

ALAMEDA
ALAMEDA
GENERAL PLAN 2040

March 2021 | City of Alameda, California



DRAFT

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City of Alameda, California

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FORWARD

Preparation of the Alameda General Plan 2040 began in 2018 and took shape over a three-year period during which time residents, businesses, community groups, and decision-makers reviewed, revised and refined plan goals, policy statements and priorities, and associated recommended actions.

In 2020, the Alameda Planning Board held four public forums to review and discuss the draft General Plan. Over 1,500 individuals provided written comments and suggestions for improvements to the draft Plan through the General Plan update website. **General Plan 2040 also benefited from recommendations and suggestions from:**

- Commission on People with Disabilities
- Historical Advisory Board
- Recreation and Parks Commission
- Social Service Human Relations Board
- Transportation Commission
- Alameda Architectural Preservation Society
- Alameda Chamber of Commerce
- Alameda League of Women Voters
- Alameda Point Harbor Seal Monitors
- Alameda Renters Coalition
- Bike Walk Alameda
- Community Action for a Sustainable Alameda (CASA)
- Downtown Alameda Business Association
- Friends of the Alameda Wildlife Reserve
- Golden Gate Audubon Society
- I Heart Oakland Alameda Estuary Garbage Cleanups
- Mike's Paddle
- O Kalani Outrigger Canoe Center
- Renewed Hope Housing Advocates
- Rotary Club of Alameda
- Sierra Club
- San Francisco Baykeeper
- Stacked Adventures
- The Alameda Collaborative for Children, Youth and their Families
- The Alameda Point Collaborative
- West Alameda Business Association

01

GENERAL PLAN **ORGANIZATION +** **THEMES**

California Government Code section 65300.5 requires that the City of Alameda prepare and maintain a General Plan with an “integrated, internally consistent and compatible statement of policies” for the City of Alameda.



1.1 INTRODUCTION

Alameda General Plan 2040 (General Plan or Plan) complies with the requirements of California Government Code section 65300, which mandates that each California city and county adopt a comprehensive, long-range, internally consistent plan for the future development and conservation of the community.

This General Plan is a coordinated statement of community goals, policies and actions to guide and manage change to the physical, environmental, economic, and social conditions in the City of Alameda, California. The General Plan guides decision making for the conservation, protection, and improvement of the Alameda community and its natural resources to address long standing and rapidly developing challenges over the next 20 years, including but not limited to climate change, equity and inclusion, transportation and mobility, public safety and disaster preparation.



THE GENERAL PLAN IS:

- Forward-Thinking:** *The General Plan considers the past and present conditions and trends and looks forward to addressing how growth and change should be managed, how unique and valuable characteristics of the community should be protected, improved or enhanced, and where and how new community needs should be addressed. The Plan strives to anticipate changes in technology, climate and economics when addressing how or where the City should take action to address existing or future challenges. The Plan is implemented by a number of shorter term, issue-specific plans, such as the Climate Action and Resiliency Plan (CARP), the Transportation Choices Plan, the Hazards Mitigation Plan, the Emergency Operation Plan, and the Alameda Municipal Code.*
- Comprehensive and Inclusive:** *The General Plan considers all major components of the community's physical, economic, social, and environmental development, as well as the needs of the entire community, neighborhoods and business districts.*
- General:** *Because it is forward-thinking and comprehensive, the General Plan is also general. It is specific enough to effectively guide decision-making, but general enough to allow for unforeseen issues and challenges and year-o-year community decision-making and priority-setting.*
- Implementable:** *The General Plan guides decision-making and supports regulations and programs designed to implement community policy goals. The Alameda Municipal Code implements General Plan policy and regulates the use of land and actions necessary to protect the public health, safety, and general welfare of the community. When evaluating proposed changes to land use, proposed new regulations, and when making funding and budget decisions, the City Council and Planning Board will ensure conformity with General Plan goals and policies.*
- Evolving:** *The General Plan may be amended as necessary. Community needs and priorities shift over time in response to changing community, regional, and global conditions. The Planning Board and City Council annually review the status of the General Plan to ensure that it reflects current community goals and State requirements. Requests for amendments may be submitted by individuals or may be initiated by the City itself. Pursuant to State and local law, any proposed amendment to the General Plan must be considered at a noticed public hearing before the Planning Board, which makes a recommendation on the amendment to the City Council. Upon receiving the Planning Board's recommendation, the City Council will hold a public hearing to consider the amendment and make a decision on the proposed amendment.*



GRAPHIC GUIDELINES FOR THE GENERAL PLAN

Alameda General Plan 2040 is organized by Chapters or “Elements”. Each Element addresses different subject matter and identifies the community’s goals in respect to that subject matter while setting forth a series of goals, policies, and in some cases, actions to achieve Element goals. Policies in each Element are identified by a policy number and two letters, which identify the Element and the policy (such as “HS-1”, which means Health and Safety Element Policy Number 1). Actions are identified by adding a period to the policy number followed by the action letter (such as HS-1.a). Using a consistent numbering system allows for easy reference and helps ensure that the General Plan does not include conflicting policies, which could hamper consistent decision-making and hinder progress toward achieving community goals. Throughout the General Plan additional information is located under the boxes entitled “spotlights”. The information provided in the spotlights is intended to help explain the context, rationale, or vocabulary related to particular policies or programs recommended by the Plan. Refer to Page 9 for a full list of Spotlights in each Element.

Using excerpts from the General Plan, here is a guide to the graphics that signal the important concepts included in the General Plan: **Goals, Policies, Actions and Spotlights**.

GOALS: ELEMENT INTRO

GOAL 1	GOAL 2
 EQUITY Provide for the mobility needs of all Alameda residents, workers, and visitors regardless of income, age, ability, or neighborhood.	 SAFETY Eliminate fatalities and severe injuries on Alameda's streets, sidewalks, crosswalks and trails.

ALAMEDA GENERAL PLAN	MOBILITY ELEMENT
SPOTLIGHT TRANSPORTATION CHOICES PLAN In 2018, the City Council adopted the Transportation Choices Plan to ensure that the city sustains a high quality of life while accommodating population and employment growth. The plan identifies projects and programs to effectively support shifts to transportation modes that make more efficient use of the existing transportation network, are more equitable, less damaging to the environment, and reduce congestion. THE PLAN INCLUDES: MEASURE Current goals and objectives to allow the City to measure its performance in providing effective travel choices and reducing single occupant vehicle trips. QUANTIFY Quantification of existing and expected future travel characteristics in terms of cross city trips and trips within Alameda. IDENTIFY Identification of potential projects and programs that, if implemented, would move the City towards the achievement of the performance goals. These projects and programs have been categorized by their expected performance and by the time frame in which they could reasonably be implemented.	GOAL 1 EQUITY: Provide for the mobility needs of all Alameda residents, workers, and visitors regardless of income, age, ability, or neighborhood. POLICIES: ME-1 Community Participation. Educate the public on transportation issues and encourage, promote and facilitate active and diverse community participation in the development, evaluation, and prioritization of transportation improvements and investments. (See also Policies LU-1, HE-13, and OS-5). Action: a. Public Engagement. Seek out and facilitate input from community members, neighborhood organizations, business associations, interest groups, and transit providers. Ensure inclusion of underserved areas and socially vulnerable communities historically underrepresented in the transportation decision making process. ME-2 Equitable and Inclusive Transportation Planning. Create a transportation system that equitably serves all Alamedans. (See also Policies: LU-1, HE-13 and HS-6). Actions: a. Equity. Ensure that all neighborhoods are equitably served by the citywide transportation system. b. Procedural Justice. Ensure that traffic enforcement is implemented in a fair, respectful, and unbiased manner. c. Environmental Justice. Ensure the fair treatment and meaningful participation of all people regardless of age, ability, culture, ethnicity, gender, race, socioeconomic status, or geographic location when considering the environmental impacts of transportation facilities and services.

THE ALAMEDA GENERAL PLAN IS ORGANIZED AS FOLLOWS:

01

ORGANIZATION + THEMES OF THE GENERAL PLAN

Organization and Themes of the General Plan introduces the General Plan objectives and purposes, and the main themes that run through all Elements of the Plan.

02

LAND USE + CITY DESIGN ELEMENT

The Land Use and City Design Element addresses the use, preservation and development of land and facilities in Alameda consistent with local and regional goals to sustain a high quality of life in Alameda and the region for future generations.

03

CONSERVATION + CLIMATE ACTION ELEMENT

The Conservation and Climate Action Element addresses global and local climate change and the conservation of Alameda's unique natural environment.

04

MOBILITY ELEMENT

The Mobility Element addresses mobility and transportation needs essential to a high quality of life and an economically vital community.

05

HOUSING ELEMENT

The Housing Element addresses the maintenance, improvement, and expansion of housing opportunities in Alameda consistent with local and regional housing needs.

06

OPEN SPACE + PARKS ELEMENT

The Open Space and Parks Element addresses the management, improvement, and expansion of public open space and park lands.

07

HEALTH + SAFETY ELEMENT

The Health and Safety Element addresses the needs to reduce the risk of death, injuries, property damage, and environmental degradation, economic and social dislocation from natural and man-made hazards and protect the population from harmful materials, noise, air quality and other environmental hazards.

FEATURED SPOTLIGHTS:

ORGANIZATION + THEMES

Graphic Guidelines for the General Plan
Alameda Milestones
What is an Equitable and Inclusive City?
The 2020 Pandemic and the 2040 General Plan

LAND USE + CITY DESIGN

State Law, City Charter, and the GP
Sustainable Growth Solutions
FAR + Residential Density
Business Opportunity Areas
Housing Opportunity Areas
Alameda's Neighborhood Character
What is "Affordable Housing"?
Alameda's "Front Doors": Park and Webster Streets
Plan Bay Area
Alameda's Relationship with the Water
Transit Corridors and Transit-Rich Areas

CONSERVATION + CLIMATE ACTION

Climate Glossary
Sea-Level Rise
SB 375
Building Electrification Benefits
Greenhouse Gas Emissions Inventory
Telecommuting
SB 1383
Food Waste

MOBILITY

Climate Change and Transportation
What is Vision Zero?
25 MPH Speed Limit: Why does it matter?
Roundabouts
What is a High Injury Corridor?
Transportation Choices Plan
What Makes a Complete Street?
What is Active Transportation
West Alameda Bicycle and Pedestrian Bridge
Transportation Demand Management
What is VMT?

OPEN SPACE, RECREATION + PARKS

Monarch Butterfly
SF Bay Water Trail
San Francisco Bay Trail
Cross Alameda Trail
Wildlife Habitat Areas of Interest
Special Status Wildlife Species

HEALTH + SAFETY

The Health + Safety Element is Informed By:
Earthquake Hazards
Abandoned Fruitvale Bridge
What is Liquefaction?
Global Heating + Sea Level Rise
Measuring Noise
Community Noise Equivalent Level



SPOTLIGHT

ALAMEDA MILESTONES

- **1776**
Settlement by non-natives begins. Alameda derives its original name, “the Encinal,” from the stands of native oaks.
- **1851**
William Worthington Chipman and Gideon Aughinbaugh purchased the Encinal.
- **1853**
The name “Alameda,” meaning “grove of poplar trees,” was established as a poetic gesture by popular vote.
- **1872**
3 separate settlements, the Town of Alameda, Encinal and adjacent lands, and Woodstock, are established.
- **1902**
Tidal Canal completed and Alameda becomes an island.
- **1920-1930**
Era of civic building, followed by political scandal.
- **1940**
The Naval Air Station commissioned in preparation for WWII and the City’s population reached 89,000.
- **1966**
SF Bay filled to create Southshore neighborhoods.
- **1973**
Measure A passed by voters to prohibit multifamily housing citywide.
- **1977**
SF Bay filled to create Harbor Bay neighborhoods and business park.
- **1991**
Measure A passed to limit residential density to 21 units per acre citywide.
- **1993**
Closure of NAS Alameda Naval Station begins. City loses over 16,000 jobs.
- **2012**
Multifamily housing overlay zoning district adopted. Housing Element certified by State for first time since 1990.
- **2020**
Alameda’s population grows to approximately 79,000 and on-island employment grows to approximately 25,000.

COVID-19 Pandemic spreads to the United States and Alameda reports approximately 2,000 cases and 33 deaths during the first year of the virus.

1.2 LOOKING BACK: A BRIEF HISTORY OF ALAMEDA

Prior to the arrival of the Spanish, Alameda was a peninsula of land covered by a dense forest of coastal live oak and inhabited by Coastal Miwoks who sustained themselves through hunting, fishing and gathering. Settlement of Alameda by non-natives began in 1776, when Luis Peralta divided Rancho San Antonio among his four sons. Alameda derived its original name, “the Encinal,” from the large stands of native oaks (“encino” means “oak” in Spanish) on the Main Island. The name “Alameda,” meaning “grove of poplar trees,” was given to the City as a poetic gesture upon popular vote in 1853.

In 1849, the California Gold Rush brought Americans and Northern Europeans to the San Francisco Bay. Many made their fortunes in supplying goods and services to the region’s burgeoning population. Among these were two young entrepreneurs, William Worthington Chipman and Gideon Aughinbaugh, who purchased the Encinal from Antonio Maria Peralta for \$14,000 in 1851, the year after California became a state. They subdivided the land and sold tracts for residences and orchards. By 1872, three separate settlements, the Town of Alameda, Encinal, and Woodstock, were established in the east, central and western sections of the peninsula. The Town of Alameda was granted a charter by the State Legislature in 1854; incorporation of all peninsula settlements under one local government occurred in 1872.

Early growth of residential, commercial and industrial areas depended upon water and rail transportation and an excellent climate. (See Figure 1-1, Alameda and Surrounding Areas in 1908.) The City’s industrial waterfront and small commercial districts (“the stations”) were developed in conjunction with rail improvements, while neighborhoods of Victorian homes and beach resorts were built attracting tens of thousands of weekend visitors. Major shipyards and Neptune Beach (the “Coney Island of the West”) were established along the northern and southern shores to take advantage of the island’s coastal assets. In 1902, the Tidal Canal was completed and Alameda became an island.



FIGURE 1.1: ALAMEDA AND SURROUNDING AREAS IN 1908

In the decades between 1920 and 1970 the City witnessed cycles of boom and bust. Following an enlightened era of civic building during the 1920s, Alameda endured difficult years of political scandal and corruption through the 1930s. The entry of the United States into World War II focused the City's attention on the war effort. During World War II, shifts ran around the clock at the Alameda Naval Air Station (commissioned in 1940) and in the City's shipyards. The City's population reached an all-time high of 89,000.

In 1973, the voters of Alameda passed a measure to amend the City Charter to prohibit multifamily housing in Alameda. City Charter Section 26-1 states, "There shall be no multiple dwelling units built in the City of Alameda". In 1991, the voters added Charter Section 26-3, which limits residential density to one unit for every 2,000 square feet. The two measures, collectively referred to as "Measure A", effectively stopped the development of any multifamily housing in Alameda from 1973 to 2013.



In 1993, the Federal Government announced that it would be closing the naval air station in Alameda, which had operated in western Alameda since the early 1940's. The departure of the Navy resulted in a loss of over 16,000 jobs, but also provided an opportunity for the community to re-envision a future for the western third of the island. In 1996, the City Council adopted a Community Reuse Plan, which envisioned a new mixed-use, waterfront community with over 300 acres of waterfront open space, parks, and conservation areas, called Alameda Point.

In the 2000's the Alameda community continued its planning efforts to address changing local and regional conditions. In 2003, the City Council adopted the Alameda Point General Plan Element, the Northern Waterfront General Plan Element in 2007, and an updated Transportation Element in 2008. In 2009, the City Council adopted a State mandated density bonus ordinance, which provides an opportunity to exceed the Measure A residential density limits and waive the prohibition on multifamily housing, if a project includes specified amounts of deed restricted affordable housing units. In 2012, pursuant to State Housing Element Law requirements to identify sufficient

land zoned for residential use to accommodate the City's Regional Housing Needs Allocation, the City Council adopted an updated Housing Element and a Multifamily Residential Combining Zone (MF District), which permits multifamily housing by right with a residential density of up to 30 units per acre on specific sites in Alameda. In 2013, construction began on the townhomes on 5th Street across from the Alameda Landing shopping center - the first privately constructed multi-family homes in Alameda in over 40 years. In 2015, the Council updated the Housing Element for the period of 2015 to 2023, and an updated Safety and Noise Element and Transportation Choices Plan in 2017. In 2018, the City Council adopted an Economic Development Strategic Plan, a five-year road map for economic development programs and initiatives. By 2019, the community completed and the City Council adopted a Climate Action and Resiliency Plan (CARP), which sets the overarching goal of making Alameda a resilient community.

By 2020, Alameda had grown to be a vibrant mixed-use community with a population of approximately 79,000 residents and a variety of innovative and traditional businesses employing an estimated 25,000 people.



The General Plan considers the quality of its housing, open space, economic and cultural environment.





SPOTLIGHT

THE 2020 PANDEMIC AND THE 2040 GENERAL PLAN

General Plan 2040 was largely crafted and finalized in the midst of the 2020 Coronavirus Pandemic, a health crisis the nation hadn't seen in over 100 years. As the community worked on its General Plan for the future, the community also faced questions about recovery and the need to become a more resilient and innovative community. Lessons from the pandemic enriched and helped shape the creation of a bolder General Plan that emphasizes the power and benefits of equity, resiliency, partnerships, and technology.



A RENEWED FOCUS ON EQUITY

COVID-19 demonstrated that everyone has the right to live in a safe and healthy community. The people most affected by the pandemic were also the most vulnerable members of the community before the pandemic. Alameda must redouble its efforts to ensure health, safety, housing and economic stability for all of its residents and expand efforts to consider all planning and investment decisions through the equity lens.



BUILDING RESILIENT COMMUNITIES

The pandemic reinforced the value of living in walkable, safe, and connected communities with access to open space and nature and the importance of building sustainable, livable and resilient neighborhoods.



PARTNERSHIPS, COORDINATION AND COMMUNICATION

The pandemic revealed the importance and need for every level of government and the community to work together in a coordinated way toward a collaborative, shared response and recovery. The pandemic showed the power and potential of the community to develop innovative responses (St. George Spirits making hand sanitizer, merchants building outdoor spaces for safe retail and restaurants, and community volunteers maintaining the Slow Street program) and work in partnership with government to address Alameda's biggest challenges.



