
Alternatives

Introduction and Overview

CEQA Guidelines require an analysis of a reasonable range of alternatives for any project subject to an EIR. The purpose of the alternatives analysis is to provide decision-makers and the public with a discussion of alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. Evaluation of alternatives should present the proposed action and all the alternatives in comparative form, to define the issues and provide a clear basis for choice among the alternatives.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Where a lead agency has determined that even after adoption of all feasible mitigation measures, a project as proposed would still result in significant environmental effects that cannot be substantially lessened or avoided, the agency must first determine whether any alternatives are both environmentally superior, and feasible. CEQA provides the following guidelines for discussing project alternatives:

- An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation (§15126.6(a))
- An EIR is not required to consider alternatives which are infeasible (§15126.6(a))
- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project (§15126.6(b))
- The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects (§15126.6(c))
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project (§15126.6(d))

Accomplishing Basic Project Objectives

The following primary Project Objective establishes the Project's functional needs for anticipated future growth and flexibility at the Genentech Campus:

1. **Campus Setting:** Retain close physical relationships between Genentech's various business units that are critical toward meeting the long-term growth needs of the company, and that can only be made possible in a campus setting:
 - Enable scientists to work in a collaborative environment that supports research, development and production goals by clustering Genentech's scientific facilities in close proximity.
 - Maximize the efficiency and support capabilities of administrative functions by keeping these functions centralized and physically proximate to scientific facilities.

- Retain Genentech's ability to transform scientific discoveries into new medicines quickly and efficiently by retaining close physical relationship between R&D and manufacturing facilities.
- Provide efficient logistics support to the Campus with ready access to warehouse and distribution facilities.
- Foster a sense of community among its employees and with the broader South San Francisco community by creating interconnectivity and ease of access.
- Assure Genentech has continued proximity to world-class scientific and academic institutions.

This primary objective is further enhanced with an updated planning framework for the Campus, focused on the following additional Project Objectives:

2. Land Use: Create a dynamic development plan for the Genentech Campus that can guide Genentech's future growth, while providing the needed flexibility to adapt and innovate.
3. Urban Design: Establish a framework for place-making within the Genentech Campus that can inform individual decisions on incremental growth in a manner that fosters and stimulates increased interaction and collaboration throughout the Campus
4. Transportation: Seek to minimize the number of vehicle trips generated by new development within the Genentech Campus, and collaborate with the City and other partners to increase opportunities for alternative modes of transportation serving the East of 101 Area. Ensure the Campus is well served by an integrated system of pedestrian, bicycle and shuttle facilities that enhance neighborhood and Campus connectivity.
5. Infrastructure and Sustainability: Identify and plan for necessary future expansion of Genentech utility needs to assure uninterrupted Campus growth and expansion, while seeking to minimize consumption of natural resources through conservation and sustainability principles.

The range of alternatives addressed in this EIR include only those alternatives to the Project that could feasibly accomplish most of these basic objectives of the Project, and that could avoid or substantially lessen one or more significant effects.

Alternatives Considered but Rejected

No New Development Alternative

The Project is a revision of the existing 2007 Genentech Campus Master Plan and the underlying Genentech Master Plan zoning district. The "no project" alternative will be the continuation of the existing Master Plan and existing zoning regulations into the future (see further discussion of the No Project Alternative, below). This EIR does not analyze nor does it foresee any "no build" scenario under which there is no new development beyond what exists at the Campus under the current baseline condition.

Alternative Site Location

In considering the range of alternatives to be analyzed in an EIR, the CEQA Guidelines state that an alternative site location should be considered when, "feasible alternative locations are available and significant effects of the project would be avoided or substantially lessened by putting the project in another location."

Genentech's corporate headquarters and main laboratory facilities are located in the East of 101 Area of South San Francisco, but Genentech does have additional manufacturing facilities in Vacaville and Oceanside, California and in Hillsboro, Oregon. Genentech also has a manufacturing facility in Singapore. It is possible that Genentech could consider an alternative of developing additional office, laboratory and associated

building space as envisioned under the Project at one of these other locations. However, development of the Project at one of these other locations would not enable Genentech to achieve its basic Project objectives:

- An alternative location for the Project would not cluster Genentech’s scientific facilities in close proximity, and would not enable Genentech to keep its administrative support functions centralized and physically proximate to its scientific facilities
- An alternative location would not foster the sense of community among its employees and with the broader South San Francisco community
- An alternative location would not assure Genentech of continued proximity to world-class scientific and academic institutions such as Stanford, UC San Francisco and UC Berkeley
- No alternative location would enable Genentech to continue its participation as part of what is now believed to be the largest biotechnology “cluster” in the world, sharing the East of 101 Area with over 200 other biotech companies within the approximately 500-acre “Birthplace of Biotechnology” in the South San Francisco East of 101 Area

There is no information to suggest that development of up to approximately 4.3 million square feet of Genentech operational facilities at any of these other locations would avoid or substantially lessen any significant effects of the Project, but instead would likely transfer those effects from one place to another.

For these reasons, an alternative site location was eliminated from further consideration in this EIR.

Alternatives Analyzed

The three alternatives analyzed in this EIR are listed below. These alternatives are intended to meet the CEQA requirements for the EIR to describe the no project alternative as well as a range of reasonable alternatives to the Project that would feasibly attain most of the basic objectives of the Project, but would avoid or substantially lessen significant effects.

Alternative #1: No Project

CEQA Guidelines Section 15126.6(e)(3)(A) states that, if the project is the revision of an existing land use or regulatory plan, policy or operation, the “no project” alternative will be the continuation of the existing plan, policy or operation into the future.

Under Alternative #1: No Project, the current 2007 Master Plan and the existing Genentech Master Plan Zoning District (Chapter 20.260 of the City of South San Francisco Zoning Code) would remain in place as the guiding land use policies and regulations for the Campus. Consistent with growth projections as analyzed in the prior 2007 Master EIR and 2012 Supplemental Master EIR, new development within the Campus would remain limited to a maximum buildout of up to 6 million square feet of building space, plus the 821,000 square feet added as the South Campus (originally the Britannia East Grand project) in 2013. Buildout of Alternative #1 would be limited to a maximum of 2.1 million square feet of net new development on the Campus, over the current baseline of approximately 4.7 million square feet, for a total of approximately 6.8 million square feet. This building space would be further regulated by land use type and by sub-campus location as indicated in the 2007 Campus Master Plan.

Alternative 2: Reduced Project

Alternative 2: Reduced Project would establish an overall growth limit within the Campus boundaries of up to 7.9 million square feet, or an overall floor area ratio (FAR) of 0.88 times the total area of the approximately 208-acre Campus. A 7.9 million square-foot buildout potential represents a mid-point between the 6.8 million square-foot buildout of the currently effective 2007 Master Plan, and the 9 million square-foot buildout potential of the proposed Project. This Reduced Alternative would enable construction of approximately 3.2 million square feet of net new building space. Buildout of up to 7.9 million square feet would exceed the 6

million square-foot building space cap on the original 2007 Master Plan, and modifications to the existing Genentech Master Plan Zoning District would be necessary to accommodate this increase in building space.

It is uncertain whether Genentech would include the same Trip Cap and commensurate TDM program under the Reduced Alternative as is proposed under the Project. For conservative purposes, this EIR Reduced Project Alternative assumes that the Genentech Campus would meet a trip reduction rate consistent with current City requirements. Pursuant to SSF Municipal Code section 20.400.003, projects within the Business and Technology Park land use designation and with an FAR of between 0.8 and 1.0 are required to achieve a minimum trip reduction rate of 35 percent. Alternative #2 would have an FAR of approximately 0.87, and thus be subject to the 35 percent TDM requirement.

Alternative 3: Alternative Mix of Land Uses

To maximize flexibility, the Master Plan Update allows the land use mix within the Campus to evolve over time, depending upon Genentech's future needs. To provide detail and specificity for this EIR, the Project Description provides one potential detailed buildout scenario that meets the goals of the Master Plan Update, and is used in this EIR for qualitative and quantitative analytical purposes. Under Alternative #3, the overall net new development within the Campus would be retained at approximately 4.3 million square feet (same as the Project), but the mix of land uses within the Campus would be fixed (rather than flexible), and with a substantially different mix of land use types, as follows:

- 1.7 million square feet of net new office space,
- 2 million square feet of net new lab space
- 300,00 square feet of net new manufacturing space
- 300,00 square feet of new employee amenity space

This Alternative Mix would represent a shift from higher trip-generating office land use to lower trip-generating lab and manufacturing space uses. One of the purposes of having an Alternative that would require an alternative mix in the buildout land use composition of the Campus is to determine whether such a different land use mix may result in reduced environmental effects as compared to the Project.

