

# CHAPTER IV

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## Environmental Setting, Impacts, and Mitigation Measures

### Overview

This chapter analyzes the physical environmental effects of implementing the Central SoMa Plan (the Plan) described in Chapter II, Project Description, including associated street network changes and open space improvements. This chapter describes the environmental and regulatory settings for topics evaluated under the California Environmental Quality Act (CEQA), assesses impacts, and identifies feasible mitigation measures to avoid or substantially reduce impacts that have been determined to be significant. This EIR evaluates the maximum environmental impact that could result from the implementation of all components of the Plan policies and where applicable, subsequent development projects.

### Initial Study

On February 12, 2014, following the release of the 2013 draft Central SoMa Plan for public review, the Planning Department prepared an Initial Study to determine which environmental topics would require further study and analysis in an EIR. The Initial Study (Appendix B) found the topics of: Population and Housing; Greenhouse Gas Emissions; Recreation and Public Space; Public Services; Geology, Soils and Seismicity; Mineral and Energy Resources; and Agriculture Resources to be less than significant, and would require no further study in the EIR. The Initial Study found significant impacts related to Biological Resources and Hazards and Hazardous Materials, and mitigation measures were identified and would reduce those impacts to less than significant. The Initial Study's conclusions are summarized in Table S-2 in the Summary.

Because the draft 2013 Plan has been superseded by the current Plan, published in August 2016, an evaluation has been conducted to ensure that the Initial Study's conclusions, based on the prior draft of the Plan would remain valid for the current 2016 draft Plan for those topics evaluated in the Initial Study. The primary differences between the two plans include: geography (the 2016 draft Plan Area occupies a smaller area fully contained within the larger 2013 draft Plan Area); the 2016 draft Plan includes a single height proposal as opposed to two height options in the 2013 draft Plan; the 2016 draft Plan includes a variety of strategies to promote retention of Production, Distribution and Repair (PDR) uses, whereas the 2013 draft Plan included none. And lastly, while both plans would regulate building envelope, setback, and lot consolidation, they would do so in different ways, with the more detailed controls in the current 2016 draft Plan replacing similar, but less exacting requirements of the 2013 draft Plan. Because the area of effect became more limited, proposed zoning and height options became more focused, proposed regulations more stringent and exacting than the 2013 draft Plan, the differences between the two Plans would not result in new effects or more severe physical environmental impacts than those disclosed in the Initial Study. As such, the findings relating to topics of

population and housing; recreation; utilities and service systems (except for potential impacts related to wastewater, which is addressed in this EIR); public services; geology and soils; hydrology and water quality (except for potential impacts related to effects of combined sewer system operation on water quality and potential impacts of sea level rise, also addressed in this EIR); biological resources; hazardous materials; mineral and energy resources; and agricultural resources would continue to be less than significant or less than significant with mitigation and no further analysis of topics covered in the Initial Study is required.

## Scope and Organization of Analysis

This chapter is organized by environmental resource topic, as follows:

Chapter IV Sections	
A. Land Use and Land Use Planning	F. Air Quality
B. Aesthetics	G. Wind
C. Cultural and Paleontological Resources	H. Shadow
D. Transportation and Circulation	I. Hydrology and Water Quality
E. Noise and Vibration	

Each of the environmental topics in the table above is presented within a setting, which is a description of the physical characteristics germane to the environmental topic in order to compare conditions as they exist without the Plan and then again with anticipated activities, regulations and subsequent development under the Plan, which is the basis for the analysis of environmental impacts. Thus, the evaluation of impacts in Chapter IV, Environmental Setting, Impacts, and Mitigation Measures under each environmental topic is based on specific “study areas” dictated by the characteristics of the resource being evaluated, as well as by the type, magnitude and location of where potential environmental effects could occur. The introduction to each of the resource topics in Chapter IV defines the setting where effects of the Plan are considered and clarifies the relevant details regarding the definition and location of the study area if it were to differ from the Plan Area as shown on Figure II-1, Central SoMa Plan Area Boundaries, in Chapter II, Project Description.