INNOVATION AND RISK TAKING

The pandemic revealed the power of innovation and calculated risks. During the pandemic, the City and the Alameda community proved that it can work together to make decisions quickly and take risks. In a matter of weeks, the community and the City decided that Park Street and Webster Street needed to be transformed from the four lane arterials they had been for over 100 years to two-lane roads with additional space for people and commercial enterprise. Within weeks, the City and the community decided it needed to create its "Slow Streets" program to create space for safe public walking and exercise during the pandemic. These experiments in city planning and public space transformation showed the power of good ideas and the willingness to experiment and take risks for the benefit of the community and provided examples that will help the City and community to address a full range of problems and challenges facing the community over the next 20 years.





1.3 LOOKING AHEAD: ALAMEDA IN 2040

Located at the center of a growing and evolving San Francisco Bay Area, the next 20 years will be a period of change presenting both challenges and opportunities for the Alameda community.

POPULATION GROWTH AND HOUSING:

By 2040, according to the Association of Bay Area Governments, the nine-county San Francisco Bay Area is projected to grow to include 4.5 million jobs and 9.3 million people. The continued growth in employment and population will continue to create housing and transportation challenges and economic opportunities both regionally and locally.

Alameda will continue to provide for its share of the growing regional housing need as required by State Housing Law and Alameda's regional housing needs allocation, which is projected to include the need for approximately 10,000 to 12,000 new housing units in Alameda over the next 20 years. The majority of the growth in Alameda will occur on the former Naval Air Station lands and along the Northern Waterfront of Alameda. Both areas are designated as priority development areas in the regional plan, Plan Bay Area. Additional housing opportunities exist for accessory units and additional units on existing residential properties, and along the Park Street and Webster Street commercial corridors and shopping centers. It is expected that Alameda's existing historic neighborhoods and commercial main streets will look very similar in 2040 as they do today and as they did in 2000 since much of the new housing in these areas will be limited to backyard accessory buildings and addition of units within existing buildings.



SPOTLIGHT

WHAT IS AN EQUITABLE AND INCLUSIVE CITY?



An equitable and inclusive city is a city that works to eliminate disparities, eliminate burdens, extend community benefits, provide affordable and fair access to housing, and provide socio-economic opportunities for all historically under-served and underrepresented populations.

Achieving equity and inclusiveness requires intentional engagement and consideration of under-served and underrepresented populations in all decisions and working intentionally to recognize, address and prevent repetition of the injustices suffered by communities of color, class, gender, age, sexuality, spiritual belief, nationality, immigration status, political beliefs and/or tribal affiliation throughout Alameda's history.

JOB GROWTH AND EMPLOYMENT:

Over the next 20 years, the San Francisco Bay Area is expected to remain a global leader and center for the development of new technologies, research, development, and innovation. The growing Bay Area economy is expected to create opportunities for business and job growth in Alameda and increased on-island employment opportunities for Alameda residents. Alameda's business community is expected to create between 10,000 to 12,000 new jobs over the next twenty years. Most of the new jobs will be located at Alameda Point, along the Northern Waterfront, and in the Harbor Bay and Marina Village business parks.

TRANSPORTATION AND CLIMATE CHANGE:

Over the next twenty years, transportation and climate change will pose major challenges for Alameda and the region. Regional employment growth and housing shortages will continue to strain the regional roadway and transit systems, including Alameda's connecting network of streets, roads, and transit systems. Automobile trips will continue to increase regional greenhouse gas emissions and contribute to global warming and the resulting rising of the Bay that surrounds this island community and the groundwater below the community. In the next 20 years the community will experience rising sea and groundwater levels and more frequent flooding in Alameda.

EQUITY AND INCLUSION:

The global COVID-19 pandemic of 2020 demonstrated that living on an island does not protect us from global and regional challenges, and the pandemic revealed the severity of the inequalities within the Alameda community. Over the next 20 years, Alameda and the region will face the need to address the inequities that have been systematically embedded in the Bay Area and Alameda economy, housing policies, transportation system, public safety standards and priorities, and health care systems over the last 150 years. In 2020, it became apparent that the most vulnerable members of our community are the least likely to be able to "shelter in place", "work from home", and educate their children "virtually". Many in the Alameda community do not have access to affordable housing, adequate transportation, or adequate health care. In 2020, children and seniors are the most likely to suffer severe injuries or death while walking across the street in Alameda, and there are people living in tents, cars, and cardboard structures in Alameda's parks and on Alameda's streets.

1.4 THEMES OF THE GENERAL PLAN

The General Plan Elements and their associated policies and actions provide a policy framework to guide future decisions to achieve four overarching themes.

THE GENERAL PLAN'S POLICIES REINFORCE FOUR BROAD THEMES:



EQUITY

Promote a healthy, equitable and inclusive city.

General Plan 2040 policies promote equity, environmental justice, and a high quality of life for everyone irrespective of income, race, gender, sexual orientation, cultural background or ability by recognizing and changing local policies, programs, ordinances, and practices that serve to perpetuate injustices suffered by under-served and underrepresented populations and proactively engaging these populations in all City decision making.



ACCESS

Enhance mobility and accessibility.

Living on an island in the center of a major metropolitan area contributes to the high quality of life in Alameda, while creating unique challenges and opportunities for mobility. General Plan 2040 policies support and enhance mobility and accessibility by increasing transportation choices and options for Alameda residents, businesses and visitors, eliminating severe injuries and fatalities on Alameda streets, and making the shoreline more accessible.



ENVIRONMENT

Protect the environment, respond to the climate crisis and meet regional responsibilities.

Alameda's island geography and environmental setting is very vulnerable to the impacts of climate change, including rising sea and groundwater levels, more severe droughts, wildfire smoke, and other impacts of climate change. General Plan 2040 policies support global, regional, and local efforts to reduce greenhouse gas emissions locally and regionally and prepare for climate change through smart growth development policies, strategic infrastructure improvements, and expanding and protecting natural conservation areas, marshes, and wetlands.



CHARACTER

Preserve and enhance Alameda's distinctive character.

Alameda is distinguished by its island setting, diverse neighborhoods and main streets, extensive tree canopy and overall walkability and livability. These qualities, and others, contribute to the quality of life for residents while providing the framework for shaping development, conserving resources and maintaining a thriving economy. General Plan 2040 policies manage growth to address current challenges and responsibilities while retaining and building upon the physical qualities and characteristics that contribute to a high quality of life in Alameda.



The General Plan recognizes the diverse characteristics that define Alameda.





1.5 IMPLEMENTATION AND PRIORITY SETTING

The General Plan establishes the local development and conservation policies necessary to guide physical development and protect the general health, safety and welfare of the community. The General Plan is implemented by ensuring that all City ordinances, plans, and actions are consistent with the General Plan, that the adopted City Budget and Capital Improvement Program is consistent with the General Plan, and that every land use, development, conservation, preservation, open space and recreation, and public safety decision is consistent with the General Plan.

California Government Code § 65400 et seq. requires that the City of Alameda annually review the adequacy of the General Plan and progress made toward meeting the City's regional housing need allocation. The annual General Plan review provides the opportunity to assess the community's progress toward achieving its goals as articulated in the General Plan, annually review city resources and set implementation priorities for the upcoming year in consideration of available public resources and current community priorities and needs.

02

LAND USE + CITY DESIGN ELEMENT

The Land Use and City Design Element establishes goals, policies and actions to ensure the orderly development of the community and to provide a sustainable, safe and healthy environment for all Alamedans. The Element establishes how land uses are to be distributed across the city and where new development may be accommodated in support of General Plan, Climate Action and Resiliency Plan, Transportation Choices Plan, and the regional sustainable communities strategy, Plan Bay Area goals and policies. The policies in this element are intended to provide for the health, safety, housing, employment, service, and recreational needs of all Alamedans.



THE GOALS OF THE LAND USE + CITY DESIGN ELEMENT ARE:

GOAL 1



CHARACTER

Maintain and enhance safe, healthy, sustainable, complete and connected neighborhoods, districts, and waterfronts that support a high quality of life and fair and equitable access to affordable housing, employment, education, recreation, transportation, services, and participation in public decision making.

GOAL 2



ECONOMY

Strengthen and diversify the Alameda business community and economy.

GOAL 3



SUSTAINABILITY

Make Alameda a more sustainable and environmentally sensitive, waterfront community.

GOAL 4



DESIGN

Promote sustainable, high-quality, accessible city design.



2.1 LAND USE CLASSIFICATIONS AND DIAGRAM

The land use diagram and classifications depict and describe the existing and intended location, distribution, intensity, and physical character and form of the development and use of land across the city in support of General Plan policies and State of California Government Code requirements.

The General Plan land use classifications, include:

NEIGHBORHOODS

Low-Density Residential: The Low-Density Residential areas are neighborhoods of predominantly single family detached homes with some multi-family residential buildings, accessory dwelling units, child care, shared living, assisted living facilities, residential care facilities, a hospital, schools, religious institutions, and home-based businesses. Buildings in these areas are typically 1 to 3 stories in height, and residential blocks are typically between 5 to 13 units per acre.

Low-Density area zoning regulations (i.e the R-1 zoning district) should permit a maximum height limit of 30 feet, accessory and junior accessory units, and maximum residential density of 13 units per acre.

Medium-Density Residential: The Medium-Density Residential areas are neighborhoods characterized by a wide variety of housing types, including single family detached homes, attached courtyard homes, multifamily rental buildings, multifamily condominium buildings, shared living, assisted living and residential care facilities. These neighborhoods also include a variety of non-residential uses, including child care, schools, religious institutions, home-based businesses, medical offices and clinics, office buildings, and personal service businesses. Buildings in these areas typically vary from 1 to 4 stories in height. The residential density of blocks in these areas varies from 10 to 30 units per acre. Some individual buildings are over 100 units per acre.

In support of State Law and General Plan affordable housing, transit-oriented development, city design, and sustainable development policies, zoning districts in the Medium Density Residential area (ie. R-2, R-3, R-4, R-5 and R-6) should permit by right a wide variety of housing types, including multi-family housing and a wide variety of non-residential uses. Height limits should vary from 35 feet (to allow for a three story building) in the R-2 zoning district to 50 feet in the R-6 zoning district (to allow for a four story building), and the maximum residential densities for development of an individual property should vary from 21 units per acre in the R-2 and R-3 districts, 30 units per acre in R-4, 40 units per acre in R-5, and 50 units per acre in R-6. Residential density bonuses should be granted consistent with state law for projects that provide additional affordable housing.



SPOTLIGHT

FAR: FLOOR AREA RATIO + DENSITY

FAR (Floor Area Ratio) and Density are two different ways of measuring development capacity and intensity.

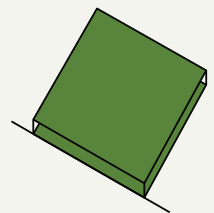
FAR is a measure of building floor area (size) relative to parcel size. A 5,000 square foot building on 5,000 square foot lot represents a FAR of 1.0 (1:1). If the building is increased to 10,000 square feet, the FAR increases to 2.0. FAR is a good estimate of building size and development capacity on land, but is not a good measure of building height. A 10,000 square foot building on a 5,000 square foot lot might be 2 stories of 5,000 square feet each or 5 stories of 2,000 square feet each, but both buildings represent an FAR of 2.0.

Density is a measure of number of housing units relative to parcel size. A 30 unit residential building on a one acre parcel represents a density of 30 units per acre. Density is a good way to estimate residential capacity of land, but it is not a good estimate of building size or height. A building with 30 one bedroom units on a one acre parcel is going to be much smaller than a building with 30 three bedroom units on a one acre parcel, but both buildings will represent a density of 30 units per acre.

FLOOR AREA RATIO (FAR)

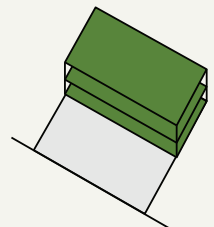
1 STORY
(100% LOT COVERAGE)

FAR = 1:1



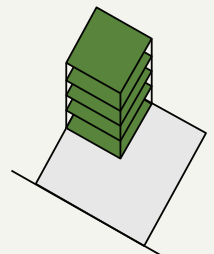
2 STORY
(50% LOT COVERAGE)

FAR = 1:1



4 STORY
(25% LOT COVERAGE)

FAR = 1:1





SPOTLIGHT

STATE LAW, THE CITY CHARTER, AND THE GENERAL PLAN

State law requires that each city adopt a General Plan that facilitates and encourages the development of a variety of types of housing for all income levels, including multi-family housing. Under state law, zoning that prohibits multi-family housing and prohibits residential density of more than 30 units per acre in an urban environment like Alameda, does not support or encourage the development of lower income housing.

Alameda City Charter Article 26 prohibits construction of multi-family housing and residential densities over 21 units per acre. Multi-family housing is more affordable than single family detached housing. Therefore Article 26 is excluding access to housing for those who cannot afford to own or rent a detached single family home in Alameda and severely limits the City's ability to eliminate disparities and burdens, provide affordable and fair access to housing and socio-economic opportunities for historically under-served and under-represented populations.

Despite the City Charter's prohibitions, to comply with State law, the Alameda General Plan must identify which areas of the City are appropriate for multi-family housing and residential densities of at least 30 units per acre. The land use classifications identify those areas and the Housing Element of the General Plan must also be updated every 8 years to include an updated list of specific properties within those areas that will be available to accommodate the regional affordable housing.

MAIN STREETS, STATIONS AND CENTERS

Neighborhood Mixed-Use: These areas, which were originally developed to serve neighborhood stations for the Alameda commuter rail system, are small, compact, pedestrian-oriented "corner store" neighborhood mixed-use districts with 1 and 2-story buildings typically with commercial and retail uses on the ground floor and multi-family residential and office uses on upper floors. The ratio of floor area to parcel size (FAR) in these areas is typically 0.5 to 2.0. Mixed use buildings with residential units above ground floor retail in these areas vary from 30 and 90 units per acre.

In support of State Law and General Plan policies, the C-1 Neighborhood Business zoning district, which governs these areas should permit multi-family housing by right above ground floor commercial use, a maximum building height of 40 feet to allow for a three story building, a maximum residential density of 50 units per acre, and a maximum FAR of 3.0. Residential density bonuses should be granted for projects that provide additional affordable housing.

Community Mixed-Use: The Community Mixed-Use areas include the pedestrian and transit-oriented mixed-use districts along the Park and Webster Street "Main Street" corridors and the shopping centers at South Shore, Marina Village, Harbor Bay, and Alameda Landing. Existing buildings in these areas vary from 1 to 3 stories in height, with a FAR of 0.25 to 3.0. Existing mixed-use buildings in these areas have a residential density of between 30 and 90 units per acre.

In support of State Law and General Plan policies, the C-2 Central Business zoning district and the C-C Community Commercial zoning district should permit multi-family housing by-right above ground floor commercial, a maximum height of 40 to 80 feet, a maximum FAR of 3.0, and a maximum residential density of 30 to 65 units per acre, depending on the sub district and historic district designations. Residential density bonuses should be provided for project that provide additional affordable housing

Mixed-Use: These areas at Alameda Point and along the Northern Waterfront are designated Priority Development Areas in the regional sustainable communities plan, Plan Bay Area. These diverse areas include a variety of buildings varying in height from 1 to 5 stories, with residential densities of 10 to 100 units per acre and FAR of 0.25 to 4.0.

In support of State Law and General Plan policies, Mixed-Use area zoning districts (i.e. Alameda Point Zoning District, North Park Street Zoning District, MX Zoning District) should permit a wide variety of housing types, including multi-family housing, a maximum height limit of 35 to 100 feet, a maximum residential density of 30 to 87 units per acre, and a maximum FAR 0.25 to 5.0 depending on the subdistrict and historic district designations.

BUSINESS AND WORK

Business and Employment Areas: The Business and Employment areas include the Harbor Bay Business Park, the Marina Village Business Park, and Ballena Isle, which include office, research and development, bio-technology, food manufacturing, maritime commercial, manufacturing, distribution, and visitor serving hotels and restaurants. Residential use is not permitted in these areas. The FAR of buildings varies from 0.25 to 2.0, and building heights vary from 1 to 5 stories.

In support of General Plan economic development policy goals, the Business and Employment zoning districts (i.e. CM District, MX District) should permit a maximum height limit of 100 feet and a maximum FAR of 0.5 to 3.0.

General and Maritime Industry Areas: These areas at the former Todd Shipyards and adjacent Alameda Landing Waterfront provide space for waterfront maritime and heavier manufacturing and distribution uses. Residential use is not permitted in these areas. The ratio of floor area to parcel size in these areas varies from 0.25 to 1.5, and building and warehouse heights typically vary from 1 to 4 stories in height.

In support of General Plan economic development policy goals, the General and Maritime Industrial zoning districts (i.e. M-1, M-2, CM) should support a maximum building height of 100 feet and a maximum FAR of 0.5 to 2.0.

Commercial Maritime/Recreation/Marinas Areas: These areas are submerged lands appropriate for recreational marinas and commercial boatyards and maritime businesses. Residential use (except “live-aboards”) is not permitted in these areas.

In support of General Plan economic development goals, Maritime Commercial zoning districts should permit a maximum height limit of 50 feet and maximum FAR of 0.25 to 1.0.



SPOTLIGHT

HOUSING GROWTH OPPORTUNITY AREAS

To accommodate regional and local housing needs, the General Plan identifies these key housing growth opportunity areas.



Alameda Point is a key housing opportunity site to meet regional and local housing needs.

COMMUNITY MIXED-USE AREA:

- Park Street
- Webster Street
- South Shore Shopping Center
- Alameda Landing Shopping Center

MIXED-USE AREA:

- Alameda Point
- Northern Waterfront
- Coast Guard Island

MEDIUM DENSITY RESIDENTIAL:

- North Housing at Singleton
- Infill Sites



SPOTLIGHT

BUSINESS GROWTH OPPORTUNITY AREAS

To accommodate business growth, the General Plan identifies these key business growth opportunity areas:



The Harbor Bay Business Park is identified as a key Business Opportunity area

COMMUNITY MIXED-USE AREA:

- Park Street
- Webster Street

MIXED-USE AREA:

- Alameda Point
- Northern Waterfront

BUSINESS + EMPLOYMENT AREAS:

- Harbor Bay Business Park
- Marina Village Business Park

GENERAL + MARITIME INDUSTRY AREAS:

- Todd Shipyards
- Alameda Landing Waterfront

PARKS AND WILDLIFE

Public Parks and Recreation Areas: These areas are to be preserved for public parks, greenways, and recreational facilities including commercial marinas, restaurants, boat rentals and repair businesses. Residential use (except “live-aboards”) is not permitted in these areas.

