Town of Colma
General Plan 2040

Existing Conditions Report

Draft
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1 INTRODUCTION

GENERAL PLAN UPDATE

The Town of Colma is updating the existing General Plan which was adopted in 1999. While elements within the General Plan have been updated over time, this is the first comprehensive update since the original adoption.

WHAT IS A GENERAL PLAN?

California State Law requires that every local jurisdiction adopt a general plan "for the physical development of the town and any land outside its boundaries that bear relation to its planning." A general plan serves as the jurisdiction's blueprint for future decisions concerning a variety of issues including land use, health and safety, and resource conservation. All specific plans, subdivisions, Public Works projects, and zoning decisions must be consistent with the local jurisdiction's general plan. The Colma General Plan contains the goals and policies upon which the City Council and Zoning Administrator base their decisions. Typically, a general plan is designed to address the issues facing the jurisdiction for the next 15-20 years. The horizon year for Colma's General Plan Update is 2040.

The Town of Colma General Plan is made up of the Existing Conditions Report and a series of elements, or chapters, that portray the Town's vision and guiding principles. This document is the Existing Conditions Report.

EXISTING CONDITIONS REPORT

The Existing Conditions Report takes a "snapshot" of current conditions and trends in Colma. It provides a detailed description of a wide range of topics within the Town, such as demographics and economic conditions, land use, public facilities, and environmental resources. The report provides decision-makers, the public, and local agencies with the context for making policy decisions. Unlike the General Plan Elements, the Existing Conditions Report is objective and policy-neutral. The report will also serve as the "Environmental Setting" for the Environmental Impact Report (EIR) which will be prepared for the adoption of the General Plan.

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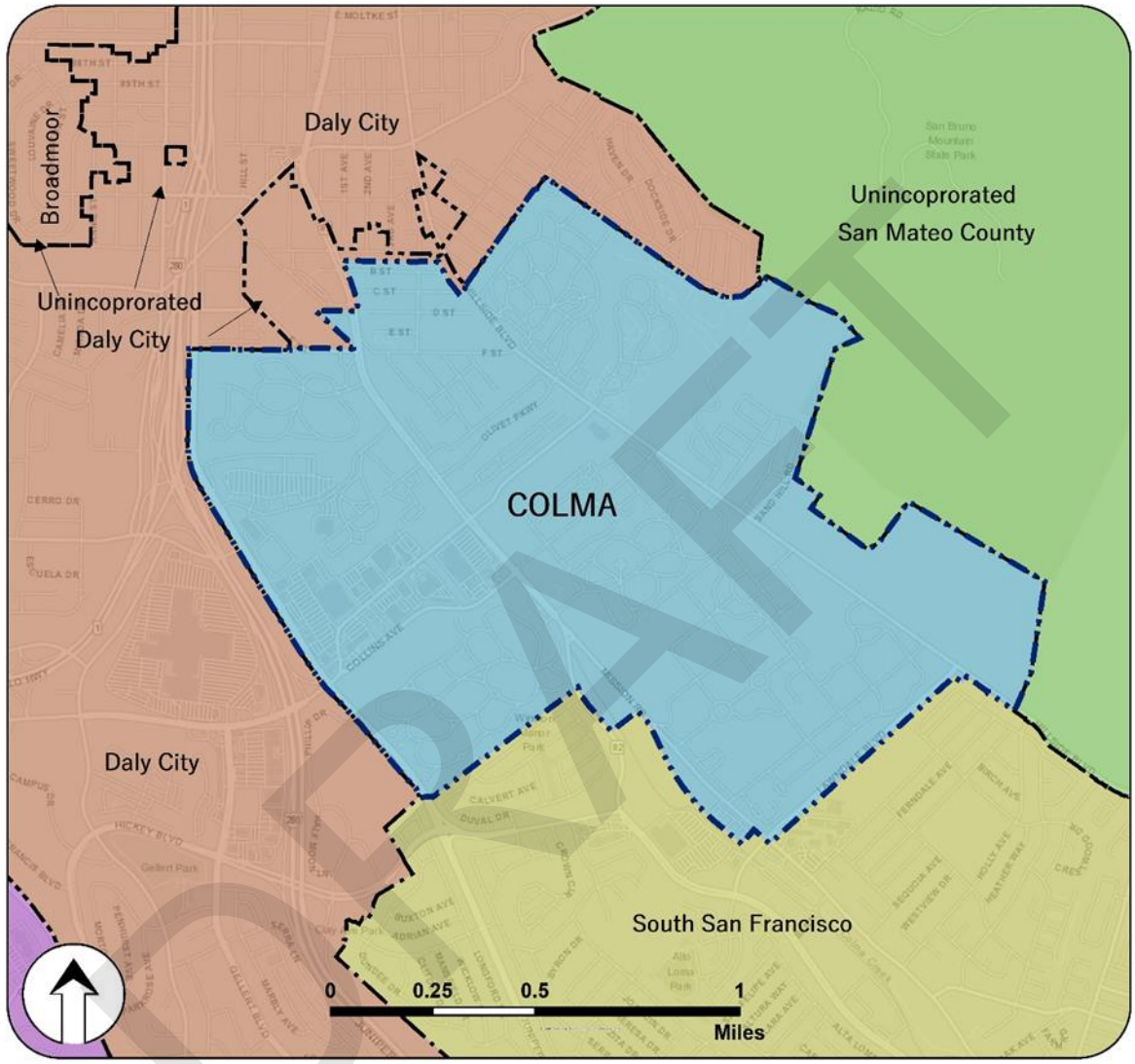
REGIONAL SETTING AND PLANNING BOUNDARIES

Figure 1-1: Town Location and Limits



Town of Colma's Sphere of Influence and Town Limits

Jurisdictional Boundaries

- Colma Town Limits
- Jurisdictional Boundaries

Jurisdictional Sphere of Influence

- Unincoprorated San Mateo County
- Colma
- Daly City
- Pacifica
- South San Francisco

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Colma is located in San Mateo County. As show on figure 3-1, Colma is bounded by the City of Daly City to the north and west, the City of South San Francisco to the south, and San Bruno Mountains to the east. Colma was incorporated in 1924 and encompasses approximately 1.98 square miles. The Existing Conditions Report, and the General Plan uses several terms to describe the Town and areas beyond, including the following:

- **Town/City Limits.** The jurisdictional boundary of the Town. The town limits include the area within the Town's boundary over which the Town exercises land use authority and provides public services.
- **Sphere of Influence**. A sphere of influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCo). A SOI typically includes both incorporated and unincorporated areas within which a jurisdiction will have primary responsibility for the provision of public facilities and services. In this instance the Town limits and SOI are the same.
- **Planning Area.** Pursuant to State law, a general plan must address all areas within the jurisdiction's planning area. The planning area encompasses all incorporated and unincorporated territory that bears a relationship to the long-term planning of the jurisdiction. At minimum, a jurisdiction's planning area should include all incorporated land within the town limits and all land within the Town's Sphere of influence. Colma's SOI is identical to the town limits, therefore the Town's planning area is also limited to the town limits.

Organization of Existing Conditions Report

The Existing Conditions Report is divided into 9 chapters. These chapters describe a wide range of topics with topic serving as an important data point on the existing conditions of the Town.

1: **Introduction.** Describe the purpose of the report and its organization.
2: **Demographics**. Describes the population and employment projections of Colma.
3: **Health.** Summarizes community health and wellness in Colma
4: **Land Use**. Summarizes existing land use; it describes local and regional land use plans and zoning designations in Colma
5: **Public Facilities, Services and Infrastructure**. Describes all of the services offered by the local governments and agencies, including water supply, utilities, law enforcement, town services, and public infrastructure.
6: **Transportation and Mobility.** Describes the transportation network in Colma, including roadways, active transport, transit service and parking.
7: **Natural Resources.** Provides an overview of water, energy, mineral, and biological features, as well as cultural and historic resources in Colma.
8: **Climate Change**. Describes Colma's greenhouse gas emissions and the impact of climate change in Colma.
9: **Hazards and Safety.** Describes geologic, seismic, flood, fire, and human-made hazards, as well as Nosie and safety.

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2 Demographics and Economic Conditions

Executive Summary

Key Findings

- The 2018 median household income in Colma was $97,500. This is higher than the statewide average of $71,805 (2017), and slightly lower than the countywide average of $105,667.
- With an estimated 2019 population of 1,512 residents, Colma has a small population when compared with other surrounding communities in San Mateo County. The growth rate has also been modest with an increase of 1.7 percent from 2018 to 2019.
- Opportunity sites for redevelopment include properties on Collins Avenue, Hillside, Colma, Serramonte and Junipero Serra Boulevards, Mission Road, and El Camino Real.
- Colma had a projected 4,070 jobs in 2020, with the trend over the past decade showing a modest increase from 3,935 positions in 2010.
- Colma is regional destination for cemetery/funeral services, automobiles and large-format retail sales.
- Colma's employment base has a high concentration of jobs in retail, professional, auto dealerships and entertainment (card room). Retail jobs account for more than half of the jobs in Colma.
- The occupational distribution of workers living in Colma is similar to the countywide averages, with just under half of the town workforce and San Mateo County workforce employed in management, business, science, and arts occupations
- The commute patterns shown a net outflow of jobs, with 96 percent of workers who live in Colma working jobs outside of the town.

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- ABAG projects that Colma's population and households will grow moderately from 2020 to 2040, increasing by about 105 households. ABAG projections also show that San Mateo County will have a slightly lower average annual growth rate (AAGR) in population of 0.8 percent through 2040.
- Employment projections from ABAG show Colma adding 250 jobs between 2010 and 2040. The AAGR during this period of 0.3 percent is lower than the San Mateo County and Bay Area projected growth rates.
- Colma's sales tax total is projected at $11.4 million for Fiscal Year 2019-20.
- Available housing inventory in San Mateo County has remained low, with median home prices continuing to increase to nearly $1.1 million.
- Vacancies in the local market for Colma and Daly City show low availability for retail, office, industrial, and R&D space.

POPULATION AND HOUSEHOLD TRENDS

This section discusses recent population and household growth trends in Colma and describes current distribution of household income. Additional demographic information, specifically age and ethnicity, can be found in Chapter 2 of this Existing Conditions Report – Health and Wellness. This section is divided into the following subsections:

- Population Trends
- Household Trends

POPULATION TRENDS

With an estimated 2019 population of 1,512 residents, Colma has a small population when compared with other surrounding communities in San Mateo County (see Table 2-1). Surrounding communities such as South San Francisco and Daly City substantially add to the population in close proximity to Colma.

Support for retail stores comes from population and income (with other market support from visitors, commuters, and other local businesses), which is the primary generator of household spending demand.

Concurrent to Colma's small population, the recent growth rate has been modest with an average annual rate of 0.44 percent. This growth rate is lower than that of neighboring communities Daly City (0.88%) and South San Francisco (0.60%) as well as San Mateo County (0.86%). This is due in part to lack of available land for new construction.

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Table 2-1: Population Growth Trends

Location	2010 Population	2015 Population	2019 Population	Annual Growth Rate
Atherton	6,914	6,935	7,070	0.25%
Belmont	25,835	26,748	27,174	0.57%
Brisbane	4,282	4,541	4,691	1.06%
Burlingame	28,806	29,890	30,317	0.58%
Colma	1,454	1,480	1,512	0.44%
Daly City	101,072	105,810	109,122	0.88%
East Palo Alto	28,155	29,137	30,499	0.92%
Foster City	30,567	32,390	33,693	1.13%
Half Moon Bay	11,324	12,051	12,631	1.27%
Hillsborough	10,825	11,420	11,769	0.96%
Menlo Park	32,026	33,273	35,790	1.3%
Millbrae	21,532	22,898	23,154	0.83%
Pacifica	37,234	38,551	38,674	0.42%
Portola Valley	4,353	4,527	4,659	0.78%
Redwood City	76,815	81,838	85,319	1.22%
San Bruno	41,114	44,409	45,257	1.11%
San Carlos	28,406	29,449	29,864	0.57%
San Mateo	97,207	101,429	104,570	0.84%
South San Francisco	63,632	66,193	67,078	0.60%
Woodside	5,287	5,539	5,615	6.20%
Balance of County	61,611	64,615	66,027	0.79%
Incorporated	656,840	688,508	708,458	0.87%
San Mateo County Total	**718,451**	**753,123**	**774,485**	**0.86%**

Source: Population: California Department of Finance, E-5 Report; January 1, 2019

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HOUSEHOLD TRENDS

Data from the California Department of Finance estimates that Colma's household count grew moderately since 2010, from 412 to an estimated total of 490 households in 2020 (1.89%), as shown in Table 2-2.

Table 2-2: Household Growth Trends

Location	2010 Households	2015 Households	2020 Households	Annual Growth Rate
Atherton	2,330	2,455	2470	0.60%
Belmont	10,575	10,805	10,910	0.32%
Brisbane	1,820	1,835	6,350	24.9%
Burlingame	12,360	12,525	12,755	0.32%
Colma	412	450	490	1.89%
Daly City	31,090	31,275	33,615	0.81%
East Palo Alto	6,940	7,430	7,610	0.96%
Foster City	12,015	12,725	13,055	0.86%
Half Moon Bay	4,150	4,271	4,590	1.06%
Hillsborough	3,693	3,875	3,895	0.54%
Menlo Park	12,345	13,930	15,390	2.47%
Millbrae	7,995	8,110	8,235	0.30%
Pacifica	13,965	13,925	14,155	0.14%
Portola Valley	1,745	1,800	1,800	0.31%
Redwood City	27,955	30,410	30,820	1.02%
San Bruno	14,700	14,645	14,890	0.13%
San Carlos	11,525	13,445	13,575	1.78%
San Mateo	38,235	41,175	43,035	1.25%
South San Francisco	20,940	21,330	22,155	0.58%
Woodside	1,975	2,110	2,130	0.78%
Balance of County	21,065	21,645	21,980	0.39%
Incorporated	236,770	249,070	262,370	1.08%
San Mateo County Total	**257,835**	**270,715**	**284,260**	**1.02%**

Source: Growth Projections: ABAG Projections Plan Bay Area 2040
Colma Housing Element, 2015

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In 2018, Colma had a median household income of $97,500 (Table 2-3). The median income in Colma is higher than the statewide average of $71,805 (2017) and slightly lower than the median income for San Mateo County which was $105,667 in 2018.

Table 2-3: Annual Household Income Distribution

Income Range	Percent of Households
Less than $10,000	4.3%
$10,000 to $14,999	3.0%
$15,000 to $24,999	5.8%
$20,000 to $24,999	2.2%
$25,000 to $34,999	3.6%
$35,000 to $49,999	6.5%
$50,000 to $74,999	11.2%
$75,000 to $99,999	16.8%
$100,000 to $149,999	20.7%
$150,000 to $199,999	15.9%
$200,000 or more	11.9%
Total	100.0%
Median Household Income	$97,500

Source: 2013-2017 American Community Survey 5-Year Estimates

EMPLOYMENT AND INDUSTRY TRENDS

This section discusses jobs in Colma and describes trends in employment by major industry group. The analysis also describes the industry and occupational characteristics of workers who live in Colma. The section is divided into the following subsections:

- Employment Trends
- Industry and Occupation Characteristics of Colma Resident Labor Force
- Industry and Occupation Characteristics of Colma Labor Force
- Commuting Trends

EMPLOYMENT TRENDS

Based on data from ABAG, Colma's employment base is expected to grow by an average of 0.30 percent to 2040 from 4,070 jobs in 2020 to an estimated 4,315 jobs in 2040, as shown in Table 2-4. The greatest growth is anticipated to occur in retail. In comparison, San Mateo

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County job growth is expected to be greatest in health, educational and recreational and financial and professional services.

Table 2-4: Employment Trends 2020 - 2040

Location	2020	2040 (Est.)	Projected Annual Growth Rate
Colma Total Jobs	**4,070**	**4,315**	**0.30%**
Agricultural and Natural Resources	5	5	0%
Manufacturing, Wholesale and Transportation	150	155	0.17%
Retail	2,180	2,435	0.58%
Financial and Professional Services	140	140	0%
Health, Educational, and Recreational Services	1,160	1,135	-0.11%
Information, Government and Construction	440	450	0.11%
San Mateo County Total Jobs	**319,275**	**472,845**	**2.40%**
Agricultural and Natural Resources	2,460	2,440	-0.04%
Manufacturing, Wholesale, and Transportation	55,850	48,305	-0.67%
Retail	37,530	39,675	0.28%
Financial and Professional Services	130,365	169,620	1.5%
Health, Educational, & Recreational Services	104,175	134,400	1.45%
Information, Government and Construction	68,900	77,605	0.63%
Bay Area Total Jobs	**4,136,190**	**4,698,375**	**0.68%**
Agricultural and Natural Resources	24,865	24,380	-0.09%
Manufacturing, Wholesale, and Transportation	523,320	518,740	-0.04%
Retail	364,515	398,175	0.46%
Financial and Professional Services	253,580	234,545	-0.37%
Health, Educational, and Recreational Services	1,178,130	1,479,410	1.28%
Information, Government and Construction	870,990	949,685	0.45%

Source: ABAG Projections: Plan Bay Area 2040

Colma's projected growth trends are similar to the trends for San Mateo County, and generally show a slightly lower growth rate than the Bay Area. As shown in Table 2-5, Colma currently has about 4,070 jobs. The trend over the past decade shows a small increase in the number of jobs (3,935 in 2010 to 4,070 projected in 2020).

The jobs-housing balance is the ratio of jobs to housing in a given metropolitan sub-area. It may be considered at the metro/regional level, or that of a municipality, or an area linked by commuter transit means. If jobs-housing balance is too high, adequate housing may be unaffordable or unavailable to workers in that area, leading to issues such as housing unaffordability and traffic congestion from in-commuting workers. if jobs-housing balance is too low, this may indicate inadequate job availability for area residents.

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Colma is part of a much larger regional area that includes Daly City, South San Francisco, and San Francisco. While Colma has a small number of residential units, Colma's residential units are directly adjacent to surrounding bedroom communities. Colma's retail, cemetery and auto businesses serve this larger regional area. Consideration of jobs and housing balance should be considered within this broader regional context.

Industry and Occupation Characteristics of Colma Resident Labor Force

According to the American Community Survey (ACS) sample for 2014, workers living in Colma and San Mateo County mostly work in similar industries (Table 2-5). There are approximately 835 working residents living in the Town of Colma. About 10.5 percent of the Colma resident labor force and 12.9 percent of San Mateo County's labor force work in manufacturing and construction industries. Just over 12.7 percent of the town's labor force works in wholesale and retail trade, while the countywide trend in these industries is lower at 9.9 percent. With transportation, warehousing, and utility industries, Colma's labor force had a higher representation (8.4 percent) compared to San Mateo County (5.7 percent). The combination of information, financial, professional, administrative, and management services employ 24.8 percent of the city labor force, and 33.2 percent of the county labor force. Education and health care comprise about 20.0 percent of the town's labor force and 20.4 percent of the county labor force.

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Table 2-5: Distribution of Workforce by Industry

Industry Category	Colma	Percent of Total	San Mateo County	Percent of Total
Civilian employed population 16 years and over	845	100.0%	404,882	100.0%
Agriculture, forestry, fishing and hunting, and mining	0	0%	2108	0.52%
Construction	43	5.0%	20,695	5.1%
Manufacturing	44	5.2%	31,453	7.8%
Wholesale trade	17	2.0%	9,383	2.3%
Retail trade	107	12.7%	39,955	9.9%
Transportation and warehousing, and utilities	71	8.4%	22,960	5.7%
Information	24	2.8%	17,119	4.2%
Finance and insurance, and real estate and rental and leasing	26	3.1%	30,992	7.6%
Professional, scientific, and management, and administrative and waste management services	109	12.9%	73,038	18.0%
Educational services, and health care and social assistance	169	20.0%	82,815	20.4%
Arts, entertainment, and recreation, and accommodation and food services	107	12.7%	39,640	9.8%
Other services, except public administration	77	9.1%	20,936	5.2%
Public administration	51	6.0%	13,788	3.4%

Source: American Community Survey, 2017.

Industry and Occupation Characteristics of Colma Labor Force

Business license data indicates that there is a unique set of industries in Colma. According to the 2011 Economic Development Plan, three main industries employed 85 percent of all workers in Colma: retail (58 percent of total jobs), arts/entertainment/recreation (17 percent of total jobs), and "other services" which includes both cemeteries and auto services (10 percent of total jobs). Table 2-6, below, shows the employment breakdown for workers in Colma:

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Table 2-6: Colma 2015 Employment Characteristics

Employment Sector	Jobs
Colma Total Jobs (ABAG)	4,065
Agricultural & Natural Resources	5
Manufacturing, Wholesale, and Transportation	165
Retail	2,075
Financial & Professional Services	145
Health, Educational, and Recreational Services	1,215
Information, Government and Construction	460

Source: ABAG Growth Projections: Plan Bay Area 2040 and 2015 Colma Housing Element

Retail Sector

With more than half of all jobs in Colma, the retail sector also accounted for almost seven percent of all retail employment in San Mateo County, making Colma a leading contributor to the area's economy in this sector. This strong retail base underscores Colma's strategic location, particularly for larger-format stores which serve parts of San Francisco and much of northern San Mateo County

Colma's retail employment can be further divided into three main subcategories: consumer-oriented retail, automobile dealerships, and cemetery-related retail such as florists and monuments.

Consumer retail, including larger format store such as Target and Kohl's, and associated smaller stores located in the two main shopping centers accounted for approximately 620 jobs in Colma. The auto dealerships located along Serramonte Boulevard accounted for 507 jobs. Cemetery-related retail, which includes flower shops and monument-related businesses, provided 64 jobs (does not include the cemeteries themselves, see below).

Arts/Entertainment/Recreation Sector

This industry sector employed approximately 17 percent of all workers in Colma in 2011. It includes Lucky Chances Casino, with a reported 621 full-time workers, which is about 12 percent of the total countywide employment in this industry category, making Colma a strong arts/entertainment/recreation leader in San Mateo County. This finding suggests that new approaches to positioning Colma as an entertainment/recreation destination may yield additional business attraction.

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Other Services Sector (Cemeteries and Auto Services)

This category includes the cemeteries, which contributed 304 jobs to the Colma economy in 2011, as well as auto oriented service businesses such as detailing and body shops, which provided 70 jobs.

Summary of Cemetery Cluster

Economic development practitioners sometimes take a cross-cutting approach to this type of data, and combine industry sectors in related businesses, to look at the "cluster" as a whole. In Colma, the cemeteries, which are service businesses, are supported by cemetery-related retail (e.g., florists and monuments), for a total cluster employment of 368 jobs. This cluster also probably supports some portion of the restaurant/bar employment in Colma, along with some of the jobs in the Lucky Chances, which reportedly attracts post-funeral gatherings in its private reception room.

Summary of Automobile Cluster

The automobile cluster includes auto dealerships as well as the auto related services, for a total employment of 577 jobs. Again, some portion of restaurant employment is also likely attributable to this cluster as people shop for autos and take breaks at local food service facilities, and as the dealer employees seek lunch and dining destinations.

Colma has one of the premier Auto Row concentrations in the Bay Area. Currently there are 8 new car dealerships representing 13 car brands located within its borders along Serramonte Boulevard. These include: Honda of Serramonte, Serramonte Ford, Lexus of Serramonte, Stewart Chevrolet Cadillac, Nissan Serramonte, Serramonte Volkswagen, Serramonte Subaru, Acura of Serramonte, , and Stewart Dodge/Jeep/Chrysler/RAM. In addition to new cars, many dealerships offer used cars, and there is a large Carmax facility at the east end of Colma's auto row. Between 2001 and 2007, Colma dealerships sold an average of 12,300 vehicles per year. Sales dropped to a low of just 6,000 cars in 2009, but recovery started in 2010, with a rise to 6,700 sales for that year. This trend of fewer new car sales affected all dealers in California during the recession.

Four of Colma's dealerships (Lexus, Nissan, Volkswagen, and Acura) are still ranked as the top volume sellers in their brand in San Mateo County. Serramonte Ford is notable as the only Ford dealership serving San Francisco (San Francisco Ford closed in 2011). California regulations and manufacturer agreements with dealerships include a stipulation that new car dealers selling the same nameplate must be located at least 10 miles from each other.

COMMUTING TRENDS

Based on data from LEHD, the commute patterns shown a net outflow of jobs, with 96.4 percent of workers that live in Colma working jobs outside of the town (Figure 2-1). Only about

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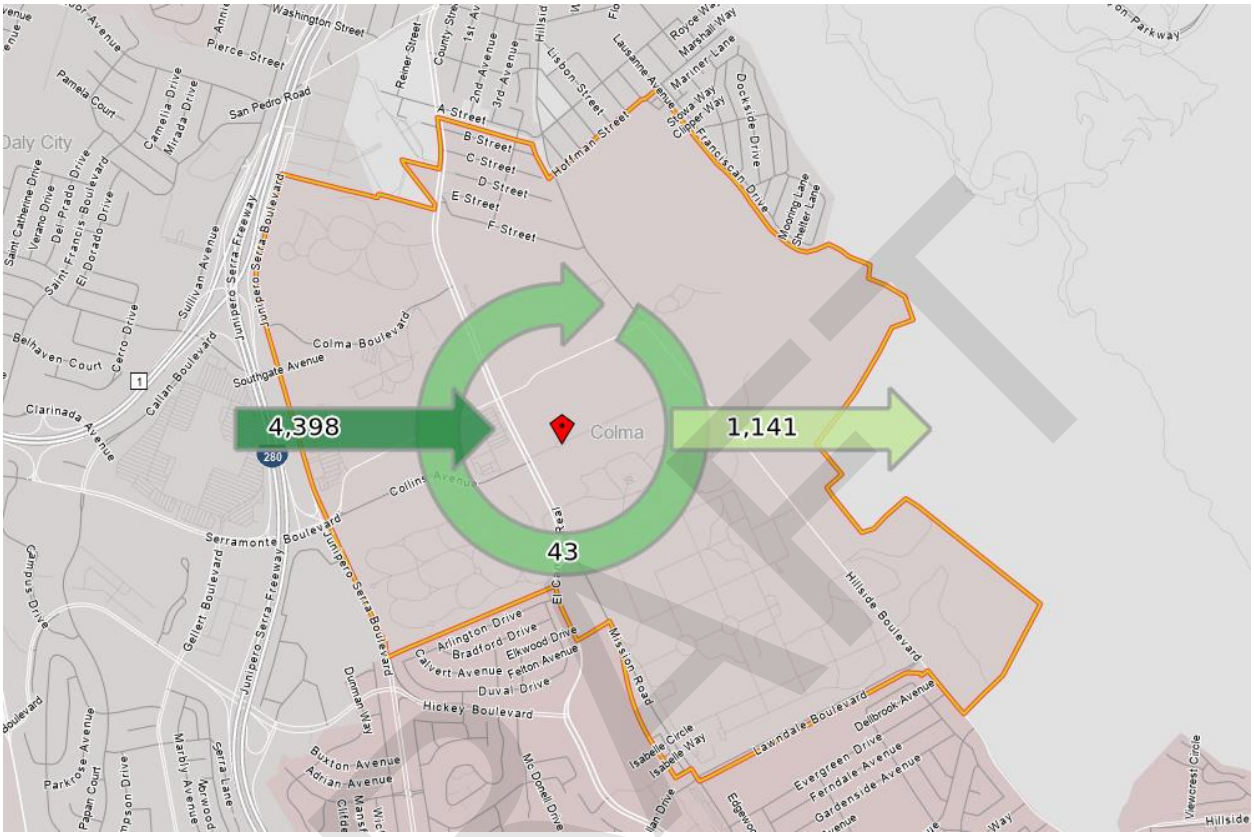
3.6 percent of the Colma labor force lives and works in jobs located in Colma. Conversely, 99 percent of the jobs in Colma are filled by workers commuting into the town.

Figure 2-1: Commute Inflow and Outflow Geographic Area – 2017



Source: Longitudinal Employer-Household Dynamics 2017.

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Table 2-7: Commuting Characteristics San Mateo County

Workers 16 years and older	Number
Car, truck or van	407,732
Drove alone	68.2%
Carpooled	9.8%
Public transportation	10.6%
Walked	2.3%
Bicycle	1.6%
Taxi, motorcycle or other means	2.0%
Worked at home	5.4%
Place of Work	
Worked in County	58.9%
Worked outside County	40.8%
Worked outside state	0.3%
Location of Workplace	
Worked in place of residencer	19.1
Worked outside place of residence	78.5
Not living in a place	2.4%
Travel Time to Work	
Less than 10 minutes	5.9%
10 to 19 minutes	26.4%
20 to 29 minutes	19.7%
30 to 44 minutes	25.6%
45 to 59 minutes	11.7%
60 or more minutes	10.7%

Source: U.S. Census Bureau, 2018

POPULATION AND EMPLOYMENT PROJECTIONS

This section summarizes population and employment projections for Colma through 2040. Projections of future growth help identify the level of development that implementation of the General Plan could demand. The General Plan describes how the community would allocate development by location and type of use, while projections indicate the likely pace of development and the quantity of demand for housing and jobs during the planning period. The Association of Bay Area Governments (ABAG) prepared updated projections for all cities and counties in the Bay Area in 2013. This is the only source of population growth projections that specifically includes Colma.

This section summarizes the population and employment projections for the Town of Colma and is organized into the following sections:

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- Population and Household Projections
- Employment Projections

POPULATION AND HOUSEHOLD PROJECTIONS

The Association of Bay Area Governments (ABAG) periodically releases regional projections for population, households, total jobs, and employed residents. Their most recent projections released in 2013 cover the period between 2010 and 2040.

ABAG projects that Colma's population will grow moderately from 2015 to 2040, with an average annual growth rate (AAGR) of 2.1 percent. As Table 2-7 shows, Colma's population is projected to grow to 2,269 by 2040, an increase of almost 800 residents from the 2015 population of 1,480. Households are expected to grow at a similar AAGR of 1.87 percent, and a total household count of 660 by 2040 (Table 2-8). This is an increase of 110 households from 2015 through 2040 ABAG projects that San Mateo County will have an AAGR in population of 0.84 percent through 2040, less than the projected growth rate for Colma. The projected household growth rate for San Mateo County expects to average 0.70 percent during this period.

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Table 2-8: Population Growth Projections (2015 – 2040)

Location	2015 Population	2025 Population	2040 Population	Average Annual Growth Rate (2015 – 2025)	Average Annual Growth Rate (2015 – 2040)
Atherton	7,345	7,435	7,685	0.12%	0.18%
Belmont	27,155	27,685	30,085	0.20%	0.43%
Brisbane	4,400	14,790	16,050		
Burlingame	29,455	31,050	33,145	0.54%	0.50%
Colma	1,480	1,776	2,269	2.0%	2.1%
Daly City	102,730	111,830	121,330	0.88%	0.72%
East Palo Alto	29,907	30,970	36,090	0.36%	0.83%
Foster City	32,405	33,435	39,070	0.32%	0.82%
Half Moon Bay	12,970	13,205	13,440	0.18%	0.14%
Hillsborough	11,420	11,530	11,850	0.10%	0.15%
Menlo Park	37,945	48,490	54,920	2.78%	1.8%%
Millbrae	22,025	22,640	27,055	0.28%	0.91%
Pacifica	37,440	38,435	40,145	0.26%	0.29%
Portola Valley	4,600	4,610	4,730	0.02%	0.11%
Redwood City	82,870	85,340	103,940	0.30%	1.0%
San Bruno	41,270	43,100	51,920	0.44%	1.0%
San Carlos	32,895	33,580	35,250	0.44%	0.29%
San Mateo	105,020	114,510	133,005	0.90%	1.0%
S. San Francisco	65,455	71,080	80,015	0.86%	0.89%
Woodside	5,620	5,700	5,855	0.14%	0.17%
Balance of Count	*62,665*	*64,550*	*68,525*	*0.30%*	*0.37%*
Incorporated	*695,240*	*751,910*	*848,065*	*0.81%*	*0.88%*
San Mateo County Total	**757,895**	**816,460**	**916,590**	**0.77%**	**0.84%**

Source: ABAG Growth Projections: Plan Bay Area 2040 and 2015 Colma Housing Element

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Table 2-9: 2015-2040 Household Growth Projections

Location	2015 Households	2025 Households	2040 Households	Average Annual Growth Rate (2015 – 2025)	Average Annual Growth Rate (2015 – 2040)
Atherton	2,455	2,475	2,460	0.08%	0.008%
Belmont	10,805	10,995	11,620	0.17%	0.30%
Brisbane	1,835	6,160	6,410		
Burlingame	12,525	13,190	13,735	0.53%	0.39%
Colma	450	530	660	1.78%	1.87%
Daly City	31,275	34,005	35,775	0.87%	0.57%
East Palo Alto	7,430	7,690	8,675	0.35%	0.67%
Foster City	12,725	13,155	15,110	0.34%	0.75%
Half Moon Bay	4,575	4,640	4,585	0.57%	0.009%
Hillsborough	3,875	3,915	3,910	0.10%	0.04%
Menlo Park	13,830	16,215	17,680	1.72%	1.11%
Millbrae	8,110	8,325	9,725	0.26%	0.80%
Pacifica	13,925	14,305	14,520	0.11%	0.17%
Portola Valley	1,800	1,800	1,800	0%	0%
Redwood City	30,410	31,280	38,085	0.29%	1.01%
San Bruno	14,645	15,240	17,935	0.40%	0.90%
San Carlos	13,445	13,720	13,985	0.20%	0.16%
San Mateo	41,175	44,945	50,830	0.91%	0.94%
South San Francisco	21,330	23,050	25,305	0.81%	0.74%
Woodside	2,110	2,130	2,125	0.095%	0.028%
Balance of County	21,645	22,205	22,755	0.26%	0.20%
Incorporated	249,070	268,125	295,210	0.76%	0.74%
San Mateo County Total	**270,715**	**290,330**	**317,965**	**0.72%**	**0.70%**

Source: ABAG Growth Projections: Plan Bay Area 2040 and 2015 Colma Housing Element

EMPLOYMENT PROJECTIONS

ABAG employment projections show Colma adding 250 jobs between 2015 and 2040. The AAGR during this period of 0.25 percent is lower than the countywide projection of 0.9 percent and the projected growth for the Bay Area (0.69 percent). Among the individual industry groups, most of the projected growth occurs in the retail category, which has a projected AAGR of 0.69 percent.

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Table 2-10: Comparison of Employment Growth Projections (2015 – 2040)

	2015	2025	2040	Annual Growth Rate (2015 to 2025)	Annual Growth Rate (2015 to 2040)
Colma Total Jobs (ABAG)	4,065	4,150	4,315	0.21%	0.25%
Agricultural & Natural Resources	5	5	5	0%	0%
Manufacturing, Wholesale, and Transportation	165	150	150	-0.90	-0.36
Retail	2,075	2,280	2,435	0.99%	0.69%
Financial & Professional Services	145	140	140	-0.34%	-0.14%
Health, Educational, and Recreational Services	1,215	1,135	1,135	-0.66%	-0.26%
Information, Government and Construction	460	440	450	-0.43%	-0.087%
San Mateo County Total Jobs (ABAG)	385,770	415,305	472,845	0.76%	0.90%
Agricultural & Natural Resources	2,475	2,455	2,440	-0.08%	-0.056%
Manufacturing, Wholesale, and Transportation	58,320	53,595	48,305	-0.81%	-0.71%
Retail	36,515	38,120	39,675	0.44%	0.017%
Financial & Professional Services	124,590	140,750	169,620	1.30%	1.44%
Health, Educational, and Recreational Services	96,840	110,690	134,400	1.43%	1,55%
Information, Government and Construction	67,025	69,695	77,605	0.40%	0.63%
Bay Area Total Jobs (ABAG)	4,010,135	4,267,760	4,698,375	0.64%	0.69%
Agricultural & Natural Resources	24,990	24,740	24,380	-0.10%	-0.10%
Manufacturing, Wholesale, and Transportation	524,475	522,175	518,740	-0.04%	-0.04%
Retail	356,555	372,655	398,175	0.45%	0.47%
Financial & Professional Services	1,138,830	1,211,020	1,327,980	0.63&	0.66%
Health, Educational, and Recreational Services	1,112,930	1,247,145	1,479,410	1.20%	1.32%
Information, Government and Construction	852,355	890,030	949,685	0.44%	0.46%

Source: Source: ABAG Projections 2013, and Caltrans California County-Level Economic Forecast 2015-2040

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MARKET OVERVIEW/DEMAND

This section describes the retail market in Colma, as well as recent and projected real estate market conditions for the office, industrial, and R&D sectors in Colma and San Mateo County submarkets. This includes trends in vacancy rates and lease rates for existing building space.

RETAIL MARKET ANALYSIS

Taxable Sales

The Town of Colma derives a large percentage of its operating revenue from retail sales tax generated by Colma's auto dealerships and retail establishments. Due to the large retail component, the Town is required to provide municipal services to support the businesses, employees and patrons that are in Town on a daily basis. For example, a majority (approximately 60%) of the Town's police resources are required to police Colma's shopping centers and businesses. The Town of Colma receives a very small amount of property tax revenue.

Table 2-11: Retail Portion of Taxable Sales

Location	Population (1/1/2018)	Total Taxable Sales (2013)	Retail as % of Taxable Sales
Colma	1,487	$834,542,625	94.0%
Brisbane	4,689	$233,622,914	40.4%
Burlingame	30,345	$901,932,449	71.8%
San Carlos	29,832	$744,025,145	69.4%
Redwood City	84,444	$1,828,715,375	74.6%
Menlo Park	35,802	$610,133,395	71.5%
South San Francisco	67,054	$1,206,734,423	63.6%
Half Moon Bay	12,558	$208,280,242	82.1%
San Bruno	45,255	$687,849,719	92.4%
San Mateo	104,497	$1,591,666,774	85.4%
Woodside	5,628	$59,513,173	68.2%
East Palo Alto	30,478	$304,121,481	92.2%
Belmont	27,182	$255,632,596	76.2%
Foster City	33,094	$304,032,640	75.5%
Daly City	108,927	$953,203,007	92.9%
Millbrae	23,168	$203,514,006	86.6%
Atherton	7,042	$36,357,104	18.9%
Pacifica	38,718	$175,372,368	94.7%
Portola Valley	4,657	$18,853,142	54.5%
Hillsborough	11,748	$6,120,545	19.0%

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Location	Population (1/1/2018)	Total Taxable Sales (2013)	Retail as % of Taxable Sales
Balance of County	*64,216*	*$3,447,394,458*	*33.9%*
Incorporated	*681,419*	*$11,164,223,123*	*78.5%*
San Mateo County Total	**772,372**	**$14,611,617,581**	**68.0%**

Source: Population: California Dept. of Finance, E-5 Report; January 1, 2018

Taxable Sales: California Board of Equalization, Taxable Sales by City, 2013

Notes: Sales tax receipts include all retail and non-retail categories. Per capita calculations are based on the population estimate for January 2018 by the California Department of Finance. The State Board of Equalization data covers calendar year 2013, which is the latest full year of data available due to confidentiality requirements.

Real Estate Market Conditions

The market potential for opportunity sites in Colma may include both short- and long-term considerations. The market conditions and real estate indicators provide a good glimpse into the shorter-term opportunities for Colma. These short-term opportunities reflect the existing supply and demand dynamics in Colma and the Peninsula. Longer term considerations would have a greater emphasis on planning priorities and strategic objectives. The long-term view would also reflect the prevailing market conditions but consider more systemic issues such as economic and labor force transformations that occur over the course of a decade or more.

Housing

Colma has had slow population growth for much of the past decade. Real estate indicators in the Bay Area now show much more robust activity in the housing market, with rising home values and declining available inventory. In January 2016, the year-over-year trend with housing prices showed a 6.4 percent increase in San Mateo County with a median price of $1,077,500. It should be noted that this trend data includes both single family residences and condos.

The available housing inventory in San Mateo County remains very low, which reflects high demand and fast turnaround. According to the California Association of Realtors, San Mateo County had an Unsold Inventory Index (UII) of 1.9 in January 2016, compared with a UII of 4.3 in California. An index below 7.0 is generally considered a healthy market for home sellers.

Retail

As shown in Table 1-15, retail space in San Mateo County constitutes a very tight market, according to market data from Cushman & Wakefield. Countywide, the vacancy rate for the third quarter of 2015 averaged 2.5 percent, with just over 250,000 square feet of available shopping center space out of 10.1 million total square feet for the entire county.

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Colma is considered part of the North County submarket that also includes Daly City, Colma, South San Francisco, San Bruno, and Burlingame. The North County submarket has a higher vacancy rate of 4.5 percent, with total vacant shopping center space of just over 175,250 square feet. The average asking rate (per month) for North County was $2.40 in Q3 2015.

Table 2-12: Retail Shopping Center Market Trends North San Mateo County Submarket Q3 2015

Retail Market	Q3 2015
Total Inventory (SF)	3,936,527
Total Vacant SF	175,259
Vacancy Rate	4.5%
Current Occupied SF	3,761,268
Average Asking Rate	$2.40

Source: Cushman & Wakefield, Marketbeat: Retail Snapshot Q3 2015, San Mateo County

Office

The latest office vacancy data (2015 Fourth Quarter) from Colliers International shows a vacancy rate of 5.5 percent for the San Bruno/Colma submarket (Table 2-13). This comes from a submarket inventory of more than 1.8 million square feet of office space, with just under 100,000 square feet of vacant space. The San Bruno/Colma submarket is small compared to the 40.7 million square feet of office space in San Mateo County. The countywide office market showed a 7.8 percent vacancy rate.

The trends during 2015 showed vacancy rates that varied between 5.4 and 6.4 percent. In addition, the average asking rent per square foot for the San Bruno/Colma submarket ranged between $3.37 and $3.58 per square foot.

Table 2-13: Office Market Trends Daly City/Colma Submarket 2015

Office Market	Q1 2015	Q2 2015	Q3 2015	Q4 2015
Buildings	43	43	43	43
Total Inventory (SF)	1,824,895	1,824,895	1,824,895	1,824,369
Total Vacant SF	106,913	115,944	97,556	99,776
Vacancy Rate	5.9%	6.4%	5.4%	5.5%
Current Occupied SF	1,717,982	1,708,425	1,726,813	1,724,593
Weighted Average Asking Rental Rate	$3.37	$3.56	$3.58	$3.49

Source: Colliers International, San Francisco Peninsula Research & Forecast Reports, Q1 2015 to Q4 2015

R&D

Data from Colliers International for the 2015 Fourth Quarter shows a 2.1 percent vacancy rate for R&D buildings in the San Bruno/Colma/Burlingame submarket (Table 2-14). This is based on a submarket inventory of 44 buildings and just over 905,000 square feet. The overall inventory

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for San Mateo County totals 17.4 million square feet with 403 R&D buildings. The countywide vacancy rate is 5.2 percent.

The year-long trend for 2015 had vacancy rates ranging between 2.1 and 6.9 percent in the local submarket. During this time, the average asking rent per square foot ranged between $1.40 and $1.55 per square foot.

Table 2-14: R&D Building Market Trends Daly City/Colma Submarket 2015

R&D Market	Q1 2015	Q2 2015	Q3 2015	Q4 2015
Buildings	45	45	44	44
Total Inventory (SF)	913,079	913,079	905,079	905,079
Total Vacant SF	59,854	63,181	40,713	19,090
Vacancy Rate	6.6%	6.9%	4.5%	2.1%
Current Occupied SF	853,225	849,898	864,366	885,989
Weighted Average Asking Rental Rate	$1.40	$1.40	$1.43	$1.55

Source: Colliers International, San Francisco Peninsula Research & Forecast Reports, Q1 2015 to Q4 2015

Industrial

The industrial building market for the San Bruno/Colma submarket showed a total inventory of 18 buildings and just under 602,200 square feet, based on data from Colliers International (Table 2-14). The vacancy rate remained at 0.0 percent for all of 2015. Due to the lack of available space, there is no data on asking rents.

Table 2-15: Industrial Building Market Trends San Bruno/Colma Submarket 2015

Industrial Market	Q1 2015	Q2 2015	Q3 2015	Q4 2015
Buildings	18	18	18	18
Total Inventory (SF)	602,182	602,182	602,182	602,182
Total Vacant SF	0	0	0	0
Vacancy Rate	0.0%	0.0%	0.0%	0.0%
Current Occupied SF	602,182	602,182	602,182	602,182
Weighted Average Asking Rental Rate	n/a	n/a	n/a	n/a

Source: Colliers International, San Francisco Peninsula Research & Forecast Reports, Q1 2015 to Q4 2015

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FISCAL CONDITIONS

This section summarizes the Colma Budget and discusses how land uses affect Town revenues and costs for services. Cities and Towns are largely dependent on general tax revenues such as the property tax and sales tax to fund municipal service s. The tax rates for these revenues cannot easily be increased as Town costs escalate, so it is important for the Town to plan for a land use mix that creates a sustainable tax base. The section is divided into the following subsections.

- Budget Overview
- Fiscal Impacts of Land Uses

TOWN BUDGET OVERVIEW

In Fiscal Year (2018-2019) the Town of Colma had a total operating budget of $23.6 million (Table 2-16). In addition to annual operating expenses, the Town has budgeted for $8.5 million in capital expenditures. Total revenues are projected to be $19.2 million, but the Town had a reserve fund of approximately $37 million at the beginning of the fiscal year from which to fund the capital expenditures and additional operating costs. The Town also relies on regional, state and federal funds to balance the budget.

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Table 2-16: Town of Colma Fiscal Year 2018-2019 Budget

Account Type	2018-19
Sales Tax	$11,397,118
Cardroom Tax	$4,339,128
Property Tax	$728,905
Hotel Taxes	n/a
Licenses and Permits	$278,046
Fines/Forfeitures	$65,127
Use of Money & Property	$723,307
Revenue from other agencies	$432,282
Charges for current services	$880,037
Allocations	-
Other Revenue	$395,947
Total Revenue	$19,239,897
Operating Expenses	$15,092,765
Capital Expenditures	$8,550,899
Total Expenditures	$23,643,684
Operating Surplus/(Deficit)	($4,403,767)
Beginning Fund Balance	$37,900,220
Change in Fund Balance	($4,403,767)

Sources: Town of Colma. Fiscal Year 2018-2019 Adopted Budget.

The General Fund represents about half of the Town's total budget and is funded mainly from general tax revenues such as the sales tax and property tax. The General Fund pays for most of the general government and public safety expenditures for the Town, as shown in Table 2-17.

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Table 2-17: Town of Colma Fiscal Year 2019-2020
General Fund Revenues and Expenditures

Budget Item	
Revenues	
Property Taxes	
Sales Tax	$11,397,118
Cardroom tax	$4,339,128
Franchise taxes	$127,789
Transportation Grant	$131,666
Licenses and Permits	$278,046
Charges for Current Services	$880,037
Fines and Forfeitures	$65,127
Use of Money and Property	$695,219
Revenue from Other Agencies	$61,609
Other Revenue	$307,337
TOTAL GENERAL FUND	$18,745.554
Expenditures	
General Government	$3,650,938
Public Safety	$8,678,943
Public Works and Planning	$4,604,328
Recreation	$438,147
City Council	$249,459
City Attorney	$234,402
Capital Improvement Plan*	$1,433,624
TOTAL EXPENDITURES	$19,289,841

Source: Town of Colma 2019-20 Adopted Budget

FISCAL IMPACTS OF LAND USES

In order to illustrate the effects of land use changes on the Town budget, Table 2-18 provides an illustrative fiscal analyses of several prominent land uses in Colma. This type of analysis will be most helpful during the Alternatives Analysis phase of the General Plan Update process and further refinement of these fiscal estimates will need to be done at that time; however, this illustrative analysis demonstrates some key considerations in terms of how land use affects the Town's tax base and demand for municipal services. For residential, the figures represent one single family unit. For the non-residential uses, the figures reflect 1,000 sq. ft. of building space.

Residential. With home prices in Colma currently averaging $1.1 million per unit, property tax generated for the General Fund totals nearly $2,300 per year for units with assessed values at this level. The homeowners pay much more than this in taxes, but the Town receives only 15.8

percent of the base tax paid by property owners. The rest is shared by the County of San Mateo, the local school districts and a variety of other local and regional taxing entities.

In terms of Town costs for services, residents tend to require twice as much in Town services as do businesses, compared on a per-person and per-employee basis. It is estimated that the Town of Colma spends nearly $2,500 per year on General Fund services per household, which is more than the Town takes in through residential property tax revenue.

Retail. Most sales tax, which comprises a majority of the General Fund revenues, is generated by retail businesses and auto dealerships located within Colma. The Town relies on this revenue for operating expenses. Since Colma also relies on shoppers outside of Colma, it is critical for Colma to have an attractive and functional retail sector in order for the town to rely on sales tax revenues in its budget. Retail businesses generate calls for service demand, but commercial development is generally a very positive land use from a fiscal perspective for the Town.

Office. Colma has limited office space and no Class A office space that would feature higher property values. The property tax values for offices is slightly higher than the retail and hotel developments, but office space generates relatively little sales tax, unless it is occupied by businesses selling products directly to final consumers and therefore functioning as a point of sale. On the cost side, the density of employees in office development and related traffic impacts can generate slightly higher costs for service than retail uses. From a fiscal perspective, office development is a neutral land use, but it does often support higher paying jobs, which creates income in the community and supports the housing market. As an economic development target, office development can have many positive attributes.

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Table 2-18: Illustrative Fiscal Impacts of Major Land Uses
Town of Colma General Fund

Budget Category	Residential [a]	Retail [b]	Office [d]
Revenues			
Property Taxes	$2,274	$724	$775
Sales Tax	$287	$3,000	$397
Transient Occupancy tax	$0	$0	$0
Franchise taxes	$101	$37	$61
Other Taxes	$31	$11	$19
Licenses and Permits	$127	$46	$77
Charge for Services	$123	$45	$74
Fines and Forfeitures	$101	$37	$61
Use of Money and Property	$49	$62	$24
Grants and Intergovernmental;	$19	$0	$0
Miscellaneous	$42	$15	$26
Total Revenues	$3,154	$3,977	$1,513
Expenditures			
General Government	$293	$145	$156
Public Safety	$1,494	$815	$727
Public Works and Planning	$123	$45	$75
Recreation	$0	$0	$0
	$363	$139	$232
Capital Outlay	$0	$0	$0
Transfers Out	$193	$74	$123
Total Expenditures	$2,467	$1,218	$1,313
TOTAL BUDGET NET SURPLUS	**$687**	**$2,759**	**$201**

Source: ADE

[a] One single family unit valued at $1.1 million with a household size of 2.75 persons.

[b] 1,000 sq.ft. of retail space valued at $350 per sq.ft. with 2 employees and $300 per sq.ft. in taxable sales.

[c] 1,000 sq.ft. valued at $350 per sq.ft. with two rooms at $150 per night and 82 % occupancy, and 1 employee.

[d] 1,000 sq.ft. valued at $375 per sq.ft. and 3.1 employees.

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REGULATORY SETTING

Proposition 13. Enacted as part of the State constitution, Proposition 13 limits the base property tax to one percent of assessed value and requires a two-thirds vote to raise any tax rates. It also limits assessed value increases to no more than two percent per year.

Proposition 4 (Gann). Limits increases in tax-supported municipal general operating expenses to the combined rate of population growth and inflation.

Proposition 218. Determines the way in which property-based assessments must be approved by affected property owners. Requires preparation of an engineer's report to define the "special benefit" that the assessment would convey to affected property owners. Requires majority approval by the property owners. Benefits which are deemed to be "general" rather than special to the affected properties must be paid for by taxes rather than assessments, which requires two-thirds voter approval rather than a majority vote.

AB 1600 (Mitigation Fee Act). Defines the process and findings necessary to establish development impact fees. Impact fees may only pay for capital improvements required to serve new development, not deficiencies in existing facilities. The amount of the fee must meet the "nexus" test in terms of being a reasonable cost to address specifically the impact of the land uses affected by the fee.

KEY TERMS

Assessed Valuation. A value established for real property for use as a basis for levying property taxes. Assessed values are determined by the County Assessor and are set at full market value when property is sold or newly constructed.

Capital Improvement Plan (CIP). A five-year plan for maintaining or replacing existing public facilities or assets, and for building or acquiring new ones that have an initial useful life beyond one year. The CIP only includes projects that cost $15,000 or more; projects costing less than $15,000 are included in the operating budget.

Debt Financing. Borrowing funds for capital improvements needed today and pledging future revenues to repay principal and interest expenditures.

Debt Service. Payments of principal and interest on bonds and other debt instruments in accordance with a predetermined schedule.

Fiscal Year. The beginning and ending period of recording financial transactions. The City has specified July 1 to June 30 as its fiscal year.

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General Fund. As the primary operating fund of the City, all revenues that are not allocated by law or contractual agreement to a specific fund are accounted for in the General Fund. Except for subvention or grant resources restricted for specific uses, General Fund resources can be used for any legitimate governmental purpose.

Operating Budget. The portion of the budget that pertains to daily operations and delivery of basic governmental services.

Reserve. An account used to indicate that a portion of fund's balance is legally restricted for a specific purpose and is, therefore, not available for general appropriation.

Retail Leakage. Retail leakage occurs when the existing store sales fall short of the available household spending in a given spending category. Leakage indicates that household spending goes to establishments located outside of a community or local market area. Recapturing these sales that leave a community can potentially support new retail establishments within a local market area.

Net Capture. The net capture of regional sales occurs when businesses within a community or local market area generate stores sales that exceed the household spending. Net capture indicates that local establishments have successfully attracted significant retail spending from outside of the local market area.

Taxable Sales. The portion of consumer or business-to-business transactions that are subject to sales tax. Most consumer goods, except for groceries and prescription drugs, are taxable. Goods sold to businesses for resale are not taxable. The taxable sales data used for this report comes from the California Board of Equalization.

