representing adjoining neighborhoods and/or with the City and County of San Francisco (City) to identify neighborhood impacts, if any, of such lease, acquisition, development and operations.

In the event that UCSF, the community groups, and/or the City agree that such impacts are likely to occur, UCSF will enter into further discussions with the community groups and/or the City to identify potential cushioning actions to offset such impacts. Any agreements by UCSF to undertake cushioning actions will be documented in a formal agreement between UCSF, the community groups, and/or the City. These agreements could utilize a community benefits district if one were to be established by the City.

The cushioning of impacts could be in addition to any mitigation measures that might otherwise be required to reduce significant impacts to a less-than-significant level as a result of any required CEQA review of a proposed project. OP3-guided actions are considered separate from and in addition to the proportional share funding described below in OP4.

As a state-supported institution, UCSF must manage its resources in a manner consistent with its mission. Therefore, monetary and non-monetary contributions to community facilities or programs must be consistent with UCSF’s mission and directly benefit UCSF, its students, and its employees. Examples of voluntary community assistance measures might include (but are not limited to) physical improvements to open space facilities near UCSF sites; enhanced street lighting, landscaping, and street fixtures around the perimeter of campus facilities; shared open space on the UCSF campus; joint use of UCSF facilities for community and campus functions; and employment programs that serve the community and provide skilled workers for UCSF’s programs.

OP4. “PROPORTIONAL SHARE” FUNDING
UCSF will provide “proportional share” funding to the City to pay for adopted mitigation measures that are the responsibility of the City and identified in CEQA documents prepared for UCSF projects to reduce or avoid UCSF’s share of significant off-campus environmental impacts caused by UCSF development.

---

3. “Acquire property”: acquire property through lease or purchase, or acquire property by gift, and develop such property for UCSF use.

4. "Intensify use of existing property": develop or change the use of an existing property if the proposed project would increase the square footage or population of the campus site in a manner that could reasonably be expected to trigger community concern.

5. CEQA Guidelines, Section 15126.4(a)(4)(R)
OP5. COMMUNITY INVOLVEMENT MECHANISM
The mechanism for ongoing community involvement in monitoring the UCSF development process and in negotiating agreements with adjoining neighborhoods is the UCSF CAG and/or its sub-committees, the CAG Action Teams. UCSF is responsible for the ongoing coordination and inclusion of neighborhood and community-based organizations in these planning efforts. Prior to development, UCSF will consult with CAG members for advice on appropriate community representatives for community consultation processes, depending on the location of the projects to be discussed.

COMMUNITY PLANNING GOALS
The following goals cover a range of potential topic areas and represent what UCSF will strive for in implementing the overarching principles. The goals are presented in alphabetical order by category.

AMENITIES AND SERVICES/PUBLIC SAFETY
A1. Enrich the quality of life in the community by extending access to UCSF-provided services, facilities, and activities to the wider community neighboring UCSF, as capacity and availability allow. These services could include child care, public safety, meeting and event space, recreation, and other support activities appropriate to the goals of UCSF and the community. UCSF will seek opportunities for partnering with other entities, when appropriate, to provide these mutually desirable services, facilities and activities.
A2. Support local efforts to increase fire and police protection, especially in neighborhoods with a high incidence of crime, and ensure that the campus safety officers are sensitive to the surrounding community.
A3. Provide adequate security measures, including lighting, particularly in parking garages and exterior parking areas, to enhance a safe environment on all campus sites. These security methods should be designed in a manner that is sensitive to the surrounding community.

BUILDING AND PUBLIC REALM DESIGN
BD1. Consider viewsheds of surrounding neighborhoods when designing new buildings.
BD2. Follow the design principles of collaboration and a strong campus-community relationship. Consider adaptive reuse of building structures.
BD3. Consider adaptive reuse of building structures.
BD4. Incorporate pedestrian-friendly urban design principles so as to better relate campus buildings to the adjoining streetscape, landscape, public space, and pedestrian realm.
BD5. Present proposed building designs, using 3-D modeling and other visualization techniques, to the public for review and comment at critical milestones.
BD6. Consult with the community in the design of buildings and open space, to ensure that they are complementary to the surrounding neighborhoods while being inspiring, creative, and innovative.
BD7. Ensure that a completed building or open space is true to the agreed-upon design; if financial constraints force changes, ensure that acceptable alternatives are identified, discussed, and evaluated with the community.
BD8. Respect historically significant resources whenever possible.
BD9. Conform to the planning and design principles set forth in UCSF’s 2007 Physical Design Framework when planning for physical development at UCSF’s campus sites. These principles are: respond to context while reinforcing identity; welcome the community; ensure connectivity to and within the campus; improve campus cohesiveness; create spaces to promote collegiality; and lead through conservation and sustainability.
BD10. Consider prior community feedback on similar projects when designing new buildings or public realm elements.
BD11. Consider screening of surface parking lots from adjacent parcels/streets, keeping in mind security concerns.

COMMUNITY
C1. Conduct a planning and development process that invites community participation and is responsive to community concern.
C2. Plan and design projects that take into consideration the unique characteristics and vitality of neighboring communities.
C3. Be responsive and contribute to the community’s need for access to primary and emergency care.
C4. In partnership with the City, continue the San Francisco General Hospital affiliation.
C5. Continue providing community health care services and outreach to diverse and underserved segments of the community.
C6. Working with diverse communities in a culturally sensitive manner, enhance the community’s familiarity and comfort in utilizing the health care resources and services available at UCSF.
C7. Promote and expand community partnerships programs.
C8. In partnership with the San Francisco Unified School District (SFUSD), City College of San Francisco, and
other educational institutions, provide educational opportunities for San Francisco students enrolled in K-12 or higher education institutions. Continue the Science and Health Education Partnership, a collaboration between UCSF and SFUSD wherein scientists and educators from both organizations work in partnership to support high-quality science education for K-12 students.

ECONOMIC IMPROVEMENT

E1. Because patronization of locally owned businesses helps the vibrancy and economic well-being of nearby neighborhoods, UCSF will:
   a. Continue to actively participate in local merchants associations;
   b. Ensure that employees and students are aware of local shopping opportunities;
   c. Encourage use of local businesses when purchasing products and services, within the framework of University of California system-wide procurement policy; and
   d. Offer guidance on “doing business with UCSF” to local businesses.

E2. Encourage and support local employment opportunities.

E3. Work with construction projects’ general contractors to ensure that qualified San Francisco residents are aware of and have access to construction jobs on UCSF projects. For UCSF building projects with construction budgets exceeding $5 million, UCSF will set voluntary local hiring goals in keeping with the City's local hiring mandates for city projects.

E4. Coordinate hiring programs with community employment and job training programs, labor unions, San Francisco Unified School District, and San Francisco Community College District to maximize employment opportunities for city residents; work with community agencies to monitor job placements to ensure success.

ENVIRONMENTAL PLANNING AND SAFETY

EP1. Community health is of paramount importance to UCSF. UCSF bioscience facilities and research laboratories are designed by UCSF and inspected by outside regulatory agencies for compliance with applicable city, state, and federal regulatory requirements for environmental health and safety; use and collection of hazardous chemicals and of radioactive and bio-hazardous materials; use of animals; and waste collection.

EP2. Plan and locate UCSF’s facilities to avoid hazards to the campus community and surrounding neighborhoods.

EP3. Meet or exceed city, state, and federal standards with respect to health and safety, noise, and construction-related environmental impacts.

HOUSING

H1. Make a positive contribution to San Francisco’s affordable housing stock by directly providing housing and by using financial and technical resources to assist with the development of increased housing opportunities for UCSF students, staff, and faculty in order to relieve housing demand in the local community.

H2. Ensure that UCSF development will seek to avoid adversely affecting the availability and affordability of housing. Address the need for student and junior faculty housing by making additions to the existing housing stock, while respecting existing neighborhood character.

H3. Avoid displacement of existing residential units or individuals who could be displaced by converting housing to other uses. Continue the UCSF practice of not acquiring existing residential property for non-residential use.

H4. Should UCSF lease or purchase existing residential property for residential use and displacement occurs, assist in securing suitable and equivalent replacement housing for existing residents or tenants prior to displacement – in the same neighborhood, if possible.

LAND USE

LU1. Plan for growth and renovations that are substantially consistent with use limitations and height and bulk limitations in City planning and zoning codes that exist at the time UCSF initiates the site selection process for such growth and renovation projects. The University should consider City planning proposals that are underway. UCSF will endeavor to be consistent with applicable land use plans and mitigation approaches where consistent with UC policy, while respecting specific neighborhood plans and concerns.

With respect to other provisions of the planning and zoning codes, such as off-street parking, UCSF will comply with such provisions or, if unable to comply strictly, will attempt to address impacts of its development with alternative measures, whether physical or operational.

LU2. Work with relevant governmental planning agencies or community-based planning organizations to serve as a model for coordinated planning in San Francisco.

LU3. Ensure that future UCSF development is compatible with physical surroundings in use, scale, and density, and that surrounding land uses do not negatively
affect UCSF’s activities. Similarly, ensure that UCSF’s activities do not negatively affect surrounding land uses.

LU4. Support open space and waterfront access in adjacent neighborhoods (consistent with OP3, “Cushioning of Impacts”).

LU5. Plan and develop facilities to maximize public benefit while meeting UCSF’s programmatic needs and not negatively impacting surrounding neighborhoods.

LU6. Attempt to locate programs on UCSF campus sites first, prior to leasing or acquiring additional property off-campus.

LU7. Target expansion in areas that have indicated a desire for UCSF-related uses.

LU8. Coordinate planning and environmental review efforts with the City.

LU9. Preserve the Mount Sutro Open Space Reserve as permanent open space.

LU10. Work toward compliance with the Parnassus Heights space ceiling and adhere to boundaries for the Parnassus Heights campus site.

LU11. In recognition that vacant UCSF parcels or buildings could contribute to neighborhood blight and security concerns, UCSF to maintain vacant sites and communicate with neighbors regarding intentions for unused sites. If development of a particular site is not anticipated within five years, UCSF will consider an interim use for the site.

SUSTAINABILITY

S1. Meet or exceed guidelines and standards in the University of California’s Sustainable Practices Policy when planning and developing projects. Policy goals are categorized as follows: Green Building; Clean Energy; Climate Protection Practices (including greenhouse gas reduction); Sustainable Transportation; Sustainable Building Operations; Recycling and Waste Management; Environmentally Preferable Purchasing Practices; Sustainable Foodservices Practices.

TRANSPORTATION

T1. Coordinate with relevant agencies to minimize congestion and provide viable transportation alternatives to single-occupancy vehicles.

T2. Coordinate UCSF planning and development efforts with San Francisco Municipal Transportation Agency operations within and around campus sites.

T3. Remain committed to San Francisco’s Transit First policy and appropriate transportation demand management strategies.

T4. Recognizing UCSF’s position as the second largest employer in San Francisco, take a leadership position to advance San Francisco’s Transit First policy and to advocate for sustainable transportation solutions including increase in public transit ridership, use of alternative fuel vehicles, traffic calming measures, transportation demand management, demand pricing, off-peak delivery of goods and services, smart phone technologies, and other innovative strategies.

T5. Take into account transportation impacts at both the neighborhood and citywide levels in planning for UCSF’s facilities.

T6. Avoid building parking in excess of anticipated need.
1.0 BACKGROUND AND OBJECTIVES

This document is an update of the 2014 Long Range Development Plan (LRDP) Greenhouse Gas Reduction Strategy Reduction Strategy and the subsequent 2017 UCSF Climate Action Plan & Greenhouse Gas Reduction Strategy. The 2014 document was prepared to ensure that the LRDP is implemented in alignment with the UC Sustainable Practices Policy; in particular the policies on greenhouse gases (GHGs), to fulfill the GHG reduction requirements of the State of California (AB 32), and, to allow for CEQA analysis of the necessary actions to meet University policy while implementing the projects outlined in the campus 2014 LRDP as amended.

UC San Francisco (UCSF) has prepared this update to reflect changes that have occurred since 2014 and 2017 in both the goals outlined in the UC Sustainable Practices Policy and, in the addition of new campus projects unforeseen at the time of LRDP adoption. The plan also updates the underlying quantitative analyses.

Relevant changes since 2014 include:

- As of June 2015, the UC Sustainable Practices Policy required each campus to develop strategies for meeting the following UC goals:
  1. Climate neutrality from scope 1 and 2 sources by 2025
  2. Climate neutrality from specific scope 3 sources by 2050 or sooner.

- The University of California began directly supplying electricity under a wholesale power program as part of the initiative to achieve carbon neutrality by 2025. Specifically providing Clean Carbon free electricity (0 lbs/CO₂/MWh) available to its individual campuses in 2019.

- Voluntary purchase of carbon offsets at UCSF beginning in 2018. Revisions to policy on the purchase of carbon offsets to mitigate GHG emissions starting in 2020.

- Five amendments to the 2014 LRDP to accommodate campus projects unforeseen or not fully developed at the time of 2014 LRDP:
  1. LRDP Amendment 1 – 2016 Accommodating the development of a 28,000 gsf child care facility accommodating 272 children at Mission Bay Block 18.
  2. LRDP Amendment 2 – 2017. Detailing the programming for the 343,000 gsf research/office building on Mission Bay block 33.
  3. LRDP Amendment 3 – 2017 Construction of a 150,000 gross square feet psychiatry building at 2130 Third Street to replace the LPPI facility located on Parnassus Heights.
  4. LRDP Amendment 4 - 2017 Allowing for construction of a 360,000 gs 610-unit student housing complex on 2 acres of land on Minnesota Street south of Mission Bay.
  5. LRDP Amendment 5 – 2019 An acquisition of a 70 Unit housing building at 2130 Post adjacent to Mount Zion.

- The development of the Comprehensive Parnassus Heights Plan (CPHP). A proposal that would provide for development of approximately 2.04 million gsf of net new building space with significant new clinical, research, and housing facilities at that campus site.
This GHG Reduction Strategy:

- Consolidates GHG reduction efforts already underway and planned by UCSF over the life of the LRDP (through 2035); and reflects the growth planned at Parnassus under the Comprehensive Parnassus Heights Plan (through 2050)
- Quantifies the impact on GHG emissions of projected land use as represented by the LRDP as amended
- Reflects and reinforces the policy direction regarding GHG reduction provided by the regular ongoing public meetings with the UCSF campus community and the annual reporting to the UC Regents
- Creates a framework for the ongoing monitoring and revision of this Greenhouse Gas Reduction Strategy; and
- Helps streamline California Environmental Quality Act (CEQA) review of future campus development projects as consistent with the LRDP growth projections and the GHG reduction policies and programs contained in the GHG Reduction Strategy.

This GHG Reduction Strategy has been prepared in accordance with CEQA Guidelines Section §15183.5, which specifically addresses how lead agencies can analyze and mitigate GHGs at a programmatic level and streamline environmental review of future projects that are consistent with the policies and programs contained in this GHG Reduction Strategy. Development of this strategy was also informed by the Governor’s Office of Policy and Research (OPR) CEQA Guidelines16 and its technical advisory on CEQA and Climate Change,17 and by the Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act Air Quality Guidelines.

For UCSF, with land use authority over a significant urban area, adoption of campus-wide plan policies and programs for reducing GHG emissions is an effective way to reduce the cumulative impact of UCSF operations on climate change, and to streamline later project-specific CEQA reviews. The GHG Reduction Strategy is intended to minimize the effects of GHGs at a programmatic level across the UCSF Mount Zion and Mission Bay campus sites through the year 2035 and the Parnassus Heights campus site through 2050. It is designed to be a “qualified” strategy under the programmatic environmental review provisions of CEQA §15183.5, to provide CEQA coverage of GHG emissions for future development projects that are consistent with LRDP growth projections and the policies and strategies that are contained in the GHG Reduction Strategy.

As future individual projects are proposed, project-specific environmental review documents can tier from or incorporate by reference the programmatic environmental review of the LRDP and GHG Reduction Strategy, to determine if the project’s GHG impact is cumulatively considerable. Future environmental documents that rely on the GHG Reduction Strategy for cumulative impact analysis of GHGs must identify the requirements specified in the GHG Reduction Strategy that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project. The procedure for determining if a future project is consistent with the LRDP and GHG Reduction Strategy is presented in Section 7.0: CEQA Project Review.

The essential requirements of a qualified GHG Reduction Strategy, under CEQA §15183.5 and as interpreted by OPR and BAAQMD are as follows:

- Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area, using accepted accounting protocols
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the strategy would not be cumulatively considerable
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographical area
- Specify GHG reduction measures and performance standards, that, substantial evidence demonstrates, if implemented on a project-by-project basis, will collectively achieve the specified emissions target
- Establish a mechanism by which to monitor the plan’s progress toward achieving its targets and one which will trigger required amendment if the plan is not achieving specified levels; and
- Be adopted in a public process following environmental review

UCSF’s existing Climate Action Plan, dated December 2009, established a 1990 baseline, which in turn informs a 2020 campus-wide target (consistent with AB 32 and the UC Sustainable Practices Policy). It forecast emissions through 2020, and included a comprehensive set of prescriptive GHG reduction measures. The 2009 Climate Action Plan did not undergo CEQA review and it was not adopted in a public process; in addition, it does not include a clear monitoring plan for tracking GHG emissions reductions and adjusting the plan over time to meet the 2020 target.

When the LRDP was adopted in 2014, qualified GHG reduction strategies were constructed around target year 2020, since that is the AB 32 planning horizon. In 2016,
the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In 2018, Governor Brown signed executive order B-55*18 establishing a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045. The UC Sustainable Practices Policy require each campus to develop strategies for meeting climate neutrality for scope 1 and 2 sources by 2025, and scope 3 by 2050. This GHG Reduction Strategy provides a framework for meeting the goals and maintaining qualification going forward.¹⁸

With respect to environmental review of the LRDP and, LRDP amendments (the “projects”), the GHG Reduction Strategy is intended to ensure that UCSF can answer “no” to the following questions regarding “Greenhouse Gas Emissions is intended to ensure that UCSF can answer “no” to the

VII.a. Will the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

VII.b. Will the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The GHG Reduction Strategy will require revision over time in response to changes in GHG regulations; changes to existing or planned State, UC, or UCSF GHG reduction programs and policies; or development patterns that diverge from the assumptions made when the LRDP was adopted and/or last amended. Circumstances that may lead to revision of the GHG Reduction Strategy are outlined in Section 6.0: Implementation and Monitoring.

2.0 POLICY AND REGULATORY SETTING

This UCSF GHG Reduction Strategy addresses applicable federal, state, regional, local, UC system-wide, and UCSF-specific policies and regulations in effect as of 2020. These are outlined in the following sections.