General Plan policies support Zoning District maximum height limits of 1 to 2 stories and maximum floor area ratio of 0.1 to 0.5.

Wildlife Habitat Areas: These areas are preserved for natural resources, wildlife and wildlife habitat. Residential uses are not allowed in these areas. New development in these areas is limited to structures and uses that support preservation of the habitat. Policies support plans, regulations, and investments to restore and/or preserve these areas to support the health and well being of the community as well as to prepare for the changing climate.

General Plan policies support Zoning District maximum height limits of 1 to 2 stories and maximum floor area ratio of 0.1 to 0.25.

INSTITUTIONS

Public Institutional Use Areas: These areas are primarily for public buildings, grounds, services, schools, colleges, and institutions. New development in these areas is limited to structures and uses that support or enhance the mission of the institutions.

General Plan policies support Zoning District maximum height limits of 3 to 5 stories and maximum floor area ratio of 0.1 to 2.

Federal Lands Overlay: These are lands currently owned by the Federal Government for military use. The underlying land use designation establishes the planned use of the land in the event that the land is conveyed out of federal ownership at a future date.

Coast guard island, located in the Oakland Estuary, is currently owned by the Federal Government.



GOAL 1: CHARACTER

Maintain and enhance safe, healthy, sustainable, complete and connected neighborhoods that support a high quality of life and fair and equitable access to affordable housing, employment, education, recreation, transportation, services, and participation in public decision making.

POLICIES:

LU-1

Inclusive and Equitable Land Use and City Design.

Promote inclusive and equitable land use plans, policies, zoning regulations, and planning processes. (See also Policies CC-1, CC-2, ME-1, ME-2, ME-3, HE-9 and HE-13).

Actions:

- a. Equitable Plans.** *Ensure that citywide and neighborhood plans are inclusive, non-discriminatory, and culturally responsive. Plans should reduce disparities, promote equitable access, minimize the impacts of income disparity, minimize displacement and promote fair access to affordable housing.*
- b. Exclusionary and Discriminatory Policies.** *Rescind existing policies, programs, or development standards that are exclusionary or discriminatory.*
- c. Equitable Distribution.** *Ensure that the uses, facilities, and services that are needed for a high quality of life are distributed equitably throughout the city.*
- d. Inclusive Processes.** *Ensure robust community involvement in all city planning, public investment, and development review decision making by actively engaging all segments of the community, especially those that have historically been less engaged in city decision-making such as lower-income families, people of color, and youth.*
- e. Equal Representation.** *Encourage a cross section of the community in the appointments for commissions and other boards and advisory committees.*

LU-2

Complete Neighborhoods. Maintain complete, safe, healthy, and connected neighborhoods that support a mix of uses and meet the needs of residents of all ages, physical abilities, cultural backgrounds and incomes. (See also Policies HE-2, HE-3, HE-4 and HE-15).

Actions:

- a. Healthy Neighborhoods.** *Provide equitable and safe access to housing, parks and recreation facilities, community services, public health services, schools, child care facilities, and neighborhood amenities in all neighborhoods.*
- b. Parks and Open Space.** *Provide a comprehensive and integrated system of parks, trails, open space, and commercial recreation facilities within a safe and comfortable 1/4 mile walk from all neighborhoods. (See also Figure 6.2).*
- c. Water Access.** *Provide convenient and safe bicycle and walking access to the waterfront from all residential neighborhoods.*
- d. Accessory Units.** *Permit accessory dwelling units in all residential and mixed-use zoning districts to increase the supply of small, more affordable housing units.*
- e. Affordable Housing.** *Permit rental and ownership housing opportunities for all income levels, ages and family types and sizes in all residential and mixed-use zoning districts.*



SPOTLIGHT

WHAT ARE THE QUALITIES THAT GIVE ALAMEDA ITS UNIQUE CHARACTER?

General Plan policies embrace and support the desirable qualities and assets that give Alameda its unique character. Understanding those qualities is important, in order that future community design decisions and investments continue to support, enhance and maintain Alameda's character. The characteristics that give Alameda its special character are:



WALKABILITY

Alameda, like all great places, is walkable. Short blocks, generally two lane roads, a traditional street grid, street trees, and a network of public parks and open spaces, a pair of commercial "Main Streets", and human-scaled buildings, make walking in Alameda pleasant and comfortable.

LEAFY STREETS

The mature deciduous and evergreen trees along Alameda's city streets and in its parks are critical to Alameda's neighborhood character. Systematic planting of a variety of younger specimen trees in the future is essential to maintaining and expanding Alameda's urban forest for future generations.

HUMAN SCALE

Alameda is "human scale". Tall trees, narrower streets with slower moving traffic, and buildings generally one to four stories in height fronting onto the sidewalk creates an environment that is best appreciated by the human senses and at eye level. Maintaining a human scale in all changes to landscapes, streets, and buildings is maintaining Alameda's character.

CITY OF NEIGHBORHOODS AND MAIN STREETS

Alameda is a city of neighborhoods and main streets that has endured and evolved over time. Walkable, mixed-use neighborhoods with nearby parks and main streets, living in Alameda feels more like living in a small town than living in a metropolitan city of 80,000. General Plan policies preserve and build on this neighborhood fabric to accommodate inclusive residential and commercial growth while maintaining its charm.

CONNECTED TO NATURE

Memorable towns and cities are often surrounded by natural areas or defined by natural features, such as a river or a lake. Alameda's island setting contributes to its distinctive feeling of being connected to nature. Alameda's street grid provides multiple ways to explore the outdoors and easily connect to the water's edge. Maintaining Alameda's network of public open spaces and parks and promoting improvements to retain and enhance access to the water for all Alamedans will be essential to maximizing and preserving Alameda's unique natural assets.

QUALITY ARCHITECTURE AND DESIGN

Although Alameda buildings represent a wide range of Bay Area regional architecture styles, they are well-crafted, comfortable, and rich with personality and color. Continuing to promote design excellence by ensuring that City development regulations express clear outcomes is essential.

- f. Multi-family and Shared Housing.** Permit multi-family and shared housing opportunities, including co-housing, congregate housing, senior assisted living, single room occupancy housing, transitional housing, emergency warming shelters, and shelters for the homeless in all Medium-Density residential zoning districts and in all three of the Mixed-Use Land Use Classification zoning districts to provide for the housing needs of all Alamedans.
- g. Child Care.** Permit child care facilities and services in all residential and mixed-use zoning districts.
- h. Cottage Business and Home Occupations.** Permit small employment and business opportunities such as home occupations, live work, and “cottage” businesses in all residential and mixed-use zoning districts to reduce commute hour traffic and associated greenhouse gas emissions.
- i. Local Food.** Permit farmers’ markets and community gardens in all residential and mixed-use zoning districts to increase access to healthy foods for all residents throughout the city.

LU-3

Complete Streets. Promote safe and walkable neighborhoods with inter-connected well-designed streets that serve the needs of all Alamedans and all modes of transportation. (See also Policies ME-1, ME-5, ME-6, ME-7, ME-14, CC-7, HE-12 and the ‘What Makes a Complete Street?’ Spotlight in the Mobility Element).

Actions:

- a. Connectivity.** Connect neighborhoods and major destinations such as parks, open spaces, the waterfront, civic facilities, employment centers, retail and recreation areas with pedestrian and bicycle infrastructure, and avoid sound walls, gated streets and other similar barriers that separate neighborhoods and decrease physical and visual connectivity.



SPOTLIGHT

WHAT IS AFFORDABLE HOUSING?

“Affordable” is generally considered to mean that the household does not need to pay more than 30 percent of its income on housing costs. In Alameda, land costs and construction costs are high and housing is in short supply. As a result, housing costs are high and generally not affordable to households with a moderate or lower income.

To support construction of units that will be affordable to lower income households, the City of Alameda requires that every housing development with 10 units or more, deed restrict some of the new housing units in the project for very low-income, low-income, and moderate-income households. The deed restriction limits the price of the home or the rent of the home to 30% of each households’ income for those deed restricted units. The cost to subsidize the construction of the deed restricted units is added to the cost to construct the non-deed restricted units in the project. In 2020, the City of Alameda requires all projects at Alameda Point to deed restrict 25% of the units. Everywhere else in the City, 15% of the units must be deed restricted.

In 2020, the areawide median income in the East Bay for a family of four was approximately \$119,200 per year. A very low-income family of four has an income that is no more than half or 50% of the area median income or \$59,600 per year. That household’s housing costs would be limited to approximately \$17,880 per year in a deed restricted “affordable” unit. A low-income household of four presently makes up to 80% of AMI or \$95,360 per year. Their annual housing costs would be limited to \$28,608 per year in a deed restricted unit. A moderate-income household makes up to 120% of area median or \$143,040 per year. Their housing costs are limited to \$42,912 per year in a deed restricted unit.



Everett Commons is an example of recently constructed affordable housing in Alameda.

- b. Pedestrian-Friendly Environment.** *Provide wide sidewalks, street shade trees, pedestrian lighting, bus benches and shelters, and other pedestrian amenities to support walking, rolling, strolling, window-shopping and sidewalk dining.*
- c. Common Areas.** *Provide spaces for community interaction to encourage a sense of collective ownership of public areas.*
- d. Safety.** *Eliminate traffic related fatalities and severe injuries on Alameda streets by providing safe, well-designed pedestrian crossings with adequate visibility for motorists and pedestrians, minimizing curb cuts and driveways that cross public sidewalks and bicycle facilities, providing low-stress bicycle routes, and designing streets to keep automobile travel speeds below 25 miles per hour.*

LU-4

Neighborhood Transitions. Ensure sensitive well designed transitions between neighborhoods and adjoining business districts to minimize nuisances while encouraging mixed-use development that provides commercial services or employment opportunities in close proximity to neighborhoods. (See also Policy HE-15).

LU-5

Neighborhood Mixed-Use. Maintain, promote and support neighborhood-oriented business districts to provide local-serving retail and commercial uses with multi-family housing opportunities above the ground floor commercial uses. (See also Policy HE-11).

Actions:

- a. Neighborhood Serving Commercial Uses.** *Permit continuation and re-investment in existing, small, legal non-conforming neighborhood-serving commercial uses in commercial buildings that predate the zoning code.*
- b. Neighborhood Serving Retail Uses.** *Permit neighborhood serving retail uses in residential districts where office uses are already permitted.*

LU-6

Waterfront Mixed-Use. Provide a wide variety of maritime, commercial, residential, civic, and recreational uses along the waterfront that compliment maritime activities, provide economic opportunities and jobs, and draw residents and visitors to the shore.

Actions:

- a. Water Dependent Businesses.** *Prioritize the current and future needs of public ferry systems, water taxis and shuttles, recreational and boating businesses, and other businesses and activities that require a waterfront location to operate.*
- b. Supporting Services.** *Permit complementary maritime serving and visitor serving commercial services and uses to support the public waterfront access and maritime businesses on the waterfront.*
- c. Public Access and Bay Trail.** *Ensure waterfront public access and Bay Trail improvements in all new waterfront development.*

Alameda
supports
a variety
of maritime
businesses and
services



LU-7

Joint Use. Partner with Alameda Unified School District and other institutions to provide public access for shared and joint use of open space, recreational and community facilities. (See also Policy OS-2).

LU-8

Arts and Culture. Support and promote a diversity of arts and cultural facilities and programs throughout the city for people of all ages. (See also Policy LU-11).

Actions:

- a. **Strengthen Cultural Resources.** Partner with educational institutions, libraries, arts and cultural organizations, the business community and creative industries to strengthen Alameda's network of cultural resources and development of the arts.
- b. **Accessibility of Cultural Facilities and Programs.** Encourage the development of arts, entertainment and cultural facilities that are both physically and financially accessible to all.
- c. **Contributions to Public Art.** Promote and support the public art requirement for new developments within the city.



GOAL 2: ECONOMY

Strengthen and diversify the Alameda business community and economy.

POLICIES:

LU-9

On-Island Goods and Services. Encourage the development of a broad range of commercial businesses and services in Alameda to provide for the diverse needs of the Alameda community and reduce the need to travel off-island to acquire goods and services.

LU-10

Two “Main Streets”. Support, promote and preserve Park and Webster Streets as the city’s two iconic and vibrant “Main Streets” providing Alamedans with a broad mix of local restaurants, stores, entertainment, hospitality, and personal and professional services. (See also Policy LU-28).

Action:

- a. **Business District Partnerships.** *Work in partnership with the West Alameda Businesses Association and the Downtown Alameda Business Association to support, strengthen, and diversify the Park and Webster Streets commercial mixed-use districts.*
- b. **Facade Improvement Programs.** *Provide support for private property owners through facade improvement programs and streamlined permitting processes to improve their buildings and facades and support the overall attractiveness and success of the business district.*

LU-11

On-Island Employment. Increase on-island employment to provide additional employment opportunities for Alameda residents, reduce commute hour congestion, and reduce transportation related greenhouse gas emissions.

Actions:

- a. **Training and Intervention Strategies for Populations Facing Barriers.** *Support programs, strategies and interventions that break down barriers to employment for historically marginalized populations such as youth, seniors, people with disabilities, the formerly incarcerated, and residents with limited English proficiency.*
- b. **Partnerships.** *Partner with the College of Alameda and the Alameda Unified School District to offer more coursework and training oriented toward emerging industries such as green collar, blue economy (sustainable use of ocean resources for economic growth and jobs), and other high-growth employment categories.*

LU-12

Business and Employment Preservation. Protect and preserve Business and Employment and Maritime Commercial and Industrial Areas by prohibiting introduction of residential uses and discouraging the rezoning of property in these areas to allow residential use.

LU-13

Green Economy. Promote a green economy that reduces greenhouse gas emissions generated by Alameda businesses. (See also Policies CC-6, CC-9, CC-11, CC-14, HE-2, HE-10 and HE-11).

Actions:

- a. Incentives.** *Provide incentives and support for businesses that benefit Alamedans and the environment by reducing their greenhouse gas emissions and air pollution through clean energy alternatives, electrification of buildings and operations, and other environmental best practices.*
- b. Green Business Practices.** *Encourage Alameda businesses and industries to become more sustainable and continue to make positive contributions to the community by, for example, hiring locally, supporting telecommuting, utilizing solar power and prioritizing electric vehicles. This includes providing electric vehicle charging stations and a variety of transit options.*
- c. Housing and Transportation.** *To reduce greenhouse gas emissions generated by employee commute trips, support housing at all affordability levels in proximity to employment areas, improve bus, ferry, bicycle and pedestrian facilities in proximity to employment areas, and allow child care facilities in business areas.*

**SPOTLIGHT****ALAMEDA'S "FRONT DOORS":
PARK & WEBSTER STREETS**

Alameda's two main streets, Park Street and Webster Street, are integral to Alameda's identity and community fabric. Park and Webster streets are the gateways that welcome those traveling by bridge or tunnel into Alameda and local neighborhoods' needs.

The General Plan promotes the continued development and evolution of these transit-oriented streets as mixed-use main streets to accommodate local-serving commercial, employment, entertainment, and lower cost housing opportunities.





Alameda is a
city of unique
pedestrian-oriented
mixed use business
districts





GOAL 3: SUSTAINABILITY

Make Alameda a more sustainable and environmentally sensitive community.

POLICIES:

LU-14

Planning for Climate Change. Prepare for climate change and reduce greenhouse gas emissions regionally and locally. (See also Policies CC-3, CC-4, CC-10 and HE-10).

Actions:

- a. Sustainable Communities Strategy.** Maintain consistency between the City's General Plan, the Municipal Code, and the region's Sustainable Communities Strategy Plan Bay Area.
- b. State and Regional Programs.** Continually evaluate City policies, ordinances, and actions, to ensure that the City supports and is an active participant in state and regional efforts to address climate change through greenhouse gas emission reduction, transportation system improvements, and increased affordable housing supply near job centers, public transportation facilities, and other services.

LU-15

Housing Needs. Provide land appropriately zoned to accommodate local and regional affordable housing needs and support the region's Sustainable Communities Strategy to address climate change as well as housing needs. (See also Policies CC-3, HE-1 and HE-2).



SPOTLIGHT

ALAMEDA'S RELATIONSHIP WITH THE WATER

Alameda is defined by water. A source of food for the first native american inhabitants along the northern waterfront, the Bay waters continued to provide opportunities for Alameda throughout its history, including the Alaska Packers fleet that started docking at Encinal Terminals in the 1890's, the shipbuilding industries at what is now Alameda Marina and Marina Village, and the U.S. Navy's deep water port at Alameda Point.

Water continues to provide opportunities for Alameda. Walking along the beach, windsurfing in the bay, rowing in the estuary, seeing views of the water and boat masts rising above buildings, and seeing and hearing the sounds of sea birds is all possible



because of the water that surrounds us. Improving access and connectivity to the water and waterfront increases these opportunities for all Alameda residents.

Alameda's relationship with water is also getting more challenging. The San Francisco Bay around Alameda and Alameda's groundwater are both rising. Alameda must adapt to this new relationship with water. In some areas, allowing water to encroach, such as at the wetlands at Alameda Point, is the preferred approach. In other areas, seawalls and bulkheads will need to be raised. In all areas, the system of storm sewer, lagoons, and the network of pumps that keep Alameda dry will all need to be upgraded and improved to accommodate more water more often.



SPOTLIGHT

PLAN BAY AREA

Plan Bay Area is a long-range plan charting the course for the future of the nine-county San Francisco Bay Area. Plan Bay Area 2050 will focus on four key issues—the economy, the environment, housing and transportation—and will identify a path to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. Plan Bay Area processes are used to allocate housing targets for jurisdictions throughout the region, including the City of Alameda. Those local housing allocations are outlined in the Housing Element of the General Plan.