Summary of Alternatives

Table 20-1 compares the amount of development and applicable TDM requirements as proposed by the Project to the three alternatives.

Table 20-1: Project and Alternatives Development Summary (Million Square Feet, MSF)						
	<u>Existing Campus¹</u>	<u>Potential Net New Bldg. Space</u>	<u>Total Buildout</u>	<u>FAR (at 208-acre Campus)</u>	<u>Trip Cap?</u>	<u>Effective TDM Rate</u>
Project	4,715	4,293	9,008	1.00	Yes	47% - 50%
Alternative 1: No Project/2007 Master Plan	4,715	2,106	6,821	0.75	No	32%
Alternative 2: Reduced Project	4,715	3,200	7,900	0.87	No	35%
Alternative 3: Different Land Use Mix	4,715	4,293	9,008	1.00	No	42%

1. Includes development within the original 2007 Master Plan Campus boundaries, the 2013 addition of the Britannia East Grand project as South Campus, and other smaller additions made in 2013

Overview of Alternatives Analysis

Each of the alternatives is more fully described below, and their potential environmental effects are disclosed. The environmental effects of each alternative are also compared to those of the Project. As permitted by CEQA (CEQA Guidelines Section 15126.6[d]) the effects of the alternatives are discussed in less detail than the impact discussions of the Project. However, the alternatives analysis is conducted at a sufficient level of detail to provide the public, other public agencies, and City decision-makers adequate information to evaluate the alternatives as compared to the Project. For each of the alternatives, the significance of each impact is compared to applicable thresholds. These significance conclusions assume implementation of those same regulatory requirements and mitigation measures as applied to the Project (if necessary). The impacts of each alternative are also compared to the impacts of the Project to indicate whether the alternative would:

- avoid potentially significant impacts of the Project
- result in impacts that are greater than those of the Project
- result in impacts less significant (or of a lesser magnitude) than those impacts of the Project, or
- generally have the same impact as the Project

Alternative #1: No Project – Continuation of the 2007 Master Plan

CEQA Guidelines Section 15126.6(e) requires that a “no project” alternative be evaluated, along with its impacts. The “no project” alternative must be the practical result of non-approval of the project.

Description of Alternative #1: No Project

Total Buildout Potential

The practical result of non-approval of the Project is continuation of the 2007 Master Plan and its limitation of 6 million square feet of total building space, plus the addition of the South Campus (originally the 821,000 square-foot Britannia East Grand project). In 2013, the City took action to amend its zoning, adding the South Campus and several additional properties now part of the Upper and West Campus to the Genentech Master Plan zoning district. These additional properties (which total 44.7 acres) were also added to the Master Plan boundaries.¹

Under the 2007 Master Plan limitations, the 6 million square-foot cap on building space, plus the 2013 addition of the South Campus, limits potential net new growth to approximately 2.1 million square feet (as shown in **Table 20-2**). The South Campus is assumed to be additive under Alternative #1 because the original Britannia East Grand project was approved and a separate EIR for that project was certified in 2002, well before 2013 when this area was incorporated into the Genentech Campus.

Table 20-2: Alternative #1 Buildout Potential

	<u>2007 Master Plan Buildout Potential (sf)¹</u>	<u>Existing (2017) Status (sf)²</u>	<u>Potential New Development (sf)</u>
Lower Campus	1,625,000	1,237,000	388,000
Mid Campus	910,000	554,000	356,000
Upper Campus	1,387,000	1,107,000	280,000
West Campus	737,000	737,000	0
"Expansion"	<u>1,341,000</u>	<u>258,000</u>	<u>1,083,000</u>
Campus, sub-total:	6,000,000	3,894,000	2,106,000
plus South Campus	<u>821,000</u>	<u>821,000</u>	<u>0</u>
Total:	6,821,000	4,715,000	2,106,000
Resulting FAR:	0.76		

Note: Totals do not precisely match due to rounding

1. Per Table 20.260.003(l): Genentech Growth and Development Projections, SSF Municipal Code

2. Per Genentech Master Plan, 2015/16 Annual Report, pg.8

The 2007 Master Plan also allocates growth potential in building space between four different types of land uses: office, lab, manufacturing/warehouse, and amenity space. The net new development by land use type that is currently permitted pursuant to the 2007 Master Plan limitations is as shown on **Table 20-3**.

¹ City of South San Francisco, Zoning Text and Map Amendments, May 16, 2013

Table 20-3: Alternative #1 Buildout Potential by Land Use Type (SF)

	<u>Office</u>	<u>Lab</u>	<u>Mfg. / Warehouse</u>	<u>Amenity</u>	<u>Total Bldg. Area</u>
2007 Master Plan Buildout	2,632,000	2,000,000	1,046,000	322,000	6,000,000
Plus South Campus	<u>230,500</u>	<u>568,000</u>		<u>22,500</u>	<u>821,000</u>
Total Buildout Potential:	2,862,500	2,568,000	1,046,000	344,500	6,821,000
Less Existing 2017 Baseline	<u>- 1,566,000</u>	<u>- 1,718,000</u>	<u>- 1,285,000</u>	<u>- 145,000</u>	<u>- 4,715,000</u>
Potential New Development	1,296,000	850,000	-239,000	199,000	2,106,000

As indicated by the negative new development in the manufacturing and warehouse category, the 2007 Master Plan assumed that certain existing manufacturing and/or warehouse space at the Campus would be redeveloped for new office or lab space.

Figure 20-1 shows the Opportunity Sites assumed in the 2007 Master Plan. As Figure 20-1 indicates, most of these Opportunity Sites are similar to those of the Project, and include properties along the western edge of the Campus as well as potential redevelopment of several properties that contain buildings that may no longer be useful or efficient in the Lower and Upper Campus. However, only those Opportunity Sites indicated in the 2007 Master Plan are assumed as development opportunities under Alternative #1.

Based on the potential new development by land use types, and the assumed space requirements per seated worker as assumed for the Project, Alternative #1 would generate approximately 6,650 net new jobs at the Campus, or approximately 53% of the 12,500 new jobs expected pursuant to the Project.