2.1 POLICIES AND PLANS OF THE BOARD OF REGENTS OF THE UNIVERSITY OF CALIFORNIA AND UNIVERSITY OF CALIFORNIA OFFICE OF THE PRESIDENT

In 2007, the Chancellor of UCSF signed the American College and University President’s Climate Commitment (ACUPCC)¹⁹ to complete an emissions inventory, set target dates and interim milestones for becoming climate-neutral,²⁰ take steps to reduce GHG emissions, and prepare public progress reports. The University of California Office of the President (UCOP) has established the goals of reducing GHG emissions to 2000 levels by 2014; 1990 levels by 2020; and achieving climate neutrality from scope 1 and 2 sources by 2025. These goals pertain to Scope 1 and Scope 2 emissions of the six Kyoto greenhouse gases originating from sources specified in the ACUPCC,²² and include a target for climate neutrality for Scope 3 emissions from business airline travel and commuting by UCSF staff and students by 2050. The Sustainable Practices Policy of the Board of Regents of the University of California (Regents) and the UCOP specifies that these goals will be pursued while maintaining the primary research and education mission of the University.

As outlined in UCSF’s Climate Action Plan of 2009, the Regents approved and UC President issued the Sustainable Practices Policy in 2004, which committed UC to implementing actions intended to minimize the University’s impact on the environment and reduce the University’s dependence on non-renewable energy. A section on climate was added to the policy in 2007. The policy was most recently revised in July 1, 2019, and now includes updates to the areas of green building design, clean energy, climate protection, sustainable transportation, sustainable building operations, zero waste, sustainable procurement, sustainable foodservice, sustainable water systems and Sustainability at UC Health. The UC Sustainable Practices Policy will continue to be updated over time.²³

The Sustainable Practices Policy sets the following additional requirements and goals relevant to GHG emissions reduction:

NEW BUILDINGS

- All new building projects, other than acute care facilities, shall be designed, constructed, and commissioned to

20 Climate neutrality is defined as the University having a net-zero impact on the Earth’s climate; it will be achieved by minimizing GHG emissions as much as possible and by using other measures to mitigate the remaining GHG emissions (UCSF Climate Action Plan, December 2009).

21 For a definition of Scope 1, Scope 2 and Scope 3 GHG emissions, see Section 3.0: “UCSF GHG Emissions Inventory and Forecasts”.

22 The six greenhouse gases identified in the Kyoto Protocol/ACUPCC are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs / CFPY). These are the same six greenhouse gases identified in CEQA Section 15364.5.

23 The current version of the Policy is available at: http://policy.ucop.edu/doc/3100155/SustainablePractices


¹⁹ American College & University Presidents’ Climate Commitment, 2007. www.presidentsclimatecommitment.org/about/commitment
outperform the CBC energy-efficiency standards by at least 20% or meet the whole-building energy performance targets. The University will strive to design, construct, and commission buildings that outperform CBC energy efficiency standards by 30% or more, or meet the stretch whole-building energy performance targets.

• Acute care/hospital facilities and medical office buildings shall be designed, constructed, and commissioned to outperform ASHRAE 90.1-2010 by at least 30% or meet the whole-building energy performance targets;

• No new building or major renovation that is approved after June 30, 2019 shall use onsite fossil fuel combustion (e.g., natural gas) for space and water heating (except those projects connected to an existing campus central thermal infrastructure).

• All new buildings will achieve a USGBC LEED “Silver” certification at a minimum. All new buildings will strive to achieve certification at a USGBC LEED “Gold” rating or higher, whenever possible within the constraints of program needs and standard budget parameters.

• All new building projects will achieve at least two points within the available credits in LEED-BD+C’s Water Efficiency category.

RENOVATED BUILDINGS

• Major Renovations of buildings are defined as projects that require 100% replacement of mechanical, electrical and plumbing systems and replacement of over 50% of all non-shell areas (interior walls, doors, floor coverings and ceiling systems) shall at a minimum comply with III.A.4 or III.A.5, above. Such projects shall outperform CBC Title 24, Part 6, currently in effect, by 20%. This does not apply to acute care facilities.

• Acute care facilities and medical office buildings undertaking major renovations as defined above will outperform ASHRAE 90.1-2010 by 30%.

• Renovation projects with a project cost of $5 million or greater that do not constitute a Major Renovation, shall at a minimum achieve a LEED-ID+C Certified rating and register with the utilities’ Savings by Design program, if eligible. This does not apply to acute care facilities.

CLEAN ENERGY

• Energy Efficiency: Each location will implement energy efficiency actions in buildings and infrastructure systems to reduce the location’s energy use intensity by an average of least 2 percent annually.

• On-campus Renewable Electricity: Campuses and health locations will install additional on-site renewable electricity supplies and energy storage systems whenever cost-effective and/or supportive of the location’s Climate Action Plan or other goals.

• Off-campus Clean Electricity: By 2025, each campus and health location will obtain 100% clean electricity. By 2018, the University’s Wholesale Power Program will provide 100% clean electricity to participating locations.

• On-campus Combustion: By 2025, at least 40% of the natural gas combusted on-site at each campus and health location will be biogas. This goal may be realized when supply and transport of biogas is financially feasible and CARB certification available.

CLIMATE PROTECTION

Each campus and the UC Office of the President will develop strategies for meeting the following UC goals:

• Climate neutrality from scope 1 and 2 sources by 2025

• Climate neutrality from specific scope 3 sources (as defined by Second Nature’s Carbon Commitment)

• Reduce greenhouse gas (GHG) emissions to 1990 levels by 2020, pursuant to the California Global Warming Solutions Act of 2006.

SUSTAINABLE TRANSPORTATION

• Each location will reduce GHG emissions from its fleet and report annually on its progress. Locations shall implement strategies to reduce fleet emissions and improve fuel efficiency of all university-owned or operated fleet vehicles and equipment where practical options exist through acquisition and fleet operation protocols. By 2025, zero emission vehicles or hybrid vehicles shall account for at least 50% of all new light-duty vehicle acquisitions.

• The University recognizes that single-occupant vehicle (SOV) commuting is a primary contributor to commute GHG emissions and localized transportation impacts.

• By 2025, each location shall strive to reduce its percentage of employees and students commuting by SOV by 10% relative to its 2015 SOV commute rates;

• By 2050, each location shall strive to have no more 40% of its employees and no more than 30% of all employees and students commuting to the location by SOV.

• Consistent with the State of California goal of increasing alternative fuel – specifically electric – vehicle usage, the University shall promote purchases and support investment in alternative fuel infrastructure at each location.

• By 2025, each location shall strive to have at least 4.5% of commuter vehicles be ZEV.

• By 2050, each location shall strive to have at least 30% of commuter vehicles be ZEV.

• Each location will develop a business-case analysis for any proposed parking structures serving University affiliates or visitors to campus to document how a capital investment in parking aligns with each campus’ Climate Action Plans and/or sustainable transportation policies.
SUSTAINABLE BUILDING OPERATIONS FOR CAMPUSES

- Each campus will submit for certification one pilot building at a LEED-O+M “Certified” level or higher.
- Each campus shall register a master site to certify campus-wide LEED-O+M credits and prerequisites to streamline the certification of multiple buildings through the LEED-O+M rating system by July 1, 2015. Each campus shall certify their campus-wide credits as soon as possible after the master site has been registered.
- Each campus shall seek to certify as many buildings as possible through the LEED-O+M rating system, within budgetary constraints and eligibility limitations.
- All locations shall implement an ongoing Green Lab Assessment Program supported by a department on campus to assess operational sustainability of research groups and the laboratories and other research spaces they use by Summer 2018.
- At least one staff or faculty member from the location must have the role of managing the Green Lab Assessment Program.
- Any green lab assessment programs and related efforts will adhere to all relevant UC, state and national policies and laws. Safety will never be compromised to accommodate sustainability goals.
- All locations shall submit a UC Green Laboratories Action Plan by Summer 2018.

ZERO WASTE

- The University prioritizes waste reduction in the following order: reduce, reuse, and then recycle and compost.
- The University supports the integration of waste, climate and other sustainability goals, including the reduction of embodied carbon in the supply chain through the promotion of a circular economy and the management of organic waste to promote atmospheric carbon reduction. In support of this goal, waste reporting will include tracking estimated scope 3 greenhouse gas emissions.
- The University will reduce per capita total municipal solid waste generation at all locations other than health locations as follows:
  - Reduce waste generation per capita to Fiscal Year (FY) 2015/16 levels by 2020
  - Reduce waste generation by 25% per capita from FY2015/16 levels by 2025
  - Reduce waste generation by 50% per capita from FY2015/16 levels by 2030
- The University will achieve zero waste by 2020 at all locations other than health locations. Minimum compliance for zero waste is 90% diversion of municipal solid waste from landfill.
- By 2020, the University will prohibit the sale, procurement or distribution of packaging foam, such as food containers and packaging material, other than that utilized for laboratory supply or medical packaging and products. The University seeks to reduce, reuse and find alternatives for packaging foam used for laboratory and medical packaging products. No packaging foam or expanded polystyrene shall be used in foodservice facilities for takeaway containers.

SUSTAINABLE PROCUREMENT

- The University values the health and wellbeing of its students, staff, faculty, visitors, and suppliers. The University seeks to provide healthy and accessible conditions for the communities it serves and this will be considered as a fundamental factor when making procurement decisions. Where functional alternatives to harmful products or impacts exist, they are to be strongly preferred.
- The University prioritizes waste reduction in the following order: reduce, reuse, and then recycle. Accordingly, sustainable procurement will look to reduce unnecessary purchasing first, then prioritize purchase of surplus or multiple use products, before looking at recyclable or compostable products.

The University’s sustainable purchasing requirements are:

- 100% compliance with Required Level Green Spend criteria within three fiscal years of the addition of those products and/or product categories to the Guidelines.
- 25% Green Spend as a total percentage of spend per product category; target to be reached within three fiscal years after a category is added to the Guidelines.
- 25% Economically and Socially Responsible Spend as a total percentage of addressable spend; target to be reached within five fiscal years of adoption of this section in the Guidelines.

The University’s sustainable purchasing reporting requirements are:

- Reporting on percent Green Spend beginning at the close of the first full Fiscal Year after a category is added to the Guidelines.
- Reporting on percent Economically and Socially Responsible Spend beginning at the close of Fiscal Year 2018/19.
- Reporting on percent Sustainable Spend will be piloted by UCOP beginning at the close of Fiscal Year 2018/19.
Each University’s Procurement department will integrate sustainability into its processes and practices, including competitive solicitations, in order to satisfy the sustainable purchasing goals outlined above for products, as well as for the procurement of services. The University will do so by:

- Allocating a minimum of 15% of the points utilized in solicitation evaluations to sustainability criteria. Criteria may include, but is not limited to, sustainable product attributes, supplier diversity, supplier practices, contributions to health and wellbeing, and materials safety.
- Supporting outreach, education and providing equal access to small, diverse, and disadvantaged suppliers for all applicable University procurement opportunities.
- Comparing the Total Cost of Ownership when evaluating costs for goods and services in the selection of suppliers, whenever feasible.
- Targeting sustainable products and services for volume-discounted pricing to make less competitive or emerging sustainable products and services cost competitive with conventional products and services.
- Leveraging its purchasing power and market presence to develop sustainable product and service options where not already available.
- Requiring packaging for all products procured by the University be designed, produced, and distributed to the end user in a sustainable manner.
- Contracting with suppliers of products (e.g. electronics, furniture, lab consumables) that have established (preferably non-manufacturer specific) end-of-life reuse, recycling, and/or takeback programs at no extra cost to the University, and in compliance with applicable federal, state, and University regulations regarding waste disposal.
- Requiring sustainability related purchasing claims to be supported with UC recognized certifications and/or detailed information on proven benefits, durability, recycled content, and recyclability properties, in accordance with the Federal Trade Commission’s Green Guides for the use of environmental marketing claims.
- Working with its suppliers to achieve greater transparency and sustainable outcomes throughout the supply chain. This may include maximizing the procurement of products that optimize use of resources from extraction through manufacturing and distribution.
- All procurement staff will consult the UC Sustainable Procurement Guidelines document for minimum mandatory sustainability requirements to be included in solicitations for a given product or service category.

**SUSTAINABLE FOODSERVICE OPERATIONS**

- Food Procurement: Each campus and health location foodservice operation shall strive to procure 20% sustainable food products by the year 2020, while maintaining accessibility and affordability for all students and UC Health Location’s foodservice patrons.
- Education: Each campus and health location shall provide patrons with access to educational materials that will help support their food choices.
- Engagement with External Stakeholders: Campus and health location departments, organizations, groups, and individuals shall engage in activities with their surrounding communities that support common goals regarding sustainable food systems.
- Sustainable Operations: Campus and health location foodservice operations shall strive to earn third party “green business” certifications for sustainable dining operations.
- Retail foodservice tenants will strive to meet the policies above. Given the constraints faced by nationally-branded franchises that must purchase food through corporate contracts, location departments managing retail foodservice tenants will have the option of meeting the procuring 20% of all sustainable food products by the year 2020 policy by aggregating the purchases of all retail entities under the jurisdiction of a single operational unit on location.

**SUSTAINABLE WATER SYSTEMS**

- Locations will reduce growth-adjusted potable water consumption 20% by 2020 and 36% by 2025, when compared to a three-year average baseline of FY2005/06, FY2006/07, and FY2007/08. Locations that achieve this target early are encouraged to set more stringent goals to further reduce potable water consumption. Each Campus shall strive to reduce potable water used for irrigation by converting to recycled water, implementing efficient irrigation systems, drought tolerant planting selections, and/or by removing turf.
- Each location will develop and maintain a Water Action Plan that identifies long term strategies for achieving sustainable water systems. Campuses will include quantification of total square feet of used turf and under-used turf areas on campus as well as a plan for phasing out un-used turf irrigated with potable water.
- Each campus shall identify existing single pass cooling systems and constant flow sterilizers and autoclaves in laboratories and develop a plan for replacement.
- New equipment requiring liquid cooling shall be connected to an existing recirculated building cooling water system, new local chiller vented to building exhaust or outdoors, or to the campus chilled water system through an intervening heat exchange system if available.
- Once through or single pass cooling systems shall not be allowed for softplumbed systems using flexible tubing and quick connect fittings for short term research settings.
If no alternative to single pass cooling exists, water flow must be automated and controlled to avoid water waste.

**SUSTAINABILITY AT UC HEALTH**

- Health locations will achieve Practice Greenhealth’s award “Greenhealth Partner for Change”. Locations will use the definitions in Practice Greenhealth to set medical-center-specific goals for waste diversion and reduction as well as water reduction.
- UC San Francisco Health and UCLA Health have the following targets:
  - By 2020, 50% of total solid waste diverted from landfill and incineration.
  - By 2020, 40lbs of total solid waste per Adjusted Patient Day.
- In line with campus targets, UCLA and UCSF Medical Centers will reduce growth-adjusted potable water consumption 20% by 2020 and 36% by 2025, when compared to a three-year average baseline of FY2005/06, FY2006/07, and FY2007/08.

### 2.2 UCSF POLICY AND PLANS

UCSF has a robust program covering sustainability activities across the entire campus. Through its Office of Sustainability, UCSF has created work groups of campus stakeholders addressing sustainability in the following areas which have implications for GHG emissions: Carbon Climate Change, Water Conservation, Zero Waste, Green Building, Culture Shift, Sustainable Food, Toxics Reduction, Green Procurement, and Sustainable Operations. It has an active program to involve the campus community in reducing emissions.²⁴

UCSF’s Sustainability Governance consists of the Academic Senate Sustainability Committee and the University Advisory Committee on Sustainability (UACS). The Academic Senate Sustainability Committee identifies faculty recommendations for improving sustainability at UCSF. **The charge of the UACS is to:**

- Annually examine UCSF’s effect on the environment from a comprehensive perspective;
- Evaluate existing UCSF policies, procedures, and programs that affect the environment;
- Serve as a coordinating body for groups or individuals concerned with sustainability issues; and
- Support reduction of greenhouse gas emissions to 1990 levels by 2020 and Carbon Neutrality by 2025

The University community has been very active in UC’s Carbon Neutrality Initiative, with a particular focus on Carbon Offsets policy. UCSF has had a subcommittee of faculty, staff, and fellows working in late 2019/early 2020 to develop UCSF’s policy²⁵ and guidance on purchasing future carbon offsets.

These internal guidelines have been developed to ensure that any purchase of offsets for this purpose will result in additional, verified GHG emissions reductions from actions that align, as much as possible, with UC’s research, teaching, and public service mission. Specifically, any voluntary carbon offsets used by UCSF to mitigate GHG emissions will:

7. Be third-party verified by a major registry recognized by CARB such as CAR (Climate Action Reserve).
8. Be reported publicly and tracked through the Climate Registry (TCR) as required by UC policy. The Climate Registry TCR is a non-profit organization governed by U.S. states and Canadian provinces and territories. UCSF’s TCR reports will be third-party verified and posted publicly.
9. Follow UC’s internal criteria for specific offsets types/technologies, projects, and co-benefits developed as part of the UC Carbon Neutrality Initiative in coordination with UC faculty and researchers with expertise in offset quality.

UCSF includes a Sustainability Dashboard on its Living Green web-site that includes performance metrics for multiple issue areas including GHG emissions. UCSF also publishes an annual sustainability report on its web-site.²⁶

### UCSF CLIMATE ACTION PLANS

- As part of implementing the UC Sustainable Practices Policy, UCSF developed a Climate Action Plan in 2009, a long-term strategy for voluntarily meeting the State of California’s goal for reducing GHG emissions to 1990 levels by 2020, pursuant to AB 32. In addition, as part of the 2014 LRDP, UCSF developed a GHG Reduction Strategy (GHGRS) to provide streamlined analysis under CEQA for future development projects. Both of these documents were updated in 2017, and now, to create a combined UCSF Climate Action Plan – GHGRS to reflect changes that have occurred since 2014 to both the goals outlined in the UC Sustainable Practices Policy and, addition of new campus projects unforeseen at the time of LRDP adoption.

²⁴ [https://sustainability.ucsf.edu/getinvolved](https://sustainability.ucsf.edu/getinvolved)
²⁶ [https://sustainability.ucsf.edu/what_ucsf_is_doing_2](https://sustainability.ucsf.edu/what_ucsf_is_doing_2)
Specifically, this updated GHGRS includes strategies to meet UC goals to achieve climate neutrality from Scope 1 and Scope 2 emissions by 2025, and from Scope 3 emissions by 2050, incorporating the new proposed CPHP development at Parnassus Heights.