FOUR KEY ISSUES:



ECONOMY



ENVIRONMENT



HOUSING



TRANSPORTATION

Priority Development Areas, commonly known as PDAs, are areas within existing communities that local city or county governments have identified and approved for future growth. These areas typically are accessible by one or more transit services; and they are often located near established job centers, shopping districts and other services.

Priority Conservation Areas, commonly known as PCAs, are locations designated for the protection of natural habitats and the preservation of open space for future generations. This includes farming, ranching, recreational and resource lands.

LU-16

Climate-Friendly, Transit-Oriented Mixed-Use

Development. Permit higher-density, multi-family and mixed-use development on sites within walking distance of commercial and high quality transit services to reduce automobile dependence, automobile congestion, greenhouse gas emissions, and energy use; provide for affordable housing; make efficient use of land; and support climate friendly modes of transportation, such as walking, bicycling, and transit use. (See also Policies LU-16, LU-33, LU-34, CC-3, CC-10, ME-6, ME-21, HE-5, HE-10 and HE-11).

Actions:

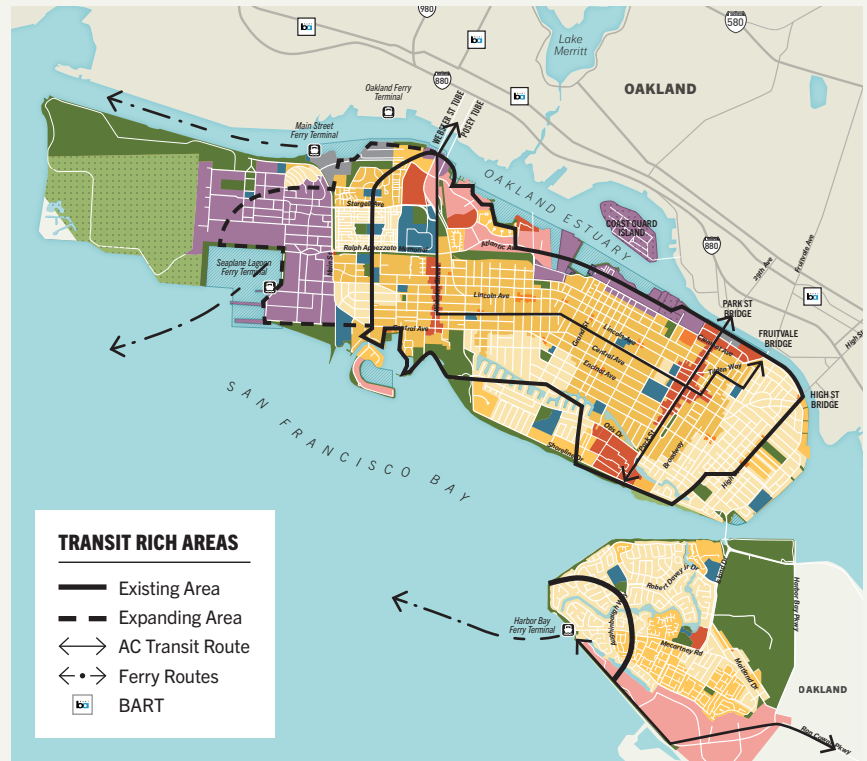
- a. **Transit-Oriented Zoning.** *To support additional ferry service, bus services, and future rail service in Alameda, amend the zoning code to allow for higher-density, mixed-use, multi-family housing in transit-rich locations.*
- b. **Mixed-Use Shopping Centers.** *Amend the zoning code to facilitate the redevelopment and reinvestment in Alameda's single-use retail shopping centers and large open parking lots with higher density mixed use development with ground floor commercial, service, and office uses, and upper floor multi-family housing.*
- c. **Incentives.** *Utilize strategic infrastructure investments, public lands, public/private partnerships, and density bonuses and waivers to incentivize and support mixed-use, transit-oriented development in transit rich locations.*
- d. **Transportation Demand Management Programs.** *Require new developments to include transportation services and facilities to support the City's mode shift goals.*
- e. **Parking Requirements.** *Amend the Municipal Code to replace minimum parking requirements with maximum parking requirements to disincentivize automobile ownership and reduce construction and land costs to help make housing more affordable.*

SPOTLIGHT

WHERE ARE THE TRANSIT-RICH LOCATIONS IN ALAMEDA?

As shown in the figure below, large areas of Alameda are transit-rich, and with the planned expansions of transit service in partnership with AC Transit and WETA to serve Alameda Point and the historically underserved areas of West Alameda, most of Alameda will be transit-rich and able to support the transportation needs of existing and future residents in these areas.

Consistent with California Public Resources Code sections 21064.3 and 21155, Alameda General Plan 2040 considers a transit-rich location to be a property within a half mile of a high-quality transit corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours, a ferry terminal served by bus service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

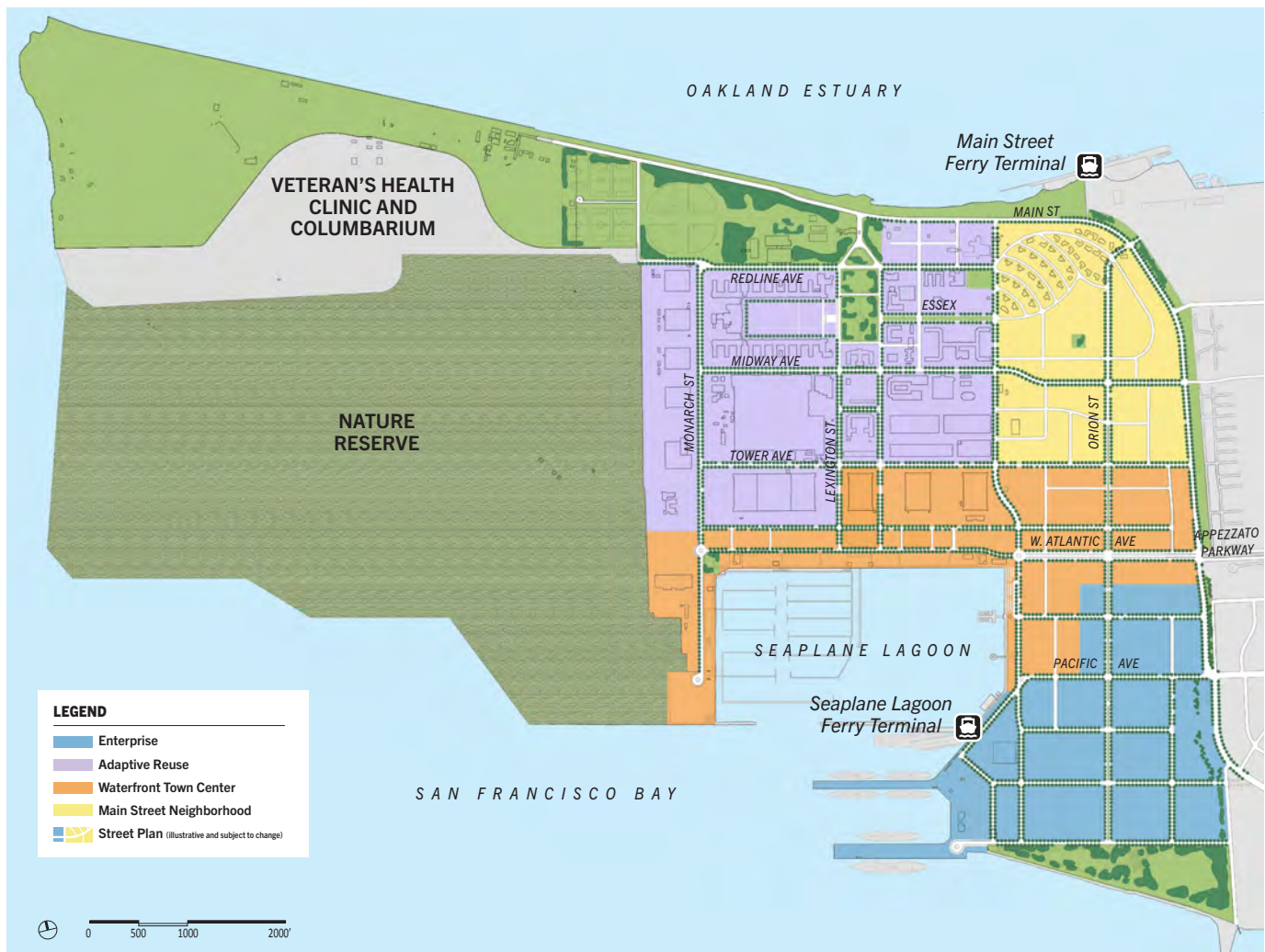


LU-17

Adaptive Reuse and Restoration. Support and encourage rehabilitation, restoration, and reuse of existing structures to retain the structure's embodied energy and reduce the generation of waste. (See also Policies LU-25, CC-17 and CC-18).

Action:

- Intensification and Reinvestment in Existing Buildings.** Promote reinvestment and reuse in existing buildings, including facade improvements, accessibility improvements and additional story height to increase the range of uses and richness of the urban fabric while building on the historic character and form.
- Innovative Design Solutions.** Encourage and support innovative design solutions for the restoration and reuse of older buildings for new uses and avoid design solutions that mimic a prior design style.



ALAMEDA POINT: SUB-AREAS

LU-18

Alameda Point Waterfront and Town Center Mixed-Use District. Consistent with the Waterfront and Town Center Specific Plan, create a compact, transit-oriented mixed-use urban core and vibrant waterfront experience that leverages the unique character and existing assets of the area to catalyze a transformation of the larger Alameda Point area. (See also Policy HE-10).

Actions:

- Mixed-Use.** Create a pedestrian, bicycle, and transit supportive mixed-use urban waterfront environment designed to provide for a mix of uses that include waterfront and visitor-serving uses, retail, service, entertainment, lodging, recreational, and medium to high-density residential.
- Seaplane Lagoon.** Permit uses that promote pedestrian vitality and are oriented to the Seaplane Lagoon, such as a ferry terminal, marinas, viewing platforms, fishing piers, and areas reserved for kayaks and other non-motorized boats. Include "short-duration stop" facilities that support stopping, gathering and viewing with places to sit, interpretive kiosks, integrated water features, public art, and access to the water.

- c. **De Pave Park.** *On the western shore of the Lagoon, support development of “De Pave Park” consistent with the Public Trust and sensitive to the neighboring Wildlife Refuge.*
- d. **Conservation.** *Educate users and enforce restrictions to Breakwater Island and install signs about the sensitivity of the protected bird and mammal species.*

LU-19

Alameda Point Main Street Neighborhood Mixed-Use District. Consistent with the Main Street Specific Plan, provide a variety of housing types and a mix of residential densities with complementary business uses, neighborhood-serving retail, urban agriculture and park uses. (See also Policy HE-10).

Actions:

- a. **Mixed-Use.** *Promote a mixed-use and mixed-income residential neighborhood with parks and community serving businesses and institutions, child care and family child care homes, supportive housing, assisted living, community gardens, urban farms and agriculture, compatible specialty manufacturing and light industrial uses, life science companies, and community services that complement and support the sub-district and Alameda as a whole.*
- b. **Walkable.** *Promote a walkable, transit friendly neighborhood with safe streets, common open space areas and greenways, and pedestrian and bicycle friendly development.*
- c. **Alameda Point Collaborative.** *Support development of a new residential campus for the Alameda Point Collaborative (APC), Building Futures for Women and Children, and Operation Dignity (collectively referred to as the “Collaborating Partners”).*
- d. **NAS Alameda Historic District.** *Preserve the character defining features of the NAS Alameda Historic District Residential Subarea. Preserve the “Big White” single family homes, and consider the preservation of the Admiral’s House for community and/or City use.*

**SPOTLIGHT****THE IMPORTANCE OF PROMOTING SUSTAINABLE GROWTH SOLUTIONS**

With shifts in technology, the impact of the Coronavirus pandemic, and the climate bringing new demands on services and infrastructure, the City of Alameda must maximize limited resources. More efficient land use leads to a more cost and space efficient transportation network for all Alamedans. More residents allows transit agencies to add more service which draws even more Alamedans to use transit. Investments in transit, walking and rolling are critical in addition to adding housing that facilitates efficient transportation modes. By 2040, Alameda could see BART add stations while having faster and more frequent AC Transit and Ferry service, all connected together by a safe network of streets and paths. Growth with inclusive design makes transportation options more reliable, enjoyable and affordable for all Alamedans, including drivers who find some of their neighbors are choosing travel options that free up space for those who are most car dependent.

More efficient land use also leads to more cost-efficient infrastructure. The shift in transportation towards more transit, walking and rolling also saves taxpayers on road repairs while reducing overall transportation expenses for many Alamedans. Whether it is a block of asphalt that needs repaving due to wear and tear from automobiles or a mile of pipe that needs retrofitting due to sea-level rise, even a slightly denser city can reduce its infrastructure costs per person to meet new and existing challenges during this resource-constrained decade.

Priority Development Areas, commonly known as PDAs, are areas within existing communities that local city or county governments have identified and approved for future growth. These areas typically are accessible by one or more transit services; and they are often located near established job centers, shopping districts and other services.

Priority Conservation Areas, commonly known as PCAs, are locations designated for the protection of natural habitats and the preservation of open space for future generations. This includes farming, ranching, recreational and resource lands.

LU-20

Alameda Point Enterprise Sub-District. Support the development of the Enterprise District for employment and business uses, including office, research and development, bio-technology and high tech manufacturing and sales, light and heavy industrial, maritime, community serving and destination retail, and similar and compatible uses.

Actions:


- a. Vibrant Employment District.** *Support the creation of a pedestrian, bicycle, and transit supportive business environment with high quality, well designed buildings within walking distance of transit, services, restaurants, public waterfront open spaces, and residential areas.*
- b. Support and Protect Job Growth.** *Encourage and facilitate job growth and limit intrusion of uses that would limit or constrain future use of these lands for productive and successful employment and business use.*
- c. Pacific Avenue.** *Support the development of Pacific Avenue as an iconic landscaped boulevard with separated bike paths and pedestrian routes.*
- d. Residential Uses.** *Ensure that residential uses are directed to those areas within the district that will not result in limitations or impacts on the ability of research and development, bio-technology, high tech manufacturing, heavy industrial, manufacturing, or distribution businesses to effectively operate in the area.*

LU-21

Alameda Point Adaptive Reuse Sub-District. Support the development of the Adaptive Reuse District for employment and business uses, including office, research and development, bio-technology and high tech manufacturing and sales, light and heavy industrial, maritime, commercial, community serving and destination retail, work/live, and other uses that support reinvestment in the existing buildings and infrastructure within the NAS Alameda Historic District.

Actions:

- a. Preservation of the NAS Alameda Historic District.** *Support and promote a pedestrian, bicycle, and transit supportive urban environment that is compatible with the character-defining features of the NAS Alameda Historic District.*
- b. Investment Opportunities.** *Allow for a wide range of investment opportunities within the district to encourage private reinvestment in the NAS Alameda Historic District.*
- c. Significant Places.** *Encourage the creation of a range of cultural and civic places through the development or adaptive reuse of key civic structures, including libraries, churches, plazas, public art, or other major landmarks to provide a sense of place and unique character.*



Improving access to the waterfront is a key goal of the General Plan.

LU-22

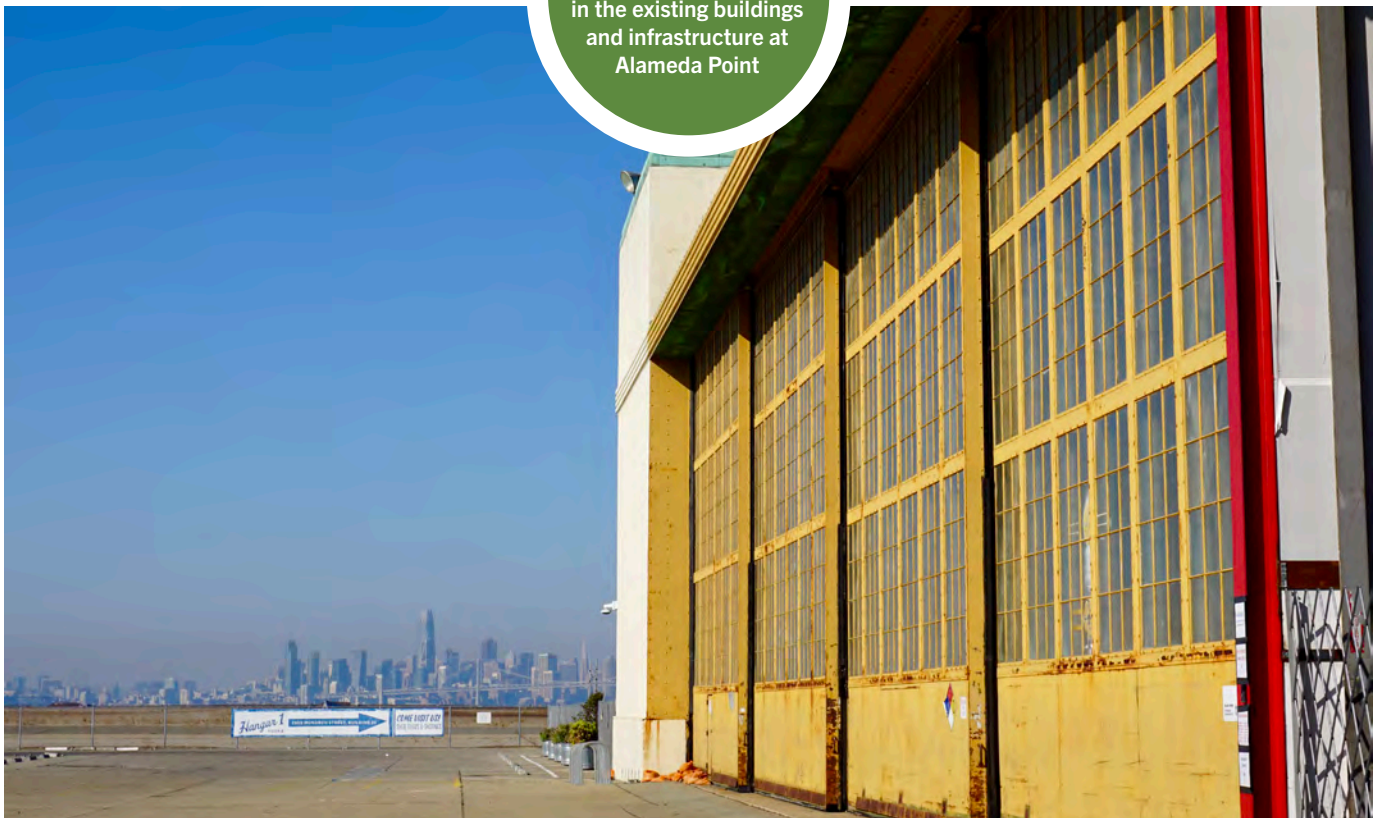
Alameda Point Open Space and Nature Reserve. Provide for parks, recreation, trails, and large-scale public assembly and event areas consistent with the Public Trust Exchange Agreement. (See also Policies CC-29, OS-5, OS-12, and OS-17).