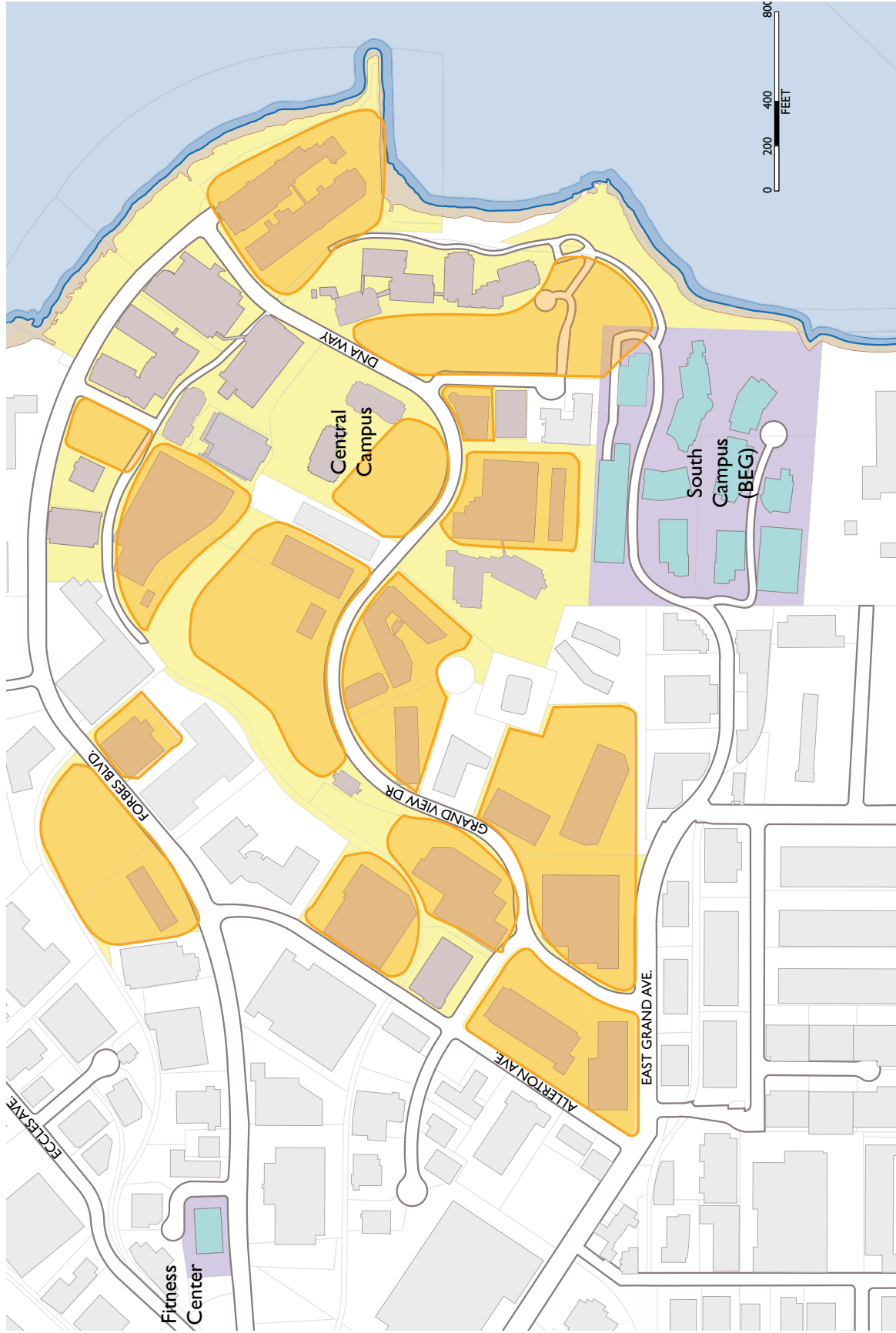


Figure 20-1

No Project Alternative - 2007 Genentech Campus Master Plan

Source: South San Francisco, Genentech Campus 10-Year Facility Master Plan, 2007

Comparative Environmental Effects of the No Project Alternative (Alternative #1)

Impacts Reduced as Compared to Project

Certain environmental effects would be reduced under Alternative #1 as compared to the Project. For the most part (as more fully described below), these reductions effectively lower the magnitude of air quality and greenhouse gas emissions, the number of new vehicle trips, and the demands on public infrastructure as compared to the Project. However, these reductions are either not fully capable of reducing impacts to less than significant levels, or are not necessary to reduce any significant impacts of the Project that are not otherwise reduced through implementation of regulatory requirements or mitigation measures.

Air Quality/Construction-Period Criteria Pollutants (LTS with MM)

With approximately 50% of the construction of new building space as assumed for the Project (2.1 MSF versus 4.3 MSF under the Project), Alternative #1 would generate less overall construction-period criteria pollutant emissions. This potential impact was concluded to be less than significant with implementation of regulatory requirements and identified mitigation measures (construction-period BMPs) for the Project. These regulations and mitigation measures would be similarly applicable to Alternative #1, and this is not a significant impact of the Project that would be avoided under Alternative #1. Further, construction-period criteria pollutants are reported against an annualized emission rate. If approximately 50% of the total emissions were to be generated in approximately 50% of the overall construction period as assumed for the Project, the annual emission rates would be similar.

Air Quality/Operational Criteria Pollutant Emissions (SU)

Proportionally, Alternative #1 would likely generate only about one-half of the criteria pollutants from area sources (architectural coatings, and consumer products and solvents used in the new offices and laboratories), and about one-half of the mobile sources as compared to the Project. However, even a 50% reduction in emission sources would not be able to reduce operational ROG emissions to below threshold levels, and may be unable to reduce NO_x emissions to less than threshold levels. A 50 % reduction in operational emission sources of PM₁₀ would be sufficient to reduce these criteria pollutants to below threshold levels. Impacts under Alternative #1 would be reduced, but remain significant and unavoidable.

Air Quality/Operational Health Risk (LTS with MM)

Proportionally, Alternative #1 would generate approximately one-half of the number of new sources of TAC emissions from less laboratory space, fewer diesel emergency generators and less natural gas combustion facilities. With fewer TAC emissions, Alternative #1 would generate lower overall TAC concentrations. However, potential exposure and resulting health risks would continue to vary depending on a number of factors including emission source locations. Like the Project, any new operational source of TAC emission would be required to operate within the emission parameters as used in the analysis prepared for the Project, could only be located on those Opportunity Sites found to not contribute to operational-period health risks, or would require preparation of subsequent project-specific health risk analysis.

Geology/Landslide Potential (LTS)

The Project foresees the potential that development may occur on Opportunity Sites located along the base of the existing steep hillsides. To accommodate these hillside structures, cuts into the hillside would be required, potentially exacerbating slope failure and/or result in landslide conditions if not conducted in a safe manner and consistent with applicable excavation design and slope stability standards. The 2007 Master Plan regarded these existing steep slopes as a constraint to new development, and did not consider the potential for construction within these areas. Development pursuant to Alternative #1 would not include those Opportunity Sites that are located along the base of the existing steep hillsides. Alternative #1 would avoid or

reduce the potential for Slope failure or landslide conditions. This potential impact was concluded to be less than significant with implementation of regulatory requirements and identified mitigation measures for the Project.

GHG/Operational and other Land Use Emissions (LTS)

Alternative #1 would reduce operational GHG emissions attributable to mobile sources, indirect water use, wastewater treatment, and solid waste disposal and landscaping. Like the Project, these operational-related GHG emissions would be fully covered under the SSF CAP and do not represent a cumulatively considerable contribution to global climate change. Alternative #1 would also reduce the Project's land use-based GHG emissions and like the Project, these types of emissions would not exceed the efficiency thresholds for year 2020 or 2030. Like the Project, Alternative #1 would not contribute significantly to global climate change, and this impact would similarly be considered less than cumulatively considerable.

Land Use/ Consistency with the South San Francisco Municipal Code (LTS)

By definition, the No Project Alternative is the physical result of continuation of the 2007 Master Plan and the Genentech Master Plan zoning district. As such, Alternative #1 is fully consistent with these plans and regulations. Alternative #1 would not require any zoning changes as requested by the Project for lot coverage, temporary limitations on allowable FAR, building heights or off-street parking ratios.

Trip Generation and Resulting Traffic Impacts (SU)

Under Alternative #1, the total net new development at the Campus is reduced to 2,106 KSF (or by about 50% as compared to the Project), and assumes a mix of new land uses as defined in the 2007 Master Plan. As indicated in **Table 20-4**, applying the base AM peak-hour trip rates (without TDM) to the potential buildout of Alternative #1 would yield an expected total of 7,007 AM peak hour trips arriving at the Campus without TDM. However, buildout of Alternative #1 would result in a Campus-wide FAR of approximately 0.76, requiring implementation of a TDM program capable of achieving a 32% reduction in AM peak hour trips.² As also indicated in Table 20-4, a 32% trip reduction would yield a total of 4,765 AM peak hour Campus trips for Alternative #1.³

² Per Table 20.400.03 for the underlying Business and Technology Park zoning

³ Although it is not practical to retroactively apply escalating TDM rates (pursuant to changing Municipal Code requirements) to previously approved/existing development within the Campus, the City and Genentech have historically reported on the Genentech TDM Program's effectiveness on a Campus-wide basis, taking into account both existing development and pending projects. The question of whether escalating TDM requirements should apply to previously approved development has not been of issue, primarily because Genentech's TDM Program has been consistent in voluntarily out-performing all applicable City requirements.

Table 20-4: Alternative #1 Trip Generation and TDM Requirement

<u>Land Use</u>	<u>Building Space (ksf)</u>	<u>AM Base Trip Rate</u>	<u>AM Trips</u>	<u>Total AM Peak Trips</u>
<u>Existing</u>				
Office	1,566	1.29	2,021	
Labs	1,718	1.03	1,766	
Mfg.	1,285	0.35	448	
Amenity	<u>145</u>	1.03	<u>149</u>	
subtotal:	4,715		4,384	4,384
		Existing TDM Rate:	42%	
			2,543	
<u>Plus Alternative #1</u>				
Office	1,296	1.29	1,627	
Labs	850	1.03	874	
Mfg.	-239	0.35	-83	
Amenity	<u>200</u>	1.03	<u>205</u>	
subtotal:	2,106		2,623	2,623
Total:	6,821	Total AM Peak Trips (before any TDM):		7,007
Campus FAR:	0.76	Level of Campus-wide TDM required:		32%
		Resulting Trips, with 32% TDM:		4,765

In comparison, the Project's Trip Cap would limit total AM peak hour trips at buildout to 5,216 trips. Therefore, Alternative #1 would reduce AM peak hour trips at buildout by approximately 451 trips (or 9% fewer trips) as compared to the Project, when measured post-TDM.⁴

At those intersections and freeway segments where the Project's contribution of trips is at, or only slightly above threshold levels, this 9% reduction in trips would reduce, and may be capable of avoiding certain Project-specific traffic impacts. However, a reduction of about 450 AM peak hour trips would not be sufficient to reduce Project-specific or cumulative effects on most local intersections or mainline freeway segments, and these impacts would remain significant and unavoidable.