Each section of Chapter IV contains the following elements, based on the requirements of CEQA:

- Environmental Setting.** This subsection presents a description of the existing physical environmental conditions in the Plan Area with respect to each resource topic as of April 2013, which is the date the San Francisco Planning Department issued a Notice of Preparation initiating environmental review of the Central SoMa Area Plan. The environmental setting constitutes the baseline physical conditions by which potential impacts of the Plan are assessed for significance. CEQA Guidelines Section 15360 defines the environment (or the setting) as “the physical conditions which exist within the area which will be affected by a proposed project.”
- Regulatory Framework.** This subsection describes the relevant laws, regulations, and ordinances that apply to the environmental resources within the Plan Area and the governmental agencies responsible for enforcing those laws and regulations. (Chapter III identifies the potential environmental impacts attributable to possible planning and policy inconsistencies that may occur if the Central SoMa Plan were adopted.)

- **Impacts and Mitigation Measures.** This subsection evaluates the potential for the proposed project to result in adverse environmental effects. Significance criteria for evaluating the environmental impacts are defined at the beginning of this subsection, and the “Approach to Analysis” presents the thresholds of significance relevant to the topical significance criteria used to evaluate the impacts of the Plan and associated street network changes and open space improvements. The conclusion of each impact analysis is expressed in terms of the impact significance, which is discussed further under “Significance Determinations,” below. Mitigation measures are identified where feasible for the impacts considered significant, consistent with CEQA Guidelines Section 15126.4, which states that an EIR “shall describe feasible measures which could minimize significant adverse impacts ... .” CEQA Guidelines Section 15364 defines feasible as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. The Planning Department, as sponsor of the proposed project, has indicated that, if the Central SoMa Plan were approved, then all feasible mitigation measures identified in this EIR that are within its purview would be implemented. In addition, this EIR may identify Improvement Measures, which are measures that are not required by CEQA because they are not necessary to mitigate significant impacts, but could nevertheless be implemented to reduce the severity of less-than-significant impacts.
- **Cumulative impacts** are discussed following the description of Plan impacts and identified mitigation measures. CEQA Guidelines Section 15355 states that cumulative impacts “refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” The cumulative impacts analysis considers the incremental effects of implementing the Plan together with the environmental effects of other closely-related past, present, and reasonably foreseeable probable future projects proposed by the Planning Department, other jurisdictions, or other entities (i.e., private developers, non-profit organizations, etc.). The analysis of cumulative impacts under each resource topic is based on the same setting, regulatory framework, and significance criteria as the analysis of project-specific impacts. Additional mitigation measures are identified if the analysis determines that the proposed project causes or makes a cumulatively considerable contribution to a significant adverse cumulative impact.

## Significance Determinations

The significance criteria used in this EIR are based on the San Francisco Planning Department’s Environmental Planning Division (EP) guidance regarding the thresholds of significance used to assess the severity of the Plan’s environmental impacts. EP guidance is based on Appendix G of the CEQA Guidelines, with some modifications. The significance criteria used to analyze each environmental resource topic are presented in each resource section of Chapter IV before the discussion of impacts. The categories used to designate impact significance are described as follows:

- **No Impact.** An impact is considered not applicable (no impact) if there is no potential for impacts or the environmental resource does not occur within the Plan Area or the area of potential effects; essentially a project would result in no physical changes in the Setting. For example, because the Plan Area is not within the vicinity of a private airstrip, there would be no impacts related to exposure of people residing or working in the Plan Area to excessive noise levels within the vicinity of a private airstrip. Many of these impacts were addressed in the Initial Study. Remaining impacts are discussed in the Approach to Analysis section of each environmental topic.

- **Less-than-Significant Impact.** This determination applies if there is potential for some limited effect, but not a substantial adverse effect that qualifies under the significance criteria as a significant impact. No mitigation is required for impacts determined to be less than significant.
- **Less-than-Significant Impact with Mitigation.** This determination applies if implementation of the Plan would result in an adverse effect that meets the significance criteria but feasible mitigation is available that would reduce the impact to a less-than-significant level.
- **Significant Unavoidable Impact or Significant and Unavoidable with Mitigation.** This determination applies if implementation of the Plan would result in an adverse effect that meets the significance criteria but there appears to be no feasible mitigation available to reduce the impact to a less-than-significant level or when the efficacy of a mitigation measure could not predict whether an impact would be fully reduced to insignificance. There may be certain situations in which mitigation may lessen a given impact, but the residual effects of that impact may continue to be adverse even after implementation of the mitigation measure(s). If this were the case, the EIR would characterize the impact as significant and unavoidable.