Actions:

- a. Public Access.** Support maximum public access, use and enjoyment of these lands, and the protection of natural habitat and wildlife. Provide a variety of public open space and compatible uses, such as museums and concessions in a manner that ensures the protection of the natural environment.
- b. Limited Use.** Limit uses to public recreation and maritime oriented commercial uses in this sub-district. Provide seasonal public access to wildlife and nature reserve areas.
- c. Nature Reserve.** Support the development of the Nature Reserve and Government sub-district for wildlife habitat to preserve and protect the natural habitat in this area and protect endangered species and other wildlife and plant life that inhabit, make use of, or are permanently established within this area.
- d. Marine Conservation Area.** Consider establishment of a Marine Conservation Area within the submerged lands at the entrance of the Seaplane Lagoon.



The General Plan supports the ongoing reinvestment in the existing buildings and infrastructure at Alameda Point



LU-23

Northern Waterfront Mixed-Use Area. Create a vibrant mixed-use, pedestrian-friendly, transit-oriented neighborhood with a variety of uses that are compatible with the waterfront location. (See also Policy HE-10).

Actions:

- a. Waterfront Access.** *Expand public shoreline access and by redeveloping vacant and underutilized waterfront property with shoreline public open space and a mix of uses and extending Clement Avenue, the Cross Alameda Trail, and the Bay Trail through the Northern Waterfront from Grand Street to Sherman and from Broadway to Tilden Avenue to facilitate the movement of vehicles, bicycles, and pedestrians along the northern waterfront.*
- b. View Corridors.** *Preserve views of the water and Oakland from existing and planned roadways and public rights of way.*
- c. Waterfront Mixed-Use.** *To support a lively waterfront and a pedestrian friendly environment, provide for a mix of uses and open space adjacent to the waterfront including a mix of multi-family residential, neighborhood-serving commercial, office, marine, and waterfront commercial recreation, boat repair, maintenance and storage, dry boat storage and hoists, waterfront restaurants and related amenities.*
- d. Public Launching and Water Shuttle Facilities.** *Support waterborne forms of transportation and water based recreation by providing public docks at Alameda Landing at 5th Street, Marina Village, Alaska Basin at Encinal Terminals, Grand Street Boat Ramp, and Alameda Marina.*
- e. Maritime and Tidelands Uses.** *Promote and support water and maritime related job and business opportunities.*
- f. Historic Resources.** *Preserve the unique historical, cultural, and architectural assets within the area and utilize those assets in the creation of a new, vibrant mixed-use district.*
- g. Del Monte Warehouse and Alaska Packers Building.** *Preserve the Del Monte Warehouse Building consistent with the Secretary of the Interior's Standards for Rehabilitation and its City Monument designation, and preserve the Alaska Packers building for maritime and tidelands compliant uses.*
- h. Encinal Terminals.** *Redevelop the vacant property with a mix of uses to create a lively waterfront development with residential, retail and recreational commercial, restaurant and visitor serving, and maritime uses. Ensure the provision of an accessible, safe and well designed public shoreline promenade around the perimeter of the site adjacent to the Alaska Basin and Fortman Marinas that connects to trail systems. Consider a reconfiguration of the Encinal Tidelands to allow public ownership of the privately held submerged lands and waterfront lands to better provide for public waterfront access and enjoyment and future maritime use.*
- i. Infrastructure Funding.** *Require all new development to fund a fair share proportion of the costs of extending Clement Street from Sherman to Grand and upgrade storm sewer and wastewater facilities to serve all future development within the Northern Waterfront area.*



GOAL 4: DESIGN

Promote sustainable, high-quality, accessible city design.

POLICIES:

LU-24

Universal Design. Continue to promote and require universal design in new construction and rehabilitation to protect the public health, accessibility, and safety of all regardless of ability and ensure equal access to the built environment. (See also Policy HE-4).

Actions:

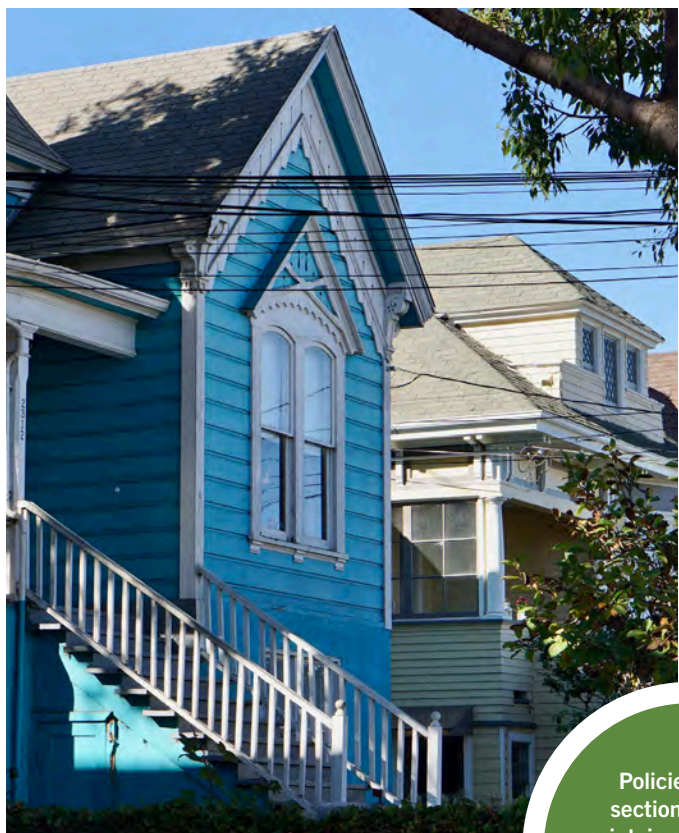
- a. **Principles.** *Incorporate universal design principles at every level of planning and design to ensure an inclusive and healthy built environment.*
- b. **Awareness.** *Promote and raise awareness about the importance of universal design and building an environment that works for everyone.*
- c. **Universal Design Regulations.** *Conduct annual reviews of the City's Universal Design Ordinance to ensure that current best practices of the built and external environment are being used and that implementation is successful in meeting the diverse needs of Alamedans regardless of ability without undue constraints on housing development.*

LU-25

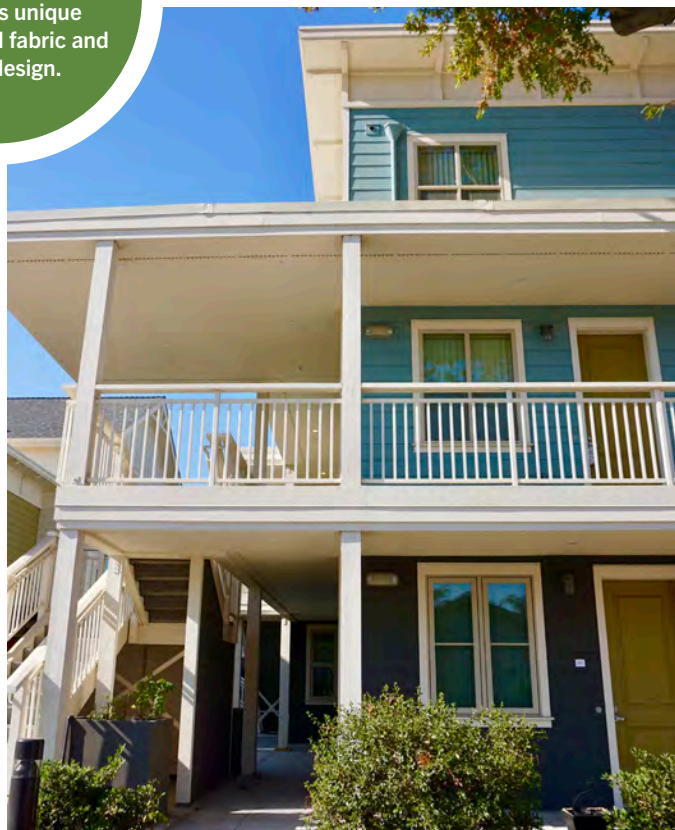
Historic Preservation. Promote the preservation, protection and restoration of historic sites, districts, buildings of architectural significance, archaeological resources, and properties and public works. (See also Policy HE-7).

Actions:

- a. **City-Owned Buildings.** *Preserve, maintain and invest in all City-owned buildings and facilities of architectural, historical or aesthetic merit.*
- b. **Partnerships.** *Work in partnership with property owners, Alameda Unified School District, and non-profit organizations, such as the Alameda Architectural Preservation Society (AAPS) to ensure that the city's memorable buildings and landscapes are preserved.*
- c. **Property Owner Awareness.** *Continue to work to increase owners' and buyers' awareness of the importance of preservation in protecting community character and identity.*
- d. **Historic Districts and Monuments.** *Designate additional Historic Districts and Monuments to recognize areas or sites with significant historic architectural design character or cultural history.*
- e. **Financial and Design Assistance.** *Develop financial and design assistance programs to encourage the restoration or preservation of buildings, structures, and sites with architectural, historic or aesthetic merit, such as a Mills Act Program or the Facade Grant Program.*
- f. **Demolition Controls.** *Maintain demolition controls for historic properties.*
- g. **Alterations.** *Require that exterior changes to existing buildings be consistent with the building's existing or original architectural design whenever feasible.*
- h. **Archaeological Resources.** *Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.*



Policies in this section protect, maintain and enhance Alameda's unique architectural fabric and urban design.



LU-26

Architectural Design Excellence. Promote high quality architectural design in all new buildings and additions to complement Alameda's existing architectural assets and its historic pedestrian and transit-oriented urban fabric.

Actions:

- a. Diversity.** *Encourage a broad range of architectural styles, building forms, heights, styles, materials, and colors to enhance Alameda's rich and varied architectural character and create visually interesting architectural landscapes within each neighborhood and district.*
- b. Creativity.** *Encourage and support creative and contemporary architectural design that complements, but does not mimic, existing architectural designs in the neighborhood or district.*
- c. Harmony.** *Harmonize the architectural design of new buildings with the architectural character of the surrounding buildings to create a visually appealing architectural landscape.*
- d. Human Scale.** *Promote accessible, human scaled designs that ensure that ground floors are easily accessible and visually interesting from the public right-of-way by facing buildings toward the street, using higher quality materials at the ground floor, providing pedestrian-scaled lighting, and minimizing the extent of blank walls along ground floor elevations with doorways, windows, art, landscaping, or decorative materials.*
- e. Regulations and Guidelines.** *Promote design excellence by ensuring that City development regulations and design guidelines clearly express the intent and support for creative and innovative design solutions. Guidelines should focus on desired outcomes rather than prohibited outcomes.*

LU-27

Neighborhood Design. Protect, enhance and restore Alameda's diverse neighborhood architecture and landscape design while encouraging design innovation and creativity in new residential buildings and landscapes. (See also Policy HE-15).

Actions:

- a. Architectural and Landscape Design.** *Require that neighborhood infill development and alterations to existing residential buildings respect and enhance the architectural and landscape design quality of the neighborhood.*
- b. City Design Regulations.** *Develop regulations, standards and guidelines that express the intended and desired form and functional outcomes as opposed to expressing just the prohibited forms to support and encourage innovative design solutions and high quality design.*

LU-28

Retail Commercial Design. Require that alterations to existing buildings and all new buildings in community commercial districts be designed to be pedestrian-oriented and harmonious with the architectural design of the surrounding mixed-use district.

Actions:

- a. Park and Webster Street Design.** *Continue to support and promote high quality design in the reinvestment in Alameda's "Front Doors" to ensure the continued vibrancy of these unique city Main Streets for commerce, employment, entertainment, and culture.*
- b. Contextual Architectural and Landscape Design.** *Require varied building facades that are well-articulated, visually appealing at the pedestrian level, and that utilize architectural and landscape design features that respond to the district's existing architectural and landscape character.*



Example of the Park Street retail corridor's historic urban form and character

- c. Pedestrian Orientation.** Require building entrances (e.g., the entry to a store, or the lobby entry to an office building) to actively engage and complete the public realm (streets, entry plazas or public open spaces) through such features as building orientation, universal design, build-to and setback lines, facade articulation, ground floor transparency and location of parking.
- d. Sidewalks.** Provide generous sidewalks, sidewalk lighting, street trees, bus shelters, bicycle racks, and street furniture to promote pedestrian traffic and encourage strolling, window-shopping and sidewalk dining.
- e. Public Space for Commercial Use.** Support the use of public on-street parking spaces and public sidewalks for small parklets, sidewalk dining, and other temporary commercial purposes. Avoid the use of fixed, permanent fences and barricades on public sidewalks that permanently privatize the use of the sidewalk for a single business for 24 hours a day.
- f. Automobile Parking and Access.** Minimize the number of curb cuts and driveways crossing public sidewalks. Place off-street parking areas behind or beside buildings, but not between the public right-of-way and the front entrance to the building, whenever possible.
- g. Signs and Utilities.** Provide well-designed public signage including street signs, directional signs, gateway markers, street banners, and pedestrian-oriented directories. Reduce visual clutter where possible by grouping sign messages and regulating the number, size and design quality of signs. Utility boxes and trash enclosures should be grouped and screened from public view and should not be located adjacent to the public right-of-way unless no other location is available. Alternatively, visible utility boxes should be made attractive with public art.

LU-29

Shopping Center Redevelopment. Redevelop existing automobile-oriented, single-use shopping centers with associated large surface parking areas into transit-oriented, mixed-use centers with multi-family housing.

Actions:

- a. **Vertical Mixed-Use.** Maintain ground floor commercial retail and service uses, while allowing upper stories to be developed for residential, office, and other uses.
- b. **Safe, Accessible, and Connected.** Ensure that the pedestrian, bicycle, transit and automobile network is safe and convenient for all users and well integrated with adjacent off-site networks.
- c. **Shared Parking.** Minimize the amount of land needed for off-street automobile parking by sharing parking between on-site commercial businesses and on-site residents.
- d. **Walkable.** Create walkable, pedestrian-scaled blocks, publicly accessible mid-block and alley pedestrian routes where feasible, and sidewalks generously scaled for pedestrian and wheelchair use with ample street trees, public seating areas, pedestrian lighting, and other amenities to create a safe and convenient pedestrian experience and enhance Alameda's network of leafy streets.
- e. **Gathering Places.** Provide public, open air, gathering places, such as small parks, plazas, outdoor dining opportunities, or other publicly accessible areas to support a mix of residential, commerce, employment, and cultural uses.
- f. **Architecture.** Require building offsets, window and door recesses, and variations in building heights to create a rich and visually interesting pedestrian level experience.

LU-30

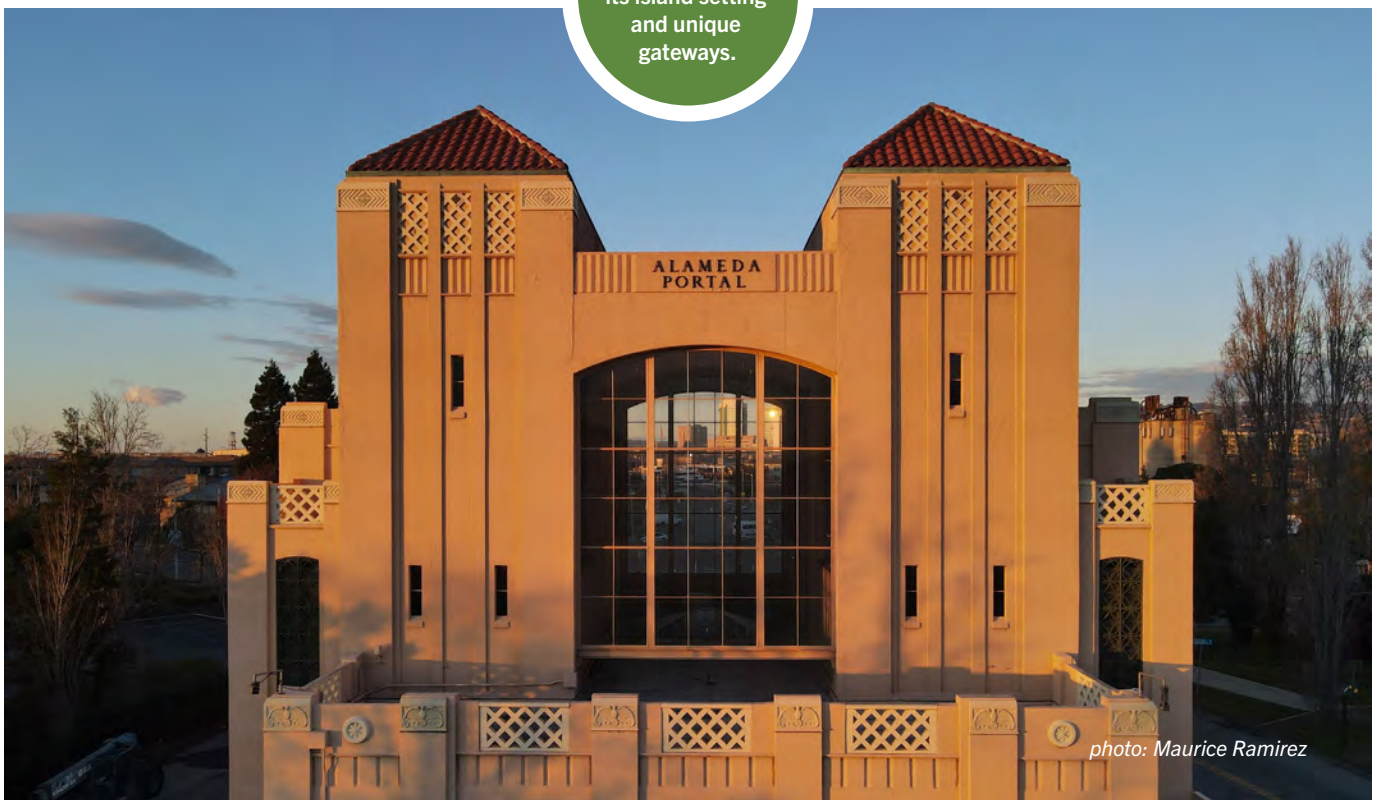
Waterfront Design. Preserve and enhance Alameda's waterfronts as important destinations by maximizing waterfront physical and visual access from adjoining neighborhoods and streets and permitting land uses that complement the waterfront setting. (See also Policies LU-6, OS-8 and HS-22).