Industry Employment. Full-time and part-time workers (including employees on paid vacation or paid sick leave) who work or receive compensation from establishments for any part of the pay period including the 12th of the month. Those workers involved in labor-management disputes are excluded. This is a count of the number of jobs, and is available by industry. (Employment Development Department)

Jobs/Housing Ratio. This number of jobs divided by the number of housing units is used as a measure of how well the local economy provides jobs for the local labor force.

Sector. A group of related business types that constitute a broad category in the economy.

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REPORTS:

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CalTrans Economic Forecast: https://dot.ca.gov/programs/transportation-planning/economics-data-management/transportation-economics/long-term-socio-economic-forecasts-by-county, December 9, 2019

Town of Colma Budget: https://www.colma.ca.gov/documents/current-adopted-budget, December 9, 2019

Yimby Wiki Jobs Housing Data: https://yimby.wiki/wiki/Jobs-Housing_Balance, December 10, 2019

- Colma's imbalance between jobs and housing has increased since the 1999 General Plan update due to limited areas for new residential projects and a healthy economy.

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3 Health and Wellness

Executive Summary

This chapter provides an overview of community health and wellness in the Town of Colma. Place impacts health by shaping the choices made available to us. The social, economic and environmental factors that influence the difficulty to make healthy choices are known as social determinants of health. These determinants of health are responsible for health inequities, or preventable differences in health outcomes among populations. By building healthy, equitable communities that address these disparities, everyone can have opportunities to live a long and healthy life. Measures of where people live, work and play help in understanding the types of opportunities the Town can provide to support the health and well-being of its residents**. Note that the Demographic information in this section includes incorporated and unincorporated portions of Colma and differs from information in Chapter 2, Demographics, since available data for this chapter was obtained through Healthy Cities San Mateo County**

Key Findings

- Colma's population is 1,540; 31 percent of the population is Asian, 5 percent is African American, 45 percent is Latino, 15 percent is white, 1 percent is "other," and 3 percent is more than one race.*
- From 2010 to 2040, San Mateo County is projected to have an aging population. Persons aged 65 years and older are projected to have the greatest proportion of growth at 125 percent, whereas persons ages 17 years and younger are projected to grow by 5 percent. The number of working age persons, ages 25 to 64 years, is projected to grow by 4 percent.
- Based on the 2018 Healthy Cities SMC report, Colma's median household income is about $92,589, which is higher than the statewide average and slightly lower than the countywide average.
- Poverty is less prevalent in Colma than the statewide average; 19 percent of residents were living below 200 percent of the Federal Poverty Level (FPL), compared to California at 36 percent and San Mateo County at 20 percent.

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- Colma has a lower educational attainment rate than the countywide average; 36 percent of adults have a high school degree or less, compared to 27 percent countywide and 18.2 percent statewide. 32 percent of adults have a bachelor's degree or higher compared to 47% in San Mateo County.
- Median rent is lower in Colma ($1,469) compared to San Mateo County ($1,830).
- 59% of households in Colma are occupied by the homeowner.
- Almost half (48%) of households are rent burdened.
- There are three major medical facilities within a two-mile radius of the Town of Colma (located in the Cities of Daly City and South San Francisco).
- Of residents in Colma, 8.6 percent did not have health insurance coverage, which is far below the statewide average of 16.7 percent.

DEMOGRAPHICS

An understanding of the make-up of a community is essential to understanding how to best meet the diverse needs of residents. This section describes demographics related to health and wellness.

RACE AND ETHNICITY

Colma is more diverse than San Mateo County as a whole. Only 15% of the residents are White (compared to 40% in the county) and almost one-third are Asian. Over the past decade, the White population has declined, while the Asian population has grown. Approximately 45% of the population is Latino. Additionally, 10% of the residents are non-White or more than one race.

Linguistic Isolation

The U.S. Census Bureau defines "linguistic isolation" as households where all members, 14 years or older, have at least some difficulty speaking English. Communication is essential for many steps in the process of accessing health care. Persons with limited English are less likely to have regular medical care and are more likely to have trouble getting medical information compared to English speakers. Non-English speakers are also less likely to receive mental health services when needed.

Neighborhoods with a high degree of linguistic isolation raise concerns about access to healthcare information and public services. Linguistic isolation is also an indicator of a community's ability to participate in decision-making processes, navigate the political system, and access employment, medical and social services, and emergency preparedness resources. Lack of English proficiency often results in racial discrimination, and both language difficulties and discrimination are associated with stress, low socioeconomic status, and reduced quality of life.

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AGE

The average age in Colma has decreased. In 2000, the median age was 37 and in 2018 it was 33. This appears to be due to a growth in the 20-34 segments of the population, which grew from one-fifth of the total population in 2000 to a third in 2011. Almost 30 percent of Colma's population is comprised of children under 19, and only 12 percent of the population includes seniors over the age of 60. Colma is the only city in San Mateo County whose population has gotten younger.

Table 3-1: Colma's Demographic Indicators

Demographic Indicators	Colma	San Mateo County
Total Population	1540	754,748
Age		
0-17 years	17%	22%
18-64 years	72%	64%
65+ years	11%	15%
Median age	33 years	40 years
Race/Ethnicity		
American Indian/Alaska Native	Less than 1%	Less than 1$
Asian	31%	27%
African American	5%	2%
Latino	45%	25%
Pacific Islander	Less than 1%	1%
White	15%	40%
Other	1%	Less than 1%
Two or more races	3%	4%
Limited English -Speaking Households	10%	9%

Source: Source: Healthy Cities San Mateo County, 2018

INCOME

The median household income in Colma was $92,589 based on the 2018 Healthy Cities SMC report. This is higher than the statewide average of $71,805 (2017), and slightly lower than the countywide average of $98,546.

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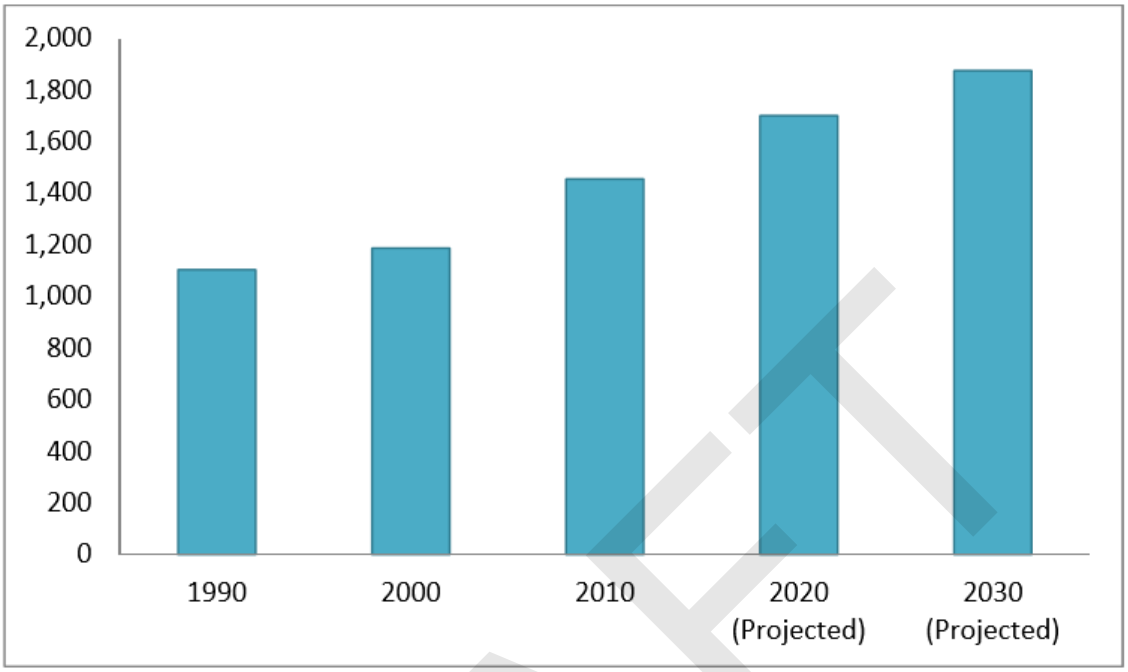
Figure 3-1: Colma's Population Growth



Source: Colma Housing Element, 2015

HEALTHY HOUSING

Colma's location just south of San Francisco and Daly City makes it a desirable and slightly more affordable location to live than San Francisco, with easy transit into San Francisco from the Colma and South San Francisco BART stations. Colma is also a regional shopping destination for automobiles and retail goods. Colma has limited land available for new development given that approximately 76% of its two square miles is devoted to cemetery land uses. Remaining land uses include developed residential properties and commercial uses. The San Francisco Bay Area continues to be one of the most desirable and expensive real estate markets in the country. Despite the economic downturn and a lowering of housing prices that began in 2008, rents generally continued to rise throughout region. Housing sales prices have regained losses associated with the recession and most Bay Area homes are too expensive for families with average household incomes. Despite its small size and limited land resources, opportunities exist within Colma to provide new and affordable housing with good transit access.

Stable and affordable housing protects health and provides the ability to engage in healthy opportunities. People who live in healthy, affordable places live longer, healthier lives. This section describes different facets of healthy housing.

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Housing Insecurity and Displacement

The Bay Area Regional Health Inequities Initiative identified the following four major health impacts of housing insecurity and displacement: unhealthy tradeoffs; mental health impacts; effects on children and families; and long commutes, air quality, congestion, and health. When housing costs are high, working families may decide to accept substandard housing that contains mold or pests, unsafe appliances, or exposure to toxins. They may also eat poorer quality food and forego medical care to pay for housing. Regarding mental health impacts, the threat of displacement takes an emotional toll on individuals, which leads to higher stress and lower performance in everyday duties and activities. People experiencing housing insecurity are nearly three times more likely to be in frequent mental distress compared to individuals with secure housing. The effects of housing instability are more intense on children, causing behavioral problems, educational delays, depression, low birth weights, and other health conditions such as asthma. The lack of adequate housing near job centers forces many low- and moderate-income residents to commute long distances to work, which leads to high levels of regional congestion and poor air quality.

Table 3-2: Healthy Housing Indicators

Healthy Housing Indicators	Colma	San Mateo County
Median Rent[1]	$1,469	$1,830
Percent of Households Who Are Rent Burdened[1,2]	48%	52%
Percent of Households Occupied by Homeowner[1]	52%	52%
Percent of Households Who Are Overcrowded[1]	5%	8%
Percent of Regional Housing Needs Allocation for Very Low Income Households[3]	less than 1%	20%
Number of Low-wage Jobs for Every One Affordable Housing Unit[4]	48	6
Percent of Employees that Do Not Live Where They Work[5]	99%	63%

1-Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-year Estimates

2-Note: Rent burden refers to households that spend 30% or more of their income on rent and other housing costs.

3- Source: Association of Bay Area Governments, 2007-2014 Regional Housing Need Allocation

4-Source: UC Davis Center for Regional Change, 2013 Regional Opportunity Index

5-Note: Percent of employees that don't live where they work refers to employees that do not live in the same city/county they work in. Source: U.S. Census Bureau, 2015 Longitudinal Employer-Household Dynamics

Complete neighborhoods make it easy for residents to be healthy every day in their communities by making the healthy choice, the easy choice. Living near where you work and send your children to school enables many opportunities for health. Creating vibrant complete neighborhoods allows people to safely walk and bike, purchase daily goods and services such as healthy foods, and easily access affordable public transportation, parks and open space.

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Table 3-3: Healthy Neighborhood Indicators

Healthy Neighborhood Indicators	Colma	San Mateo County
Percent of Income for Average Transportation Costs for Block Groups within ¼ mile of Transit[1]	18%	17%
Percent of Residents Who Take Active Transportation to Work[2, 3]	24%	14%
Number of Daily Vehicle Miles Traveled Per Capita[4]	44	26
Number of Bicycle and Pedestrian Collisions Per 100,000 People[5]	65	53
Number of Severe or Fatal Bicycle and Pedestrian Collisions Per 100,000 People[5]	0	45
Percent of Households Enrolled in Food Stamps[2]	7%	4%
Number of Park Acres Per 1,000 People[6]	0	1

1-Source: Center for Neighborhood Technology, 2018 AllTransit

2-Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-year Estimates

3-Note: Active transportation includes walking, biking, and taking public transit.

4-Sources: Caltrans Highway Performance Monitoring System, 2015 California Public Road Data

5-Sources: UC Berkeley Transportation Injury Mapping System, 2016 Statewide Integrated Traffic Records System

6-Sources: San Mateo County GIS, 2018 Parks and Beaches

Overcrowded Households

According to the U.S. Census Bureau, a unit is considered overcrowded if it the unit is occupied by more than 1.01 persons per room (excluding bathrooms and kitchens). Homes with more than 1.5 persons per room are considered severely overcrowded. Overcrowding increases health and safety concerns and stresses the condition of the housing stock and infrastructure. Overcrowding correlates strongly with household size, particularly for large households.

Colma has a small number of overcrowded homes. Five percent of owner-occupied homes, or 12 homes, are overcrowded. The vast majority of rental homes are not overcrowded. However, six homes are considered overcrowded and 25 homes are extremely overcrowded. The percent of overcrowded households has decreased since 2000, when close to 25% of homes were considered overcrowded.

Rent Burden

A household has a rent burden if they spend 30 percent or more of their income on rent (or mortgage) and other housing costs. A severe rent burden refers to households that spend 50 percent or more of their income on housing. When households are forced to pay unaffordable housing costs, their wages are diverted from other essential needs such as healthy food and health care.

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Displacement

Displacement occurs when a household is forced to move from its place of residence because of conditions beyond its control, such as no-fault evictions, rapid rent increases, and relocation due to repairs or demolition. Displacement segregates neighborhoods by income over time. As households relocate to more affordable areas, they experience a social disruption that may include loss of their social networks and support systems. Households that remain in the neighborhood are also affected by the migration of the family because of the change in the neighborhood.

Displacement is a major social and political issue that is occurring throughout the Bay Area because of the region's rapid economic boom from the technology sector. The region experiences many benefits from a strong economy including employment growth, new sources of innovation, and tax revenue for infrastructure and public services. However, housing supply has not kept up with demand. Because of lagging housing production and renewed investment in central cities, the region's economic growth has fueled dramatic increases in housing costs, with rents rising almost 40 percent between 2010 and 2014. According to the Bay Area Regional Health Inequities Initiative, 28 percent of San Mateo County households are affected by displacement and 28 percent are at risk of displacement. In comparison, 25 percent of households in the City and County of San Francisco are affected by displacement and 64 percent are at risk of displacement.

Homelessness

The 2019 countywide homeless census counted 1,512 homeless people in San Mateo County. The homeless population increased from 1,483 people counted in 2015. There were eight unsheltered homeless people counted in Colma in 2019, which is the highest number counted thus far. Colma's previous homeless populations were: 7 in 2013; 3 in 2015; and 1 in 2017.

Shelters and homeless assistance programs are the main resources available to homeless residents of San Mateo County. Colma helps to meet the needs of its homeless residents by providing financial support and appropriate referrals to local homeless assistance programs available in San Mateo County. In addition, Colma permits development of a homeless shelter as a permitted use in the Commercial (C) zone.

HOPE (Housing Our People Effectively) is a ten-year action plan initiated by San Mateo County that brings together the business, nonprofit, and public sector communities to address the challenging issue of homelessness. This plan reflects the Board of Supervisors' goal that housing should exist in our community for people at all income levels and all generations of families, including those who are extremely low-income or who are homeless. To end homelessness, San Mateo County must follow the housing strategy successfully documented in other communities around the country. The HOPE Plan is built around the following two key strategies:

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- Housing - increasing the supply of permanent affordable and supportive housing for people who are homeless and developing strategies to help them move into housing as rapidly as possible; and
- Prevention - prevent individuals and families from becoming homeless in the first place by assisting them to maintain their housing. These goals are consistent with the Town of Colma Housing Element.

EDUCATION

High quality education creates pathways to better health. Education is one of the top determinants of health outcomes and can impact a child's future opportunities to access health promoting prospects such as jobs and stable housing.

Table 3-4: Healthy Schools Indicators

Healthy Schools Indicators	Colma	San Mateo County
Youth Need Index[1]	51*	24
Percent of Adults with a High School Degree or less[2]	36%	27%
Percent of Adults with a bachelor's degree or Higher[2]	32%	47%

**Includes students in unincorporated area around the BART station.*

1-Note: Score is out of 100 points possible where higher score indicates higher need. Source: San Mateo County Health System, Office of Epidemiology and Evaluation, 2017

2-Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-year Estimates

Research suggests that people who are highly educated tend to be healthier and live longer. Lower educational attainment is related to economic hardship, stress, fewer occupational opportunities, lack of social support, poor medical care, less access to prevention and wellness initiatives, and less access to nutritious foods. Colma has a lower than average educational attainment rate. As shown in the table above, in Colma 36 percent of adults have a high school degree or less compared to the countywide average of 27%. In Colma 32 percent of adults had a bachelor's degree or higher compared to San Mateo County at 47%.

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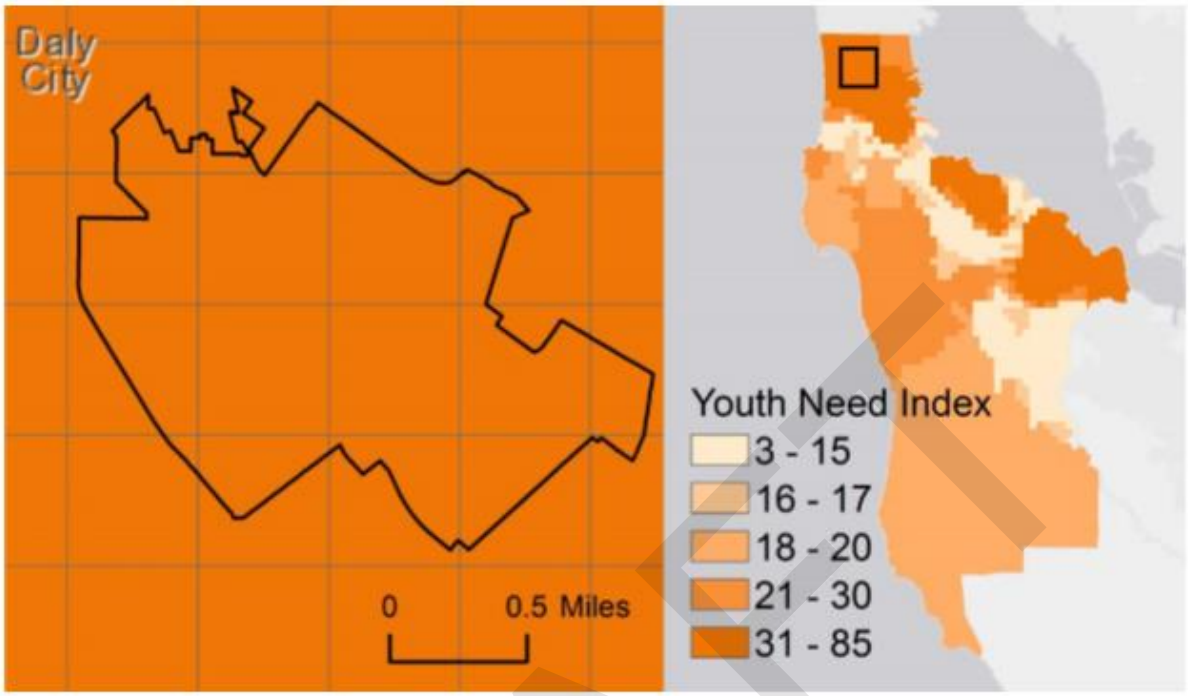
Figure 3-2: Youth Need Index in Colma



Source: Source: Healthy Cities SMC, Colma, 2018

The Youth Need Index reflects a combination of factors that impact youth success where higher scores (out of 100 total) indicate higher need. Data include Juvenile Probation and Behavioral Health hot spots, child maltreatment, low birthweight, student reading proficiency, suspensions and poverty.

HEALTHY ECONOMY

A strong local economy builds household financial security and promotes health. Access to income and wealth is one of the most important predictors of a person's health. The less money a person makes, the less opportunity they have to be healthy. Financial insecurity makes it difficult to afford and meet basic needs, leading to higher rates of depression and stress, and subsequently more health problems.

Poverty

Poverty has a significant impact on health status and outcomes; individuals with lower incomes report poorer health and higher risk of disease. The Federal Poverty Level (FPL) is the standard measure based on household size and income. In 2019, a person living below 100 percent FPL earns less than $12,490 a year and a family of four earns less than $25,750 a year. Because San Mateo County has a higher cost of living compared to the nationwide average, 200 percent FPL (double the national income threshold) is a better estimate for the number of households who live in poverty. Based on the 2018 Healthy Cities San Mateo County report 19% percent of

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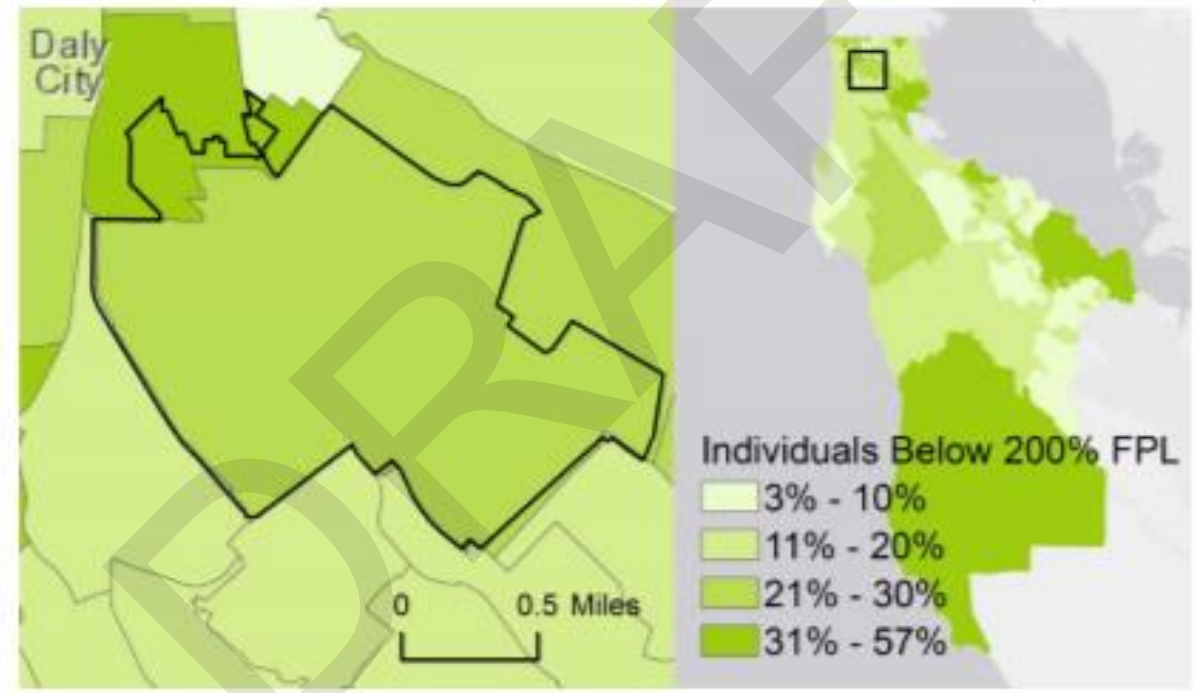
Colma residents are living below 200 percent of the FPL. Poverty is less prevalent in Colma than it is statewide), and slightly lower than the average for San Mateo County (20 percent).

Table 3-6: Healthy Economy Indicators

Healthy Economy Indicators	Colma	San Mateo County
Median Household Income	$92,589	$98,546
Per Capita Income	$37,253	$50,262
Income Inequality	0.43	0.49
Unemployment Rate	7%	6%
Percent of Residents Living Below Federal Poverty Level	9%	8%
Percent of Residents Living Below 200% of Federal Poverty Level	19%	20%

Source: Source: Healthy Cities SMC, Colma, 2018

Figure 3-3: Federal Poverty Level 2018



Source: Healthy Cities San Mateo County, 2018

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HEALTH CARE ACCESS

This section describes health care facilities near Colma and health insurance coverage for its residents.

HEALTH CARE FACILITIES

Accessibility to primary care has a role in preserving good health and preventing morbidity and hospitalizations from chronic and communicable diseases. The largest providers located within a few miles of Colma are Kaiser Permanente which has facilities in Daly City and South San Francisco, and Seaton Medical Center in Daly City.

HEALTH INSURANCE

Health insurance coverage is strongly correlated with better health outcomes. Uninsured people generally receive much less care, either preventive or for acute and chronic conditions, than insured people. According to San Mateo County All Together Better, 6.4 percent of San Mateo County adult residents and 2% of children under age 18 did not have health insurance coverage (2017). The percent of uninsured residents is far below the statewide average of 16.7 percent.

MEASURE A

In November 2012, San Mateo County residents approved Measure A, a 10-year half-cent general sales tax, to provide essential services and maintain and/or replace critical facilities. In fiscal year, 2013-2014 the Board of Supervisors approved many health and safety programs including expansion of mental health outpatient services, emergency case management, substance abuse treatment, youth trauma intervention, and capital improvements to Seton Medical Center.

AFFORDABLE CARE ACT

The Affordable Care Act (ACA), effective January 1, 2014, authorized states to expand Medicaid to many low-income persons under the age of 65 who were previously ineligible for coverage. The ACA established a new income eligibility limit of 138 percent of the federal poverty level, increasing the number of people eligible. In March 2016, more than 4.7 million Californians have begun receiving comprehensive health care benefits through Medi-Cal since the ACA was implemented.

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TOBACCO USE

Tobacco use contributes to coronary heart disease which is the leading cause of premature and preventable death in the United States. Tobacco is also the number one preventable cause of death in California.

The 2019 American Lung Association (ALA) State of Tobacco report rates states, counties and cities tobacco regulations. The State of California earned an "A" for Smoke free Air policies and "B's" for Tobacco Prevention and Control Funding, Tobacco Tax, Minimum Age, and Access to Cessation Services. The ALA established local tobacco control grades in four categories that reflect where local action is needed and where the greatest public health benefit can be derived.

The three tobacco control policy grades that are assigned to each city and county are: (1) Smoke free Outdoor Air; (2) Smoke free Housing; and (3) Reducing Sales of Tobacco Products. Colma's overall grade for tobacco control is a C. The Town adopted local smoking and tobacco regulations for outdoors and adopted a 20' distance requirement from residential entrances.

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4 Land Use and Urban Form

Executive Summary

This chapter reviews the baseline (2019) context for land use planning in the Town of Colma. It provides a comprehensive review of how local land resources are used and regulated in Colma and its immediate surroundings. This report identifies the plans, policies, and ordinances used to regulate land resources within the Town. It discusses urban form, community character, historic and cultural resources. It also summarizes regional plans and those of adjacent communities and analyzes how these plans and policies influence land use within Colma. Finally, this chapter addresses State general plan requirements related to military installations and disadvantaged unincorporated communities.

Key Findings

The Town of Colma is generally bisected by the El Camino Real (generally extending north and south) and Serramonte Boulevard (generally east and west). The Town is bordered by Daly City to the north, the Interstate 280 Freeway to the west (also Daly City), South San Francisco to the south, and San Bruno Mountain to the east. Below is a summary of the findings from this chapter:

- The Town of Colma officially incorporated on August 5, 1924, largely to protect the interest of local cemeteries.
- The town limits encompass 1.91 square miles. Colma is constrained from further expansion by Daly City and San Mateo County to the north and west, South San Francisco to the south, and the San Bruno Mountains to the east.
- Principal regional transportation facilities serving Colma are U.S. Highway 101 (to the east accessed via Sister Cities Boulevard), Interstate 280 (Junipero Serra Freeway), State Route 82 (El Camino Real), and Bay Area Rapid Transit (BART). San Mateo County Transit District (SamTrans) provides regional bus service.
- The area subject to the Colma General Plan is aligned with the town limits.
- The current Town of Colma General Plan was adopted in 1999.
- In most cases, the uses permitted by the Town of Colma Zoning Ordinance reflect the Land Use Designation in the General Plan.
- Approximately 72% of the land in Colma is Zoned for "G" for Cemetery use.

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- San Mateo County Board of Supervisors adopted the Colma BART Station Area Plan (CBSAP) in September 1994. The plan influences land uses and developments at properties by the Colma BART Station, some of which are located in the Town.
- Colma does not have any disadvantaged unincorporated communities because the Town's Sphere of Influence (SOI) is coterminous with its town limits.
- Colma is not located near any military air space or flight path necessary for military operations.
- Plan Bay Area, prepared jointly by The Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), designates one Priority Development Area (PDA) in Colma. The PDA centers around El Camino Real, stretching from the northern boundary and southern boundary of Town. The PDA is forecasted to accommodate a 75 percent increase in the number of housing units and 40 percent increase in jobs from 2010 to 2040.

EXISTING LAND USE

- Cemetery is the most common land use in the Town of Colma. Approximately 72 percent (888 acres) of the total land is existing Cemetery or reserved for future Cemetery. Some of this land is in agricultural use.
- Commercial areas make up 13 percent (165 acres) of the total land use in Colma. The majority of the commercial areas consist of the automobile dealerships on Serramonte Boulevard and the two shopping centers, 280 Metro Center and Serra Center.
- Less than one percent (2.8 acres) of land is vacant in Colma. Vacant lots are scattered throughout the Town.
- The Town has identified sites which may be underutilized and commissioned an "Urban Design Study" to review these sites for contextual development opportunities.

PLANNING BOUNDARIES

Located between the cities of Daly City and South San Francisco in northern San Mateo County, the Town of Colma is 1.91 square miles, or 1,222 acres, in size. To the east lies the San Bruno Mountain State Park, and along the western border of the Town lies the junction of Highway 1 and Interstate 280. El Camino Real, or State Route 82, runs north-south through the middle of town, and BART runs underground and roughly parallel to the El Camino Real corridor, with a BART station just to the north of town (Colma station, located in unincorporated San Mateo County) and to the south (South San Francisco station). The San Francisco International Airport is seven miles to the southeast, and downtown San Francisco is 12 miles to the northeast. Highway 101 is accessible to the east via Hillside/Sister Cities Boulevard.

Colma's General Plan was last updated 20 years ago. Since that time, Colma and the north San Mateo County area have changed considerably. BART has now been extended through Colma with multiple stations leading to the San Francisco International Airport. South San Francisco

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has developed a new transit village around the South San Francisco BART station, just south of Colma. In conjunction with the development of the South San Francisco BART station, Lawndale Boulevard was built to connect Hillside Boulevard to El Camino Real and the BART station. Just south of this, and close to Colma's southeastern border, South San Francisco has approved a new El Camino Real/Chestnut Avenue Area Plan that envisions buildings rising to perhaps 150 feet (15 stories) in height. To the north, new high-density housing has been developed around the Colma BART station in unincorporated San Mateo County.

The City of Daly City has approved significant new development along Serramonte Boulevard and Gellert Boulevard, just west of Colma. Expansion on the Serramonte Mall includes the development of substantial new commercial square footage. The Serramonte Views project, if constructed, would add a hotel and several hundred residential units in three towers on the south side of Serramonte Boulevard, just west of Gellert Boulevard. Substantial development potential remains around the Colma BART station. Townhouses are currently under construction directly west of the station, and the potential for several hundred units remains at the Samtrans park and ride lot west and south of the BART station on D Street, which transitions to F Street in Colma.

Pursuant to State law, the Colma General Plan must address all land within its planning area. The planning area encompasses all incorporated and unincorporated territory that bears a relationship to the long-term planning of the Town. At a minimum, a planning area should include the entire sphere of influence (SOI). An SOI is established by the County Local Agency Formation Commission (LAFCo) and is defined as a planning boundary generally outside an agency's legal boundary (i.e., the town limits) that designates the agency's probable future boundary and service area. San Mateo LAFCo designated Colma's 1985 Town boundary as the Town's SOI. As shown in Figure 3-1, the Town of Colma sphere of influence, planning area, and town limits are synonymous.

This section describes the major political and geographic boundaries that influence the long-term growth and development of Colma.

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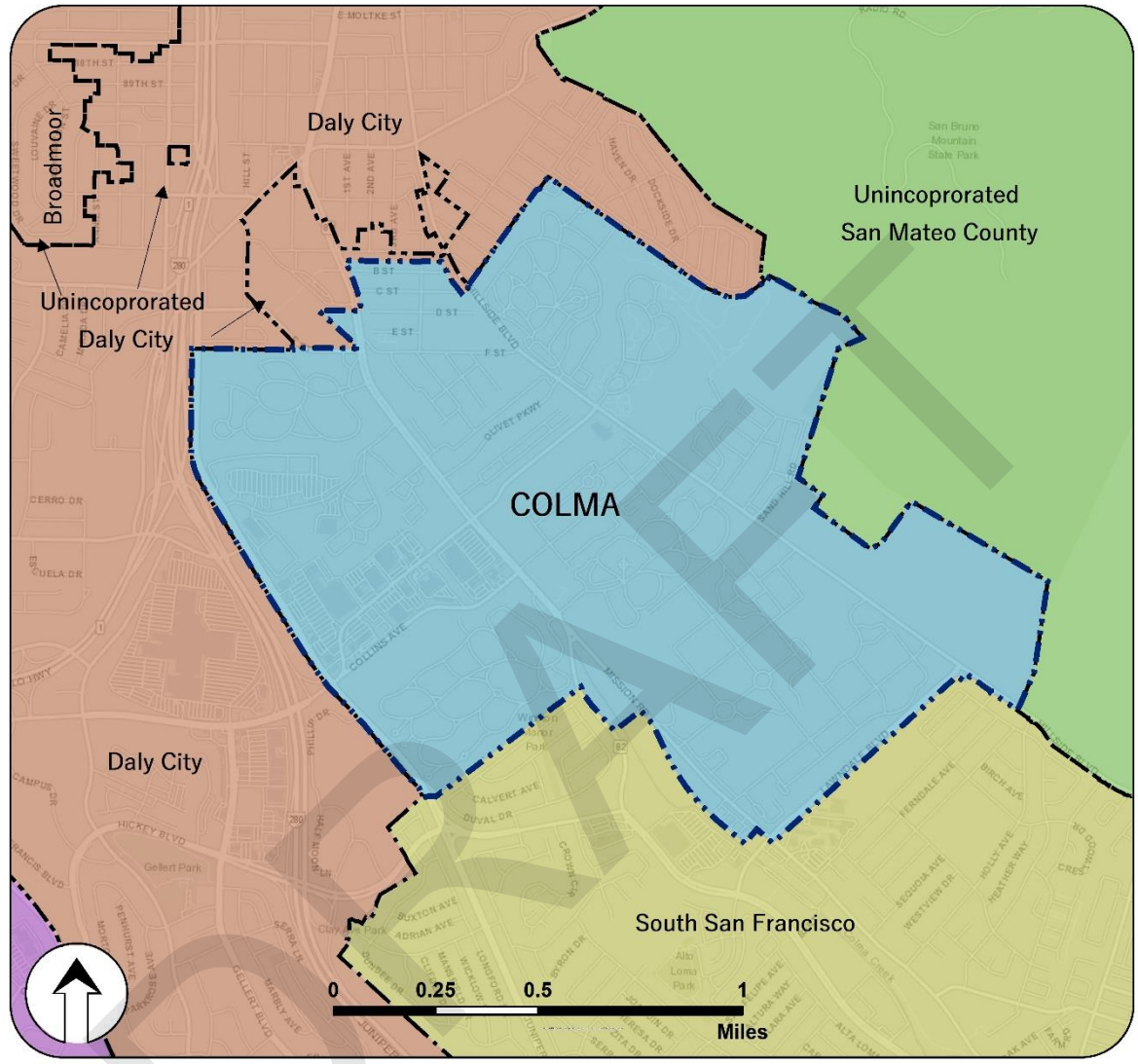
Figure 4-1: Planning Boundaries



Town of Colma's Sphere of Influence and Town Limits

Jurisdictional Boundaries

- Colma Town Limits
- Jurisdictional Boundaries

Jurisdictional Sphere of Influence

- Unincoprorated San Mateo County
- Colma
- Daly City
- Pacifica
- South San Francisco

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EXISTING LAND USE

This section summarizes existing land use within the Town of Colma. Critical to the formulation of a new Land Use Diagram and standards for Colma is an understanding of the type and distribution of existing development in the Town. This information can assist in evaluating whether past General Plan policies have been effective in directing new development and population growth to areas where they could best be accommodated and can indicate where new growth should be encouraged.

Table 4-1 summarizes, and Figure 4-2 shows the existing land use in the Town of Colma.

Table 4-1: Existing Land Use

Existing Land Use	Acreage	Percent of Total
Cemetery	887.91	72.47%
Commercial[1]	164.66	13.44%
Office	10.47	0.85%
Vacant	2.80	0.23%
Residential	19.14	1.56%
Multifamily	7.95	0.65%
Public/Quasi-Public/Utility[2]	8.57	0.70%
Roadways	123.69	10.10%
Total	1225.18	100%

[1] Includes Industrial Uses
[2] Includes Town-owned Parks and Open Space
Source: Town of Colma Planning Department

In the middle to late 1800's, the Town of Colma was primarily agricultural, growing crops to support the growing population in San Francisco. Colma transitioned to a town of cemeteries after San Francisco passed laws in the early 1900's prohibiting new burials and requiring the removal of existing cemeteries. Open space/cemeteries dominate the Town's land use, with approximately 72 percent of the total land area used or dedicated for future use as cemetery or cemetery related uses such as chapels, monument sales, flower sales and mortuaries.

Within the remaining developable area, about 132 acres house commercial and light industrial uses. Commercial uses are dominated by two development types: automobile dealers along Serramonte Boulevard, which has grown into the most significant cluster of automobile dealers in the county; and two highly successful regionally oriented retail centers with establishments including Target and Home Depot. These regional retail centers are clustered around Junipero Serra and Colma boulevards. The Collins Avenue corridor—much of it much higher in elevation than Serramonte Boulevard—is lined with auto-oriented Commercial and Light Industrial/Warehouse uses. The only commercial recreation use, and the only significant commercial use along Hillside Boulevard outside of the Sterling Park neighborhood, is the Lucky

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Chances cardroom. The cardroom employs about 700 people and is in operation 24 hours a day, seven days per week.

Most of the Town's residential uses are clustered in the Sterling Park neighborhood. A small number of additional residential uses are located at the end of Hoffman Avenue and along Mission Road, including the 63-unit Verano and 66-unit Veteran's Village neighborhoods. Public uses (Town Hall and the Police Station) are concentrated at the intersection of Serramonte Boulevard and El Camino Real.

Mission Road, which begins in the southern portion of the Town and intersects El Camino Real, has a wide range of uses. Medium-density housing units anchor the north and south ends of Mission Road, Other uses include a mix of auto service uses, light industrial uses, office uses, residential uses, and vacant parcels.

El Camino Real is one of the most significant travel corridors in the County. However, development along this corridor is limited in Colma as it is largely fronted by cemeteries or land dedicated for cemetery uses. Smaller neighborhood-serving commercial uses occur on the east side of El Camino Real between A Street in Daly City and F Street. Minor commercial uses and public uses including flower and monument shops occur between Colma Boulevard and Serramonte Boulevard. On El Camino Real between Serramonte Boulevard and its intersection with Mission Road is a mixture of offices, a bank, commercial uses, cemetery related uses and several vacant sites.

Only 0.2 percent (2.8 acres) of land in Colma is vacant. Vacant parcels are spread throughout the Town and include two housing sites near the Colma BART station. In addition to vacant land, the Town has reviewed properties which may have redevelopment potential.

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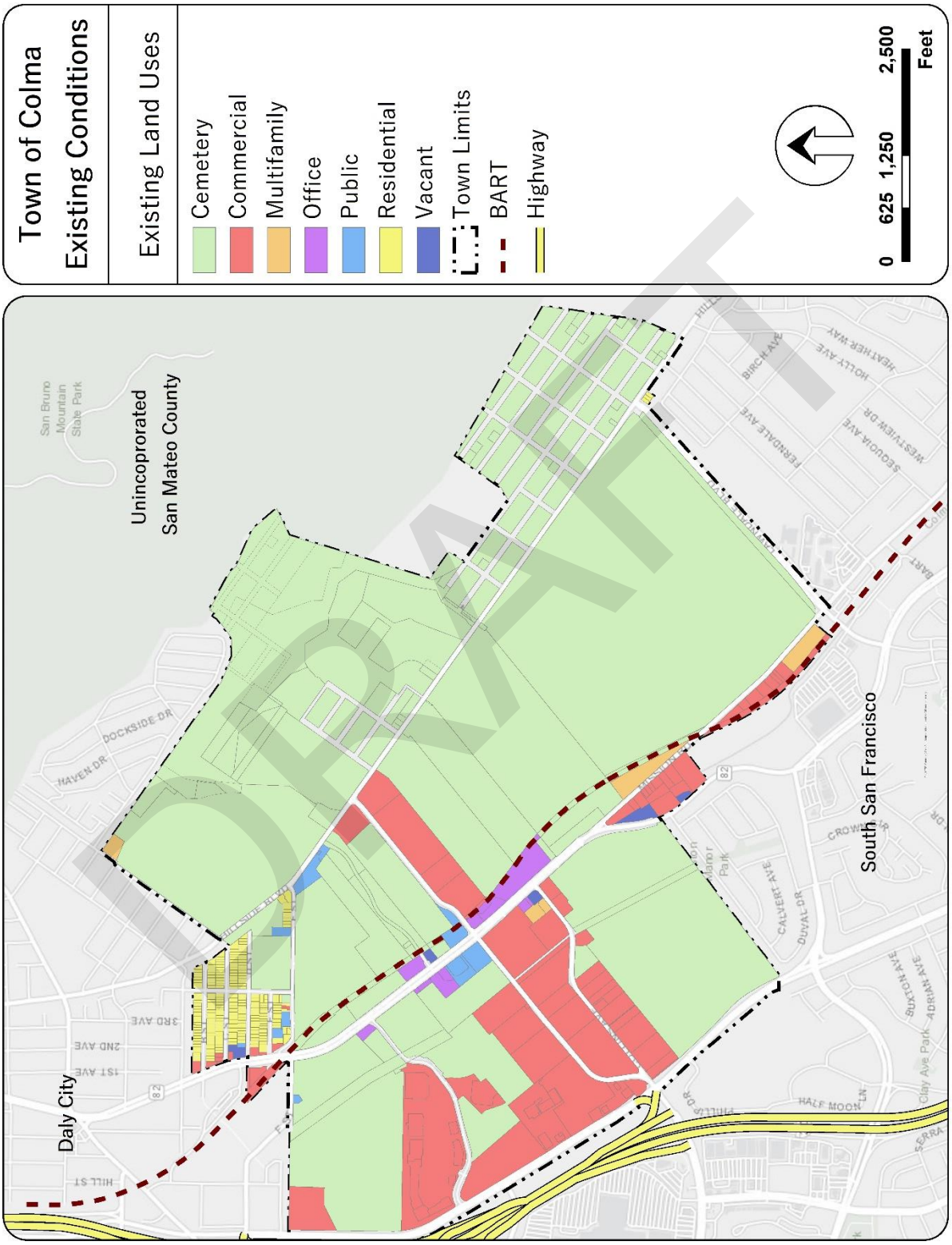
Figure 4-2: Existing Land Use



EXISTING GENERAL PLAN LAND USE DESIGNATIONS

The Colma General Plan guides how land in the Town may be developed and used by designating each parcel of land for a particular use or combination of uses and by establishing broad development policies. Land use designations identify both the types of development (e.g., residential, commercial, and industrial) that are permitted and the density or intensity of allowed developments, such as the minimum or maximum number of housing units permitted on an acre of land or the amount of building square footage allowed.

The 1999 Colma General Plan land use diagram includes five land use designations. Figure 4-2 shows the land use designations throughout the town. Table 4-2 shows the total acreage for all land use designations. Approximately 72 percent of the Town is designated for Cemetery uses. Residential, Commercial, Executive/Administrative, and Public make up the remaining 28 percent of designated land uses.

Table 4-2: Existing General Plan Land Use Designations

Land Use Designation	Existing Colma Planning Area	
	Acreage	Percent of Total
Cemetery	887.908092	72.47%
Commercial	163.279916	13.33%
Executive Administrative	14.651843	1.20%
Low Density Residential	19.137755	1.56%
Medium Density	7.948414	0.65%
Public/Quasi-Public/Utility	8.567187	0.70%
Roadways	123.686793	10.10%
Total	1225.18	100%

Source: Colma 1999 General Plan.

The 1999 General Plan Land Use Designations are broad and are intended to indicate the general type of activity that may occur on a site. The Zoning Code establishes specific standards for development, such as height, setbacks, and lot coverage. The 1999 General Plan designations, as described in the Land Use Element, are summarized below.

Cemetery

The General Plan identifies a single land use designation for cemetery, golf, agriculture and open space land uses. In addition to memorial parks, uses such as florists, green houses, monument shops and a golf course can be found in this land use designation.

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Commercial

Colma's General Plan includes one commercial land use designation that allows commercial and light industrial uses. The General Plan identifies certain commercial areas in the Town to guide the development of specific uses that complement each other in specific commercial areas. Residential facilities, including multi-family dwelling units may be allowed only in planning areas designated for commercial and residential use subject to the approval of a Use Permit.

Executive/Administrative

The Executive/Administrative land use designation allows for cemetery and agriculture uses as well as offices. The purpose of this land use designation is to expand the range of possible land uses and economic support opportunities along El Camino Real while protecting the green belt theme of the cemeteries.

Public

The Public land use designation provides space for uses that are public serving in nature, including the Town offices, police station, community center, recreation center, and public parks.

Residential

Colma's General Plan allows for a mix of residential types and unit sizes to occur. Land designated for residential purposes can be used for single family homes and small day care facilities as allowed uses. Home occupations are allowed subject to the approval of a Home Occupation Permit. As described in the Commercial section above, multi-family residential uses are permitted in specified planning areas.

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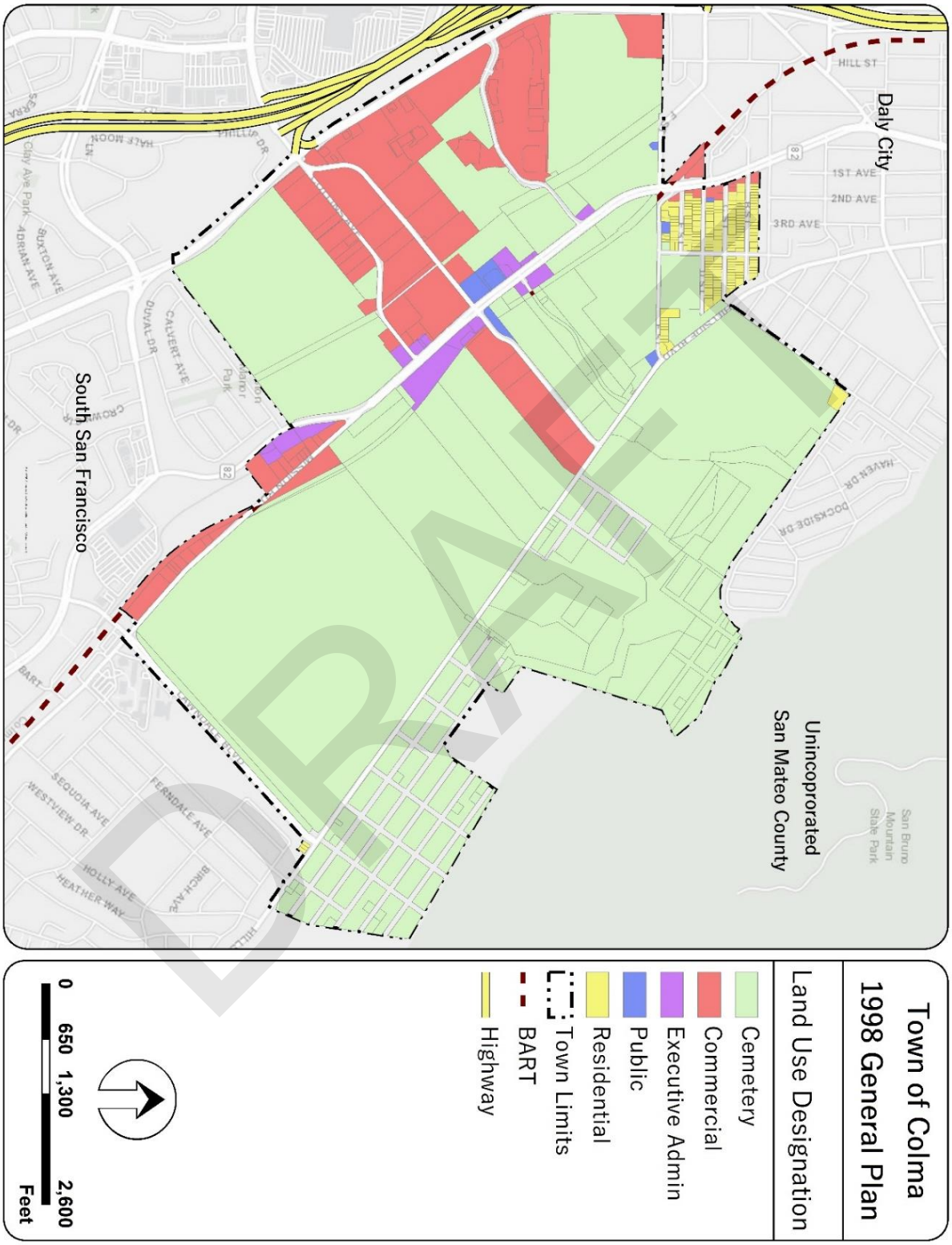
Figure 4-3: 1999 General Plan Land Use Designations



EXISTING ZONING

Zoning is the primary tool used to implement a community's general plan. A major difference between the general plan and zoning is that the general plan provides general guidance on the location, type, and density of new growth and development over the long term, while zoning provides detailed development and use standards for each parcel of land. The zoning in Colma is very similar to the land use designations in the Colma General Plan. The biggest difference is the inclusion of Planned Developments which allow for flexibility in zoning standards while conforming to the land use

This section describes the Town's zoning regulations included in Chapter 5 (Planning, Zoning, Use, and Development of Land and Improvements) of the Municipal Code.

TOWN OF COLMA ZONING ORDINANCE

The Town of Colma Zoning Ordinance consists of text and a map delineating districts for basic land uses as residential and commercial, and establishing special regulations for design and other specific concerns. For each of the basic land uses, the zoning ordinance text includes an explanation of the purpose of the zoning district; a list of permitted and conditionally permitted uses; and standards for minimum lot size, density, height, lot coverage, setbacks, and parking. The Town of Colma Zoning Ordinance also describes procedures for processing discretionary approvals. The zoning districts only apply to land within the town limits and the standards serve to preserve the character and integrity of existing neighborhoods.

The following section describes the seven zoning districts established by the Town of Colma Zoning Ordinance.

Residential Zones

Residential Zone (R). The "R" Zone allows for single family housing units. Uses such as manufactured homes, accessory dwelling units and home occupations are allowed without a Use Permit. Multiple dwelling units up to six units are allowed with a use permit. The geographic area where this zoning occurs is along Hillside Boulevard, south of Lawndale Boulevard.

Single Family Residential Zone (R-S). The "R-S" Zone is similar to the "R" Zone. The main difference is that the "R-S" Zone allows for public facilities as well. The R-S zone comprises a majority of the properties located in the northern portion of Colma, the Sterling Park neighborhood.

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Non-Residential Districts

Commercial Zone (C). The purpose of this district is to provide for general commercial uses. All commercial uses are allowed on lots zoned "C" with the approval of a Use Permit. Multifamily uses are also allowed with the approval of a Use Permit in specified planning areas designated in the General Plan.

Cemetery (G). The "G" Zone is for cemetery, agriculture and golf uses, along with their incident uses. The Zoning Ordinance was amended in 2017 to allow vehicle storage for automobile dealership inventory if the use does not impact the existing green belt theme. The location of automobile storage is limited to the area east of Hillside Boulevard at the driving range and closed landfill.

Executive Administrative (E). The "E" Zone allows for cemetery or agriculture similar to the "G" Zone. However, the "E" Zone is located exclusively along El Camino Real and allows office and restaurant uses with the approval of a Use Permit.

Public (P). The "P" Zone is for public uses such as the Town Hall, police station, community center, and public parks.

Planned Development (PD). The "PD" Zone may be established to allow flexibility of design which is in accordance with the objective and spirit of the General Plan. The purpose of a PD district is to grant diversification in the location of structures and other site qualities while ensuring adequate standards relating to public health, safety, welfare, comfort, and convenience. Many projects, such as Verano, Villa Hoffman, Veteran's Village, and Peninsula Reflections are examples of projects which have PD zoning.

As shown in Table 4-3, cemeteries make up nearly three-fourths of the land zoned in the town (72.49% or 888.11 acres).

Table 4-3 Breakdown of Land Area by Zoning District

Zoning District	Acreage	Percent of Total
Cemetery (G)	888.11	72.49%
Commercial (C)	160.61	13.11%
Planned Development (PD)	16.49	1.35%
Executive Administrative (E)	10.52	0.86%
Public (P)	8.37	0.68%
Residential (R)	0.26	0.02%
Residential (R-S)	17.14	1.40%
Roadways and ROW	123.69	10.10%
Total	1225.18	100%

Source: Colma Zoning Map and 1999 General Plan

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Overlay Zones

Design Review (DR) and Design Review-Spanish Mediterranean (DR-S). The "DR-S" overlay zone applies to the parcels along El Camino Real and a few larger commercial properties in Town. The overlay zone requires Design Review approval for major renovations and large additions. Buildings on those parcels are required to have a Spanish Mediterranean design. The "DR" overlay zone applies to all other parcels in Town except for those zoned for residential use. The overlay zone requires Design Review approval for major renovations and large additions at those properties.