## Analysis Assumptions

This EIR analyzes the potential environmental effects of the Central SoMa Plan and associated street network changes and open space improvements. The analysis of physical impacts is based in part upon growth projections developed by the Planning Department for the Plan that inform the analysis of the Plan. The resulting conclusions inform the qualitative analysis of land use changes, while the quantitative analysis of, for example, changes in traffic patterns and transit ridership, is based on projected growth in population and employment.

CEQA directs lead agencies to identify the potential environmental effects of a project and to determine the significance of a project's environmental effects. CEQA contains a substantive mandate to mitigate adverse impacts. This EIR considers direct and indirect physical environmental effects that may be attributable to Plan implementation. A direct physical change in the environment is "a physical change in the environment which is caused by and immediately related to the project." An indirect physical change in the environment is "a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project." An EIR would only consider indirect effects if the change "is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable." In general, economic and social changes resulting from a project are not treated as significant effects on the environment.<sup>58</sup> Social and economic effects are only relevant under CEQA if they would result in or are caused by an adverse physical impact on the environment. To the extent that social or economic changes associated with Plan implementation may engender secondary or indirect physical changes, such effects are addressed in this EIR.

A discussion of socioeconomic effects is presented in Chapter V, Other CEQA Considerations, for informational purposes.

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<sup>58</sup> CEQA Guidelines Sections 15064(d)(1)-(3) and 15064(e).

## Growth Assumptions

Citywide growth forecasts prepared by the Planning Department are part of the basis of the analysis in this EIR. The Department regularly updates citywide growth forecasts that are based on Association of Bay Area Governments' (ABAG) regional projections of housing and employment growth. The Department allocates the regional growth forecasts to 981 Traffic Analysis Zones (TAZs)<sup>59</sup> in San Francisco by first accounting for in-city growth that is already anticipated (both individual projects and planning efforts) in the so-called development pipeline, subtracting pipeline growth from the City's share of the regionally forecast growth, and allocating the residual amount of ABAG-forecast growth on the basis of weighting factors developed from analysis of both development capacity and existing development. To establish baseline numbers for the Plan, the Planning Department relied on a 2010 Dun & Bradstreet database for employment numbers and the 2010 Census and the Department's Land Use Database for existing housing units. It is noted that the growth forecasts for the No Project condition (2040 Baseline) and for the Plan differ somewhat from those shown in the Initial Study due to modifications to the Plan since the Initial Study was published.<sup>60</sup>

**Table IV-1, Summary of Growth Projections**, presents the population and employment growth assumed in the Plan Area between 2010 (the base year for the analysis) and 2040 ("buildout year" or "planning horizon"). This growth amounts to approximately 14,400 additional households, approximately 25,500 additional residents and about 63,600 additional jobs under the Plan. It is noted that a certain amount of development and growth in the Plan Area would be expected to occur even without implementation of the Plan. In many cases, existing development does not reach its full potential under current building height limits, and those parcels could be developed regardless of future changes in land use policies and zoning controls. Development that could occur without project implementation is shown in the table below under the No Project scenario.

## Approach to Analysis

The Central SoMa Plan is a regulatory program. Its approval would mean that the City would amend the *General Plan*, *Planning Code* and associated Zoning Maps, including height and bulk district maps, to reflect the regulations as amended by the Plan. Adoption of the Plan and implementation of its various components would not result in direct physical changes in the environment. The use districts, *Planning Code* controls (particularly the amended limits to height and bulk districts), land use policies and design guidelines have been developed to encourage and incentivize subsequent development of housing, commercial and employment generating uses within the Plan Area. These uses and activities are considered the logical consequences of adopting the Plan. This EIR considers the environmental impacts of the uses and activities of the Plan and its components subsequent to Plan adoption, which are the indirect effects of the Plan and are studied at a "programmatically level" of review. On the other hand, because sufficient detail exists related to the

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<sup>59</sup> TAZs are the smallest geographic units of measurement associated with existing job and household counts.