Utilities/Water Demand (LTS)

Using the same water demand factors as applied to the Project, Alternative #1 is estimated to generate an increased water demand of approximately 163,000 gallons per day, or a 55% reduction in water demand as compared to the Project. This water demand takes into account all of the water conservation strategies and initiatives that Genentech has implemented throughout the existing Campus. Since the WSA prepared for the Project concludes that the District will be able to provide adequate water supplies to meet existing and

⁴ The number of AM peak hour trips generated under the No Project Alternative is not equal to the Project's Trip Cap. The Trip Cap is based on a minimum 47 percent reduction in drive-alone trips. Prior assumptions that applied at the time the 2007 Master Plan was approved was a trip reduction rate of 21% per the 2007 Master Plan MEIR, and a trip reduction rate of 9.5% per the 2002 Britannia East Grand EIR. The City's current TDM requirements, which would now apply to the No Project Alternative, represent increases in required TDM performance that have been adopted by the City over time.

projected customer demands for the next 20-plus years under normal water year conditions, the same would be true under Alternative #1.

Impacts Increased as Compared to Project

Alternative #1 would not result in any environmental effects that would be greater than those of the Project.

Impacts Similar to those of the Project

The following provides a list of potential environmental effects pursuant to Alternative #1 that would be substantially similar to those of the Project. Alternative #1 would not be capable of reducing any of the following impacts from significant to less than significant levels, and/or would not reduce any significant impacts of the Project that are not otherwise reduced through implementation of regulatory requirements or mitigation measures.

Aesthetics

Alternative #1 would not increase building space within the Campus to the same extent as would the Project and the scale of new buildings would unlikely be as tall or large as envisioned under the Project. Although Alternative #1 would still change the existing visual character of the Campus, this change will not be as substantial as under the Project. However, like the Project, the visual changes under Alternative #1 would not be adverse, and would not be visually inconsistent with the current Campus or surrounding areas.

- Scenic vistas (LTS)
- Scenic resources as seen from a State Scenic Highway (LTS)
- Visual character (LTS)
- Light and glare (LTS with Mitigation)

Air Quality

Although Alternative #1 would not increase employment, new construction or operational activities to the same extent as would the Project, Alternative #1 would generally result in air quality impacts that are similar to the Project related to the following topics:

- Consistency with Clean Air Plan (LTS)
- Construction-period emissions of criteria pollutants (LTS with Mitigation)
- Construction-period health risk (LTS with Mitigation)

Biological Resources

Alternative #1 would result in development on many of the same Opportunity Sites as identified for the Project, resulting in generally the same types of impacts on biological resources:

- Tidal aquatic species and essential fish habitats (LTS)
- Burrowing Owl (LTS)
- Harbor Seal and California Sea Lion (LTS)
- Bird strikes (LTS)
- Sensitive natural communities (LTS)
- Wetlands and other waters (LTS)
- Environmental corridors (LTS)

- Local tree protection policies and HCPs (LTS)
- Secondary biological effects of sea level rise adaptation strategies (LTS)
- California Ridgway's Rail (LTS with Mitigation)
- San Francisco Common Yellowthroat and Alameda Song Sparrow (LTS with Mitigation)
- Invasive species (LTS with Mitigation)

Cultural Resources

Alternative #1 would result in development on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of effects on cultural resources:

- Historic resources (LTS)
- Paleontological resources (LTS)
- Currently unknown archaeological resources (LTS with Mitigation)
- Tribal cultural resources (LTS with Mitigation)

Geology

Alternative #1 would result in development on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of geological effects, and subject to the same required compliance with existing regulatory requirements:

- Seismic hazards (LTS)
- Differential settlement and unstable or expansive soils (LTS)
- Substantial soil erosion or loss of topsoil (LTS)
- Septic tanks (No Impact)

Greenhouse Gas Emissions

Alternative #1 would substantially reduce the volume of GHG emissions as compared to the Project, but would still result in the same types of GHG emissions impacts:

- Stationary source emissions subject to Cap-and-Trade (LTS)
- Permitted stationary source emissions (LTS)

Hydrology

Alternative #1 would result in development on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of hydrology impacts and subject to the same regulatory requirements:

- Water quality (LTS)
- Groundwater (LTS)
- Drainage patterns and runoff (LTS)
- Flood hazards (LTS)

Land Use

The following land use effects and consistency determinations for Alternative #1 would be similar to those of the Project:

- Consistency with the Comprehensive Airport Land Use Compatibility Plan for SFO (Consistent)
- Consistency with Genentech's BCDC Permits (Consistent)
- Consistency with South San Francisco General Plan (1999) Land Use Element (Consistent)
- Consistency with the East of 101 Area Plan (Consistent)
- Physically dividing an established community (LTS)
- Conflicts with policies or regulation adopted to avoid or mitigate an environmental effect (LTS)
- Conflicts with applicable Habitat Conservation Plan (LTS)

Noise

Alternative #1 would result in construction activity and operations on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of noise impacts:

- Operational noise (LTS)
- Operational ground-borne vibration (LTS)
- Excessive noise due to location within an Airport Land Use Plan (No Impact)
- Construction noise (LTS with Mitigation)
- Construction-period ground-borne vibration (LTS with Mitigation)
- Substantial permanent increase in ambient noise (SU)

Population, Housing and Employment

Alternative #1 would result in an increase in employment at the Genentech Campus, resulting in generally the same types of impacts on population, housing and employment, as would the Project. Although Alternative #1 would increase employment to a lesser extent than would the Project, the following impacts would remain similarly less than significant.

- Inducing substantial population growth (LTS)
- Displacing substantial numbers of existing housing units (No Impact)
- Displace substantial numbers of people (No Impact)

Public Services

Alternative #1 would result in an increase in employment at the Genentech Campus, resulting in generally the same types of impacts to public services, as would the Project. Although Alternative #1 would not increase employment and commensurate demands on public services to the same extent as would the Project, the following impacts would remain similar:

- Police services (LTS)
- Fire and emergency medical services (LTS)
- Recreation (LTS)

Transportation

Whereas Alternative #1 would reduce AM peak hour trips at buildout by approximately 425 trips, or an 8% reduction as compared to the Project (when measured post-TDM), Alternative #1 would have similar traffic and transportation-related impacts as compared to the Project for the following topics:

- Vehicle miles travelled (VMT): (the City's required 32% reduction in drive-alone rate is assumed to result in a commensurate 32% reduction in baseline traffic, resulting in a daily per employee VMT rate of more than 15% below the regional or Citywide average)
- Internal Vehicle Circulation (existing roadways provide sufficient vehicular circulation to serve circulation needs)
- Pedestrian Circulation (not detrimental to existing pedestrian facilities, no conflict with adopted plans and programs regarding pedestrian mobility or safety)
- Bicycle Circulation (fair share contribution toward bicycle improvements in the East of 101 Area through payment of East of 101 Traffic Impact Fees)

Utilities and Service Systems

Alternative #1 would result in an increase in building space and employment at the Genentech Campus, resulting in generally the same types of impacts on utilities and service systems as would the Project. Although Alternative #1 would not increase demands on utilities and service systems to the same extent as would the Project, the following impacts would remain similar:

- Water supply infrastructure (LTS)
- Exceedances of wastewater treatment requirements (LTS)
- Wastewater treatment and disposal capacity (LTS)
- Wastewater collection infrastructure (LTS)
- Stormwater facilities (LTS)
- Solid waste disposal (LTS)
- Energy (LTS)

Alternative 2: Reduced Project

CEQA Guidelines Section 15126.6(b and c) require that, “the discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project.” The range of potential alternatives to the proposed project “shall include those that could feasibly accomplish most of the basic objectives of the project”. The Reduced Project Alternative (Alternative #2) has been defined as an alternative that is capable of reducing the magnitude certain significant effects of the Project, and accomplishing most of the basic Project Objectives - but to a lesser extent than would the Project.