Each zoning district includes development standards that are designed to protect and promote public health, safety, and general welfare and to implement the policies of the General Plan. Table 4-4 shows the Town's development standards by Zoning District in 2019.

Table 4-4: Development Standards by Zoning District

Zoning District	Lot Min.		Lot Max.	Setbacks		
	Width	Depth	Height	Front	Side	Rear
Cemetery	N/A	N/A	36 feet – Additional height for architectural features	N/A	N/A	N/A
Commercial	33-1/3 ft	100 feet	40 feet	5 feet	5 feet	5 feet
Executive / Administrative	33-1/3 feet	100 feet	36 feet	5 feet; 30 feet from El Camino Real	5 feet	5 feet
Public	N/A	N/A	N/A	N/A	N/A	N/A
Planned Development	Development Standards in the Planned Development Zones vary and are site specific.					
Residential (R)	33-1/3 feet	100 feet	36 feet	Building: 15 feet Garage: 19 feet	10% of lot width 10' max.	Ground Floor: 15 feet Second Floor: 25 feet
Single Family Residential (R-S)	33-1/3 feet	100 feet	27 feet	Building: 15 feet Garage: 19 feet	10% of lot width 10' max.	Ground Floor: 15 feet Second Floor: 25 feet

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Floor Area Ratio and Lot Coverage

The Zoning Ordinance does not include maximum lot density. Instead, Floor Area Ratio and Lot Coverage is separated by planning area in the existing General Plan. Table 4-5 below indicates the maximum floor area ratio and lot coverage for the different planning areas in Colma.

Table 4-5: Maximum Lot Density

Area	Max Lot Coverage	Max FAR	Density
Residential Areas			
Sterling Park Sub-Area	N/A	N/A	13-30 units per net acre
Scattered Residential Sites	N/A	N/A	Up to 22 units per net acre
Commercial Areas			
Commercial Core	50%	1.5	N/A
Service Commercial Area	50%	1.0	N/A
Mixed Commercial/Residential	75%	3.0	30 units per net acre
Outlying Commercial Areas	50%	1.0	N/A
Other Land Uses			
Executive Administrative	50%	1.0	N/A
Public and Quasi-public Utilities, Facilities and Services	50%	1.0	N/A

Local Plans

The Town has developed two planning documents that envision the future development of the Town, The Land Use and Urban Design Study and the Serramonte Collins Master Plan. These plans envision the Town's development potential and include economic development strategies to create a focal point for the town and strengthen the appearance and vitality of Colma's commercial core. These plans were prepared to help guide land use decision making in the future.

Land Use and Urban Design Strategy

The Town of Colma Land Use and Urban Design Strategy was prepared in 2014 and is intended to inform and be integrated into the General Plan Update. The material presented in the document offers a comprehensive land use structure as well as an overall streetscape framework. The document identifies "opportunity sites" in Colma. It also provides illustrations of buildout scenarios and shows how new development would fit in the existing setting. The Plan also envisions a new Town Center on the southwest corner of El Camino Real and Serramonte Boulevard and designates 36 feet to 110 feet high height limits in that area.

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Serramonte Boulevard and Collins Avenue Master Plan

The Master Plan outlines a vision for the Town's key commercial area and provides guidance for strategic improvements to circulation, streetscape, infrastructure, and aesthetics to improve the overall design and function of the business community. One of the key objectives of the Master Plan is to incorporate land use and urban design elements that sustain and enhance the function and unique identity of Serramonte Boulevard and Collins Avenue. To accomplish the objective, new design standards were included which increase the height limit throughout the Plan Area. On Serramonte Boulevard, buildings would be allowed to step up, increasing the height limit from 48 feet to 72 feet high after the first 200 feet, measured from the sidewalk.

The Master Plan also provides guidance on building form and articulation, wayfinding signage, access and transportation, economic development and sustainability.

Community Character and Design

Community character and design influence the way people experience a town and remember it; how it is perceived by the residents and by visitors. They play an important role in creating a distinctive identity of the community and influence the quality of life of residents. While community character and design relate predominantly to the aesthetic quality of the urban form, it can also have a significant impact on economic development, community health, safety, vitality, public services, and circulation.

Understanding how the current community character and design influences the quality of life of residents and the factors that contribute to it or detract from it, will inform decisions about how the town should develop in the future.

This section discusses the overall character of the Colma community defined by its topography, natural features, urban form, physical character, and the overall experience of the town.

Historical Context

All of the land between the San Francisco border and the South San Francisco border, the Pacific Ocean and San Bruno Mountain was known as Colma (unincorporated) until 1911, when the north end of the county became Daly City. Today there is still an area that is unincorporated near the Colma Bart Station which is actually part of the Daly City sphere of influence.

Events that led up to the incorporation of the Town of Colma began seventy-five years before the incorporation in 1924. In 1849 the gold rush brought hundreds of thousands to San Francisco and with them they also brought disease leading to a high death rate. Twenty-six cemeteries had been established and most were almost filled by the 1880s.

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In the late 1880s, cemetery owners started looking for new property to bury their dead as San Francisco's cemeteries were full. The southern end of Colma was chosen because of transportation. There was easy access by horse and carriage by way of Mission Street, street cars ran from San Francisco to Colma, and trains were going alongside the cemeteries with stops at each cemetery.

On March 26, 1900, the City and County of San Francisco passed an ordinance that banned burials within its boundaries, as the land was too valuable to be wasted on the cemeteries. It was to be used for the living.

January 14, 1914, eviction notices were sent out to all cemeteries to remove their bodies and monuments. Colma then inherited hundreds of thousands of bodies.

August 5, 1924, Lawndale became an incorporated city.

In December of 1941, the name Lawndale was changed back to Colma. The U.S. Post Office stated that there was an established Lawndale in Southern California. Colma had been able to use the name Lawndale without repercussion, as all residents and businesses had been using the Colma Post Office with a box number for delivery addresses. When it was requested to have home or business deliveries, it was then discovered that the name was used elsewhere.

March 1982, the Town of Colma annexed B Street and C Street in the Sterling Park neighborhood, which expanded the Town's primary single-family residential neighborhood.

DISTRICTS AND NEIGHBORHOODS

Planning Areas are areas within a town that have similar characteristics and physical form, which differentiate them from other parts of the town. There could be one or more districts in a town based on how well defined they are, and how clearly they can be perceived by an observer. The 1999 General Plan Land Use Element indicates that there are five Planning Areas that comprise Colma, defined by location and shown in Figure 4-4:

Cemetery

This district is bounded by F Street to the north, El Camino Real to the west, Hillside Boulevard to the east, Lawndale Boulevard to the south. The land is dedicated almost entirely to cemetery use, not including the smaller properties along El Camino Real and Mission Road, which includes commercial, office, and public uses.

Central Colma

Central Colma is located on the west side of Town. The district includes the majority of the commercial properties in Town, including the two shopping centers in Town, the auto dealerships on Serramonte Boulevard, and the auto service-related businesses on Collins Avenue.

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Cypress Hills

Cypress Hills is located on the east side of Hillside Boulevard and includes all of the properties east side of Hillside Boulevard. The area consists primarily of cemetery lands. However, the area also includes a driving range, closed landfill, and a few residential units. It also includes a large land holding of Holy Cross.

Mission Road District

The Mission Road District includes all the properties west of Mission Road. The majority of uses include service commercial uses. However, the Verano residential development and a few single-family homes (several historic) are also located in this area.

Sterling Park

Sterling Park is a residential neighborhood located near Colma's northern boundary. The majority of the properties in the area are single-family residential units with some commercial, cemetery, and public uses on F Street. Public uses include the Town's recreation center and two parks.

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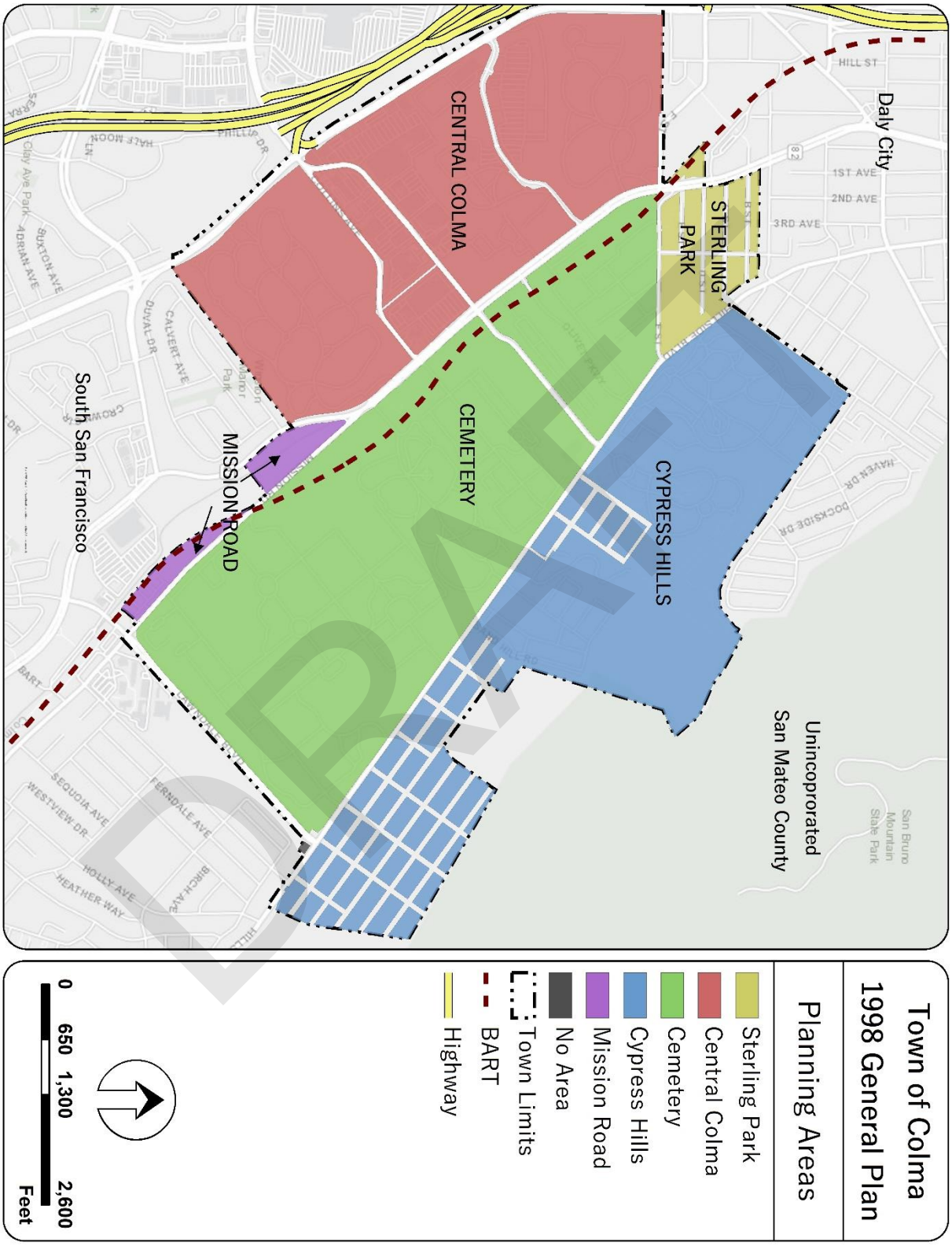
Figure 4-4: Existing Planning Areas



Location and Access

The Town of Colma is a small town located in the northern portion of San Mateo County, approximately 5 miles south of San Francisco. Colma is 1.91 square miles in size and is bordered by Daly City to the north and west; San Bruno Mountain to the east; and South San Francisco to the south.

The major connections within the Town's existing structure are vehicular. The Town is accessed through nine gateways:

- Interstate 280 Serramonte Boulevard exit;
- El Camino Real at B Street;
- El Camino Real at Mission Road;
- Hillside Boulevard at Hoffman Street;
- Hillside Boulevard at Lawndale Boulevard;
- Mission Road at Lawndale Boulevard;
- Junipero Serra Boulevard, south of D Street;
- Junipero Serra Boulevard north of Hickey Boulevard; and
- Junipero Serra Boulevard at Southgate Avenue.

Interstate 280 is the western boundary for the town and provides primary north/south access to and from the town. Highway 82, or the El Camino Real, another north/south route, extends through the center of the town. Other principal regional transportation facilities nearby are U.S. Highway 101, BART and the San Francisco International Airport. More information can be found in the Transportation and Mobility Chapter of the Existing Conditions Report.

Natural Features and Topography

Although the Town of Colma is built out, natural features such as Colma Creek and unique valley/hillside topography have been preserved. The Town's Urban Design Strategy, prepared in 2014, includes the potential daylighting of Colma Creek on private property. The San Bruno Mountains include approximately 2,416 acres of open space and abuts the Town to the east. More information regarding the Town's natural resources can be found in the Natural Resource Chapter of the Existing Conditions Report.

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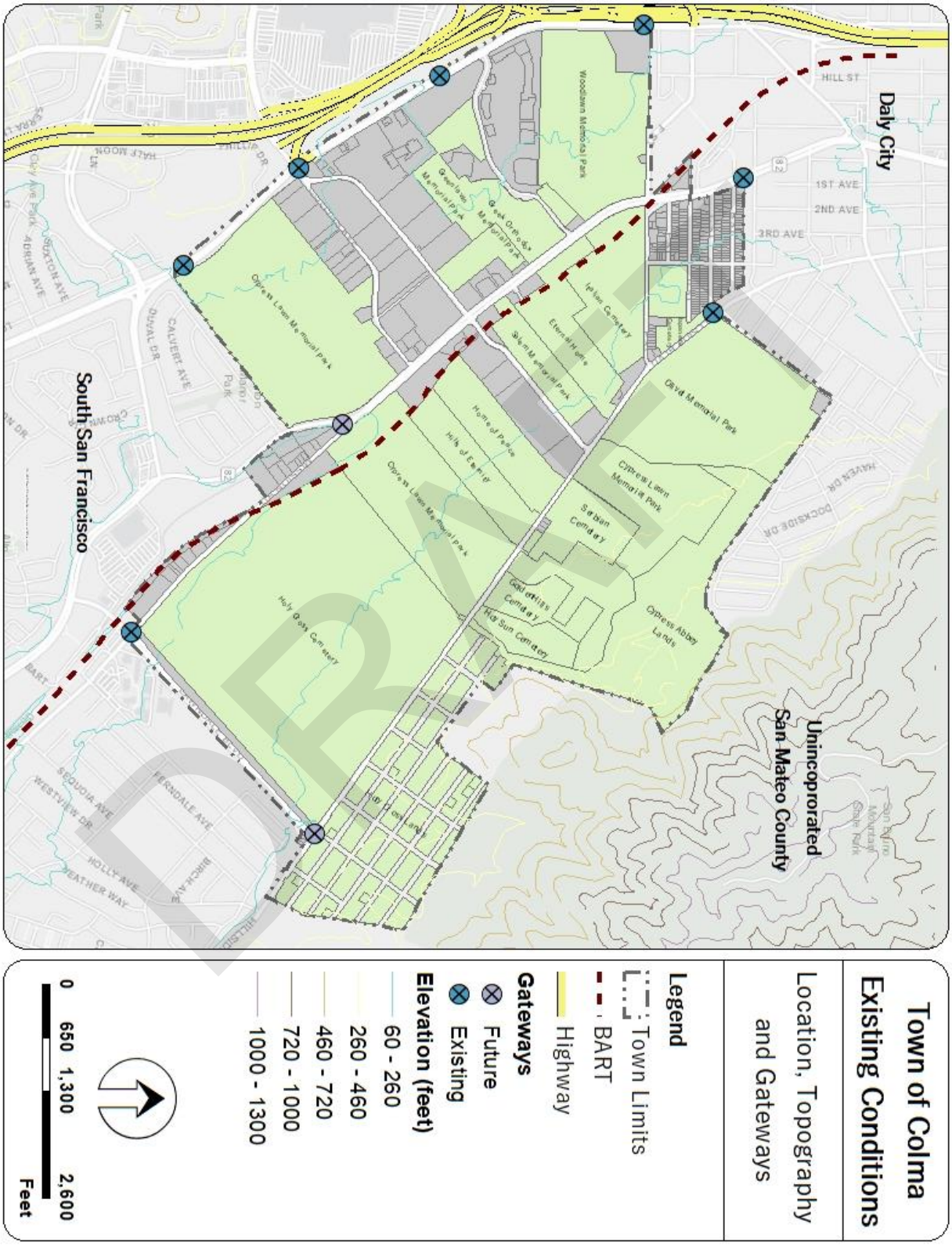
Figure 4-5: Location, Natural Features and Topography



OTHER AGENCY PLANS

This section discusses the plans, policies, and regulations of other agencies that affect growth and development within Colma. Regional, State, and Federal agencies are generally not subject to the policies and plans adopted by local governments. Therefore, understanding the roles and responsibilities of these agencies is vital to ensure effective inter-jurisdictional cooperation and coordination. This section also discusses the General Plans of neighboring Cities and the County.

REGIONAL

Plan Bay Area

Plan Bay Area is an integrated long-range transportation, land use, and housing plan for the San Francisco Bay Area. It includes the Bay Area's Regional Transportation Plan (RTP), which the Metropolitan Transportation Commission (MTC) updates every four years, and the Association of Bay Area Governments (ABAG) demographic and economic forecast, which is updated every two years. Additionally, ABAG administers the State-required Regional Housing Needs Allocation (RHNA). State law requires that the RHNA process be coordinated with the RTP.

MTC and ABAG prepared Plan Bay Area, which was adopted in July 2013, and Plan Bay Area 2040, which was adopted in July 2017. This Plan includes a Sustainable Communities Strategy (SCS), which coordinates land use, housing, and transportation for the nine-county Bay Area region. The primary goal of the SCS is to plan regional growth in a way that reduces greenhouse gas emissions for cars and light-duty trucks by reducing vehicle miles traveled.

Plan Bay Area is a result of the California Sustainable Communities and Climate Protection Act of 2008 (California Senate Bill 375), which requires each of the state's 18 metropolitan areas to reduce greenhouse gas emissions through coordinated transportation and land use planning with the goal of more sustainable communities. The law requires that the SCS promote compact, mixed-use commercial and residential development. To meet the goals of SB 375, Plan Bay Area accommodates 80 percent of the region's future housing needs in Priority Development Areas (PDAs). These are neighborhoods within walking distance of frequent transit service, offering a wide variety of housing options, and featuring amenities such as grocery stores, community centers, and restaurants.

The Transit Station Area, which includes El Camino Real and the Downtown area, comprises the Colma PDA. Between 2010 and 2040 Plan Bay Area projects that the area will see a 75 percent increase in the number of housing units and 40 percent increase in jobs. Plan Bay Area does not regulate development, but the Colma PDA is eligible for transportation funds that support and encourage residential and commercial development within the PDA boundaries. These

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funds are distributed by MTC as a part of the One Bay Area Grant (OBAG) program. The Town received OBAG funds for a project for local street and road preservation.

Plan Bay Area is continuing to evolve as new challenges develop and technology advances. ABAG and MTC are developing Plan Bay Area 2050 to address anticipated changes such as autonomous vehicles, rising sea levels, climate change, earthquakes, economic booms and busts and other external forces that may shape the Bay.

Comprehensive Airport Land Use Compatibility Plan for the Environs of SFO

SFO, the largest airport in the San Francisco Bay Area, is directly to the west and south of the Town of Colma. The Comprehensive Airport Land Use Compatibility Plan for the Environs of SFO was prepared and adopted in November 2012 by the Town/County Association of Governments (C/CAG) Board of Directors, acting as the Airport Land Use Commission for San Mateo County. This document provides land use requirements and recommendations and other information relevant to development near SFO. The intent of the plan is to ensure that development in the areas surrounding SFO is compatible with airport activities. Measures include limits on the height of structures in the path of the runways and restrictions on certain types of uses in the vicinity of the airport. In accordance with California State Law, the Town of Colma must update the General Plan, specific plans, and land use regulations to be consistent with the Airport Land Use Compatibility Plan (ALUCP).

Colma BART Station Area Plan

The Colma BART Station Area Plan adopted by San Mateo County Board of Supervisors in September 1994 and influences land uses in the town by the Colma BART Station. The Plan Area is located near the Colma BART Station and includes parcels within Colma, Daly City and unincorporated San Mateo County. The overarching goal of the BART Plan is to encourage investment and new development within the area through clearly established public policies.

The Area Plan contains five goals:

- Reflect BART Station Area Specific Plan
- Create an Attractive Neighborhood
- Introduce Uses and Improvements Compatible with BART Station
- Respect and Maintain Key Existing Uses
- Respect Design of Surrounding Communities

General Plans

City of Daly City General Plan

The City of Daly City adopted Daly City 2030 General Plan in 2013 and amended it in 2015. The General Plan establishes a vision for creating a balanced mixture of land uses that ensure equal opportunities for employment, housing, open space, and services which adequately serve both

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personal needs of the citizens and economic needs of the community. The Mission Street / El Camino Real corridor consists largely of commercial and office uses, although several mixed-use developments including residential uses have recently been developed.

City of South San Francisco General Plan

The City of South San Francisco adopted a General Plan in 1999. The City is in the process of updating the document to a 2040 General Plan. The current plan outlines a vision for South San Francisco's long-range physical and economic development and resource conservation that reflects the aspirations of the community.

San Mateo County General Plan

Colma is located within San Mateo County. The San Mateo County General Plan, adopted by the Board of Supervisors in 1986, is the long-range policy document for land within the county, not including incorporated cities and towns.

Military Institutions and Installations

The Department of Defense (DoD) has a significant presence throughout California. The California Military Land Use Compatibility Analyst (CMLUCA) helps planners and local governments like Colma determine if their project has the potential to affect areas important to military readiness. The CMLUCA was developed by the California Natural Resources Agency in conjunction with the California Governor's Office of Planning and Research (OPR).

The CMLUCA can easily determine if a project, in this case the General Plan, triggers the military notification requirement. Specifically, the Town Planning Area would need to include land operated by a military branch or within a Military Training Route or a Special Use Airspace. Based on the information from CMLUCA, there are no military branches, Military Training Routes, or Special Use Airspaces in or near Colma.

Disadvantaged Unincorporated Communities

State law requires Colma to determine if there are any disadvantaged unincorporated communities inside the Town's sphere of influence and outside the town boundary. Once identified, the Town must provide analysis of water, wastewater, stormwater drainage, and structural fire protection needs or deficiencies for each of the identified communities. This section addresses the requirements of SB 244.

A disadvantaged unincorporated community is a fringe, island, or legacy community in which the median household income is 80 percent or less than the statewide median household income. A fringe community is an inhabited, unincorporated territory within the Sphere of Influence (SOI). An island community is any inhabited and unincorporated territory that is

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surrounded or substantially surrounded by one or more cities or by one or more cities and a county boundary or the Pacific Ocean. A legacy community is a geographically-isolated community that is inhabited and has existed for at least 50 years.

Colma is built out; the Town's SOI is coterminous with its town limits, and the Town includes no fringe or island communities Colma is bordered by other incorporated cities, and therefore the Town includes no legacy communities. Therefore, Colma does not have any disadvantaged unincorporated communities and does not need to provide any analysis of the needs or deficiencies for disadvantaged unincorporated communities.

REGULATORY SETTING

PLANNING BOUNDARIES

State

General Plan Law, California Government Code Section 65300.

California Government Code Section 65300 regulates the requirements of General Plans. State law requires each city and county to adopt a General Plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to the its planning. "The California Supreme Court has called the General Plan the "constitution for future development." The General Plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private.

General Plan Guidelines, California Government Code Section 65301.

Section 65301 of the California Government Code requires a general plan to address the geographic territory of the local jurisdiction and any other territory outside its boundaries that bears relation to the planning of the jurisdiction. The jurisdiction may exercise judgment in determining what areas outside of its boundaries to include in the Planning Area. The State of California General Plan Guidelines state that the Planning Area for a town should include (at minimum) all land within the town limits and all land within the town's sphere of influence.

Cortese Knox Hertzberg Local Government Reorganization Act of 2000 (CKH Act).

The Cortese Knox Hertzberg Local Government Reorganization Act (CKH Act) is the most significant reform to local government reorganization law since the 1963 statute that created a LAFCo in each county. The law established procedures for local government changes of organization, including town incorporation, annexation to a town or special district, and consolidation of cities or special districts (Section 56000, et seq.). LAFCos have numerous powers under the CKH Act, but those of prime concern are the power to act on local agency boundary changes and to adopt spheres of influence for local agencies. The law also states that

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in order to update a sphere of influence, LAFCos are required to first conduct a review of the municipal services provided in the county.

While a LAFCo does not have any direct land use authority, the CKH Act assigns LAFCos a significant role in planning issues by requiring them to consider a wide range of land use and growth factors when they consider proposals. California Government Code Section 56001 specifically states that "the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing State interests of discouraging urban sprawl, preserving open space and prime agricultural lands, [and] efficiently extending government services."

The CKH Act also requires LAFCos to update spheres of influence for every town and special district every five years. The Peninsula cities prepared comprehensive SOI studies in 1985, which were updated regularly until 1996. The last SOI update for the Town of Colma was in 2015. Every SOI update must be accompanied by an update of the Municipal Services Review (MSR). The MSR provides an in-depth look at provider service needs, use of resources, and possibilities for partnership with other agencies; and contains determinations that serve as guidelines to inform and support LAFCo decisions about sphere of influence. Pursuant to Government Code Section 56430, San Mateo LAFCo prepared Municipal Service Reviews for the North County cities of Colma, Brisbane, Daly City, and Pacifica.

Existing General Plan Land Use Designations

State

General Plan Law, California Government Code Section 65300.

California Government Code Section 65300 regulates the substantive and topical requirements of general plans. State law requires each town and county to adopt a general plan "for the physical development of the county or town, and any land outside its boundaries which bears relation to its planning." The California Supreme Court has called the general plan the "constitution for future development." The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private.

Existing Zoning

State

Government Code Section 65860(a)

State law requires that general law town zoning ordinances be consistent with the general plan. A zoning ordinance is consistent with an adopted general plan only if the various land uses authorized by the zoning ordinance "are compatible with the objectives, policies, general land

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uses, and programs specified in such a plan" (Government Code Section 65860(a)). State law also provides that in the event a zoning ordinance becomes inconsistent with a general plan by reason of amendment to such a plan, the zoning ordinance must be amended within a reasonable time so that it is consistent with the general plan as amended (Government Code Section 65860(a)). The Town of Colma is a general law town and is, therefore, required to have zoning consistency.

Specific Plans

State

Specific Plans (California Government Code Section 65451)

California Government Code Section 65451 regulates the substantive and topical requirements of specific plans. A specific plan is a tool for the systematic implementation of the general plan and establishes a link between implementing policies of the general plan and the individual development proposals in a defined area. A specific plan may be as general as setting forth broad policy concepts, or as detailed as providing direction on every facet of development from the type, location, and intensity of uses to the design and capacity of infrastructure.

Local

Town of Colma Zoning Ordinance.

The Town of Colma Zoning Ordinance divides the town into districts or zones represented on the zoning map and specifies the allowable uses within each of those zones. The Zoning Ordinance establishes development standards for each zone, such as minimum lot size, maximum height of structures, building setbacks, and yard size.

Other Agency Plans

State

Airport Land Use Commission Plans (Public Utilities Code Section 21674.7 (b) and 21675(a)).

The purpose of Airport Land Use Commission Plans (ALUCPs) is to discourage incompatible land uses near existing airports. Prior to granting permits for the renovation or remodeling of an existing building, structure, or facility, and before the construction of a new building, local agency decision-making shall be guided by the height, use, noise, safety, and density criteria that are compatible with airport operations as established by the ALUCP.

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Government Code Section 65302.3.

The General Plan and applicable specific plans shall be consistent with the ALUCP required under PUC Section 21675.

Military Institutions and Installations

State

SB 1468.

Codified in the California Government Code Sections 65302 and 65560, SB 1468 was authored by Senator Pete Knight and signed into law by Governor Gray Davis on September 26, 2002. SB 1468 outlines how cities and counties must consider the impact of development on military readiness activities when preparing or updating their general plan. The intention of the law is to encourage cooperation between military installations and local communities to reduce land use conflicts between civilian development and military readiness activities. SB 1468 identifies specific requirements about when and where local governments must incorporate military readiness activities into the general plan.

Disadvantaged Unincorporated Communities

State

Senate Bill 244 Disadvantaged Communities (Government Code Section 65302.10).

Senate Bill (SB) 244 requires, on or before the next due date for the next adoption of its housing element, a town or county to review and update the land use element of its general plan to identify, in the case of a town, each unincorporated island or fringe community within the town's Sphere of Influence (SOI), and in the case of a county, each legacy community within the boundaries of the county, but excluding any area within the SOI of any town. The general plan must include for identified communities a description of the community; a map designating its location; an analysis of water, wastewater, stormwater drainage, and structural fire protection needs or deficiencies; and an analysis of benefit assessment districts or other financing alternatives that could make the extension of services financially feasible. It also requires that on or before the due date for each subsequent revision of its housing element, each town and county review, and if necessary, amend its general plan to update this analysis.

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KEY TERMS

Apartment. Land with five or more attached dwelling units (e.g., apartment complexes, condominiums, convalescent group homes, and nursing homes).

Assessor's Use Code. Land use codes used by the County Assessor to determine the value of property for property tax purposes.

Density. The number of permanent residential dwelling units per acre of land. Densities specified in the general plan may be expressed in units per gross acre or per net developable acre.

Duplex/Triplex/Fourplex. Two, three, or four attached dwelling units.

General Commercial. Retail, service, and entertainment uses (e.g., shopping centers, smaller stores, and quick service / fast food and sit-down restaurants).

Industrial. Light industrial facilities (e.g., business/research parks, warehouses, mini-storage businesses, light manufacturing facilities) as well as heavier industrial operations (e.g., manufacturing, processing, and assembling).

Land Use Designation. A specific geographic designation with associated land use or management policies and regulations.

Local Agency Formation Commission (LAFCo). A commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county LAFCo is empowered to approve, disapprove, or conditionally approve such proposals.

Low-Density Multifamily Residential. Land with four or fewer attached dwelling units (e.g., duplexes, triplexes, fourplexes, and townhomes).

Military Installation. A military base, camp, post, station, yard, center, or other activity under the jurisdiction of the U.S. Secretary of Defense.

Mixed Use. Parcels of land on which a variety of uses such as office, commercial, institutional, and residential are combined in a single building or on a single site in an integrated development project with a coherent physical design.

Multifamily Residential. Land with attached dwelling units (e.g., duplexes, triplexes, fourplexes, apartments, and condominiums).

Office. Professional buildings for business uses.

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Parks and Open Space. Developed parks and other facilities primarily used for recreation, such as golf courses, sports fields, walking trails, and skate parks; and undevelopable areas covered with shrubs adjacent to streets and other transportation corridors that are not sizeable in area to accommodate development.

Planning Area. An area that generally encompasses all incorporated and unincorporated territory that bears a relationship to the long-term planning of a jurisdiction.

Public/Quasi-Public/Utility. Governmental or semi-public facilities, such as schools, museums, hospitals, churches, government offices, community centers, and utility companies.

Single Family. Detached dwelling units for residential uses, such as single-family homes and mobile homes.

Sphere of Influence. An area that includes the probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission of the county.

Town Limits. A political boundary that defines land that has been incorporated into a town.

Vacant Land. Land that is not actively used for any purpose, including land that is not improved with buildings or site facilities and is sizeable in area to accommodate development.

Zoning. The division of a town into districts and the application of different regulations in each district.

Zoning Ordinance. A law dividing all land in the town into zones that specific uses permitted and standards required in each zone. The adopted zoning and planning regulations establish development standards for each zone, such as minimum lot size, maximum height of structures, building setbacks, and yard size.

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5 Public Utilities, Facilities and Services

EXECUTIVE SUMMARY

This chapter presents an overview of public and quasi-public facilities and community services provided by the Town of Colma and other agencies within the town limits.

KEY FINDINGS

- There are not any public or private schools located with the Town limits. School aged children attend public school in Daly City or South San Francisco or private school elsewhere.
- Although several memorial parks have a chapel, there are not any churches that hold regular services located in Colma. There are a number of churches in Daly City and South San Francisco.
- Recreational facilities in Colma include the Sterling Park Recreation Center, Colma Community Center and Historic Park and Bark Park. Nearby San Bruno Mountain State and County Park has a 12-mile network of hiking trails.
- Colma's Police Department is staffed by 24 full time and 3 part time personnel, and 5 per diem dispatchers.
- The Colma Fire Protection District provides fire service to the Town of Colma. Staff include 40 paid on-call fire fighters and three salaried personnel.
- There are currently no doctors or medical facilities in Colma. Seaton Medical Center is located in Daly City and Kaiser Permanente has facilitates in Daly City and South San Francisco.
- Library services are provided to Colma residents by the Daly City Library system.
- Transit services include Bay Area Rapid Transit (BART) and bus service from San Mateo County Transit District (SamTrans). The Colma BART Station is located in an unincorporated area located just west of the Sterling Park residential neighborhood

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- Sanitation services are provided by the South San Francisco - San Bruno Joint Wastewater Treatment Facility and the North San Mateo County Sanitation District Treatment Plant.
- Water service is provided to the Town by California Water Service Company. Colma is within Cal Water's South San Francisco District.
- Postal service for Colma is provided by post offices in Daly City and South San Francisco.
- Solid waste produced in Colma is collected by Republic Services of Daly City. The main solid waste disposal site for San Mateo County is the Ox Mountain Sanitary Landfill located north of Highway 92, three miles east of Half Moon Bay.
- Colma's principal sources of power are from natural gas and electricity transmitted by Pacific Gas and Electric Company (P.G.& E.) and Peninsula Clean Energy (PCE). Most residents and businesses have chosen to use PCE for electric service.

PUBLIC AND QUASI PUBLIC FACILITIES

TOWN ADMINISTRATION

Colma's government offices are housed in an attractive Spanish-style building complex located at the corner of Serramonte Boulevard and El Camino Real. An addition to and remodel of Town Hall was completed in 2018. Planning, Building, Public Works and Administrative Services staff work in this building. Police facilities are located in a building across the street from Town Hall on the corner of El Camino Real and Serramonte Boulevard. The Town also owns an 18-unit senior apartment building adjacent to Town Hall to the north on El Camino Real.

Colma's government is a Council-Manager form. A five-member City Council is elected by Colma voters. The Mayor and Vice-Mayor positions are rotated annually by a vote of City Council members. The City Manager is hired by the City Council. The City Council sets official Town policy and acts in-lieu of a Planning Commission in making development decisions. The Town does not have any committees or commissions that meet on a regular basis.

The Town employs its City Manager, Administrative Staff, Recreation management staff and Police force on a full-time basis. Other functions such as City Attorney, City Engineer, Building Official and City Planner are provided on a contract basis by private consultants.

Maintenance of public facilities and landscape is performed by Town staff or is contracted out to private individuals or firms, while the maintenance of roads is provided by San Mateo County on contract or by contracts issued through the Public Works Department.

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SCHOOLS AND CHILD CARE

Public Schools

Colma has neither public nor private schools within the town limits. School age children living in Colma attend school in nearby Daly City or South San Francisco. The Town is part of both the Jefferson Elementary School District, the Jefferson Union High School District, and the South San Francisco Unified School District. The Jefferson districts include the Sterling Park neighborhood and houses on north Hillside Boulevard and Hoffman Street. The South San Francisco district includes houses on El Camino Real, south Hillside Boulevard and in the Mission Road area. None of these school districts provide buses to transport students to and from school.

Colma Children within the Jefferson Elementary School District attended kindergarten through the 5th grade (K-5) at Colma Elementary School until 2005 when the school was closed. At the time of its closure the school served 390 students.

Children in grades K-5 attend the Susan B. Anthony School. 555 students are currently enrolled (2019). The school is located at 575 Abbot Avenue, about one-half mile from Sterling Park.

Junior High school aged children attend grades 6-8 at Thomas R. Pollicita Middle School. The Middle School is located adjacent to Colma Elementary School at 500 East Market Street in Daly City. Current enrollment at Pollicita is 676 students (2018) with capacity for 900 students.

Colma high school students within the Jefferson Union High School District attend grades 9-12 at Jefferson High School. The school is located at 6996 Mission Street between Westlake Avenue and West Cavour Street in Daly City. The school is approximately 1-1/4 miles north from Colma's Sterling Park residential area. Jefferson's current enrollment is 1162 students (2018) and its capacity is 1700 students.

Colma children living within the South San Francisco Unified School District attend elementary school at Sunshine Gardens Elementary School. The school is located at 1200 Miller Avenue, South San Francisco, about one-half mile southeast from Colma's Mission Road area. There are 402 students (2018) currently enrolled.

Children in middle school attend Parkway Heights Middle School, located 825 Park Way, South San Francisco, about 1.5 miles southeast from the Mission Road area. Current enrollment is 639 students (2018).

Colma high school students living within the South San Francisco Unified School District attend El Camino High School. The school is located at 1320 Mission Road, South San Francisco, just south of Colma's jurisdictional boundary. The school's current enrollment is 1,387 students (2018).

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All of the South San Francisco schools serving Colma students are under capacity (2018). There is an open enrollment policy within the district allowing students to attend other schools in the district on a space available basis.

Private Schools

The nearest private school available to Colma residents is the Holy Angels School. It is located at 20 Reiner Street in Daly City, one-half mile west of Colma's Sterling Park residential area. The school is operated by the Holy Angels Catholic Church and teaches grades kindergarten through 8th. Its current enrollment is 220 students (2018) and its capacity is 330 students. Monthly tuition varies depending upon the number of children enrolled from a family and the amount of parental participation in the school.

There are two private preschools in or directly adjacent to incorporated Colma: Little Giants Daycare and Preschool located at 413 B Street, and Early Learning Academy located at 398 F Street.

Child Care

Childcare is the caring for and supervision of children from ages six weeks to age 13. Childcare is a fundamental component of child development. Childcare providers are children's first teachers and can instill a variety of values including learning skills, social conventions, culture, and institutions. Private childcare centers within Colma's town limits include Little Giants Daycare and Preschool on B Street. Additional day care homes and childcare centers are located within Daly City and South San Francisco, adjoining Colma.

Recreational Facilities

The Urban Land Institute (ULI) has suggested standards for park facilities based on population to be served. The ULI standards recommend a two-acre neighborhood park for every 1,000 population to be located within one-half mile radius of the population served. Parks located within the town limits include:

Table 5 -1: Park Inventory

Facility Name	Acres	Amenities
Bark Park	0.11	Dog park
Colma Community Center and Historical Park	2.00	Restored train station, blacksmith shop and freight station
Sterling Park Recreation Center	0.33	Picnic area with barbeque pit, half court basketball court, bocce ball court, playground
Total	2.44	

Source: Town of Colma

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In addition to parks and facilities within the Town, the Town provided a sizable contribution to Thomas R. Pollicita Middle School for use in perpetuity of their recreation field and gym. These facilities can be reserved and programed by the Parks and Recreation department for day camp or other special events.

A small picnic area which is part of the Veteran's Village project on Mission Road is available for public use and includes a historic display about the site.

Private recreation and workout facilities that are available include several private health clubs located within a one-half mile distance of Colma in Daly City including Crunch Fitness in the Serramonte Center; Planet Fitness on Junipero Serra Boulevard; Snap fitness on Mission Street; Orange Theory Fitness at the 280 Metro Center and 24-Hour Fitness on Gellert Blvd.

San Bruno Mountain State and County Park lies adjacent to Colma's easternmost boundary. The park entrance, however, is approximately four and one-half miles from the Sterling Park neighborhood. The park consists of 2,416 acres of rugged landscape offering hiking opportunities and outstanding views of Colma and the central Bay Area. The facilities provided here include an extensive trail system, picnic grounds, day camp, and a handicap accessible nature trail. Vehicular access to the park is gained from Guadalupe Canyon Parkway in Daly City. Pedestrian access to the park from Colma can be gained via a trailhead on Hillside Boulevard near the southernmost boundary of the Town. This trailhead leads up a ravine to the ridge top where the greater trail network can be accessed. A second trailhead was proposed on the Hillside Landfill property. However, it was found to be infeasible and the trailhead was not installed.

Religious Institutions

Although Colma has several memorial chapels within the town limits, there are no churches in Town. Memorial chapels are generally small facilities within cemetery grounds where mourners can gather for special services. Chapels typically do not have regular hours or services. There are several churches nearby in Daly City and South San Francisco, however. Some of these churches are: Holy Angels Church on San Pedro Road, First Baptist Church on Lisbon Street, Harvest Baptist Church on hill Street, Saint Andres's Catholic Church on Southgate Avenue and New Day Church on Serramonte Boulevard. Churches in South San Francisco closest to Colma include: Gracepoint Church on Del Monte Avenue, St. Augustine Catholic Church on Callan Boulevard, Hope United Methodist Church on El Campo Drive, and Great Commission Church on Arroyo Drive.

Churches are distinguished from memorial chapels by having a regular schedule, a pastor or other regular speaker, a regular congregation and/or mailing list, and a group that organizes activities.

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Library

The nearest library to which Colma residents have access is the Serramonte Main Library located on Wembly Drive in Daly City. The library is part of the Daly City Public Library System and has over 100,000 books, audiobooks, music CDs, DVDs and magazines. The Library has materials for patrons of all ages. Its foreign languages collections include Spanish, Chinese and Tagalog. Special collections include a Filipina collection and material on local history. Public computer lab offers free Internet access and use of Microsoft Office applications. The library also has a photocopier, microfilm reader and a 3D printer.

Public and Quasi Public Services

Public Safety

Colma has its own police department located across the street from Town Hall at 1199 El Camino Real. The Department (2019) personnel includes a chief, a commander, 5 sergeants, 12 sworn officers, a communications and records supervisor, 3 dispatchers, 5 per diem dispatchers, a community service officer/admin tech, 2 part time community service officers and an administrative technician. Counting both sworn officers and sergeants, there are a minimum of two officers per shift. The Department has 8 patrol cars, one community service officer truck, one motorcycle and one electric motorcycle. Average response time to a call for service is less than two minutes.

Fire protection is provided to Colma by the Colma Fire Protection District, made up of 40 paid on-call fire fighters and three salaried part time personnel (Chief, Deputy Fire Marshal, and EMS Captain) (2019). The Fire Protection District responds to calls within the town limits and the surrounding unincorporated areas including the Broadmoor neighborhood. The station is located at 50 Reiner Street in unincorporated Colma. The volunteers have an average response time of 3.5 to 4.0 minutes.

Available equipment consists of three 1,500 gallon per minute capacity fire engines (E85,E86 and E285) and one 100-foot aerial ladder truck and one squad truck (T85), The Fire District also supports one of the three breathing support units for San Mateo County (BS86). (2019).

For additional protection to the communities it serves, the District is part of the automatic aid agreement throughout San Mateo County. The California Division of Forestry protects the San Bruno Mountain Park.

Medical Services

Both the police department and fire protection district provide emergency first aid and rescue service. At this time the Town has no doctors or other medical facilities other than veterinary

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within the town limits. The nearest hospital is Seton Medical Center located west of I-280 at 1900 Sullivan Avenue in Daly City. Seaton is in bankruptcy proceedings (2019) and the longevity of the facilities is currently unknown.

The next nearest hospital to Colma is Kaiser Permanente in South San Francisco. The medical facility is located at 1200 El Camino Real and includes after hours and pharmacy services, 24 hour emergency services and a number of departments and specialties including cardiology, nuclear medicine, neurology, minor injury clinic, podiatry, orthopedics, sleep lab, surgery and urology. A Cancer Treatment Center is located at 220 Oyster Point Blvd. The facility has a 120 bed hospital.

Kaiser Permanente also has several medical facilities located in Daly City. A medical office at 395 Hickey Boulevard in Daly City has a number of departments and specialties including internal medicine, obstetrics and gynecology, pediatrics, nutrition clinic, adult and pediatric injection clinics, radiology/diagnostic imaging, optometry and ophthalmology, laboratory and pharmacy. A Hearing Center is located at 15 Southgate Avenue and the DC Station Medical Offices at 2001 Junipero Serra Boulevard provides addiction medicine and recovery and psychiatry and mental health services.

Health and Safety Services

Public health inspections are provided by San Mateo County personnel. This service is on a request basis and includes inspection of water and sewer facilities, water quality in Colma Creek and monitoring of septic systems. San Mateo County is responsible for administering a plan to regulate hazardous materials. Colma provides information to the County on matters such as land fill sites and individual business which handle hazardous materials. Colma assists in regulating the use, transport and disposal of hazardous materials in town through conditions of approval for Use Permits. San Mateo County health department personnel also inspect businesses and provide enforcement for the Town's single-use plastic bag and Styrofoam food ware ordinance.

Public Transit Services

Transit services in Colma are provided by the San Mateo County Transit District (SamTrans). Residents of and visitors to Colma can catch a SamTrans Mainline bus along El Camino Real (ECR) or a SamTrans Local bus along Junipero Serra Boulevard. From Colma, a person can take the bus to nearly any place in San Mateo or San Francisco Counties, including schools, shopping areas, BART Stations, the San Francisco Airport, or the Seton Medical Center.

The San Francisco International Airport is located east of Highway 101 approximately six miles south and east from Colma. This airport provides access to domestic and worldwide destinations.

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The Colma BART Station is in an unincorporated area located just west of the Sterling Park residential neighborhood at Mission Street and D Street. From here one can travel into San Francisco, across the Bay to Oakland, and from there north to Richmond, east to Concord, or south to Fremont.

In 2003, BART was extended to San Francisco International Airport, and an additional station was constructed just south of Colma in South San Francisco. This extension also prompted the construction of a roadway extension from Hillside Boulevard to El Camino Real – Lawndale Boulevard. To ensure that visual and noise effects would not detract from the tranquil atmosphere required for Colma's memorial parks, the line extension through Colma was constructed underground following the abandoned Southern Pacific Railroad right-of-way.

These services are further discussed the in Transportation and Mobility section of this report

Postal Service

The nearest Post Office to Colma's Sterling Park residential area is Daly City Post Office located at 1000 Sullivan Avenue. Postal Service for Mission Road is provided by the South San Francisco Post Office located at 36 Chestnut Avenue.

Public Utilities

Because of Colma's small residential population, basic utilities are provided by special districts, agreements with agencies or by private utility providers

Sewer Service

Colma's existing sewer system is mapped on Figure 5-2. Extensions to this system are possible to any areas of the Town requiring new service due to development. Currently, the Town, through joint powers agreements, uses the South San Francisco - San Bruno Joint Wastewater Treatment Facility and the North San Mateo County Sanitation District Treatment Plant. The collection system in Town is, therefore, segmented.

The northern part of Town is served by 10-inch, 8-inch, and 6-inch lines which connect to a 10 inch force main located along the unincorporated portion of A Street. A sewer pump station is located at F Street. The Colma Creek Branch of the South San Francisco sewer system is located along Mission Road near the Holy Cross cemetery. The central and southern part of Town is served by this gravity flow system.

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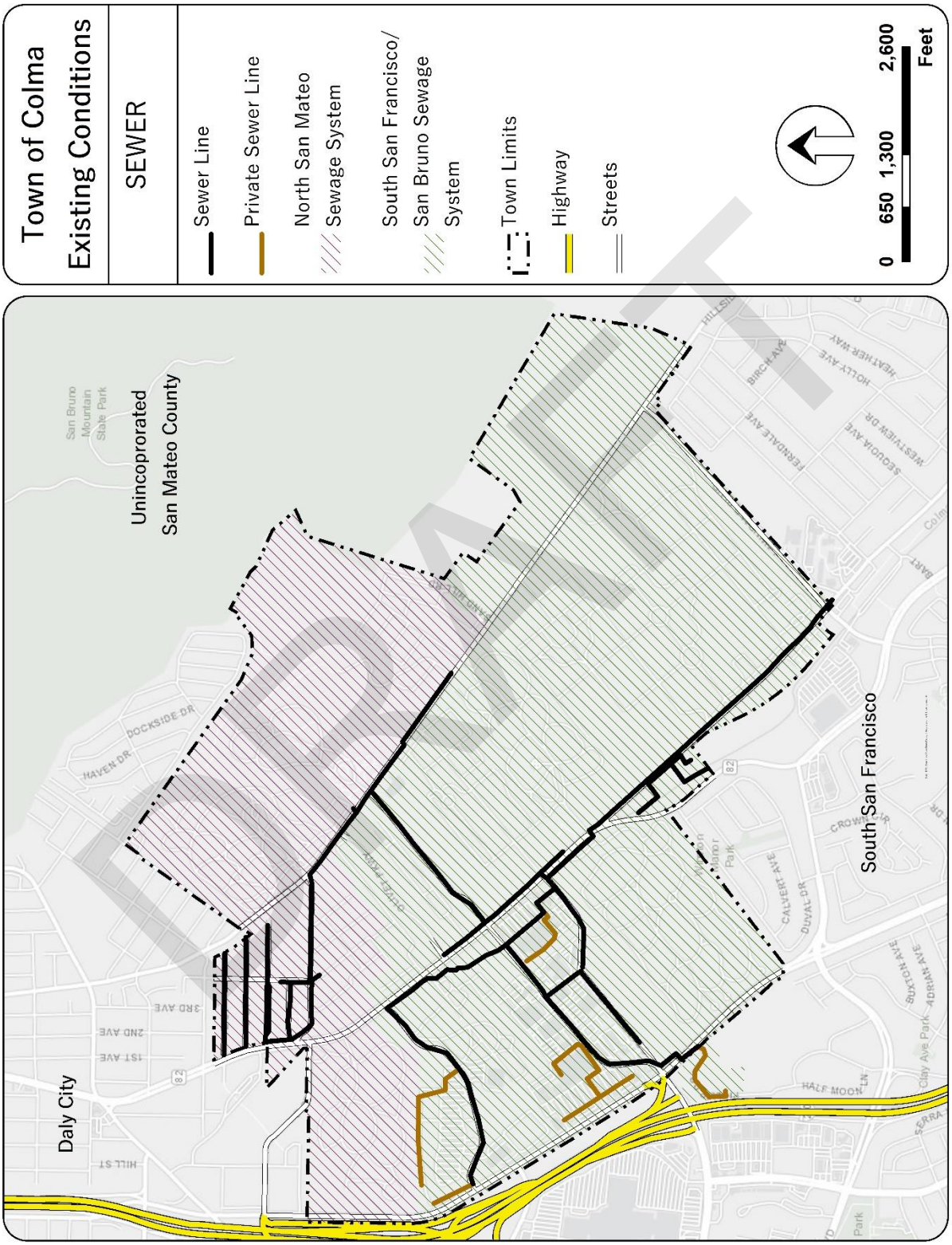
Figure 5-1: Sewer System



North San Mateo County Sanitation District Treatment Plant

The North San Mateo County Sanitation District Treatment Plant is located near John Daly Boulevard and Lake Merced Boulevard in Daly City. Through an agreement with the Sanitation District, Colma is allowed the treatment of 490,000 gpd of wastewater with annual growth increments not to exceed 30,000 gpd. Wastewater at the plant is given secondary treatment and then discharged into the Pacific Ocean. Wastewater solids are transported offsite for land disposal.

South San Francisco Water Quality Control Plant

The South San Francisco Water Quality Plant is located on Belle Air Road in South San Francisco. Located adjacent to San Francisco Bay on Colma Creek, the facility provides secondary wastewater treatment for the cities of South San Francisco, San Bruno, and Town of Colma. The average dry weather flow through the facility is 9 million gallons per day (mgd). Peak wet weather flows can exceed 60 mgd.

Through an agreement with South San Francisco and San Bruno, Colma has purchased the right to contribute maximum flows up to 450,000 gallons per day (gpd) to the shared plant. The Town will be amending this agreement in the near future since actual flows are near or exceed this capacity.

WATER SERVICE

Water service is provided to the Town by California Water Service Company. Colma is within Cal Water's South San Francisco District, which provides water from a combination of groundwater and purchased water sources. The purchased water is acquired from the San Francisco Water Department, whose sources are the Hetch Hetchy System, the Tuolumne Basin, and individual local sources. A new treatment plant for the groundwater supply opened in 1997. The supply and storage capacity of water reservoirs is adequate to meet the present needs and foreseeable growth of Colma as projected in the Housing Element.

Colma is located above a ground water aquifer associated with local geology. Well water is the primary source of irrigation water used by the cemeteries in Colma.

The City and County of San Francisco, acting under the jurisdiction of its Public Utilities Commission, owns land and easements for its water transmission lines through Colma. The main right-of-way, from the southern edge of Cypress Lawn Cemetery on the south, to the northern edge of Woodlawn Cemetery on the north, has a consistent open space designation through Colma recognizing the fact that the subsurface waterlines prevent structures from being built.

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Power and Energy Use

Colma's principal sources of power are from natural gas and electricity transmitted by Pacific Gas and Electric Company (P.G.& E.). Power is supplied to the Town by Peninsula Clean Energy, except for a very few properties that have opted out of service by Peninsula Clean energy in favor of P.G. & E.

Colma's commercial businesses use a large majority of the energy within the Town. Residential energy use accounts for a relatively small percentage of energy use within the Town.

Telephone and Communications

Local and nearby telephone communication is provided to Colma residents by Verizon. Long distance telephone service is provided by numerous companies as selected by local users. Internet phone and cable service is provided primarily by Comcast. Additional television cable service for subscribers in Colma includes AT&T and Direct TV. Commercial communication structures such as towers, antenna and equipment buildings are only allowed in commercial and open space districts subject to a Use Permit and then only when not highly visible from public roads.