<sup>60</sup> Since publication of the Initial Study, Plan development assumptions have been modified to add development capacity to a portion of the block bounded by Bryant, Fifth, Brannan, and Sixth Streets (location of the San Francisco Flower Mart) and allow for approximately 430 units of affordable housing at Fifth and Howard Streets. In addition, development forecasts were adjusted to move the approved 5M Project and the under-construction Moscone Center Expansion from Plan-induced growth to cumulative growth. These modifications to the growth assumptions would not result in substantial or more severe physical impacts for topics evaluated in the Initial Study.

Plan's open space and street network improvements, this EIR considers the direct physical impacts of implementing these Plan components at a "project level" of review, unless otherwise noted.

**TABLE IV-1 SUMMARY OF GROWTH PROJECTIONS**

	Baseline (2010)	No Project (2040)	Central SoMa Plan (2040)
<b>Housing Units (Total)</b>	<b>7,800</b>	<b>16,800</b>	<b>22,300</b>
Change from Baseline	—	9,000	14,500
Change from No Project	—	—	5,500
<b>Households (Total)<sup>a</sup></b>	<b>6,800</b>	<b>16,000</b>	<b>21,200</b>
Change from Baseline	—	9,200	14,400
Change from No Project	—	—	5,200
<b>Population (Total)<sup>b</sup></b>	<b>12,000</b>	<b>28,200</b>	<b>37,500</b>
Change from Baseline	—	16,200	25,500 <sup>c</sup>
Change from No Project	—	—	9,300
<b>Employment (Jobs) (Total)</b>	<b>45,600</b>	<b>72,800</b>	<b>109,200</b>
Change from Baseline	—	27,200	63,600 <sup>c</sup>
Change from No Project	—	—	36,400

SOURCE: San Francisco Planning Department, 2016; Fehr & Peers, 2015.

NOTES:

Numbers rounded to nearest 100; some columns and rows do not add due to rounding.

- Assumes an 87 percent occupancy rate for existing households (2010 Baseline) which is based on the 2010 Census Data and appears to reflect a large number of newly constructed but not yet occupied units. Assumes a 95 percent occupancy rate for all Plan Area households and existing households under future conditions in the remaining years.
- Assumes 1.77 persons per household.
- As described in Chapter VI, Alternatives, the Land Use Variant would result in about 10 percent fewer new housing units and about 4 percent more new employment than would the Plan in 2040.
- The 2016 Central SoMa Plan is contained entirely within the boundaries of the 2013 draft Plan Area. The Department analyzed projected growth in employment and residential uses for the 2013 draft Plan and determined that 95 to 97 percent of this projected growth is anticipated to occur in the 2016 draft Plan Area. Thus, the numbers presented in this table, are conservative (i.e., higher) and would not substantively alter the conclusions reached in this EIR. These modifications to the growth assumptions would not result in substantial or more severe physical impacts for topics evaluated in the Initial Study.

The EIR assumes that the amended land use regulations and policy programs associated with the Plan would apply to subsequent development projects, that if implemented could result in physical changes in the environment. Future changes in land uses would, thus, not be caused by Plan policies or zoning, but by subsequent development projects that could occur on individual sites within the Plan Area as a result of these policy and zoning changes. In parts of the Plan Area where amended regulations would result in increases to maximum building heights, this EIR anticipates subsequent development to be more likely to occur than without the Plan. This is because the regulatory changes and policies proposed by the Plan have been developed to incentivize subsequent development by expanding the types of land uses that may be permitted

in areas where they are currently restricted or prohibited by creating incrementally greater potential buildable area on sites through changes in permitted height limits and building bulk controls.<sup>61</sup>

Analysis of the physical effects of implementation of the Plan is based in part on the above growth assumptions, which are of primary relevance for the analysis of effects related to the intensity of development and associated activities, such as transportation, air quality, and noise.

For other effects related to the physical realm, the Planning Department considered changes in height districts in conjunction with an analysis of soft sites (i.e., sites developed with a relatively lower-value use than allowed by the zoning, such as a service station or an older industrial building that is well shorter than the height limit) to gauge the likelihood of certain sites being developed, to create a model that reflects build out of the Plan Area if the Plan's proposed amendments to use districts and permitted height districts were adopted. The resulting computer-generated model is used to evaluate shadow and aesthetic impacts. It is also the basis for a physical model that is assembled and tested in a boundary layer wind tunnel to determine the Plan's effects on pedestrian-level winds.