**UC STRATEGIC ENERGY PLAN**

The UC Strategic Energy Plan (SEP) was prepared in 2008 for all UC campuses, to fulfill a goal of UC’s Sustainable Practices Policy to implement energy efficiency projects in existing buildings. The UCSF portion of the SEP analyzes energy use and GHG trends, and identifies potential energy efficiency retrofit projects for all buildings over 50,000 square feet at UCSF (primarily lighting, HVAC, commissioning and central plant measures). Energy savings, GHG emissions savings, and financial returns are estimated for hundreds of projects, which are grouped into Tier 1 (high priority) and Tier 2 (longer term planning) projects based on their energy savings and financial payback. The SEP project list is intended to be regularly updated every year by each campus to evaluate the feasibility of additional energy-saving measures. The current plan horizon runs to 2025.

**ANNUAL GHG INVENTORY REPORTING**

The UC Sustainable Practices Policy requires each campus to report a GHG emissions inventory to an independent reporting organization. Emissions are also reported to the UC Regents.

UCSF reported Scope 1 and Scope 2 emissions\(^{27}\) for calendar-year 2008 to the California Climate Action Registry (CCAR). UCSF currently reports its annual Scope 1 and Scope 2 GHG emissions inventory to The Climate Registry (TCR). The most recent inventory reported to TCR was for calendar-year 2018. UCSF emissions inventories reported to outside agencies are verified by accredited independent auditors.

\(^{27}\) For more information on UCSF’s Scope 1, Scope 2, and Scope 3 GHG emissions, see Section 3.0: UCSF GHG Emissions Inventory and Forecasts.
Since 2008, UCSF has also been required to report its annual Scope 1 emissions from the Parnassus Heights Central Utility Plant (PCUP) to the California Air Resources Board (CARB) under the AB 32 Reporting Rule. The PCUP is the only UCSF facility that reaches the threshold for required reporting of emissions to the CARB under AB 32 and federal regulations.

UCSF tracks and reports its progress towards meeting its GHG emissions goals in its Annual Sustainability Report. UCSF also reports to the UC Regents annually on its progress in meeting the goals in the UC Sustainable Practices Policy. (See Section 3 for more on UCSF’s inventories and reporting.)

2.3 FEDERAL REGULATIONS

Under the Mandatory Reporting of Greenhouse Gases Rule (74 FR 56260) of the United States Environmental Protection Agency (USEPA or EPA), large emitters of GHGs are required to report their emissions annually to a public database. Under this rule, GHG emissions from the PCUP have been reported annually to the EPA since 2010.

2.4 STATE OF CALIFORNIA AND PROGRAMS AND POLICIES

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the State. The major components of California’s climate protection initiative are reviewed below.

CALIFORNIA ENVIRONMENTAL QUALITY ACT AND SENATE BILL 97

Under CEQA lead agencies are required to disclose the reasonably foreseeable adverse environmental effects of projects they are considering for approval. GHG emissions have the potential to adversely affect the environment because they contribute to global climate change. In turn, global climate change has the potential to raise sea levels, alter rainfall and snowfall, and affect habitat.

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue requiring analysis under CEQA. This bill directed the Governor’s Office of Planning and Research (OPR) to prepare, develop, and transmit to the CNRA guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. The CNRA was required to certify or adopt those guidelines by January 1, 2010. On December 30, 2009, the CNRA adopted amendments to the State CEQA Guidelines, as required by SB 97. The State CEQA Guidelines amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The amendments became effective March 18, 2010.

State CEQA Guidelines

The State CEQA Guidelines are embodied in the California Code of Regulations (CCR), Public Resources Code, Division 13, starting with Section 21000. The current State CEQA Guidelines section 15064.4 specifically addresses the significance of GHG emissions, requiring a lead agency to make a “good-faith effort” to “describe, calculate or estimate” GHG emissions in CEQA environmental documents (CNRA, 2018b). Section 15064.4 further states that the analysis of GHG impacts should include consideration of (1) the extent to which the project may increase or reduce GHG emissions, (2) whether the project GHG emissions would exceed a threshold of significance that the lead agency determines applies to the project, and (3) the extent to which the project would comply with “regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)).”

The CEQA Guidelines also state that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (State CEQA Guidelines section 15064(h)(3)).

The CEQA Guidelines do not require or recommend a specific analytical methodology or provide quantitative criteria for determining the significance of GHG emissions, nor do they set a numerical threshold of significance for GHG emissions. Section 15064.7(c) clarifies that “when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.”

When GHG emissions are found to be significant, CEQA Guidelines section 15126.4(c) includes the following direction on measures to mitigate GHG emissions:

“Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:
1. Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency’s decision;
2. Reductions in emissions resulting from a project through implementation of project features, project design, or other measures;
3. Off-site measures, including offsets that are not otherwise required, to mitigate a project’s emissions;
4. Measures that sequester greenhouse gases; and
5. In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.

State of California Executive Orders

Executive Order S-3-05.

In 2005, in recognition of California’s vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger issued EO S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order S-1-07.

EO S-1-07, which was signed by then-Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It established a low carbon fuel standard (LCFS) with a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020.

In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the program, including a doubling of the carbon intensity reduction to 20 percent by 2030.

Executive Orders S-14-08 and S-21-09

In November 2008, then-Governor Schwarzenegger signed EO S-14-08, which expands the State’s Renewable Portfolio Standard (RPS) to 33 percent renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued California’s commitment to the RPS by signing EO S-21-09, which directs CARB under its AB 32 authority to enact regulations to help the State meet its RPS goal of 33 percent renewable energy by 2020.

Executive Order S-13-08.

Governor Schwarzenegger signed EO S-13-08 on November 14, 2008. The order called on State agencies to develop California’s first strategy to identify and prepare for expected climate impacts. As a result, the 2009 California Climate Adaptation Strategy (CAS) report was developed to summarize the best known science on climate change impacts in the State to assess vulnerability and outline possible solutions that can be implemented within and across State agencies to promote resiliency. The State has also developed an Adaptation Planning Guide (CNRA, 2012) to provide a decision-making framework intended for use by local and regional stakeholders to aid in the interpretation of climate science and to develop a systematic rationale for reducing risks caused or exacerbated by climate change.

The State’s third major assessment on climate change explores local and statewide vulnerabilities to climate change, highlighting opportunities for taking concrete actions to reduce climate-change impacts.

Executive Order B-16-12.

In March 2012, Governor Jerry Brown issued an executive order establishing a goal of 1.5 million zero emission vehicles (ZEVs) on California roads by 2025. In addition to the ZEV goal, EO B-16-12 stipulated that by 2015 all major cities in California will have adequate infrastructure and be ‘zero-emission vehicle ready’; that by 2020 the State will have established adequate infrastructure to support 1 million ZEVs; that by 2050, virtually all personal transportation in the State will be based on ZEVs, and that GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

Executive Order B-30-15.

Governor Brown signed EO B-30-15 on April 29, 2015, which directed the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all State agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Executive Order B-48-18.

On January 26, 2018, Governor Brown issued an executive order establishing a goal of 5 million ZEVs on California roads by 2030.
Executive Order B-55-18.

On September 10, 2018, Governor Brown signed EO B-55-18, committing California to total, economy-wide carbon neutrality by 2045. EO B-55-18 directs CARB to work with relevant State agencies to develop a framework to implement and accounting that tracks progress toward this goal.

State of California Policy and Legislation
Assembly Bill 1493.

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 requires that CARB develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State.”

To meet the requirements of AB 1493, in 2004 CARB approved amendments to the California Code of Regulations (CCR) adding GHG emissions standards to California’s existing standards for motor vehicle emissions. All mobile sources are required to comply with these regulations as they are phased in from 2009 through 2016.

Because the Pavley standards (named for the bill’s author, State Senator Fran Pavley) would impose stricter standards than those under the CAA, California applied to the USEPA for a waiver under the CAA. In 2008, the USEPA denied the application. In 2009, however, the USEPA granted the waiver. The waiver has been extended consistently since 2009; however, in 2018 the USEPA and NHTSA indicated their intent to revoke California’s waiver, and prohibit future State emissions standards enacted under the CAA. As of April 2019, the waiver was still in place and the status of the federal government’s revocation of the waiver was uncertain.

Senate Bills 1078 and 107.

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.


In September 2006, then-Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act (AB 32). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished by enforcing a statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

In 2016, Senate Bill (SB) 32 and its companion bill AB 197 amended HSC Division 25.5 and established a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and included provisions to ensure the benefits of State climate policies reach into disadvantaged communities.

Climate Change Scoping Plan.

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial Scoping Plan in 2008, outlining the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State’s long-range climate objectives (CARB, 2008).

The First Update to the Scoping Plan was approved by CARB in May 2014 and built upon the initial Scoping Plan with new strategies and recommendations. CARB approved the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update) in December 2017. The 2017 Scoping Plan Update outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels (CARB, 2017). The 2017 Scoping Plan Update identifies key sectors of the State’s implementation strategy, which includes improvements in low carbon energy, industry, transportation sustainability, natural and working lands, waste management, and water. Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 MMTCO2e, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO2e beyond current policies and programs. The cornerstone of the 2017 Scoping Plan Update is an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2030 limit set forth by EO B-30-15.

The 2017 Scoping Plan Update’s strategy for meeting the State’s 2030 GHG target incorporates the full range of legislative actions and State-developed plans that have relevance to the year 2030, including the following, described elsewhere in this section:
• Extending the low carbon fuel standard beyond 2020 and increasing the carbon intensity reduction requirement to at least 18 percent by 2030;
• SB 350, which increase renewables portfolio standard (RPS) to 50 percent and requires a doubling of energy efficiency for existing buildings by 2030;
• The 2016 Mobile Source Strategy to reduce emissions from mobile sources, including an 80 percent reduction in smog-forming emissions and a 45 percent reduction in diesel particulate matter from 2016 level in the South Coast Air Basin, a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels;
• The Sustainable Freight Action Plan to improve freight efficiency and transition to zero emission freight handling technologies (described in more detail below);
• SB 1383, which requires a 50 percent reduction in anthropogenic black carbon and a 40 percent reduction in hydrofluorocarbon and methane emissions below 2013 levels by 2030; and
• Assembly Bill 398, which extends the State Cap-and-Trade Program through 2030.

In the 2017 Scoping Plan Update, CARB recommends statewide targets of no more than six metric tons CO2e per capita by 2030 and no more than two metric tons CO2e per capita by 2050. CARB acknowledges that because the statewide per capita targets are based on the statewide GHG emissions inventory that includes all emissions sectors in the State, it is appropriate for local jurisdictions to derive evidence-based local per-capita goals based on local emissions sectors and growth projections.

To demonstrate how a local jurisdiction can achieve their long-term GHG goals at the community plan level, CARB recommends developing a geographically-specific GHG reduction plan (i.e., climate action plan) consistent with the requirements of CEQA section 15183.5(b). A so-called “CEQA-qualified” GHG reduction plan, once adopted, can provide local governments with a streamlined tool for project-level environmental review of GHG emissions, provided there are adequate performance metrics for determining project consistency with the plan. Absent conformity with such a plan, CARB recommends “that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development” (CARB, 2017).29 While acknowledging that recent land use development projects in California have demonstrated the feasibility to achieve zero net additional GHG emissions (e.g., Newhall Ranch Resource Management and Development Plan), the 2017 Scoping Plan Update states that “Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State’s long-term GHG goals, and climate change science...To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits locally” (CARB, 2017).30

Cap-and-Trade Program.

Initially authorized by the California Global Warming Solutions Act of 2006 (AB 32), and extended through the year 2030 with the passage of Assembly Bill 398 (2017), the California Cap-and-Trade Program is a core strategy that the State is using to meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. CARB designed and adopted the California Cap-and-Trade Program to reduce GHG emissions from “covered entities”31 (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO2e per year), setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve reductions.32 Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors. The statewide cap for GHG emissions from the capped sectors commenced in 2013. The cap declines over time. Facilities subject to the cap can trade permits to emit GHGs.33

Up to eight percent of a covered entity’s compliance obligation can be met using carbon offset credits, which are created through the development of projects, such as renewable energy generation or carbon sequestration

---

29 At pages 100–101.
30 At page 102.
31 “Covered Entity” means an entity within California that has one or more of the processes or operations and has a compliance obligation as specified in subarticle 7 of the Cap-and-Trade Regulation; and that has emitted, produced, imported, manufactured, or delivered in 2008 or any subsequent year more than the applicable threshold level specified in section 95812(a) of the Regulation.
32 17 CCR §§ 95800 to 96023.
33 See generally 17 CCR §§ 95811, 95812.
projects, that achieve a reduction of emissions or an increase in the removal of carbon from the atmosphere from activities not otherwise regulated, covered under the cap, or resulting from government incentives. California Carbon Offsets (CCO’s) are verified reductions of emissions whose ownership can be transferred to others. As required by AB 32, any reduction of GHG emissions used for compliance purposes must be real, permanent, quantifiable, verifiable, enforceable, and additional. Offsets used to meet regulatory requirements must be quantified according to CARB-adopted methodologies, and CARB must adopt a regulation to verify and enforce the reductions. The criteria developed will ensure that the reductions are quantified accurately and are not double-counted within the system (CARB, 2008).34

If California’s direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California’s direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will require relatively more emissions reductions. In other words, the Cap-and-Trade Program can be adaptively managed by the State to ensure achievement of California’s 2020 and 2030 GHG emissions reduction mandates, depending on whether other regulatory measures are more or less effective than anticipated.

**Senate Bill 375.**

Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California’s 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). CARB may update the targets every four years and must update them every eight years. MPOs in turn must demonstrate how their plans, policies and transportation investments meet the targets set by CARB through Sustainable Communities Strategy. The original target reductions for the Bay Area are a regional reduction of per-capita CO2 emissions from cars and light-duty trucks by 7 percent by 2020 and by 15 percent by 2035, compared to a 2005 baseline. The year 2035 reduction target has since been revised in 2018 to reduce per capita vehicular GHG emissions 19 percent by 2035 from a 2005 baseline. ABAG addresses these goals in Plan Bay Area, which identifies Priority Development areas near transit options to reduce use of on-road vehicles.

**Senate Bill X 1-2.**

Senate Bill X 1-2, signed by Governor Brown in April 2011, enacted the California Renewable Energy Resources Act. The law obligates all California electricity providers, including investor-owned and publicly-owned utilities, to obtain at least 33 percent of their energy from renewable resources by the year 2020.

**Advanced Clean Cars Program.**

In January 2012, pursuant to Recommended Measures T-1 and T-4 of the Scoping Plan, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

The program also requires car manufacturers to offer for sale an increasing number of zero-emission vehicles (ZEVs) each year, including battery electric, fuel cell, and plug-in hybrid electric vehicles. In December 2012, CARB adopted regulations allowing car manufacturers to comply with California’s GHG emissions requirements for model years 2017-2025 through compliance with the USEPA GHG requirements for those same model years.

**Senate Bill 743.**

In 2013, Governor Brown signed Senate Bill (SB) 743, which added Public Resources Code section 21099 to CEQA, to change the way that transportation impacts are analyzed under CEQA to better align local environmental review with statewide objectives to reduce GHG emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California.35

As required under SB 743, OPR developed potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled (VMT), VMT per capita, automobile trip generation rates, or automobile trips generated. The new VMT metric is intended replace the use of automobile delay and level of service (LOS) as the metric to analyze transportation impacts under CEQA. In its 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA, OPR recommends different thresholds of significance for projects depending on land use types. For example, residential and office space projects must demonstrate a VMT

---

34 Climate Reserve Tones (CRTs). When CRTs are transferred to a retirement account in the Reserve System, they are considered retired. Retirement accounts are permanent and locked to prevent a retired CRT from being transferred again.

level that is 15 percent less than that of existing development to determine whether the mobile-source GHG emissions associated with the project are consistent with statewide GHG reduction targets. With respect to retail land uses, any net increase of VMT may be sufficient to indicate a significant transportation impact (OPR, 2018b). In 2016, the City of San Francisco adopted local VMT metrics to implement the directive from SB 743.

Mobile Source Strategy (2016).

Implementing CARB’s Mobile Source Strategy includes measures to reduce total light-duty VMT by 15 percent from the business-as-usual in 2050. The Mobile Source Strategy includes an expansion of the Advanced Clean Cars Program (which further increases the stringency of GHG emissions for all light-duty vehicles, and 4.2 million zero-emission and plug-in hybrid light-duty vehicles by 2030). It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for class 3 – 7 “last mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels by 2030/2031.

California Sustainable Freight Action Plan (2016).

California Sustainable Freight Action Plan includes strategies to improve freight efficiency and transition to zero emission freight handling technologies. It includes goals to achieve 25 percent improvement of freight system efficiency by 2030, and to deploy over 100,000 freight vehicles and equipment capable of zero emission operation by 2030, and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030 (Caltrans, 2016).

Senate Bill 350.

The Clean Energy and Pollution Reduction Act of 2015, SB 350 (Chapter 547, Statutes of 2015) was approved by Governor Brown on October 7, 2015. SB 350 increased the standards of the California Renewable Portfolio Standards (RPS) program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased from 33 percent to 50 percent by December 31, 2030. The Act requires the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in existing electricity and natural gas final end uses of retail customers by January 1, 2030.

Senate Bill 100.

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals that were established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

SB 1383 (Short-lived Climate Pollutants).

Senate Bill 1383, passed in 2016, requires statewide reductions in short-lived climate pollutants (SLCPs) across various industry sectors. The SLCPs covered under AB 1383 include methane, fluorinated gases, and black carbon – all GHGs with a much higher warming impact than carbon dioxide and with the potential to have detrimental effects on human health. SB 1383 requires CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emission reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025.

California Assembly Bill 341. AB 341, which became law in 2011, establishes a new statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020, and changed the way that the State measures progress toward the 75 percent recycling goal, focusing on source reduction, recycling and composting. AB 341 also requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The purpose of the law is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and expand the opportunity for additional recycling services and recycling manufacturing facilities in California (CalRecycle, 2019).

California Assembly Bill 1826. AB 1826, known as the Commercial Organic Waste Recycling Law, became effective on January 1, 2016, and requires businesses and multi-family complexes (with 5 units or more) that generate specified amounts of organic waste (compost) to arrange for organics collection services. The law phases in the requirements on businesses with full implementation realized in 2019:

- **First Tier**: Commencing in April 2016, the first tier of affected businesses included those that generate eight or more cubic yards of organic materials per week.
• **Second Tier**: In January 2017, the affected businesses expanded to include those that generate four or more cubic yards of organic materials per week.

• **Third Tier**: In January 2019, the affected businesses are further expanded to include those that generate four or more cubic yards of commercial solid waste per week.

**State of California Building Codes**

**California Building and Energy Efficiency Standards (Title 24).**

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods (CEC, 2016).

The current Title 24, Part 6 standards (2016 standards) were made effective on January 1, 2017. The next update to the Title 24 energy efficiency standards (2019 standards) goes into effect on January 1, 2020.

**California Green Buildings Standards Code (CALGreen).**

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. CALGreen is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code is mandatory for all new residential and nonresidential buildings constructed in the State. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality. The CALGreen Code was most recently updated in 2016 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2017 (California Building Standards Commission, 2016).