Utility Undergrounding

In all new construction, whether residential or commercial, power lines and telephone lines are required to be placed underground entirely or from the nearest existing pole. Service utility boxes and transformers must be screened from view by fencing and/or landscaping.

In areas of existing development, utility lines should be placed underground in order to give Colma's streets a neater appearance. One section that has been completed is Mission Street in Daly City to F Street in Colma.

This undergrounding should occur as funds become available or in conjunction with other public works projects. Here are some key segments:

1. El Camino Real - F Street to Serramonte Boulevard.
2. El Camino Real - Serramonte Boulevard south to town boundary.
3. Mission Road - El Camino Real to town boundary.
4. Hillside Boulevard.
5. Junipero Serra Boulevard.
6. Collins Avenue
7. Serramonte Boulevard - El Camino Real to Hillside Boulevard.

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Storm Drain Facilities

All storm water runoff flows by gravity through open channels and culverts to Colma Creek. Once the creek leaves Colma it continues most of the way in an open channel through South San Francisco and into the Bay. Areas with flooding potential are discussed in the Safety Element. Open space characteristics of the creek are discussed in the Conservation/Open Space Element.

Solid Waste Disposal Facilities

Solid waste produced in Colma is collected by Republic Services of Daly City. Garbage is collected once a week and, subscription to the service is mandatory in Colma. The main solid waste disposal site for San Mateo County is the Ox Mountain Sanitary Landfill located north of Highway 92, three miles east of Half Moon Bay. The facility accepts all solid waste except hazardous materials.

A private landfill site, operated by Calco, in the Cypress Hills area east of Hillside Boulevard in Colma, closed in 2011.

Recycling

Republic Services provides curbside pickup for recyclables for residential customers. One bin is used for recyclables such as paper, cardboard, aluminum and metal, glass and plastic. In addition to these standard recyclables, electronics and universal (items such as light bulbs, batteries and ballasts that contain hazardous materials) recycling is offered for commercial customers. Residents with hazardous items such as batteries can take those items to a drop off location.

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6 Transportation and Mobility

Executive Summary

This chapter reviews the baseline (2019) context for Transportation and Mobility planning in the Town of Colma. It provides a comprehensive review of the transportation network in Colma and its immediate surroundings. This report discusses travel and commute patterns, streets and highways, active transportation, transit service, transportation demand management and parking. Its also summarizes local, regional and state plans and policies which influence the transportation network in Colma.

Key Findings

Travel and Commute Patterns

- The majority of Colma commuters, both residents and employees drive alone.

Streets and Highways

- Most of Colma's intersections operate with a high level of service, however the existing General Plan allows for a level of service F during peak hours. There is only one intersection in Colma which operates at a level of service E or During the AM and PM Peak. This intersection is at Junipero Serra Blvd and Serramonte Boulevard which is the on-ramp to I-280 North.

Active Transportation

- Colma currently has pedestrian and bike infrastructure in place for travel around and though the town. Bike facilities include of Class II Bike lanes and Class III bicycle routes, while pedestrian facilities are comprised of sidewalks, crosswalks at intersections and high visibility mid-block crossings.
- The Town has embarked on the creation of a Serramonte Boulevard and Collins Avenue Master Plan, to improve pedestrian connectively though the commercial core. The provision for bicycle lanes or routes was found to be problematic due to the quick change in elevation and limited rights of way along these corridors.
- El Camino Real is difficult to cross and presents a major barrier to pedestrians and bicyclists. The Town of Colma has been awarded a grant to develop a Pedestrian and

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Bicycle Master Plan for its portion of El Camino Real. This plan is scheduled for adoption in 2021.

Transit Service

- Colma is served by local and regional transit options. BART provides connections to San Francisco International Airport, San Francisco and the East Bay, and has SamTrans bus service though the primary North-South Corridors.
- While Colma does not have a direct Caltrain stop, BART and SamTrans provide connections to the South San Francisco Caltrain Station.

Parking

- Colma's shopping centers are generally served by large surface parking lots with the capacity to handle their shoppers and visitors.
- Colma's Sterling Park Neighborhood has short-term on-street parking for nonresidents. Residents can obtain parking permits. The parking demand is due to the proximity to the Colma BART Station and density of the neighborhood.
- Elsewhere in Colma there are limited opportunities for on-street parking. On street parking only exists on portions of El Camino Real, Mission Road, Collins Ave and Hillside Boulevard.
- Junipero Serra Blvd, Serramonte Blvd, and Colma Blvd. do not have on-street parking and are designed to carry vehicles though and around town quickly.

TRAVEL AND COMMUTE PATTERNS

Colma is located along a developed north/south corridor between San Jose and San Francisco. Interstate 280, El Camino Real, and the Colma and South San Francisco Bart Stations connect the town to significant regional transportation amenities.

COMMUTE PATTERNS

The workplace destinations for residents of Colma from the 2006 to 2010 American Community Survey are summarized in Table 6-1. Forty percent of Colma residents worked in San Francisco with another 37 percent working in Northern San Mateo County. Approximately 14 percent traveled south to southern San Mateo County, five percent to Santa Clara County, and three percent crossed the bay to East Bay workplaces. This indicates that mobility in the local area is important as well as connections to major regional employment centers.

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Table 6-1: Colma Residential Commute Destinations

Employment Location	2006-2010 Percent of Workplaces
Northern San Mateo County	37%
Southern San Mateo County	14%
San Francisco	40%
South Bay	5%
East Bay	3%
North Bay	1%
Total	**100.0%**

Source: U.S. Census Bureau, American Community Survey 2006-2010 Five-year estimates. Commuting Bay Area By Place Of Residence, http://www.bayareacensus.ca.gov/transportation.htm March 26, 2019.

Commute Mode Shares

The commute mode shares from the 2013-2017 American Community Survey are summarized in Table 6-2. Compared to San Mateo County averages, Colma residents are about 28 percent less likely to drive alone to work, while employees working in Colma drive alone at rates 12 percent lower than the county average. Colma residents and employees use transit at higher rates than the county averages, however, bicycle use is lower. The higher transit usage is likely due to the proximity of the Colma and South San Francisco BART stations to major activity centers. The lower bicycle usage is likely related to the hillier terrain throughout the town.

Table 6-2: Commute Mode Shares

Travel Mode	Colma	San Mateo County
Drive Alone/Motorcycle	56.3	70.9
Carpool	15.1	11.1
Public Transit	19.3	8.4
Bike	0	1.1
Walk	4.7	2.8
Worked at Home	4.6	4.9
Other	0	0.8
Total	**100%**	**100%**

Source: U.S. Census Bureau, American Community Survey 2006-2010 Five-year estimates. Commuting Bay Area By Place Of Residence, http://www.bayareacensus.ca.gov/transportation.htm March 26, 2019.

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STREETS AND HIGHWAYS

This section describes the streets and highways serving the Town of Colma. An understanding of the existing conditions on streets and highways in the town provides the baseline from which the existing and future mobility needs can be identified and addressed.

The existing streets and highways serve different functions as presented in the hierarchy of street classifications (**Error! Reference source not found.**). The average daily traffic (ADT) volume of the study segments provides an indication of the key corridors serving both regional through traffic and local access. This section includes a description and analysis of the existing traffic volumes, levels of service, and on-going transportation improvements.

FUNCTIONAL CLASSIFICATIONS

Roadways serve two primary functions: mobility and property access. Higher and reliable speeds are desirable for mobility, while lower speeds are more desirable for property access and bicycle and pedestrian safety, particularly in residential areas. A functional classification system provides a hierarchy of streets to meet both access and mobility needs. Arterials emphasize high mobility for through traffic, local streets emphasize property access, and collectors provide a balance between both functions.

Standard functional classifications for urban areas are:

- Principal Arterial, Interstate
- Principal Arterial, Other Freeways
- Principal Arterial, Other
- Minor Arterial
- Collector
- Local

The Principal Arterial Interstate and Other Freeway classifications apply to limited access freeways and are generally regional routes operated by the State. State routes that are not access-controlled freeways would typically be classified as Principal Arterial Other. Classifications for local streets include Principal Arterial Other, Minor Arterial, Collector and Local. The Town of Colma uses a modified version of these classifications for its streets.

REGIONAL ROAD SYSTEM

Colma is served by one north-south freeway, Interstate 280 (I-280). State Route 82 (SR 82)/El Camino Real is a major non-freeway regional route (or Principal Arterial, Other). These State highway facilities are maintained and operated by the California State Department of Transportation (Caltrans). However, Colma maintains landscape improvements.

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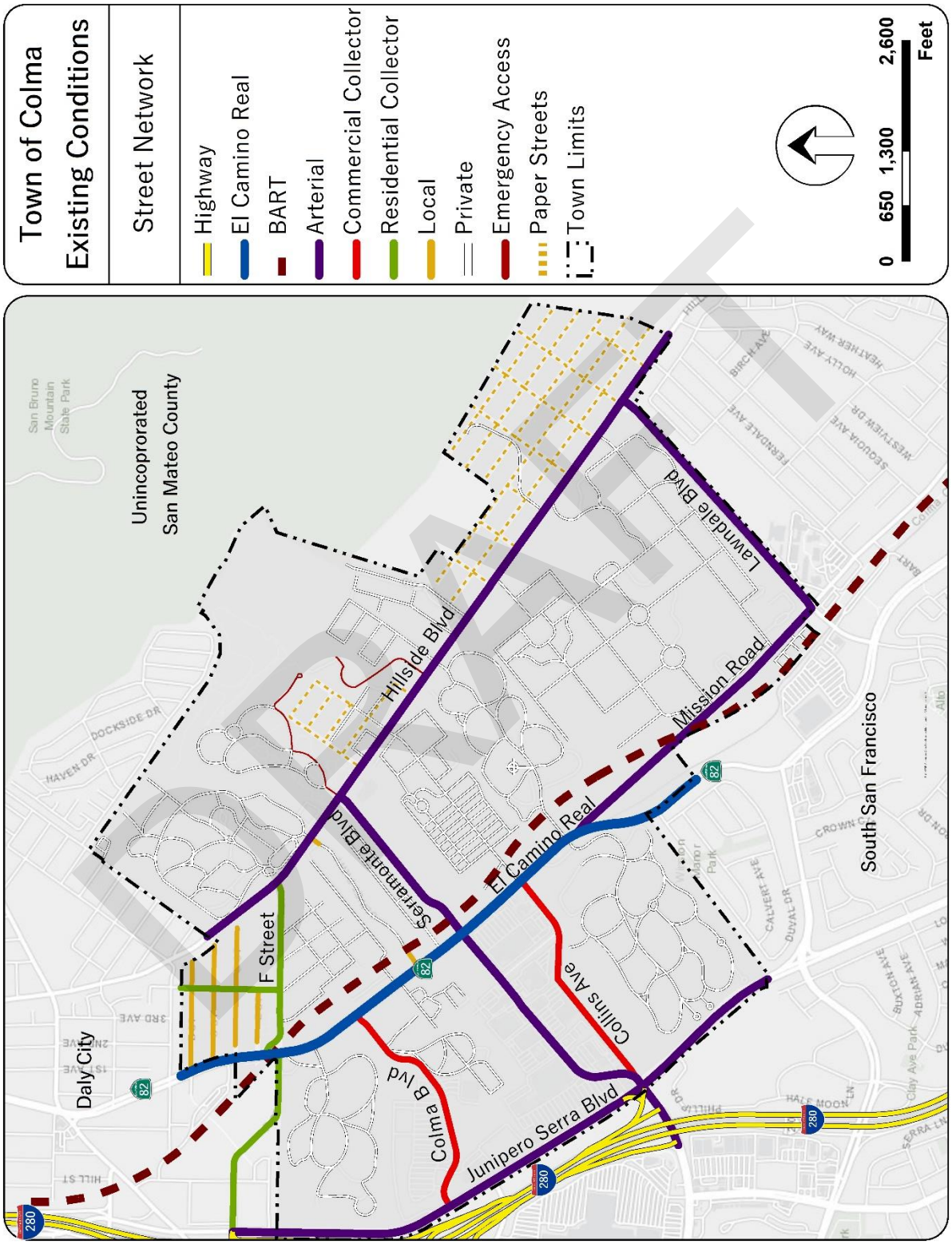
Figure 6-1: Map of the Town of Colma's Street Network



Interstate 280

Interstate 280 is a north-south freeway connecting San Francisco to the north with San Jose to the south, generally serving the western side of the developed portions of the Peninsula. I-280 provides access to Colma at three locations: Hickey Boulevard, Serramonte Boulevard and D Street at Junipero Serra Boulevard. Hickey Boulevard is a full interchange with on-and off-ramps for both northbound and southbound traffic. The Serramonte Boulevard interchange provides a northbound on-ramp and a southbound off-ramp only. A northbound off-ramp exists in the vicinity of D Street at Junipero Serra Boulevard in Daly City.

There are weaving conflicts between the Serramonte Boulevard on-ramp traffic and the I-280 traffic accessing the D Street (Eastmoor) and Highway 1 off-ramps. These conflicts could be reduced by constructing a fly-over for Highway 1 traffic. In addition, weaving conflicts occur at the Serramonte Boulevard exit due to the short merge lane for those entering or exiting the freeway.

El Camino Real (State Route 82)

El Camino Real (State Route 82) is a Principal Arterial which serves the central areas of many of the cities on the Peninsula between San Francisco and San Jose. North of F Street, the road name is Mission Street (Daly City) and south of F Street, through Colma, it becomes El Camino Real. Highway 82 bisects the Town of Colma with three travel lanes in each direction, narrowing to two lanes in each direction south of the Mission Road intersection. Most of El Camino has a 28-foot wide landscaped median with an underground box culvert for drainage. There are overhead electric, telephone, and cable TV lines along both sides of the street starting just south of F Street, extending to the Town's southern boundary.

On-street parking is allowed in many locations, with various time restrictions, including no-parking during overnight hours. The Town plans to designate parking spaces along El Camino Real and institute a one vehicle per space rule that reduce the number of recreational vehicles and box trucks that use the corridor for parking. Sidewalks have been installed along the entire east side of the roadway to Mission Road, however the west side lacks sidewalks north of the Greek Cemetery driveway and south of Cypress Lawn (which transitions into the jurisdiction of South San Francisco). In 2019, the Town began a study of the El Camino Real corridor to assess safety and to create opportunities for bicyclists and pedestrians. This study is funded largely through a Caltrans planning grant.

Left turns from Collins Avenue and from various cemetery entrance driveways onto El Camino Real can be dangerous at times due to the width of El Camino Real (three lanes in each direction) and the high speed of traffic. The wide median is important for the protection it provides to vehicles turning into businesses. Future median landscaping improvements must not obscure lines of sight. Controls on left-turn movements should be considered. Or, in the case of Collins Avenue, signalization is recommended. Likewise, access to parcels fronting El Camino Real south of Mission Road is potentially hazardous due to poor visibility caused by the

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curvature of the road, and the relatively high speed of traffic. Left turns to and from these parcels should be restricted. Access to parcels with frontage on both El Camino Real and Mission Road should be restricted to Mission Road where feasible.

Local Street System

The current 2014 Circulation Element of the Colma General Plan defines local streets in Colma as one of the following street classifications:

- Arterial
- Collector
- Local

The functions of each of these street classifications are described below.

Principal Arterials

Arterial streets connect Colma's residential, commercial and cemetery districts and provide a link to surrounding communities. Arterials also act as alternative north-south routes should the major highway system be blocked. Colma streets classified as Principal Arterials include the following:

Junipero Serra Boulevard (JSB): JSB is a north/south arterial street extending from Daly City, through Colma, and into South San Francisco. Traffic signals are located at Serramonte Boulevard, the entrance to the Serra Shopping Center, Southgate Avenue and Colma Boulevard. JSB has four lanes of traffic that travel in north-south directions, with occasional right-turning lanes. The traffic lanes are divided by raised landscape medians. A sidewalk exists along the majority of the east side of the street, along with bicycle paths that run the entire length of JSB within the Town of Colma. Sidewalks on the west side only exist at bus stop locations at Colma Boulevard and at the Serra Center driveway. On-street parking is prohibited along the entire length of JSB but is being considered for a small segment between Serramonte Boulevard and the Serra Center driveway.

Serramonte Boulevard: Serramonte Boulevard is a four-lane Arterial street extending from Saint Francis Boulevard in Daly City to Hillside Boulevard in Colma. There is a partial interchange with I-280 consisting of a southbound off-ramp and a northbound on-ramp. Colma's major retail core, which includes auto dealerships and shopping centers, is centered on Serramonte Boulevard between Junipero Serra Boulevard and El Camino Real.

There are sidewalks along both sides of Serramonte between Junipero Serra Boulevard and El Camino Real, and along the south side only from El Camino Real to Hillside Boulevard. The low level of pedestrian activity and the presence of an existing cemetery on the north side of the road minimizes the need to develop a sidewalk on both sides.

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Parking is not allowed along any portions of Serramonte Boulevard. The lack of left turn lanes to the many driveways along Serramonte Boulevard is a potential source of congestion. Loading and unloading of car carriers or other vehicles on the street is prohibited.

The Town has accepted the Serramonte Boulevard and Collins Avenue Master Plan which includes landscape and streetscape enhancements along Serramonte Boulevard and Collins Avenue. The plan proposes a lane reduction between the Serra Center access driveway and the El Camino Real. Implementation of the plan will be considered in a future Capital Improvement Program.

Mission Road: Mission Road is a two-lane road which connects El Camino Real in Colma to Chestnut Avenue in South San Francisco. Mission Road is used as an alternate to El Camino from many sections of South San Francisco. Access to Mission Road from El Camino Real is controlled by a stop sign. Left turns from Mission Road into the south bound lane of El Camino Real are prohibited because of poor sight lines and fast-moving traffic; instead, motorists must make a U-turn at one of several median breaks on El Camino Real. On-street parking is allowed on both sides of Mission Road, although there are time restricted zones in most areas. Most of this route has sidewalks along both sides of the street, except in front of Holy Cross Cemetery. Auto repair, light industrial and residential uses in this area result in heavy demand for parking both on-and off-street. An improvement project is planned to install, widen and improve sidewalks and pedestrian safety.

Hillside/Sister Cities Boulevard: Hillside Boulevard is a north-south arterial roadway connecting Daly City near the San Francisco city limits, through Colma, to Highway 101 in South San Francisco (Hillside Boulevard becomes Sister Cities Boulevard in South San Francisco). Hillside Boulevard has been striped for two lanes through Colma. Traffic signals are located at Olivet Parkway, Serramonte Boulevard, and Lawndale Boulevard. The intersections at F Street and at Hoffman Street are controlled by stop signs. Sidewalks are installed on both sides of Hillside Boulevard between Serramonte Boulevard and Hoffman Street.

Lawndale Boulevard: Lawndale Boulevard is an east/west connector between Hillside Boulevard and Mission Road. The name of the street changes to McLellan Drive, which makes the connection from Mission Road to the El Camino Real. Pacific Gas and Electric Company has installed gas and electric transmission lines the entire length of Lawndale Boulevard.

Collector Streets

Collector streets serve the important function of transferring traffic from local traffic generators such as shopping and employment areas to the arterials. Collector streets do not form a continuous system; otherwise there would be a tendency to use them as arterials. The following streets have been designated as collector streets in Colma:

Collins Avenue: Collins Avenue is a two-lane road which connects El Camino Real at its east end with Serramonte Boulevard at its west end. Collins Avenue descends from west to east and

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is bordered by a steep downslope along most of its north side. There is an existing sidewalk along Collins Avenue on the south side of the street. No sidewalk exists for a majority of the north side of the street. Parking is allowed only along the south side of the street, except for a segment close to El Camino Real. The eastern portion has a wider roadway, sidewalks and parking lanes on both sides of the street in accordance with the Collins Avenue Plan Line specifications (refer to Exhibit C-5).

The Serramonte Boulevard and Collins Avenue Master Plan includes landscape and streetscape enhancements along Collins Avenue. The plan proposes crosswalk, sidewalk and parking improvements. Implementation of these improvements will be considered in a future Capital Improvement Program.

Colma Boulevard: Colma Boulevard is a collector connecting Junipero Serra Boulevard with El Camino Real. It has two lanes in each direction but widens to four lanes in each direction at the west end for access to abutting commercial uses. No on-street parking is allowed. A sidewalk exists on the entire north side of the street. On the south side there is no sidewalk in front of the Greenlawn Cemetery.

F street: F Street serves as a two-lane collector route at the north end of town. F Street provides access to the Sterling Park neighborhood between Hillside Boulevard and El Camino Real. As part of the Sterling Park Street Beautification Program, this segment has received improvements such as street trees, ornamental light fixtures, underground utilities and special paving. West of El Camino Real, F Street turns northwest, passes by the Colma BART station and merges with D Street in Daly City. D street leads to Junipero Serra Boulevard and an I-280 on-ramp. Two residential developments, Trestle Glen and a townhouse development, both in unincorporated San Mateo County, front F Street (the street being in the Town limits).

Clark Avenue: Clark Avenue is two-lane residential collector street running north/south between Fisher Street in Daly City and F Street in Colma. It is a principal route in and out of the Sterling Park residential area, particularly for residents on D and E Streets. Sidewalks are provided, and parking is allowed on both sides of the street.

Local Streets

Local streets comprise all the facilities not in one of the higher designations. They primarily permit direct access to abutting property and connections to the collector and arterial streets and offer the lowest level of vehicle mobility and usually do not include bus routes. Service to through traffic movements are usually deliberately discouraged.

"Paper" Streets

The Cypress Hills area (on the east side of Hillside Boulevard) has a series of public easements remaining from when the land was originally platted for development. Although the streets were never built, a number of lots within the platted area were sold speculatively. These lots, known as "in-holding" lots, have not been developed, but nevertheless the Town is obliged to

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retain the paper streets as a theoretical means of access. The paper streets remain on the County Assessor's maps.

Decommissioned Landfill/Park Access Road

Access to the decommissioned Hillside Landfill is provided by Sand Hill Road, a two-lane road which is privately owned.

SCENIC CORRIDORS

Scenic corridors provide outstanding views of natural landscapes and attractive man-made development.

Major Highways

The State of California has identified I-280 as a State Scenic Highway from the Santa Clara County line to the San Bruno City limit. The section from the San Bruno City limit north through Colma is an Eligible State Scenic Highway but is not officially designated. This section is also a Landscape Freeway, which limits outdoor advertising. Although the State has no jurisdiction over development in Colma, local consideration should be given to what is visible from the highway. For the most part there is a sense of open space that prevails except near Serramonte Boulevard where Colma's commercial core is concentrated.

While traveling on I-280, San Bruno Mountain is a major focal point to views east of the freeway. The existing backdrop of trees along most cemetery boundaries provides an important buffer at the edge of urban development. Provided the Town's open space character is maintained by retaining large tree buffers and adding new landscaping with future development, the view of Colma from the freeway will remain nearly the same.

Landscaping along El Camino Real adds to the road's scenic quality and successfully reinforces Colma's open space character. The median is landscaped with lawn, which, due to California's water use restrictions, cannot be watered during dry months. This should be enhanced with other landscape elements to create a distinctive appearance through Colma. Tree planting along the roadway and undergrounding of the overhead utility lines is recommended to better define the corridor and further contribute to the road's scenic quality. Site planning criteria for development along the El Camino Real scenic corridor should be adopted in order to maximize the visual effects of landscaping.

Arterial Streets

Hillside Boulevard is designated a scenic corridor in Colma. It is located at a higher elevation than the rest of the Town. Therefore, the drive along Hillside provides unique foreground views of San Bruno Mountain and panoramic views of Colma, South San Francisco, and Daly City.

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The view to the east along the Hillside Boulevard corridor is mostly of San Bruno Mountain and open space, including flower growing plots, cemeteries, and a few houses. The view to the west overlooks Colma and its surrounding communities (refer to the Scenic Route Map). Part of this view is blocked by roadside fencing and vegetation, which emphasizes the view to the east. Consequently, this adds variety and interest to Hillside Boulevard.

As one travels along Hillside Boulevard there is a rural character to the corridor. There is a sense of separation from the urban development that surrounds Colma. Special care should be given to the landscape treatment associated with future uses along this route.

Road Traffic Volumes

Traffic volumes have been compiled from two sources, Caltrans, and recent traffic counts conducted for the Town of Colma Systemic Safety Analysis Report (Table 6-3).

Table 6-3: Average Daily Traffic Volumes

Street	Segment	ADT
Collins Ave	Between Serramonte Boulevard & El Camino Real	4,932
Colma Blvd	West of El Camino Real	6,782
F St	East of Clark Avenue	1,771
Lawndale Blvd	Between Mission Rd & Hillside Boulevard	4,871
Hillside Blvd	Between Hoffman St & F Street	11,824
Serramonte Blvd	Between El Camino Real & Hillside Blvd	12,331
Serramonte Blvd	Between Collins Ave & El Camino Real	17,039
Junipero Serra Blvd	South of Philip Drive	25,041
Mission Rd	North of Lawndale Boulevard	7,484
SR 82/El Camino Real	North of Mission Road	24,343
I-280	Between Hickey Avenue & Junipero Serra Boulevard	217,000

Source: Town of Colma Transportation Safety Action Plan: Final Systemic Safety Analysis Report, October 2018

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Table 6-4: Level of Service Criteria at Signalized Intersections

Level of Service (LOS)	Average Delay (seconds/ vehicle)	Description
A	< 10	Very Low Delay:
B	> 10 and < 20	Minimal Delays:
C	> 20 and < 35	Acceptable Delay: .
D	> 35 and < 55	Approaching Unstable Operation/Significant Delays:
E	> 55 and < 80	Unstable Operation/Substantial Delays:
F	> 80	Excessive Delays:

Source: Highway Capacity Manual (HCM) 2010, Transportation Research Board, Washington, DC.

Intersection Volumes and Level of Service

Street intersections often represent the key points for mobility conflicts and restrictions, as well as safety issues.

Intersection Level of Service

"Level of Service (LOS)" describes the general operating conditions that a driver will experience while driving on a particular street or highway. Six levels of service are used to describe the driving experience under various speeds and traffic volume conditions. It is typically the measure of operating conditions at road intersections. Levels of service range from A to F, with A being a condition of free movement, low traffic volumes and high speeds. Level F is a situation of low operating speed, high volumes and stoppages. With Level F conditions, traffic volumes are below capacity. Levels of Service B-E are gradations of progressively worsening conditions. Level of Service C, which is characterized by stable flow but where speed and maneuverability is limited by higher volumes, and Level of Service D, characterized by very limited maneuverability and long delays where traffic flow is approaching an unstable condition.

Table 6-5: Level of Service Criteria at Unsignalized Intersections

Level of Service (LOS)	Average Delay (seconds/vehicle)	Description
A	≤ 10	Very Low Delay
B	> 10 and ≤ 15	Minimal Delays
C	> 15 and ≤ 25	Acceptable Delay
D	> 25 and ≤ 35	Approaching Unstable Operation and/or Significant Delays
E	> 35 and ≤ 50	Unstable Operation and/or Substantial Delays
F	> 50	Excessive Delays

Source: Highway Capacity Manual, 2010, Transportation Research Board, Washington, D.C.

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Table 6-6: Existing Intersection Levels of Service

No.	North-South Cross Street	East-West Cross Street	Traffic Control	Peak-Hour	LOS	Delay (seconds)
1	Hillside Boulevard	Lawndale Boulevard	Signal	AM	B	16.3
				PM	B	13.1
2	Hillside Boulevard	Serramonte Boulevard	Signal	AM	B	17.1
				PM	B	15.5
3	Hillside Boulevard	F Street	3-way stop	AM	B	13.2
				PM	B	12
4	Hillside Boulevard	Hoffman	4-way stop	AM	B	13.9
				PM	B	13.4
5	El Camino Real	Mission Road	1-way Stop	AM	A	3.9
				PM	A	4.7
6	El Camino Real	Collins Avenue	2-way stop	AM	A	3.2
				PM	A	1.9
7	El Camino Real	Serramonte Boulevard	Signal	AM	C	27.3
				PM	C	31.5
8	El Camino Real	Colma Boulevard	Signal	AM	A	6
				PM	A	9.4
9	El Camino Real	F Street	1-way stop	AM	A	7.4
				PM	A	8
10	Mission Road	Lawndale Boulevard	Signal	AM	D	45.5
				PM	D	33.7
11	Junipero Serra Boulevard	Serramonte Boulevard	Signal	AM	D	36.9
				PM	E	58.3
12	Junipero Serra Boulevard	Serra Center	Signal	AM	A	5.5
				PM	A	8.4
13	Junipero Serra Boulevard	Colma Boulevard	Signal	AM	A	8.2
				PM	B	13.2
14	Junipero Serra Boulevard	Southgate Avenue	Signal	AM	B	15.2
				PM	B	16.3
15	I-280 S Off Ramp	Serramonte Boulevard	Signal	AM	B	18.1
				PM	C	28.4
16	I-280 N On Ramp	Serramonte Boulevard	Signal	AM	A	1.7
				PM	A	4.1
17	Collins Avenue	Serramonte Boulevard	1-way stop	AM	A	1.2
				PM	A	2.5
18	Serra Center	Serramonte Boulevard	3-way stop	AM	B	13

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No.	North-South Cross Street	East-West Cross Street	Traffic Control	Peak-Hour	LOS	Delay (seconds)
				PM	D	31.5
19	Metro Center	Colma Boulevard	Signal	AM	B	15
				PM	C	21.1
20	Clark Avenue	B Street	2-way stop	AM	A	4.6
				PM	A	4.9

Source: Town of Colma Transportation Safety Action Plan: Final Systemic Safety Analysis Report, October 2018

TRAFFIC SAFETY

Crash Statistics

Collision statistics within the Town of Colma for the most recent available six-year period (January 2011 through December 2016) were compiled from the Town of Colma's Final Systemic Safety Analysis Report.

Crash Severity

The number of collisions involving fatalities, injuries and Property Damage by road uses involved and level of severity are summarized in Table 6-7. There were 121 collisions reported for the 5-year period. These collisions resulted in two deaths and 50 injuries on Colma streets.

Table 6-7: Crash Severity (2011-2016)

Road Users Involved in Crashes	Fatal Crash	Injury Crash	Property Damage only	Total
Bicycle- Vehicle	0	4	0	4
Pedestrian – Vehicle	1	4	0	5
Vehicle-vehicle or vehicle-other	1	42	69	112
Total	2	50	69	121

Source: Town of Colma Transportation Safety Action Plan: Final Systemic Safety Analysis Report, October 2018

An additional 190 collisions were reported on the I-280 freeway adjacent to the Colma Town limits during the same period. These 190 collisions resulted in one death and 120 injured persons.

GRAND BOULEVARD INITIATIVE

The Grand Boulevard Initiative (GBI) is a regional collaboration, consisting of 19 cities, counties, and local and regional agencies. The mission of GBI is to improve the El Camino Real corridor, from Daly City to central San Jose. The Grand Boulevard Initiative scope encompasses one-half

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mile on each side of El Camino Real. The GBI seeks to transform El Camino Real into a more walkable, transit-friendly boulevard with mixed-use development. This vision is embodied in the Grand Boulevard Initiative Guiding Principles, which eight of the 10 Principles were adopted by the Town of Colma in 2008 (Resolution No. 2008-10).

The GBI Task Force, including the Town of Colma, adopted the Grand Boulevard Multimodal Transportation Corridor Plan on September 15, 2010. The Grand Boulevard Multimodal Transportation Corridor Plan contains multimodal access strategies, street design guidelines, and prototypes for development along the corridor.

ACTIVE TRANSPORTATION

This section describes the active transportation facilities serving the Town of Colma, including on-street and off-street bikeways and trails system and pedestrian facilities and activity areas. Colma has a pleasant climate, two BART stations, and proximity to major retail centers along Junipero Serra Boulevard. **Error! Reference source not found.** displays the designated bicycle facilities and off-street trails in Colma.

BICYCLE FACILITIES

Bicycle facilities can be categorized by type:

- **Class I Bikeway (Bike Path).** A paved right-of-way for bicycle travel that is completely separated from any street or highway.
- **Class II Bikeway (Bike Lane).** A striped and stenciled lane for one-way bicycle travel on a street or highway.
- **Class III Bikeway (Bike Route).** A signed route along a street or highway where the bicyclist shares the right-of-way with motor vehicles.
- **Unclassified** Lanes or routes that would allow for bicycles but may not have any regular improvements or signage.

The town is currently reviewing possible bicycle improvements along El Camino Real as part of the El Camino Real Bicycle and Pedestrian Master Plan.

Within the Town of Colma, existing bikeways include Class II bike lanes and Class III signed bike routes. Class II bike lanes include Hillside Boulevard, Junipero Serra Boulevard, Lawndale Boulevard, and Mission Road segment from Lawndale to El Camino Real.

A Unclassified route has existis for a portion of El Camino Real within Colma, between Mission Road and B Street, and F street between Hillside Boulevard and El Camino Real.

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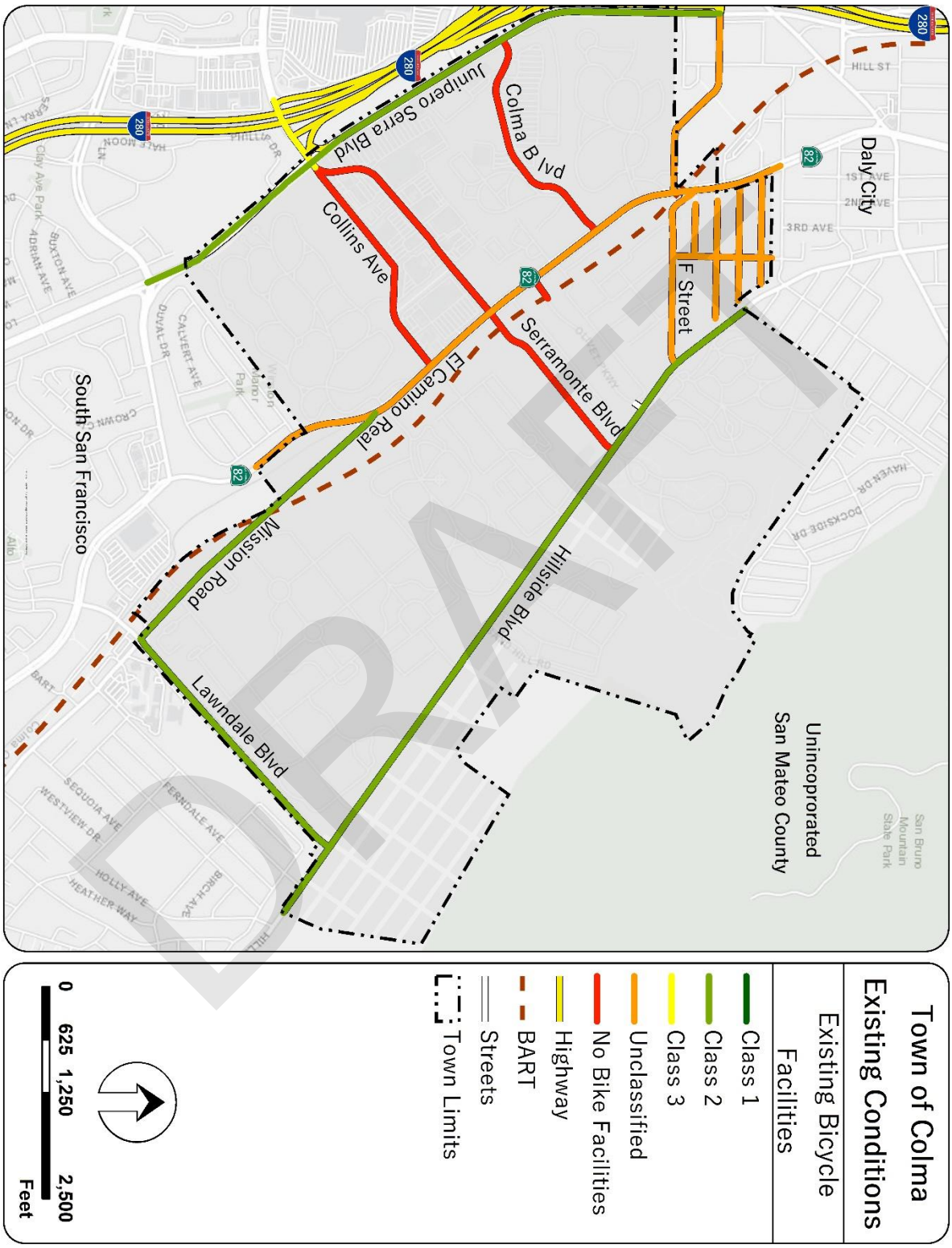
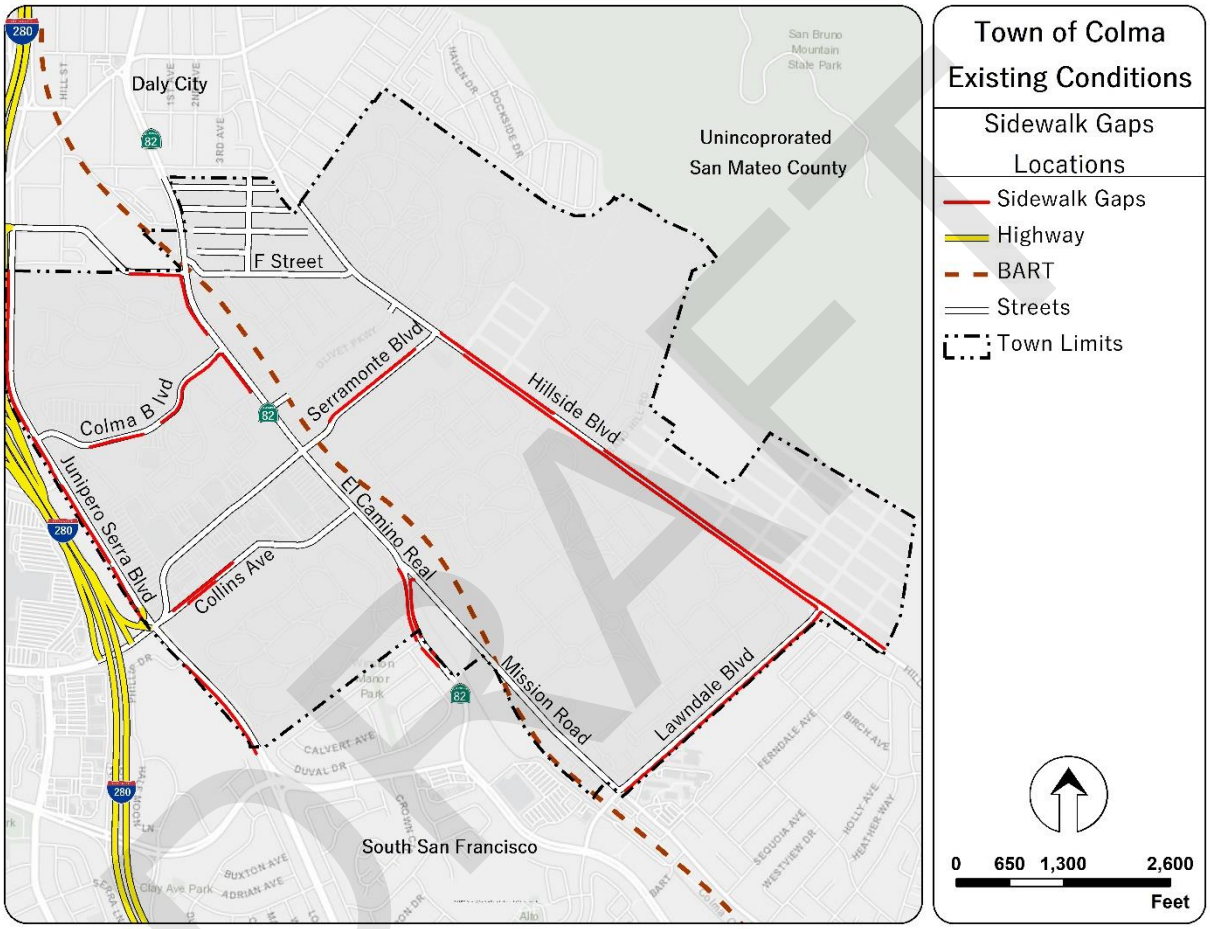
Figure 6-2: Existing Bicycle Facilities



PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, paths, trails, curb ramps, and crossings. Amenities, including street furniture, pedestrian-scale lighting, and landscaping, can serve to create an environment that is conducive to walking and inviting for pedestrians.

Figure 6-3: Sidewalk Gaps



As illustrated in figure 6-3 the town of Colma has sidewalk gaps at the following locations.

Significant sidewalk gaps exist;

-Hillside Blvd from Serramonte Blvd to Lawndale
-El Camino Real from Mission Rd to Arlington Dr in South San Francisco
-The westside of El Camino Real from F Street to the Greek Orthodox Driveway entrance.
-The southside of Colma Blvd from the Best Buy Driveway to El Camino Real.

Bicycle and Pedestrian Safety

Safe Routes to Schools

There are no public or private schools within the Town Limits. El Camino High School in South San Francisco directly borders the Towns southernmost border. The Town received a Safe Routes to School grant for pedestrian and bicycle safety improvements along Mission Road.

Active Transport Safety

Safety issues for bicyclists and pedestrians can include both collision incidents, which can be quantified, as well as perceptions that prevent people from using the bike and walk modes, which are more difficult to quantify. Quantitative collision information for Colma was presented in Table 6-7.

Planned/Proposed Active Transport Improvements

Mission Road: Improvements are under construction as part of the Mission Road Bicycle and Pedestrian Improvement plan and are expected to be completed by the end of 2020. These improvements include sidewalk improvements, new lighting, adding High Visibility crosswalks, green infrastructure (GI), and landscaping Improvements.

El Camino Real: The town is currently developing a El Camino Real Bicycle and Pedestrian Master Plan. Possible improvements may include a road diet, sidewalk improvements, bike lane improvements, new lighting, High Visibility crosswalks, and GI/landscaping Improvements.

Hillside Boulevard: An improvement plan for Hillside Boulevard has been developed. The first of three phases has been implemented. Phases two and three, extending between Serramonte Boulevard and Lawndale Avenue, will include new lighting, sidewalk improvements and GI/landscaping Improvements.

Serramonte Boulevard: Improvements are identified as part of the Serramonte Boulevard and Collins Avenue Master Plan. These improvements include a road diet, sidewalk improvements, new lighting, high visibility crosswalks, GI/landscaping Improvements. Bike improvements are not considered feasible at this time due to topography and right-of-way limitations.

Collins Avenue: Improvements are identified as part of the Serramonte Boulevard and Collins Avenue Master Plan. These improvements include additional parking, sidewalk improvements, new lighting, high visibility crosswalks, and GI/landscaping Improvements. Bike improvements are not considered feasible at this time due to topographic constraints and right-of-way limitations.

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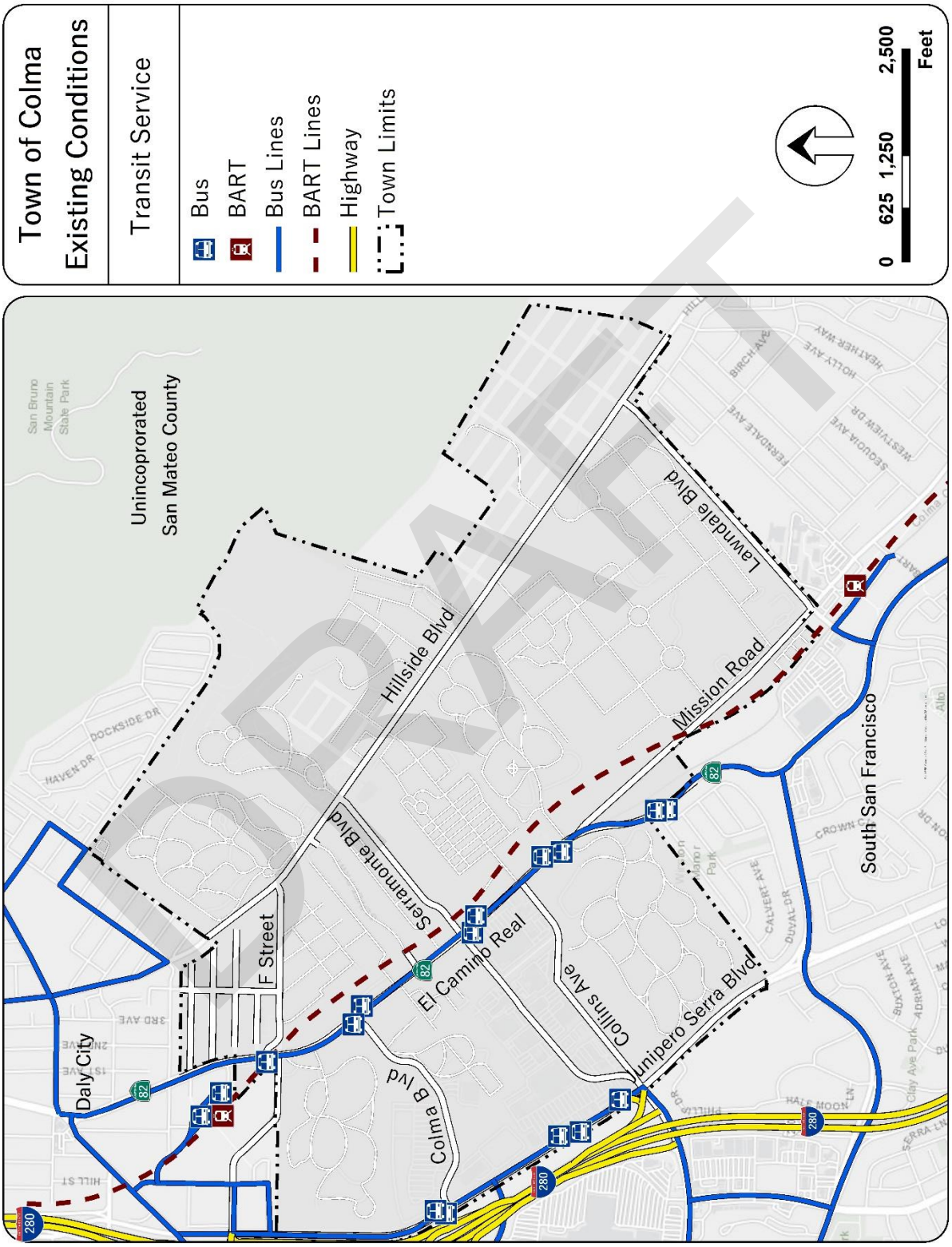
Figure 6-4: Transit Service in and around the Town of Colma



TRANSIT SERVICE

This section describes the transit services that serve Colma. The Colma and South San Francisco BART stations serve as transfer locations between the BART transit services and local bus and shuttle routes.

RAIL TRANSIT

BART

The San Francisco Bay Area Rapid Transit district (BART) provides heavy-rail, regional transit service via five rail lines in the following four Bay Area counties: Alameda, Contra Costa, San Francisco, and San Mateo. There are two Bart stations located just outside of the town limits.

The Colma BART station, is situated along the Richmond-Millbrae (red) line, which runs on weekdays every 15 minutes between 4:00 a.m. and 9:00 p.m. and the Antioch-SFO (yellow) line, which runs on the weekdays every 15 minutes between 4:00 a.m. and 9:00 p.m. and every 30 minutes 9:00 p.m. and 1:00 a.m.

The South San Francisco BART station is situated along the Richmond-Millbrae (red) line, which runs on weekdays every 15 minutes between 4:00 a.m. and 9:00 p.m. and the Antioch-SFO (yellow) line, which runs on the weekdays every 15 minutes between 4:00 a.m. and 9:00 p.m. and every 30 minutes between 9:00 p.m. and 1:00 a.m.

BART is in the process of extending its services south into Santa Clara County on the east side of the San Francisco Bay. The Milpitas and Berryessa (north San Jose) stations are under construction, with service to the Berryessa station expected to start in December 2019. Phase II of the expansion will extend BART to Santa Clara, adding four more stations by 2026.

Caltrain

The nearest Caltrain station is located in South San Francisco. Caltrain provides commuter rail service from Gilroy to San Francisco, with 32 stops along the 51-mile corridor, including the South San Francisco Transit Center. There are three types of Caltrain service along the route, two of which stop in South San Francisco:

- Limited-Stop Service; a limited-stop service between San Jose and San Francisco; and
- Local-stop service; regular service which operates along the entire corridor (14 trains each way per day).

The weekday and weekend Caltrain service is summarized in Table .

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Table 6-8: Caltrain Departure Times

	Northbound		Southbound	
	AM	PM	AM	PM
Weekday				
Limited Stop	7:09, 7:34, 8:09, 8:37, 9:14, 9:32	5:14, 6:12, 7:12	6:31, 7:31, 8:31,	4:52, 5:11, 5:51, 6:11, 6:52, 7:11,
Local	5:45, 6:20, 10:32, 11:29	12:29, 1:29, 2:29, 3:31, 4:34, 8:24, 9:01, 10:01, 11:01, 11:46	5:10, 5:40, 9:17, 10:16, 11:16,	12:16, 1:16, 2:16, 3:16, 7:46, 8:46, 9:46, 10:46, 12:21
Weekend (Local Service Only)				
Saturday	8:33, 10:03, 11:33,	1:03, 2:33, 4:03, 5:33, 7:03, 8:33, 10:03, 11:33, 11:52	8:42, 9:45, 11:24,	12:54, 2:24, 3:54, 5:24, 6:54, 8:24, 9:54, 11:07, 12:21a
Sunday	10:03, 11:33	1:03, 2:33, 4:03, 5:33, 7:03, 8:33, 10:03, 11:33,	8:42, 9:45, 11:24,	12:54, 2:24, 3:54, 5:24, 6:54, 8:24, 9:54

Source: Caltrain website, June 2019

The Caltrain Modernization Program is scheduled for completion in 2019 and is planned to improve service while electrifying the system and switching from a diesel fleet to a more efficient electric fleet.

BUS TRANSIT

SamTrans

SamTrans operates 76 bus routes and served 13,158,700 passengers in 2015 in San Mateo County and along the peninsula between San Francisco and Palo Alto. SamTrans operates four multi-city bus lines in Colma.

The ECR is an express, multi-city bus that operates between the Daly City BART station and the Palo Alto Transit Center between 4:00 a.m. and 12:30 a.m., with 15-minute weekday headways and 20-minute weekend headways. The ECR has a stop at the Colma and South San Francisco BART stations, in addition to stops along El Camino Real.

Route 112 is a multi-city bus that operates between Linda Mar Park & Ride in Pacifica and Colma BART. During the weekdays, one northbound bus operates hourly between 6:20 a.m. and 8:05 p.m., and one southbound bus operates hourly between 6:35 a.m. and 7:16 p.m. On the weekends, one northbound bus operates hourly between 8:35 a.m. and 7:35 p.m., and one southbound bus operates hourly between 9:05 a.m. and 8:05 p.m.

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Route 120 is a multi-city bus that operates between Brunswick Street/Templeton Avenue in Daly City and Colma BART. During the weekdays, four northbound buses operate hourly between 5:00 a.m. and 6:00 p.m., and four southbound bus operates hourly between 7:06 a.m. and 7:46 p.m. On the weekends, four northbound bus operates hourly between 7:55 a.m. and 6:30 p.m., and four southbound bus operates hourly between 9:00 a.m. and 8:03 p.m.

Route 122 is a multi-city bus that operates between South San Francisco BART and Stonestown/San Francisco State University. During the weekdays, one northbound bus operates hourly between 6:20 a.m. and 8:05 p.m., and one southbound bus operates hourly between 6:35 a.m. and 7:16 p.m. On the weekends, one northbound bus operates hourly between 8:35 a.m. and 7:35 p.m., and one southbound bus operates hourly between 9:05 a.m. and 8:05 p.m.

Long Distance Bus Service

There is no scheduled intercity bus service (Greyhound or other carriers) serving Colma or other cities on the Peninsula. The closest long-distance bus stations are in San Francisco, Oakland or San Jose.

Demand Responsive Transit

Paratransit Service

SamTrans operates two paratransit services: Redi-Wheels on the bay side of San Mateo County and RediCoast on the coast side of San Mateo County. Colma is served by Redi-Wheels. Redi-Wheels passengers must reserve trips one to seven days in advance or set up subscription services for regular trips. Additionally, paratransit customers may ride any fixed-route services for free.

Parking

Colma has a unique mix of parking areas. These area rage from retail and commercial parking; on street parking, in the commercial zones and transit parking located at the two BART stations and a Sam Trans Commuter lot, to permit on street parking in the residential neighborhoods.

Retail and Commercial Parking

Colma has multiple large parking areas mostly focused around its two Shopping centers. Colma is also home to auto dealers who have large parking lots to display their inventory, provide parking for employees and customers, and for cars waiting for or completing auto servicing.

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Street Parking

The town has limited street parking. Street parking in the Sterling Park neighborhood is described in the residential area parking section below. There is no street parking along Junipero Serra Boulevard, Lawndale Boulevard, and Colma Boulevard. There is limited parking along Collins Avenue, Hillside Boulevard, El Camino Real, and Mission Road. (Note: El Camino Real is a state highway and is under the control of Caltrans).

BART Parking

Both the Colma and South San Francisco BART stations have large multi-story parking structures to serve commuters.

SamTrans Commuter Lot

Located at the Colma Bart Station, SamTrans operates multiple surface parking lots for commuters utilizing SamTrans or BART transit.

Residential Area Parking

The Town has a Preferential parking Zone in the Sterling park neighborhood. This zone was established to prevent all day commuter parking in the neighborhood due to its proximity to the Colma Bart station. Parking is limited to four (4) hours unless a parking permit is displayed. Each resident is permitted one permit per registered vehicle to that address, up to four. In addition, guest parking permits can be obtained.