The three-dimensional model does not incorporate fine-grained architectural detailing for each parcel. Instead, the model consists largely of simple extrusions of blocks and lots in the Plan Area to represent a buildout condition that reflects base height limits of up to 85 feet. Where heights would be permitted above the 85-foot-limit, building features such as reduced floorplates and upper-level setbacks were incorporated into the model in a manner to reflect *Planning Code* requirements pertaining to building bulk and mass.

Soft sites are assumed more likely to redevelop under the Plan than a site occupied by a relatively higher-value use (e.g., an office or residential building at or close to the height limit). The model assumes that soft sites are redeveloped and other sites that are currently occupied by higher value uses would remain. These assumptions, with a limited number of exceptions, are not based on actual project applications on file with the Planning Department. Instead, they reflect the Department's judgment related to the potential for development within the Plan Area. These assumptions inform an understanding of the intensity and capacity of future population growth within the Plan Area as a consequence of implementing the Plan's regulatory program and should not be understood as predicting how a particular site would change in the future.

It is noted that, while the assumptions are based on aggregating outcomes facilitated by the Plan's regulatory changes, there could also be specific situations, conditions or constraints not considered by these assumptions that would constrain or result in no physical changes at certain locations within the Plan Area. In particular, the model of the Plan Area incorporates assumptions that some sites, due to existing constraints that are assumed to continue into the future, may not fully build out to the maximum land use and building intensities assumed for the Plan articulated in the Plan's Goal VIII (see Chapter II, Project Description). Subsequent development may be constrained by *Planning Code* requirements that limit that separation of towers, as well as other factors. Accordingly, the assumptions driving Plan Area build out may be viewed as conservative.

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<sup>61</sup> Please refer to Table VI-1 in Chapter VI, Alternatives for a comparison of estimated increases in development that would occur under the Plan as compared to a number of Plan alternatives, including a No Project alternative.

## Subsequent Development Projects

The EIR analyzes the Plan at a “program” level of analysis pursuant to CEQA Guidelines Section 15168. The following is a list of known subsequent development projects (based on a review of the Department’s Environmental Evaluation Applications) located within the Plan Area that would occur under the Plan, if approved. Accordingly, these projects are not considered in the cumulative analysis, but rather in the Plan analysis, as the proposed uses and intensity of development would be allowed under the Plan. It is important to note that this EIR does not analyze the specific environmental impacts of these projects. These projects would be subject to their own environmental evaluation, as described in Chapter I, Introduction.

- **630–698 Brannan Street (Flower Mart site):** The proposed development would include approximately 2,030,600 square feet of office, 99,000 square feet of retail, and 115,000 square feet of PDR uses. Existing buildings on the Flower Mart site to be demolished include one existing single-story warehouse-style building, four single-story-with-mezzanine buildings, two single-story retail/warehouse buildings, and one single-story industrial building—totaling 157,541 square feet on four adjoining lots.
- **725 Harrison Street:** The proposed development would include 907,300 square feet of office, and 53,600 square feet of flexible space could accommodate PDR uses.
- **598 Brannan Street:** The proposed development would consist of four new buildings containing 984,400 square feet of office, 61,340 square feet of retail, and 104,800 square feet of residential (approximately 100 dwelling units). Existing buildings to be demolished include the four existing one- and two-story commercial, industrial, and warehouse buildings and associated surface parking lots. The proposed project would also include a new approximately 33,000 square-foot park at the center of the project site.
- **505 Brannan Street:** The proposed project is a vertical addition to an office building approved by the Planning Commission in December 2014, and in construction as of February 2016. The proposed project will consist of up to 165,000 square feet of office space on 11 floors above the six-story base project. The combined buildings will have a height of 240 feet.
- **636–648 Fourth Street:** The proposed project would include a 350-foot-tall primarily residential tower with 427 units and approximately 3,200 square feet of ground floor commercial space. Two existing one and two story commercial buildings and general advertising billboard would be demolished.
- **225 Shipley Street:** The proposed project would demolish the existing two-story, wood-framed commercial building and construct a new 45-foot-high, 11,496-square-foot residential building containing nine residential units.
- **265 Shipley Street:** The proposed project would include a lot merger and construction of a new five-story, nine-unit residential building, with six off-street parking spaces located in a below-grade garage.
- **300 Fifth Street:** The proposed project would include an eight-story building with seven floors of hotel use and residential units on the eighth floor. Additional mechanical and building support spaces would be included on a partial basement level.
- **345 Sixth Street:** The proposed project would construct an eight-story, mixed-use building with 89 single-residency occupancy units and a 3,090 square-foot commercial space.