Actions:

- a. **High Quality.** Design new parks, open spaces, and waterfront buildings of exemplary quality, highlighting visual and physical connections to the water's edge, preserving waterfront historic resources, and complementing the character of adjacent neighborhoods.
- b. **Inclusive.** Design and locate waterfront public spaces and the Bay Trail to be inclusive and welcoming to all.
- c. **Climate Sensitive.** Design public spaces to be micro-climate sensitive, allowing for shelter, wind breaks, sun access and shading.
- d. **Public and Safe.** Ensure that all new waterfront buildings are set back an appropriate distance from the water's edge, such that the public access and Bay Trail feels public, yet also safe for visitors and Bay Trail users.
- e. **Public Access and Building Heights.** Require a wider public access and separation between the water's edge and the face of the building for taller buildings. Shorter buildings may be closer to the water's edge. Taller buildings should be set back further.
- f. **Architecture.** Require that buildings adjacent to the shoreline provide attractive and varied facades that compliment, but do not mimic, the historic maritime character of the waterfront.



- g. Visual and Physical Access.** Maximize visual and physical access to the waterfront from inland neighborhoods by maintaining views and access to the water along streets and other public rights-of-way. Ensure that the placement of and access to utilities do not interfere with physical or visual access to the waterfront*
- h. Street Grid.** Extend the street grid so that north-south streets continue to the waterfront and provide gateways to the waterfront, while equitably distributing traffic between existing and new neighborhoods, and supporting people walking and bicycling from inland neighborhoods to the waterfront.*
- i. Climate Adaptation.** Ensure all public investments are designed to accommodate the 50-year sea level rise scenario.*



LU-31

Gateway Design. Enhance the design of the gateways into the city.

Actions:

- a. **Posey-Webster Tubes.** *Improve the entry into Alameda and Webster Street by reducing visual clutter from Caltrans signs and signs on adjacent private property and increasing tree planting in the area.*
- b. **Park Street Bridge.** *Improve the Park Street entry into Alameda by upgrading the street lighting, street tree canopy, and sidewalk and bike and pedestrian connections on the Park Street side of the bridge. Work with the Downtown Alameda Business Association on its plan for an iconic entry arch near the Park Street Bridge.*
- c. **Miller-Sweeney Bridge and Fruitvale Rail Bridge.** *Improve the Fruitvale Avenue entry into Alameda by redesigning Tilden Way to include sidewalks, bicycle facilities, and consistent street tree plantings from Broadway to the Bridge approach. Remove or seismically reinforce the abandoned Fruitvale Rail Bridge, to prevent the risk of collapse on the Miller-Sweeney Bridge in the event of a large earthquake. (See also Abandoned Fruitvale Bridge spotlight in Health & Safety Element).*
- d. **Bay Farm Island Bridge.** *Ensure that the design for Bridgeview Park enhances the Bay Farm Island Bridge entry onto the Main Island. Maintain and enhance the wooden bike/ped bridge.*

LU-32

Civic Center Design. Create an identifiable Civic Center District that supports a wide variety of civic, institutional, cultural, office, commercial, retail, and residential uses and provides a transition between the Park Street commercial district to the east and the neighborhoods to the west on Santa Clara and Central Avenues.

Actions:

- a. **Centerpieces.** *Preserve the City Hall, Carnegie Library, and Elks Club buildings as centerpieces of the Civic Center district.*
- b. **Opportunity Sites.** *Support and encourage the redevelopment and reuse of the corners opposite City Hall and the Carnegie Building with mixed-use development.*

LU-33

Alameda Rail Station Design. Ensure that a future Alameda rail station is designed as an underground, urban station located within the fabric of the existing neighborhood or business district similar to Oakland's 12th Street and 19th Street BART stations. (See also Policies CC-8 and ME-10).

LU-34

Parking Design. To maintain the historic character of Alameda and reduce the impact of automobile parking and trips on the environment and character of Alameda, design parking facilities in a manner that decreases their visibility in the urban environment. (See also Policy ME-21).

Actions:

- a. **Size.** *Minimize the size and amount of land dedicated to off-street parking.*
- b. **Design.** *Design parking lots for shared and multiple uses, active parking management, and electric vehicle charging. Parking areas should be well landscaped with shade trees to reduce heat island effects from expansive asphalt surfaces and to screen cars from view. Ensure impacts on Alameda's stormwater system are minimized.*
- c. **Location.** *Place parking inside, below, or behind buildings. Avoid placing parking between the building and the public right of way or the waterfront wherever possible.*

03

CONSERVATION + CLIMATE ACTION ELEMENT

The Conservation and Climate Action Element establishes the City's goals, objectives, policies, and actions necessary to conserve and protect Alameda's natural resources, reduce the community's greenhouse gas emissions and energy use, promote sustainability, and to prepare for and address the wide range of impacts of climate change from rising seas and groundwater, to wildfire smoke, disease and pandemics.



THE GOALS OF THE CONSERVATION AND CLIMATE ACTION ELEMENT ARE TO:

GOAL 1	GOAL 2	GOAL 3	GOAL 4
 <p>EMPOWER</p> <p>Empower community action, partnership and leadership to address local and global environmental and climatic emergencies.</p>	 <p>REDUCE</p> <p>Reduce the community's greenhouse gas emissions which are contributing to global warming, climate change, and environmental and social impacts.</p>	 <p>PREPARE</p> <p>Prepare the community to adapt to the disruptions and impacts of climate change, including but not limited to rising sea and groundwater levels, increasingly severe storms and flooding, more frequent heat events, hazardous air quality days, and power outages.</p>	 <p>PROTECT</p> <p>Protect and conserve Alameda's natural resources and recognize their intrinsic importance in responding to climate change and fostering a healthy environment that sustains people, neighborhoods and the unique natural resources of the island.</p>



SPOTLIGHT

CLIMATE GLOSSARY

Environmental Justice: Ensuring that the health impacts of environmental hazards are not disproportionately impacting low-income, vulnerable, and marginalized communities.

Greenhouse Gas Emissions (GHG): A type of air-borne molecule that traps heat from the sun, contributing to the overall warming of the planet. These particles trap radiation like a greenhouse, hence the name. Methane and carbon dioxide (CO₂) are among the most commonly discussed greenhouse gases.

MTCO₂e (Metric Tons of Carbon Dioxide Equivalent): The most common way to measure greenhouse gas emissions by comparing the 'greenhouse effect' of particles to that of carbon dioxide. For example, methane has a roughly 25 times stronger greenhouse effect than carbon dioxide on a 100-year time scale so 1 metric ton of methane = ~25MTCO₂e.

Low Carbon: An activity or entity that emits significantly fewer greenhouse gas emissions compared to its peers. A bus, for example, is a low carbon transportation mode when compared to a car.

Carbon Neutral/Net-Zero Emissions: An activity or entity that sequesters at least as much carbon as it emits.

Sequestration: Removing air-borne pollution like carbon dioxide from the air.

Resilience: The ability of a community to adapt to new and unexpected circumstances such as those fueled by the climate crisis.

Sea level Rise (SLR): The increase in average sea levels, mostly due to rising temperatures and melting ice around the world.

King Tide: The highest tides that happen a few times per year when the moon and sun's gravity align to have the greatest pull on the sea, raising the tide levels several inches.

50-year Storm: A storm event where wind and precipitation combine to cause flooding at a level typically only seen around once every 50 years, which for Alameda would be about a 3 foot increase in sea level during that event.

INTRODUCTION TO CONSERVATION + CLIMATE CHANGE ELEMENT

Alameda's unique island geography and natural setting supports a high quality of life for Alameda residents and a natural habitat for important fish and wildlife. These natural resources and healthy environment are key contributors to Alameda's identity and sense of place. The island setting is also uniquely vulnerable to changes in the environment. As worldwide temperatures and sea levels rise, Alameda residents and businesses will be increasingly impacted by flooding, sewer back-ups, road closures, power outages, hazardous air quality days, and periods of intense heat.

In 2019, the City Council joined a number of other American cities and declared a climate state of emergency in response to the growing threat of climate change. The City Council found that as an island city, Alameda faces an existential crisis from sea and groundwater level rise and must act as a global and regional leader by transitioning to an ecologically, socially and economically regenerative economy. In doing so, the City Council established a citywide goal of becoming a net zero emissions community as quickly as possible and reduce emissions by 50% below 2005 levels by 2030. To achieve these ambitious but necessary goals, Alameda's reliance on fossil fuels to support our current way of life must change.

The City of Alameda must respond to the climate emergency with policies and specific actions that reduce greenhouse gas emissions while preparing to protect Alameda from the consequences of global warming, rising sea levels and rising groundwater levels. Specific actions must also be taken by all Alameda residents and businesses, if the community of Alameda is to be successful in reducing its greenhouse gas emissions to prepare for climate change. Action is needed on all fronts.

This General Plan element includes a policy framework that is designed to preserve Alameda's high quality of life and unique natural setting and resources for future generations. The General Plan reinforces and complements the Climate Action and Resiliency Plan (CARP) which contains specific plans, programs, and actions needed to address the threats of climate change.



SPOTLIGHT

SEA LEVEL RISE

Alameda is a community with a uniquely beautiful and environmentally sensitive setting in the center of the San Francisco Bay. This unique waterfront community, its natural resources, and the infrastructure necessary to make it safe, healthy and habitable are also uniquely vulnerable to environmental change. With almost half of its land area 6 feet or less above sea level and ground water just a few feet below, rising sea levels and rising ground water levels threaten to overwhelm our waterfront open spaces and habitat areas, our roadways, storm water, and sewer systems, and the seawalls, embankments, and shoreline barriers that were constructed to make it possible to live on the delicate peninsula and islands that we call Alameda, California.

The San Francisco Bay rose 8 inches in the 20th century, and it is projected to continue rising for the foreseeable future. Today, a severe storm (storms that occur every 50 years or so) will cause a storm surge in sea level of about 36 inches above the 8 inches it has already risen. Due to global warming and the continued generation of greenhouse gases locally and worldwide, by 2040, Alameda must prepare for sea levels to be about 36 inches higher than today, and as a result groundwater levels will also rise, meaning that homes, businesses, infrastructure and natural habitat areas everywhere on the island will be impacted, whether on the shoreline or inland.

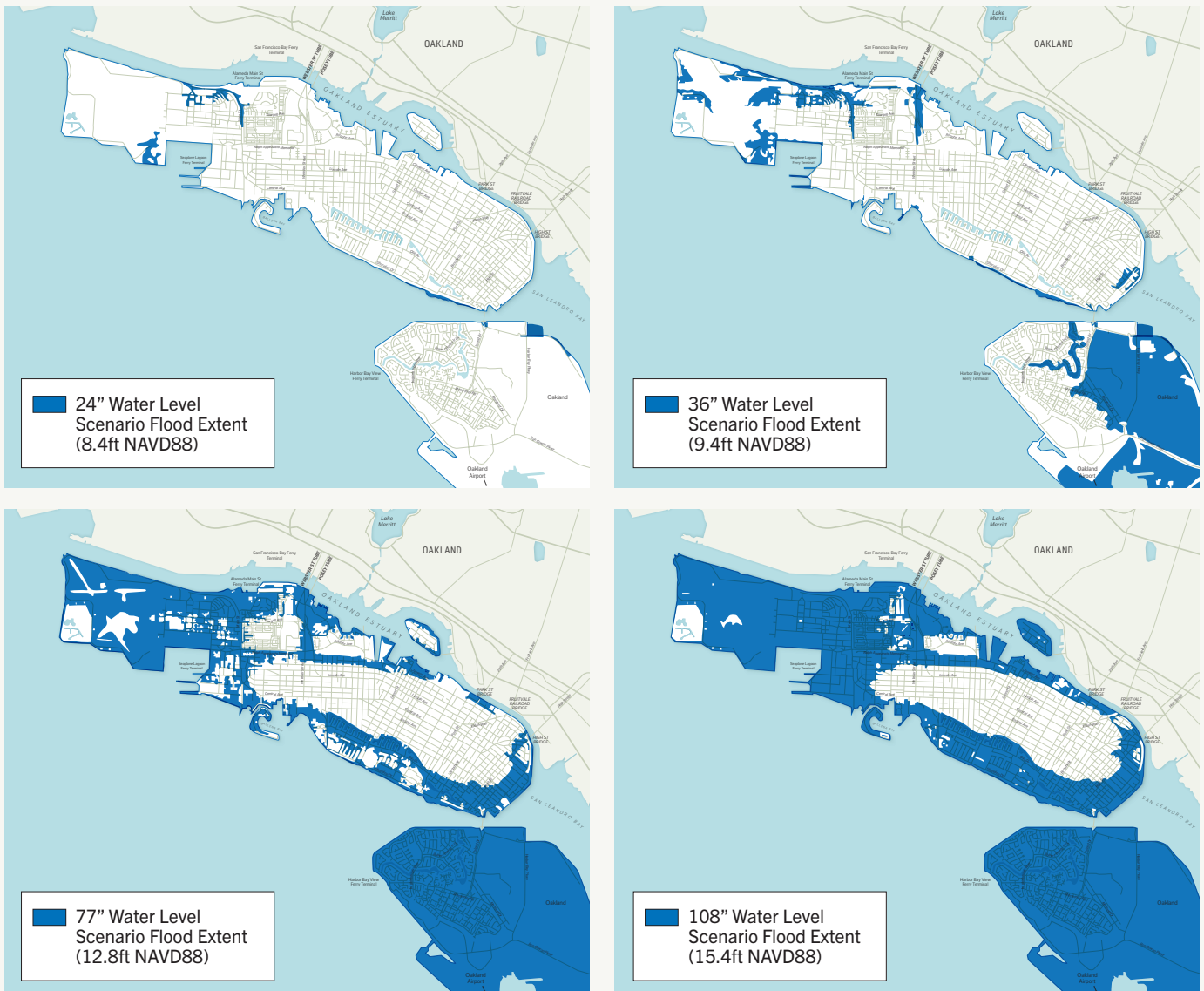


FIGURE 3.1: WATER LEVEL SCENARIOS



GOAL 1: EMPOWER

Empower community action, partnership and leadership to address local and global environmental and climatic emergencies.

POLICIES:

CC-1

Community Action. Empower local community members and leaders to participate, plan, and implement the changes in both individual and collective behavior and actions that are needed to address the climate crisis. (See also Policies LU-1, ME-1, and HS-4).

Actions:

- a. **Outreach and Education.** Continue to provide planning and educational opportunities that support participation and collaboration by all segments of Alameda's population.
- b. **Community Organizations.** Continue to partner on climate action initiatives with groups such as Community Action for Sustainable Alameda (CASA), Bike Walk Alameda and all other interested community groups.
- c. **Community Capacity Building.** Enhance the ability of community members, particularly those in under-served and/or under represented groups to develop the relationships, knowledge, and skills to effectively participate in planning for, and responding to the climate crisis.
- d. **Climate-Solution Academy.** Consider opportunities to create a Climate Solution Academy at Alameda Point for the purpose of creating an international gathering place and training center for emerging climate-solution technology to be publicly showcased, tested, demonstrated, and funded.

CC-2

Social Vulnerability. Prioritize the needs of the most vulnerable communities when prioritizing public investments and improvements to address climate change. (See also Policies LU-1, ME-2 and Spotlight on *What is an equitable and inclusive city?* In Chapter 1).

Actions:

- a. **Equity.** Ensure opportunities for participation and actions to involve and benefit Alameda's low-income individuals, seniors, youth, people of color, unhoused, individuals with disabilities and socio-economically disadvantaged communities from environmental and climate change impacts.
- b. **Environmental Justice.** Ensure the equitable treatment and full involvement of all people when considering actions to reduce the adverse impacts of climate change on residents regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location. Prioritize actions that will reverse historic policies of racial discrimination and exclusion.
- c. **Assessments.** Utilize Alameda's Social Vulnerability Assessment in the Climate Action and Resiliency Plan or similar tool to identify neighborhoods and specific groups with high levels of social vulnerability in order to prioritize locations for action and improvements.

CC-3

Coordinated Regional and Local Planning. Maintain consistency between local and regional plans to reduce greenhouse gas emissions regionally and locally. (See also Policies LU-14, ME-15, HS-3, HS-16 and HS-63).

Actions:

- a. City Government Leadership.** *Promote climate friendly policies, standards, practices, technologies and purchasing in all City facilities and operations.*
- b. State and Regional Programs.** *Support and participate in state and regional efforts to address climate change through greenhouse gas emission reduction, affordable housing, transportation system improvements, and increased housing supply near job centers and existing regional transportation infrastructure.*
- c. State and Regional Funding.** *Advocate for and support state and regional efforts to provide funding for greenhouse gas reduction, transportation improvements and climate change adaptation at the local level.*
- d. Sustainable Communities Strategy.** *Maintain consistency between the City's General Plan and Municipal Code and the regional Sustainable Communities Strategy.*
- e. Documentation and Open Data.** *Share data in machine-readable formats along with other lessons learned from responding to the climate crisis.*

CC-4

Net Zero Greenhouse Gas Emissions. Take actions to make Alameda a net zero GHG community. (See also Policies CC-13 and ME-22).