Electric Vehicle (EV) Charging Stations

In 2018 The Town of Colma installed its first public Electric Vehicle Charging station at the Town hall parking lot. The facility features two dual-cord (EV) charging stations capable of quickly charging up four vehicles simultaneously. Some businesses, primarily auto dealerships, have also installed EV charging stations within their onsite parking lots (not for public use). Two free public charging stations are available at the Serra Center shopping center. A public charging station is also available in the Kohls parking lot.

Transportation Demand/System Management

Transportation Demand Management (TDM) is a term that broadly covers programs and incentives designed to reduce traffic congestion, reduce GHG emissions and improve air quality by offering a combination of incentives and market-based measures to increase alternative mode use among employees and residents.

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COMMUTE.ORG

The Town of Colma participates in Commute.org, (formerly known as the Peninsula Traffic Congestion Relief Alliance) a joint-powers authority (JPA) governed by 17 cities and towns, as well as the County of San Mateo. Commute.org provides several programs and services which support TDM in Colma:

- **Employer Outreach:** In FY 2015, Commute.org agency staff worked closely with 400 of the largest employers in San Mateo County (representing over 100,000 employees) and provided program information to another 4,000 employers.
- **Employer Support Services:** The Commute.org Employer Outreach Team provides free consulting and support services for employer liaisons and facilities managers. The Emergency Ride Home Program supports commuters who use alternative modes by providing a free taxi in the event of an emergency. A total of 62 employers with over 40,000 employees participate in the program, which is funded by Commute.org and participating employers.
- **Direct Communication with Commuters:** The Commute.org web site is designed to help commuters find smarter ways to commute in San Mateo County. The site attracts an average of 10,000 views each month.
- **Vanpool and Carpool Incentive Program:** The Carpool Incentive Program encourages commuters to try carpooling for at least two days per week for eight weeks. In FY 2015, a total of 459 people participated in the program and received an incentive to encourage them to continue carpooling.
- **Try Transit Incentive Program:** Through the Try Transit program, Commute.org provides free transit tickets from transit agencies that operate in and around San Mateo County, including Caltrain, SamTrans, BART, and San Francisco Bay Ferry. There were 545 people who participated in the program in FY 2015.
- **Bicycle Safety and Parking:** Commute.org coordinated free bicycle safety workshops led by a certified bicycle safety instructor to provide employees and residents with information including rules of the road for cyclists, tips on buying a bicycle, and bicycle maintenance. In FY 2015, Commute.org sponsored two workshops and subsidized 86 bicycle racks and lockers that employers installed at their worksites.
- **Special Campaigns and Events:** Commute.org sponsors several special events, including Rethink Your Commute and Bike to Work Day.

REGULATORY SETTING

There are several existing government agencies, Commissions, codes and planning documents which provide context for the transportation infrastructure and service within the Town of Colma, as outlined in table 6-9.

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Table 6-9: Regulatory Plans and Policies

Plan, Year	Overview
Local Plans	
Colma General Plan, 1999	Outlines the goals, objectives, and policies to guide development in Colma.
Colma Circulation Element, 2014	Outlines the existing and future transportation systems to accommodate growth and development in Colma.
Systemic Safety Analysis Report (SSAR), 2018	Describes the Town's roadway network, crash trends and patterns, priority corridors, potential countermeasures, and benefit-cost ratios of viable projects scopes.
Serramonte Collins Master Plan	Streetscape Improvement Plan with recommendations for future improvements on Serramonte Boulevard, including a lane reduction on Serramonte Boulevard between El Camino Real and Junipero Serra Boulevard.
El Camino Real Corridor Plan (in process)	CalTrans grant funded project to create a plan that improves pedestrian and bicycle access and use.
County Plans	
San Mateo County Comprehensive Bicycle and Pedestrian Plan, 2011	Outlines recommendations and design guidelines for "safe, convenient, and universally accessible" bicycle and pedestrian facilities throughout the county. The plan is currently being updated.
San Mateo County Transportation Authority Short-Range Highway Plan, 2011-2012	Outlines how funding has been and will be allocated to highway improvements projects throughout San Mateo County.
San Mateo County Transportation Plan for Low-Income Populations, 2012	Examines the mobility needs in transportation-disadvantaged communities in San Mateo County and develops strategies to bridge gaps in service delivery. strategies include providing education, free services to low income persons and auto loan and repair assistance programs.
San Mateo County Transportation Authority Strategic Plan 2015-2019	Outlines the vision, goals, and implementation procedures for Measure A funds over the next five years.
City/County Association of Governments of San Mateo County San Mateo Countywide Transportation Plan 2040	A long-range, comprehensive transportation planning document that sets forth a coordinated planning framework and establishes a systematic transportation planning process for identifying and resolving transportation issues.
Regional Plans	
Grand Boulevard Multimodal Transportation Corridor Plan, 2010	Multimodal corridor plan for El Camino Real though San Mateo and Santa Clara counties focused on a better match between land use and transportation. The plan includes guidelines for street design for different segments of El Camino Real.
Colma Bart Access Studies (in process)	Study that identifies improvements and projects that will improve access to the station by pedestrians and bicyclists. Projects to be funded by BART.
South San Francisco Bart Access Studies (in process)	Study that identifies improvements and projects that will improve access to the station by pedestrians and bicyclists. Projects to be funded by BART.
BART Multimodal Access Design Guidelines, 2017	Plan that includes standards for planning the pedestrian, bicycle, transit and vehicle access within BART's station areas.

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Plan, Year	Overview
State Plans	
California Transportation Plan 2040 (2016)	Defines goals, strategies to achieve a vision and recommended performance for California's transportation infrastructure and provides a framework to guide transportation decisions and investments.
State Bicycle and Pedestrian Plan (2017)	The "Toward an Active California" State bike and walk plan which lays out policies and actions to double walking and biking trips by 2020.
SB 743 (2013)	For land use projects, OPR identified Vehicle Miles Traveled (VMT) per capita, VMT per employee, and net VMT as new metrics for transportation analysis. For transportation projects, lead agencies for roadway capacity projects have discretion, consistent with CEQA and planning requirements, to choose which metric to use to evaluate transportation impacts.

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REPORTS/PUBLICATIONS

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- Commute.org. Annual Report FY2015.
- Town of Colma Transportation Safety action Plan, Final Systemic Safety Analysis Report, October 2018
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WEBSITES

- American Community Survey, 2014, as summarized by the Metropolitan Transportation Commission.
- California Department of Transportation. 2014 Traffic Volumes on the California State Highway System. http://traffic-counts.dot.ca.gov/2014all. 2016.
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- Transportation Injury Mapping System (TIMS) based on Statewide Integrated Traffic Records System (SWITRS).
- U.S. Census Bureau, American Community Survey 2006-2010 Five-year estimates. Special Tabulation: Census Transportation Planning.
- http://www.citypopulation.de/USA-California.html.

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7 Natural Resources

EXECUTIVE SUMMARY

This chapter summarizes topics related to natural resources such as air quality, water, groundwater, stormwater, critical habitat, parkland and open space within the Town of Colma.

KEY FINDINGS

- The Town of Colma receives its potable water from the San Francisco Water Company through the Cal Water Service Company. The majority of this water is from the Hetch Hetchy Reservoir.
- Groundwater is an important water source in Colma, with many of the cemeteries depending on groundwater for irrigation. The groundwater aquifer that these cemeteries depend on extends through South San Francisco and northern San Bruno.
- The Town of Colma is a member of the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP), which is the program that monitors and ensures compliance with the Municipal Regional Permit.
- Colma's air quality is generally good, due in large part to the marine influence which carries pollutants away from Colma.
- Critical habitat near Colma includes areas suitable for Mission Blue, San Bruno Elfin and Bay Checkerspot butterflies. This habitat is in San Bruno Mountain State and County Park.
- Mountain Manzanita and Pacific Manzanita are listed by the State of California as threatened. Other identified rare plant species on San Bruno Mountain, include Coast Rock Cress, Franciscan Wallflower, San Francisco Campion and the sunflower-like *Helianthela Castanea.*
- The Town has approximately 2.44 acres of developed parkland and recreational facilities, including parks, County parks, and school playgrounds and playfields open to public use during non-school hours. With approximately 1,540 residents, Colma has approximately 1.58 acres of park and recreational facilities per 1,000 residents.
- Colma does not have any substantial extractable mineral resources. Historically, sand was extracted from the Hillside Landfill, which closed in 2006.

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- The Town implements green building requirements (Cal Green) with new construction, and encourages green building practices during the design, construction, renovation and maintenance of businesses and homes to increase energy efficiency, water conservation and reduce waste.

WATER RESOURCES AND QUALITY

This section describes the existing conditions and regulatory framework applicable to water resources and quality in Colma.

PUBLIC WATER SUPPLY

Colma's potable source is supplied by the San Francisco Water Company through the Cal Water Service Company. The majority of this water is from the Hetch Hetchy Reservoir. This water supply is considered high quality because of its softness and low quantity of dissolved solids (TDS). The majority of the inorganic and organic compounds found in the water can be removed by standard methods of water treatment.

Based on the expected increase in population in the region, the demand for water is expected to increase moderately in the next ten years. Therefore, water conservation is becoming more essential. Although Colma imposes a very small demand on Hetch Hetchy resources, the Town is a part of a regional effort to manage groundwater for drought conditions and emergencies.

Groundwater

Colma is within the Colma Creek watershed, which is part of the San Mateo Basin, a major groundwater basin. The headwaters of Colma Creek are on the slopes of San Bruno Mountain. The San Mateo Basin watershed drains via Colma Creek into the San Francisco Bay in South San Francisco.

Groundwater is an important water source in Colma, with many of the cemeteries depending on groundwater for irrigation. The groundwater aquifer that these cemeteries depend on extends through South San Francisco and northern San Bruno. The trough is estimated to be two miles wide by nine miles long, lying between San Bruno Mountain and the Santa Cruz Mountains. Most of the wells tapping the aquifer are in the order of 200-600 feet deep and produce 100-600 gallons per minute. The mineral, chemical and physical constituents found in the groundwater generally fall below the California Domestic Water Quality maximum contaminant levels. Thus, the water used by the cemeteries and agricultural uses for irrigation is not considered potable.

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WATER QUALITY

Water quality is a particular area of concern in Colma, because of the ease of water pollution by urban uses and the effects of pollution on wildlife habitat. Pollutants are picked up by runoff from streets, open areas, and urban lands and collect into larger sources of water, such as Colma Creek and ultimately drain into the San Francisco Bay. Colma takes part in a joint effort to reduce the concentration of pollutants and improve water quality in the bay by managing stormwater runoff.

The Town complies with the Municipal Regional Stormwater Permit (MRP), issued by the San Francisco Regional Water Quality Control Board (RWQCB) for its stormwater pollution control measures. Local agencies in San Mateo County are required to reduce surface water drainage pollution runoff and establish control measures in development projects, which provide specific guidelines on design measures for runoff of pollutants of concern, source controls, stormwater treatment measures, hydromodification management, and construction site controls. To address flow-related impacts of stormwater runoff, the Town also enforces National Pollutant Discharge Elimination System (NPDES) permits that are issued to industrial and construction activities.

Colma has established preferred best management practices (BMPs) for adoption into a Stormwater Management Plan. These practices include street sweeping, storm drain stenciling, spill cleanup and annual catch basin maintenance. Additionally, the Town has adopted a Green Infrastructure Plan in July 2019 to reduce pollutants that enter the bay. Specifically, the plan targets the reduction of mercury and polychlorinated biphenyls (PCBs).

FLOODING

Colma Creek flows through the Town of Colma in above ground channels and underground culverts. The creek and drainageway is approximately eight miles long, flowing heaviest during the rainy season from November through April. Even though the rainfall amount in Colma is not unusually high, the rainfall often occurs over a short period. As urbanization increases in the watershed, the potential for groundwater infiltration decreases while water runoff and the potential for flooding increases.

Historically, flooding has occurred in the south and north end of Town at El Camino Real and F Street, and on El Camino at the Mission Street Y. The San Mateo County Flood Control District has constructed two box culverts that divert the main flow from Colma Creek. One box culvert is located in the median of El Camino Real and one is located under the centerline of Old Mission Road. These major capital improvements have eliminated the flooding risk in these areas and are designed for a 50 year event.

Colma is not part of the Federal Emergency Management Agency (FEMA) flood mapping program. An open space policy provides that on site runoff, infiltration and retention facilities be constructed as a part of each new development project in Colma. Adjoining communities

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are urged to follow this same practice when projects are considered that may influence the Colma Creek drainageway.

AIR QUALITY

This section summarizes air quality conditions within the Town of Colma and the Planning Area. Air quality is described as the concentration of various pollutants in the atmosphere for a specific location or area. Air quality conditions at a particular location are a function of the type and amount of air pollutants emitted into the atmosphere, the size and topography of the regional air basin, and the prevailing weather conditions. Air quality is an important natural resource that influences public health and welfare, the economy, and quality of life. Air pollutants have the potential to adversely impact public health, the production and quality of agricultural crops, native vegetation, visibility, buildings, and other structures.

Regarding public health impacts from poor air quality, some people are more sensitive to poor air quality than others. These people include children, the elderly, and persons with asthma. Land uses where these people are likely to be located are defined as sensitive receptors. Sensitive receptors include long-term healthcare facilities, hospitals, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds.

CLIMATE

Colma's climate is affected by marine influence. This local climate is dominated by the Pacific Ocean most of the time. Dominant westerly winds prevail throughout the summer with frequent fog. Winter months are usually very wet and cold. Ninety percent of the rain occurs between the months of November and April. Ground water resources are recharged at this time.

The average rainfall varies between 20-25 inches per year. Temperatures range from lows in the 30's (degrees Fahrenheit) to highs approaching the 80's. Colma has a micro-climate of its own: it is lower in elevation from surrounding urban areas, is influenced by Colma Creek drainage, and is in the shadow of San Bruno Mountain.

There is a heavy incidence of fog and wind throughout the summer months, which limits the range of plants that can be grown in the open. Special care and selection must be given when selecting landscape plants for Colma.

AIR QUALITY

The Town of Colma is part of the San Francisco Bay Air Basin defined by the State Air Resource Basin and is subject to administrative regulations of the Bay Area Air Quality Management District (BAAQMD). Regional air quality conditions are monitored continually and analyzed

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annually by the BAAQMD. Table 7-1 below presents measurement data from the nearest operating air quality monitoring station nearby located in San Francisco, for the most recent three full years of data available (2014-2016). According to the table, ambient concentrations of carbon monoxide, ozone, nitrogen oxide and fine particulate matter (PM2.5) levels have not exceeded State or Federal standards.

Table 7-1: Measure Air Pollutant Concentrations in San Francisco

Pollutant	California Standard	Federal Standard	Measured Concentrations by Year		
			2014	2015	2016
Carbon Monoxide					
Maximum 1-hour average (ppm)	20	35	1.6	1.8	1.7
Maximum 8-hour average (ppm)	9	9	1.2	1.3	1.1
Nitrogen Dioxide					
Maximum 1-hour average (ppm)	0.180	0.100	0.084	0.071	0.058
Annual Average (ppm)	0.030	0.053	0.012	0.012	0.011
Ozone					
Maximum 1-hour average (ppm)	0.090	----	0.079	0.085	0.070
Maximum 8-hour average (ppm)	0.070	0.070	0.069	0.067	0.057
Particulate Matter (PM2.5)					
24 Hour (µg/m3)	35	35	33.2	35.4	19.6
Annual Average (µg/m3)	12	12	7.7	7.6	7.5

Source: BAAQMD, 2014-2016 monitoring data

Air quality is largely affected by climate and topography, as well as the amount and source of air pollutants in the area. The largest source of air pollution in Colma is vehicular traffic. The influence of I-280 and local vehicular traffic has a constant effect on the air quality, but the prevailing northwesterly winds disperse the air pollutants. The location of Colma west of San Bruno Mountain also has an effect on local air quality. San Bruno Mountain protects Colma from the influences of pollutants along the U.S. 101 corridor. Upslope and downslope air movements on the west slopes of the mountain help disperse air pollutants along the I-280 corridor.

As future developments take place in Colma, it is anticipated that they will be similar in nature to what already exists. Industries that produce concentrated amounts of air pollution are not planned in Colma. As vehicular traffic increases in the Bay Area, Colma can mitigate the potential for pollutant concentrations by making timely circulation improvements to facilitate the flow of traffic along major thoroughfares and to continue to encourage alternative transportation modes.

In an effort to reduce future levels of particulate matter, the Town adopted an ordinance regulating wood-burning appliances. Such appliances must meet the emission requirements of the Bay Area Air Quality Management District

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San Francisco Bay Air Basin Attainment Status

The Environmental Protection Agency (EPA) and California Air Resources Board (ARB) have adopted the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) to regulate air quality within air basins in the state and nation. Both agencies determine the status of each air basin relative to these standards, known as attainment designations. The purpose of these designations is to identify those areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are "nonattainment," "attainment," and "unclassified." "Nonattainment" areas are areas that do not meet air quality standards, whereas "attainment" areas meet air quality standards. "Unclassified" is used in areas that cannot be classified on the basis of available information as meeting or not meeting the NAAQS or CAAQS.

The most current National and California attainment designations for the San Francisco Bay Area Air Basin (SFBAAB) are shown in Appendix 7-A, Table 7-A-1, for each criteria air pollutant. The SFBAAB is in nonattainment status for the following pollutants (a full summary is available in Appendix 7-A, Table 7-A-1):

- **Ozone:** CAAQS) 1-hour and NAAQS 8-hour ozone;
- **PM_{10}:** CAAQS annual arithmetic mean and 24-hour standard; and
- **$PM_{2.5}$:** CAAQS annual arithmetic mean and NAAQS 24-hour standard.

BIOLOGICAL RESOURCES

This section describes the existing conditions and regulatory framework related to biological resources in the Town of Colma.

VEGETATION COMMUNITIES AND LAND COVER TYPES

Vegetation communities provide wildlife habitat components including food, shelter, movement corridors, and breeding opportunities for wildlife species. They are classified in general terms with an emphasis on vegetation structure, vegetation species composition, soil structure, and water availability. Some wildlife species are generalists that use a variety of habitats, while other species are adapted to very specific habitats. Species that are limited to a single habitat type are more vulnerable to habitat loss and disturbance than are generalists and, therefore, may be more at risk to experience population declines.

Colma's natural vegetative habitat is scrub, with riparian habitat located along Colma Creek. Because of agricultural practices, memorial parks and urbanization, this habitat has been significantly altered or removed. The vegetative cover of Colma now consists primarily of introduced ornamental and native plant materials.

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Riparian Vegetation

Riparian vegetation, largely willow and alder, is limited to the banks along open sections of Colma Creek. These areas are located behind the commercial district west of Mission Road, from the Cypress Lawn Cemetery offices to Collins Avenue, west of City Hall from Serramonte Boulevard north about 800 feet, and in front of Woodlawn and Greenlawn cemeteries adjacent to El Camino Real. The remaining above ground portions of the creek in Colma run through a concrete lined channel.

The areas of Colma Creek that are open deserve recognition for their potential riparian and open space value. Riparian vegetation supports a variety of wildlife and enhances the natural setting of the Town.

Non-Native Plants

Non-native plant species are prevalent in certain areas of Colma and are often so prolific that they are invasive and spread into surrounding ecosystems, displacing native plants. Non-native plants tend to be more aggressive in their growth habits, often produce more seed that lasts longer in the soil and are more resistant to diseases, to competitors and to predators. This dominance of non-native plants can have profound effects on the native ecosystem; as native plants are killed off, the animals that depend on those plants also disappear. Often the invading plant is not a food source and may support no life, or worse, contain potent alkaloids that are toxic to native animals.

Invading non-native plants in Colma include German Ivy *(Senecio mikanioides)*, Cape Ivy *(Senecio angulatus)*, Pampas Grass *(Cortaderia jubata)*, Fennel *(Foeniculum)*, Scotch Broom *(Cytisus scoparius)*, and Gorse *(Ulex europaea)*. Property owners should eliminate any of these plants where they occur. Eradication can be quite difficult, however, since many of these plants break when pulled, and segments that fall to the ground will take root and grow again. Typically, the root systems of non-native plants must be removed and carefully disposed of, starting at the outer edge of the infestation. In some cases, chemical control can be effective.

Tree Masses

The vegetation that is most clearly recognized in Colma is the significant tree masses that exist throughout the Town. The majority of these trees were planted by the cemetery owners to act as buffers, windbreaks and for aesthetic purposes. The cemeteries chose pine, cypress, palm, acacia, and eucalyptus because of their availability and compatibility with Colma's microclimate. Many of these plantings have naturalized to Colma's environment. Tree masses are particularly prominent in the memorial parks in Colma.

Aesthetically, these trees play a major role in determining the charming picturesque quality of the Town. They also provide a support system for wildlife nesting and feeding purposes.

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Unfortunately, many of these trees are nearing the end of their natural lives or are vulnerable to disease or infestation.

It is important to the Town of Colma to protect tree masses when possible. Consequently, the Town has adopted a tree cutting and removal ordinance. This ordinance has set up guidelines and regulations to protect both trees and views. When trees are removed they must be replaced with new trees. As a general rule, a one to one replacement is required. Where appropriate, the Town seeks to have new trees planted that will achieve substantial height, and in groups that will perpetuate the large massings associated with the Colma setting. In cemeteries, replacement tree planting is encouraged along the perimeter of each cemetery to define boundaries and provide a windbreak.

WILDLIFE

Colma has a diversified wildlife population consisting of small animals. The Bay Area is located along the Pacific Flyway, so migratory birds are attracted to the open spaces of San Bruno Mountain and to the memorial parks and cemetery irrigation ponds in Colma. It is not uncommon to view wild ducks and geese along with domestic fowl in the various cemetery lakes in Colma. Other bird species seen in the area include vultures, hawks, owls and a variety of songbirds. Small animals common to the Colma area are snakes, lizards, gophers, squirrels, frogs, mice and rabbits. Mammals such as racoons, possum, skunk and cyotes are also common in Colma and on San Bruno Mountain.

Endangered, Threatened and Sensitive Species

More than 28,000 species are threatened with extinction, including 40% percent of amphibians, 25% of mammals, 34% of conifers, 14% of birds, 30% of sharks and rays, 33% of coral reefs and 27% of crustaceans.

Open space land in Colma is characterized as disturbed due to agricultural practices and normal cemetery landscape maintenance which has occurred for over 100 years; there are no areas of undisturbed native habitat within the Town boundaries. However, there are areas adjacent to Colma where threatened and endangered species are found, such as San Bruno Mountain, and there are areas within Colma where man-made environments may favor the presence of sensitive species.

Colma abuts San Bruno Mountain State and County Park, known for its colonies of federally-listed endangered butterflies. Both the Mission Blue and San Bruno Elfin butterflies are found on the mountain east and south of the Town limits. The mountain is also home to the *Callipe Silverspot*, a federally proposed endangered butterfly and the Bay Checkerspot, a federally-listed threatened butterfly. With regard to plant species, two subspecies of Manzanita found on the mountain, San Bruno Mountain Manzanita and Pacific Manzanita, are listed by the State of California as threatened. The California Native Plant Society has identified rare plant species on

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the mountain, including Coast Rock Cress, Franciscan Wallflower, San Francisco Campion and the sunflower-like *Helianthela Castanea*.

Colma's tall trees and tree masses are potential nesting sites for sensitive raptors protected by the Migratory Bird Treaty Act. A biological investigation should be done whenever tree removal would occur during nesting season (generally February through July) so that active nests can be protected. Ornamental ponds within some of Colma's cemeteries may be potential habitat for the federally listed threatened Red-legged frog. Conditions favoring this species include ponds at least two feet deep with moving water and borders of dense, shrubby or emergent riparian vegetation. Although the state and federally-listed endangered San Francisco garter snake seeks the Red-legged frog as a food source, there are currently no known populations of the snake in Colma. A biological investigation for presence of the frog should be done whenever development would alter a pond as described above. The garter snake may have once been found along Colma Creek when it was a natural creek, however, the current culverted condition of the creek is not suitable habitat.

OPEN SPACE

This section summarizes issues related to parks, trails, urban forest, and open space in Colma.

OPEN SPACE

Colma is a small community recognized for its large expanses of cemetery land. The major components of the total open space resource in Colma (about 76% of the total land area) is land owned by cemeteries that is used for memorial parks, agriculture or general open space. Other major resources that are recognized as open space are Colma Creek and the land east of Hillside Boulevard at the base of San Bruno Mountain. Due to the small size and unique character of the Town, the Town does not have land categorized as open space for public health and safety, military support or tribal resources. An inventory of existing open space resources is compiled in Table 7-2 below.

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Table 7-2: Open Space Inventory

Existing Open Space in Colma	Open Space for Natural Resources	Open Space for Managed Production of Resources	Open Space for Outdoor Recreation	Approximate Size
Public Parks			X	2.44 Acres
Colma Creek	X	X	X	2300 linear feet
Cemetery Lands		X		1.4 square miles
Golf Course remnant and driving range			X	0.012 Square Miles
Agricultural Lands*	X	X		0.29 square miles

**Agricultural Lands include areas that are zoned for cemetery use but currently being utilized for agriculture.*
Source: Town of Colma 1999 General Plan Land Use Map and Zoning Map

Colma Creek

Special care is given to the preservation and protection of Colma Creek at locations where the creek is open. Emphasis will be placed on the maintenance of riparian vegetation at key street crossings and maintaining the creek lining to mitigate erosion and flooding. Planning the future of such a significant community resource will involve considerable input from the Colma community.

To prevent erosion, to protect stormwater from pollution and to maintain the potential for a linear park in the future, new buildings are required to be set back from the top bank of the creek. Opportunities exist to take advantage of the open sections by adding vegetation, pedestrian walkways and sitting areas along the edge of the channel.

TRAILS

San Bruno Mountain State and County Park is a landmark of local and regional significance. The park is a unique open-space island in the midst of the peninsula's urbanization at the northern end of the Santa Cruz Mountain Range. The mountain's ridge line runs in an east-west configuration, with considerable slopes and elevations ranging from 250 feet to 1,314 feet at the summit. The 2,416 acre park includes twelve miles of hiking, riding, and jogging trails that access various vista points throughout the park. Many of the vistas offer spectacular views of the Pacific Ocean, central Bay, and San Francisco skyline.

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URBAN FORESTRY

In 2018, the Town of Colma was designated as a Tree City USA Community. Tree City USA is a national recognition program sponsored by the Arbor Day Foundation in conjunction with the U.S. Forest Service and National Association of State Foresters. Since the program started in 1976, more than 3,400 communities across the United States boast recognition as Tree Cities.

The community's urban forest is one of the Town's most important natural resources. Trees enrich the aesthetics of the Town, adding texture to streets and screening urban development. In addition, trees provide environmental benefits by shading streets and filtering airborne particulates. The Public Works Department maintains trees throughout the Town, making Colma a more desirable place to live, both aesthetically and environmentally.

ENERGY AND MINERAL RESOURCES

This section describes the existing conditions and regulatory framework related to energy and mineral resources in Colma.

SOILS AND MINERALS

Colma occupies a wide drainage basin centered on Colma Creek. The geologic formation of the area is known as the Colma Formation. It consists of friable, well sorted, fine to medium grained sand and local gravel, sandy silt and clay. The formation is weakly to moderately consolidated and is well drained. An alluvial strip consisting of unconsolidated permeable sand and gravel exists along Colma Creek.

The State Division of Mines and Geology has not classified or designated any areas in Colma as containing regionally significant mineral resources. However, Colma sand is a well known construction resource. Previously sand was mined from the Hillside Landfill which closed in 2006.

Guadalupe Valley Quarry on San Bruno Mountain is the only active quarry in the vicinity of Colma.

ENERGY

Thirty four percent of California's electricity came from renewable sources in 2018. California has some of the most ambitious climate and energy goals in the world. The California Energy Commission oversees achievement of these goals and ensures that the state's energy systems remain accessible, reliable, safe, and affordable through thoughtful planning and the identification of policy solutions to current energy challenges. Energy efficiency means doing more with less. By leveraging technology to meet consumer needs while using less energy, California is reducing the need for new electricity generation, which reduces air pollution and

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saves consumers money. California is transitioning its electricity system to one that relies increasingly on clean sources of energy, such as solar, wind, and geothermal, and has even established a 100 percent zero-carbon energy-planning goal by 2045.

The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. New buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. The California Energy Commission updates the standards every three years.

SOLAR

Solar is the number one source of renewable energy, providing 31% of California's renewable generation. Solar is now required on all new homes. California leads the nation in distributed generation with 987,562 solar projects and 8,240 Megawatts (MW) installed (June 30, 2019). The California Solar Initiative transformed the market with 143,217 CSI projects and 1891 CSI MWs installed. The Town of Colma website maintains information on solar and energy efficiency resources and programs for its residents and businesses.

WIND

Wind energy is the country's fourth largest source of electric capacity, behind natural gas, coal and nuclear energy. There are not any wind farms or windmills located in Colma, although the Town participates in the Peninsula Clean Energy program which purchases wind energy as a source of renewable energy that provides a clean energy alternative to San Mateo County residents and businesses.

REGULATORY SETTING

WATER RESOURCES AND QUALITY

Federal

Clean Water Act

The primary goals of the Federal Clean Water Act, 33 USC §§ 1251, *et seq*. (CWA) are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollutant discharges. The CWA sets forth a number of objectives in order to achieve the above mentioned goals. The CWA objectives include regulating pollutant and toxic pollutant discharges; providing for water quality which protects and fosters the propagation of fish, shellfish, and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources pollution.

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The CWA provides the legal framework for several water quality regulations including NPDES, effluent limitations, water quality standards, pretreatment standards, anti-degradation policy, non-point source discharge programs, and wetlands protection.

The State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (Regional Water Boards; collectively the Water Boards) are authorized to implement the federal Clean Water Act in California. The State Water Board protects water quality by setting statewide policy, coordinating and supporting the Regional Water Boards, and reviewing petitions that contest Regional Water Board actions. Additionally, the State Water Board is solely responsible for allocating surface water rights, regulating public drinking water systems, and administering financial assistance programs.

Raker Act

SFPUC was granted the rights to the water resources of the Tuolumne River in 1913 by the Raker Act. This was an act of the United States Congress that allowed the construction of the O'Shaughnessy Dam in the Hetch Hetchy Valley in Yosemite National Park. The Act specifies that because the source of water and power was on public land, no private profit could be derived from the development.

State

Porter-Cologne Water Quality Control Act (California Water Code)

The State of California is authorized to administer Federal or State-enacted laws regulating water pollution in the state. The Porter-Cologne Water Quality Control Act (Water Code §§ 13000, *et seq*.) includes provisions to address requirements of the CWA. These provisions include NPDES permitting, dredge and fill programs, and civil and administrative penalties. The Porter-Cologne Act is broad in scope and addresses issues relating to the conservation, control, and use of the water resources of the State. Additionally, the Porter-Cologne Act states that the quality of all the waters of the state (including groundwater and surface water) must be protected for the use and enjoyment by the people of the state.

The SWRCB and its nine RWQCBs are agencies under the umbrella of the California Environmental Protection Agency (CalEPA). The SWRCB has the principle responsibility for the development and implementation of California water quality policy and must develop programmatic water quality control procedures to be followed by the RWQCBs. The Town of Colma is in the jurisdiction of the San Francisco Bay RWQCB.

Water Code § 13050 defines what is considered pollution, contamination, or nuisance. Briefly defined, pollution means an alteration of water quality such that it unreasonably affects the beneficial uses of water (for drinking, agricultural supply, or industrial uses). Contamination means an impairment of water quality to the degree that it creates a hazard to the public

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health. Nuisance is defined as anything that is injurious to health, offensive to the senses, or an obstruction to property use, and which affects a considerable number of people.

Discharge Permits

The National Pollutant Discharge Elimination System (NPDES) Program is a federal program that has been delegated to the State of California for implementation through the State Water Board and the nine Regional Water Quality Control Boards. In California, NPDES permits are also referred to as waste discharge requirements (WDRs) that regulate discharges to waters of the United States.

Since its introduction in 1972, the NPDES Program has been responsible for significant improvements to our nation's and state's water quality.

Local agencies in San Mateo County are required to reduce surface water drainage pollution runoff and establish control measures in development projects, which provide specific guidelines on design measures for runoff of pollutants of concern, source controls, stormwater treatment measures, hydromodification management, and construction site controls.

AIR QUALITY

Air quality within the Planning Area is regulated by EPA, ARB, and BAAQMD. Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although EPA regulations may not be superseded, State and local regulations may be more stringent.

Federal

The EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments to the CAA were made by Congress were in 1990.

Clean Air Act (CAA)

The CAA required EPA to establish the National Ambient Air Quality Standards (NAAQS). EPA has established primary and secondary NAAQS for several different pollutants, expressed in maximum allowable concentrations generally defined in units of parts per million (ppm) or in micrograms per cubic meter ($\mu g/m^3$). The primary standards protect the public health and the secondary standards protect public welfare. The CAA also required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP).

The CAA Amendments of 1990 (CAAA) added provisions to protect the ozone layer, reduce acid rain and toxic pollutants, and improve air quality and visibility, and included a requirement for states with nonattainment areas to revise their SIPs The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins

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as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

State

California Ambient Air Quality Standards (CAAQS)

ARB is responsible for preparing and enforcing the Federally-required SIP to achieve and maintain NAAQS, as well as the California Ambient Air Quality Standards (CAAQS) (Table 7-A-1), which were developed as part of the California Clean Air Act (1988). CAAQS for criteria pollutants equal or surpass NAAQS and include other pollutants for which there are no NAAQS. ARB is also responsible for assigning air basin attainment and nonattainment designations in California. Air basins are designated as being in attainment if the levels of a criteria air pollutant meet the CAAQS for the pollutant and are designated as being in nonattainment if the concentration of a criteria air pollutant exceeds the CAAQS. ARB is the oversight agency responsible for regulating statewide air quality, but implementation and administration of the CAAQS is delegated to several regional air pollution control districts and air quality management districts. These districts have been created for specific air basins, and have principal responsibility for developing plans to comply with the NAAQS and CAAQS; developing control measures for non-vehicular sources of air pollution necessary to achieve and maintain NAAQS and CAAQS; implementing permit programs established for the construction, modification, and operation of air pollution sources; enforcing air pollution statutes and regulations governing non-vehicular sources; and developing employer-based trip reduction programs.

Toxic Air Contaminants (TACs) in California are regulated primarily through the Tanner Air Toxics Act (AB 1807, Chapter 1047, Statutes of 1983) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588, Chapter 1252, Statutes of 1987). In some cases, TACs, which are also referred to as hazardous air pollutants (HAPs) by Federal agencies are regulated by the EPA as well.

Tanner Air Toxics Act

AB 1807 outlines a formal procedure for ARB to designate substances as TACs. Research, public participation, and scientific peer review are required before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. Diesel PM ($PM_{2.5}$) was added to ARB's list of TACs in 1998.

Once a TAC is identified, ARB adopts an airborne toxics control measure for sources that emit that particular TAC. If a safe threshold exists for a substance at which there is no toxic effect,

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the control measure must reduce exposure below that threshold. If no safe threshold exists, the measure must incorporate best available control technology to minimize emissions of the TAC.

Air Toxics Hot Spots Information and Assessment Act of 1987

The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) was enacted in 1987. Stationary sources are required to report the types and quantities of certain substances that are routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, and notify nearby residents of significant risks. The "Hot Spots" Act was amended in 1992 by Senate Bill (SB) 1731 (Calderon) to address the reduction of significant risks. The Act was further modified in 1996 by AB 564, including added provisions that: exempt specified low priority facilities from further compliance with the Hot Spots program; reinstate exempted facilities if specified criteria are met; specify an alternative evaluation process for facilities subject to district permit programs; and other changes to exempt specified facilities from further compliance with the Hot Spots Program.

Mobile Source Strategy

ARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). In 2000, ARB adopted a fleet rule for transit agencies which included more stringent emission standards for some new urban bus engines beginning with the 2002 model year; zero-emission-bus demonstration and purchase requirements for transit agencies; and reporting requirements to demonstrate compliance with rule. Recent milestones included the low-sulfur diesel fuel requirement, and tighter emissions standards for heavy-duty diesel trucks (effective in 2007 and subsequent model years) and off-road diesel equipment (2011) nationwide.

Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) in California have been reduced significantly over the last decade; such emissions will be reduced further through a progression of regulatory measures (e.g., Low Emission Vehicle/ Clean Fuels and Phase II reformulated-gasoline regulations) and control technologies. It is expected that concentrations of diesel PM will be reduced statewide by 85 percent in 2020 from the estimated year-2000 level. Adopted regulations are also expected to continue to reduce formaldehyde emissions from cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

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Regional

Criteria Air Pollutants

Bay Area Air Quality Management District (BAAQMD) provides regulations and rules to the ARB that regulate emissions from construction activities and stationary sources. Regulations and rules pertaining to construction and land development are listed below:

- Regulation 2: Permits. This Regulation specifies the requirements for authorities to construct and permits. Examples of pertinent rules included under this regulation are listed below:
  - Rule 1: General Requirements. Includes criteria for issuance or denial of permits, exemptions, appeals against decisions of the Air Pollution Control Officer (APCO) and District actions on applications.
  - Rule 2: New Source Review. Applies to new or modified sources. Contains requirements for Best Available Control Technology and emission offsets. Implements federal New Source Review and Prevention of Significant Deterioration requirements.
  - Rule 3: Power Plants. Contains special provisions for the review of and standards for the approval of authorities to construct power plants within the District.
  - Rule 6: Major Facility Review. Establishes procedures for large facilities to obtain Title V permits.
  - Rule 5: New Source Review of TACs. Applies preconstruction permit review to new and modified sources of toxic air contaminants; contains project health risk limits and requirements for Toxics Best Available Control Technology
  - Rule 10: Large Confined Animal Facilities. Provides requirements for agricultural sources of air pollution, and complies with the provisions of SB 700.
- Regulation 5: Open Burning. Generally, prohibits open burning, but also allows for exemptions such as agricultural burning, disposal of hazardous materials, fire training, and range, forest, and wildlife management.
- Regulation 6, Rule 1: General Requirements. Limits the quantity of particulate matter in the atmosphere by controlling emission rates, concentration, visible emissions and opacity.
- Regulation 8: Organic Compounds. Limits the emissions of a number of organic pollutant categories. There are 53 separate rules under this regulation. Pertinent examples include Rule 3 (Architectural Coatings), Rule 4 (General Solvent and Surface Coating Operations).
- Regulation 9: Inorganic Gaseous Pollutants. Limits the emissions of a number of inorganic gaseous pollutant categories. There are 14 separate rules under this regulation.
- Regulation 10: Standards of Performance for New Stationary Sources. Establishes emission and/or performance standards for new plants and other sources. The rules are

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incorporated by reference to the provisions of Part 60, Chapter 1, Title 40, of the Code of Federal Regulations.

- Regulation 11: Hazardous Pollutants. Sets emission and/or performance standards for hazardous pollutants.
- Regulation 12: Miscellaneous Standards of Performance. Establishes emission and/or performance standards for plants and operations that are not otherwise included in District Regulations. There are 15 separate rules under this regulation.

Recommended Setback Distances from Sources of Air Toxics

ARB research substantiates the health risks to sensitive populations from exposure to high levels of TACs. ARB recommends local jurisdictions adopt land use policies to separate sensitive land uses a minimum of 500 to 1,000 feet from air toxic sources (ARB 2005). ARB's recommendations for siting new sensitive land uses for both mobile and stationary sources of air toxics is presented in Table 7-3 below. These recommended setback distances in Table 7-3 are advisory and should not be interpreted as defined "buffer zones." ARB recognizes the opportunity for more detailed site-specific analyses and that land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues (ARB 2005).

Table 7-3: Recommendations for Siting New Sensitive Land Uses

Source Category	Advisory Recommended Setback Distance
Freeways and High-Traffic Roads	500 feet from a freeway or urban road with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	1,000 feet. Avoid location new sensitive land uses near entry and exit points.
Rail Yards	1,000 feet. Within 1 mile, consider siting limitation and mitigation approaches.
Ports	Immediately Downwind. Consult local air district.
Refineries	1,000 feet
Chrome Platers	1,000 feet
Dry Cleaners Using Perchloroethylene	300 to 500 feet
Gasoline Dispensing Facilities	300 feet

Source: California Air Resources Board (ARB). Air Quality and Land Use Handbook: A Community Health Perspective. 2005.

Bay Area 2017 Clean Air Plan

The Bay Area 2017 Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health and the climate. The Clean Air Plan defines a control strategy that the BAAQMD and its partners will implement to:

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- Reduce emissions of criteria air pollutants and toxic air contaminants from all key sources;
- Reduce emissions of "super-GHGs" such as methane, black carbon and fluorinated gases;
- Decrease demand for fossil fuels (gasoline, diesel and natural gas); and
- Decarbonize our energy system.

In its dual roles as an update to the Bay Area state ozone plan and a multi-pollutant plan, the 2017 Clean Air Plan addresses four categories of pollutants: ground-level ozone and its key precursors (ROG and NO_X), particulate matter ($PM_{2.5}$ as well as precursors secondary to $PM_{2.5}$), air toxics, and greenhouse gases (BAAQMD 2017).

The 2017 Clean Air Plan provides a control strategy including the following key elements:

Stationary sources:

- Decrease emissions of GHGs and criteria air pollutants through a region-wide strategy to reduce combustion and improve combustion efficiency at industrial facilities, beginning with the three largest sources of emissions: oil refineries, power plants and cements plants.
- Reduce methane emissions from landfills, and from oil and natural gas production and distribution.
- Reduce emissions of toxic air contaminants by adopting more stringent thresholds and methods for evaluating toxic risks at existing and new facilities.

Transportation:

- Reduce motor vehicle travel by promoting transit, bicycling, walking and ridesharing.
- Implement pricing measures to reduce travel demand.
- Direct new development to areas that are well served by transit, and conducive to bicycling and walking.
- Accelerate the widespread adoption of electric vehicles.
- Promote the use of clean fuels and low- or zero- carbon technologies in trucks and heavy-duty equipment.

Buildings and energy:

- Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar, wind and ground-source heat pumps.
- Support the expansion of community choice energy programs throughout the Bay area.
- Promote energy and water efficiency in both new and existing buildings.
- Promote the switch from natural gas to electricity for space and water heating in Bay area buildings.

BAAQMD CEQA Guidelines

BAAQMD's Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act (CEQA). The thresholds were designed to establish the level at which BAAQMD determined air pollution emissions would cause significant environmental impacts under CEQA. These thresholds are used when

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considering the impact of projects on the environment and not restrict development in areas with existing air quality on the occupants or users of a development. Table 7-4 summarizes the thresholds of significance as adopted by BAAQMD in 2017.

Table 7-4: BAAQMD Thresholds of Significance (Adopted 2017)

Pollutant	Construction-Related Average Daily Emissions (lb/day)	Operational-Related	
		Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
Project-Level			
ROG	54	54	10
NOX	54	54	10
PM10 (Exhaust)	82	82	15
PM2.5 (Exhaust)	54	54	10
PM10 / PM2.5 (Fugitive Dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs (Projects Other than Stationary Sources)	None	Compliance with Qualified GHG Reduction Strategy; OR 1,100 MT CO2e/yr; OR 4.6 MT CO2e/SP/yr	
GHGs (Stationary Sources)	None	10,000 MT CO2e/yr	
Risks and Hazards – New Source (Individual Projects)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan; OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM2.5 increase: > 0.3 µg/m3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Receptor (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan; OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM2.5 increase: > 0.3 µg/m3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Source (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM2.5: > 0.8 µg/m3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor	

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Pollutant	Construction-Related Average Daily Emissions (lb/day)	Operational-Related	
		Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant	
Odors	None	5 confirmed complaints per year averaged over three years	
Plan-Level			
Criteria Air Pollutants and Precursors	None	1. Consistency with Current Air Quality Plan control measures; 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase	
GHGs	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan); OR 6.6 MT CO2e/ SP/yr (residents + employees)	
Risks and Hazards*	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas); 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways	
Odors*	None	Identify the location, and include policies to reduce the impacts of existing or planned sources of odors	
Accidental Release of Acutely Hazardous Air Pollutants	None	None	
Regional Plans (Transportation and Air Quality Plans)			
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions	

CEQA = California Environmental Quality Act; CO = carbon monoxide; CO_2e = carbon dioxide equivalent; GHGs = greenhouse gasses; lb/day = pounds per day; MT = metric tons; NOx = oxides of nitrogen, $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO_2 = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr= year; TBD: to be determined.

**The receptor thresholds were the subject of litigation in California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal. 4th 369. The use of the receptor threshold is discussed in section 2.8 of the CEQA Air Quality Guidelines.*

*** The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.*

Source: Bay Area Air Quality Management District (BAAQMD). CEQA Air Quality Guidelines. May 2017

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BIOLOGICAL RESOURCES

Federal

Federal Endangered Species Act (FESA)

The U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) administer the Federal Endangered Species Act (FESA). The FESA requires each agency to maintain lists of imperiled native species and affords substantial protections to these "listed" species. NMFS jurisdiction under the FESA is limited to the protection of marine mammals, marine fishes, and anadromous fishes. All other species are subject to USFWS jurisdiction.

USFWS and NMFS may include a species on the list if it is endangered (at risk of extinction throughout all or a significant portion of its range) or threatened (likely to become endangered in the foreseeable future). Section 9 of the FESA prohibits the "take" of any wildlife species listed as endangered and most species listed as threatened. Take, as defined by the FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering" (50 CFR 17.3).

The FESA includes exceptions to this general take prohibition that allow an action to be carried out, despite the fact that the action may result in the "take" of listed species, where conservation measures are included for the species. Section 7 of the FESA provides an exception for actions authorized (e.g., under a Section 404 permit), funded, or carried out by a Federal agency and Section 10 provides an exception for actions that do not involve a Federal agency.

Federal Clean Water Act, Section 404

The Clean Water Act (FWA) is the primary Federal law that protects the quality of the nation's waters, including wetlands, lakes, rivers, and coastal areas. Section 404 of the CWA regulates the discharge of dredged or fill material into the waters of the United States, including wetlands. The CWA holds that all discharges into the nation's waters are unlawful unless specifically authorized by a permit; issuance of such permits constitutes its principal regulatory tool.

The United States Army Corps of Engineers (USACE) is authorized to issue Section 404 permits, which allow the placement of dredged or fill materials into jurisdictional waters of the United States under certain circumstances. The USACE issues two types of permits under Section 404: general permits (either nationwide permits or regional permits) and standard permits (either letters of permission or individual permits). General permits are issued by the USACE to streamline the Section 404 permitting process for nationwide, statewide, or regional activities

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that have minimal direct or cumulative environmental impacts on the aquatic environment. Standard permits are issued for activities that do not qualify for a general permit (i.e., that may have more than a minimal adverse environmental impact).

Federal Clean Water Act, Section 401

Under the Clean Water Act (CWA) Section 401, applicants for a Federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the state in which the discharge would originate. Therefore, all projects that have a Federal component and may affect state water quality (including projects that require Federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401 and the State's Porter-Cologne Water Quality Control Act. In California Section 401 certification is handled by the nine Regional Water Quality Control Boards (RWQCB) and SWRCB. The Town of Colma falls under the jurisdiction of the San Francisco Bay RWQCB. The San Francisco Bay RWQCB must certify that the discharge will comply with State water quality standards and other requirements of the CWA.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918, as amended (MBTA), implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA taking, killing, or possessing migratory birds is unlawful, as is taking of any parts, nests, or eggs of such birds (16 U.S. Government Code [USC] 703). Take is defined more narrowly under the MBTA than under FESA and includes only the death or injury of individuals of a migratory bird species or their eggs. As such, take under the MBTA does not include the concepts of harm and harassment as defined under FESA.

State

California Endangered Species Act

Administered by CDFW, the California Endangered Species Act (CESA) prohibits the take of listed species and also species formally under consideration for listing ("candidate" species) in California. Under CESA take means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish and Game Code § 86.) Under this definition, and in contrast to the ESA, CESA does not prohibit "harm" to a listed species. Furthermore, take under the CESA does not include "the taking of habitat alone or the impacts of the taking." However, the killing of a listed species that is incidental to an otherwise lawful activity and not the primary purpose of the activity constitutes a take under CESA. CESA does not protect insects, but with certain exceptions prohibits the take of plants on private land.

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State Fish and Game Code, Section 1600-1616

The California Department of Fish and Wildlife (CDFW) has jurisdictional authority over streams and lakes, and wetland resources associated with these aquatic systems, under California Fish and Game Code Section 1600 *et seq.* The CDFW has the authority to regulate work that will "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris waste or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" (Fish and Game Code § 1602.). An entity that proposes to carry out such an activity must first inform CDFW. Where CDFW concludes that the activity will "substantially adversely affect an existing fish or wildlife resource," the entity proposing the activity must negotiate an agreement with CDFW that specifies terms under which the activity may be carried out in a way that protects the affected wildlife resource.

PARKS AND OPEN SPACE

State

The California Government Code regulates open space planning and the dedication of parkland or payment of in-lieu fees by developers.

Sections 65560–65568, Government Code: Open Space Lands

This portion of California planning law defines open space and requires cities and counties to prepare an open space plan as a required element of its General Plan. Building permits, subdivision approvals, and zoning ordinance approvals must be consistent with the local open space plan.

Section 66477, Government Code, Subdivision Map Act

Referred to as the Quimby Act, this law allows local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based on the residential density, parkland cost, and other factors. Land dedicated and fees collected pursuant to the Quimby Act may only be used for developing new or rehabilitating existing park or recreational facilities. The maximum dedication and/or fee allowed under current State law is equivalent to providing three acres of parkland per 1,000 persons, unless the park acreage of a municipality exceeds that standard, in which case the maximum dedication is five acres per 1,000 residents.

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Local

Colma Municipal Code

Chapter 5.06 of the Municipal Code addresses tree cutting and removal. This chapter establishes policies, regulations, and standards necessary to ensure that the Town will continue to realize the benefits provided by its urban forest. Chapter 5.13 of the Code provides for the dedication of park land for subdivisions of five lots or more.

Energy And Mineral resources

State

Surface Mining and Reclamation Act of 1975

SMARA (California Public Resources Code §§ 2710-2796) encourages the production, conservation, and protection of California's mineral resources. The SMARA requires that the State Mining and Geology Board map areas throughout the state that contain regionally significant mineral resources.

Renewable Portfolio Standard Docket # 11-RPS-01, 14- RPS-01 and 16-RPS-01

This California standard for renewable energy developed as a result of the 2002 Senate Bill 1078 and was accelerated in 2006 under Senate Bill 107 which requires 20 percent of electricity intended for serving public communities to be derived from renewable energy resources by 2010.

CA-SB1 Docket Number: 07-SB-1

SB1 exempts the Energy Commission from responsibility for warranty disputes but requires all solar installations to have a 10-year warranty and be tested in a nationally recognized testing laboratory, and submit electrical characterization data to a third party for verification purposes (GoSolar 2016). Compliance with SB1 enables communities to benefit from installing solar panels through incentive programs (CEC 2013).

Cal Green Code (CGC)

Title 24 of the CGC was created by the California Building Standards Commission to establish energy efficiency standards for residential and nonresidential buildings.

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Regional

Regionally Integrated Climate Action Planning Suite (RICAPS)

The overall concept of RICAPS is that San Mateo County cities and the County should focus and collaborate on efforts on measures tied to sectors of emissions that they have control over. Most cities are focusing efforts on energy efficiency, renewable energy, waste reduction and transportation measures. The San Mateo County Office of Sustainability hosts regular meetings and provides resources to San Mateo County jurisdictions.

San Mateo County Energy Watch

The San Mateo County Energy Watch (SMCEW) is a local government partnership between PG&E and the City/County Association of Governments of San Mateo County (C/CAG), and is administered by the County's Office of Sustainability. SMCEW partners with the non-profit, Ecology Action, to provide no-cost technical services to eligible San Mateo County local governments, schools, non-profits, and businesses. SMCEW provides coordination, outreach, and educational resources to help guide community members through the implementation process. Colma is a member agency.

Peninsula Clean Energy

The Peninsula Clean Energy Authority, formed in March 2016, is a joint powers authority (JPA) comprised of the County of San Mateo and the 20 cities in the County. This JPA was formed to provide the residents and businesses in San Mateo County with a cleaner and greener sourced energy choice.

Peninsula Clean Energy (PCE) is San Mateo County's locally controlled electricity provider. PCE is a community choice energy (CCE) program that provides local residents and businesses with a choice of where their energy comes from. PCE purchases renewable electricity such as geothermal, solar and wind. As a CCE, PCE offers environmental and economic benefits to the residents and businesses of San Mateo County including the following:

- Earnings are reinvested into the community in the form of new energy projects and programs leading to reduction of greenhouse gas emissions (and customer savings)
- The environment benefits from greater use of clean, renewable energy, and consumption of fossil fuels is reduced which lowers greenhouse gas emissions.
- Providing the community with more control over their power supply.

Local

Green Building

The Town encourages green building practices during the design, construction, renovation and maintenance of businesses and homes to increase energy efficiency, water conservation and

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reduce waste. Green building also improves indoor air quality and is better for the environment.

The Town also implements the California Green Building Code for new construction and alterations to existing buildings.

KEY TERMS

Ambient Air Quality Standards. Maximum acceptable average concentrations of air pollutants during a specified period of time.

Aquifer. A layer of rock or sand that can absorb and hold water.

Area-wide Source. Pollution where the emissions are spread over a wide area, such as consumer product use; fireplaces and wood stoves; natural gas-fueled space heaters and water heaters; road dust, landscape maintenance equipment; architectural coatings; solvents; and farming operations. Area-wide sources do not include mobile sources or stationary sources.

California Department of Fish and Wildlife (CDFW). Wildlife agency responsible for oversight of the State's fish and wildlife resources. Formerly named California Department of Fish and Game.