Description of Alternative 2: Reduced Project

Total Buildout Potential

For purposes of alternatives analysis, Alternative #2 establishes an overall growth limit within the approximately 207-acre Campus boundaries of up to 7.9 million square feet of building space, or an overall FAR of 0.88. A buildout potential of 7.9 million square feet represents the mid-point between the 6.8 million square-foot buildout of the currently effective 2007 Master Plan, and the 9 million square-foot buildout potential of the proposed Project, and represents a net increase of approximately 3.2 million square feet of net new growth.

Table 20-5 presents the development potential of Alternative #2 as aggregated by neighborhood campus, based on a reduction of growth within each neighborhood campus proportional to the reduction of overall Campus growth. These development potentials are based on the assumption that certain Opportunity Sites may not be developed or redeveloped with new buildings, and/or that new development may be reduced in height, mass and scale as compared to the Project. This table demonstrates how a projected net new development of up to approximately 3.2 million square feet of building space may be allocated across the Campus by neighborhood campus locations.

Table 20-5: Alternative #2 Buildout Potential, by Neighborhood Campus (sf)			
	<u>Existing - 2017</u>	<u>Growth</u>	<u>Buildout</u>
Lower Campus	1,236,000	534,000	1,770,000
Mid Campus	554,000	408,000	962,000
Upper Campus	1,107,000	970,000	2,073,000
West Campus	995,000	1,086,000	2,081,000
South Campus	<u>821,000</u>	<u>191,000</u>	<u>1,012,000</u>
Total	4,715,000	3,190,000	7,900,000
		Average FAR:	0.87

Buildout of up to 7.9 million square feet would exceed the building space cap of the 2007 Master Plan, and modifications to the existing Genentech Master Plan and Genentech Master Plan Zoning District would be necessary to accommodate this building space.

Table 20-6 presents how the approximately 3.2 million square feet of net new development potential under Alternative #2 is allocated between new office, lab and amenity space, based proportionally to the reduction of overall Campus growth (an approximate 26% reduction in building space per each land use type as compared to the Project).

Table 20-6: Alternative #2 Buildout Potential, by Land Use Type (sf)

	<u>Office</u>	<u>Lab</u>	<u>Mfg. / Warehouse</u>	<u>Amenity</u>	<u>Total Bldg. Area</u>
Existing 2017 Baseline	1,566,000	1,718,000	1,285,000	145,000	4,715,000
Potential Net New Development, Reduced Project	<u>1,800,000</u>	<u>1,165,000</u>	<u>0</u>	<u>225,000</u>	<u>3,190,000</u>
Reduced Project Buildout	3,366,000	2,883,000	1,285,000	370,000	7,900,000

Based on the potential new development by land use types, and the assumed space requirements per seated worker as assumed for the Project, Alternative #2 would generate approximately 10,250 net new jobs at the Campus, or approximately 80% of the 12,500 new jobs expected pursuant to the Project.

Trip Cap

It is uncertain whether Genentech would include the same Trip Cap and commensurate TDM program under the Reduced Alternative as is proposed under the Project. For conservative purposes, this EIR Reduced Project Alternative assumes that Genentech would not volunteer to implement a Trip Cap or to achieve the goal of a 50 percent reduction in drive-alone trips, and instead would comply with the requirements of the City's TDM Ordinance (Municipal Code section 20.400). With a total of 7.9 million square feet distributed across the 207.9-acre Campus, Alternative #2 would result in an FAR of approximately 0.87, requiring a minimum trip reduction rate of 35%.⁵

Other Campus Improvements

It is assumed that Alternative #2 would include other Campus-wide improvements as described under the Project (potentially at a reduced extent based on reduced needs), including:

- potential closure of DNA Way as a through street during off-peak hours to allow this street segment to function as a designated pedestrian environment
- accommodating the predicted demand of parking spaces in new parking structures located throughout the Project Area
- providing for on-Campus pedestrian improvements as assumed in the Project Description
- new manufacturing, processing and research activities will need to be individually assessed pursuant to waste discharge permits, and may be required to construct and implement pollutant reduction plans, potentially including expansion of on-site pre-treatment pH neutralization systems of post-process wastewater.
- continued extension of purple pipes to all new development projects and landscaping
- potential construction of a PG&E substation
- continuation of the on-Campus solar energy project, with new solar panels installed on building rooftops
- construction of the on-going Site Utility Project for high-efficiency industrial cooling and building air conditioning systems

⁵ pursuant to Table 20.400.003 of the City Zoning Ordinance

- potentially installing a new combined heat and power (CHP) plant as a cogeneration plant that would use a natural gas power station to generate electricity

Comparative Environmental Analysis of the Reduced Project Alternative (Alternative #2)

Impacts Reduced as Compared to Project

Certain environmental effects would be reduced under Alternative #2, as compared to the Project. For the most part, these reductions lower the magnitude of air quality and greenhouse gas emissions, and the demands on public infrastructure as compared to the Project. However, these reductions are not necessary to reduce any significant impacts of the Project that are not otherwise reduced through implementation of regulatory requirements or mitigation measures.

Air Quality/Operational Criteria Pollutant Emissions (SU)

Proportionally, Alternative #2 would likely generate about 74% of the criteria pollutants from area sources (architectural coatings, and consumer products and solvents used in the new offices and laboratories), and about 74% of the mobile source emissions, as compared to the Project. However, the corresponding 26% reduction in emission sources would not reduce operational emissions of ROG or NO_x to below threshold levels, and may not reduce operational emissions of PM₁₀ to below threshold levels. Impacts under Alternative #2 would be reduced, but remain significant and unavoidable.

Air Quality/Operational Health Risk (LTS with MM)

Proportionally, Alternative #2 would result in approximately 26% fewer new sources of TAC emissions from less laboratory space, fewer diesel emergency generators and less natural gas combustion facilities. With fewer TAC emission sources, Alternative #2 would generate lower overall TAC concentrations. However, potential exposure and resulting health risks would continue to vary depending on a number of factors including emission source locations. Like the Project, any new operational source of TAC emission would be required to operate within the emission parameters as used in the analysis prepared for the Project, could only be located on those Opportunity Sites found to not contribute to operational-period health risks, or would require preparation of subsequent project-specific health risk analysis.

GHG/Operational and other Land Use Emissions (LTS)

Alternative #2 would reduce operational GHG emissions attributable to mobile sources, indirect water use, wastewater treatment, and solid waste disposal and landscaping. Like the Project, these operational-related GHG emissions would be fully covered under the SSF CAP and do not represent a cumulatively considerable contribution to global climate change. Alternative #2 would also reduce the Project's land use-based GHG emissions, and like the Project, these types of emissions would not exceed the efficiency thresholds for year 2020 or 2030. Like the Project, Alternative #2 would not contribute significantly to global climate change, and this impact would similarly be considered less than cumulatively considerable.

Utilities/Water Demand (LTS)

Using the same water demand factors as applied to the Project, Alternative #2 is estimated to generate an increased water demand of approximately 219,000 gallons per day, or about 74% of the water demand as compared to the Project. This water demand takes into account all of the water conservation strategies and initiatives that Genentech has implemented throughout the existing Campus. The Water Supply Assessment (WSA) prepared for this EIR by CalWater indicates that the Project's expected increase in water demand is included within CalWater's forecast of future water demands of the three Peninsula Districts. As such, Alternative #2's reduced water demand would similarly be included within CalWater's future demand

forecast, and could be met for the next 20-years under normal water year conditions, the same as would occur under the Project.

Impacts Increased as Compared to Project

Alternative #2 would not result in any environmental effects that would be greater than those of the Project.

Impacts Similar to those of the Project

Alternative #2 would result in development on perhaps fewer, but many of the same Opportunity Sites as identified for the Project, resulting in generally the same types of physical environmental effects. Alternative #2 would result in less overall development, but that development would include the same land uses (offices, labs and amenity space) as those of the Project. The following provides a list of potential environmental effects pursuant to Alternative #2 that would be similar to those of the Project, with the only differences being the comparative magnitude of the effect. Alternative #2 would not be capable of reducing any of the following impacts from significant to less than significant levels, and/or would not reduce any significant impacts of the Project that are not otherwise reduced through implementation of regulatory requirements or mitigation measures.

The following effects pursuant to Alternative #2 would be the same as those of the Project, assuming compliance with all applicable regulatory requirements and implementation of the same mitigation measures as identified for the Project.