### 2.5 REGIONAL PLANS AND POLICIES

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that regulates stationary sources of air pollution within the nine San Francisco Bay Area counties. BAAQMD regulates GHG emissions through the following plans, programs, and guidelines.

**Clean Air Plan**

BAAQMD and other air districts prepare clean air plans in accordance with the state and federal Clean Air Acts. On April 19, 2017, the BAAQMD Board of Directors adopted the 2017 Clean Air Plan, Spare the Air, Cool the Climate, an update to the 2010 Clean Air Plan. The Clean Air Plan is a comprehensive plan that focuses on the closely-related goals of protecting public health and protecting the climate. Consistent with the State’s GHG reduction targets, the plan lays the groundwork for a long-term effort to reduce Bay area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

As part of the Basin-Wide Methane Strategy outlined in the 2017 Clean Air Plan, the BAAQMD is currently developing a new regulation to address significant releases of methane in the Bay Area, called Regulation 13, Rule 1: Significant Methane Releases, which would serve as a general backstop rule to address releases of methane from regulated sources.

**BAAQMD Climate Protection Program**

The BAAQMD established a climate protection program to reduce pollutants that contribute to global climate change and affect air quality in the San Francisco Bay Area Air Basin. The climate protection program includes measures that promote energy efficiency, reduce vehicle miles traveled, and develop alternative sources of energy, all of which assist in reducing emissions of GHG and in reducing air pollutants that affect the health of residents. The BAAQMD also seeks to support current climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

**BAAQMD CEQA AIR QUALITY GUIDELINES**

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. The guidelines also include recommended assessment methodologies for air toxics, odors, and greenhouse gas emissions. In June 2010, the BAAQMD’s Board of Directors adopted CEQA thresholds of significance and an update of the CEQA Guidelines, which included significance thresholds for GHG emissions based on the emission reduction goals for 2020 articulated by the State Legislature in AB 32. The first threshold, 1,100 MT CO$_2$e per year, is a numeric emissions level below which a project’s
contribution to global climate change would be less than cumulatively considerable. For larger and mixed-use projects, the Guidelines state that emissions would be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 MT CO₂e per service population or better (BAAQMD, 2010).

On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds of significance in the BAAQMD CEQA Air Quality Guidelines. That decision was appealed to the Court of Appeal and one of the issues in the case has been decided by the California Supreme Court. The Supreme Court found that CEQA does not require an analysis of how existing environmental conditions will impact future residents or users of a proposed project, and remanded the case down for the lower court to decide remaining issues. Following the Superior Court order, the BAAQMD released revised CEQA Air Quality Guidelines in May of 2012 that include guidance on calculating air pollutant emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures, and which set aside the significance thresholds. There was no challenge to BAAQMD’s 2010 greenhouse gas emissions thresholds or the substantial evidence supporting those thresholds (BAAQMD, 2012). In May 2017, the Air District published a new version of the Guidelines, which included no changes to the quantitative greenhouse gas thresholds, but presented them as guidance and recommended that lead agencies consider the information to develop their own thresholds of significance.

Under BAAQMD’s current CEQA Air Quality Guidelines, a local government may prepare and adopt a qualified GHG Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG Reduction Strategy and General Plan that addresses the project’s GHG emissions, it can be presumed that the project will not have significant GHG emissions under CEQA (BAAQMD, 2017a).

Metropolitan Transportation Commission/Association of Bay Area Governments Sustainable Communities Strategy

MTC is the federally recognized MPO for the nine county Bay Area. On July 18, 2013, the Plan Bay Area was jointly approved by ABAG’s Executive Board and by MTC. The Plan includes the region’s Sustainable Communities Strategy, as required under SB 375, and the 2040 Regional Transportation Plan. The Sustainable Communities Strategy lays out how the region will meet GHG reduction targets set by CARB. CARB’s current targets call for the region to reduce per capita vehicular GHG emissions 10 percent by 2020 and 19 percent by 2035 from a 2005 baseline. A central greenhouse gas reduction strategy of Plan Bay Area is the concentration of future growth within Priority Development Areas (PDAs) and Transit Priority Areas (TPAs). To be eligible for PDA designation, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. To be eligible for PDA designation, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. A TPA is an area within one-half mile of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes (MTC, 2013).

On July 26, 2017, MTC adopted Plan Bay Area 2040, a focused update that builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic and financial trends since the original plan was adopted (MTC, 2017).

2.6 CITY AND COUNTY OF SAN FRANCISCO PLANS AND POLICIES

Pursuant to Article 9, Section 9 of the California State Constitution, UCSF is constitutionally exempt from local land use regulations whenever using property under its control in furtherance of its educational purposes. This authority includes University master planning and oversight of land uses and the development, maintenance and use of physical facilities under UCSF control. Thus, the following City plans and policies do not apply to UCSF and are presented for informational purposes only. The following is a general discussion of CCSF policy with respect to GHG emissions.

San Francisco Greenhouse Gas Reduction Ordinance

In May 2008, the CCSF adopted Ordinance No. 81-08 amending the San Francisco Environment Code to establish GHG emissions targets and departmental action plans and to authorize the San Francisco Department of the Environment to coordinate efforts to meet these targets. The City ordinance establishes the following GHG emissions reduction limits and target dates by which to achieve them: determine 1990 Citywide GHG emissions by 2008, the baseline level, with reference to which target reductions are set; reduce GHG emissions by 25 percent below 1990 levels by 2017; reduce GHG emissions by 40 percent below 1990 levels by 2025; and reduce GHG emissions by 80 percent below 1990 levels by

---

2050. The City’s GHG reduction targets are consistent with—in fact, more ambitious than—those set forth in Governor Brown’s recent Executive Order B-30-15 by targeting a 40 percent reduction by 2025 rather than a 40 percent reduction by 2030.

San Francisco Greenhouse Gas Reduction Strategy
San Francisco has developed a number of plans and programs to reduce the City’s contribution to global climate change and to meet the goals of the City’s Greenhouse Gas Reduction Ordinance. San Francisco’s Greenhouse Gas Reduction Strategy documents its actions to pursue cleaner energy, energy conservation, and alternative transportation and solid waste policies. For instance, the City has implemented mandatory requirements and incentives that have measurably reduced GHG emissions including, but not limited to, increasing the energy efficiency of new and existing buildings, installation of solar panels on building roofs, implementation of a green building strategy, adoption of a zero waste strategy, a construction and demolition debris recovery ordinance, a solar energy generation subsidy, incorporation of alternative fuel vehicles in the City’s transportation fleet (including buses), and a mandatory recycling and composting ordinance. The strategy also identifies 42 specific regulations for new development that would reduce a project’s GHG emissions.

San Francisco’s policies and programs have resulted in a reduction in GHG emissions to below 1990 levels, exceeding statewide AB 32 GHG reduction goals. San Francisco’s GHG emissions in 2010 were 5.3 million metric tons CO2e, which represents a 14.5 percent reduction in GHG emissions compared to 1990 levels (6.2 million metric tons CO2e). The reduction is largely a result of reduced GHG emissions from the electricity sector, from 2.0 million metric tons CO2e (1990) to 1.3 million metric tons CO2e (2010), and the waste sector, from 0.5 million metric tons CO2e (1990) to 0.2 million metric tons CO2e (2010) (SF DOE, 2013).

UCSF sustainability staff actively engage with the SF Department of Environment to ensure that the university coordinates its activities on City initiatives that reduce GHG emissions.

3.0 UCSF GHG EMISSIONS INVENTORY AND FORECASTS

UCSF has inventoried its campus-wide GHG emissions for many calendar years, including 1990, 2000, and every year since 2007, using standard accounting protocols from the California Climate Action Registry (CCAR), The Climate Registry (TCR), the California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA), as discussed in section 2. Reporting rules, protocols, and registries have evolved over this time, with the CCAR no longer active and TCR taking over as the leading national registry for voluntary reporting. As a major stationary source (greater than 25,000 metric tons (mt) CO2e per year) and electric power producer, the Parnassus Central Utility Plant (PCUP) falls under state and federal reporting requirements. Since 2008, PCUP emissions have been reported to CARB under California’s GHG Mandatory Reporting Regulation; and since 2010 PCUP emissions have been report to USEPA under the Greenhouse Gas Reporting Rule (74 FR 56260).

ORGANIZATIONAL BOUNDARY
All of the standardized GHG reporting protocols and methodologies require a clear delineation of the organizational and operational boundaries used to account for emissions in an inventory. The organizational boundary includes all facilities and GHG sources over which the reporting entity has management control. Management control can be defined in either financial or operational terms, but the boundary definition must be applied consistently across the organization. Through calendar year 2011, the UCSF inventory based its organizational boundary on the operational control criterion, which requires inclusion of all wholly-owned facilities, and all facilities for which UCSF has operational control through an operational lease or other means. Facilities with which UCSF has an affiliation agreement but not operational control, such as leased space at the City owned Zuckerberg San Francisco General Hospital (ZSF GH) or the federally owned Veterans Affairs Medical Center (VAMC), have reported their emissions separately through their own documents.

Starting with the 2012 GHG inventory reported to TCR, UCSF delineates its organizational boundary using the financial

37 https://sustainability.ucsf.edu/what_ucsf_is_doing_2, and
https://ucop.edu/sustainability/policy-areas/annual-reports.html
control criterion. Under financial control, UCSF reports emissions from facilities and sources that are wholly-owned, and from facilities and sources that are partially-owned but where UCSF retains financial control (e.g., through a capital or financial lease, or where majority ownership establishes management control). Due to this organizational boundary change, pre-2012 inventories in this GHG Reduction Strategy are presented with boundary adjustments to enable direct comparison with current and future inventories. Essentially, emissions associated with leased facilities are removed from the pre-2012 inventories.

**OPERATIONAL BOUNDARY**

The operational boundary describes the direct and indirect sources of GHG emissions included in the inventory. GHG reporting protocols generally break emissions down into three source categories related to the level of operational control exercised by the organization over the emission source. For UCSF, the following sources are included:

- **Scope 1 Emissions** – Direct emissions, including stationary combustion such as boilers, hydrofluorocarbon (HFC) refrigerant use, and some medical gases (anesthesia), as well as non-stationary combustion of fuels in University-owned vehicles.

- **Scope 2 Emissions** – Indirect stationary sources, including emissions from purchased electricity and purchased steam for leased facilities.

- **Scope 3 Emissions** – Other indirect emissions from business air travel and from commuting by students, faculty, and staff. Scope 3 is defined as emissions that are a consequence of the activities of the institution, but occur from sources not owned or controlled by the institution.

UC’s Sustainable Practices Policy stipulates that each UC campus will annually inventory its GHG emissions in accordance with TCR requirements, to include Scope 1 and Scope 2 emissions as well as Scope 3 emissions from business air travel and from commuting by students, faculty and staff. Inclusion of Scope 3 emissions is optional for TCR reporting, and when reported, they are generally not third-party verified.

The standardized reporting methodology also incorporates protocols for carbon sequestration accounting – e.g., ‘credits’ for items such as institution-owned large tracts of forest land held as ‘permanent’ (100 year) open space. Although UCSF owns the Mount Sutro Open Space Reserve located at the Parnassus Heights campus site, UCSF GHG inventories do not account for carbon sequestration in the Reserve. Forest land policy, and the use of forestry carbon offsets are currently being discussed by UC at the system level. Future updates of UCSF’s Climate Action Plan may include offsets attributable to forest management, either on University or third party owned land. The University has prepared a vegetation management plan to assess the health of the Mount Sutro forest, and manages the land while balancing multiple goals such as wildland fire prevention, bio-diversity, and carbon sequestration. If a significant change in land use or a forest coverage occurs, the net change in sequestered carbon associated with that change would be evaluated and may be included in a future inventory.

**ESTABLISHING A BASELINE**

There are different requirements for and varying guidance regarding the various reporting rules for establishing a GHG emissions baseline. BAAQMD’s guidance for a qualified GHG Reduction Strategy is to set the baseline inventory as calendar-year 2008 or earlier. Important considerations in setting the baseline include the accuracy and completeness of underlying data, and the role of the baseline in forecasting future emissions and setting reduction targets.

AB 32 requires the state to reduce GHG emission to 1990 levels by 2020. Since most communities and facilities covered under AB 32 do not have access to high quality data for estimating 1990 GHG emissions, CARB and the California Attorney General recommend that plan-level GHG reduction strategies target 2020 emissions at 15 percent below a 2008 (or earlier) baseline (132,888 mt CO2e). From a statewide perspective, CARB has determined that 15 percent below 2008 is approximately equivalent to 1990 levels. This approach to setting a 2020 target is supported by BAAQMD’s and OPR, and represents current best practice for climate action plans and general plans adopted by cities and public agencies throughout California. (More on the GHG Reduction Strategy approach to setting future emission targets and establishing a CEQA threshold is provided in the next section.)

---

38 Although UCSF has in the past (e.g., 2009 Climate Action Plan) included estimates of Scope 3 emissions from wastewater treatment and off-site disposal of solid waste, UC policy does not require their inclusion in annual inventory reporting to the UC Regents or to TCR. Together, these sources accounted for approximately two percent of total emissions in UCSF’s 1990 and 2008 inventories.

39 Significant defined as more than 10% of the 61 acre reserve, i.e. more than 6.1 acres

40 In its Climate Change Scoping Plan of September 2008, CARB recommends that local governments adopt a GHG reduction target consistent with the State’s commitment to reach 1990 levels by 2020. This is identified as equivalent to 15 percent below “current” levels at the time of writing (2008).

41 BAAQMD’s CEQA Guidelines (updated May 2012)
INVENTORY RESULTS

Table 1 provides a summary of campus-wide GHG inventories for 1990, 2008, and 2018 (the most recently reported year). The inventories contain all sources within the operational boundary prescribed by UCOP’s Sustainable Practices Policy, which includes all Scope 1 and Scope 2 emissions as well as Scope 3 emissions from business air travel and commuting by students, faculty and staff. A subtotal is provided for Scope 1 and Scope 2 emissions, reflecting the operational boundary associated with the UC President’s carbon neutral initiative. The results show that total Scope 1, 2, and 3 GHG emissions increased from 109,817 mt CO2e in 1990 to 156,339 mt CO2e in 2008 (a 42 percent increase), and subsequently dropped to 158,372 mt CO2e in 2018 – despite the opening of over 2 million gross square feet of new campus space since 2008.

The following sections provide more detail on each inventory, highlighting similarities, differences, and data quality.

1990 INVENTORY

UCSF’s earliest GHG inventory (calendar year 1990) is largely based on actual 1990 activity data, but there are several sources for which accurate or complete data is not available, leaving a certain amount of uncertainty in the GHG emissions estimates for those sources. As mentioned in Section 2.2 and explained further below, this data reflects an adjustment made to the 1990 inventory as it appeared in the 2009 Climate Action Plan to correct for an accounting error discovered during development of this GHG Reduction Strategy; when the 1990 inventory was first developed, only half of the utility data was aggregated, so the initial 1990 emissions estimates for energy included in the 2009 Climate Action Plan were erroneously low. In Table 1, the adjusted values for natural gas and electricity emissions account for a full year of energy data. In addition, also as previously discussed, emissions from electricity used by leased buildings were removed from the calculations shown in Table 1 to maintain consistency with the organizational boundary change that was made starting with the 2012 inventory (from operational to financial control). The 1990 inventory has not been independently audited, nor has it been submitted to a GHG emissions registry.

The largest of the 1990 inventory contributing sectors, Buildings and Facilities natural gas (40.9 percent of total) and Buildings and Facilities electricity consumption (22.3 percent), are based on actual utility consumption data tracked in the billing system. However, the utility data represents fiscal year 1989-1990, which is an approximation of calendar-year 1990. Building records show that no significant development occurred on the campus that year.

The third-largest contributor to 1990 GHG emissions, the commute to work (15.6 percent of total), was estimated based on a comprehensive transportation survey that UCSF prepared in 1991, which accounts for both mode-split and trip lengths, as explained in the 2009 UCSF Climate Action Plan. Other sectors of this inventory, such as UCSF Fleet fuel consumption, did not have centralized record keeping in place in 1990, and were estimated based on an algorithm combining 2008 data scaled to the facility size and population at that time (i.e., fleet emissions are based on 2008 actual fuel consumption data scaled to the 1990 facility size and population). Similarly, Refrigerants and Medical Gases’ emissions data are an estimate based on 2008 known usage scaled to the conditions that existed in 1990. (Medical gas use is largely dependent on hospital stays; UCSF did not experience a significant change in the size or use of inpatient clinical facilities between 1990 and 2008.)

Following standard GHG accounting protocol, the CCAR acquisition adjustment accounts for the transfer of historical emissions data to UCSF. This allows equal comparison across years of un-offset emissions. Note that emissions reported in the Annual Sustainability Report only include Scope 3 mobile emissions under UCSF’s control from employee air travel and commute. Emissions from travel by patients and visitors are not included in the GHGRS.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Emission Category</th>
<th>1990</th>
<th>1990%</th>
<th>2008</th>
<th>2008%</th>
<th>2018</th>
<th>2018%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Buildings and Facilities – Natural Gas</td>
<td>44,923</td>
<td>40.9%</td>
<td>90,026</td>
<td>57.6%</td>
<td>80,420</td>
<td>50.8%</td>
</tr>
<tr>
<td>1</td>
<td>Buildings and Facilities – Other Fuels</td>
<td>114</td>
<td>0.1%</td>
<td>NA</td>
<td>NA</td>
<td>197</td>
<td>0.1%</td>
</tr>
<tr>
<td>1</td>
<td>UCSF Fleet</td>
<td>1,944</td>
<td>1.8%</td>
<td>3,200</td>
<td>2.0%</td>
<td>2,714</td>
<td>1.7%</td>
</tr>
<tr>
<td>1</td>
<td>Refrigerants and Medical Gases</td>
<td>3,500</td>
<td>3.2%</td>
<td>3,500</td>
<td>2.2%</td>
<td>1,656</td>
<td>1.0%</td>
</tr>
<tr>
<td>1</td>
<td>CCAR Acquisition Adjustment</td>
<td>10,178</td>
<td>9.3%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2</td>
<td>Buildings and Facilities - Electricity</td>
<td>24,529</td>
<td>22.3%</td>
<td>24,962</td>
<td>16.0%</td>
<td>29,108</td>
<td>18.4%</td>
</tr>
<tr>
<td>Scope 1 and 2 Subtotal</td>
<td>85,188</td>
<td>77.6%</td>
<td>121,688</td>
<td>77.8%</td>
<td>114,095</td>
<td>72.0%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Business Air Travel</td>
<td>7,549</td>
<td>6.9%</td>
<td>12,582</td>
<td>8.0%</td>
<td>18,743</td>
<td>11.8%</td>
</tr>
<tr>
<td>3</td>
<td>Commute</td>
<td>17,080</td>
<td>15.6%</td>
<td>22,069</td>
<td>14.1%</td>
<td>25,529</td>
<td>16.1%</td>
</tr>
<tr>
<td>Scope 1, 2, and 3 Total</td>
<td>109,817</td>
<td>100.0%</td>
<td>156,339</td>
<td>100.0%</td>
<td>158,372</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: University of California, San Francisco (UCSF), UCSF Climate Action Plan – Greenhouse Gas Reduction Strategy, April 2017 and TCR 2018 Summary, 2019. 2018 inventory does not reflect 4,396 MT mt CO2e of offsets taken by UCSF. This allows equal comparison across years of un-offset emissions. Note that emissions reported in the Annual Sustainability Report only include Scope 3 mobile emissions under UCSF’s control from employee air travel and commute.
UCSF after 1990. This adjustment methodology is in place so that an institution that has goals related to meeting 1990 emissions levels can accurately account for enterprise-wide emissions source changes through time. In a series of acquisitions, starting in 1998, UCSF acquired a new 61-acre campus site in the formerly industrial Mission Bay South Redevelopment Area of San Francisco. The 1990 historical emissions from this acquired site are represented by the CCAR acquisition adjustment, and are now included in all UCSF inventories since 2008.