- **350 Second Street:** The proposed project would construct a 21-story hotel with 480 rooms, 4,600 square feet of retail, 6,650 square feet of open space, including 5,750 square feet of public open space, 30 off-street valet parking spaces, and two new public art pieces.
- **399 Fifth Street:** The proposed project would construct a seven-story hotel with retail space on the ground floor.
- **400 Second Street:** The proposed project would demolish the existing one- to four-story buildings and construct three new buildings.
- **451–453 Tehama Street:** The proposed project would add two dwelling units to a four-dwelling-unit building.
- **462 Bryant Street:** The proposed project would add five stories, or approximately 49,995 square feet of office space, for a total of 63,239 square feet of office space, as well as a green roof and a commonly-accessible rooftop deck. The first-floor office and basement-level will remain.
- **481–483 Tehama Street:** The proposed project would demolish the existing two-story building and construct a new four-story residential building with six units.
- **31 Bryant Street:** The proposed project would retain the existing façade and construct a new six-story building.
- **Fifth, Clara, and Shipley Streets:** The proposed project would demolish the existing commercial buildings and construct a new mixed-use building.
- **655 Fourth Street:** The proposed project would demolish the existing buildings on site and build residential towers with approximately 900 units of residential housing, ground-floor retail, and a public plaza.
- **667 Folsom Street:** The proposed project would include demolition of a two two-story buildings and construction of a 130-foot-tall, 13-story, mixed-use building containing 240 dwelling units and 11,179 square feet of commercial retail space.
- **725–765 Harrison Street:** The proposed project would include construction of a mid-rise building and tower containing residential and production, distribution, and repair uses, as well as publicly-accessible open space.
- **744 Harrison Street:** The proposed project would demolish the existing two-story building and construct a new eight-story building with commercial, office, and residential uses.
- **768 Harrison Street:** The proposed project would demolish an existing two-story building and construct a new nine-story building with retail on the ground floor and mezzanine, with residential uses above.
- **88 Bluxome Street:** The proposed project would demolish the existing building and construct a new building containing office use, a fitness club, retail space, and underground parking and loading.
- **909–921 Howard Street:** The proposed project would demolish two two-story commercial buildings and construct a new mixed-use building with 178 residential units and approximately 8,051 square feet of retail space on the ground floor.
- **953–955 Folsom Street:** The proposed project would construct a nine-story building with commercial space and 18 residential units.

- **980 Folsom Street:** The proposed project would demolish the one-story building and construct a new mixed-use building containing 34 residential units and ground-floor retail.
- **996 Mission Street:** The proposed project would demolish a two-story building and construct and eight-story hotel with ground-floor retail.
- **999 Folsom Street:** The proposed project would demolish a former gas station and construct a seven-story mixed-use building with 84 residential units.
- **300 Fifth Street:** The proposed project would demolish the existing gas station and construct a new eight-story building with 11 residential units and ground-floor retail.

## Cumulative Impacts

### *Defining Cumulative Impacts*

Cumulative impacts, as defined in Section 15355 of the CEQA Guidelines, refer to two or more individual effects that, when taken together, are “considerable” or that compound or increase other environmental impacts. A cumulative impact from several projects is the change in the environment that would result from the incremental impact of the project when added to the impact of other closely related past, present, or reasonably foreseeable future projects. Pertinent guidance for cumulative impact analysis is provided in Section 15130 of the CEQA Guidelines:

- An EIR shall discuss cumulative impacts of a project when the project’s incremental effect is “cumulatively considerable” (i.e., the incremental effects of an individual project are considerable when viewed in connection with the effects of past, current, and probable future projects, including those outside the control of the agency, if necessary).
- An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.
- A project’s contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The discussion of impact severity and likelihood of occurrence need not be as detailed as for effects attributable to the project alone.
- The focus of analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact.

An EIR must then determine whether an individual project’s contribution to a cumulative impact is *considerable*. This means that the project’s proportional share is deemed to be adverse in conjunction with other similar projects that may combine to result in physical impacts.

The cumulative impact analysis for each individual resource topic is described in each resource section of this chapter, immediately following the description of the project-specific impacts and mitigation measures.