Transportation

Alternative #2 assumes a 26% reduction in development potential, but the same proportional mix of new land uses and the same base (pre-TDM) trip generation rates per land use type as the Project. Therefore, the net new AM peak-hour base trips for Alternative #2 (without TDM) is approximately 76% of the trips as calculated for the Project (without TDM), yielding an expected total of 8,135 AM peak hour trips arriving at the Campus without TDM. However, buildout of Alternative #2 would result in a Campus-wide FAR of approximately 0.88, requiring implementation of a TDM program capable of achieving a 35% reduction in AM peak hour trips. As also indicated in **Table 20-7**, a 35% trip reduction would yield a total of approximately 5,287 trips during the AM peak hour under Alternative #2. In comparison, the Project's Trip Cap would limit total AM peak hour trips at buildout to 5,216 trips. Therefore, Alternative #2 would result in approximately 71 more AM peak hour trips (or a 1% increase) as compared to the Project, when measured post-TDM. Effectively, Alternative #2 and the Project would generate the same number of AM peak hour trips, resulting in virtually the same traffic impacts.

Table 20-7: Alternative #2 Trip Generation and TDM Requirement

<u>Land Use</u>	<u>Building Space (ksf)</u>	<u>AM Base Trip Rate</u>	<u>AM Trips</u>	<u>Total AM Peak Trips</u>
<u>Existing</u>				
Office	1,566	1.29	2,021	
Labs	1,718	1.03	1,766	
Mfg.	1,285	0.35	448	
Amenity	<u>145</u>	1.03	<u>149</u>	
subtotal:	4,715		4,384	4,384
		Existing TDM Rate:	42%	
			2,543	
<u>Plus Alternative #3</u>				
Office	1,800	1.29	2,322	
Labs	1,165	1.03	1,197	
Mfg.	0	0.35	0	
Amenity	<u>225</u>	1.03	<u>231</u>	
subtotal:	3,190		3,751	<u>3,751</u>
Total:	7,905	Total AM Peak Trips (before any TDM):		8,135
Campus FAR:	0.88	Level of Campus-wide TDM required:		35%
		Resulting Trips, with 35% TDM:		5,287

Aesthetics

Alternative #2 would not increase building space within the Campus to the same extent as would the Project, and the scale of new buildings may not be as tall or large as envisioned under the Project. Alternative #2 would still change the existing visual character of the Campus, but like the Project, the visual changes under Alternative #2 would not be adverse, and would not be visually inconsistent with the current Campus or surrounding areas.

- Scenic vistas (LTS)
- Scenic resources as seen from a State Scenic Highway (LTS)
- Visual character (LTS)
- Light and glare (LTS with Mitigation)

Air Quality

Although Alternative #2 would not increase employment, new construction or operational activities to the same extent as would the Project, Alternative #2 would generally result in air quality impacts that are similar to the Project related to the following topics:

- Consistency with Clean Air Plan (LTS)
- Construction-period emissions of criteria pollutants (LTS with Mitigation)

- Construction-period health risk (LTS with Mitigation)

Biological Resources

Alternative #2 would result in development on many of the same Opportunity Sites as identified for the Project, resulting in generally the same types of effects on biological resources:

- Tidal aquatic species and essential fish habitats (LTS)
- Burrowing Owl (LTS)
- Harbor Seal and California Sea Lion (LTS)
- Bird strikes (LTS)
- Sensitive natural communities (LTS)
- Wetlands and other waters (LTS)
- Environmental corridors (LTS)
- Local tree protection policies and HCPs (LTS)
- Secondary biological effects of sea level rise adaptation strategies (LTS)
- California Ridgway's Rail (LTS with Mitigation)
- San Francisco Common Yellowthroat and Alameda Song Sparrow (LTS with Mitigation)
- Invasive species (LTS with Mitigation)

Cultural Resources

Alternative #2 would result in development on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of effects on cultural resources:

- Historic resources (LTS)
- Paleontological resources (LTS)
- Currently unknown archaeological resources (LTS with Mitigation)
- Tribal cultural resources (LTS with Mitigation)

Geology

Alternative #2 would result in development on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of geological effects. As indicated for the Project, the following geological effects pursuant to Alternative #2 would be less than significant, primarily a result of required compliance with existing regulatory requirements:

- Seismic hazards (LTS)
- Differential settlement and unstable or expansive soils (LTS)
- Substantial soil erosion or loss of topsoil (LTS)
- Septic tanks (No Impact)
- Landslides (LTS with Mitigation)

Greenhouse Gas Emissions

Alternative #2 would reduce the volume of GHG emissions as compared to the Project, but would still generally result in the same types of GHG emissions impacts:

- Stationary source emissions subject to Cap-and-Trade (LTS)
- Permitted stationary source emissions (LTS)

Hydrology

Alternative #2 would result in development on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of hydrology impacts:

- Water quality (LTS)
- Groundwater (LTS)
- Drainage patterns and runoff (LTS)
- Flood hazards (LTS)

Land Use

As indicated for the Project, most of the following effects on land use and policy consistency determinations for Alternative #2 would be less than significant. Like the Project, Alternative #2 would require amendments to certain provisions of the South San Francisco Municipal Code

- Consistency with the Comprehensive Airport Land Use Compatibility Plan for SFO (Consistent)
- Consistency with Genentech's BCDC Permits (Consistent)
- Consistency with South San Francisco General Plan (1999) Land Use Element (Consistent)
- Consistency with the East of 101 Area Plan (Consistent)
- Physically dividing an established community (LTS)
- Conflicts with policies or regulation adopted to avoid or mitigate an environmental effect (LTS)
- Conflicts with applicable Habitat Conservation Plan (LTS)
- Consistency with the South San Francisco Municipal Code (Inconsistent, amendments needed)

Noise

Alternative #2 would result in construction activity and operations on many of the same Opportunity Sites as now identified for the Project, resulting in generally the same types of noise impacts:

- Operational noise (LTS)
- Operational ground-borne vibration (LTS)
- Excessive noise due to location within an Airport Land Use Plan (No Impact)
- Construction noise (LTS with Mitigation)
- Construction-period ground-borne vibration (LTS with Mitigation)
- Substantial permanent increase in ambient noise (SU)

Population, Housing and Employment

Although Alternative #2 would increase employment to a lesser extent than would the Project, it would still result in an increase in employment at the Genentech Campus, resulting in generally the same types of impacts on population, housing and employment:

- Inducing substantial population growth (LTS)
- Displacing substantial numbers of existing housing units (No Impact)
- Displace substantial numbers of people (No Impact)

Public Services

Although Alternative #2 would not increase employment and commensurate demands on public services to the same extent as would the Project, Alternative #2 would result in an increase in employment at the Genentech Campus resulting in generally the same types of impacts to public services:

- Police services (LTS)
- Fire and emergency medical services (LTS)
- Recreation (LTS)

Utilities and Service Systems

Although Alternative #2 would not increase employment, new construction and commensurate demands on utilities and services to the same extent as would the Project, Alternative #2 would result generally the same types of impacts:

- Water supply infrastructure (LTS)
- Exceedances of wastewater treatment requirements (LTS)
- Wastewater treatment and disposal capacity (LTS)
- Wastewater collection infrastructure (LTS)
- Stormwater facilities (LTS)
- Solid waste disposal (LTS)
- Energy (LTS)

Alternative 3: Different Land Use Mix

Description of Alternative #3

Under the Different Land Use Mix Alternative (Alternative #3), the overall net new development within the Campus would be retained at approximately 4.3 million square feet (same as the Project), but the mix of land uses within the Campus would have a different land use mix, fixed as a not-to-exceed total by land use type. This alternative would remove the flexibility of adapting new development to accommodate changing needs of the Campus and, as indicated in **Table 20-8**, would include more lab space and growth in new manufacturing space, with a commensurate reduction in office space as compared to the EIR Project Description.

Table 20-8: Alternative #3, Buildout Potential by Land Use Type (sf)

	<u>Office</u>	<u>Lab</u>	<u>Mfg.</u>	<u>Amenity</u>	<u>Total Bldg. Area</u>
Existing 2017 Baseline	1,566,000	1,718,000	1,285,000	145,000	4,715,000
Potential Net New Development, Alternative #3	<u>1,693,000</u>	<u>2,000,000</u>	<u>300,000</u>	<u>300,000</u>	<u>4,293,000</u>
Relative % of Net New Development	39%	46%	7%	7%	
Alternative #3 Buildout	3,260,000	3,718,000	1,585,000	445,000	9,008,000
Relative change in buildout, as compared to Project	-730,000	+ 433,000	+ 300,000	-3,000	same

Alternative #3 presents a scenario as to how the Project Area may develop over time, but with an established, or “fixed” composition of future land uses that is substantially different than the EIR Project Description.