California Endangered Species Act of 1984 (CESA). Prohibits the take of listed species and also species formally under consideration for listing in California.

California Native Plant Society (CNPS). A non-profit organization with a mission to conserve California native plants and their habitat. CNPS maintains an online Rare Plant Inventory database in California.

Critical Habitat. Specific areas designated by USFWS as essential to the conservation of a Federally-listed species and which may require special management considerations or protection. On city, county, state, or private land where there is no Federal involvement, a critical habitat designation has no regulatory impact. In other words, designation of critical habitat generally does not affect non-Federal land unless and until the property owner needs a Federal permit or requests Federal funding for a project.

Discharge. A rate of water flow, typically expressed as a unit volume of water per unit of time (e.g., cubic feet per second (cfs)).

Endangered. A species whose survival and reproduction in the wild is in immediate jeopardy from one or more causes: including loss of habitat, change in habitat, over exploration, predation, competition, disease, or other factors.

Greenhouse Gas (GHG). Gases such as water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and ozone (O_3) which

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are the result of both natural and human activities. The consumption of fossil fuels for transportation and generating electricity are the primary sources of GHG emissions which contribute to rising surface temperatures by trapping long wave radiations through the greenhouse effect and exacerbate the effects of global climate change.

Groundwater. Water that occurs beneath the land surface, specifically in pore spaces of saturated soil, sediment, or rock formations. Groundwater does not include moisture held by capillary action in the upper, unsaturated areas of aquifers.

Groundwater Basin. An aquifer or series of aquifers with defined lateral boundaries and bottom layer.

Mineral Resource Zones. A classification of State lands into four geographic zones: areas of no mineral resource significance (MRZ-1); areas of identified mineral resources significance (MRZ-2); areas of undetermined mineral resource significance (MRZ-3); and areas of unknown mineral resource potential (MRZ-4).

Mobile Source. On-road or off-road vehicles, boats, airplanes, lawn equipment and small utility engines.

NMFS. National Marine Fisheries Service. Responsible for the stewardship of the Nation's ocean resources and their habitat.

Non-point Source. A pollution source that cannot be defined at a discrete location; a dispersed or spread out source area.

Nonattainment Area. An area or air basin that does not meet California or National ambient air quality standards for a given pollutant.

Oxides of Nitrogen (NOx). Nitric oxide (NO), nitrogen dioxide (NO_2), and other molecules consisting of nitrogen and oxygen. Oxides of nitrogen are created from the combustion of fuels process and are a major contributor to smog and acid rain formation.

Ozone and Ozone Precursors. Ozone is a photochemical oxidant (a substance whose oxygen combines chemically with another substance in the presence of sunlight) and the primary component of smog. Ozone is a pungent, colorless, toxic gas created in the atmosphere rather than emitted directly into the air. Ozone is not directly emitted into the air but is formed through complex chemical reactions between emissions of ozone precursors, including reactive organic gases (ROG) and oxides of nitrogen (NOX) in the presence of sunlight. Ozone precursors occur either naturally or as a result of human activities such as the use of combustion engines.

Open Space. Any area that is vacant of any structures and is primarily maintained in its natural condition. Under Section 65560 of the California Government Code, open space land is broadly defined as land designated for the preservation of natural resources (e.g., lakeshore and

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watershed lands); managed production of resources (e.g., lands for agriculture, forestry, recharge of groundwater); outdoor recreation (e.g., parks, scenic highway corridors, areas with outstanding scenic, historic, and cultural values); or public health and safety (e.g., flood plains, unstable soil areas).

Parkland. Improved, primarily unobstructed area with landscaping and recreational equipment such as play apparatuses and/or basketball courts. The purpose of parks is to provide for outdoor recreation and physical exercise near to residential and employment areas.

Particulate Matter (PM). A complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles

Particulate Matter, Respirable (PM_{10}). Dust and particulates that are 10 microns in diameter or smaller. PM_{10} is also referred to as respirable particulate matter.

Particulate Matter, Fine ($PM_{2.5}$). Dust and particulates that are 2.5 microns in diameter or smaller. $PM_{2.5}$ is also referred to as fine particulate matter.

Point Source. A specific site from which pollution is discharged to a water body.

Rare. A plant species that, although not presently threatened with extinction, is present in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens.

Reactive Organic Gases (ROG). Photochemically reactive gases that are composed of non-methane hydrocarbons. These gases contribute to the formation of smog. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels.

Riparian. Of, on, or pertaining to the bank of a natural course of water. For example, riparian vegetation is composed of plant species normally found near streams, lakes, and other freshwater bodies, such as lakes, ponds, and reservoirs.

Runoff. Precipitation (rain or snowmelt) that is not used by plants, evaporated or infiltrated to soils, and is transported across land surfaces to streams or other surface water bodies.

Sensitive Receptors. Populations or uses that are more susceptible to the effects of air pollution than the general population, such as long-term health care facilities, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds.

Special Animals: a broad term used to refer to all the animal taxa tracked by the Department of Fish and Wildlife's California Natural Diversity Database (CNDDB), regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species".

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Special Status Species: Rare, threatened, or endangered plant or animal species protected by Federal, State, or other agencies in accordance with any of the following:

- Federal Endangered Species Act
- California Endangered Species Act (CESA)
- State Species of Concern list or Special Animals list (case-by-case basis)
- CDFW Fully Protected Species List [Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code]
- California Native Plant Protection Act (plants listed as rare, threatened or endangered by the California Native Plant Society (CNPS)
- Section 15380 of the California Environmental Quality Act guidelines

Stationary Source. A non-mobile source of air pollution such as a power plant, refinery, distribution center, chrome plating facility, dry cleaner, port, rail yard, or manufacturing facility.

Take. To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Threatened. A species that is abundant in parts of its range, but declining in overall numbers and likely to become endangered in the foreseeable future throughout all or a significant portion of its range.

Urban Forest. Urban parks, street trees, landscaped boulevards, public gardens, greenways, nature preserves, and natural areas.

USFWS. United States Fish and Wildlife Service. Guides the conservation, development, and management of the Nation's fish and wildlife resources.

USFS. United States Forest Service. Mission is to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.

Waters of the United States. A body of water with a defined bed and bank and an ordinary high water mark. Also defined in Section 404 of the Clean Water Act as hydric features regulated by the Clean Water Act that are not defined as wetlands. Waters of the U.S. include lakes, rivers, and intermittent streams.

Watershed. The land surface area from which water drains into a common downstream point.

Wetlands. Areas that are inundated or saturated by surface or groundwater to support a prevalence of vegetation typically adapted for life in saturated soil conditions. This definition of wetlands requires three wetland identification parameters to be present: wetland hydrology, hydric soils, and hydrophytic vegetation. Wetlands can be areas that are consistently inundated or seasonally inundated. Wetlands are delineated according to the USACE 1987 Wetlands Delineation Manual and are a subset of Waters of the United States.

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8 Climate Change

Executive Summary

This chapter summarizes climate change issues for the Town of Colma. It provides a discussion of climate change science and greenhouse gas (GHG) emissions sources in the State, Region, and local area. This report identifies the plans, policies, local ordinances, and State and Federal Laws that are used to regulate Greenhouse gas emission and mitigate the effects of Climate change.

Key Findings

- Total communitywide GHG emissions in Colma were approximately 26,156 metric tons of carbon dioxide equivalent ($MTCO_2e$) in 2016, or approximately 22 percent less than the 2005 baseline of 33,620 $MTCO_2e$.
- The primary source of GHG emissions in Colma is the transportation sector, comprising about 68 percent of all GHG emissions in the city in 2016. Residential and commercial building energy consumption comprised nearly 31 percent of communitywide emissions in 2016.
- The Town of Colma adopted a Climate Action Plan with specific GHG emissions reduction goals in 2013 for municipal operations and communitywide GHG emissions sources. The goals include achieving a 15 percent reduction by 2020 and an 80 percent reduction by 2050, relative to GHG emissions levels in the established base year of fiscal year 2005 for governmental operations and calendar year 2005 for communitywide sources.
- The City has adopted and implemented a number of policies, programs, and projects that address the reduction of GHG emissions and related efforts to improve sustainability. While the City has not formally adopted a local climate action plan (CAP), the General Plan Update will serve as a mechanism to develop a local GHG emissions reduction plan that will be integrated into the General Plan.

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GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

This section provides a discussion of climate change science and greenhouse gas (GHG) emissions sources in California, the San Francisco Bay Area, and the Town of Colma. This section also provides a summary of applicable regulations with respect to local, regional and statewide GHG emission sources. A discussion of the impacts caused by global climate change within the Town is included in the Hazards and Safety Chapter of the Existing Conditions Report.

GHG emissions have the potential to adversely affect the environment because, on a cumulative basis, they contribute to global climate change. In turn, global climate change has the potential to result in rising sea levels, which can inundate low-lying areas; affect rain and snow fall, leading to changes in water supply; and to affect habitat, leading to adverse effects on biological and other resources. Because GHG emissions come from many different sources in both current and expected future activities in a growing community, identification and reduction of GHG emissions is an important consideration in long-range planning efforts.

GLOBAL WARMING EFFECT

As solar radiation enters Earth's atmosphere from space, a portion of the radiation is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected back toward space. The absorbed radiation is then emitted from the Earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Some of this radiation is absorbed by gasses is Earth's atmosphere, classified as GHGs, resulting in the warming of atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on Earth. Without the greenhouse effect, Earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

STATEWIDE GHG EMISSIONS

The most recent report available from the California Air Resources Board (ARB) is a 2016 statewide GHG inventory. The report shows that California's GHG emissions have followed a declining trend since 2007. In 2016, emissions from routine emitting activities statewide were 429 million metric tons of CO2 equivalent (MMTCO2e), representing an overall decrease of 13% since peak levels in 2004 and 2 MTCO2e below the 1990 level and the state's 2020 GHG target.

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Per capita GHG emissions in California have dropped from a peak in 2001 of 14.0 tonnes per person to 10.8 tonnes per person in 2016, a 23% decrease. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining, representing a 38% decline since the 2001 peak, while the state's GDP has grown 41% during this period.

REGIONAL GHG EMISSIONS

San Francisco Bay Area

The Bay Area Air Quality Management District (BAAQMD) conducts periodic inventories of GHG emissions within the San Francisco Bay Area Air Basin. In 2015, BAAQMD updated its regional production-based GHG emissions inventory (originally conducted for the baseline year of 2002) to the base year 2011. In 2011, nearly 87 million metric tons of CO_2 equivalent ($MMTCO_2e$) were emitted as a result of activities in the San Francisco Bay Area. Of these, 84 $MMTCO_2e$ were emitted within the Air Basin and 3 $MMTCO_2e$ were indirect emissions from imported electricity. The Transportation sector contributed approximately 40 percent of total GHG emissions in the Bay Area, including on-road motor vehicles, locomotives, ships and boats, and aircraft. The Industrial/Commercial also contributed about 36 percent of regional GHG emissions, with primary sources including oil refining, natural gas and other fuel combustion, waste management, cement manufacturing, and other sources (BAAQMD 2015a).

A summary of the 2011 regional GHG emissions inventory, by sector and County, is shown in Table 8-1. San Mateo County, in which the Town of Colma is located, emitted approximately 7.7 $MMTCO_2e$, or about 9 percent of total regional emissions.

Table 8-1: Greenhouse gas Emissions, by Sector and County ($MMTCO_2e$)

	Alameda	Contra Costa	Marin	Napa	San Francisco	San Mateo	Santa Clara	Solano[2]	Sonoma[2]	Total SF Bay Area
Industrial/ Commercial	2.7	17.8	0.4	0.2	1.2	1.4	4.1	2.7	0.5	31.0
Residential Fuel	1.3	1.0	0.3	0.1	0.9	0.8	1.5	0.3	0.4	6.6
Electricity/Co-Generation	0.9	7.2	0.1	0.1	0.5	0.4	2.2	0.4	0.2	12.0
Off-Road Equipment	0.2	0.2	0.0	0.0	0.2	0.1	0.4	0.0	0.1	1.2
Transportation	7.9	5.0	1.3	0.9	3.0	5.0	7.6	1.6	2.0	34.3
Agriculture/ Farming	0.1	0.2	0.2	0.1	0.0	0.0	0.2	0.1	0.2	1.1
Total (All Sectors)[1]	**13.2**	**31.4**	**2.4**	**1.5**	**5.7**	**7.7**	**16.0**	**5.1**	**3.5**	**86.5**

Notes: $MMTCO_2e$ = million metric tons of carbon dioxide equivalent.

[1]Totals may not sum exactly, due to rounding of figures.

[2]Portion within San Francisco Bay Air Basin.

Source: BAAQMD 2015; compiled by Ascent Environmental 2016.

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LOCAL GHG EMISSIONS

Community Wide GHG Emissions

The Town of Colma has completed community-wide GHG inventories in 2005 and 2010 to create a baseline for GHG emissions in the jurisdiction. Subsequent community wide inventories were conducted every year since 2011, with the 2016 inventory complete most recently. Emissions are calculated in four different sectors: Energy use (including stationary sources), transportation, water/wastewater, and solid waste. Since the baseline year inventories, the Town has effectively reduced GHG emissions from the community on an annual basis. As of 2016, the Town has met GHG reduction goals of 20% below 2005 levels at approximately 22% below 2005 levels. The GHG Inventories are summarized on Table 8-2 below.

Table 8-2: Community Wide Greenhouse Gas Emissions Inventories (MTCO2E)

Sector	Source		Emissions (MTCO2E)			
			2005	2010	2015	2016
Energy	Residential Energy	Electricity	492	570	382	225
		Natural Gas	1,026	1,056	800	834
	Commercial/ Industrial Energy	Electricity	5,162	4,375	3,591	2,053
		Natural Gas	2,942	2,788	2,235	2,100
	Direct Access	Electricity	2,106	965	1,077	728
	Stationary Sources	Multiple Fuels	--	55	1667	2,207
Subtotal: Energy Sector			11,728	9,809	9,752	8,148
Transportation	Local Roads	Local Roads-Gasoline	12,074	10,609	9,788	9,165
		Local Roads-Diesel		929	1,326	1,057
	State Highways	State Highways-Gasoline	6,068	4,805	5,196	4,610
		State Highways-Diesel		421	704	532
	Off-Road Equipment (Residential)		2,432	2,468	2283	2,300
Subtotal: Transportation Sector			20,574	19,232	19,297	17,664
Solid Waste	Solid Waste Disposal	Landfilled Waste	1,316	770	299	290
		ADC	2	85	6	11
Subtotal: Solid Waste Sector			1,318	855	305	301
Water	Water	Water Use	--	27	34	27
		Wastewater	--	28	19	16
Subtotal: Water and Wastewater Sectors			--	55	54	44
Total Annual GHG Emissions (all sectors)			**33,620**	**29,951**	**29,407**	**26,156**

Notes: Although the closed landfill facility is located within the Town of Colma, it is not included since it is not managed by the Town and the Town is unable is implement programs to reduce emissions from the facility.

Source: Town of Colma Community Wide GHG Inventory

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Municipal Operations Greenhouse Gas Emissions Inventory

The City prepared an updated Government Operations GHG Emissions Inventory for 2010 using the Local Government Operations Protocol (LGOP). Water and wastewater sector emissions represented the highest share of the City's total government operations emissions in 2010 at 48 percent, followed by employee commute; buildings and facilities; and vehicle fleet sector emissions which were 15 percent, 13 percent and 12 percent of total operational emissions, respectively.

The 2004-2005 Government Operations inventory did not follow the LGOP because it was created prior to the release of the LGOP. Thus, a direct and accurate comparison between the 2004-2005 inventory and 2010 government operations inventory is not possible. The City's 2004-2005 government operational emissions are shown in Table 8-3 for informational and illustrative purposes only, along with 2010 government operations emissions.

Table 8-3: Municipal Operations GHG Emissions Inventory Summary

Sector	Emissions (MTCO2e)			Percent Change From 2010-2015 (%)
	2005	2010	2015	
Buildings and Facilities	92	108.1	97.5	-9.8%
Public Lightning	8	27.8	17.3	-37.9%
Water and Stormwater Services	1	0.5	0.5	3.1%
Vehicle Fleet	161	72.4	113.5	56.7%
Employee Commute	146	147.6	103.2	-30.1%
Government Generated Solid Waste	23	14.2	3.9	-72.2%
Total:	**431**	**370.6**	**335.9**	**-9.4 %**

Source: Town of Colma Municipal Operations GHG Emissions Inventory

Climate Action Plan

A state mandate, AB 32 (California's Global Warming Solutions Act of 2006), requires statewide greenhouse gases (GHGs) to be reduced 15% below current levels (as measured in 2005), by the year 2020. In response to this mandate, the Town of Colma has prepared a Climate Action Plan (CAP) in 2013. The Town's CAP serves as a guiding document to identify measures and strategies that Colma can implement to reduce GHGs. As noted under the Community GHG Emissions, the CAP goals for 2020 have been met. Since the municipal operations emissions make a small portion of the community wide emissions, it is not included in the reductions goal. However, some of the policies in the CAP do target Municipal operations.

A new mandate, SB 32, requires further GHG emissions reductions by 2030. The Town is updating the CAP with new measures and policies to meet the new goal of reducing emissions to 51% below 2005 levels.

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REGULATORY SETTING

This report has been prepared at a time where accepted practice and legislation regarding how government agencies should address climate change continues to evolve. This section summarizes the current and relevant federal, State, and local regulatory programs, plans, and policies that apply to GHG emissions and land use planning.

FEDERAL

Supreme Court Ruling of Carbon Dioxide as a Pollutant

The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for implementing the federal Clean Air Act (CAA) and its amendments. The Supreme Court of the United States ruled on April 2, 2007 that CO_2 is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. The ruling in this case resulted in EPA taking steps to regulate GHG emissions and lent support for state and local agencies' efforts to reduce GHG emissions.

Endangerment and Cause or Contribute Findings

On December 7, 2009, EPA adopted its Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA (Endangerment Finding). The Administrator (of EPA) found that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are very likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, and higher-intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations. The Administrator also found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHGs fit within the CAA definition of air pollutants.

National Program to Cut GHG Emissions and Improve Fuel Economy for Cars and Trucks

On August 28, 2012 EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) issued joint Final Rules for Corporate Average Fuel Economy (CAFE) standards for vehicle model years 2017 and beyond (NHTSA 2012). These first-ever national GHG emissions standards will increase fuel economy to the equivalent of 54.5 miles per gallon (mpg) for cars and light-duty trucks by model year 2025. EPA approved these standards under the CAA, and NHTSA approved them under the Energy Policy and Conservation Act.

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STATE

The California Air Resources Board (ARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA), which was adopted in 1988. ARB is also designated as the lead state agency for implementing the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) and related efforts to reduce statewide GHG emissions in California. ARB coordinates closely with other state agencies and regional and local entities to implement AB 32 and related laws, rules and regulations.

Executive Order S-3-05

Executive Order (EO) S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea level. To combat those concerns, the EO established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. This EO is binding only on State agencies, and has no force of law for local governments; however, the signing of EO S-3-05 sent a clear signal to the California Legislature about the framework and content for legislation to reduce GHG emissions.

Executive Order B-30-15

On April 20, 2015 Governor Edmund G. Brown Jr. signed EO B-30-15 to establish a new California GHG reduction target of 40 percent below 1990 levels by 2030, as well as increase statewide efforts to address the need for increase climate change adaptation measures by State agencies. This EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union which adopted the same target in October 2014. California is on track to meet or exceed its legislated target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32 (summarized below). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 °C, the warming threshold at which there will likely be major climate disruptions such as super droughts and rising sea levels. The targets stated in EO B-30-15 have not been adopted by the State legislature.

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Assembly Bill 32, The California Global Warming Solutions Action of 2006

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions are being implemented through the California Cap-and-Trade regulation starting in 2012, along with other regulations and programs to achieve GHG emissions reductions in sectors that included under the statewide cap.

Assembly Bill 32 Climate Change Scoping Plan

In December 2008, ARB adopted its Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 118 $MMTCO_2e$, or approximately 22 percent from the state's projected 2020 emission level of 545 $MMTCO_2e$ under a business-as-usual scenario (this is a reduction of 47 $MMTCO_2e$, or almost 10 percent, from 2008 emissions). ARB's original 2020 projection was 596 $MMTCO_2e$, but this revised 2020 projection takes into account the economic downturn that occurred in 2008 (ARB 2011a). The Scoping Plan reapproved by ARB in August 2011 includes the Final Supplement to the Scoping Plan Functional Equivalent Document (FED), which further examined various alternatives to Scoping Plan measures. The Scoping Plan also includes ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. ARB estimates the largest reductions in GHG emissions to be achieved by implementing the following measures and standards (ARB 2011a):

- Improved emissions standards for light-duty vehicles (26.1 MMTCO2e);
- The Low-Carbon Fuel Standard (LCFS) (15.0 MMTCO2e);
- Energy efficiency measures in buildings and appliances (11.9 MMTCO2e); and
- Renewable portfolio and electricity standards for electricity production (23.4 MMTCO2e).

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375) aligns regional transportation planning efforts, regional GHG emission reduction targets for cars and light trucks, land use planning, and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which integrates regional land use and transportation planning within an MPO's Regional Transportation Plan (RTP).

SB 375 requires ARB, in consultation with MPOs, to provide each region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets.

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The specific GHG reduction targets to be used by MTC and ABAG in Plan Bay Area include seven percent below 2005 emissions levels by 2020, and 15 percent below 2005 levels by 2035 (ARB 2012b). ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG emission reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

In 2013, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) jointly adopted Plan Bay Area, which is the SCS for the San Francisco Bay Area region. Plan Bay Area is the successor to Transportation 2035, the long-range RTP adopted by MTC in 2009, and was certified by ARB to achieve the regional GHG reduction targets for light duty vehicles (MTC/ABAG 2014).

Senate Bill 97

SB 97 directed the California Natural Resources Agency (CNRA) to adopt amendments to the California Environmental Quality Act (CEQA) Guidelines related to analysis of GHG emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

CEQA allows lead agencies to analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, or as part of a separate plan (e.g., a climate action plan) to reduce GHG emissions (CEQA 15183.5).

Renewable Electricity (or Renewable Portfolio) Standard

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their power supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08 requiring all retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. The following year, Executive Order S-21-09 directed the California Air Resources Board, under its Assembly Bill 32 authority, to enact regulations to achieve the goal of 33 percent renewables by 2020. In 2011, Governor Brown signed SB X1-2 codified the 33 percent by 2020 standard into law.

The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) jointly implement the statewide Renewable Portfolio Standard (RPS) program through rulemakings and monitoring the activities of electric energy utilities in the state (CPUC 2015a).

Low-Carbon Fuel Standard

Executive Order S-1-07, signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at over 40 percent of statewide emissions. It establishes a goal that the carbon intensity of transportation fuels sold

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in California should be reduced by a minimum of 10 percent by 2020. This order also directed ARB to determine if this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early action measure after meeting the mandates in AB 32. ARB adopted the LCFS regulation in 2009, and subsequently re-adopted the regulation with modifications in 2015, in response to an order of the California Appellate Court.

Advanced Clean Cars Program

In January 2012, ARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions than the statewide fleet in 2016 (ARB 2011b).

California Solar Initiative

The California Solar Initiative (CSI) was authorized in 2006 under SB 1 and allows CPUC to provide incentives to install solar technology on existing residential, commercial, nonprofit, and governmental buildings if they are customers of the State's investor-owned utilities (IOUs), including Pacific Gas & Electric (PG&E). The CSI program has a budget of nearly $2.2 billion to be expended by 2016 with a goal to reach 1,940 megawatts (MW) of installed solar power throughout the state by that time (CPUC 2015). The CSI program has several components, including the Research and Development, Single-family Affordable Solar Housing (SASH), Multi-family Affordable Solar Housing (MASH), and Solar Water Heating Pilot Program, each of which provides incentives to further the installation of solar technology on California's buildings.

Assembly Bill 939, the California Integrated Waste Management Act

Assembly Bill 939 (Sher, Statutes of 1989) established the California Integrated Waste Management Act of 1989. Among the bill's provisions is a requirement that each city and county develop and adopt a plan to divert 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities (CalRecycle 1997).

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Assembly Bill 341

Assembly Bill 341 (Chesbro, Chapter 476, Statutes of 2011) established a policy goal for the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020. The California Department of Resources Recycling and Recovery's (CalRecycle) identified five priority strategies for achieving the 75 percent statewide waste diversion target, which include:

- Moving organics out of the landfill;
- Expanding recycling/manufacturing infrastructure;
- Exploring new approaches for State and local funding of sustainable waste management programs;
- Promoting State procurement of post-consumer recycled content products; and
- Promoting extended producer responsibility (CalRecycle 2015).

Model Policies for Greenhouse Gases in General Plans

In June 2009 the California Air Pollution Control Officers Association (CAPCOA) prepared a white paper that presents model policies for addressing GHG emissions in general plans. CAPCOA intends this paper to be a resource rather than a guidance document intended to dictate how local communities should address GHG emission in their general plans. Model language is provided in nine major categories: GHG reduction planning (overall); land use and urban design; transportation; energy efficiency; alternative energy; municipal operations; waste reduction and diversion; conservation and open space; and education (CAPCOA 2009).

Regional and Local

Bay Area Air Quality Management District

The BAAQMD is the lead air quality regulatory agency for the San Francisco Bay Area Air Basin. BAAQMD maintains air quality conditions through comprehensive programs of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues, as well as reducing GHG emissions. A number of BAAQMD programs related to GHG emissions are addressed below.

Climate Protection Program

On June 1, 2005 the Air District Board of Directors adopted a resolution establishing a Climate Protection Program and acknowledging the link between climate protection and programs to reduce air pollution in the Bay Area. The Board of Directors also formed a standing Committee on Climate Protection to provide direction on District climate protection activities.

In 2013, the Board adopted a resolution that sets a 2050 GHG emissions reduction target, in line with EO S-3-05 to reduce GHG emissions in the Bay Area 80 percent below 1990 levels by 2050. The 2013 resolution also established a Regional Climate Protection Strategy to make

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progress towards achieving the 2050 goal using the District's Clean Air Plan update to initiate the process, along with a 10-point work program to guide the District's climate protection activities in the near-term (BAAQMD 2015b).

A central element of the District's climate protection program is the integration of climate protection activities into existing District programs. The District is continually seeking ways to integrate climate protection into current District functions, including grant programs, CEQA commenting, regulations, inventory development, and outreach. In addition, the District's climate protection program emphasizes collaboration with ongoing climate protection efforts at the local and State level, public education and outreach and technical assistance to cities and counties (BAAQMD 2015b).

Bay Area 2010 Clean Air Plan

The Bay Area 2010 Clean Air Plan provides a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines a control strategy that the BAAQMD and its partners will implement to: (1) reduce emissions and decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce GHG emissions to protect the climate. In its dual roles as an update to the Bay Area state ozone plan and a multi-pollutant plan, the 2010 Clean Air Plan addresses four categories of pollutants: ground-level ozone and its key precursors (ROG and NO_X), particulate matter ($PM_{2.5}$ as well as precursors secondary to $PM_{2.5}$), air toxics, and greenhouse gases (BAAQMD 2015c).

Adoption of California Environmental Quality Act Guidelines

On June 2, 2010, BAAQMD's Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act (CEQA). The thresholds were designed to establish the level at which BAAQMD determined air pollution and GHG emissions would cause significant environmental impacts under CEQA and were included in BAAQMD's updated May CEQA Guidelines (BAAQMD 2011). Table 7-4 in the Air Quality section of this Existing Conditions Report summarizes BAAQMD's 2010 thresholds of significance, including those for GHG emissions.

On March 5, 2012, the Alameda County Superior Court issued a judgment finding that BAAQMD had failed to comply with CEQA when it adopted the thresholds. However, on August 13, 2013, the Court of Appeals reversed the trial court's decision. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review with respect to whether or not CEQA requires analysis of the impact of the environment on the project. On December 17, 2015, the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on

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future residents or users." The Supreme Court remanded the case to the Court of Appeal for reconsideration in light of its holding. As such, the previous Court of Appeals ruling that the BAAQMD did not need to conduct CEQA review for the adoption of significance thresholds still stands.

In May 2012, the BAAQMD issued GHG Plan-Level Guidance to assist local governments in developing community scale GHG emission inventories and projections, quantifying emission reductions from various policies and mitigation measures, and developing effective climate protection strategies. The Guidance is based on established methodologies and practices, and is intended to be a set of recommended approaches rather than formal protocol.

Included within the Plan-Level Guidance document are qualitative criteria that the BAAQMD will use to judge whether a CAP or other plan designed to reduce communitywide GHG emissions (e.g. sustainability plan or general plan) will meet the criteria established by the Governor's Office of Planning and Research (OPR) per CEQA Guidelines Section 15183.5. These qualitative criteria are as follows:

- GHG emissions inventory should be complete and comprehensive;
- Calculations and assumptions should be transparent;
- GHG reduction strategies should rely primarily on mandatory measures;
- Plans should build in a margin of safety;
- GHG reduction measures should address existing as well as new development; and,
- Implementation and monitoring should be clearly defined.

The Guidance document also provides guidance on developing the quantitative sections of a local CAP, including development of GHG emission inventories, projections, mitigation measures, and implementation and monitoring procedures (BAAQMD 2012).

San Mateo County Energy Strategy

In 2006, the County of San Mateo and incorporated cities in the county convened a Utilities Sustainability Task Force (USTF), an ad hoc working group composed of six elected officials, six stakeholder representative, staff, and others to consider the future needs of San Mateo County for both energy and infrastructure. In 2012, the San Mateo County Energy Strategy was completed to frame the discussion and defines goals, strategies and potential actions that cities and the County can take with respect to energy, water, alternative energy generation, and climate protection (County of San Mateo 2012). Key goals included in the Strategy are summarized below:

- **Energy**: Reduce the amount of power it purchases from utilities to 25 percent below 2005 levels through conservation, efficiency and increased local production of clean energy.
- **Water:** To reduce water consumption by 14 gallons per capita per day.

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- **Collaboration**: Partner with the public utilities and work across city boundaries to address environmental challenges more effectively and efficiently.
- **Economic Opportunities**: Support the clean technology sector to strengthen the long-term economic health of San Mateo County.
- **Leadership from the Top**: Encourage environmental leadership from the top in the public sector, the business community and with its residents to achieve the goals of the Energy Strategy.

Town of Colma Goals, Policies and Programs

Colma has adopted and implemented a number of policies, programs and projects that address the reduction of GHG emissions and related efforts to improve sustainability. These are summarized as follows:

- Climate Protection and Sustainability Goals and Policies
- Certified City Hall and Police Department as Green Businesses and promote the program to businesses.
- Sustainable design for Town Hall addition and remodel.
- Adopted a Climate Action Plan in 2013.

Communitywide Programs and Projects:

- Became a "Tree City" in 2018.
- Promoted rebates and water efficient appliances and fixtures.

KEY TERMS

The following key terms used in this chapter are defined as follows:

Carbon dioxide (CO_2). An odorless and colorless GHG emitted from natural sources, such as the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out-gassing. Anthropogenic (man-made) sources include the burning of fossil and other fuels (e.g., coal, oil, natural gas, wood).

Carbon dioxide equivalent (CO_2e). A unit for describing how much global warming a given type and amount of GHG may cause, normalized to a functionally equivalent amount or concentration of CO_2 as the reference. See Global Warming Potential.

Carbon Sequestration. Atmospheric CO_2 taken up through leaves and becomes carbon in the woody biomass of trees and other vegetation where it is stored.

Climate Action Plan (CAP). A planning document that lays out a set of strategies and policy recommendations intended to reduce GHG emissions associated with a given entity, agency, or jurisdiction.

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Climate Change. Long-term changes in temperature, precipitation, and other elements of the Earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to GHGs, particularly those generated from the human production and use of fossil fuels.

Global Warming Potential (GWP). One type of simplified index based upon properties of the GHG that can be used to estimate the effect on the climate system with reference to CO_2. For example, one ton of methane is as potent a GHG as 21 tons of CO_2. Methane has GWP of 21 CO_2e. See also Carbon Dioxide Equivalent.

Greenhouse Effect. The Earth's natural warming process. Certain atmospheric gases that trap heat in the atmosphere, causing the greenhouse effect, are referred to as GHGs.

Greenhouse Gases (GHGs). Gases that contribute to the greenhouse effect. Some GHGs such as carbon dioxide ($CO_{2)}$ occur naturally, and are emitted to the atmosphere through natural processes and human activities. Other GHGs (e.g., fluorinated gases) are created and emitted solely through human activities. The principal GHGs that enter the atmosphere because of human activities include: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), Chlorofluorocarbons (CFCs), and fluorinated gases (hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Greenhouse Gas (GHG) Inventory. An accounting of the amount of GHGs emitted to or removed from the atmosphere over a specific period of time (e.g., one year) for a specified area.

Methane (CH_4). A GHG with GWP of 21. Anthropogenic (human-caused) sources of methane emissions include agricultural activities, natural gas consumption, landfills, wastewater treatment plants, and mobile sources.

Nitrous oxide (N_2O). A GHG with GWP of 310. Nitrous oxide sources include wastewater treatment plants, fertilizer application and soil management in agricultural activities, and mobile sources.

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9 Hazards and Safety

Executive Summary

This chapter reviews and summarizes hazards and safety issues for the Town of Colma. It provides a review of the Town's emergency preparedness, then identifies and summarizes hazards in and around Colma. These hazards include seismic, geologic, flood, fire, aviation and hazardous materials. It also discuss the safety issues around each of the identified hazards and evaluates noise issues.

Key Findings

- Colma Municipal Code Section 1.17 outlines the duties and responsibilities of Town Staff and the City Council in the event of an emergency.
- Emergency medical services are provided by the Colma Fire Protection District
- The Town of Colma is responsible for providing emergency operations services and in cooperation with the San Mateo County Office of Emergency Services.
- The Town of Colma, the Colma Fire District and the San Mateo County Office of Emergency Services train individuals to respond to emergencies at free Community Action Plan for Emergency (CAPE) events. The trainings target community-specific issues that affect the community of Colma and teach individuals how to best respond to each emergency situation.
- Four major faults can impact the Town of Colma: The San Andreas Fault, San Gregorio Fault, Hayward Fault, and Calaveras Fault. The nearest fault to Colma is the San Andreas Fault, which passes within one mile west of the Town in a north to south direction.
- Soils in the central portion of Colma have been identified by the Association of Bay Area Governments and the United States Geologic Survey as having a very high susceptibility to liquefaction during an earthquake event. These areas are identified in Figure 9-3
- None of the land in the Town of Colma is in the 100-year flood zone.
- The eastern edge of the Town of Colma (which interfaces with San Bruno Mountain) is designated as having a moderate to high fire hazard.
- Colma is served by the Colma Fire Protection District which has one fire station and serves the Town of Colma and unincorporated Broadmoor.

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- The San Francisco International Airport (SFO) is a large, primary commercial airport located southeast of Colma. In 2014, SFO served over 47 million domestic and international passengers and 338,000 metric tons of cargo through 58 different airlines.
- The Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (2012) identifies safety compatibility zones from SFO. The plan also presents goals and policies to ensure public safety and land use compatibility in communities in proximity to SFO. Colma is within airport area of influence areas A and B. Colma outside of the 65 dBl noise contour. Airport land use compatibility review is required for development in Colma.
- The Airport Development Plan (2016) outlines projects and improvements at the airport. In 2019, a new Terminal 1 was opened, along with an on-site hotel. The airport is working towards becoming a net-zero energy facility. Projects in the plan do not affect Colma.
- The County of San Mateo Environmental Health Department is the Certified Unified Program Agency (CUPA) in San Mateo County, including Colma.
- As of July 2019, there were on hazardous waste sites and no toxic air contaminant (TAC) hot spots in Colma. There is one Leaking Underground Storage Tanks (LUST) cleanup site in Colma.
- A primary contributor to the Colma noise environment is vehicular traffic on major thoroughfares.
- A minor amount of noise is experienced from planes taking off and landing at San Francisco International Airport

EMERGENCY PREPAREDNESS

The Town of Colma has historically endured disasters, including the 1989 Loma Prieta Earthquake and severe storms (2016,1998). Due to its climate, topography, and geographic location between major fault lines, Colma is at high risk of impact from natural or human-caused disasters such as earthquakes and fires. Specific details regarding flood hazards, seismic hazards, fire hazards, and other conditions of local concern can be found in the respective sections of this chapter.

According to Federal Emergency Management Agency (FEMA) flood insurance rate maps (06081C0037E), Colma is in Flood Zone X, areas of 0.2% chance of annual flooding. Colma's low incidence of flooding or flood potential is a result of drainage improvements along El Camino Real, extending to Colma Creek at El Camino Real and Mission Road.

While rising sea levels may not directly impact Colma, impacts could occur to the South San Francisco Sewage Treatment plant, which would impact Colma residents and businesses.

The San Andreas Fault is within one mile of the western town limits. Additionally, the San Gregorio, Hayward, and Calaveras faults are all active and within 30 miles of Colma. These

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faults present significant potential earthquake hazards to the Town. Geotechnical and geologic reviews are required prior to development to assess seismic and geologic hazards such as liquefaction, land sliding, and settlement.

Colma is locally responsible for fire hazards and has regions with moderate to high risk for fire hazards in the eastern portion of the Town. Fire hazards on undeveloped land in the Town is predominantly located adjacent to San Bruno Mountain. Structure fires represent the majority of fire hazard in Colma.

This section describes the existing conditions and regulatory framework related to emergency preparedness in the Town of Colma.

EMERGENCY PLANNING

Preparing for natural or human-caused disasters is a priority for the Town of Colma, the Town participated with other San Mato County jurisdictions in the development of the regional plan and Local Hazard Mitigation Plan.

In the event of a disaster, the Town of Colma would open its Emergency Operations Center (EOC). EOC staffing includes representatives from the Police Department, Colma Fire Protection District, and Town staff. The Colma Municipal Code outlines the responsibilities of the City Manager and how the Town will respond in the event of an emergency.

San Mateo County Sheriff's Office of Emergency Services has developed a comprehensive Countywide Emergency Operations Plan (EOP) to ensure the most effective and economical allocation of resources for the protection of human health, property and the environment in the event of an emergency or disaster. In May 2015, the EOP was revised and reflects nationally recognized "best practices" and includes emergency management plans in phases, detailed actions, and recommended next steps such as the adoption of additional policies based on disaster needs.

Local Hazard Mitigation Plan Annex

In 2010 Colma officials, in cooperation with the San Mateo County Fire Department and the San Mateo County Sheriff's Office of Homeland Security and Emergency Services, drafted the Colma Local Hazard Mitigation Plan Annex (LHMP) to ensure the most effective and economical allocation of resources for protection of human health, property and the environment in the event of an emergency or disaster.

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2010 Multijurisdictional Local Hazard Mitigation Plan

The purpose of the MJLHMP is to establish disaster mitigation priorities for the region in an effort to minimize the damage from a human-made or natural disaster. The MJLHMP identifies a number of hazard mitigation strategies and goals that prepare the Town for future disasters or emergencies, including: a vulnerability assessment of Town facilities and infrastructure; joint meetings of security and operations personnel at critical facilities; participation in general mutual aid agreements for cooperative disaster response; and, the adoption of more stringent building code provisions.

In 2010, the MJLHMP was created and addressed the potential hazards identified in the 1998 Colma General Plan Safety Element. The MJLHMP refers to the General Plan's Safety Element which "includes a discussion of fire, earthquake, flooding, and landslide hazards. This plan was adopted as an implementation appendix to the Safety Element" (page 4). The MJLHMP draft annex was completed in 2010, but no changes were made to the Safety Element within the General Plan.

By State law, all local government employees are disaster service workers, obligated to respond in the event of a declared disaster. Staff of the Economic and Community Development Department's Environmental Programs Division responds to hazardous materials and environmental emergencies around-the-clock. Public Works has on-call staff available around-the-clock, on an as-needed basis, for emergencies involving Town infrastructure and to support Colma Police operations.

The Town of Colma, in cooperation with San Mateo County, supports and relies on outside resources. These resources include:

- San Mateo County Alert: a free notification system that citizens can register for to receive notifications in the event of an urgent emergency situation. The system has the ability to send both emergency and non-emergency messages to cell phones, tablets, email accounts, and to leave messages on landlines.
- San Mateo County Emergency Preparedness Training: a program organized by the San Mateo County Sheriff's Office and provides resources at three different levels of outreach: 1) at home; 2) at work; 3) in the community.
- San Mateo County Office of Emergency Services provides a list of links to resources available to the community at the local, state, or federal levels. Some of the online resources include storm prediction information, Non-Governmental Agency support for special needs or vulnerable communities, and checklists for preparing a personal emergency response plan.
- The American Red Cross provides a variety of resources such as shelters, contact databases, and post-emergency recovery support programs. The website also provides links to additional resources for schools, workplaces, organizations, individuals, special needs individuals, and smart phone applications for up-to-date emergency preparedness tips such as handling first aid emergency situations.

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- State of California Office of Emergency Services provides information for emergency events ranging from gas leaks, preparing for major storms, and emergency response news updates.

2015 Multijurisdictional Local Hazard Mitigation Plan and Colma Annex

In September of 2015, the San Mateo County Emergency Manager's Association selected Tetra-Tech to update the 2010 Multijurisdictional Plan. They completed the update in the summer of 2016. In addition to the Multijurisdictional Annex, individual jurisdictions and districts within the County prepared their own specific Annex which is integrated into the County-wide plan. The Town of Colma prepared an Annex as part of this process.

The plan identified a number of potential vulnerabilities to the town and created a list of action items to implement to reduce Colma's vulnerabilities in the event of a natural disaster. This plan will be updated again in 2020.

GEOLOGIC AND SEISMIC HAZARDS

This section describes the existing conditions and regulatory framework related to geologic and seismic hazards in the Town of Colma.

FAULTING AND SEISMICITY

Generally defined, an earthquake is an abrupt release of accumulated energy in the form of seismic waves when movement occurs along a fault. The severity of an earthquake generally is expressed in two ways: magnitude and intensity. The energy released, measured on the Moment Magnitude (Mw) scale, represents the magnitude of an earthquake. The Richter Magnitude (M) scale has been replaced in most modern building codes by the Mw scale because the latter scale provides more useful information to design engineers.

The intensity of an earthquake is measured by the Modified Mercalli Intensity (MMI) scale, which emphasizes the current seismic environment at a particular site and measures ground shaking severity according to damage done to structures, changes in the earth surface, and personal accounts. Table 9-1 identifies the level of intensity according to the MMI scale and describes that intensity with respect to how it would be received or sensed by its receptors.

Faults are categorized as active, potentially active, and inactive. A fault is classified as active if it has moved during the Holocene time (during the last 11,000 years). A fault is classified as potentially active if it has experienced movement in Quaternary time (during the last 1.8 million years). Faults that have not moved in the last 1.8 million years are generally considered inactive.

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Table 9-1: Modified Mercalli Intensity Scale

Intensity	Description
I	Not felt except by a very few under especially favorable conditions
II	Felt by a few people at rest, especially in upper floors of buildings
III	Felt noticeably indoors, but not always recognized as a quake; vibration like a passing truck
IV	Felt indoors by many and outdoors by few. Sensation like heavy truck striking building
V	Felt by nearly everyone. Some breakage of windows, dishes, and plaster
VI	Felt by all; some heavy furniture moved; falling plaster; damage small
VII	Damage negligible in buildings of good design and construction
VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings; walls, monuments, chimneys fall
IX	Damage considerable; buildings shift off foundations
X	Most masonry and frame structures destroyed; railroad rails bent
XI	Few structures remain standing; bridges destroyed
XII	Damage total; lines of sight and level are distorted; objects thrown into the air

Source: U.S. Geological Survey, 2015. http://earthquake.usgs.gov/learn/topics/mercalli.php.

Regional Setting

Colma is located in the seismically active San Francisco Bay Area. Due to its location near the boundary between the North American and Pacific tectonic plates, Colma is exposed to geologic and seismic hazards such as strong seismic ground shaking, seismic-related ground failure, including liquefaction and landslides.

The San Francisco Bay Area is generally comprised of northwesterly trending mountain ranges and valleys which reflect the alignment of the coast ranges and the prevailing orientation of major faults, folds and associated geologic units. The Town of Colma is situated along Colma Creek in the stream valley that runs southeasterly from Lake Merced and is flanked by the San Bruno Mountains to the northeast and the Santa Cruz Mountains to the southwest.

The Colma area is characterized by rolling foothills that extend east and west from the alluvial fan deposit associated with Colma Creek. The bedrock types underlying the Town include the Quaternary alluvium and marine deposits, the Pliocene Marine rocks and the Franciscan Complex. The Quaternary alluvium and marine deposits consists of poorly consolidated friable, well sorted, fine to medium grained sand, gravel, silt and clay deposits that form most foothills from Daly City southward through Colma Valley to Burlingame. The Quaternary alluvium and marine deposits overlay the Pliocene Marine rocks and consists of unconsolidated and moderately consolidated sandy silt and fine sand found throughout the Santa Cruz Mountains.

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The Franciscan Complex occurs in the San Bruno Mountain foothills. This association is composed of sedimentary volcanic and metamorphic rocks of shale and siltstone containing blocks of sandstone, greenstone and chert. The bedrock and surface geologic characteristics are shown in Figure 9-1 below.

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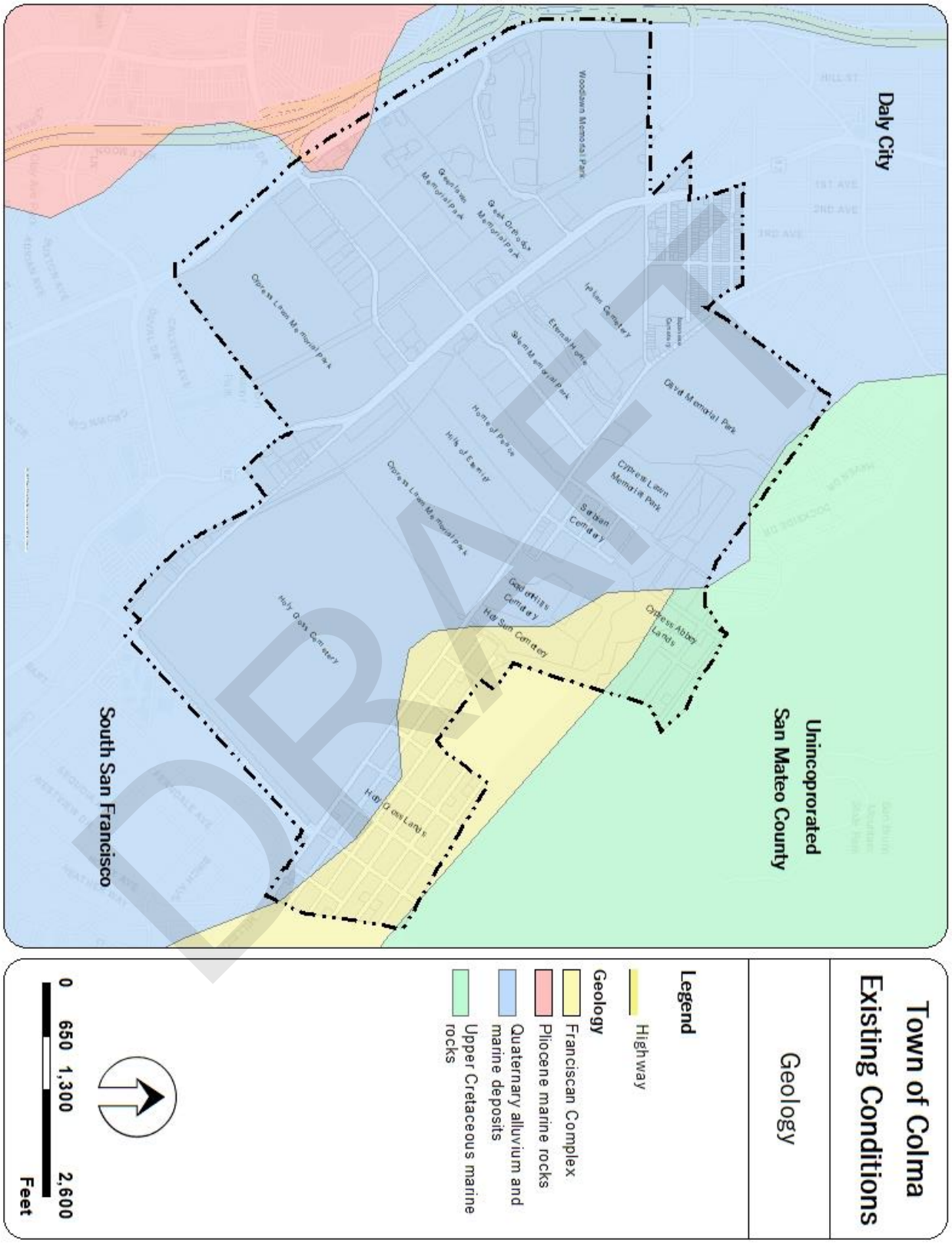
Figure 9-1: Colma Geology



Fault Lines

Although mapping completed under the Alquist-Priolo Earthquake Fault Zoning Act indicates that no active earthquake fault zones are located in the Town, several major regional active fault zones are of concern. The San Andreas Fault zone – a significant tectonic feature – is located just over a mile west of Colma. Other major regional active faults include the Hayward, Concord, Calaveras and San Gregorio faults, as shown in figure 9-2. The U.S. Geological Survey estimates that between 2003 and 2032, there is a 63% probability that a 6.7 or greater magnitude earthquake will occur in the San Francisco Bay Region, and a 21% chance that a 6.7 or greater magnitude earthquake will occur along the San Andreas Fault.

The existing Colma General Plan identifies and discusses the existence of two inactive faults The San Bruno and Hillside Fault. The San Bruno Fault was thought to be a concealed/inferred fault that runs northwest to southeast through the center of Colma. The existence of this fault, however, has since been disproven and is no longer recognized by the USGS as a Fault. There are no known active or potentially active faults within the Town of Colma.

The Hillside Fault trace was thought to located to the northeast of Colma along the southern base of the San Bruno Mountains. This fault, mapped by Bonilla (1971), separates the fairly coherent sandstone blocks of the San Bruno Mountain to the northeast from the extensively deformed sandstone and shale of the Franciscan assemblage to the southwest and has not had any apparent movement in over two million years. The existence of this fault, however, has since been disproven and is no longer recognized by the USGS as a Fault.

There is one recognized inactive fault in Colma, the Serra Fault. The Serra fault runs parallel to Junipero Serra Boulevard and is approximately 1 mile from the San Andres Fault. The fault extends from the Town of Hillsborough to Daly City. It has not shown any activity within the last 2 million years and is classified as quaternary by the State of California.

The town is located near the San Andreas Fault. The San Andreas Fault has had historic surface faulting (including tectonic creep) and continues to be the historic locus of damaging earthquakes. Seismically induced hazards with potential to affect Colma include ground shaking, ground failure, liquefaction and surface rupture. The likelihood, severity and location of any of these seismically induced hazards occurring in Colma depends upon the specific site's geology, topography, soil type, weather and intensity of development. The geology and fault locations provide a basis for evaluating potential hazards in Colma, and for requiring a geotechnical study or special engineering, architectural, or site design consideration.

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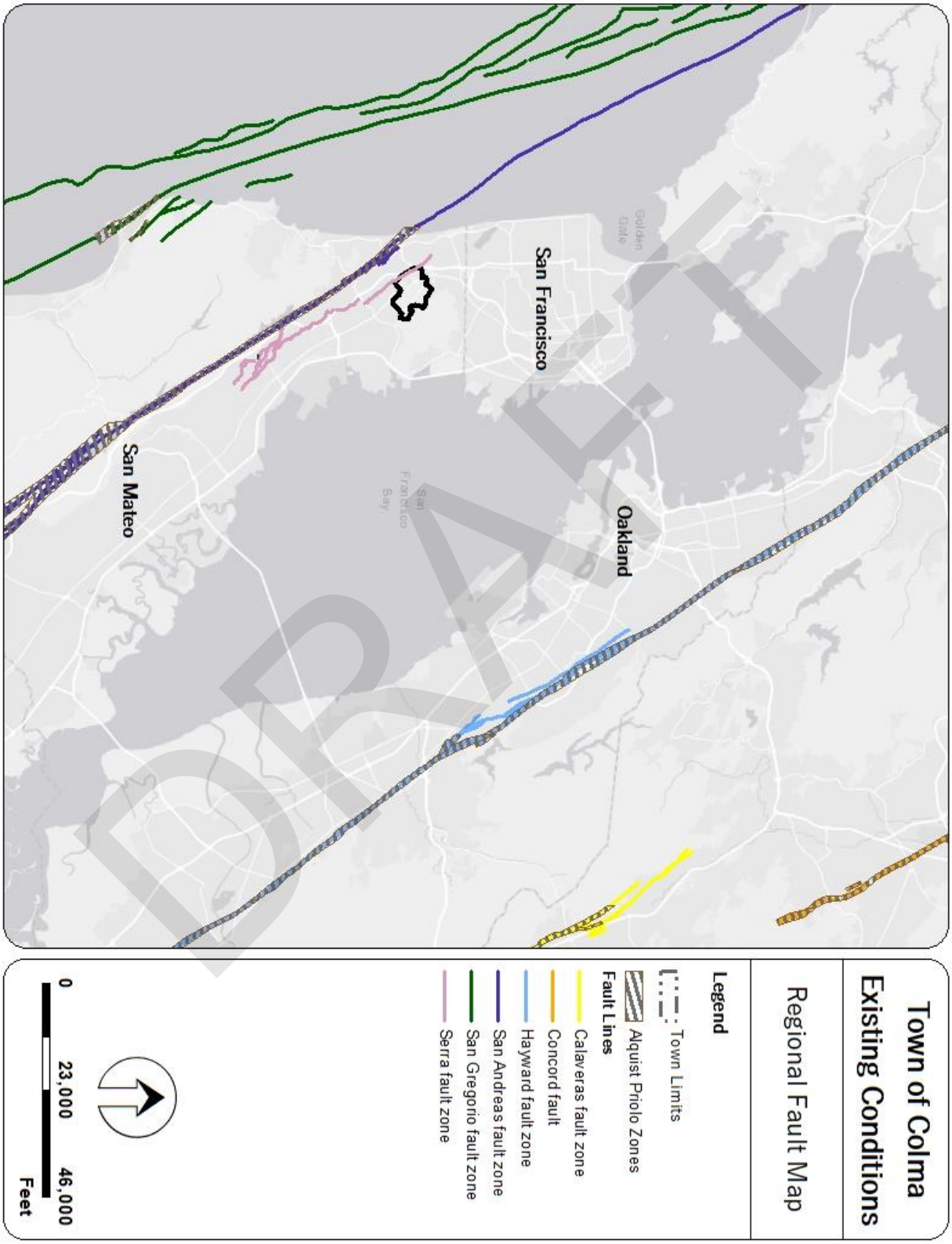
Figure 9-2: Regional Fault Map



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SEISMIC HAZARDS

Earthquakes cause primary hazards, such as surface rupture and ground shaking, and secondary hazards, such as liquefaction and tsunamis. These hazards are described below.