2008 INVENTORY

The 2008 GHG inventory was the first of the UCSF inventories to be audited by an accredited third-party verifier, providing a high degree of confidence in the accuracy and completeness of the underlying data and emissions calculations. The 2008 inventory (Scope 1 and Scope 2 emissions) was reported to the CCAR, while the 2008 emissions from the PCUP were reported to CARB under California’s GHG Mandatory Reporting Regulation. The 2008 figures provided in Table 1 do not include emissions from electricity used by leased buildings; this is in order to maintain consistency with the organizational boundary change that was made starting with the 2012 inventory (from operational to financial control). Emissions associated with leased buildings are addressed in the City of San Francisco and CARB inventories.

As described in the 2009 Climate Action Plan, emissions estimates for all sectors included in the adjusted 2008 inventory are based on actual activity data (utility natural gas and electricity usage, fleet fuel consumption; etc.). As with the 1990 inventory, the Commute emissions estimate is based on a comprehensive transportation survey for 2008.

2018 INVENTORY

UCSF’s latest GHG inventory (calendar-year 2018) was third-party verified and reported to TCR. The TCR Reporting Protocol requires quantification of all Scope 1 and Scope 2 emissions, while reporting of Scope 3 is optional. As mentioned previously, the organizational boundary change made in 2012 means that leased facilities are not included. The 2018 figures in Table 1 include the emissions reported to TCR, plus the Scope 3 emissions for business air travel and commuting by students, faculty, and staff, so as to match the operational boundaries used for the 1990 and 2008 inventories. In 2018, 85.1 percent of total emissions were associated with three sectors: Buildings and Facilities natural gas (50.8 percent of total), Buildings and Facilities electricity (18.4 percent), and Commute (16.1 percent).

GHG INVENTORY FORECASTS

Consistent with the requirements for a qualified GHG Reduction Strategy, 2020, 2035 and 2050 forecasts of GHG emissions are based on campus energy-use trends, the anticipated impact of LRDP as amended by proposed developments, the anticipated impact of existing energy efficiency and GHG reduction programs, and compliance and implementation of the policies identified in Section 2 of this document.

Table 2 provides a summary of campus-wide GHG emissions inventories for 1990, 2008, 2015, and 2018 (current), along with the forecasts for 2020, 2035 and 2050. These forecasts are adjusted to incorporate the impact of state-wide measures for reducing transportation-related emissions, namely the Pavley bill (AB 1493), which addresses vehicle fuel efficiency, and the Low Carbon Fuel Standard (LCFS).

The University provides inventories and makes projections in 2 separate formats. The first is for Market Based Emissions reflecting actual emissions factors from the companies UCSF was able to purchase from in the marketplace. This is the methodology used to report to TCR per the Sustainable Practices Policy. The second methodology references generic Western Grid emissions factors for purchased electricity. It is used for comparative purposes as a conservative business-as-usual assessment when looking at multiple similar institutions.

Table 3 provides a summary of the LRDP building growth assumptions used in the GHG emissions forecasting, broken down by the five main campus sites covered by the LRDP. Table 3 has been updated to reflect the acquisition of the new sites that have occurred since the 2014 LRDP and reflects the sale of the Laurel Heights property. Table 3 also includes the projected new growth proposed for the Parnassus heights campus site under the CPHP.

The projected impacts of the state’s Renewables Portfolio Standard (RPS) and the UCSF utility funded partnership projects are incorporated into the 2020 and 2035 forecasts for energy-related emissions. Energy data for the past four years were analyzed by the UCSF Energy and Facilities teams to quantify energy use intensities (EUI) for buildings on each of the main campus sites and larger properties, as well as the impact of SEP projects on energy use intensity over the same time period. Table 4 provides a summary of the future energy use intensities forecasted for buildings at each of the campus sites, based on the analysis.

Average annual energy efficiency gains were calculated for each campus area. Because of UCSF’s multisite distributed nature in the urban environment, age of existing facilities, and previous investments in cogeneration infrastructure, average energy use intensities vary widely across locations. This EUI information is used to inform the cost benefit analysis of making future investments in reducing emissions.
### TABLE 2: GHG Emissions History and Forecasts (2020) (values in mt CO2e)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Building &amp; Facilities - Natural Gas</td>
<td>44,923</td>
<td>90,026</td>
<td>79,889</td>
<td>80,420</td>
<td>83,386</td>
<td>102,528</td>
<td>140,000</td>
</tr>
<tr>
<td>1 Building &amp; Facilities - Other Fuels</td>
<td>114</td>
<td>NA</td>
<td>112</td>
<td>197</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1 UCSF Fleet</td>
<td>1,944</td>
<td>3,200</td>
<td>2,787</td>
<td>2,714</td>
<td>2432</td>
<td>1359</td>
<td>1,578</td>
</tr>
<tr>
<td>1 Refrigerants and Medical Gases</td>
<td>3,500</td>
<td>3,500</td>
<td>1,212</td>
<td>1,656</td>
<td>1254</td>
<td>1550</td>
<td>1,800</td>
</tr>
<tr>
<td>1 CCAR Acquisition adjustment</td>
<td>10,178</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1 Building &amp; Facilities - Electricity</td>
<td>24,529</td>
<td>24,962</td>
<td>29,546</td>
<td>29,108</td>
<td>20,302</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Scopes 1 &amp; 2 Subtotal</strong></td>
<td>85,188</td>
<td>121,688</td>
<td>113,546</td>
<td>95,763</td>
<td>100,563</td>
<td>105,437</td>
<td>143,377</td>
</tr>
<tr>
<td>3 Business Air Travel</td>
<td>7,549</td>
<td>12,582</td>
<td>13,385</td>
<td>18,748</td>
<td>14,009</td>
<td>17,257</td>
<td>20,035</td>
</tr>
<tr>
<td>3 Commute</td>
<td>17,080</td>
<td>22,069</td>
<td>24,698</td>
<td>25,529</td>
<td>22,167</td>
<td>27,771</td>
<td>32,241</td>
</tr>
<tr>
<td><strong>Scopes 1, 2 &amp; 3 Total</strong></td>
<td>109,817</td>
<td>156,339</td>
<td>151,629</td>
<td>140,040</td>
<td>136,739</td>
<td>150,465</td>
<td>195,653</td>
</tr>
</tbody>
</table>

Western Grid Factors (Comparative)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Building &amp; Facilities - Natural Gas</td>
<td>44,923</td>
<td>90,026</td>
<td>79,889</td>
<td>80,420</td>
<td>83,386</td>
<td>102,528</td>
<td>140,000</td>
</tr>
<tr>
<td>1 Building &amp; Facilities - Other Fuels</td>
<td>114</td>
<td>NA</td>
<td>112</td>
<td>197</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1 UCSF Fleet</td>
<td>1,944</td>
<td>3,200</td>
<td>2,787</td>
<td>2,714</td>
<td>2432</td>
<td>1359</td>
<td>1,578</td>
</tr>
<tr>
<td>1 Refrigerants and Medical Gases</td>
<td>3,500</td>
<td>3,500</td>
<td>1,212</td>
<td>1,656</td>
<td>1254</td>
<td>1550</td>
<td>1,800</td>
</tr>
<tr>
<td>1 CCAR Acquisition adjustment</td>
<td>10,178</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1 Building &amp; Facilities - Electricity</td>
<td>24,529</td>
<td>24,962</td>
<td>29,546</td>
<td>29,108</td>
<td>20,302</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Scopes 1 &amp; 2 Subtotal</strong></td>
<td>85,188</td>
<td>121,688</td>
<td>113,546</td>
<td>95,763</td>
<td>100,563</td>
<td>105,437</td>
<td>143,377</td>
</tr>
<tr>
<td>3 Business Air Travel</td>
<td>7,549</td>
<td>12,582</td>
<td>13,385</td>
<td>18,748</td>
<td>14,009</td>
<td>17,257</td>
<td>20,035</td>
</tr>
<tr>
<td>3 Commute</td>
<td>17,080</td>
<td>22,069</td>
<td>24,698</td>
<td>25,529</td>
<td>22,167</td>
<td>27,771</td>
<td>32,241</td>
</tr>
<tr>
<td><strong>Scopes 1, 2 &amp; 3 Total</strong></td>
<td>109,817</td>
<td>156,339</td>
<td>151,629</td>
<td>140,040</td>
<td>136,739</td>
<td>150,465</td>
<td>195,653</td>
</tr>
</tbody>
</table>

*2018 inventory does not reflect 4,396 mt CO2e of offsets taken by UCSF. This allows equal comparison across years.*

### TABLE 3: UCSF Building Space Forecasts

<table>
<thead>
<tr>
<th>Campus Site</th>
<th>Total Gross Square Feet (GSF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission Bay</td>
<td>3,059,700</td>
</tr>
<tr>
<td>Parnassus Heights</td>
<td>3,301,800</td>
</tr>
<tr>
<td>Mount Zion</td>
<td>776,200</td>
</tr>
<tr>
<td>Mission Center Building</td>
<td>290,700</td>
</tr>
<tr>
<td>Laurel Heights</td>
<td>362,800</td>
</tr>
<tr>
<td>Other UCSF Buildings</td>
<td>332,700</td>
</tr>
<tr>
<td><strong>TOTAL SPACE</strong></td>
<td>8,123,900</td>
</tr>
</tbody>
</table>

### TABLE 4: UCSF Building Energy Use Intensities

<table>
<thead>
<tr>
<th>Campus Site</th>
<th>Average energy use intensity in kbtu/ft2</th>
<th>Est % reduction per through 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission Bay</td>
<td>240.4</td>
<td>1.50%</td>
</tr>
<tr>
<td>Parnassus Heights</td>
<td>304.6</td>
<td>1.25%</td>
</tr>
<tr>
<td>Mount Zion</td>
<td>314.6</td>
<td>1.50%</td>
</tr>
<tr>
<td>MCB Mission Center Building</td>
<td>135.3</td>
<td>1.50%</td>
</tr>
<tr>
<td>Laurel Heights</td>
<td>53.2</td>
<td>1.50%</td>
</tr>
<tr>
<td>Other Sites</td>
<td>213.0</td>
<td>1.50%</td>
</tr>
</tbody>
</table>

---

42 The 2035 GSF estimate includes the Phase 2 Medical Center at Mission Bay.
The 2014 GHG Reduction Strategy extrapolated planned reductions of EUI's in the future to proposed new buildings to calculate future emissions. This document updates the methodology to reflect the UCOP FOVEA tool for calculating future emissions.

Additional notes on forecasting methodology:

- **USSF Fleet emissions**: Forecasts are based on the anticipated growth of student and staff populations by 2020, 2035 and 2050. Updated to reflect the 2019 UC Sustainable Practices Policy and the 2017 acquisition by UCSF of 15 full size electric shuttles buses for the fleet.
- **Commute emissions**: Forecasts are based on the anticipated growth of student and staff populations by 2020, 2035 and 2050.
- **Refrigerants and Medical Gases**: Forecasts are based on the anticipated growth of students, staff, patients, and visitors by 2020, 2035 and 2050.
- **Solid Waste emissions**: Forecasts are based on the anticipated growth of students, staff, patients, and visitors by 2020, 2035 and 2050.
- **Adjustments for statewide transportation measures**: Combined, AB 1493 (Pavley vehicle efficiency standards) and the LCFS are expected to reduce overall emissions from cars and light-duty trucks by approximately 20 percent by 2030. The adjusted forecasts assume that the entire UCSF fleet will be impacted by Pavley and the LCFS.
- **Air travel emissions**: Forecasts are based on the LRDP's anticipated growth of student and staff populations by 2020, 2035 and 2050, and then adjusted to account for the expected continuation of fuel efficiency improvements over time. A study by the Federal Aviation Administration (FAA)\(^{43}\) reports that “Aircraft fuel efficiency has historically improved by about one percent per year. This trend is expected to continue for the foreseeable future.”

As discussed in Section 3 above, one approach to establish a baseline from which to measure targets using UCSF's 1990 emissions inventory (109,817 mt CO\(_2\)e), while the other is based on UCSF's verified 2008 inventory, using the 15 percent downward adjustment recommended by CARB to account for emissions growth since 1990 (132,888 mt CO\(_2\)e). Consistent with the policy of reducing emissions, UCSF's goal for the Parnassus Heights campus site is also that future annual unmitigated emissions not exceed its current 2018 goal for the Parnassus Heights campus site is also that future annual unmitigated emissions not exceed its current 2018 emissions of 125,426 MT CO2e.

Table 5 summarizes the projected targets for the amount of emissions that are required to be mitigated as determined by these two methodologies. The actual quantities of emissions that will need to be mitigated each year will be calculated using the TCR annual inventories and the applicable policy in effect at that time. After all of the feasible onsite measures identified in the subsequent section are implemented, offsets will be purchased, as the final action to reach reduction targets, appropriate to the policy to be met, UC or State. The 2035 and 2050 targets are shown as both the UC Policy goal and the amount needed to offset the full build-out of the LRDP as amended for the CPHP.

### TABLE 5: UCSF Campus-wide GHG Emissions Targets (values in mt CO\(_2\)e)

<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>2018</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions (BAU) 1&amp;2</td>
<td>85,188</td>
<td>95,763</td>
<td>100,563</td>
<td>102,186</td>
<td>103,809</td>
<td>105,437</td>
<td>143,377</td>
</tr>
<tr>
<td>Emissions (BAU) 1,2, &amp; 3</td>
<td>109,817</td>
<td>125,426</td>
<td>136,739</td>
<td>141,310</td>
<td>145,881</td>
<td>150,465</td>
<td>195,653</td>
</tr>
<tr>
<td>AB32 / SB32 goal</td>
<td>109,817</td>
<td>-</td>
<td>109,817</td>
<td>87,854</td>
<td>65,890</td>
<td>54,909</td>
<td>21,063</td>
</tr>
<tr>
<td>Balance to mitigate/offset</td>
<td>-</td>
<td>-</td>
<td>26,922</td>
<td>53,456</td>
<td>79,990</td>
<td>95,557</td>
<td>173,690</td>
</tr>
<tr>
<td>UC Policy Goal</td>
<td>109,817</td>
<td>-</td>
<td>109,817</td>
<td>39,124</td>
<td>66,668</td>
<td>45,028</td>
<td>0</td>
</tr>
<tr>
<td>Balance to mitigate/offset</td>
<td>-</td>
<td>-</td>
<td>26,922</td>
<td>102,186</td>
<td>79,213</td>
<td>105,437</td>
<td>195,653</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Based on 2008 Inventory Baseline adjusted 15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2020</td>
</tr>
<tr>
<td>Emissions (BAU) 1&amp;2</td>
<td>103,435</td>
</tr>
<tr>
<td>Emissions (BAU) 1,2, &amp; 3</td>
<td>122,888</td>
</tr>
<tr>
<td>AB32 / SB32 goal</td>
<td>132,888</td>
</tr>
<tr>
<td>Balance to mitigate/offset</td>
<td>-</td>
</tr>
</tbody>
</table>


---

### 4.0 GHG TARGETS AND CEQA THRESHOLDS OF SIGNIFICANCE

The UCSF GHG Reduction Strategy utilizes two approaches to establishing campus-wide GHG emissions targets that are consistent with both UC policy and State policy - AB 32, SB 32, Executive Order B-55-18 as well as other California policy on GHG emissions. Consistency with UC policy for setting emission targets for this plan consists of meeting 1990 levels by 2020; climate neutrality from scope 1 and 2 sources by 2025; and climate neutrality from specific scope 3 sources by 2050 or sooner. Consistency with State policy for setting emission targets for this plan consists of meeting 1990 levels by 2020; 40 percent below 1990 levels by 2030; and 80 percent below 1990 levels by 2050. As an CARB-covered entity, UCSF also has to maintain compliance with CARB’s cap and trade program.

As discussed in Section 3 above, one approach to establish a baseline from which to measure targets using UCSF’s 1990 emissions inventory (109,817 mt CO\(_2\)e), while the other is based on UCSF’s verified 2008 inventory, using the 15 percent downward adjustment recommended by CARB to account for emissions growth since 1990 (132,888 mt CO\(_2\)e). Consistent with the policy of reducing emissions, UCSF’s goal for the Parnassus Heights campus site is also that future annual unmitigated emissions not exceed its current 2018 emissions of 125,426 MT CO\(_2\)e.

Table 5 summarizes the projected targets for the amount of emissions that are required to be mitigated as determined by these two methodologies. The actual quantities of emissions that will need to be mitigated each year will be calculated using the TCR annual inventories and the applicable policy in effect at that time. After all of the feasible onsite measures identified in the subsequent section are implemented, offsets will be purchased, as the final action to reach reduction targets, appropriate to the policy to be met, UC or State. The 2035 and 2050 targets are shown as both the UC Policy goal and the amount needed to offset the full build-out of the LRDP as amended for the CPHP.
5.0 GHG REDUCTION MEASURES

This section describes the GHG reduction measures currently underway at UCSF, as well as those measures that are funded or to which UCSF is currently committed. The GHG reduction measures are organized into two major categories of Energy and Transportation, the areas the University most directly has control.

The GHG Reduction Strategy includes two categories of GHG reduction measures: those to which UCSF is currently committed to in terms of existing funding and/or implementation (called “Tier 1” measures); and those that currently committed to in terms of future funding but are in the planning or study stages (called “Tier 2” measures).

A combination of Tier 1 and Tier 2 on-site reduction measures are not sufficient for UCSF to meet the future goals. Additional measures—purchasing REC’s or offsets—are needed for UCSF to meet the 2025 UC Policy goal of climate neutrality for scope 1 and 2, and, scope 3 by 2050.