Trip Cap

As part of the Master Plan Update, the Project includes a TDM program goal to achieve a 50 percent reduction in drive-alone trips at buildout, and a commensurate Trip Cap. The Trip Cap is equivalent to the number of drive-alone vehicle trips as previously analyzed in the 2007 Master EIR and subsequent 2012 Supplemental Master EIR for the Campus Master Plan, and the 2002 Britannia East Grand EIR for the area now known as the South Campus. The Trip Cap holds this previously analyzed number of drive-alone trips constant, while increasing the underlying entitlement from approximately 6.8 million square feet, up to 9 million square feet of building space. To achieve this Trip Cap, Genentech proposes to implement TDM programs for all of its employees at levels that can reduce drive-alone trips such that the Trip Cap is not exceeded.

This Trip Cap is intended to provide Genentech and the City of South San Francisco with flexibility to modify and adapt the land use mix within the Campus over time depending upon future needs, while holding a constant “cap” on the number of net new AM peak-hour vehicle trips that the ultimate land use mix can generate. The Trip Cap is used as a proxy, or means by which the maximum land use development under the Master Plan Update is measured. By holding the Trip Cap constant, a variety of land use scenarios can be accommodated at the Campus (including this Different Land Use Mix Alternative) without exceeding the previously analyzed off-Campus traffic effects. One of the purposes of Alternative #3 is to compare the

flexibility of the Master Plan Update and its proposed “Trip Cap” to an alternative that instead “fixes” the land use program for buildout of the Campus with a different mix of land uses that generate a relatively lower base trip rate.

Comparative Environmental Analysis of Alternative #3

Impacts Reduced as Compared to Project

The potential environmental effects that would be reduced under the Alternative #3 as compared to the Project is relatively short because Alternative #3 is, in many respects, the same as the Project. Alternative #3 results in the same buildout potential of 9 million square feet of net new building space, new development would occur on the same Opportunity Sites, employment growth would be relatively similar, and new land uses would include the same types of office, lab and amenity space as those of the Project. Therefore, the following potential environmental effects pursuant to Alternative #3 would be substantially similar to those of the Project, with the only differences being the comparative magnitude of effects.

Transportation (SU)

Under Alternative #3, the land use mix is balanced in favor of a greater percentage of net new lab space and manufacturing space, with a commensurate reduction in office space. The AM peak hour trip rate for lab space is approximately 80% of the trip rate for office space, and the trip rate for manufacturing space is approximately 27% of the trip rate for office space. As indicated in **Table 20-9**, these differences in trip rates per building space would generate approximately 4,653 net new AM peak hour base trips (without considering any TDM reductions), or about 90% fewer net new AM peak hour base trips than the Project, prior to TDM reductions. When added to the existing AM peak hour trips prior to TDM, Alternative #3 would result in a buildout of 9,037 AM peak hour base trips, or about 4% less than the 9,432 AM peak hour base trips generated under buildout of the Project.

As also indicated in Table 20-9, Alternative #3 could achieve the Trip Cap threshold of 5,216 total AM peak hour trips by implementing a TDM program capable of achieving an approximately 42% reduction in AM peak hour trips, generally consistent with Genentech’s current trip reduction rate. In comparison, the Project will require implementation of a TDM program capable of achieving a greater reduction in AM peak hour trips.

Table 20-9: Alternative #3 Trip Generation and TDM Requirement

<u>Land Use</u>	<u>Building Space</u>	<u>AM Base Trip Rate</u>	<u>AM Trips</u>	<u>Total AM Peak Trips</u>
<u>Existing</u>				
Office	1,566	1.29	2,021	
Labs	1,718	1.03	1,766	
Mfg.	1,285	0.35	448	
Amenity	<u>145</u>	1.03	<u>149</u>	
subtotal:	4,715		4,384	4,384
		Existing TDM Rate:	42%	
			2,543	
<u>Plus Alternative #3</u>				
Office	1,693	1.29	2,184	
Labs	2,000	1.03	2,056	
Mfg.	300	0.35	105	
Amenity	<u>300</u>	1.03	<u>308</u>	
subtotal:	4,293		4,653	4,653
Total:	9,008	Total AM Peak Trips (before any TDM):		9,037
		Trip Cap:		<u>-5,216</u>
		# of Base Trips Exceeding Trip Cap:		3,821
		Level of Campus-wide TDM required:		42.3%
		Total Alternative #3 Trips, with 42% TDM:		5,216

After adjusting for the Trip Cap and necessary TDM effectiveness, Alternative #3 would result in the same traffic and transportation effects as those of the Project:

- Local intersections and arterial roadway segments (significant and unavoidable impacts at several locations, payment of East of 101 Traffic Fees as mitigation)
- Freeway ramps and mainline freeway segments (significant and unavoidable impacts at several locations)
- Vehicle miles travelled (the Trip Cap's required 42% reduction in drive-alone rate is assumed to result in a commensurate 42% reduction in AM peak hour trips, resulting in a daily per employee VMT rate of more than 15% below the regional or Citywide average)
- Internal vehicle circulation (existing roadways provide sufficient vehicular circulation to serve circulation needs)
- Pedestrian circulation (not detrimental to existing pedestrian facilities, no conflict with adopted plans and programs regarding pedestrian mobility or safety)
- Bicycle circulation (fair share contribution toward bicycle improvements in the East of 101 Area through payment of East of 101 Traffic Impact Fees)

Impacts Greater than those of the Project

Utilities/Water Demand (LTS with Mitigation)

The increased emphasis on new lab space as compared to office space, and the potential increase in manufacturing space under Alternative #3 would result in a greater demand on water supply than the Project. Alternative #3 is estimated to generate an increased water demand of approximately 428,000 gallons per day, or a 45% increase in water demand as compared to the Project (approximately 294,000 gpd). This water demand takes into account all of the water conservation strategies and initiatives that Genentech has implemented throughout the existing Campus, and conservatively assumes that the increase in use of water for additional manufacturing purposes will be proportional to current industrial water use at the Campus. The Water Supply Assessment (WSA) prepared for this EIR by CalWater indicates that the Project's expected increase in water demand is included within CalWater's forecast of future water demands of the three Peninsula Districts, but does not address the potential additional water demands of this Alternative. However, some proportional comparisons can be made based on information provided in the WSA:

- The Project's water demands were found to represent approximately 18% of the overall increase in projected demand within CalWater's SSF District. Comparatively, Alternative #3 would generate a water demand representing approximately 26% of the overall increase in projected demand within CalWater's SSF District, leaving approximately 74% for other development projects.
- The Project's water demands, when added to increased water demands of other known projects in SSF, resulted in a combined water demand representing approximately 45% of the total projected increase in water demands of the District by year 2040, leaving 55% of that increase for other projects and general growth. Comparatively, adding the water demands of Alternative #3 to increased water demands of other known projects in SSF would result in a combined water demand representing approximately 53% of the total projected increase in water demands of the District by year 2040, leaving 47% of that increase for other projects and general growth.

Based on these comparisons, it would seem likely that the District would be able to provide adequate water supplies to meet existing and projected future customer demands (including those of the Alternative #3) for the next 20-plus years under normal water year conditions. However, before exceeding the approximately 294,000-gpd increase in water use as assessed in the WSA, a supplemental assessment would likely be necessary. Genentech's sustainability, conservation and water recycling efforts may decrease industrial-based water demands, such that the estimated water demand of Alternative #3 may be overly conservative. For example, Genentech, SSF and the Water District have initiated a joint exploration of the potential to reclaim a portion of treated effluent prior to disposal in the Bay, provide additional on-site treatment at the Campus and use this treated effluent for industrial applications. If such a program were to become successful, it would substantially reduce Campus water demands such that Alternative #3 might generate the same or less demands for water as the Project.

Same or Similar Effects

Alternative #3 would result in development on the same Opportunity Sites as identified for the Project, resulting in the same types of physical environmental effects. Alternative #3 would also result in generally the same overall new development, with land use types that are the same as those of the Project, but with a different composition between offices, lab space and amenity space. Whereas this Draft EIR has found the Project to result in numerous environmental effects that would be less than significant, that would be less than significant assuming compliance with all applicable regulatory requirements, or less than significant with implementation of identified mitigation measures, Alternative #3 would have similar less-than-significant effects. Each of the environmental effects of Alternative #3 would be the same or similar to those of the Project, with the only difference being the comparative magnitude of the effect.