## *Approach to Cumulative Impact Analysis*

Two approaches to a cumulative impact are articulated in CEQA Guidelines Section 15130(b)(1): (a) the analysis can be based on a list of past, present, and reasonably foreseeable probable future projects producing closely related impacts that could combine with those of a proposed project, or (b) a summary of projections contained in a general plan or related planning document can be used to determine cumulative impacts. The analysis in this EIR employs both the list-based approach and a projections approach, depending on which approach best suits the individual resource topic being analyzed. For instance, Section IV.B, Aesthetics, considers several large individual projects that are anticipated or approved in the Plan Area and vicinity and that could alter the visual character and views in and surrounding the Plan Area, while at the same time making assumptions regarding other development patterns that are likely to occur as part of anticipated long-range growth. By comparison, Section IV.D, Transportation and Circulation, relies on the San Francisco County Transportation Authority's citywide travel forecasting model that encompasses many reasonably foreseeable individual projects anticipated in and surrounding the Plan Area, as well as elsewhere in San Francisco, and takes into account regional growth projections, which is the typical methodology the Planning Department applies to analysis of transportation impacts.

The following factors were used to determine an appropriate list of individual projects to be considered in the cumulative analysis:

- **Similar Environmental Impacts**—A relevant project contributes to effects on resources that are also affected by the proposed project. A relevant future project is defined as one that is “reasonably foreseeable,” such as a proposed project for which an application has been filed with the approving agency or has approved funding.
- **Geographic Scope and Location**—A relevant project is located within the geographic area within which effects could combine. The geographic scope varies on a resource by resource basis. For example, the geographic scope for evaluating cumulative effects to regional air quality consists of the affected air basin.
- **Timing and Duration of Implementation**—Effects associated with activities for a relevant project (e.g., short-term construction or demolition, or long-term operations) would likely coincide in timing with the related effects of the proposed project.

Based on the above, “large-scale” individual projects in and near the Plan Area are considered in the cumulative impact analysis. Past, present and probable future projects (CEQA Guidelines Section 15130(b)(1)(A)) in the Plan Area's vicinity, but outside of its boundaries, consist of the following:

- The “5M Project,” a 1.8-million-square-foot mixed-use development at 925 Mission Street and various parcels;
- The Moscone Center Expansion Project, which will add 300,000 square feet to the Moscone Center convention facility;
- 706 Mission Street, which will consist of a mixed-use residential building containing exhibit space for the Mexican Museum adjacent to Yerba Buena Gardens and Center for the Arts;
- The Sixth Street Improvement Project, which would reduce two existing travel lanes on Sixth Street in each direction to a single lane in each direction, along with right-of-way and sidewalk improvements between Market and Bryant Streets;

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**Overview**

- Better Market Street, which would include the redesign and various transportation and streetscape improvements to a 2.2-mile segment of Market Street between Octavia Boulevard and The Embarcadero;
- The University of California San Francisco's Long Range Development Plan (LRDP), which guides growth and directs the planning of 2.4 million gross square feet of UCSF's research and development, institutional, housing, and recreational uses over a 20-year period;
- The San Francisco Giant's Mission Rock/Seawall Lot 337 project on a parcel bounded by Third Street, Terry A. Francois Boulevard, Mission Rock Street, and China Basin Park adjacent to Pier 48, that would be developed to include up to approximately 1.6 million gross square feet of residential uses (1,600 units), up to 1.4 million gross square feet of commercial uses, and about 5.4 acres of open space throughout the parcels;
- The Golden State Warriors received approvals for a multipurpose sports arena and event center including two 11-story office buildings with ground-floor retail areas, a food hall, publicly accessible open spaces, and structured parking on an approximately 11-acre site within the Mission Bay South Redevelopment Plan Area; and

An Institutional Master Plan update for the Academy of Art University (AAU) that would allow AAU to accommodate anticipated enrollment and staff growth and associated increase need of space for institutional uses, dormitories, and indoor recreational uses through the changes of use of existing buildings in 12 study areas throughout downtown San Francisco, SoMa, the Van Ness Avenue corridor, and the Marina District. Five of these study areas overlap with the Plan Area, though no specific locations for the changes of use or construction of new buildings have been identified at this stage in the planning process for these geographic areas.