Figure 2 shows the changes in UCSF GHG emissions over time. The grey area indicates historical emissions between 2007 and 2018 based on inventory results. The top line represents business-as-usual; the dotted line the goal. The colored wedges represent the future implementation of various Tier 1 and Tier 2 measures described in sections below.

**FIGURE 2: UCSF GHG Emissions Reduction Scenario**

| Item | Measure Description | Incremental Emissions Impact (Mt CO2e) /
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S_01</td>
<td>UCOP: Wholesale Power Program</td>
<td>-3,625</td>
</tr>
<tr>
<td>S_02</td>
<td>UCOP: RECS</td>
<td>-2,024</td>
</tr>
<tr>
<td>S_03</td>
<td>UCOP: Biomethane Existing Contracts</td>
<td>-9,399</td>
</tr>
<tr>
<td>S_04</td>
<td>UCOP: Biomethane Future Contracts</td>
<td>-28,196</td>
</tr>
<tr>
<td>S_05</td>
<td>High Performance New Buildings</td>
<td>-762</td>
</tr>
<tr>
<td>S_06</td>
<td>AB 32 Offsets</td>
<td>-1,815</td>
</tr>
<tr>
<td>S_07</td>
<td>WPP Expansion – Campus</td>
<td>-3,186</td>
</tr>
<tr>
<td>S_08</td>
<td>WPP Expansion – Health</td>
<td>-2,978</td>
</tr>
<tr>
<td>S_09</td>
<td>Energy Efficiency - Campus</td>
<td>-4,616</td>
</tr>
<tr>
<td>S_10</td>
<td>Energy Efficiency - Med Center</td>
<td>-663</td>
</tr>
<tr>
<td>S_14</td>
<td>Planned On-site Solar</td>
<td>-422</td>
</tr>
<tr>
<td>S_16</td>
<td>Electric Buses</td>
<td>-386</td>
</tr>
<tr>
<td>S_17</td>
<td>Renovations</td>
<td>-1,219</td>
</tr>
</tbody>
</table>

**TABLE 6: Emissions Reductions Targets (values in Mt CO2e)**
5.1 TIER 1 MEASURES

Table 7 summarizes the significant Tier 1 strategies (comprised of programs, policies, and actions) that are expected to reduce GHG emissions between now and the planning horizon for the LRDP (2035) and CPHP (2050). Most of the programs and policies associated with these strategies are outlined in the 2009 Climate Action Plan and on the UCSF Office of Sustainability’s web site. GHG reduction estimates associated with these measures, if not already incorporated into future emissions forecasts (e.g., EN1 – SEP Implementation), are provided for in 2035 and 2050. The following sections provide more detail about the key programs, policies and actions comprising each of the measures.

The following sections describe in more detail the implementing actions associated with each Tier 1 measure, and the GHG reductions expected to result from those actions.

5.2 ENERGY MEASURES

STRATEGY EN1: IMPROVE ENERGY EFFICIENCY OF EXISTING BUILDINGS AND OPERATIONS (SEP IMPLEMENTATION)

Key Implementing Actions:

-Continue to revise and implement the SEP to achieve energy efficiency improvements consistent with the results of the past four years.
-Continue to participate in the system-wide UC/CSU Investor Owned Utility Energy Partnership.

Table 7: UCSF Tier 1 GHG Reduction Measures

<table>
<thead>
<tr>
<th>Strategy ID</th>
<th>Strategy Name</th>
<th>Annual GHG Reduction by 2020 (MT CO2e)</th>
<th>Annual GHG Reduction by 2035 (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN1</td>
<td>Improve Energy Efficiency of Existing Buildings and Operations (SEP Implementation)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>EN2</td>
<td>Green Building Standards</td>
<td>5,235</td>
<td>10,792</td>
</tr>
<tr>
<td>EN3.1</td>
<td>Renewable Energy Strategies: Onsite PV</td>
<td>128</td>
<td>377</td>
</tr>
<tr>
<td>EN3.2</td>
<td>Renewable Energy Strategies: Green power purchasing</td>
<td>-</td>
<td>6,721</td>
</tr>
<tr>
<td>EN3.3</td>
<td>Renewable Energy Strategies: Biogas purchasing</td>
<td>6,379</td>
<td>6,379</td>
</tr>
<tr>
<td>TR1</td>
<td>Reduce Vehicle Trips</td>
<td>1,137</td>
<td>2,561</td>
</tr>
<tr>
<td>TR2</td>
<td>Clean Vehicle Strategies</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td></td>
<td><strong>12,878</strong></td>
<td><strong>26,830</strong></td>
</tr>
</tbody>
</table>

NOTES: a - Impact of EN1 is already incorporated into the future GHG emissions forecasts.

The following sections describe in more detail the implementing actions associated with each Tier 1 measure, and the GHG reductions expected to result from those actions.

Since the early 1990’s UCSF has periodically written Strategic Energy Plans to identify and prioritize implementation of campus investments in energy efficiency projects for existing buildings and infrastructure. These energy efficiency plans, with three-year to seven-year timelines, examine all UCSF facilities for application of new efficiency technologies, implementation of best practices, and available financial incentive programs. Focused primarily on electrical and gas usage, the projects are expected to produce savings equal in value to investment costs within 10 years or less.

As of February 2020, there have been 28 SEP projects completed at UCSF with a total electric savings of 12,264,567 kWh, a total therm savings: 884,784 therms, and an annual utility cost savings: $2,625,108 (using FY2019 utility rates).

There are also 11 active projects SEP Projects with an estimated electric savings of 3,158,254 kWh, an estimated therm Savings of: 101,891 therms, and an estimated utility cost savings: $606,077 (using FY2019 utility rates).
Additionally, there are 48 projects actively under consideration in the planning and evaluation phase. The represent an estimated electric savings of 15,000,000 kWh, and an estimated therm Savings of: 976,000 therms. The current budget plan is for $22,000,000.

The SEP projects undertaken by UCSF over the past 20 years have contributed to a 35 percent reduction of GHGs compared to a business-as-usual scenario.

Utility funded partnership projects cover a wide variety of improvements, from changing lighting fixtures to building new power plants. Lighting and HVAC (Heating, Ventilation, and Air Conditioning) projects are particularly effective tools for achieving reductions. UCSF will continue to convert the remaining existing T12 and 32 watt T8 fluorescent light fixtures to 28 watt T8 lamps or LED's. Other projects include broader use of occupancy sensor controls, daylight harvesting (using daylight to offset the amount of electric lighting needed to properly light a space), and more energy-efficient stairwell fixtures. The replacement of lighting in parking structures is also being evaluated. HVAC improvements in the SEP include meeting basic efficiency standards for air handlers of 10hp and above: by controlling variable air volume with economizers, operating only the hours necessary, providing demand control ventilation where warranted, and controlling static pressure reset to optimize HVAC systems to actual operating conditions.

The SEP includes projects for upgrading laboratory fume hoods with more energy-efficient high-performance models. As explained in the 2009 Climate Action Plan, fume hoods use large amounts of energy, and if all of the fume hoods campus-wide were retrofitted and operated to maximize energy efficiency, as much as 4,600 mt CO\textsubscript{2}e per year could be avoided.

UCSF is a participant in the system-wide UC/CSU Investor Owned Utility Energy Partnership (the Partnership). The Partnership is designed to help campuses implement energy efficiency programs that decrease their energy use. The Partnership encourages energy-efficient operations and maintenance practices by offering incentives for equipment improvements, and offering training and providing tools to reduce energy consumption and peak demand. Over the past four years, energy efficiency strategies have reduced energy use across UCSF buildings by approximately 17 percent on a per-square-foot basis.

The buildings on the Parnassus campus site comprise the oldest space in the UCSF inventory. The average age of a building's square foot at Mission Bay is 14 years old, the average age of a building’s square foot at Parnassus is 52 years old. As evidenced in Table 4: UCSF Building Energy Use Intensities, the newer buildings at Mission Bay are significantly less energy intense. Future implementation of SEP, and renewal of the older Parnassus space, is a critical component in the plan to allow UCSF to achieve climate neutrality.

The largest single SEP-type project undertaken by UCSF since 1990 has been the construction of the Parnassus Heights Central Utility Plant (PCUP). The PCUP is a 12-MW cogeneration facility constructed between 1995 and 1997; it replaced a far less efficient 50-year-old facility that had significantly higher emissions per MWh. (fuel oil).

The PCUP cogeneration system is a highly efficient generator of energy that uses a single source of clean fuel (natural gas) to produce two energy products, electricity and heat. The heat is used locally for buildings, instead of being discarded as in a conventional electrical generation facility; the captured heat can be used for either heating or cooling buildings. Further efficiencies are gained by the proximity of the cogeneration plant to the end user, both because transmission losses due to resistance are reduced and because supply can be more quickly matched to demand. Conventional energy production transmits electricity from remote generation sites with low efficiency rates (35 percent); when this is combined with the high efficiency rates (60 percent) of natural gas burned on-site in boilers, UCSF reaches an overall institutional efficiency rate of about 54 percent. In contrast, on-site cogeneration directly employs the thermal energy by-products associated with electricity production, and accompanied with much lower transmission losses, provides an overall institutional efficiency rate of about 76 percent. The UCSF cogeneration plant has two turbines. The turbine have undergone upgrades renovation to be more efficient and reduce emissions. UCSF is not proposing increasing the capacity of the turbine equipment in the facility when future upgrades occur to the emissions equipment.

As noted in the preceding section, the GHG-reducing impact of EN1 is already incorporated into the FOVEA future GHG emissions forecasts.

**STRATEGY EN2: GREEN BUILDING STANDARDS**

**Key Implementing Actions:**

- Exceed Title 24 energy requirements by at least 20 percent (for all new buildings and major renovations except acute care facilities); strive to achieve 30 percent improvement over Title 24. This requirement is maintained over time as Title 24 is revised.

- Pursuant to the UC Sustainable Practices Policy, design and build all new buildings (except for laboratory and acute care facilities) to a minimum standard that is equivalent to a LEED\textsuperscript{®} Silver rating. Strive to achieve a standard equivalent to a LEED\textsuperscript{®}-NC Gold rating or higher for all such projects

---

44 Due to an increased awareness of risks associated with exposure to chemicals, and an expanding research program, the number of fume hoods has increased at UCSF from ~400 in 1990, to more than 750 in 2009. The operational energy cost of UCSF’s 750 fume hoods is about $4.9 million dollars per year.
whenever possible, within the constraints of program needs and standard budget parameters.

- Design the UCSF Phase 2 Medical Center at Mission Bay to LEED® Gold standards. (Facilities that are already constructed or are planned or under construction were designed to meet a LEED® Gold standard; future building projects are also expected to meet or exceed this standard.)
- Design the UCSF New Hospital at Parnassus to a minimum of LEED® Gold standards.
- Per the UC Sustainable Practices Policy, design all new UCSF laboratory buildings so as to meet Labs21 Environmental Performance Criteria (EPC).

Annual GHG reduction by 2020: 5,235 mt CO2e
Annual GHG reduction by 2035: 10,792 mt CO2e
Implementation Timeframe/Status: In progress; to continue through 2035/2050

Discussion: To improve energy efficiency of new buildings, UCSF relies on several available tools, programs and building codes. Title 24 of the California Energy Code enhances the energy efficiency requirements of all newly constructed buildings and major renovations. The 2019 Title 24 update, effective January 1, 2020, improves energy performance of new buildings significantly, depending on the type of building and its intended use. Major renovations also benefit with respect to energy savings, though to a lesser degree.

The UC Sustainable Practices Policy states that the University of California shall incorporate the principles of energy efficiency and sustainability in all capital and renovation projects within budgetary constraints and programmatic requirements. Given the importance of energy efficiency to green building design, the University has set a goal for all new building projects, other than acute care facilities, to outperform the requirements of Title 24 energy-efficiency standards by at least 20 percent. 45

UCSF is committed already to designing and building all new buildings (except for laboratory and acute care facilities, addressed separately below) so as to meet a minimum standard of sustainability that is equivalent to a LEED-NC Silver rating. In addition, and at the same time, UCSF will continue to strive to achieve a standard equivalent to a LEED-NC Gold rating or higher for such new buildings, whenever possible within the constraints of program needs and standard budget parameters. Over time, this will help achieve the energy savings and GHG emissions reductions associated with EN2, as well as providing the myriad long-term economic, social, and health benefits that accrue to the communities occupying green building spaces, compared with those in conventional buildings.

Central to its academic mission, research laboratories make up a large percentage of the new space developed by UCSF. These types of facilities, filled with specialized equipment, consume significantly more energy per square foot than the average building. Given the importance of specifically addressing sustainability in laboratory facilities, UCSF has also committed to designing all new laboratory buildings to a minimum standard equivalent to a LEED-NC Silver rating and the Laboratories for the 21st Century (Labs21) Environmental Performance Criteria (EPC), as appropriate. The UCSF design process includes attention to energy efficiency for UCSF buildings that meet LEED® standards for New Construction (listed by standard achieved and year completed):

- Aldea Center on Mount Sutro, 2013 – Gold
- Cardiovascular Research Institute (CVRI), 2012 – Gold
- Dolby Regeneration Medicine, 2011 – Gold
- The Osher Center for Integrative Medicine, 2010 – Silver
- UCSF Medical Center at Mission Bay, 2014 – Gold
- UCSF Mission Hall, 2014 - Silver

**UCSF buildings that meet LEED® standards for Existing Buildings Operations and Maintenance:**

- Arthur and Toni Rembe Rock Hall (Rock Hall), 2009 – Silver

**UCSF buildings that meet LEED® standards for Commercial Interiors:**

- 1500 Owens Street (leased), third floor clinics, 2012 – Gold
- HSE5 Center for Bioengineering and Tissue Regeneration, 2012 – Gold
- Pharmaceutical Packaging Facility, 2011 – Gold
- HSE 15 S/D Craniofacial & Mesenchymal Biology Program Lab Renovation, 2010 – Gold
- MSB S1372 Anatomy Department Renovation, 2013 – Silver
- Campus Data Center, 2009 – Silver
- 654 Minnesota Street, 2009 – Certified
- HSW Dentistry Lab, 2005 - Certified

UCSF must ensure that all regulatory obligations are met when the University considers design or operational strategies for reducing GHG emission. Agencies such as the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), the Occupational Safety and Health Administration (OSHA), and the Institutional Animal Care and Use Committee (IACUC) often have safety protocols in place that constrain UCSF’s ability to satisfy GHG reduction goals and simultaneously maintain an acceptable safety margin.

---

45 Although the Title 24 building code does not apply to hospitals, new UCSF medical facilities must be designed to a LEED® Silver standard or higher, which achieves energy savings similar to Title 24. The Medical Center at Mission Bay is being designed to a LEED® Gold standard.
ON-SITE SOLAR PV

Key Implementing Actions:

- Build Solar Photovoltaic (PV) energy installation (750 kW) at Mission Bay Hospital; to be operational by 2025.
- Implement Priority 1 Solar PV projects (as determined by UCSF engineer) over the next 20 years.

Annual GHG reduction by 2020: 169 mt CO2e

Annual GHG reduction by 2035: 864 mt CO2e

Implementation Timeframe/Status: In progress; to continue through 2035/2050

Discussion: Planned and financed Solar PV installations expected to be operational by 2020 represent approximately 750 kW capacity, capable of displacing 128 mt CO2e per year using conservative assumptions about PV panel efficiency and electrical productivity in San Francisco. Longer-term, additional solar PV projects deemed Priority 1 because of their financial payback potential are expected to add 1,465 kW for a total capacity of 2,215 kW, displacing approximately 377 mt CO2e per year by 2035.

UCSF implemented 5 solar photovoltaic projects with over 2 MW capacity in 2018. UCSF now has installed solar panels at 8 owned buildings; UCSF Fresno, Parnassus Dental Clinics, Mission Hall (25A), Third Street Garage, Owens Street Garage, Genentech Hall, Aldea Community Center and Oyster Point. The University is evaluating installing panels at Rutter Center Garage, Mission Bay Hospital, and on surface parking lots. Table 8 details the cost per kWh. The current goal for projects is $0.14 to $0.16/kwh.

TABLE 8: UCSF cost per kWh of installed PPA Solar

<table>
<thead>
<tr>
<th>Contract Term</th>
<th>PPA Rate ($/kWh)</th>
<th>Block 18 &amp; 15 - 1250 KW (dc) system</th>
<th>Block 18 only - 443 KW (dc) system</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 year PPA</td>
<td>$0.160</td>
<td>$693,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>25 year PPA</td>
<td>$0.146</td>
<td>$750,000</td>
<td>$770,000</td>
</tr>
</tbody>
</table>

STRATEGY EN3.2: RENEWABLE ENERGY: PURCHASING GREEN ELECTRICITY

Key Implementing Actions:

- Implement UC’s Wholesale Electricity Program to increase the supply of low-carbon electricity sources through direct access suppliers;
- Continue, on an on-going basis, to pursue the possibility of increasing purchases of low carbon electrical power from the grid.

Annual GHG reduction by 2035: TBD – potentially 5,784, or, all electricity purchased by 2045

Implementation Timeframe/Status: In progress; to continue through 2035/2050

Discussion: The UC President’s goal for UC to become carbon-neutral by 2025 means that UCSF needs to purchase 100% green power by 2024 or purchase additional offsets.

In support of this goal, the UCOP Wholesale Power Program has increased the supply of low-carbon electricity sources through UC’s two Fresno-area solar projects as well as shorter term purchases from renewable and carbon-free resources. The ESU supply is carbon neutral as of 2019. Under the Wholesale Power Program, UC is its own registered Energy Service Provider. The Wholesale Power Program serves to stabilize UC’s energy costs and provide an opportunity to procure larger proportions of carbon-free energy than would be otherwise available through traditional channels.

The program supplies power to approximately 500 electricity meters across the UC system, with a total 2019 gross load of roughly 261,000 MWh. The peak load ranges from 40 MW in February to 70 MW in September. Annual load has ranged from 260,000 to 305,000 MWh over the past five years of operation. UCSF purchases approximately 20% (44,771 MWh) of the WPP resources.

As of 2018, the largest share of UCSF’s outside electrical power purchases was from PG&E, one of the cleanest investor-owned large utilities in the country. PG&E is currently forecasting even lower average carbon content for its grid-supplied electricity as it moves towards the SB100 2045 goal of sourcing 100 percent of its electricity from renewable energy and other zero-carbon sources.

The City of San Francisco offers a Community Choice Aggregation program for retail accounts – Clean Power SF. In 2018 its 40% renewable plan was slightly cleaner than PG&E. In January 2018, UCSF switched 77 small bundled non-direct
access accounts to Clean Power SF. It is analyzing the utility
bills of new Clean Power SF accounts to identify appropriate
candidates for the next phase of accounts to switch over. The
University has committed to purchase SFPUC power for the
new ZSFG Research and Academic Building currently under
construction at that campus site.