The following effects pursuant to Alternative #3 would be the same as those of the Project, assuming compliance with all applicable regulatory requirements and implementation of the same mitigation measures as identified for the Project:

Aesthetics

- Scenic vistas (LTS)
- Scenic resources as seen from a State Scenic Highway (LTS)
- Visual character (LTS)
- Light and glare (LTS with Mitigation)

Air Quality

- Consistency with Clean Air Plan (LTS)
- Construction-period emissions of criteria pollutants (LTS with Mitigation)
- Construction-period health risk (LTS with Mitigation)
- Operational health risks (LTS with Mitigation)
- Operational criteria pollutant emissions (SU)

Biological Resources

- Tidal aquatic species and essential fish habitats (LTS)
- Burrowing Owl (LTS)
- Harbor Seal and California Sea Lion (LTS)
- Bird strikes (LTS)
- Sensitive natural communities (LTS)
- Wetlands and other waters (LTS)
- Environmental corridors (LTS)
- Local tree protection policies and HCPs (LTS)
- Secondary biological effects of sea level rise adaptation strategies (LTS)
- California Ridgway's Rail (LTS with Mitigation)
- San Francisco Common Yellowthroat and Alameda Song Sparrow (LTS with Mitigation)
- Invasive species (LTS with Mitigation)

Cultural Resources

- Historic resources (LTS)
- Paleontological resources (LTS)
- Currently unknown archaeological resources (LTS with Mitigation)
- Tribal cultural resources (LTS with Mitigation)

Geology

- Seismic hazards (LTS)

- Differential settlement and unstable or expansive soils (LTS)
- Substantial soil erosion or loss of topsoil (LTS)
- Septic tanks (No Impact)
- Landslides (LTS with Mitigation)

Greenhouse Gas Emissions

- Stationary source emissions subject to Cap-and-Trade (LTS)
- Permitted stationary source emissions (LTS)
- Operational emissions fully covered under the SSF CAP (LTS)
- Other operational GHG emissions by year 2020 (LTS)
- Other operational GHG emissions by year 2030 (LTS)

Hydrology

- Water quality (LTS)
- Groundwater (LTS)
- Drainage patterns and runoff (LTS)
- Flood hazards (LTS)

Land Use

- Consistency with the Comprehensive Airport Land Use Compatibility Plan for SFO (Consistent)
- Consistency with Genentech's BCDC Permits (Consistent)
- Consistency with South San Francisco General Plan (1999) Land Use Element (Consistent)
- Consistency with the East of 101 Area Plan (Consistent)
- Physically dividing an established community (LTS)
- Conflicts with policies or regulation adopted to avoid or mitigate an environmental effect (LTS)
- Conflicts with applicable Habitat Conservation Plan (LTS)
- Consistency with the South San Francisco Municipal Code (Inconsistent, amendments needed)

Noise

- Operational noise (LTS)
- Operational ground-borne vibration (LTS)
- Excessive noise due to location within an Airport Land Use Plan (No Impact)
- Construction noise (LTS with Mitigation)
- Construction-period ground-borne vibration (LTS with Mitigation)
- Substantial permanent increase in ambient noise (SU)

Population, Housing and Employment

- Inducing substantial population growth (LTS)

- Displacing substantial numbers of existing housing units (No Impact)
- Displace substantial numbers of people (No Impact)

Public services

- Police services (LTS)
- Fire and emergency medical services (LTS)
- Recreation (LTS)

Utilities and Service Systems

- Water supply infrastructure (LTS)
- Exceedances of wastewater treatment requirements (LTS)
- Wastewater treatment and disposal capacity (LTS)
- Wastewater collection infrastructure (LTS)
- Stormwater facilities (LTS)
- Solid waste disposal (LTS)
- Energy (LTS)

Environmentally Superior Alternative

CEQA requires the identification of the environmentally superior alternative in an EIR. Where a no project alternative has been identified as the environmentally superior alternative, CEQA requires the EIR to identify another alternative that would be considered environmentally superior in the absence of the no project alternative.

Table 20-10 provides a summary comparison of the impacts of each of these alternatives relative to those of the Project, for those environmental topics where there is a difference. For each impact topic addressed in the Draft EIR chapters, this table identifies the extent to which this impact would be significant under each alternative, for example:

- no impact (No Impact)
- less than significant (LTS)
- less than significant with implementation of regulatory requirements (LTS with Regs)
- less than significant with implementation of mitigation measures recommended for the Project (LTS with MM)
- significant and unavoidable (SU)

As indicated in this Table, even for those environmental topics where differences between the Project and the alternatives have been identified, none of the alternatives (even the No Project Alternative, which continues the current 2007 Master Plan) is capable of changing a significant impact to less than significant, or is capable of fully avoiding an environmental effect of the Project.⁶ Rather, the differences between the

⁶ The only alternative that could lower all impacts to levels of less than significant would be an alternative that would reduce development potential from the previously approved 2007 Master Plan. The EIR for that 2007 Master Plan was certified with Statements of overriding considerations for these significant and unavoidable impacts, and that decision is not reconsidered in this EIR.

Project and the alternatives are measured in relative magnitude. Table 20-10 also compares the relative magnitude of impacts under each alternative relative to the magnitude of the impact of the proposed Project. For example:

- the symbol “↓” indicates that the alternative would have a less substantial impact relative to the Project, even if the CEQA conclusion were similar for both the Project and the alternative (e.g., an alternative could have a less substantial adverse effect than does the Project, even though the impact of the Project and the alternative can be addressed through implementation of the same mitigation measure);
- the symbol “↑” indicates that the alternative’s impact would be relatively more substantial than the proposed Project; and
- the symbol “↔” indicates that the relative magnitude of the alternative’s impact would be the same or similar to the proposed Project.

Table 20-10: Summary of Impacts and Relative Comparison to the Project

<u>Environmental Topic</u>	<u>Project</u>	<u>Alternative 1: No Project</u>	<u>Alternative 2: Reduced Project</u>	<u>Alternative 3: Alternative Mix of Uses</u>
<u>Air Quality</u>				
Construction Emissions	LTS with Regs	LTS with Regs, ↓	LTS with Regs, ↓	LTS with Regs, ↔
Operation Emissions	SU	SU, ↓	SU, ↓	SU, ↔
Operation Health Risk	LTS with MM	LTS with MM, ↓	LTS with MM, ↓	LTS with MM, ↑
<u>Geology and Soils</u>				
Landslide Potential	LTS with MM	LTS, ↓	LTS with MM, ↔	LTS with MM, ↔
<u>Greenhouse Gas</u>				
GHG Emissions	LTS	LTS, ↓	LTS, ↓	LTS, ↓
<u>Land Use</u>				
Policy Consistency	Not consistent	Consistent, ↓	Not Consistent ↔	Not Consistent, ↔
<u>Transportation:</u>				
Trip Generation/Traffic	SU	SU, ↓	SU, ↔	SU, ↓
<u>Utilities</u>				
Utilities, Water	LTS	LTS, ↓	LTS, ↓	LTS with MM, ↑

Summary Comparisons of Alternatives

As shown in Table 20-10, Alternative #1 (or the No Project Alternative) would result in an order of magnitude reduction in eight different environmental topic areas. Generally, the lower development potential of Alternative #1 (at 6.8 million square feet) would generate less overall construction-period and operational emissions of air quality pollutants, toxic air contaminants, GHGs, and would generate less vehicle trips and would lower demands on utilities as compared to the Project. Alternative #1 has a reduced development footprint, fewer identified Opportunity Sites where new development may occur, and does not include Opportunity Sites on steeper hillsides where mitigation measures would otherwise be required to address potential slope failure.

Based on order of magnitude effects, Alternative #1 (the No Project Alternative) is environmentally superior to the Project and to all other alternatives. However, Alternative #1 does not substantially lessen or avoid a significant environmental effect of the Project that cannot otherwise be substantially lessened or avoided with implementation of all feasible mitigation measures.

Because the No Project Alternative has been identified as the environmentally superior alternative, CEQA requires this EIR to identify another alternative that would be considered environmentally superior in the absence of the No Project Alternative. Alternative #2 (or the Reduced Project Alternative) would result in an order of magnitude reduction in five different environmental topic areas as compared to the Project. Like the No Project Alternative, the lower development potential of Alternative #2 (at 7.9 million square feet) would generate less overall construction-period and operational emissions of air quality pollutants, toxic air contaminants and GHGs, and would lower demands on utilities as compared to the Project. Based on order of magnitude effects, Alternative #2 (the Reduced Project Alternative) is the environmentally superior alternative in the absence of the No Project. However, Alternative #2 (like the No Project Alternative) does not substantially lessen or avoid a significant environmental effect of the Project that cannot otherwise be substantially lessened or avoided with implementation of all feasible mitigation measures.