Surface Rupture: Surface rupture is an actual cracking or breaking of the ground along a fault during an earthquake. Structures built over an active fault can be torn apart if the ground ruptures. Surface rupture is generally limited to a linear zone a few yards wide. Fault displacement occurs when material on one side of a fault moves relative to the material on the other side of the fault. This can have particularly adverse consequences when buildings are located in the rupture zone. It is not feasible from a structural or economic perspective to design and build structures that can accommodate rapid displacement involved with surface rupture. Amounts of surface displacement can range from a few inches to tens of feet during a rupture event. The 1906 San Francisco earthquake horizontal displacement of 10 to 23 feet along the San Andreas Fault was common the San Francisco Bay Area. The Hayward Fault has also shown evidence of surface displacement during the past 11,000 years.

Ground Shaking: The major cause of structural damage from earthquakes is ground shaking. The intensity of ground motion expected at a site depends upon the magnitude of the earthquake, the distance to the epicenter, and the geology of the area between the epicenter and the property. Greater movement can be expected at sites located on poorly consolidated material, such as alluvium, in close proximity to the causative fault or in response to a seismic event of great magnitude. Due largely to the proximity of the San Andreas Fault, the Association of Bay Area Governments Resiliency Program has identified the ground shaking potential in Colma as "violent." Ground shaking would be most intense resulting from an earthquake originating from the San Andreas Fault; however, earthquakes originating from any of the other nearby faults have the potential to create significant ground shaking throughout the Town.

Liquefaction: Liquefaction is a seismic phenomenon in which loose, saturated granular and non-plastic fine-grained soils lose their structure or strength when subjected to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: 1) shallow groundwater (within the top 50 feet of the ground surface); 2) low-density non-plastic soils; and 3) high-intensity ground motion. Areas close to Colma Creek (generally parallel to the El Camino Real) are considered to have high susceptibility to experience liquefaction (ABAG 2016). Figure 9-3 shows the areas of Colma potentially affected by liquefaction.

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Figure 9-3: Earthquake Shake Map

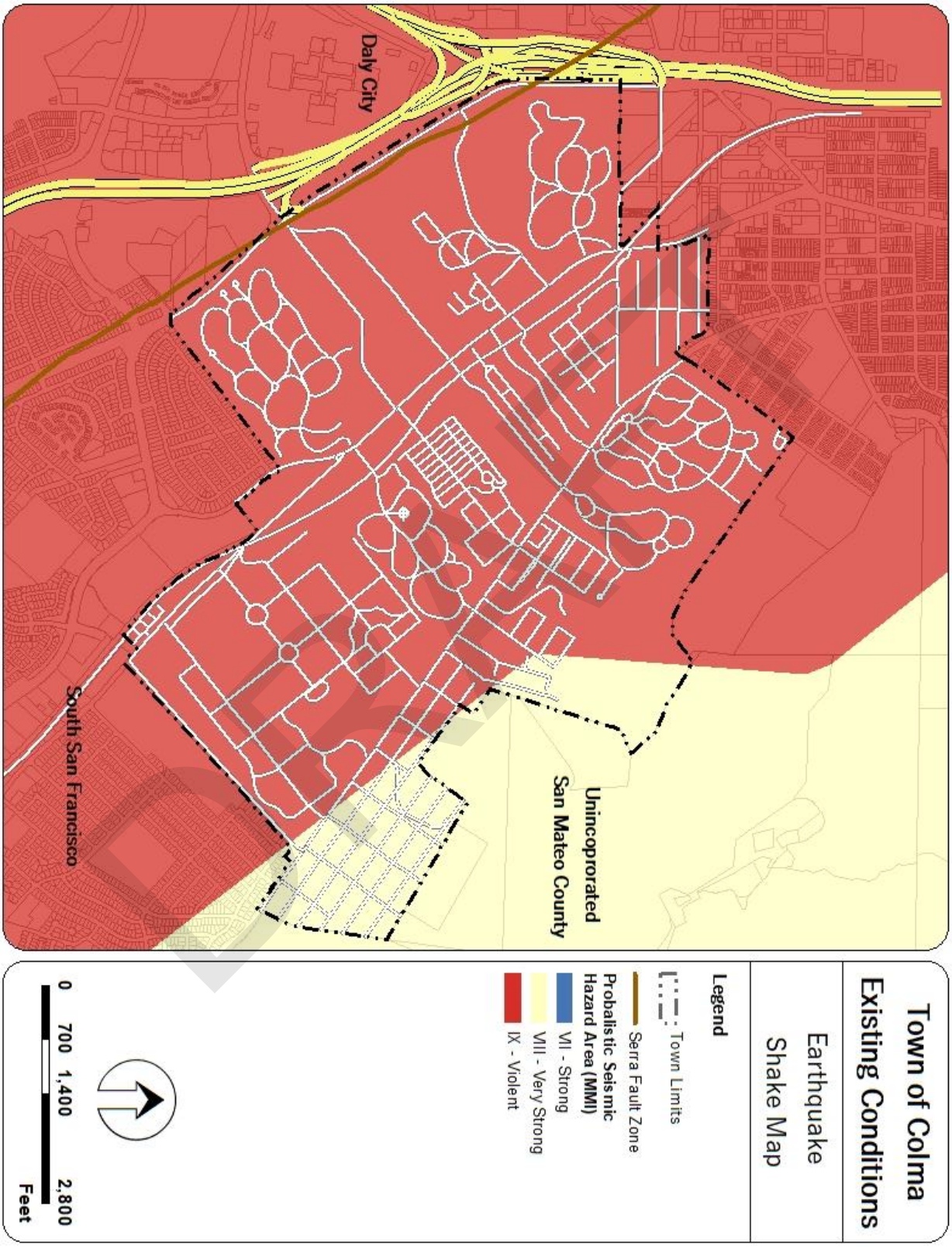
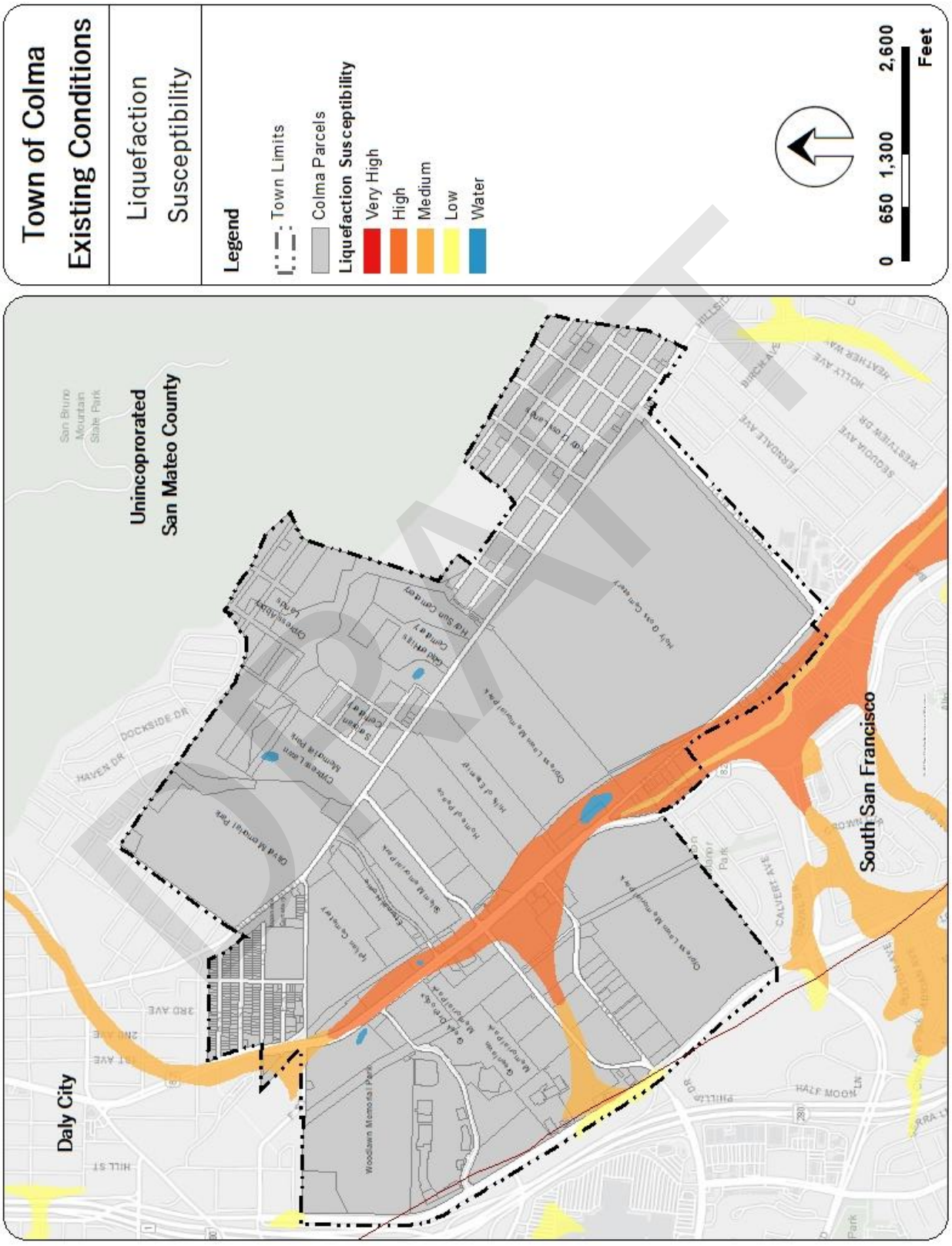


Figure 9-4: Liquefaction Hazard



Tsunamis: Tsunamis, or seismic sea waves, are great oceanic waves that are generated by earthquakes or less commonly, by large submarine landslides. An individual earthquake can generate a continuous train of tsunami waves that may oscillate for eight to 12 hours. The first waves to reach any locality are not necessarily the strongest ones. In the deep ocean, the wavelength, from crest to crest, may be a hundred miles or more, although the wave height from crest to trough may only be a few feet. They cannot be felt aboard ships in deep water and they cannot be seen from the air, but the energy they contain is substantial. Tsunamis affect only coastal areas, and watercourses emptying into these areas. The effects tend to be diminished in partially enclosed bays and estuaries, but the wave may be driven many miles inland up unprotected waterways. Since Colma is not adjacent to the ocean or bay, the Town is not at risk of Tsunami impacts.

Soil Hazards

Hazards associated with soils include erosion, expansiveness, landslides, and subsidence. These hazards are described below.

Soil Erosion: Erosion refers to the removal of soil by water or wind. Factors that influence erosion potential include the amount of rainfall and wind, the length and steepness of the slope, and the amount and type of vegetative cover. The generalized distribution of erosion potential in Colma can be estimated by evaluating the soil characteristics described in the San Mateo County, Eastern Part, and San Francisco County Soils Report (NRCS, 2016). The eastern areas throughout Colma have low potential for soil erosion due to the generally flat topography and highly developed land use. Soils in the western portion of Colma where steeper slopes are located generally have higher potential for erosion. However, soil erosion is dependent on individual site locations and conditions.

Expansive Soils: Soils with relatively high clay content are considered expansive due to the capacity of clay minerals to take in water and expand to greater volumes. Highly expansive soils can cause structural damage to foundations and roads without proper structural engineering and require detailed geologic investigations and costlier grading applications. This makes highly expansive soils less suitable for development. The majority of soils underlying Colma are not considered to be expansive.

Landslides: The geologic and topographic character of an area determines its potential for landslides. Steep slopes, the extent of erosion, and the rock composition of a hillside can aid in predicting the probability of slope failure. Common triggering mechanisms of slope failure include undercutting slopes by erosion or grading; saturation of marginally stable slopes by rainfall or irrigation; and shaking of marginally stable slopes during earthquakes. The distribution of landslides evident in the landscape — most of which are slumps, translational slides, and earth flows — can be an indication of hazard and risk. Future movement of such landslides is most likely to occur in and around the places where they have previously occurred. Although Colma is not in a State designated earthquake induced landslide hazard zone, the

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ABAG Resilience Program has identified past landslides in the steeper slopes on San Bruno Mountain (ABAG 2016).

Subsidence: Subsidence occurs at below the surface when subsurface pressure is reduced by the withdrawal of fluids (e.g., groundwater, natural gas, or oil) resulting in sinking of the ground. Areas susceptible to subsidence are typically composed of open-textured soils that become saturated. These areas are usually composed of soils with high silt or clay content. There are no areas in Colma that are subject to subsidence.

FLOOD HAZARDS AND SEA LEVEL RISE

This section describes the existing conditions and regulatory framework related to flood hazards and sea level rise in the Town of Colma.

FLOODING

Flooding is defined as the condition resulting when an overwhelming amount of water submerges land. Some floods develop slowly, when rain continues over a period of days and inundates water systems. Flash flood conditions typically occur when a moderate rainfall is followed by a heavy rainstorm. The moderate rainfall saturates the soil allowing minimal additional infiltration. Increased urbanization in the Bay Area has increased the amount of impervious areas and reduced the amount of groundwater infiltration, thereby resulting in increased levels of water runoff and flooding potential.

The Town of Colma is bisected by Colma Creek, which is part of a watershed drainage basin defined by San Bruno Mountain on the east and the ridge traces by Skyline Boulevard on the west. Colma Creek flows through the center of Colma and continues through South San Francisco to the Bay. Colma Creek is part of the San Mateo County Flood Control District. The Colma Creek Flood Control Zone covers approximately 16.3 miles including the Town of Colma as well as portions of the Cities of Pacifica, Daly City, San Bruno and South San Francisco.

Historically, flooding frequently occurs on El Camino Real at F Street, on El Camino Real at Mission Road, and in other localized segments of Colma Creek. Current and past improvements to the Colma Creek drainage channel have reduced creek flooding. The Federal emergency Management Agency (FEMA) has determined that Colma is only minimally flood-prone and is therefore not included on FEMA's official flood zone maps. A General Plan policy requires that on-site detention be provided to reduce peak flows. As part of a 1991 street reconstruction program, the Town installed a larger box culvert under Serramonte Boulevard to increase the capacity of the storm drainage system. The Town worked with Caltrans, BART and the County Flood Control District to resolve flooding problems along Colma Creek. Caltrans helped fund the installation of a bypass culvert at El Camino Real and F Street to relieve an undersized segment of open creek. A box culvert was installed in the El Camino Real right-of-way down Mission Road. The Flood Control District with participation by BART and local cities funded the

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extension of the El Camino Real box culvert down Mission Road, the installation of a bypass culvert at the wye, the installation of a second box culvert in Mission Road and improvements to the creek alignment and capacity south of Colma.

Sea Level Rise

Although Colma is not directly affected by sea level rise, Colma could be affected by damage to infrastructure in close proximity to Colma. For example, the South San Francisco sewer treatment plant is subject to inundation as a result of sea level rise if plans are not made to protect it. In addition, the Bayshore Freeway (Highway 101) and the San Francisco International Airport are subject to flooding and inundation with approximately two to three feet of sea level rise.

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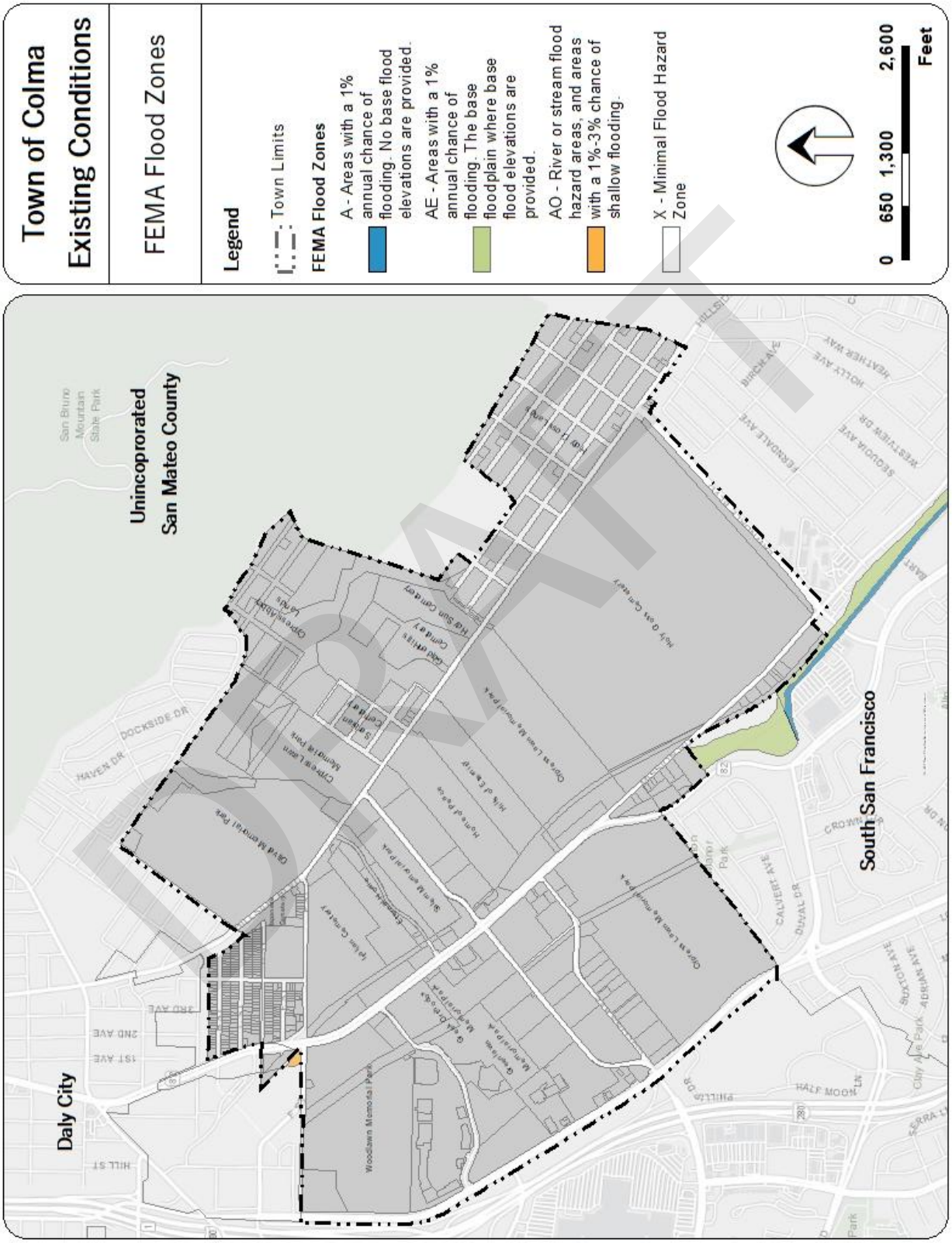
Figure 9-5: Flood Hazard Zones



FIRE HAZARDS

Fire hazards pose a threat to life and property. Urban fire hazards include buildings, vehicles, rubbish and unkempt vacant lots. Wildland fire hazards include uncultivated land, timber, range, brush and grasslands in undeveloped areas. The Town of Colma has Fire Protection Program through the Colma Fire Protections District (CFPD) to minimize the risks of urban and wildland fires.

This section describes the existing conditions and regulatory framework related to fire hazards in the Town of Colma.

URBAN FIRE HAZARDS

Fires in urban areas pose the greatest threat to life and property due to the proximity of people and structures. The types of structures posing the most significant fire hazards within the Town are those built prior to 1940 that have substandard wiring and heating systems. Other sites of concern are unmaintained public utility easements, sites with large amounts of fuel and combustibles storage and unmaintained or poorly maintained buildings regardless of age.

WILDLAND FIRE HAZARDS

The California Department of Forestry and Fire Protection (CAL FIRE) determines the degree of wildland fire hazard based on the natural setting of the area, the degree of human use of the area and the level and ability of public services to respond to fires that do occur. CAL FIRE has rated the San Bruno Mountain Park and the adjacent undeveloped areas of Colma as areas of moderate fire hazard as shown in Figure 9-5. However, when considering fire hazard threat to people, CAL FIRE rated the San Bruno Mountain and surrounding areas an extreme fire hazard. The threat to people ratings prioritize greater threat classes over areas with lesser or no threat class resulting in an increased fire threat. Fires in these areas usually occur during the summers primarily where grass and brush grow. CAL FIRE responds to wildland fires from several stations, depending on their proximity and availability. The closest station is at 20 Tower Road in Belmont. Undeveloped areas within Colma are not "Wildland Areas" as defined by the CAL FIRE, but CAL FIRE criteria may be used to identify and evaluate fire hazards in these areas which are the Colma Fire Protection District's (CFPD's) responsibility.

FIRE PROTECTION

The CFPD provides fire protection to the Town of Colma and surrounding unincorporated areas. The Colma Fire Station is located just north of Town at 50 Reiner Street, near San Pedro Road. If the unincorporated area where the Colma Fire Station is located is annexed to the City of Daly City, the existing fire protection facilities could continue to operate from its existing location or relocate to a more central location within the District's newly defined boundaries.

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The Colma Fire District will continue to serve the Town of Colma as long as the Town wants. The Fire District can only be dissolved if its service is limited to the Town of Colma and the Town elects to operate their own Fire Department or consider consolidating service with North County Fire.

The station is manned by 36 part time, paid on-call fire fighters and three salaried full-time personnel (Chief, Deputy Fire Marshal and Staff Captain).Equipment available to the Fire District includes three engines each with 1,500 gallons per minute (gpm) pumping capacity, one reserve engine rated at 1,000 gpm, one 75-foot aerial ladder truck and one squad truck.

The Colma Fire Protection District currently has an average response time of two to four minutes to sites in the Town of Colma. The time it takes to respond to an emergency is important because of the critical care period (seven to eight minutes) needed for physical health emergencies, and of the increasing intensity and spread of fire.

Colma's fire protection services are evaluated by the Insurance Service Office (ISO), whose ratings establish the fire insurance rates paid by local residents and businesses. ISO rating is partially based on such factors as available water supply, manpower and equipment. Colma Fire District's ISO rating is V on a scale of I-X (best to worst) which is an improvement from their previous rating of VI.

The Town's Fire Protection Program includes plan check and inspection of new structures and remodels in the City. Plan check by the Fire District assures adequate fire flow levels, general access, turnarounds, and other relevant fire protection measures as well as ensuring that building sites can be readily identified by street names and address numbers. Additional requirements may be the installation of automatic sprinkler systems in all structures 3,000 square feet or more in floor area, or more than two stories in height, or 30 feet or more in height, and any other requirements imposed as conditions of approval for a project by the Fire Chief. The Fire Protection services offered by the District also include public education programs and building inspection programs. Speakers from the District are generally available to schools and the public for information on fire prevention and protection.

Mutual Aid

Mutual aid agreements with other cities and departments ensures that additional fire protection support is available for a greater alarm fire which seldom occurs. Colma Fire has mutual aid agreements with Daly City, San Bruno, Pacifica, South San Francisco and Brisbane. The Fire Protection District's Mutual Aid Agreements provide for rapid response to structural fires in the District when requested. When additional assistance is needed by the Colma Fire Protection District or Police Department, the San Mateo County, Central and South strike teams or County offices may be called in. Mutual aid agreements for both the Fire Protection District and Colma Police Department provide service anywhere is neighboring jurisdictions when assistance is requested.

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Peak Load Water Supply

The required peak load water supply is the amount of water necessary to suppress fire in a structure during peak water use periods. Fire flow requirements are expressed in gallons per minute (gpm) and are determined by type of construction and size (square footage). The Colma Fire Protection District and Uniform Fire Code requires that all structures have fire flows of no less than 1500 gpm. More may be required for a non-sprinklered building. To reduce fire hazard, mitigation may be required in building construction. Mitigation often includes the installation of fire rated walls and automatic fire sprinkler systems.

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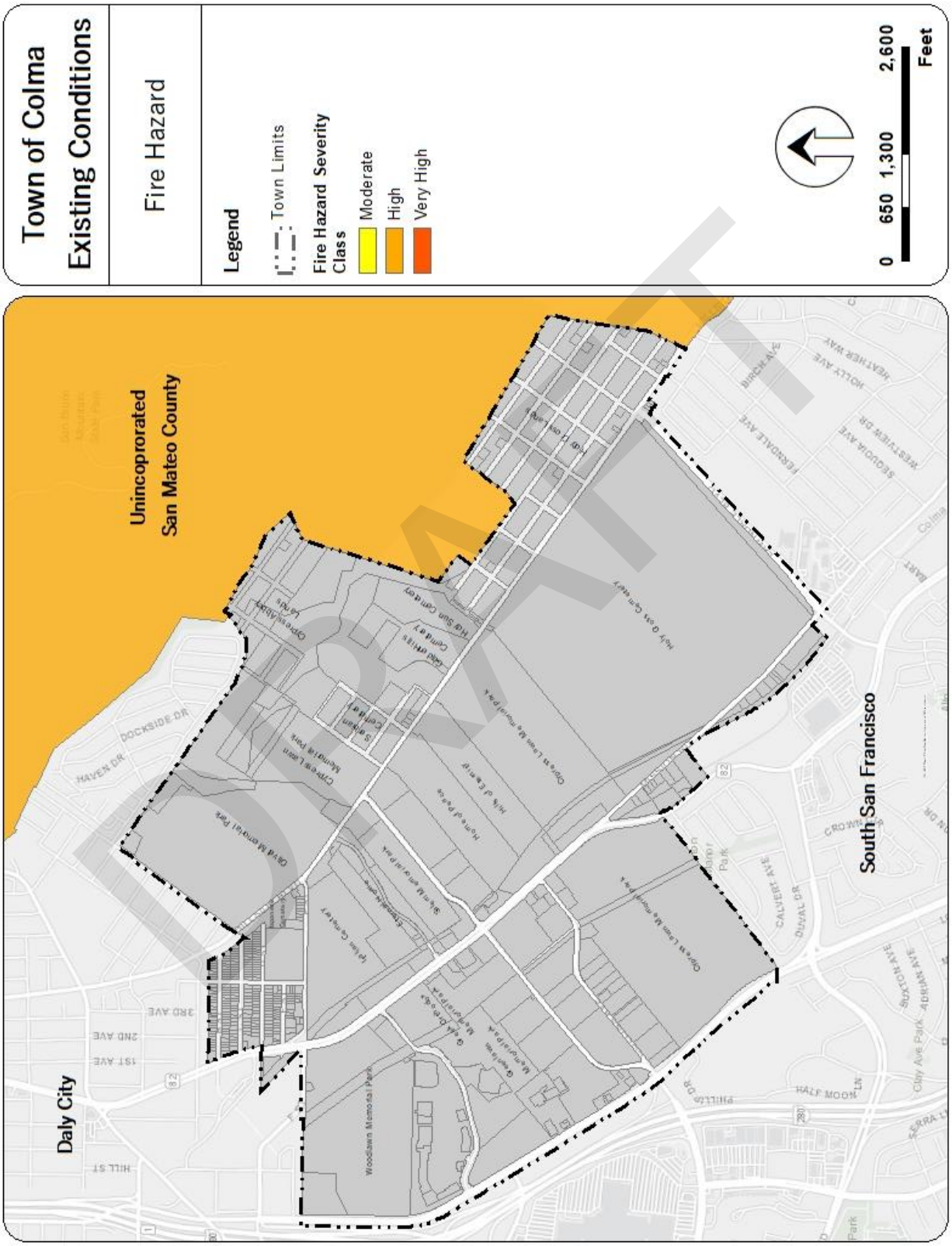
Figure 9-6: Fire Hazard Map



AVIATION HAZARDS

The San Francisco International Airport (SFO) is a large, primary commercial service airport, owned and operated by the City and County of San Francisco. The airport provides two sets of parallel runways, with two runways oriented northwest to southeast and two runways oriented northeast to southwest. In 2014, SFO served 47,074,162 domestic and international passengers as well as 383,351 metric tons of cargo through 58 different airlines (SFO 2014). The airport is situated southeast of Colma, directly adjacent to the San Francisco Bay. Figure 9-6 shows the location of SFO in relation to Colma and the Conical Surface.

SFO is continuously working to improve the air travel experience in their facilities. New and recently completed projects include a new Air Traffic Control Tower, terminal renovations in all terminals, and replacement of the West Field Cargo Building. Additionally, SFO completed construction of runway safety improvements on all four runways to comply with federal runway safety standards in 2014. In 2019, new terminal facilities at Terminal 1 and an on-property hotel were completed. A number of runway safety improvements are in process proposed.

Colma is minimally impacted by airport operations. However, it is within influence area A, which requires real estate disclosure of proximity to the airport and potential noise from planes taking off to the west. The primary flight path for planes heading west is just to the south of Colma in South San Francisco. Since operations generally occur to the south, Colma is outside of the 65 dBl noise contour, so the town is generally not significantly impacted by noise. However, planes can be heard periodically, with the noise being more noticeable in the evening. Figure 9-7 shows the location of the 65dbl noise contour.

A critical aeronautical surface extends over the Town of Colma with elevations ranging from 300' to 500'. Penetrations by structures would generally not be permitted. Since the height of most of Colma's buildings is under 40', penetration is not an issue. Airport Land Use Compatibility review is required for new structures in Colma, as well as any policy documents such as the General Plan.

This section describes the aviation facilities near the Town of Colma, specifically the San Francisco International Airport.

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Figure 9-7: Critical Aeronautical Surface

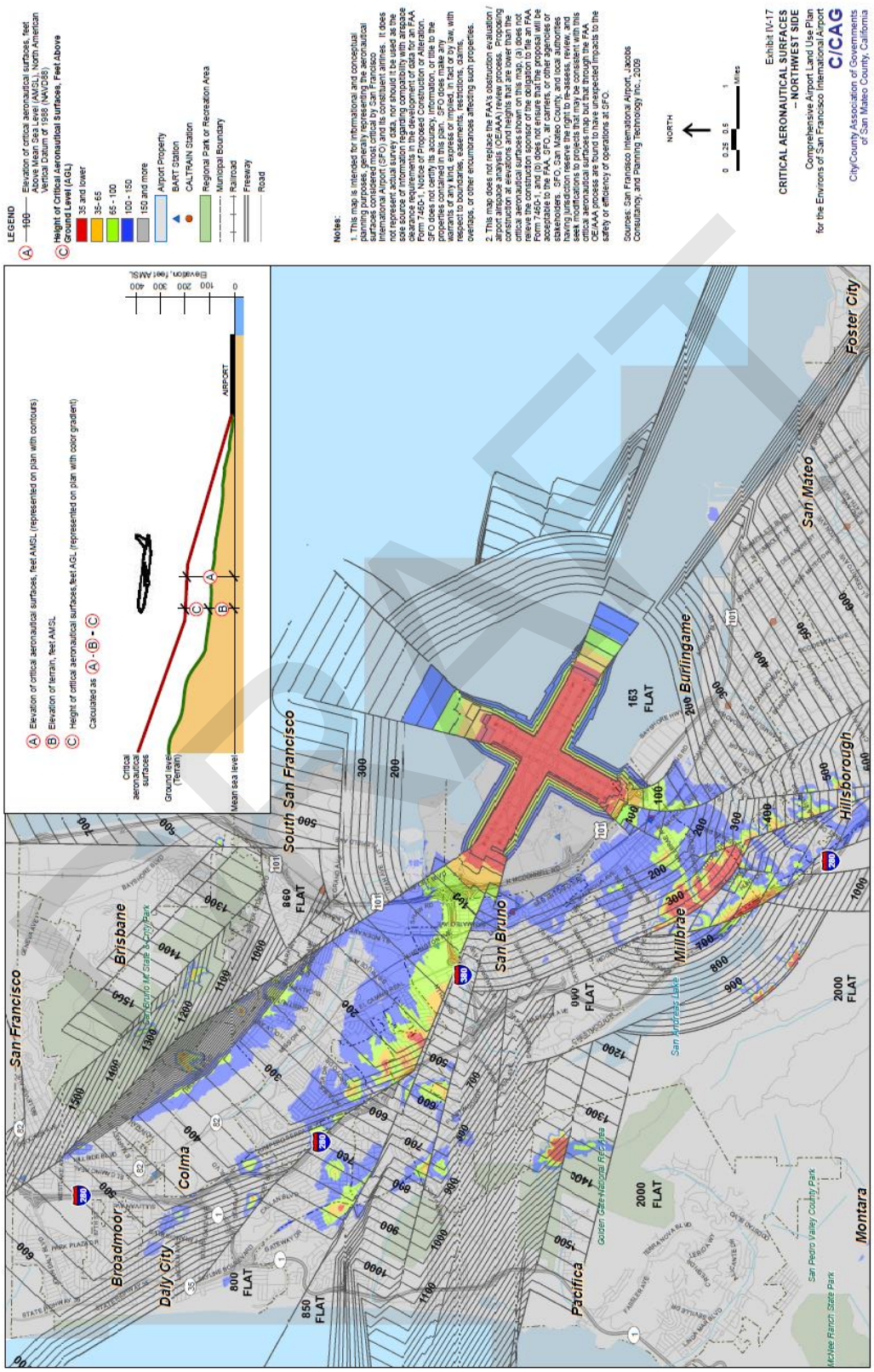
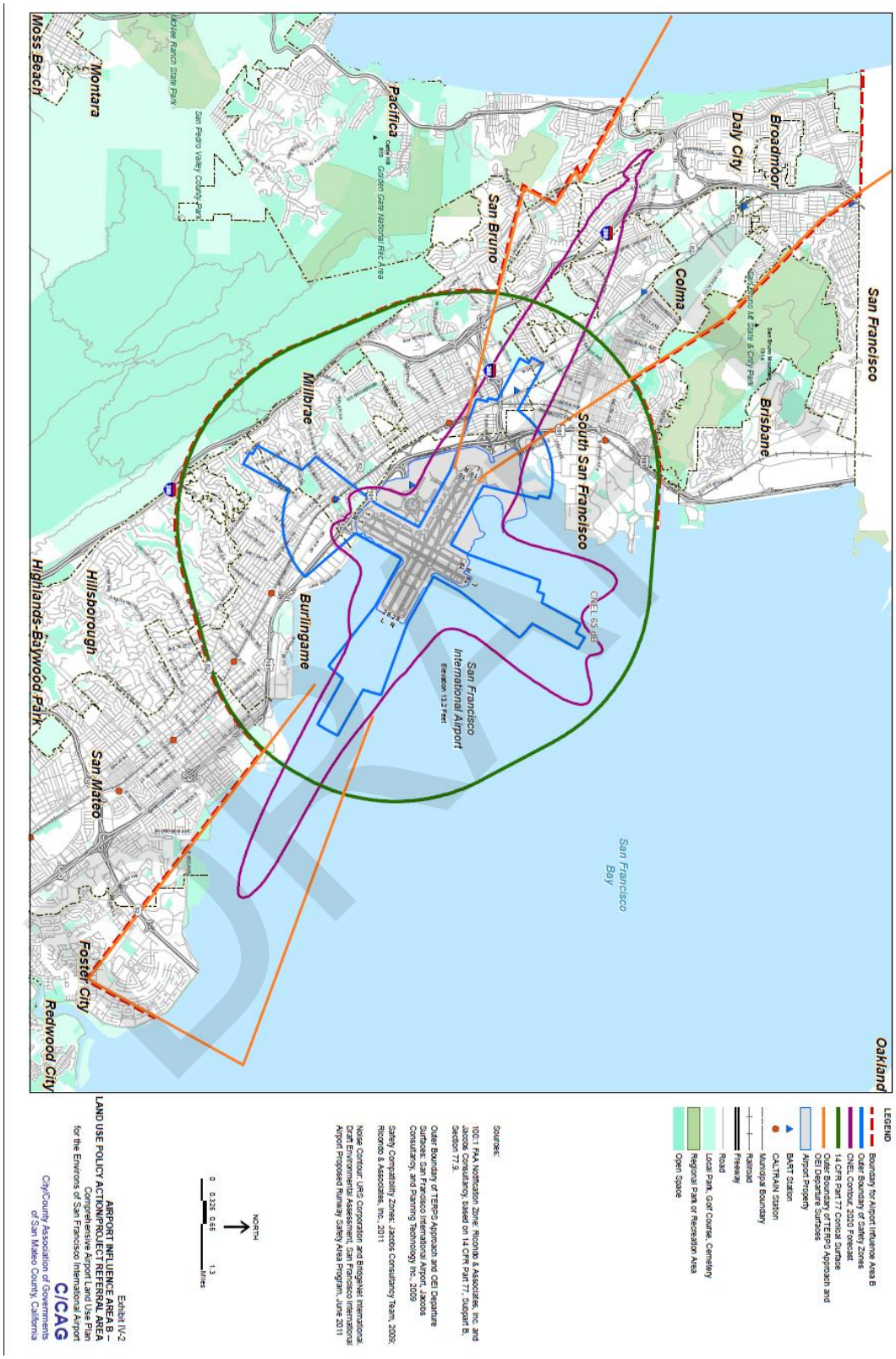


Figure 9-8: Airport Influence Area B



Airport Access

Located along the western portion of the San Francisco Bay, SFO is about 6 miles from Colma and approximately 13 miles south of downtown San Francisco. The main terminal buildings and parking lots are located at the western side of the airport property, with additional facilities and long-term parking located at the north end of the property. Access to the main terminals at SFO is off of U.S. Highway 101 on Airport Access Road. The Airport is accessible by personal autos, taxi, shuttle, and transit. From the Colma BART and Caltrain Station, the BART Pittsburg/Bay Point service line is available to take passengers directly to SFO. Additionally, SamTrans provides bus service between the Colma Caltrain and BART station and SFO during late-night hours only.

Military Air Operations

At SFO, military activity is generally limited to helicopter operations performed by the U.S. Coast Guard. The nearest military airfield to Colma is the Moffett Federal Airfield, a joint civil-military facility located approximately 34 miles to the south. Although Moffett Airfield is not an active military base, the California Air National Guard, Naval Reserve, and Onizuka Air Force Base are tenants on the airfield. It is operated by the National Aeronautics and Space Administration (NASA). The distance to Moffett Airfield places Colma outside of any air space or flight path, and thus limits any military land use compatibility constraints.

HAZARDOUS MATERIALS

Hazardous materials include toxic metals, chemicals and gasses, flammable and/or explosive liquids and solids, corrosive materials, infectious substances and radioactive materials. The accidental release of a hazardous material to the environment could cause a range of problems depending on the type, location and quantity of the material released. There are numerous State and Regional agencies that oversee and monitor the use and disposal of hazardous materials. The efforts of these agencies, in conjunction with periodic inspections by Colma safety personnel, serve to reduce the risk associated with hazardous materials.

This section describes issues related to hazardous materials in the Town of Colma, including an overview of potentially hazardous waste sites and activities that may threaten human or environmental health and safety.

HAZARDOUS MATERIALS MANAGEMENT PROGRAMS

San Mateo County Hazardous Waste Management Plan

The Tanner Bill acknowledges that hazardous waste management responsibility must be shared by all communities. Consequently, San Mateo County prepared the San Mateo County

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Hazardous Waste Management Plan which Colma adopted. The goals of the Plan are as follows:

- To ensure that hazardous waste is managed to protect public health and safety
- To preserve the County's economic viability
- To reduce the amount of hazardous waste generated in San Mateo County
- To promote public confidence in government and industry's ability to safely manage hazardous waste
- To encourage cooperation between government, industry and the public when planning for hazardous waste management

Pretreatment and disposal through the sewage system is the predominant form of authorized hazardous waste disposal. However, illegal disposal of hazardous waste is a concern that must be addressed. Small generators, including small businesses and households, are the parties primarily responsible for illegal disposal of hazardous waste into sewer systems, at landfill sites and directly into streams, or dumping along roadways.

National Pollutant Discharge Elimination System

State and Regional Water Resource Boards administer the National Pollutant Discharge Elimination System (NPDES) which was created in 1972. As authorized by the Clean Water Act (CWA), the NPDES Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Examples of pollutants include, but are not limited to, rock, sand, dirt, and agricultural, industrial, and municipal waste discharged into waters of the United States. The NPDES Program is a federal program which has been delegated to the State of California for implementation through the State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards (Regional Water Boards), collectively Water Boards. Larger projects are required to implement a Stormwater Pollution Protection Plan (SWPPP) and a Monitoring and Reporting Program Plan. Additionally, the Town has approved a Green Infrastructure Plan that directs the Town to incorporate green infrastructure in the right of way as decentralized storm water treatment areas. These programs will reduce the amount of pollutants entering the storm drainage system and curtail illegal disposal of hazardous waste into the system.

Landfill Closure

Colma has two closed landfills. One is located at the intersection of the Junipero Serra Boulevard and Colma Boulevard (Home Depot) and the other located east of Hillside Boulevard at Sand Hill Road. Landfill sites have the potential of contaminating the groundwater and air, and for producing hazardous gases. The Bay Area Air Quality Management District (BAAQMD)

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oversees the management and closure of landfill sites to protect the public's health and safety. Landfill sites are designed to avoid water contamination by using clay and synthetic liners, laying refuse over clean soils, and by installing leachate systems and groundwater monitoring wells. Gas recovery systems are used to collect and burn the landfill gases (especially methane gases) which otherwise can be odorous and present a fire and explosion hazard. Gas probes are placed on- and off-site to ensure that the gases are not migrating laterally. Both landfill sites in Colma have groundwater and gas recovering systems which are routinely monitored by the landfill operator and by the property owner's civil engineer to ensure that these systems are functioning correctly. The Colma Fire Protection District also routinely inspects the gas recovery systems.

The landfill and gas monitoring systems are designed to resist earthquake forces. However, a catastrophic earthquake may cause the landfill liner and cap to rupture, fill material may move with the earth's movement and the gas recovery system may be damaged. These failures would not pose an immediate hazard. However, the landfill cap and gas recovery system should be repaired as soon as possible.

Handling and Transport

The California Department of Health Services monitors the transportation of hazardous waste through a manifest system which is used to trace all hazardous waste transported off-site to storage, treatment or disposal facilities. Most hazardous waste generated in Colma is transported to recycling companies. Hazardous waste generated outside Colma may be transported through the Town on Interstate 280 and Highway 82 (El Camino Real). The California Highway Patrol and Caltrans are responsible for controlling transportation of hazardous materials and scene management in the event of a spill on a State or Federal highway. The Colma Fire Protection District may respond to a local hazardous materials spill. The Town's Police Department may assist in emergency action. Procedures to be followed in the event of an emergency are outlined in the *San Mateo County Hazardous Waste Management Plan*. Upon request, the Colma Fire Protection District, the County's Hazardous Material (HAZMAT) response team may respond to incidents. The HAZMAT response team is funded through the San Mateo Operational Area Office of Emergency Services.

Hazardous materials include all toxic flammable, combustible, corrosive, poisonous, and radioactive substances that possess the potential to cause harm to the public or the environment. An important subcategory of hazardous materials is hazardous waste. The use, manufacture, production, transportation, storage, treatment, disposal, and clean-up of hazardous materials and hazardous wastes present a potential threat to the health and safety of those who are using the materials and those who could be affected by improper or accidental release or disposal.

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HAZARDOUS MATERIALS STORAGE FACILITIES

In California, the responsibility for enforcing state laws regarding storage, use and handling of hazardous materials is delegated to a local agency, called a Certified Unified Program Agency (CUPA). The San Mateo County Environmental Health Department (SMCEH) is the CUPA for Colma. All facilities, including all businesses, schools, or county and Town sites, which have chemicals onsite above reporting thresholds must obtain a CUPA permit and comply with California reporting, release prevention, emergency response, and employee training requirements. All facilities are inspected at least every three years, with underground storage tank and hazardous waste treatment facilities inspected annually.

Additionally, San Mateo County inspects and regulates non-permitted hazardous waste generators based on the Hazardous Waste Control Law found in the California Health and Safety Code Division 20, Chapter 6.5 and regulations found in the California Code of Regulations, Title 22, Division 4.5. These regulations require businesses generating any amount of hazardous waste as defined by regulation, to properly store, manage, and dispose of that hazardous waste. Such facilities are inspected annually.

Colma's Municipal Code strictly regulates the storage of flammable and combustible liquids. Similarly, the Code restricts bulk storage of liquid petroleum gases and absolutely prohibits the manufacturing or storage of explosives and blasting agents. However, various service industries use chemicals and comprised gases which may pose a hazard.

HAZARDOUS MATERIALS SITES

Colma's hazardous materials storage sites are regulated through the San Mateo County Department of Environmental Health (CEH). CEH issues permits for underground storage tanks, hazardous waste generators and hazardous materials users regulated by the Health and Safety Code (Chapter 6.5 Section 25500 to Division 20). CEH regularly inspects the underground tanks in Colma, which are predominantly gasoline storage tanks for service stations and vehicle yards. Commercial and industrial facilities that generate hazardous wastewater and store it onsite for less than 90 days are also inspected and monitored by CEH.

The following databases compiled pursuant to Government Code Section 65962.5 provide information about known hazardous materials in Colma:

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database
- Superfund Enterprise Management System (SEMS)
- Geotracker search for leaking underground fuel tanks
- Department of Toxic Substances Control's Envirostor database
- Bay Area Air Quality Management District's Air Toxics Inventory

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According to these databases, there is only one open or active hazardous waste site located in Colma. The remaining sites contain materials which may become Toxic Air Contaminants (TAC). For example, cemeteries use contaminants in the embalming process, and contaminants can be released in the cremation process. Sites which have diesel emergency generators are included:

Table 9-2: Hazardous Sites in Colma

Site Name	Address	Site ID	Site Type	Status/Pollutant
Geotracker				
L. Bocci and Sons, Inc	7778 El Camino Real	780023, 41-1270	LUST Cleanup Site	Open – Site Assessment
Serramonte Nissan	650 Serramonte Blvd	789028	Cleanup Program Site	Open – Eligible for Closure
BAAQMD				
Cypress Amloc Land Co , Inc	1 Sand Hill Road	1364	TAC Facility	Benzene, Hydrogen Sulfide (H2S), Vinyl chloride
First National Bank of N CA (Former)	1300 El Camino Real	22943	TAC Facility	Diesel Engine Exhaust Particulate Matter
Pet's Rest Cemetery	1905 Hillside Blvd	4860	TAC Facility	Arsenic, Chlorinated dioxins & furans, Chromium (hexavalent), Mercury
StoneMor California, Inc	1601 Hillside Blvd	5638	TAC Facility	Arsenic, Chlorinated dioxins & furans, Chromium (hexavalent), Mercury
The Home Depot #6655	91 Colma Boulevard	17741	TAC Facility	Diesel Engine Exhaust Particulate Matter
The Home Depot USA Inc - 0639	2 Colma Boulevard	10170	TAC Facility	Diesel Engine Exhaust Particulate Matter
Woodlawn Cemetery	1000 El Camino Real	8020	TAC Facility	Arsenic, Cadmium Chlorinated dioxins & furans, Chromium (hexavalent), Mercury

Source: CERCLIS Database, July 26, 2019; SEMS Data Base, October 30, 2019; Geotracker, October 30, 2019; and Envirostor, July 26, 2019; Bay Area Air Quality Management District Toxic Inventory, 2016.

The open LUST site in Colma identified in Table 9-2 involves the contamination of local soils and groundwater from leakage of stored gasoline and diesel liquids. Primary contaminants include hydrocarbons, benzene, and Methyl Tertiary Butyl Ether (MTBE).

Cleanup Program Sites are varied and include but are not limited to pesticide and fertilizer facilities, industrial maintenance sites, and dry cleaners. Unauthorized releases detected at Cleanup Program Sites are also highly variable and include but are not limited to hydrocarbon

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solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents, to name a few. Sites that are eligible for closure have undertaken the appropriate remediation and mitigation actions to eliminate the threat and further dispersal of contaminants.

Air Toxics Hot Spots

Protecting and promoting indoor and outdoor air quality is the jurisdiction of the California Air Board. As shown in Table 9-2 above, there are 7 facilities in Colma that emit toxic substances and are subject to the Air Toxics Hot Spots reporting requirements under Assembly Bill (AB) 2588. Toxic air pollutants at these facilities may include Diesel Engine Exhaust Particulate Matter, Benzene, Hydrogen Sulfide (H2S), Vinyl chloride, Arsenic, Chlorinated dioxins & furans, Chromium (hexavalent), and Mercury. The goals of the Air Toxics Hot Spots program are to collect emissions data, to identify facilities having localized impacts, to ascertain health risks to notify nearby residents of significant risks, and to reduce those significant risks, where they exist, to acceptable levels.

Agricultural Chemicals

Pesticides and other chemicals are applied to cemetery lands to maintain weeds and cultivate agriculture. In addition, pesticides may be applied to control vegetation along roadsides and in landscaped areas as well as for pest control in structures. The Office of the San Mateo County Agricultural Commissioner regulates and inspects businesses that apply pesticides and investigates complaints of pesticide misuse. Pesticide use is also reported to the Bay Area RWQCB annually through the Town's Stormwater Management and Discharge program. The potential for this issue to impact residents or businesses is minimal due to the lack of land in the Town used for agricultural production.

CLIMATE CHANGE IMPACTS

The greenhouse effect is a naturally occurring and essential process where certain gasses such as carbon dioxide (CO2) trap heat in the atmosphere and regulates the Earth's temperature. However, due to the burning of fossil fuels and deforestation, humans are adding more greenhouse gases (GHGs) into the atmosphere while reducing the CO2 storage, throwing off the natural balance. The increases in GHGs in the atmosphere is predicted to result in dire climate impacts. California is already seeing effects of climate change through more frequent and intense wildfires, air quality impacts, droughts, reduced snowpack and sea level rise. Since the amount of GHGs in the atmosphere continue to increase, these effects will likely worsen over time.

Locally, in Colma, climate change impacts include extreme weather events such as severe storm events, intense winds, and heatwaves, severe local air quality impacts caused by regional wildfires, increased costs for food due to impacted agriculture, and longer drought conditions due to a decreased snowpack that can impact water supply. In addition to the direct impact

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that is caused, extreme weather events can exacerbate natural hazards. For example, heatwaves and strong winds can intensify wildfires while a severe storm can cause floods.

The Town of Colma adopted a Climate Action Plan in 2013 to reduce GHG emissions and combat Climate Change. The Town is in the process of updating the Climate Action Plan to reduce emissions and develop resiliency and adaptation policies to mitigate climate change impacts.

NOISE

This section describes the existing and projected future noise environments in Colma with the goal of avoiding harmful and annoying sound levels. Major noise sources are identified, noise levels throughout the community are quantified, the effects of noise on the community are discussed, and ways to minimize unwanted noise are outlined. Noise sensitive uses, such as cemeteries and residences, should be protected from excessive noise levels.

ACOUSTICS FUNDAMENTALS

Noise is defined as "unwanted sound" and is widely acknowledged as a form of environmental degradation. Ambient noise is the composite of near and far noise sources and is considered the normal, or existing, level of environmental noise at a given location. Whether or not a sound is unwanted depends on when it occurs, the activity of listener, the characteristics of the sound and how intrusive it is (i.e., how much louder than the ambient noise level). Over time people become less aware of and less irritated by sound which is constant. The more a noise exceeds the ambient noise level, the more intrusive and less acceptable the noise is to the community. Three qualities characterize the subjective effect of noise on the listener:

- The frequency.
- The intensity.
- The time-varying character.

Frequency is defined as the number of oscillations or vibrations an air particle under-goes in one second. One complete oscillation constitutes one cycle; sound frequency is measured in Hertz (Hz). One Hertz is equal to one cycle per second. Sound is comprised of a broad range of frequencies. The range of frequencies a human ear is able to hear is typically described in terms of octave bands, which separate the audible frequency range into ten segments from 20 to 20,000 Hertz.

Intensity is the measurement of the sound energy or pressure. The human ear is sensitive to a wide range of intensity. The range of sound pressure levels between the faintest audible sound and the loudest sound the ear can withstand is in the order of one to one billion. In order to conveniently handle this enormous range of numbers, a logarithmic scale has been established so the entire range is compressed to a range from 0 to 180. The sound pressure scale is

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expressed in decibels. Because the decibel scale is logarithmic, a small decibel change represents a large change in intensity. A doubling of the sound energy results in an increase of three decibels. The human ear, however, can barely perceive a three decibel change; in fact, it usually takes a change of about 10 decibels before a doubling of a sound level is perceived. For example, 65 dBA is perceived to be twice as loud as 55 dBA.

The time-varying character of sound is particularly important to recognize. Noise levels throughout the community do not remain constant, but rather fluctuate over both time and duration. Community noise consists of sources both distant and near to the listener. Distant sources may include vehicular traffic, aircraft flyovers, and industrial activities (including construction). Nearby sources may include individual vehicles passing by, trains passing by, and landscaping equipment.