UCSF is actively partnering with SFPUC to install infrastructure
at Mission Bay under the Bay Corridor Transmission &
Distribution (BCTD) program, allowing UCSF the opportunity
to purchase 100% renewable Hetch Hetchy hydroelectric power
for future projects at that campus site. The BCTD is currently
under construction.46

This analysis assumes a 100% renewable rate by 2018 and
zero carbon by 2020 for the power UCSF purchase from
UCOP direct access. UCSF, being located in the City of San
Francisco, is a potential customer of carbon free hydropower
from the SFPUC. This analysis assumes UCSF can transfer
the purchase of 30% of its purchases from PG&E to the
SFPUC, however, no firm commitment has been made to
date. The University has worked with the SFPUC to bring the
infrastructure to Mission Bay Block 34, and is in preliminary
discussions with serving the original north campus site with a
new 15 kv line. Those decisions are expected in 2020.

This GHG Reduction Strategy uses PG&E’s 2020 emission
factor to forecast 2035 electricity-related GHG emissions
(PG&E does not currently provide emission factor forecasts
beyond 2020). After 2020, however, it is reasonable to assume
that UCSF will continue to lower the average carbon content

<table>
<thead>
<tr>
<th>SAID</th>
<th>Campus</th>
<th>Service Address</th>
<th>SAID</th>
<th>Campus</th>
<th>Service Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>2593518005</td>
<td>Parnassus</td>
<td>105 BEHR AVE</td>
<td>5996340298</td>
<td>Other</td>
<td>1569 SLOAT BLVD</td>
</tr>
<tr>
<td>9041330370</td>
<td>Parnassus</td>
<td>1320 3RD AVE</td>
<td>8835082005</td>
<td>Other</td>
<td>1855 FOLSOM ST</td>
</tr>
<tr>
<td>9092958467</td>
<td>Parnassus</td>
<td>1322 3RD AVE</td>
<td>9095507060</td>
<td>Other</td>
<td>1855 FOLSOM ST</td>
</tr>
<tr>
<td>3843410005</td>
<td>Parnassus</td>
<td>1326 3RD AVE</td>
<td>9095507030</td>
<td>Other</td>
<td>260 NEWHALL ST</td>
</tr>
<tr>
<td>7791330005</td>
<td>Parnassus</td>
<td>1332 3RD AVE</td>
<td>8772609005</td>
<td>Other</td>
<td>3333 CALIFORNIA ST</td>
</tr>
<tr>
<td>9095283212</td>
<td>Parnassus</td>
<td>1338 3RD AVE</td>
<td>1608421754</td>
<td>Other</td>
<td>606 FORBES BLVD</td>
</tr>
<tr>
<td>9093483363</td>
<td>Parnassus</td>
<td>1344 3RD AVE</td>
<td>1565022959</td>
<td>Other</td>
<td>612 FORBES BLVD</td>
</tr>
<tr>
<td>9096508637</td>
<td>Parnassus</td>
<td>1350 3RD AVE</td>
<td>9293662512</td>
<td>Other</td>
<td>620 FORBES BLVD</td>
</tr>
<tr>
<td>7499664005</td>
<td>Parnassus</td>
<td>1356 3RD AVE</td>
<td>1523728437</td>
<td>Other</td>
<td>626 FORBES BLVD</td>
</tr>
<tr>
<td>9093929796</td>
<td>Parnassus</td>
<td>1362 3RD AVE</td>
<td>1176999780</td>
<td>Other</td>
<td>654 MINNESOTA ST</td>
</tr>
<tr>
<td>8957947005</td>
<td>Parnassus</td>
<td>1442 5TH AVE</td>
<td>5855930005</td>
<td>Other</td>
<td>75 CRISP RD</td>
</tr>
<tr>
<td>9582770704</td>
<td>Parnassus</td>
<td>1450 3RD ST</td>
<td>5355941005</td>
<td>Mount Zion</td>
<td>1600 DIVISADERO ST</td>
</tr>
<tr>
<td>9098614366</td>
<td>Parnassus</td>
<td>1464 5TH AVE</td>
<td>7272605005</td>
<td>Mount Zion</td>
<td>1600 DIVISADERO ST</td>
</tr>
<tr>
<td>9874617005</td>
<td>Parnassus</td>
<td>1472 5TH AVE</td>
<td>7230938005</td>
<td>Mount Zion</td>
<td>1600 DIVISADERO ST</td>
</tr>
<tr>
<td>2169604659</td>
<td>Parnassus</td>
<td>1480 4TH ST</td>
<td>6855943005</td>
<td>Mount Zion</td>
<td>1600 DIVISADERO ST</td>
</tr>
<tr>
<td>1228878005</td>
<td>Parnassus</td>
<td>1480 5TH AVE</td>
<td>6772610005</td>
<td>Mount Zion</td>
<td>1657-75 SCOTT ST</td>
</tr>
<tr>
<td>9916283005</td>
<td>Parnassus</td>
<td>1482 5TH AVE</td>
<td>6730943005</td>
<td>Mount Zion</td>
<td>1701 DIVISADERO ST</td>
</tr>
<tr>
<td>5501759005</td>
<td>Parnassus</td>
<td>1500 5TH AVE</td>
<td>9095507075</td>
<td>Mount Zion</td>
<td>1725 SCOTT ST</td>
</tr>
<tr>
<td>679857784</td>
<td>Parnassus</td>
<td>1550 4TH ST</td>
<td>8710082005</td>
<td>Mount Zion</td>
<td>2200 POST ST</td>
</tr>
<tr>
<td>3103739005</td>
<td>Parnassus</td>
<td>165 JOHNSTONE DR</td>
<td>7424351005</td>
<td>Mount Zion</td>
<td>2255 POST ST</td>
</tr>
<tr>
<td>604633005</td>
<td>Parnassus</td>
<td>2ND &amp; PARNASSUS NW</td>
<td>8397609005</td>
<td>Mount Zion</td>
<td>2330 POST ST</td>
</tr>
<tr>
<td>459139005</td>
<td>Parnassus</td>
<td>4TH &amp; KIRKHAM NW</td>
<td>8647609005</td>
<td>Mount Zion</td>
<td>2340 SUTTER ST</td>
</tr>
<tr>
<td>1832989005</td>
<td>Parnassus</td>
<td>66 JOHNSTONE DR</td>
<td>8668415005</td>
<td>Mount Zion</td>
<td>2356 SUTTER ST</td>
</tr>
<tr>
<td>6760214000</td>
<td>Parnassus</td>
<td>745 PARNASSUS AVE</td>
<td>1990884306</td>
<td>Mount Zion</td>
<td>2375 POST ST</td>
</tr>
<tr>
<td>1791322005</td>
<td>Parnassus</td>
<td>JOHNSTONE DR OPP BEHR</td>
<td>6814276005</td>
<td>Mount Zion</td>
<td>2380 SUTTER ST</td>
</tr>
<tr>
<td>3878475005</td>
<td>Parnassus</td>
<td>W/S 4TH AVE 125’ N</td>
<td>9903217147</td>
<td>Mount Zion</td>
<td>515 SPRUCE ST</td>
</tr>
<tr>
<td>2374656000</td>
<td>Parnassus</td>
<td>175 JOHNSTONE DR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9095507140</td>
<td>Parnassus</td>
<td>25 MEDICAL CENTER WAY</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

of its electricity supply due to cleaner electricity from PG&E, or by increasing its small allocation of clean Western Area Power Authority (WAPA) hydropower, or purchasing renewable power through its direct access supplier. The annual GHG reduction estimate for 2035 therefore assumes a significant percent reduction in the carbon content of grid-supplied electricity from 2020 to 2035/2050.

In 2019 CA Senate Bill 237 increased the direct access cap by 4000GWH.47 The university currently has 55 buildings on direct access using clean power. The majority (52%) at Parnassus Heights. The increase provided for by SB237 provided allows the University to enter a lottery to add additional buildings to direct access.

STRATEGY EN3.3: RENEWABLE ENERGY: PURCHASING BIOGAS AND RENEWABLE ENERGY CREDITS, OFFSETS

Key Implementing Actions:

- Purchase biogas for use at PCUP to reduce anthropogenic GHG emissions from the facility, if appropriate sources are available and approved by CARB.48

Annual GHG reduction by 2035: 652 mt CO2e, or more if financially feasible

Implementation Timeframe/Status: The University is currently examining its options in the marketplace. Proposals have been solicited by UCOP, received and evaluated. UCSF continues to evaluate the cost/benefits of bio-gas against other emission reducing options in the marketplace.49

Discussion: CO2 emissions from combustion of biogas are considered biogenic and represent a net-zero addition of GHG emissions to the atmosphere. The FOVEA analysis assumes UCSF purchasing 100,000 therms per month in 2024-2025 for use in the PCUP, which would avoid the production of approximately 652 mt CO2e per year from combustion of natural gas.

TCR general reporting protocol allows for the use of Renewable Energy Credits (RECs). They represent the energy generated by renewable energy sources, such as solar, hydro, or wind power facilities. RECs represent the clean energy attributes of renewable electricity. RECs reduce Scope 2 emissions for purchased electricity. As of June 2017, RECs representing 8,138 MWh of renewable energy were retired on the University’s behalf.

In 2018 UCSF also used 4,396 mt CO2e of offsets in its emissions reporting with TCR. The offsets retired address Scope 1 emissions associated with natural gas combustion at the PCUP. Offsets can reduce Scope 1, 2, or 3 emissions, though the campus does not plan to use them as a substitute for RECs when RECs are available.

UCSF’s practice is to accomplish its sustainability goals through reductions in direct emissions, the purchase of renewable electricity, and other local measures as identified above. Purchase of offsets are the final action to reach reduction targets. As part of UC’s Carbon Neutrality Initiative, internal guidelines have been developed to ensure that any use of offsets for this purpose will result in additional, verified GHG emissions reductions from actions that align, as much as possible, with UC’s research, teaching, and public service mission.

5.3 TRANSPORTATION MEASURES

STRATEGY TR1: REDUCE VEHICLE TRIPS

Key Implementing Actions:50

- As development occurs under the LRDP, increase on-site amenities (such as child care, foodservices, banking, retail shops, laundry, fitness facilities), and limit parking for on-campus housing and staff.
- Add on-site housing for faculty and students.
- Enhance and expand existing car-share, vanpool, and carpool programs and incentives.
- Encourage departments to allow flexible work schedules and telecommuting.
- Implement LRDP plans to realign supply chain, warehousing, and deliveries so as to streamline all parts of the process and minimize truck trips.

Annual GHG reduction by 2020: incorporated into forecast: 1,137 mt CO2e

Annual GHG reduction by 2035: incorporated into forecast: 2,561 mt CO2e

Implementation Timeframe/Status: In progress; to continue through 2035/2050

Discussion: Reductions in UCSF GHG emissions attributable

---

47 https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB237
50 Measure assumes implementation of Transportation Demand Management programs, as described in the Transportation Demand Management Program Improvement Measures Evaluation report by Fehr & Peers, August 30, 2012.
TABLE 10: Renewable energy credits (REC’s) retired

Dear James Hand,

This letter serves to document that Renewable Energy Certificates (RECs) have been retired on behalf of The University of California, San Francisco. The attached Western Electricity Coordinating Council (WECC) report was generated from Western Renewable Energy Generation Information System (WREGIS), Account Holder ID 1020 (The Regents of the University of California). The following table shows the quantity of RECs by Generator Name, WREGIS ID, Nameplate Capacity, Fuel Type, and Period of Generation.

<table>
<thead>
<tr>
<th>Generator Name</th>
<th>WREGIS ID</th>
<th>Nameplate Capacity (MW)</th>
<th>Fuel Type</th>
<th>Quantity (MWh)</th>
<th>Period of Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewiston</td>
<td>W1108</td>
<td>0.438</td>
<td>Hydroelectric Water</td>
<td>8</td>
<td>4/1/16-12/31/16</td>
</tr>
<tr>
<td>Folsom Unit 1</td>
<td>W1156</td>
<td>66.2</td>
<td>Hydroelectric Water</td>
<td>381</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Folsom Unit 2</td>
<td>W1157</td>
<td>66.2</td>
<td>Hydroelectric Water</td>
<td>412</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Folsom Unit 3</td>
<td>W1158</td>
<td>66.2</td>
<td>Hydroelectric Water</td>
<td>542</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>New Melones Unit 1</td>
<td>W1159</td>
<td>150</td>
<td>Hydroelectric Water</td>
<td>250</td>
<td>2/1/16-11/30/16</td>
</tr>
<tr>
<td>New Melones Unit 1</td>
<td>W1160</td>
<td>150</td>
<td>Hydroelectric Water</td>
<td>225</td>
<td>3/1/16-12/31/16</td>
</tr>
<tr>
<td>Nimbus Plant (2)</td>
<td>W1161</td>
<td>13.4</td>
<td>Hydroelectric Water</td>
<td>149</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>J.F. Carr Unit 1</td>
<td>W1163</td>
<td>77.2</td>
<td>Hydroelectric Water</td>
<td>159</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>J.F. Carr Unit 2</td>
<td>W1164</td>
<td>77.2</td>
<td>Hydroelectric Water</td>
<td>139</td>
<td>1/1/16-11/30/16</td>
</tr>
<tr>
<td>Keswick Powerplant (3)</td>
<td>W1165</td>
<td>117</td>
<td>Hydroelectric Water</td>
<td>749</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>O’Neill (3)</td>
<td>W1167</td>
<td>12.6</td>
<td>Hydroelectric Water</td>
<td>20</td>
<td>5/1/16-8/31/16</td>
</tr>
<tr>
<td>Shasta Unit 1</td>
<td>W1168</td>
<td>142</td>
<td>Hydroelectric Water</td>
<td>844</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Shasta Unit 2</td>
<td>W1169</td>
<td>142</td>
<td>Hydroelectric Water</td>
<td>618</td>
<td>1/1/16-9/30/16</td>
</tr>
<tr>
<td>Shasta Unit 3</td>
<td>W1170</td>
<td>142</td>
<td>Hydroelectric Water</td>
<td>793</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Shasta Unit 4</td>
<td>W1171</td>
<td>142</td>
<td>Hydroelectric Water</td>
<td>786</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Shasta Unit 5</td>
<td>W1172</td>
<td>142</td>
<td>Hydroelectric Water</td>
<td>888</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Spring Creek Unit 1</td>
<td>W1173</td>
<td>90</td>
<td>Hydroelectric Water</td>
<td>78</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Spring Creek Unit 2</td>
<td>W1174</td>
<td>90</td>
<td>Hydroelectric Water</td>
<td>358</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Trinity Unit 1</td>
<td>W1175</td>
<td>70</td>
<td>Hydroelectric Water</td>
<td>210</td>
<td>4/1/16-8/31/16</td>
</tr>
<tr>
<td>Trinity Unit 2</td>
<td>W1176</td>
<td>70</td>
<td>Hydroelectric Water</td>
<td>414</td>
<td>1/1/16-12/31/16</td>
</tr>
<tr>
<td>Stampede (2)</td>
<td>W1177</td>
<td>3.60</td>
<td>Hydroelectric Water</td>
<td>9</td>
<td>1/1/16-9/30/16</td>
</tr>
<tr>
<td>Gianelli (2)</td>
<td>W1288</td>
<td>106</td>
<td>Hydroelectric Water</td>
<td>106</td>
<td>4/1/16-7/31/16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>8,138</strong></td>
<td></td>
</tr>
</tbody>
</table>

This information is provided in accordance with guidance regarding contractual instrument documentation provided in Chapter 14 of The Climate Registry General Reporting Protocol for the Voluntary Reporting Program Version 2.1. To the best of my knowledge, the renewable attributes have not been used to meet any federal, state or local renewable energy requirement, renewable portfolio standard, or other renewable energy mandate.

Cynthia Clark
Renewable Energy Manager
June 21, 2017
Oakland, CA

Attached: WECC Certificates in Retirement Subaccount
to transportation come from both local institutional actions and from technological and regulatory changes driven by the state and federal government. State and federal government actions to-date have focused on cleaner vehicle technologies, transportation system efficiency improvements, and land use policy. Actions taken by UCSF to address transportation-related GHG emissions have been aimed at reducing vehicle miles traveled (VMT), and include: implementation of various transportation demand management measures, improvements to the campus transportation system, and improving the jobs-to-housing balance. Emissions from transportation are greatly dependent on the length of trips, and the mode of travel used. Generally, bicycle and walking trips produce almost zero carbon emissions, and a trip on public transit produces about half the quantity of GHG emissions as would a comparable trip by private automobile.

As stated in the 2014 LRDP, key features of UCSF’s existing TDM program include the following:

- 60 shuttles serving 17 locations, with over 2.5 million passengers per year
- 15 full size electric busses, 60 alternate fuel/ hybrid vehicles added to the fleet since 2010.
- 30 vanpools that travel as far as Sacramento and operated using software which improves fuel consumption and safety
- 62 reserved carpool stalls at various sites
- 18 City CarShare vehicles with dedicated parking spaces, along with 1,500 UCSF members who can use these vehicles by scheduling their use on-line
- Over 1,900 UCSF users of the ZimRide online carpool matching program
- 972 bicycle parking spaces with another 100 planned at Mission Bay, as well as bike racks on shuttles, a cyclist shower program that allows bicyclists to use UCSF showers at a discount, and other bicycle-related benefits
- Bay Area Bike Share station at Mission Bay and other campus sites, where members have access to bicycles (and a regional network of stations)
- More than 400 off-street motorcycle parking stalls in garages and surface parking lots
- An “emergency ride home” program to encourage use of alternative modes of transportation
- Clipper Card (public transit pass) sales at easily accessible locations, including through UCSF’s website
- Close to 1,800 UCSF employees participate in a pretax transit program, which saved UCSF employees over $700,000 on public transit commute costs

UCSF’s shuttle system services all primary UCSF campuses, as well as select secondary campus locations, and is free to UCSF faculty, staff, students, patients, and visitors. On average, a total of 7,435 people ride the system daily, with demand for additional service growing by around five percent per year. The 2014 UCSF Shuttle Operations Study estimates a demand for 401 additional trips by 2020, and an additional 3,611 trips by 2035. The study also contains recommendations for expanding service lines to meet increasing demand as development occurs under the 2014 LRDP. New projections for use have been developed for the CPHP EIR.

UCSF faces considerable constraints outside of its control in developing affordable housing. Housing is an auxiliary enterprise of the University, serving as a support service to its primary educational mission; and therefore, by state law, it must be financially self-supporting. Land in San Francisco is extremely expensive to acquire, and UCSF has limitations on new development on vacant land it already owns (such as Aldea San Miguel at Parnassus). UCSF will continue to implement the goals of the 2005 Housing Master Plan to provide more reasonably priced housing for up to 1,400 individuals in targeted groups of the campus community.