Actions:

- a. Partnerships.** *Continue to partner on greenhouse gas emission reduction and adaptation strategies with other agencies, including but not limited to, Caltrans, AC Transit, Bay Conservation and Development Commission, Water Emergency Transit Agency, East Bay Regional Park District, Port of Oakland, East Bay Municipal Utility District, Pacific Gas & Electric, and the US Department of Veterans Affairs.*

**SPOTLIGHT****SB 375**

The Sustainable Communities Act, also known as SB 375 and signed into State law in 2008 recognizes how significant local and regional land use planning is for reducing transportation related greenhouse gas emission and climate change.

THE GOALS OF THE LAW ARE TO:**SUPPORT**

Support the state's climate goals to reduce emissions.

**REQUIRE**

Require regional "Sustainable Communities Strategies" that coordinate local and regional land use and transportation planning.

**PROMOTE**

Promote healthier, more sustainable and equitable communities.

This state program recognizes that regional land use planning is critical for reducing transportation emissions.

- b. Alameda Climate Action and Resiliency Plan Annual Review and Funding Priorities.** *Implement and update as necessary Alameda's Climate Action and Resiliency Plan (CARP) to reduce GHG emissions to 50 percent below 2005 levels by 2030 and achieve net zero GHG emissions as soon as possible. Implement adaptation strategies to address sea level and ground water rise, storm surges, inland stormwater system flooding, drought, extreme heat, and unhealthy wildfire smoke.*
- c. Annual Review.** *Annually review and re-evaluate programs, projects, and annual budget for climate action measures and evolving climatic and public health threats, such as groundwater rise, wildfire smoke events, and global pandemics.*
- d. 100% Renewable Energy Goal.** *Support powering Alameda with 100% renewable energy by promoting the generation, transmission and use of a range of renewable energy sources such as solar, wind power and waste to meet current and future demand. Support Alameda Municipal Power's efforts to provide power from 100% clean, non-fossil fuel sources to all residential and commercial users in Alameda.*
- e. On-Island Generation.** *Support development of on-island solar power generation and on-island wind power with appropriately sized generation, storage, and microgrid distribution infrastructure to be able to provide power for a range of uses, including essential functions. Permit renewable energy generation facilities by right in zones with compatible uses and remove financial disincentives associated with the installation of clean energy generation and storage equipment.*
- f. Local Climate Impact Mitigations.** *Require any carbon neutral goals and initiatives to reduce or sequester greenhouse gas emissions locally and not use taxpayer money to purchase carbon credits from outside the City of Alameda.*

CC-5

Clean Energy Infrastructure. Actively support and advocate for improvements to the regional and local electric power infrastructure to reduce its vulnerability to high winds and other climatic conditions. (See also Policy HS-31).

Action:

- a. Undergrounding Utilities.** *Underground utilities to increase resilience of the electric grid, reduce conflicts with street trees and contribute to enhancing neighborhood character.*



GOAL 2: REDUCE

Reduce the community's greenhouse gas emissions which are contributing to global warming, climate change, and environmental and social impacts.

POLICIES:

CC-6

Climate-Friendly Vehicles and Equipment. Reduce transportation greenhouse gas emissions by promoting, and when appropriate, requiring the use of low and zero emission vehicles and equipment and taking action to support use of micro-mobility devices to reduce energy use and carbon emissions from personal vehicles. (See also Policies ME-14 and ME-21).

Actions:

- a. **EV Charging.** Support the increase in supply of publicly accessible electric vehicle charging stations in Alameda.*
- b. **New Development.** Require electric vehicle charging stations in all new development.*
- c. **Permitting.** Streamline local permitting for hydrogen fueling and electric vehicle charging infrastructure.*
- d. **City Fleet Vehicles.** Replace public fleet vehicles with zero emission vehicles.*
- e. **Buses.** Encourage AC Transit to continue its efforts to replace diesel buses with clean zero emission buses.*
- f. **Ferries.** Encourage WETA to replace diesel ferries with low or zero emission ferries.*
- g. **EV Action Plan.** Prepare and adopt an Electric Vehicle Adoption Plan that provides a path forward for increased EV adoption in Alameda, including:*
 - » Bolstering charging infrastructure availability,*
 - » Driving community awareness,*
 - » Facilitating EV adoption, and*
 - » Supporting EV services and innovation.*

CC-7

Climate-Friendly Active Modes of Transportation. Reduce greenhouse gas emissions from transportation by improving the local roadway network to support all mobility choices while specifically encouraging walking and bicycling. (See also Policies LU-3, ME-8, ME-14 and ME-23).

Actions:

- a. **Active Transportation Plans.** Maintain, regularly update and implement bicycle and pedestrian improvement plans identified in the Mobility Element of the General Plan, the Transportation Choices Plan and the Active Transportation Plan.*
- b. **Prioritize Safety.** Promote the creation of a safe environment for bicycling and walking by establishing a goal of zero annual fatalities and severe injuries for bicyclists and pedestrians using Alameda's roadway network.*



Alameda's pedestrian friendly streets and transit oriented commercial districts will help Alameda meet its Net Zero Emission's goals.

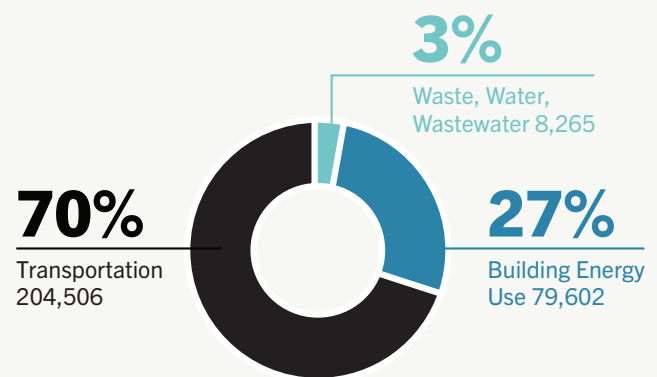


SPOTLIGHT

GREENHOUSE GAS EMISSIONS INVENTORY

In 2020, approximately seventy percent (70%) of Alameda's greenhouse gas emissions comes from cars and trucks. Approximately thirty percent (30%) of Alameda's greenhouse gas emissions come from the heating and cooling of our homes and the operating of businesses. To reduce our greenhouse gas emissions, climate friendly modes of transportation, such as walking, bicycling, buses, ferries, scooters, and water shuttles must replace modes of transportation reliance on fossil fuel powered, personal automobiles and trucks. Electricity must replace natural gas and other fossil fuel powered energy sources. To reduce our greenhouse gas emissions, electric vehicles, electric hot water heaters and furnaces, and other electric appliances must replace natural gas and other fossil fuel powered vehicles, appliances, hot water heaters, furnaces, and other appliances. Alameda Municipal Power's commitment to 100 percent clean electricity sets the stage for significant reductions in GHG emissions citywide.

(Please refer to CARP pages 39-40 for more information)



This graphic assumes completed actions including a shift to 100% clean electricity for Alameda Municipal Power and a fully implemented Transportation Choices Plan.

- c. Complete Streets.** *Ensure that all streets are designed to provide a safe and convenient environment for all modes, including bicyclists, people using mobility devices such as wheelchairs or walkers, and pedestrians. Adequately maintain sidewalk conditions to avoid tripping hazards.*
- d. Safe Routes to School.** *Increase walking and biking to school by developing and improving safe routes to schools and out-of-school programs.*
- e. Mobility for All.** *Prioritize roadway network improvements that increase mobility and equitable access for all residents, especially low-income individuals, youth, seniors, individuals with disabilities, and other vulnerable residents.*
- f. Connectivity and Inclusiveness.** *Connect neighborhoods and major destinations such as parks, open spaces, civic facilities, employment centers, retail and recreation areas with pedestrian and bicycle infrastructure. Minimize sound walls, gates and other barriers that separate neighborhoods and decrease physical and visual connectivity throughout the city.*
- g. Access to the Shoreline.** *Expand and improve pedestrian and bicycle access to the waterfront and recreational facilities throughout Alameda.*
- h. Access to Oakland.** *Improve connections for all modes, including transit, bicycle and pedestrian connections to Oakland.*
- i. West Alameda to Jack London Square Bicycle and Pedestrian Bridge.** *Continue to work with Oakland, Caltrans, the Alameda County Transportation Commission, the State of California, and the US Coast Guard to design, fund, and construct a bike and pedestrian bridge from West Alameda to Jack London Square in Oakland.*

CC-8

Transit Use. Reduce automobile pollution and greenhouse gas emissions by increasing transit use. (See also Policy ME-16).

Actions:

- a. Partnerships.** *Collaborate and partner with AC Transit, Water Emergency Transportation Authority (WETA), BART, community groups, and employers to provide expanded and more convenient transit services throughout the community as well as to downtown Oakland, San Francisco, and the BART system.*
- b. Convenience and Frequency.** *Work with AC Transit to provide convenient and frequent bus service within a quarter mile of every Alameda residence and business during normal commute hours.*
- c. Alameda Easy Pass.** *Work with AC Transit and WETA to develop and fund an “Alameda EasyPass” program that would provide every Alameda resident with a pass for use on any bus or ferry.*
- d. Transit Connections.** *Improve connections between bus transit and water transit facilities and services, such as a cross-town bus service connecting east and west Alameda to the Ferry Terminal services at Alameda Point.*
- e. Oakland Connections.** *Establish water shuttle service to connect commuters, pedestrians and bicyclists to Oakland and reduce the need to use automobiles to cross the estuary.*
- f. Transit Priority.** *Evaluate the creation of signal priority lanes, transit-only lanes, and queue jump lanes to make transit corridors more efficient and effective.*
- g. First and Last Mile Connections.** *Improve safety and access for shared and active transportation around major transportation nodes.*
- h. Alameda BART.** *Continue to work with BART to include an Alameda BART station in the design of BART’s plan for a second San Francisco Bay crossing connecting Oakland and San Francisco.*

CC-9

Vehicle Sharing. Support and encourage vehicle sharing to reduce the demand for vehicle parking and increase access to mobility. (See also Policy ME-17).

Actions:

- a. Alternative Vehicle Share Programs.** Support alternative vehicle share programs, such as bike share, car share, and scooter share programs.
- b. Carpooling.** Consider transit and carpool lanes and other methods to support and incent the use of shared vehicles.
- c. Carpool Parking.** Support the provision of preferential parking spaces for carpool vehicles in public parking lots and within private commercial development that are providing shared vehicle parking. increase mobility and equitable access for all residents, especially low-income, youth, seniors, disabled, and other vulnerable residents.
- d. Connectivity and Inclusiveness.** Connect neighborhoods and major destinations such as parks, open spaces, civic facilities, employment centers, retail and recreation areas with pedestrian and bicycle infrastructure. Prohibit sound walls, gates and other barriers that separate neighborhoods and decrease physical and visual connectivity throughout the City.

CC-10**Climate-Friendly, Walkable and Transit-Oriented Development.**

Reduce reliance on automobile use and reduce vehicle miles traveled by prioritizing walkable, transit-oriented, medium and high density mixed-use development in transit-oriented areas and commercial corridors. (See also Policies LU-33, LU-34 and ME-21).

Actions:

- a. Density, FAR and Transit.** When zoning property for commercial, residential or residential mixed-use near transit stops generally zoned for more density and/or floor-area-ratio (FAR) on the parcels closest to the highest-quality existing or planned transit stops to encourage the most efficient use of land and public resources while minimizing vehicle miles traveled.
- b. Parking Requirements.** Revise off-street parking requirements to replace minimum requirements with maximum requirements to limit the amount of onsite parking allowed with each development to reduce reliance on the automobile and automobile ownership.
- c. Transportation Demand Management Ordinance.** Prepare and adopt a Transportation Demand Management Ordinance requiring new development to actively address the mobility of new residents and employees, including but not limited to contributing to annual operations and capital improvements for supplemental transit, water shuttle, land based shuttle services and improvements to the bicycle and pedestrian network.
- d. Pedestrian Only Areas.** Create pedestrian-only areas to support economic activity in and around new development.

CC-11

Climate-Friendly Employment Commute Behavior. Encourage residents to telecommute or work from home to reduce vehicle miles travelled, greenhouse gas emissions, and commute hour congestion. (See also Policies LU-2, LU-13 and HE-4).

Actions:

- a. Home Occupations.** *Implement municipal code amendments to allow for a wider variety of “home occupation permit” types in residential zoning districts.*
- b. Support Telecommuting Professionals.** *Allow and encourage cafes, restaurants, and similar uses that specifically cater to telecommuting professionals in all zoning districts.*
- c. Flexible Home Office Spaces.** *Allow for and actively encourage the construction of flexible spaces, such as Accessory Units and outdoor spaces to facilitate telecommuting from home in residential zoning districts.*
- d. Promote Work-Live Environments.** *Support and encourage “work-live” developments in commercial zoning districts.*
- e. Telecommuting Work Sites.** *Encourage and permit remote work sites, telecommuting workplaces, and shared work locations within Alameda.*

CC-12

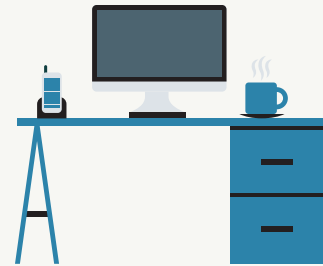
User Fees and Congestion Pricings. Advocate for changes to State law that would allow local jurisdictions to implement programs such as congestion pricing or tolling to actively manage roadway use to reduce vehicle miles traveled and greenhouse gas emissions. (See also Policy ME-19).

Action:

- a. Equity.** *Ensure that user fees are equitable and consider the impact of costs on lower income or other vulnerable communities and users.*

**SPOTLIGHT****TELECOMMUTING**

Telecommuting, living where you work, and working a couple of days a week from home significantly reduces your carbon footprint and helps Alameda become a net zero emissions community. Reducing commuter trips each day is essential to meet the City's greenhouse gas reduction goals, set by the 2019 Climate Action and Resiliency Plan.



\$11,000

In savings per year,
per employee



20%

More productivity



73%

Of Telecommuters are
satisfied with their company



SPOTLIGHT

BUILDING ELECTRIFICATION BENEFITS



FISCAL RESPONSIBILITY AND INEVITABILITY:

Key regional and state decision-makers, including PG&E, have indicated the desire and intention to go all-electric and eventually discontinue gas service.



EQUITY:

As natural gas costs rise over time, customers will switch to all-electric appliances and homes at faster and faster rates. Coordinating and subsidizing a timely and fair transition for lower-income and more vulnerable residents is critical.



HEALTHY AIR:

Buildings create roughly double the pm 2.5 air pollution as vehicles. According to a recent study, children who grow up in buildings with natural gas stoves were 42% more likely to develop asthma.



RESILIENCE:

Buildings that depend on natural gas may have to wait 6 months following severe earthquake events for service to return (compared to up to 1 week with electric appliances).

CC-13

Alameda's Building Stock. Reduce greenhouse gas emissions from natural gas combustion and natural gas leaks.

Actions:

- a. **Construction Regulations.** Prepare and adopt citywide regulations limiting use of natural gas and encouraging the use of clean energy electricity.
- b. **New Construction Reach Codes.** Adopt reach codes that ban the use of fossil-fuels in all new buildings constructed in Alameda.
- c. **Renovation to Clean Energy.** Develop regulations and incentives to facilitate the conversion of existing buildings with natural gas infrastructure to clean energy alternatives.
- d. **Development on City Land.** Limit the use and expansion of natural gas infrastructure on city land to the extent feasible and practicable.
- e. **Rebate Programs.** Support programs that encourage homeowners/commercial building owners to implement electrification retrofits, with an emphasis on Alameda's most vulnerable residents.
- f. **Partners.** Partner with PG&E and other utility companies to plan for the safe transition from natural gas to clean energy alternatives, including removal of infrastructure that pose hazards when not in use.

CC-14

Energy Efficiency and Conservation. Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure and equipment.

Actions:

- a. **Weatherization and Energy Efficient Building Renovations.** Streamline permitting requirements for energy-efficient building renovations such as weatherization.
- b. **Public Facilities.** Incorporate renewable energy and energy efficiency into public facility capital improvements.
- c. **Low Carbon Materials.** Require or promote the use of low-carbon building materials where available.
- d. **Energy Audits.** Consider requirements for energy audits or updates at major renovations or time of sale.



- e. Incentives.** *Incent the use of the Living Community Challenge, LEED for Neighborhood Development, or similar third-party certification system to certify climate friendly construction.*
- f. Solar Panels.** *Encourage installation of solar panels and energy storage equipment in new development.*
- g. Low Carbon Materials.** *Seek low-carbon alternatives to conventional construction materials.*

CC-15

Neighborhood Resilience Coordination. Consider piloting building electrification, water conservation and other climate initiatives at a block or neighborhood level to more cost effectively transition to climate friendly energy, water, and resource use similar to the EcoBlocks model in Oakland.

CC-16

Water Efficiency and Conservation. Minimize water use in new construction and landscaped areas to make Alameda more resilient to drought and generate less wastewater.

Actions:

- a. Water Efficient Landscape Requirements.** *Maintain up-to-date water-efficient landscaping regulations and ordinances to reduce water use in both private and public landscapes.*
- b. Bay-Friendly Landscapes.** *Require new developments to include native plant species, and non-invasive drought tolerant/low water use plants in landscaping.*
- c. Water-Efficient Buildings.** *Require low-flow fixtures, such as low-flow toilets and faucets in new construction.*
- d. Recycled and Reclaimed Water.** *Coordinate the production and usage of recycled and reclaimed water for potable and non-potable uses.*

CC-17

Zero Waste Culture. Create a zero waste culture by implementing the City of Alameda's 2018 Zero Waste Implementation Plan (ZWIP). (See also Policy HS-36).