MEASURING NOISE

Because the human ear does not hear high and low frequency sounds, sound levels are measured with a sound meter using a filtering device that approximates the hearing are referred to as dBA (A-weighted decibel scale). The A scale weights the frequency range between 20 to 20,000 Hz to correspond more closely with human hearing. It is one of the most accurate ratings for predicting loudness because both frequency and intensity are registered.

The A-weighted scale accurately describes environmental noise at any one particular time. However, community noise levels vary continuously, therefore all of the individual noise readings must be averaged over a period of time to give an equivalent level. The L_{eq} is the average A-weighted noise level during a stated measurement period and is represented by a single number descriptor. The equivalent noise level for a 24-hour time period, expressed as L_{dn} or DNL (Day-Night Average Sound Level) can be plotted on a map to illustrate average noise levels throughout the community.

Cumulative Noise Exposure – DNL

Noise from a passing truck or airplane flying overhead typically increases as the noise source approaches the listener, and decreases as the source draws away. The measurement of one such occurrence is referred to as a ”single event”. In order to determine the total impact of all the single events that occur at a given location, all of the events must be averaged together to quantify the equivalent steady noise value. The DNL (Day-Night Average Sound Level) descriptor provides this equivalent noise level and is particularly well-suited for the purpose because it recognizes that human sensitivity to noise increases during the nighttime. The DNL divides the 24-hour day into daytime (7:00 A.M. to 10:00 P.M.) and nighttime (10:00 P.M to 7:00 A.M.). Nighttime noise levels are penalized by 10 dBA to reflect the increased sensitivity to noise during the nighttime (sleeping) hours.

The Community Noise Equivalent Level (CNEL) is another 24-hour descriptor which includes adjustments for evening (7:00 PM to 10:00 PM) as well as nighttime noise levels. The DNL and

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CNEL are very similar (typically less than one dBA) and for all practical purposes, measurements obtained from the two systems are the same. The national trend is toward using the DNL system; however, some jurisdictions in California utilize the CNEL. The DNL descriptor is recommended by the Environmental Protection Agency and DNL is utilized throughout this Noise Element.

Human Reaction to Environmental Noise

At some point in time, noise pollution affects all people in an urbanized environment.

The seriousness of the effect of noise depends on the tolerance of the individual in the community, the types of activities taking place and the character of the noise. The effects of noise on people can be grouped into three categories:

- Subjective Effects: annoyance, irritation, nuisance.
- Interference with Activities: disruption of sleep, speech, learning.
- Physiological Effects: stress, fatigue, temporary or permanent hearing loss.

Most sound levels produce effects in just the first two categories. No completely satisfactory measure of the subjective effects of noise can be made because of the wide range of individual reaction to noise.

High levels of noise exposure for extended periods of time can cause a variety of physiological effects. In addition to hearing loss, continual exposure to excessive noise levels may cause symptoms of anxiety, anger and is apt to aggravate psychiatric disorders. The Occupational Safety and Health Administration has identified 80 decibels as the highest eight-hour noise exposure threshold to prevent hearing loss.

According to the Environmental Protection Agency, when continuous noise levels reach 70 dBA and above, some hearing loss may begin to occur. Noise at this level is likely to be identified as a major source of annoyance by the community. The threshold of human hearing roughly corresponds to 0 dBA while the threshold of pain is approximately 120 dBA. Table N-1 lists typical A-weighted sound levels and shows that 120 dBA corresponds to a jet plane taking off at 200 feet from listener.

Noise Compatibility Standards

Over the years many studies have been performed to determine how much noise is acceptable for different land uses. The Environmental Protection Agency has given emphasis to levels deemed appropriate for residential land uses.

The California Office of Planning and Research's General Plan Guidelines includes a compatibility chart which attempts to match each land use type with an appropriate range of noise levels. The land use compatibility chart, used in conjunction with the noise exposure contours shown

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on the noise maps, provides a basis for planning decisions. Proposals for rezoning, for example, can be evaluated for potential noise conflict without much difficulty.

Relation of Noise Element to State Code of Regulations

Title 24 of the California Code of Regulations requires that an acoustical analysis be prepared for hotels, motels and multi-family dwellings which are to be located where the DNL is greater than 60 dBA outdoors. The acoustical report must discuss whether it is feasible and/or how the exterior noise levels can be reduced to DNL 60, and how the noise environment inside these structures can be controlled so as not to exceed DNL 45 dB. The acoustical analysis is often included as part of an Environmental Impact Report or can be a separate report accompanying the building permit application when an EIR is not required.

How to Use the Noise Compatibility Chart and DNL Contours

The DNL contours on the noise maps are estimated values based on traffic volumes. The calculated values have been adjusted to reflect noise measurements taken with a noise meter at a variety of locations and times in the community.

The DNL contours are not intended to be precise for a given location, but rather for use as a guide to determine when site-specific acoustic analysis should be undertaken. As such, the noise maps provide an early warning system in the decision making process.

The product of a site-specific acoustic analysis should be recommended ways in which outdoor noise levels can be controlled to the level set forth in the compatibility chart for the land use type under consideration, and, for uses covered by the California Administrative Code, recommended ways in which exterior noise intrusion into interior spaces can be reduced. Standards for the preparation of acoustical reports are as follows:

1. Minimum Contents of Acoustical Reports - Site specific reports should contain a brief description of the project and the sensitivity of the land use type to noise, an accurate map describing the setting with surrounding uses and noise sources identified, and a quantitative description of the noise environment. For multi-story structures, the report should discuss noise effects for the upper floors in addition to the lower floors. Field measurements should be taken over several days and the average DNL calculated should be based on daytime and nighttime readings.
2. Qualifications for Preparing an Acoustical Report - Noise reports should be prepared by an acoustical engineer holding a degree in engineering, architecture, physics or allied discipline able to demonstrate a minimum of two years experience in the following areas of acoustics: environmental noise, architectural acoustics, field measurement of noise and mitigation.

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Table 9-3 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet	100	
Gas lawnmower at 3 feet	90	
Diesel truck moving at 50 mph at 50 feet	80	Food blender at 3 feet, Garbage disposal at 3 feet
Noisy urban area, Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet, Normal speech at 3 feet
Commercial area, Heavy traffic at 300 feet	60	
Quiet urban daytime	50	Large business office, Dishwasher in next room
Quiet urban nighttime	40	Theater, Large conference room (background)
Quiet suburban nighttime	30	Library, Bedroom at night, Concert hall (background)
Quiet rural nighttime	20	Broadcast/Recording Studio
Threshold of Human Hearing	0	Threshold of Human Hearing

Notes: dBA = A-weighted decibel; mph = miles per hour
Source: Caltrans 2013.

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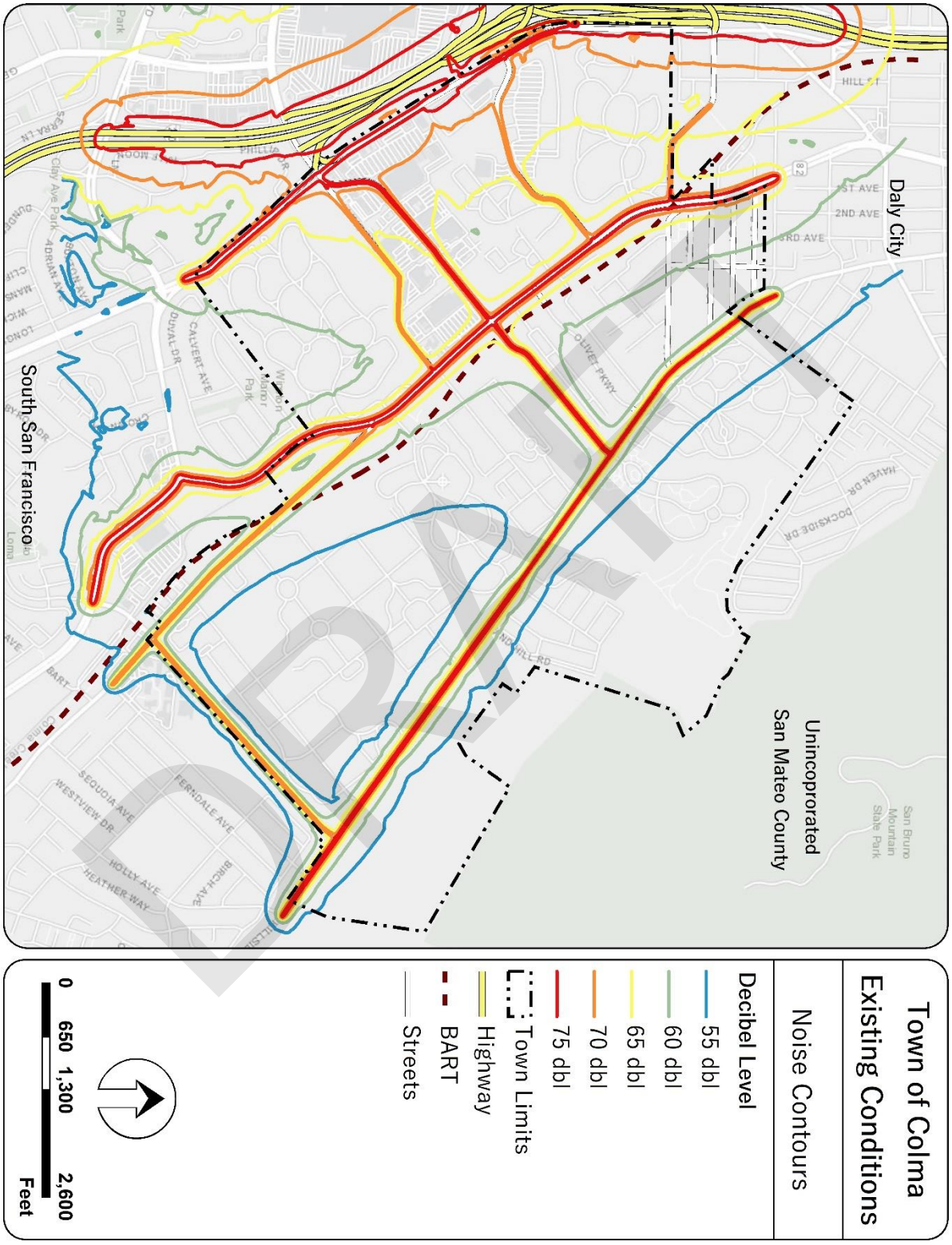
Figure 9-9: Noise Conditions



PRESENT NOISE ENVIRONMENT

Due to the character of Colma as a Town of cemeteries, the noise environment is generally a peaceful one. A minor amount of noise is generated from residential and cemetery areas by equipment such as lawn motors, air conditioners, construction equipment and power tools. Noise from light industrial and auto repair activity generally located on Mission Road and Collins Avenue, have limited impact on the overall noise environment.

The primary contributor to the Colma noise environment is vehicular traffic on major thoroughfares. Peak noise levels are generated by truck and commuter traffic on Interstate 280 and El Camino Real and along Serramonte and Junipero Serra Boulevards. To a lesser extent, the noise environment is influenced by commuter and shopping traffic on Hillside and Colma Boulevards.

Noise measurements were taken at six different locations in Colma, using a Larson Davis Model 831 sound level meter during October 2013. The locations at which readings were taken are shown on the 2013 Noise Map. DNL contours were plotted using acoustical modeling software and the Federal Highway Administration's Traffic Noise Model prediction method, based on traffic volume and speed information supplied from city-wide traffic counts taken in November of 2013. The field noise measurements indicate the calculated noise contours to be conservative and the field readings coincide with the calculated contours within a 3 dBA variation.

Analysis of the contour map indicates that a very small portion of the population may be exposed to high noise levels (above 70 dBA). At specific sites, the shielding effects of topography and other noise barriers such as solid walls and fences may reduce actual sound levels below that shown in the noise contours. However, the likelihood of noise impact is shown for properties fronting El Camino Real, Junipero Serra Boulevard and Serramonte Boulevard west of El Camino Real.

Noise generated from San Francisco International Airport flyovers have little noise impact on Colma. According to airport land use capability criteria and noise contours adopted by the San Mateo County Airport Land Use Commission in October 2012, impact on the Colma noise environment is less than 65 dBA.

Vibration

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions). Vibration levels can be depicted in terms of amplitude and frequency (relative to displacement), velocity, or acceleration.

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Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocity are normally described in inches per second (in/sec).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2006). This is based on a reference value of 1 micro inch per second (µn/sec).

The typical background vibration-velocity level in residential areas is approximately 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2006).

Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Construction activities can generate ground vibrations, which can pose a risk to nearby structures. Constant or transient vibrations can weaken structures, crack facades, and disturb occupants (FTA 2006).

Construction vibrations can be transient, random, or continuous. Transient construction vibrations are generated by events such as blasting, impact pile driving, and wrecking balls. Continuous vibrations result from activities such as vibratory pile drivers, large pumps, and compressors. Random vibration can result from jackhammers, pavement breakers, and heavy construction equipment. Table 9-4 describes the general human response to different levels of ground vibration-velocity levels.

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Table 9-4: Human Response to Different Levels of Ground Noise and Vibration

Vibration-Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Notes: VdB = vibration decibels referenced to 1 µ inch/second and based on the RMS velocity amplitude.
Source: FTA 2006

The greatest regular source of groundborne vibration is roadway truck and bus traffic. These trucks and buses typically generate noticeable groundborne vibration velocity levels at the edge of the road as they travel along the roadway.

Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, schools, historic sites, cemeteries, and recreation areas are also generally considered sensitive to increases in exterior noise levels. Places of worship, hotels and transient lodging, and other places where low interior noise levels are essential are also considered noise-sensitive. Those noted above are also considered vibration-sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance.

The following sensitive land uses have been identified in the Planning Area:

- Residential areas (i.e., all residential dwellings, including single-family units, and multi-family units);
- Care facilities;
- Parks, recreation facilities, and open space areas; and
- Cemeteries

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Existing Community Noise Environment

The predominant noise sources within the Town of Colma are mobile sources, including motor vehicles on roadways and aircraft. Stationary sources from existing land uses also contribute to the existing noise environment. Ambient noise level measurements were taken in 2013 to characterize the existing noise environment at different locations within the Town and to demonstrate the effects of topographic shielding. The DNL levels at each location, 50 feet from road centerline, are as follows:

Table 9-5: Existing Community Noise Measurements

Location	Measured DNL
Hillside Boulevard, south of Linden Street	67 dBA
El Camino Real, north of F Street	76 dBA
El Camino Real, north of Serramonte Boulevard	74 dBA
El Camino Real, adjacent to Cypress Lawn	73 dBA
Mission Road, west of Lawndale Boulevard	70 dBA
Junipero Serra Boulevard, north of Serramonte Blvd.	73 dBA
El Camino Real and Serramonte Boulevard	67 dBA
El Camino Real and F Street	72 dBA
Hillside Boulevard and F Street	67 dBA
Hillside Boulevard and Serramonte Boulevard	68 dBA

Source:2013 Noise Measurements by CSDA

Existing Traffic Noise

Major freeways in the area include US 101 and Interstate 280. There are also several major urban arterials, including El Camino Real, Serramonte Boulevard, Hillside Boulevard (Sister Cities Boulevard) and Junipero Serra Boulevard.

Existing Stationary Source Noise

Stationary noise sources are also present in Colma. Major retail and business areas in the Town may have existing land uses that are considered stationary sources of noise such as commercial corridors on El Camino Real and Auto Row on Serramonte Boulevard. Noise modeling was not conducted for existing stationary noise sources.

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REGULATORY SETTING

EMERGENCY PREPAREDNESS

Federal

Federal Government Authorities

United States government authorizations include: the Robert T. Stafford Emergency Disaster Relief and Emergency Assistance Act (42 United States Code [USC] §§ 5121 et seq.); Federal Civil Defense Act of 1950 (Public Law 920), as amended; Federal Disaster Relief Regulations: 44 Code of Federal Regulations [CFR] Part 206; Individual Assistance (44 CFR §§ 206.101 et seq.); Public Project Assistance (44 CFR §§ 206.200 et seq.); Hazard Mitigation (44 CFR §§ 206.430 et seq.); National Incident Management System (NIMS); National Response Framework; Homeland Security Act of 2002, Public Law 107-296; Homeland Security Presidential Directive (HSPD) – 5, Management of Domestic Incidents; Presidential Policy Directive – 8, National Preparedness; HSPD – 21, Public Health and Medical Preparedness; Public Law 84-99 (U.S. Army Corps of Engineers-Flood Fighting).

Federal Disaster Mitigation Act of 2000 (DMA 2000)

Provides the legal foundation for cities and counties to develop customized Local Hazard Mitigation Plans, which is a requirement necessary to receive benefits such as mitigation grant assistance from certain California Emergency Management Agency (CalEMA) and FEMA programs. To assist local governments in meeting this requirement, ABAG is the lead agency on the multi-jurisdictional Local Hazard Mitigation Plan (MJ-LHMP) for the San Francisco Bay Area. Cities and counties can adopt and use all or part of this multi-jurisdictional plan in lieu of preparing all or part of a Local Hazard Mitigation Plan themselves. However, they need to have participated in the development of the multi-jurisdictional plan to adopt it. The plan was originally adopted in 2005. The 2010 plan was adopted by ABAG. The County and local jurisdictions updated their plans and annexes in 2016.

State

Governor's Office of Emergency Services (Cal OES)

Created by the California Emergency Services Act, Cal OES (formerly known as the California Emergency Management Agency) serves as the lead State agency for emergency management in California. Cal OES coordinates the State response to major emergencies in support of local government. It is also responsible for collecting, verifying, and evaluating information about the emergency or disaster, facilitating communication with local government, and providing affected jurisdictions with additional resources when needed. If necessary, Cal OES may task State

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agencies to perform work outside their day-to-day and statutory responsibilities to support local emergency needs.

The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain support from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the Statewide Mutual Aid System. In California, the Standardized Emergency Management System (SEMS) and the Incident Command System (ICS) provide the mechanisms by which local government requests assistance and reports the status of emergency operations. Cal OES serves as the lead agency for mobilizing the State's resources and obtaining Federal resources and maintains oversight of the State's mutual aid system. Cal OES communicates exclusively with the emergency management Operational Area ("Op Area"), and the Op Area communicates directly with the locality; the San Mateo County Sheriff's Office of Homeland Security and Emergency Services manage the San Mateo County Op Area and is the primary point-of-contact for emergency support and status reporting. [California Government Code, Section 8607(a), Title 19: Public Safety, Division 2: Office of Emergency Services, Chapter 1: Standardized Emergency Management System.]

State of California Emergency Management Authorities

State authorizations include: California Emergency Services Act, Section 3100, Title 1, Division 4, Chapter 4; California Emergency Services Act, Title 2, Division 1, Chapter 7; California Civil Code, Chapter 9, Section 1799.102; • California Emergency Services Act, § 8550 et seq., Government Code; California Natural Disaster Assistance Act. Section 128, California Water Code (California Department of Water Resources - Flood Fighting); State of California Emergency Plan (SEP), State of California, Cal EMA, 2009; Standardized Emergency Management System (SEMS): California Code of Regulations (CCR), Title 19, Division 2, Chapter 1; California Emergency Resources Management Plan; California Law Enforcement Mutual Aid Plan; California State Emergency Plan; Disaster Assistance Procedural Manual (published by the California Office of Emergency Services); Disaster Assistance Act Regulations: CCR, Title 19, Division 2, Chapter 6; Orders and Regulations which may be selectively promulgated by the Governor during a State of War Emergency; Orders and Regulations which may be selectively promulgated by the Governor during a State of Emergency; California Disaster and Civil Defense Master Mutual Aid Agreement (MMAA); Media Access Regulations: California Penal Code, Section 409.5.

Regional

Association of Bay Area Governments (ABAG)

ABAG developed through strategic partnerships between local governments to collaborate on research related to land use, environmental and water resource protection, disaster resilience, energy efficiency, waste mitigation and other important issues which affect local counties, cities, and towns. This organization creates a regional collaboration opportunity for municipalities to

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share resources and develop plans for responding to emergencies such as natural disasters and providing first aid in the event of a disaster.

Plan Bay Area

In 2013, ABAG and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area, an integrated transportation and land-use strategy through 2040 that marks the nine-county region's first long-range plan to meet the requirements of California's landmark 2008 Senate Bill 375. The Senate Bill calls on each of the state's 18 metropolitan areas to develop a Sustainable Communities Strategy to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks. Working in collaboration with cities and counties, the Plan advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. ABAG and MTC prepared an update to the plan 2017 and are currently working on another update.

Local

Colma Department of Public Works Engineering Division

Colma's Municipal Code Section 5.07, Grading and Erosion and Sediment Control, states that erosion control measures and landscaping shall be done in accordance with requirements described in the Town's National Pollution Discharge Elimination System Permit and section 20 of the State Standard Specifications. Erosion control measures are critical for preventing landslides and reducing the risk of harm to the Colma community.

Geologic and Seismic Hazards

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was signed into law in 1972 (14 C.C.R. §§ 3600 et seq.). The purpose of this Act is to prohibit the location of most structures for human occupancy across the traces of active faults and to thereby mitigate the hazard of fault rupture. Under the Act, the State Geologist is required to delineate "Earthquake Fault Zones" along known active faults in California (14 C.C.R. §3601). Prior to January 1, 1994, "Earthquake Fault Zones" were referred to as "Special Studies Zones" (California Department of Conservation, 2011). Cities and counties affected by the zones must regulate certain development projects in the zones. They must withhold development permits for sites in the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting (14 C.C.R. §3603). There are fault zones throughout the San Francisco Bay Area, with the closest being the San Andreas Fault just west of Colma.

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Seismic Hazards Mapping Act

The California Geologic Survey, formerly the California Department of Conservation (DOC), Division of Mines and Geology (CDMG), provides guidance with regard to seismic hazards. Under the CDMG Seismic Hazards Mapping Act (1990), seismic hazard zones are to be identified and mapped to assist local governments in land use planning (California Public Resources Code §§ 2690 et seq.). The intent of these maps is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. In addition, CDMG's Special Publications 117, "Guidelines for Evaluating and Mitigating Seismic Hazards in California," provides guidance for the evaluation and mitigation of earthquake-related hazards for projects in designated zones of required investigations.

California Building Code

California law provides standards for building design through the California Building Code (CBC) (C.C.R. Title 24). Chapter 23 of the CBC contains specific requirements for seismic safety. Chapter 29 regulates excavation, foundations, and retaining walls. Chapter 33 of the CBC contains specific requirements pertaining to site demolition, excavation, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. Chapter 70 of the CBC regulates grading activities, including drainage and erosion control. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in California Division of Occupational Safety and Health (Cal/OSHA) regulations (C.C.R. Title 8).

Local

Town of Colma Municipal Code

Chapter 9.05 of the Town of Colma Municipal Code is the Town's Building Code, which adopts the 2013 CBC. As discussed above, the CBC contains requirements for seismic safety. All new development in the Town is required to adhere to the standards and regulations in the code.

Chapter 9.65 of the municipal code addresses the seismic identification program for unreinforced masonry buildings. This chapter requires owners for unreinforced masonry buildings in the Town to submit an engineering report to the Town's building division to determine the existence, nature, extent and severity of the structural deficiencies in the building's construction for earthquake resistance. Residential buildings with fire or fewer dwelling units, warehouses not used for human occupation or storage of emergency services equipment and buildings that have already been structurally upgraded are exempt from these requirements.

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Flood Hazards and Sea Level Rise

Federal

The Federal Disaster Mitigation Act of 2000

The Federal Disaster Mitigation Act of 2000 seeks to "reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters; and to provide a source of pre-disaster hazard mitigation measures that are designed to ensure the continued functionality of critical services and facilities after a natural disaster." The Disaster Mitigation Act outlines a process for the development of Local Hazard Mitigation Plans (LHMP) on the part of cities, counties, and special district governments. Development of an LHMP is required to be eligible to receive certain benefits from FEMA and the California Governor's Office of Emergency Services (OES).

Federal Emergency Management Agency (FEMA)

FEMA is the Federal agency that oversees flood plain management and the natural flood insurance program. Using the results of flood insurance studies required by the 1973 Act, FEMA prepares Flood Insurance Rate Maps (FIRMs) that depict the spatial extent of Special Flood Hazard Areas (SFHAs) and other features related to flood risk assessment. FEMA is responsible for maintaining the FIRMs as communities grow, and as new or better scientific and technical data concerning flood risks becomes available. FEMA insures properties against flooding losses in the Bay Area through the National Flood Insurance Program.

National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973

In response to increasing losses from flood hazards nationwide, the Congress of the United States passed the National Flood Insurance Act of 1968, which established the National Flood Insurance Program (NFIP). The 1968 Act provided for the availability of flood insurance in communities that were willing to adopt floodplain management programs to mitigate future flood losses. The act also required the identification of all floodplain areas in the United States and the establishment of flood-risk zones in those areas.

As a result of the 1972 Hurricane Agnes flooding along the East coast, the 1968 Act was expanded by the Flood Disaster Protection Act of 1973. The 1973 Act added the mandatory flood insurance purchase requirement and increased the awareness of floodplain mapping needs throughout the country. The responsibility for administration of the NFIP falls with the Federal Insurance Administration of FEMA.

National Flood Insurance Program

FEMA's NFIP provides insurance to homeowners in declared flood areas. The NFIP was established by the 1968 Act and provided for the availability of flood insurance in communities that were willing to adopt floodplain management programs to mitigate future flood losses. The

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act also required the identification of all floodplain areas in the United States and the establishment of flood-risk zones in those areas. On July 6, 2012 President Obama signed the Biggert-Waters Flood Insurance Reform Act of 2012, extending the NFIP's authority through September 30, 2017.

Regional

2015 Multi-Jurisdictional-Local Hazard Mitigation Plan (LHMP)

The goal of the Association of Bay Area Government MJ-LHMP is to maintain and enhance a disaster-resistant region by reducing the potential for loss and damage resulting from natural disasters, including flooding. The purpose of the MJ-LHMP is to serve as a catalyst for dialogue on public policies needed to mitigate the effects of natural hazards that affect the San Francisco Bay Area. The plan includes a number of hazard mitigation strategies, including strategies specifically related to flood hazard mitigation.

In September of 2015, the San Mateo County Emergency Manager's Association selected Tetra-Tech to update the 2010 Multijurisdictional Plan. The completed the update in the summer of 2016. In addition to the Multijurisdictional Annex, individual jurisdictions and districts within the County prepared their own specific Annex which is integrated into the County-wide plan. The Town of Colma prepared an Annex as part of this process.

The plan identified a number of potential vulnerabilities to the town and created a list of action items to implement to reduce Colma's vulnerabilities in the event of a natural disaster.

Local

California Water Service Company Water Management Plan

Potable water is supplied to Colma by the California Water Service Company. Colma is part of the Bayshore District (South San Francisco Region). California Water Service Company has a 2015 Urban Water Management Plan which was completed pursuant to the California Water Code Division 6 part 2.6 Section 10610. The document identifies water resources available and plans for providing reliable service to customers.

Colma Municipal Code, Chapter 5.08

Municipal Code Chapter 5.08, Encroachments in Public Rights of Way and Watercourses, includes subsections which protect watercourses to prevent flooding. The Town Engineer or Director of Public Works are appointed to administer and enforce policies outlined in this chapter. This code ensures public safety by prohibiting construction in and around the creek without proper permitting and code compliance.

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FIRE HAZARDS

Federal

The Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance. There are two different levels of State disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act has also established new requirements for local mitigation plans.

National Fire Plan

The National Fire Plan was developed under Executive Order 11246 in August 2000, following a historic wildland fire season. Its intent is to establish plans for active response to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

State

The Strategic California Fire Plan

The Strategic California Fire Plan is the State's road map for reducing the risk of wildfire. The Plan was finalized in 2018 and directs each California Department of Forestry and Fire Protection (CAL FIRE) unit to prepare a locally specific Fire Management Plan. In compliance with the California Fire Plan, individual CAL FIRE units are required to develop Fire Management Plans for their areas of responsibility. These documents assess the fire situation in each of the 21 CAL FIRE units and six contract counties. The plans include stakeholder contributions and priorities and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem. The plans are required to be updated annually.

California Office of Emergency Services

The California Office of Emergency Services (OES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks, and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is federally required under the Disaster Mitigation Act of 2000 in order for the State to receive Federal funding. The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance.

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Wildland Urban Interface Building Standard

On September 20, 2007, the Building Standards Commission approved the Office of the State Fire Marshal emergency regulations amending the California Code of Regulations, Title 24, Part 2, known as the 2007 California Building Code (CBC). These codes include provisions for ignition-resistant construction standards in the wildland urban interface.

Regional

Association of Bay Area Governments (ABAG) Multi-Jurisdictional Local Hazard Mitigation Plan (MJ-LHMP).

The MJ-LHMP covers mitigation measures that should be adopted by participating municipalities across the San Francisco Bay Area.

The San Mateo-Santa Cruz Unit Strategic Fire Plan

The San Mateo-Santa Cruz Unit Strategic Fire Plan includes a brief history of controlled fires dating from the early Native American slash and burn practices, to the destructive Summit Fire of 2008. The plan was collaboratively developed to include fire hazards and related issues affecting San Mateo County, San Francisco, and Santa Cruz County. Federal, state, county, and local agencies were consulted during the development of this plan to identify and prioritize strategies for both pre- and post-fire related emergencies to reduce the risk of loss and increase safety for the region. The Plan updated annually and is intended to be used as a tool for planning and ensure environmental compliance.

Local

Colma Fire Protection District Annex to 2015 Local Hazard Mitigation Plan

The Annex outlines mitigation measures that the District is working to implement to decrease the loss or risk to life and property in event of a hazard, including fire. Table 2-7 to the annex lists mitigation actions and priorities to address hazards. The Plan identifies the Fire Chief as a liaison between the Colma Fire District and the Town in terms of emergency response issues, and the Town's Emergency Response Operating Center.

Community Wildfire Protection Plan

In 2010, a collaborative group consisting of CAL FIRE, Resource Conservation District of Santa Cruz County, San Mateo Resource Conservation District, and the US Fish and Wildlife Service worked together to create a draft Community Wildfire Protection Plan (CWPP) which includes the Town of Colma in the planning area. The Plan identifies fire protection agencies with jurisdiction, volunteer organizations, large land owners, communities, neighborhoods, open spaces and other environmental resources in the planning area that may be at risk of fire hazards. The plan was updated in 2018.

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AVIATION HAZARDS

Federal

Federal Aviation Regulations

Federal Aviation Regulations (FARs) are rules established by the Federal Aviation Administration governing all civilian and, to a lesser extent, military aviation activities in the United States. FARs are designed to promote aviation safety. They are developed and approved through a formal Federal rule-making process and address a wide variety of aviation activities, including aircraft design, flight procedures, pilot training requirements, and airport design. FARs concerning aircraft flight generally preempts any State or local regulations. At the national level, SFO is included in the National Plan of Integrated Airport Systems.

State

California Aviation System Plan–Policy Element

The California Aviation System Plan–Policy Element (2011) is the primary document that explains and guides the business of the Division of Aeronautics that is housed in the California Department of Transportation. The Division's primary duties and functions are defined by statute codified in the State Aeronautics Act (originally the State Aeronautics Commission Act of 1947) and published in the California Public Utilities Code, Section 21001 et seq. The Policy Element is one of multiple elements that comprise the larger California Aviation System Plan (CASP), the means by which continuous aviation system planning is conducted by the State. CASP elements are revised on approximately a five-year cycle with the Policy Element update currently underway. SFO is included in the CASP.

Local

Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport

Developed for the City/County Association of Governments of San Mateo County, the Comprehensive Airport Land Use Plan outlines SFO operations and presents projections for anticipated future use. Additionally, the Comprehensive Airport Land Use Plan presents General Policies as well as Airport/Land Use Compatibility Policies to provide for the orderly growth of the airport and the area surrounding the airport in the jurisdiction of the commission, as well as to safeguard the general welfare of the inhabitants in the vicinity of the airport and the public in general. Policies have four general goals:

- To protect SFO from further encroachment by incompatible land uses
- To safeguard the general welfare of the inhabitants in the vicinity of the Airport and the public by protecting them from adverse effects of aircraft noise and avoiding an increase in the number of people exposed to airport/aircraft related hazards

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- To ensure that no structures or land use characteristics adversely affect the navigable airspace in the vicinity of the Airport to provide for the safe passage of aircraft in flight
- To provide guidance to land use agencies on compatible land uses in the environs of SFO

Regional Airport System Plan

The Regional Airport System Plan (RASP), prepared by the Metropolitan Transportation Commission (MTC) in 2000, is intended to explore a range of solutions to address the increasing air traffic demands being placed on the runways at the major commercial airports and on the airspace around these airports. The RASP provides an independent analysis of future aviation trends and airport system requirements to be used together with airport planning documents to help evaluate proposed improvements to regional airport system capacity. The RASP forecasts for each airport are based on the analysis of individual markets. The RASP is primarily an advisory and informational document. SFO is included in the MTC RASP.

Town of Colma Municipal Code

There are no Town of Colma ordinances relating to the San Francisco International Airport.

HAZARDOUS MATERIALS

Federal

Comprehensive Environmental Response Compensation and Liability Act

The Comprehensive Environmental Response Compensation and Liability Act, or CERCLA, was enacted in 1980. Commonly known as Superfund, CERCLA establishes prohibitions and requirements concerning closed and abandoned hazardous waste sites; provides for 'cradle to grave' liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party could be identified. Under CERCLA, USEPA has the authority to hold parties responsible for releases of hazardous substances and require their cooperation in site remediation. It also governs USEPA's National Priority Site List (NPL), State priority site lists, sites recommended for the EPA NPL, and other initial investigations of severely contaminated sites.

Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard

The U.S. Department of Labor's HAZWOPER requirements include procedures for clean-up operations involving hazardous substances that are conducted at uncontrolled hazardous waste sites. A person who is engaged in work with any potential for exposure to hazardous substances must comply with HAZWOPER regulations.

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Insecticide, Fungicide, and Rodenticide Act (FIFRA)

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 USC 136 et seq.) provides Federal control of pesticide distribution, sale, and use. USEPA was given authority under FIFRA not only to study the consequences of pesticide usage, but also to require users (farmers, utility companies, and others) to register when purchasing pesticides. Later amendments to the law required users to take exams for certification as applicators of pesticides. All pesticides used in the United States must be registered with and licensed by USEPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to human health or the environment.

Occupational Health and Safety Administration

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor is responsible for enforcement and implementation of Federal laws and regulations pertaining to worker health and safety. Workers at hazardous waste sites must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations (29 CFR 1910.120), depending on the nature of their exposure risk.

Resource Conservation and Recovery Act (RCRA)

Under RCRA, USEPA regulates hazardous waste from the time that the waste is generated until its final disposal. RCRA also gives USEPA or an authorized State the authority to conduct inspections to ensure that individual facilities are in compliance with regulations, and to pursue enforcement action if a violation is discovered. USEPA can delegate its responsibility to a state if the state's regulations are at least as stringent as the Federal regulations. RCRA was updated in 1984 by the passage of the Federal Hazardous and Solid Waste Amendments, which required phasing out land disposal of hazardous waste. Title 22, Section 66261.24 of the CCR defines characteristics of toxiTown, which is used to help guide the Federal Program.

SARA Title III, The Emergency Planning and Community Right-to-Know Act

SARA requires companies to declare potential toxic hazards to ensure that local communities can plan for chemical emergencies. USEPA maintains a National Priority List of uncontrolled or abandoned hazardous waste sites identified for priority remediation under the Superfund program. EPA also maintains the CERCLIS database, which contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities across the nation. It also provides clear procedures and limitations for members of the public to have access to information on chemical hazards in their communities.

U.S. Environmental Protection Agency

USEPA is the agency primarily responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials and environmental protection. Applicable

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Federal regulations pertaining to hazardous materials are contained in the Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The management of hazardous materials is governed by the following laws, among others:

- Resource Conservation and Recovery Act of 1976 (RCRA) (42 U.S. Code [USC] 6901 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 USC 136 et. Seq.)
- Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99 499)

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials and hazardous wastes. USEPA provides oversight and supervision for Federal investigations and remediation projects, evaluates effectiveness of remediation technologies, develops hazardous materials disposal restrictions and treatment standards, and mandates that states with their own Environmental Protection Agencies, such as California, enforce requirements that are at least as stringent as the Federal standards.

State

California Department of Toxic Substances Control (DTSC)

DTSC is a division of California Environmental Protection Agency (CalEPA) and has primary regulatory responsibility over hazardous materials in California, working in conjunction with USEPA to enforce and implement hazardous materials laws and regulations. DTSC can delegate enforcement responsibilities to local jurisdictions.

California Department of Pesticide Regulations, Department of Food and Agriculture and the Department of Public Health

The California Department of Pesticide Regulations (DPR), a division of CalEPA, in coordination with the California Department of Food and Agriculture (CDFA), a division of Measurement Standards and the California Department of Public Health (CDPH), have the primary responsibility to regulate pesticide use, vector control, food, and drinking water safety. CCR Title 3 requires the coordinated response between the County Agricultural Commissioner and SBDEH to address the use of pesticides used in vector control for animal and human health on a local level. DPR registers pesticides, and pesticide use is tracked by the County. Title 22 is used also to regulate both small (less than 200 connections regulation by the SBC Water District) and large CDPH water systems.

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California Department of Industrial Relations, Division of Occupational Health Administration

The California Department of Industrial Relations, Occupational Safety and Health Administration (Cal/OSHA), assumes primary responsibility for developing and enforcing workplace safety regulations in the state. Cal/OSHA standards are more stringent than Federal OSHA regulations, and are presented in California Code of Regulations, Title 8. Standards for workers dealing with hazardous materials include practices for all industries (General Industry Safety Orders); specific practices for construction, hazardous waste operations, and emergency response situations. Cal/OSHA conducts on site evaluations and issues notices of violation to enforce necessary improvements to workplace health and safety practices.

California Air Toxic "Hot Spots" (AB 2588) Program

The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly, 1987: chaptered in the California Health and Safety Code Section 44300, et. al.) established a formal regulatory program for site-specific air toxics emissions inventory and health risk quantification, managed by California Air Districts. Under this program a wide variety of industrial, commercial, and public facilities are required to report the types and quantities of toxic substances their facilities routinely release into the air. The goals of the Air Toxics Hot Spots (ATHS) program are to collect emissions data, identify facilities with potential for localized health impacts, ascertain health risks, notify nearby residents of risks that are determined to warrant such notification, and reduce significant risks. The Bay Area Air Quality Management District (BAAQMD) is responsible for air quality in Colma and throughout the nine Bay Area counties.

Hazardous Waste Control Act

The California hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which is implemented by regulations described in CCR Title 26. The State program is similar to the Federal program under RCRA. The regulations list materials that may be hazardous, and establish criteria for their identification, packaging, and disposal. Environmental health standards for management of hazardous waste are contained in California Code of Regulations (CCR) Title 22, Division 4.5. In addition, as required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the State called the Cortese List, though newly identified sites are listed separately and are no longer added to the list.

Hazardous Waste and Hazardous Materials Management Regulatory Program

The unified hazardous waste and hazardous materials management regulatory program (Unified Program) required by Senate Bill 1082 (1993) was established by CalEPA. The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental programs under CalEPA,

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the State Water Resources Control Board (SWRCB), including the Regional Water Quality Control Boards (RWQCB) in each region of the state, the State Office of Emergency Services, and the State Fire Marshal:

- Underground Storage Tank program;
- Hazardous materials release response plans and inventories (business plan)
- California Accidental Release Prevention Program (CalARPP)
- Aboveground Petroleum Storage Act requirements for spill prevention, control, and countermeasures plans
- Hazardous waste generation and on-site treatment program

The five environmental programs in the Unified Program are implemented at the local level by local agencies, known for this purpose as Certified Unified Program Agencies (CUPA). CUPAs carry out the responsibilities previously handled by approximately 1,300 State and local agencies, providing a central permitting and regulatory agency for permits, reporting, and compliance enforcement. The designated CUPA in Colma is the San Mateo County Environmental Health Department.

Regional Water Quality Control Board (RWQCB)

The RWQCB is authorized by the Porter Cologne Water Quality Control Act of 1969 to protect the waters of the State. The RWQCB provides oversight for sites where the quality of groundwater or surface waters is threatened. Extraction and disposal of contaminated groundwater due to investigation/remediation activities or due to dewatering during construction would require a permit from the RWQCB if the water were discharged to storm drains, surface water, or land.

Local

County of San Mateo Agricultural Commissioner

The regulation of pesticide storage, application, and waste disposal is under the jurisdiction of the County Office of the Agricultural Commissioner; the Commissioner implements the Cal EPA Department of Pesticide Regulation (DPR) program as well as weights and measures certifications. The Commissioner inspects businesses and those who apply pesticides in and around homes, offices, parks, streets, farms, and ranches. In addition, the Commissioner investigates complaints of pesticide misuse and follows-up on doctors' reports of suspected pesticide exposure.

Certified Unified Program Agency (CUPA)

The San Mateo County Environmental Health Department is the CUPA for Colma. As the CUPA, San Mateo County Environmental Health Department implements state laws and regulations regarding hazardous materials storage, use and handling (above certain thresholds), including hazardous wastes, for all facilities in San Mateo County boundaries, including Colma.

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Town of Colma Fire Department

The Colma Fire Department enforces hazardous materials management and underground storage tank operation regulations in the Town of Colma. The Fire Department performs annual inspections at established facilities to verify that hazardous materials are properly stored and handled, and that the types and quantities of materials reported in the Hazardous Materials Management Plan (Business Plan) are accurate, and provides guidance on hazardous materials regulations to Town businesses. The Fire Department also issues permits for the operation and removal of underground and above-ground storage tanks in the Town of Colma.

Town of Colma Municipal Code

Chapter 4.65 of the Town of Colma Municipal Code addresses the storage of hazardous materials to ensure the protection of health, life, resources, and property through prevention and control of unauthorized discharges of hazardous materials. Chapter 4.65 requires a permit for the storage of any hazardous material as well as regulates the manner in which materials are stored.

NOISE

Federal

The Federal Noise Control Act of 1972

The Federal Noise Control Act of 1972 established a requirement that all Federal agencies must comply with applicable Federal, state, interstate, and local noise control regulations. Federal agencies also are directed to administer their programs in a manner that promotes an environment free from noise that jeopardizes public health or welfare.

U.S. Department of Transportation

To address the human response to groundborne vibration, the Federal Transit Administration (FTA) of the U.S. Department of Transportation (DOT) has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. Among these guidelines are the following:

- 65 VdB, referenced to 1 µin/sec and based on the Root-Mean-Square (RMS) velocity amplitude, for land uses where low ambient vibration is essential for interior operations (e.g., hospitals, high-tech manufacturing, laboratory facilities);
- 80 VdB for residential uses and buildings where people normally sleep; and
- 83 VdB for institutional land uses with primarily daytime operations (e.g., schools, churches, clinics, offices) (FTA 2006).

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State

Governor's Office of Planning and Research

The California Governor's Office of Planning and Research (OPR) publishes the *State of California General Plan Guidelines* (OPR 2017), which provide guidance for the acceptability of projects within specific Community Noise Equivalent Level (CNEL) contours. Generally, residential uses are considered to be acceptable in areas where exterior noise levels do not exceed a CNEL type standard. Residential uses and schools are normally unacceptable in areas exceeding 70 dBA CNEL and conditionally acceptable within 55-70 dBA CNEL. Commercial uses are normally acceptable in areas up to 70 dBA CNEL. Between 67.5 and 77.5 dBA CNEL, commercial uses are conditionally acceptable, depending on the noise insulation features and the noise reduction requirements. The guidelines also present adjustment factors that may be used to arrive at noise-acceptability standards that reflect the particular community's noise-control goals, sensitivity to noise, and assessment of the relative importance of noise issues. The Town of Colma has used these guidelines to develop its community noise exposure levels.

Local

Town of Colma Noise Element

The Town's Noise Element, which was most recently adopted in 1999, identifies sources of noise in the Town and provides objectives and policies that ensure that noise from various sources would not create an unacceptable noise environment. The Noise Element also aims to maintain land uses with compatible environmental noise levels.

Colma Municipal Code

Section 2.05,020 of the Colma Municipal Code identifies noise limitations, exemptions, and enforcement and penalty for sources of noise within the Town. The Town also has a construction noise ordinance which limits noise generating construction of any kind to the following hours:

- Weekdays 8:00 a.m. to 7:00 p.m.
- Saturday 9:00 a.m. to 5:00 PM.
- Sunday 12:00 p.m. to 5:00 p.m.

KEY TERMS

100-Year Flood Event. A flood event that would occur on average every 100 years, or that has a 1 percent probability of occurring in any given year.

500-Year Flood Event. A flood event that would occur on average every 500 years, or that has a 0.2 percent chance of occurring in any given year.

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A-Weighted Level. The sound level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

Active Fault. A fault that has ruptured in the past 11,000 years.

Airport. An area of land or water that is used, or intended for use, for the landing and takeoff of aircraft. Any appurtenant areas that are used, or intended for use, for airport buildings, other airport facilities, or rights-of-way; and all airport buildings and facilities located on the areas specified in this definition.

Airport Land Use Compatibility Plan (ALUCP). A plan adopted by an Airport Land Use Commission that sets forth policies for promoting compatibility between airports and the land uses that surround them. Also referred to as an Airport Land Use Plan (ALUP), Comprehensive Land Use Plan (CLUP), or Compatibility Plan.

Airport Land-Use Commission. A commission established to provide for appropriate development of and in the vicinity of public use airports.

Alquist-Priolo Earthquake Fault Zoning Act. The State law that provides a mechanism for reducing losses from surface fault rupture on a statewide basis by identifying active faults and prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from a surface faulting or fault creep.

Ambient Noise. The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Bay Area Air Quality Management District. The regional air pollution control authority under the California Air Resources Board for the San Francisco Bay area. The Bay Area Air Quality Management District has the authority to issue permits directly to stationary sources of air pollution to comply with the Federal Clean Air Act.

Certified Unified Program Agencies (CUPA). Certified local government agencies which implement the hazardous waste and materials standards set by the State of California.

Community Noise Equivalent Level (CNEL). The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night from 10 p.m. to 7 a.m.

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is a database maintained by USEPA to store and access Superfund site data.

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Commercial Service Airport. Publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service.

Day-Night Noise Level (L_{dn}). L_{dn} is the 24-hour L_{eq} with a 10 dB penalty applied during the noise-sensitive hours from 10 p.m. to 7 a.m., which are typically reserved for sleeping.

Decibel, dB. A unit of measurement describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

Earthquake Fault Zone. Regulatory zones around active faults. The zones vary in width, but average about one-quarter per mile wide.

Equivalent Noise Level (L_{eq}). An L_{eq} is the equivalent steady-state noise level in a stated period of time that would contain the same acoustic energy as the time-varying noise level during the same period (i.e., average noise level).

Emergency. The actual or threatened existence of conditions posing immediate risk to the safety of persons, property or the environment, or representing a serious disruption or potential disruption of the functioning of a community, which requires intervention to abate, and which are likely to be beyond the control of the services, personnel, equipment, and facilities of a Town, requiring the combined forces of other regional political subdivisions to combat.

Emergency Services. The preparation and carrying out of all emergency functions, other than functions for which the military forces are primarily responsible.

Envirostor and Geotracker. State of California databases used to track hazardous waste sites and contaminated properties in California.

Erosion. The process by which material is worn away from the earth's surface.

Expansive Soils. Soils that greatly increase in volume when they absorb water and shrink when they dry out.

Fault. Planar or gently curved fracture in the rocks of the Earth's crust, where compressional or tensional forces cause relative displacement of the rocks on the opposite sides of the fracture.

Federal Aviation Administration (FAA). The U.S. government agency which is responsible for ensuring the safe and efficient use of the nation's airports and airspace.

Flood Insurance Rate Map (FIRM). Prepared by FEMA for flood insurance and floodplain management purposes and is the basis for floodplain management, mitigation, and insurance activities of NFIP. Uses of the FIRM for insurance activities include enforcement of the mandatory purchase requirement of the 1973 Act. The risk zones shown on the FIRMs are the basis for the establishment of premium rates for flood coverage offered through the NFIP. At

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present, FIRMs have been published for virtually all communities in the nation having flood risks.

Floodplain Management. The implementation of policies and programs to protect floodplains and maintain their flood control function.

Floodplain. Land adjacent to a stream, slough, or river that is subject to flooding or inundation.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. This term is synonymous with the term "regulatory floodway."

General Aviation Airport. Airports that do not have scheduled commercial service, or do not meet the criteria for classification as a commercial service airport.

General Aviation. That portion of civil aviation which encompasses all facets of aviation except commercial air carriers.

Hazardous Materials or Hazardous Waste. A substance that poses a threat to human health and the environment because of the physical or chemical nature, quantity, or concentration of the substance. Medical and bio-hazardous waste is excluded from this definition.

Holocene Faults. Faults have evidence of movement within the last 11,700 years. Holocene faults are considered active.

Intrusive Noise. That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence, and tonal or informational content as well as the prevailing noise level

Large Hub. A primary commercial service airport that receives one percent or more of the annual passenger boardings in the US.

Ldn. **Day-Night Average Level**. The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m. (Note: CNEL and Ldn represent daily levels of noise exposure averaged on an annual or daily basis, while Leq represents the equivalent energy noise exposure for a shorter time period, typically one hour.)

Levee. A dike or embankment that confines water flow in a stream channel to protect adjacent land from flood waters. A levee designed to provide 100-year flood protection must meet FEMA standards.

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Liquefaction. During groundshaking, soil grains consolidate, pushing water towards the surface and causing a loss of strength in the soil.

Leaking Underground Storage Tank (LUST). An underground storage tank that has been discovered to be leaking and which constitutes a significant threat to contaminating groundwater.

Maximum Noise Level (L_{max}). The L_{max} is the highest instantaneous noise level during a specified time period.

Minimum Noise Level (L_{min}). The L_{min} is the lowest instantaneous noise level during a specified time period.

Modified Mercalli Intensity Scale. The scale currently used in the U.S. to evaluate the effects of earthquakes. This scale, composed of increasing levels of intensity that range from imperceptible shaking to catastrophic destruction, is designated by Roman numerals. It does not have a mathematical basis; instead it is an arbitrary ranking based on observed effects.

Moment Magnitude Scale. The moment magnitude (Mw) scale measures the relative size of an earthquake based on the area of fault rupture, the average amount of slip, and the force that was required to overcome the friction sticking the rocks together that were offset by faulting.

Mutual Aid. The provision of resources (personnel, apparatus, and equipment) to a requesting jurisdiction already engaged in emergency operations, which have exhausted or will shortly exhaust local resources.

Noise Contours. Lines drawn about a noise source indicating equal levels of noise exposure. CNEL and Ldn are the metrics utilized herein to describe annoyance due to noise and to establish land use planning criteria for noise.

Noise Exposure Contours. Noise exposure contours are noise exposure levels as a function of distance from the noise source.

Noise-Sensitive Area. A noise-sensitive place in a place where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Examples include residences, cemeteries, churches and health care facilities.

National Priorities List (NPL). A list of the most serious uncontrolled or abandoned hazardous waste sites throughout the United States. The NPL lists sites after completing Hazard Ranking System screening and soliciting and responding to public comments about the proposed site.

Peak Particle Velocity (PPV). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings.

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Primary Commercial Service Airports. Airports that have more than 10,000 passenger boardings each year.

Quarternary Faults. Faults that have been recognized at the surface and which have evidence of movement in the past 1.6 million years.

Repetitive Loss Property. Properties that have submitted claims for flood reimbursement at least twice in the last 10 years under the National Flood Insurance Program.

Resources Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste.

Richter Scale. A numerical scale for expressing the magnitude of an earthquake on the basis of seismographic oscillations. The scale is logarithmic and a difference of one represents an approximate thirtyfold difference in magnitude.

Root-Mean-Square (RMS). RMS is the average of the squared amplitude of a vibration signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration. Because the human body responds to average vibration amplitude, RMS velocity values as measured in VdB are used to estimate vibration effects on humans.

Single-Event Noise Exposure Level (SNEL). The single event noise exposure level, in decibels (dB), is the noise exposure level of a single event, such as an aircraft flyby, measured over the time interval between the initial and final times for which the noise level of a single event exceeds a given threshold noise level.

Safety Compatibility Zones. Zones adjacent to airport runways which are delineated using Caltrans *Airport Land Use Planning Handbook* guidelines and adjusted to reflect specific operating characteristics of the airport. Safety Compatibility zones work to restrict development of land uses that could pose particular hazards to the public or to vulnerable populations.

Subsidence. The sinking of ground when subsurface pressure is reduced by the withdrawal of fluids (e.g., groundwater, natural gas, or oil).

Superfund. Otherwise known as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, is a federal law designed to clean up sites contaminated with hazardous substances and pollutants.

Surface Rupture. Movement on a fault that breaks through to the surface.

Toxic Air Contaminant (TAC). Air contaminants that are known to increase the risk of cancer and/or other serious health effects, ranging from eye irritation to neurological damage.

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Underground Storage Tank (UST). Tanks, including pipes connected thereto, that are used for the storage of hazardous substances and that are substantially or totally underground.

Vibration Decibels (VdB). Average vibration amplitude is a more appropriate measure for human response as it takes time for the human body to respond. Average particle velocity over time is zero, so the root-mean-square (RMS) amplitude velocity level, measured in VdB, is used to quantify annoyance.

Wildland. Land in an uncultivated natural state that is covered by trees, brush, weeds, or grass.

Wildland Urban Interface. Areas where homes or other structure are built near or among lands prone to wildland fire.

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