Since the completion of the 2014 LRDP UCSF has constructed 610 student housing units south of Mission Bay which opened in late 2019/ early 2020. It also has an existing 70 unit faculty housing building under renovation near Mount Zion.

The CPHP proposes to add 762 new housing units at Parnassus by 2050, with an initial phase project under study to add a portion by 2030.

**STRATEGY TR2: EXPAND FLEET OF CLEAN VEHICLES**

**Key Implementing Actions:**

- Continue to incentivize UCSF departments to purchase fuel efficient vehicles (hybrid, electric, CNG) by waiving the annual permit fee of $1,932.00 per vehicle. This has been an effective strategy in encouraging departments to purchase fuel-efficient and alternative-fuel vehicles.
- Continue and expand use of low-emitting fuels and vehicles for shuttle system and across UCSF fleet of vehicles.

**Annual GHG reduction by 2020:** incorporated into forecast: 1 mt CO₂e

**Annual GHG reduction by 2035:** incorporated into forecast: 1,360 mt CO₂e

**Implementation Timeframe/Status:** In progress; to continue through 2035/2050

**Discussion:** In addition to vehicle miles traveled, transportation emissions are dependent on the type of fuel used to power vehicles. UCSF is gradually transitioning its vehicle fleet to alternative fuel vehicles and more fuel efficient vehicles. UCSF currently has 43 low-emitting alternative-fuel and hybrid...
vehicles, including cars, shuttles, golf carts, and trucks. The UCSF shuttle fleet is currently run mainly on diesel and gasoline; however, the University has purchased 15 full size electric shuttle buses to replace fossil fuel vehicles. An electric vehicle charging station for them was constructed at the Mission Bay campus. UCSF is considering additional electric shuttles for future vehicle replacements.

UCSF has also instituted programs and developed infrastructure to encourage commuters to use a mix of more fuel-efficient and alternative-fuel vehicles. The University offers an employee benefit program to encourage the purchase of EVs (electric vehicles).

The 2015 UCSF Commute Survey\(^5\) indicated that the commuter vehicle fleet is composed of 12.6 percent fuel efficient and alternative fuel vehicles, including hybrid, electric, CNG and biodiesel fueled vehicles. The University has installed 18 electric-vehicle charging stations at Parnassus Heights, Mount Zion, and Mission Bay, and plans to install another 20 at Mission Bay in the Owens Street Garage plus 10 at other locations in the near future. UCSF also has 35 priority parking spaces reserved for fuel-efficient and low-carbon emitting vehicles.

Due to the concerted state effort to improve vehicle fuel efficiency (Pavley bill) and the lack of a current formal “green” or “clean fuel” vehicle replacement program at UCSF, no additional GHG reductions are associated with this measure.

### 5.4 TIER 2 MEASURES

As discussed previously and summarized in Figure 1, additional reductions beyond Tier 1 measures (summarized in Table 7) are needed over the planning horizon of the LRDP to meet the 2020, 2025, 2035, and 2050 GHG emission targets. Table 11 lists the Tier 2 measures that UCSF has identified to accomplish the additional reductions needed. The maximum potential reductions for each Tier 2 measure reflect the inventory forecasts for 2020 and 2035, and do not include the reductions expected from Tier 1 measures.

Tier 2 measures are at various stages in the planning process. Some combination of them, and offsets, will be sufficient to meet the 2020 goals identified in Table 5. Though UCSF is committed to meeting the other targets described in this document, as well as the goals of the UC President’s 2025 Carbon Neutrality Initiative, the exact mix of these future actions to be taken by UCSF is dependent on both the results of CARB Scoping Plan Updates, and the recommendations identified in the (future) implementation plan by UCOP of the Presidents 2025 Carbon Neutrality Initiative and the Sustainable Practices Policy.

---

\(^5\) UCSF Transportation Services Annual Commute Survey, UCSF Commute Survey Results 2009-2012.

### TABLE 11: UCSF Tier 2 GHG Reduction Measures

<table>
<thead>
<tr>
<th>Tier 2 Measure</th>
<th>Scope</th>
<th>GHG Inventory Category</th>
<th>Maximum potential reductions by 2020</th>
<th>Maximum potential reductions by 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand or intensify existing and planned programs for reducing direct emissions associated with stationary sources owned and controlled by UCSF</td>
<td>1</td>
<td>Buildings &amp; Facilities - natural gas</td>
<td>85,589</td>
<td>87,668</td>
</tr>
<tr>
<td>Purchase more low-carbon biogas as a replacement for natural gas used by the PCUP</td>
<td>1</td>
<td>Buildings &amp; Facilities - natural gas</td>
<td>85,589</td>
<td>87,668</td>
</tr>
<tr>
<td>Expand or intensify existing and planned programs for reducing direct emissions associated with mobile sources owned and controlled by UCSF</td>
<td>1</td>
<td>UCSF Fleet</td>
<td>2,432</td>
<td>2,718</td>
</tr>
<tr>
<td>Intensify energy conservation efforts to exceed the reductions of electricity-related emissions currently expected from implementation of the SEP</td>
<td>2</td>
<td>Buildings &amp; Facilities - electricity</td>
<td>20,302</td>
<td>29,205</td>
</tr>
<tr>
<td>Purchase a greater percentage of grid-supplied electricity from renewable, low-carbon sources</td>
<td>2</td>
<td>Buildings &amp; Facilities - electricity</td>
<td>20,302</td>
<td>29,205</td>
</tr>
<tr>
<td>Invest in renewable energy projects at UCSF or other UC campuses (e.g., where available land exists).</td>
<td>2</td>
<td>Buildings &amp; Facilities - electricity</td>
<td>20,302</td>
<td>29,205</td>
</tr>
<tr>
<td>Invest in offsite projects that reduce GHG emissions, preferably within the UC system where the full range of benefits will be retained, to offset emissions in the UCSF emissions inventory.</td>
<td>all</td>
<td>LRDP Construction Emissions</td>
<td>unlimited</td>
<td>unlimited</td>
</tr>
<tr>
<td>Purchase accredited carbon offsets that can be used to offset emissions in the UCSF emissions inventory.</td>
<td>all</td>
<td>Buildings &amp; Facilities - electricity</td>
<td>unlimited</td>
<td>unlimited</td>
</tr>
</tbody>
</table>
Because the majority of UCSF unmitigated GHG emissions stem from the combustion of natural gas at the PCUP, UCSF annually monitors for the potential to implement the best available control technology for reducing emissions of CO2 at this source. These include retrofitting carbon capture at the facility or using alternative fuel such as low- and zero-carbon hydrogen. Carbon capture uses a combination of technologies to capture the CO2 released by fossil fuel combustion. The latest 2019 UCSF study identified the current cost of carbon capture is 3x+ higher than reducing emissions by purchasing offsets. Carbon capture is an active field of research by UC scientists and many other institutions, future developments in this technology are expected to lower costs and revise the cost benefit analysis. The timeline for this reduction in cost is not clear. The incremental cost of carbon cost varies depending on parameters such as the choice of capture technology, the percentage of CO2 captured, the type of fossil fuel used, and the distance to and type of geologic storage location. Other than the initial capital costs to install the equipment, UCSF is not located adjacent to a geologic storage location.

Approximately 95% of current U.S. hydrogen production involves steam methane reforming (SMR) of natural gas, which releases carbon dioxide as a byproduct. Decarbonizing the production of hydrogen, with electrolysis using zero-carbon electricity from renewables, can generate zero-emission “green hydrogen,” that can be used directly in the existing PCUP to generate electricity with only minor modifications to the existing equipment. Similarly, SMR of natural gas with carbon capture can generate low-emission “blue hydrogen”, an environmentally superior product, with significantly lower emissions, when compared to burning natural gas. Other than the initial capital costs to install or modify the equipment, there currently exists an imbalance in the location of UCSF’s 2.3 million kwh of installed solar photovoltaic capacity (primarily Mission Bay), and the location where the capacity could be used to generate hydrogen. (Parnassus Heights).

6.0 IMPLEMENTATION AND MONITORING

Successful implementation of the measures described in the previous section nearly enable UCSF to achieve the 2020 GHG target. UCSF will need to purchase a small amount of offsets in 2021 to close the gap for that 2020 goal. Deeper reductions provided by the Tier 2 measures; and the purchase of REC’s and offsets by UCSF, enable UCSF to achieve the 2025, 2035 LRDP, and 2050 climate neutrality targets.

UCSF staff annually complete a rigorous cost benefit analysis, looking at a wide range of options, striving to get the largest impact in reducing emissions from deploying its financial and operational resources. Despite aggressive efforts towards reducing onsite energy use and increased purchase of renewable power, UCSF expects to still have emissions of about 146,000 mt CO2e in 2025. In order to reach Carbon Neutrality, UCSF will need to procure additional REC’s and offsets in 2025. The appropriate combination of these tools will need to be coordinated with UCOP.

Robust monitoring of campus-wide GHG emissions and the effectiveness of individual programs and policies are ongoing to ensure that UCSF is on track to meeting its other future targets, such as 2050, and to enable UCSF to tier CEQA analysis of future projects from this GHG Reduction Strategy, as described in Section 8.0

UCSF annually quantifies its GHG emissions and reports them to TCR and CARB. The annual verified emissions report for TCR, augmented by estimates of Scope 3 emissions from commuting and air travel will serve as the metric for comparison with both intermediate and 2050 targets.

Staff from the UCSF Office of Sustainability prepare annual reports to UCOP summarizing progress of the implementation of the GHG Reduction Strategy. The report evaluates the successes and challenges in implementing the GHG Reduction Strategy and evaluate progress toward GHG reduction targets. Staff will provide the status of program implementation (e.g., initiated, ongoing, completed), assess the effectiveness of the strategies and programs included in the Plan against the established objectives, and recommend adjustments to programs or tactics as needed. The annual report will also assess whether UCSF’s actual growth and development is consistent with the forecasts made in the LRDP. If necessary, UCSF shall modify the geographic scope of the inventory and emissions targets accordingly.

An update of the GHG Reduction Strategy should occur at least every five years to ensure the strategy remains effective in reducing GHG emissions to the extent needed for achieving the 2025, 2035 and 2050 targets. In addition, the following situations occurring over the LRDP planning horizon will necessitate a revision to the GHG Reduction Strategy:

- A change in regulations affecting GHG targets or thresholds. The state is likely to legislate more new GHG reduction goal for post-2020. Currently, the GHG Reduction Strategy can only anticipate what that goal will be based on the current regulations. The BAAQMD may also develop new guidelines for CEQA as the state regulations are developed.
- A proposed new project that exceeds the total new square footage (summarized in Table 3).
• A change in the mix of proposed new project types (e.g., another new hospital beyond that envisioned for Mission Bay and Parnassus Heights) that would result in significantly higher energy use intensities than predicted and summarized in Table 4.

• An operational change at UCSF that results in a significant change in projected GHG emissions. UCSF may institute new policies or programs, or abandon current or planned programs, and by doing so, affect GHG emissions. The States regulation of UCSF ability to enter into long-term contracts to purchase a large amount of zero-carbon electricity is one example of such a possible change.

• The required monitoring of the GHG Reduction Strategy reveals that UCSF's GHG reduction programs are not reducing emissions adequately to meet its targets.

7.0 CEQA PROJECT REVIEW

Under CEQA, the effects of GHG emissions are considered a potentially significant environmental impact. In addressing climate change, CEQA provides a useful mechanism for local agencies to evaluate new development on a comprehensive basis rather than on an individual project basis. The CEQA Guidelines recognize this, and include a provision for streamlining the analysis of projects that are consistent with a more comprehensive plan for the reduction of GHG emissions (CEQA Guidelines, Section 15183.5). This GHG Reduction Strategy meets an important requirement of CEQA Guidelines Section 15183.5(b)(1) as a plan that analyzes cumulative GHG impacts. The GHG Reduction Plan uses established protocols, methodologies and forecasts of existing and future land uses to quantify existing and projected future GHG emissions within the plan area. It also establishes a reduction target based on California State law (AB 32, SB 32, and Executive Order B-55-18), and lays out policies, actions, and performance standards that UCSF will enact and implement over time to reduce emissions. However, as demonstrated in this document, the current GHG Reduction Strategy does provide the emissions reductions needed to achieve the reduction targets identified in the UC Sustainable Practices Policy and in the state-mandated reduction target embodied in AB 32, SB 32, and EO B-55-18.

By implementing the Tier 1 measures along with a mix of the Tier 2 measures identified in Section 5.3, and purchasing offsets, UCSF will close the gap to meet the state law derived emissions target for 2020 and beyond, allowing it to utilize the CEQA streamlining provision in CEQA Guidelines Section 15183.5(b)(1). A future development project would be considered consistent with the revised GHG Reduction Strategy if it were consistent with the GHG Reduction Strategy assumptions regarding the amount and type of future development, and was consistent with the GHG reduction measures included in the revised GHG Reduction Strategy. Projects consistent with the revised GHG Reduction Strategy, including conformance with any performance measures applicable to the project, would not require additional GHG emissions analysis under CEQA Guidelines Sections 15064(h) and 15183.5(b)(2).

7.1 SCREENING PROJECT FOR CONSISTENCY WITH THE GHG REDUCTION STRATEGY

In order to assist with determining project consistency with the GHG Reduction Strategy, a project consistency checklist is included in Table 12. This checklist is intended to provide the opportunity for individual projects to demonstrate that they are minimizing GHG emissions, while ensuring that new development at UCSF will achieve its ‘fair share’ of emissions reductions. The GHG Reduction Strategy stipulates a range of prescribed and planned GHG reductions measures for meeting the GHG reduction target. The project review checklist would screen projects for important GHG reduction measures that, when implemented, will provide confidence that the project will not impede UCSF’s ability to meet its GHG emissions targets. This checklist may evolve over time as the mix of Tier 2 reduction measures is better defined and implemented.

For the project checklist to be valid, UCSF would need to ensure that total development does not exceed the following growth assumptions used to develop the emissions forecasts in this GHG Reduction Strategy.

<table>
<thead>
<tr>
<th>TABLE 12: Growth assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2050 total building space = 14,197,000 gross square feet (gsf), with campus specific growth limits provided in Table 3</strong></td>
</tr>
<tr>
<td><strong>2050 population of students + staff = 31,200</strong></td>
</tr>
<tr>
<td><strong>2050 population of students + staff + patients + visitors = 45,400</strong></td>
</tr>
</tbody>
</table>

53 If there is substantial evidence that the effects of a particular project may be cumulatively considerable, notwithstanding the project’s compliance with the qualified GHG Reduction Strategy, CEQA requires that an EIR be prepared.
APPENDIX F: REFERENCES

PLEASE NOTE: THIS LIST IS NOT INTENDED TO REPRESENT ALL DOCUMENTS, LAWS, AND POLICIES THAT INFORM OR INFLUENCE THIS LONG RANGE DEVELOPMENT PLAN. RATHER, THE LIST IS INTENDED TO PROVIDE CONVENIENT ASSISTANCE TO READERS IN FINDING SOURCES CITED IN THE LRDP.

All University of California, UC San Francisco, and State of California documents are available in the UCSF Campus Planning office, and online at campusplanning.ucsf.edu.

All City and County of San Francisco documents are available from the San Francisco Planning Department, and online at www.sf-planning.org.

UNIVERSITY OF CALIFORNIA

UC Seismic Safety Policy: policy.ucop.edu/doc/3100156/SeismicSafety


The University of California 2013-2023 Capital Financial Plan:

2013-2023 Plan:

2013-2023 Plan web page with links to school-specific project sheets:

UC SAN FRANCISCO

1987 Memorandum of Understanding (MOU) with the City and County of San Francisco: [Provided as Appendix C.]

1996 Long Range Development Plan, as amended:

1996 LRDP, as amended:
www.ucsf.edu/sites/default/files/legacy_files/UCSF_LRDP_as%2520amended_web.pdf

Web page with links to each element:
www.ucsf.edu/about/long-range-development-plan/current-long-range-development-plan

1996 LRDP Goals and Objectives:
www.ucsf.edu/sites/default/files/legacy_files/LRDP-Appendices-D.pdf

2014 LRDP Environmental Impact Report (EIR):
www.ucsf.edu/content/lrdp-environmental-impact-report-downloads

Climate Action Plan (2009):
sustainability.universityofcalifornia.edu/documents/ucsf_cap_09.pdf

Physical Design Framework (2010):
campusplanning.ucsf.edu/pdf/UCSF_Physical_Design_Framework.pdf

PARNASSUS HEIGHTS CAMPUS SITE

Mount Sutro Open Space Reserve Management Plan (2001):
campusplanning.ucsf.edu/pdf/Mount_Sutro_Reserve_Plan.pdf

...Environmental Impact Report, latest (2013):
campusplanning.ucsf.edu/pdf/Mount_Sutro_EIR_1_18_13_with_Appendices.pdf

...Hazard Reduction Plan (2013 PowerPoint show):

Parnassus Avenue Streetscape Plan (2014):
campusplanning.ucsf.edu/pdf/Parnassus_Streetscape.pdf

MISSION BAY CAMPUS SITE

Mission Bay North Redevelopment Area Plan and Mission Bay South Redevelopment Area Plan (both 1998):

North: www.sfocii.org/Modules/ShowDocument.aspx?documentid=775

South: www.sfocii.org/Modules/ShowDocument.aspx?documentid=777

campusplanning.ucsf.edu/physical/Final_SEIR_RSRP.pdf
CITY AND COUNTY OF SAN FRANCISCO

San Francisco’s Transit First policy (part of the Transportation Element of the San Francisco General Plan):
www.sf-planning.org/ftp/general_plan/I4_Transportation.htm#TRA_TF

STATE OF CALIFORNIA

Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983 (HSSA 83), as amended [California Health and Safety Code § 129675 et seq.]: codes.lp.findlaw.com/cacode/HSC/1/d10777/1#sthash.lOl9GWk3.dpuf

Senate Bill 1953 (SB 1953) is one of many amendments to the Alquist Seismic Safety Act of 1983.

California Environmental Quality Act (CEQA) [California Public Resources Code § 21000 et seq.]: resources.ca.gov/ceqa/guidelines


Executive Order S-3-05: gov.ca.gov/news.php?id=1861

UNITED STATES GOVERNMENT

The San Francisco Veteran’s Affairs Medical Center (SFVAMC) 2012 Long Range Development Plan (LRDP): www.sanfrancisco.va.gov/docs/SFVAMC_LRDP.pdf

This page intentionally left blank.
At a free UCSF dental screening, children get a lesson on brushing teeth from Daniel Ramos, DDS, PhD, Professor, Department of Orofacial Sciences, in the UCSF School of Dentistry.