Actions:

- a. Zero Waste Awareness.** *Promote a zero waste culture by developing programs and campaigns that recognize the shared responsibility for each individual to reduce and divert waste from landfill disposal.*
- b. Single-Use Plastics.** *Work toward eliminating single-use plastic products. Promote and require compostable, recyclable and/or reusable products.*
- c. Technical Assistance.** *Provide targeted technical assistance for commercial and multi-family waste generators, which have the greatest opportunity to reduce waste sent to landfill.*
- d. Food Recovery.** *Work with waste management partners to create a food recovery program and enhance organics management to reduce organic material disposal in landfills and reduce greenhouse gas emissions.*
- e. Salvageable Materials.** *Update the City's construction and demolition debris recycling ordinance to include specific incentives or requirements for deconstruction (rather than demolition) of existing buildings to salvage usable building components (lumber, doors, fireplaces, brick) on homes of a certain age.*
- f. CAL Green.** *Implement CALGreen building code requirements to divert and recycle construction and demolition waste, and to use locally-sourced building materials and recycled content building materials, including mulch/compost.*
- g. Franchise Agreements.** *Expand the high diversion franchise agreement with waste management partner(s) related to recycling, organics and construction and demolition waste to further support Alameda in reaching its zero waste goal.*

CC-18

Building Renovation and Reuse. To reduce construction waste and GHG emissions associated with construction material manufacture and transportation, encourage and facilitate renovation and rehabilitation of existing buildings instead of demolition and new construction. (See also Policy LU-17).



GOAL 3: PREPARE

Prepare the community to adapt to the disruptions and impacts of climate change, including but not limited to rising sea and groundwater levels, increasingly severe storms and flooding, more frequent heat events, hazardous air quality days, and power outages.

POLICIES:

CC-19

Sea Level Rise Protection. Reduce the potential for injury, property damage, and loss of natural habitat resulting from sea level rise. (See also Policy HS-15).

Actions:

- a. **Flood Protection Maps.** Work independently or in cooperation with county and regional agencies to delineate projected inundation zones for years 2070 and 2100 representing sea level as the sea level rise allowance plus mean higher high water consistent with the most up to date guidance from the Ocean Protection Council (OPC) for sea level rise in California.*
- b. **Contaminated Lands.** Identify and map lands at risk of inundation from rising ground water and flood inundation.*
- c. **Land Planning.** Prioritize areas of little or no flood risk for new flood-incompatible development (i.e. housing and commercial development) in new plans or zoning decisions.*
- d. **Shoreline Habitat and Buffer Lands.** Identify, preserve and restore existing undeveloped areas susceptible to sea level rise to increase flood water storage which can reduce flood risk, enhance biodiversity, and improve water quality. Maintain and restore existing natural features (i.e. marsh, vegetation, sills, etc.) between new development and the shore to allow for marsh or beach migration.*
- e. **Conservation Easements.** Consider use of conservation easements to maintain private lands for shoreline and beach migration.*
- f. **Nature Based Flood Control Systems.** When designing new flood control systems where none currently exist, prioritize use of nature based flood control systems, such as horizontal levees, marsh lands, or beach restoration.*

CC-20

Land Development. Require new development to reduce the potential for injury, property damage, and loss of natural habitat resulting from groundwater and sea level rise. (Also see Policy HS-22).

Actions:

- a. **Assessment.** Require new development proposed in areas of flood risk to assess flood risk and incorporate specific groundwater and sea level rise mitigation strategies.*
- b. **Mitigation.** Require new development to incorporate design features to mitigate 36 inches of sea level rise in the initial design and funding mechanisms to pay for later adaptation improvements to address future groundwater increases from sea levels above 36 inches. Projects that include new seawalls where none currently exist shall evaluate the off-site impact of the new walls on adjacent and nearby communities.*



SPOTLIGHT

SB 1383:

**SHORT-LIVED CLIMATE POLLUTANTS
(SLCP): ORGANIC WASTE METHANE
EMISSIONS REDUCTIONS**
**REQUIRES REDUCTION OF ORGANIC
MATERIAL TO LANDFILL BY:**
50%

BELOW 2014 LEVELS BY:

2020
75%

BY:

2025
20%

 OF DISPOSED EDIBLE FOOD
SHOULD BE RECOVERED FOR
HUMAN CONSUMPTION BY:
2025
**ENFORCEMENT & PENALTIES
WILL BEGIN JANUARY 1, 2022**

- c. Nature Based Design.** Require new development to incorporate low impact development design strategies and stormwater management systems, such as engineered landscapes, vegetated areas, or cisterns that mimic nature by soaking up and storing water, to manage and protect the quantity and quality of stormwater runoff.

CC-21

Sea Level Rise Plans. Develop neighborhood shoreline sea level rise protection and funding plans to address increasing sea and ground water level rise and storm events. (See also Policies HS-18 and HS-22).

CC-22

Critical Public Assets. Implement improvements to move or protect critical public assets threatened by sea level rise or rising groundwater. (See also Policy HS-17).

Actions:

- Stormwater.** Identify funding sources to improve the public stormwater infrastructure and ensure it meets current needs and is prepared for the effects of sea level rise and climate change.
- Transportation.** Work with Caltrans and the Alameda County Transportation Commission to identify funding to adapt the regional and local roadways in Alameda.

CC-23

Rising Groundwater. Prepare for the impacts of rising groundwater levels on private and public property. (See also Policy HS-24).

Actions:

- Infrastructure and Access.** Develop plans and strategies to protect and/or relocate critical infrastructure and maintain access to impacted property.
- Building Codes.** Prepare and adopt revised zoning and building codes to increase resiliency of new buildings against the impacts of rising groundwater.
- Annual Review.** Annually monitor groundwater levels and progress on specific strategies to mitigate impacts.

CC-24

Water Retention. Develop and maintain large and small areas to retain water within the city that may serve as areas of “retreat” during large storm events. (See also Policy HS-18).

Actions:

- a. **Alameda Point Wildlife Refuge.** Support use and development of the 550 acre former US Navy airfields and runways as a wildlife refuge and area of wetlands that may serve as flood water retention area during major storm events.*
- b. **Corica Park.** Support the use and development of the 330 acre golf complex as a recreation area and lagoon system that currently serve as a flood water retention area during major storm events.*
- c. **Public Participation.** Encourage the public’s use of small-scale green infrastructure design standards, guidance, and typical details, as presented in the City’s Green Infrastructure Plan, for residential and garden projects.*

CC-25

Heat and Wildfire Smoke Emergencies. Create a network of smoke and heat emergency shelters throughout Alameda. (See also Policy HS-62).

Actions:

- a. **Partnerships.** Identify and partner with large HVAC equipped building owners to establish a network of facilities that are able to open to the public during heat waves and smoke events during the day.*
- b. **City Facilities.** Evaluate options to upgrade or otherwise retrofit HVAC systems and buildings.*

**SPOTLIGHT****FOOD WASTE****FOOD WASTE & OTHER ORGANIC MATERIALS REPRESENT OVER**

20%

of waste sent to the landfill and ~8% of global GHG emissions, due in large part to the SLCP’s such as methane and refrigerants emitted throughout the life cycle of food waste.

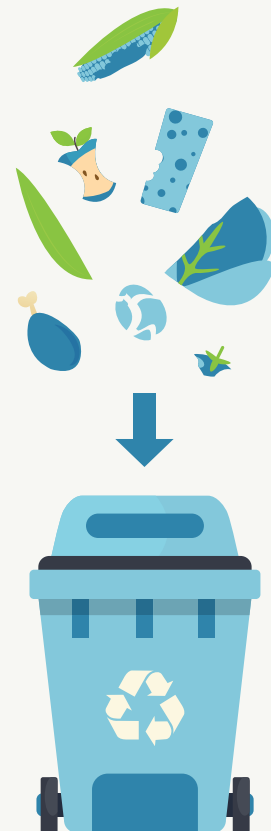



photo: Maurice Ramirez



Protecting and restoring natural habitats to support biodiversity and to prepare for climate change is a key goal of the General Plan.



GOAL 4: PROTECT

Protect and conserve Alameda's natural resources and recognize their intrinsic importance in responding to climate change and fostering a healthy environment that sustains people, neighborhoods and the unique natural resources of the island.

POLICIES:

CC-26

Urban Forest. Take actions to maintain and expand the number of trees in Alameda on public and private property to improve public health, reduce pollution, and reduce heat island effects. (See also Policies LU-2, LU-3 and ME-14).

Actions:

- a. Tree Preservation.** Continue to require and incent the preservation of large healthy native trees and vegetation.
- b. New Development and Parking Lots.** Require ample tree plantings in new development and related parking lots.
- c. Strengthen Tree Replacement Requirement.** Strengthen the tree replacement requirement for any protected trees removed due to new development or redevelopment.
- d. Prioritize Tree Planting.** Invest in tree planting and maintenance, especially in low canopy areas, neighborhoods with under-served or under-represented communities and in areas identified by the Bay Area Greenprint (that uses a variety of factors such as pollution, heat island effects, and vulnerable communities).

- e. Resilient Urban Forest.** Support the increase of the tree canopy in Alameda with drought tolerant, shade-producing, fire resistant tree species.
- f. Public Parks and Lands.** Utilize public parks and public lands, such as Alameda Point, to significantly increase the urban forest.
- g. Maintain and Update the City's Master Tree Plan.** Ensure an up-to-date, climate friendly Master Tree Plan that selects drought tolerant, shade-producing, fire-resistant tree species adapted to Alameda's changing climate. This plan should include:
 - » Design of new tree wells to allow better infiltration of stormwater;
 - » Promotion of sidewalk gardens and other sidewalk landscaping;
 - » Expansion of greenery in the public right-of-way and removal of impervious surfaces as feasible;
 - » Strategies to reduce conflicts between trees, tree roots, and other public infrastructure such as sidewalks, overhead lines and street infrastructure; and
 - » Identification of funding for both expansion and maintenance of the urban forest.

CC-27

Habitat and Biological Resource Protection and Restoration. Protect and restore natural habitat in support of biodiversity and protect sensitive biological resources to prepare for climate change. (See also Policies OS-12, OS-18 and HS-37).

Actions:

- a. Wetlands and Marshlands.** Protect wetlands, seasonal and permanent marshland, riparian habitat and vernal pools from direct and indirect impacts of new and existing development and incorporate those protections in land planning and community design.
- b. De-Pave Park and New Wetlands.** Identify areas, such as the plan for De-Pave Park at Alameda Point, to increase the amount of wetlands and habitat areas in Alameda.
- c. Submerged Lands.** Protect aquatic habitat areas, including sensitive submerged tidelands areas, mudflats, and eelgrass beds for nurseries and spawning grounds for fish and other aquatic species.
- d. Permanent Protections.** Preserve habitat in perpetuity through deed restrictions, conservation easement restrictions, or similar legally enforceable instruments.
- e. Operation and Maintenance.** Ensure a secure and ongoing funding source for operation and maintenance.
- f. Eelgrass.** Promote the planting of eelgrass in shallow waters around Alameda to provide habitat and help absorb wave energy.
- g. Information.** Work with local recreation groups to disseminate information regarding the sensitivity of open space habitat areas and the impacts of motorized craft.
- h. Signs.** Require the posting and maintenance of signs warning boaters and users of motorized craft as they approach wildlife areas.
- i. Waste Diversion.** Prevent accumulation of trash in the Bay by collaborating regionally and implementing design solutions throughout Alameda, such as providing clearly-marked, wind-sheltered trash and recycling bins, fish hook and line bins, and sharps bins that are emptied regularly. Post signs and launch efforts such as 'Adopt-a-Drain' programs and Marine Alert Systems to empower, educate and raise awareness about the dangers posed from marine waste and other more acute hazards like sewage and oil spills.



FIGURE 3.2: PROPOSED MARINE CONSERVATION, WILDLIFE AND RECREATION AREA ON THE SOUTH SHORE OF ALAMEDA POINT, REFER TO POLICY CC-29

CC-28

Alameda Point Wildlife Refuge. Work with the US Department of Veterans Affairs, East Bay Regional Park District (EBRPD), and US Fish and Wildlife to maintain and improve the 550 acre Alameda Point Wildlife Refuge and seasonal Least Tern Colony. (See also Policy OS-17).

Action:

- a. Refuge Floodplains.** Increase the area of naturally inundated floodplains and the frequency of inundated floodplain habitat. Restore some natural flooding processes and widen riparian vegetation, where feasible, at the Refuge.
- b. Lighting.** Ensure that all lighting installations at Alameda Point near the Wildlife Refuge are designed and installed to be fully shielded (full cutoff) to minimize glare and obstructive light and avoid misdirected or excessive illumination.

CC-29

Alameda Point Marine Conservation, Wildlife and Recreation Area. Partner with regional, state, and federal conservation agencies and volunteer non-governmental organizations to establish and designate a Marine and Wildlife Conservation and Recreation Area to enhance and protect habitat values, ensure safe public access, and foster appreciation of the marine environment south of Alameda Point, refer to Figure 3-1. (See also Policy OS-22).

Actions:

- a. **Mapping.** Seek funding to visually map the sea bed and rock walls to establish a biological inventory and final boundary for the proposed Conservation Area.*
- b. **Trash Removal.** Seek funding for quarterly or semi-annual removal of trash that accumulates on Alameda's rocky shoreline, rock walls or beaches that is detrimental to wildlife.*
- c. **Signage.** Seek funding to establish signage on breakwater island that acknowledges this marine formation as the largest night roosting site for California Brown Pelicans in the San Francisco Bay. Restore the historic light beacon at the western end of the breakwater.*
- d. **Oil Spill Boom.** Seek funding for a dedicated oil spill boom to be stored at Alameda Point to protect this sensitive habitat area in case of an oil spill on the Bay.*
- e. **Public Access Structure.** Seek funding for construction of a safe public access structure on the long rock wall that begins at the beach, which will allow safe fishing and wildlife observation and safe access for trash removal.*
- f. **Active Recreation.** Partner with non-motorized recreational watercraft organizations to promote safe and responsible enjoyment of this waterway and an appreciation of the marine natural environment.*

CC-30

Clean Marinas. Continue to protect water quality and biological resources by ensuring marina operating standards prevent degradation of water quality and maintain full compliance with environmental regulations.

Action:

- a. **The Clean Marinas Program** requires new marinas to participate in the Clean Marinas Program, which provides a certification program and annual monitoring to ensure the protection of habitat and water quality in proximity to working marinas and boatyards.*

CC-31

Crown Memorial State Beach. Work with the EBRPD and other appropriate agencies to improve, protect, and preserve Crown Memorial State Beach and the Alameda Beach as habitat as well as recreational resources.

CC-32

Lagoons. Continue to preserve and maintain all lagoons as natural habitat as well as an integral component of the City's green infrastructure network and flood control system.

**CC-33**

Green Infrastructure. Protect San Francisco Bay, San Leandro Bay, and the Alameda Oakland Estuary by promoting, requiring, and constructing green infrastructure that improves stormwater runoff quality, minimizes stormwater impacts on stormwater infrastructure, improves flood management, and increases groundwater recharge. (See also Policy HS-25).

Actions:

- a. **Green Streets and Infrastructure Plan.** Implement Alameda's Green Infrastructure Plan, the purpose of which is to guide the identification, implementation, tracking, and reporting of green infrastructure projects within the City.
- b. **Capital Improvement Program (CIP).** Include green infrastructure design elements in the initial design stages of all public CIP project planning efforts. Implement Green Stormwater Infrastructure (GI) design standards, guidance, and typical details, as presented in the City's GI Plan, as feasible and appropriate, for public CIPs, Complete Streets street design processes, and the infrastructure management of stormwater.
- c. **Open Space.** Utilize and maintain the lagoon systems, public open spaces, wildlife habitat, and other natural areas as integral components of the citywide green infrastructure network.
- d. **Stormwater Runoff.** Promote the reduction of stormwater runoff into the Bay with the increased use of pervious materials, retention basins, bioswales and similar methods.
- e. **Alameda Countywide Clean Water Program.** Continue to remain an active member agency of the Alameda Countywide Clean Water Program (ACCWP) working to control the discharge of pollutants from urban runoff to ensure continued improvement of San Francisco Bay water quality, water quality monitoring, public education, pollution prevention oversight, regional coordination, and the development of technical guidance and pollution prevention tools.
- f. **Municipal Stormwater Permit.** Continue to comply with the requirements of the Municipal Regional Stormwater NPDES Permit (MRP), issued to the City by the California Regional Water Quality Control Board and the San Francisco Bay Region (Regional Water Board), to guide the City's efforts to prevent pollutant discharges and to protect Bay water quality.

CC-34

New Development. Promote the preservation of on-site natural elements in new development, when feasible, that contribute to the community's native plant and wildlife species value and to aesthetic character.

Actions:

- a. Preservation of Wetlands.** *Require development to preserve existing natural wetland areas and associated transitional riparian and upland buffers.*
- b. Buffers.** *Preserve and expand buffers between wildlife habitat and developed areas to ensure the continued viability of the natural habitat and wetlands area, which may include provisions for off-site needs such as upland nesting habitat.*
- c. Biological Assessments.** *Require a biological assessment of any proposed project site where species or the habitat of species defined as sensitive or special status by the California Department of Fish and Game or the U.S. Fish and Wildlife Service might be present. Require development to mitigate any unavoidable losses of wetlands or habitat.*
- d. Water Quality.** *Require new development to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, green roofs, best management practices and Low Impact Development and hydromodification strategies.*
- e. Soil Contamination.** *Ensure proper remediation of contaminated soils to reduce the risk of current or future exposure from groundwater or sea level rise.*
- f. Nesting Bird Survey.** *Require consultation with a qualified wildlife biologist prior to any construction activities that would remove or disturb large trees during the general bird breeding season (February 1 through August 31) and implement any necessary no-work buffer zones around identified nests in coordination with the California Department of Fish and Wildlife (CDFW).*
- g. Bat Survey.** *Require consultation with a qualified wildlife biologist prior to any construction activities that would demolish existing buildings or remove large trees, with removal or disturbance of any roosting bats to be performed in coordination with the California Department of Fish and Wildlife (CDFW).*
- h. Aquatic Species and Habitats.** *Require consultation with the National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (NMFS) to identify the need for any permits and to identify appropriate measures to protect aquatic species and habitats during any in-water construction requiring pile driving.*
- i. Native Oysters and Eelgrass Beds.** *Require a pre-construction eelgrass and native oyster survey prior to any construction activities involving any disturbance to the shoreline or adjacent waters in accordance with guidance provided by the National Marine Fisheries Service (NMFS).*
- j. Dredging.** *Require all dredging activity in waters surrounding Alameda to implement Best Management Practices (BMPs) identified in the Long-term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (2001) published by the U.S. Army Corps of Engineers in order to avoid impacts on water quality and avoid degradation of aquatic habitat.*
- k. Lighting.** *Ensure that all lighting installations are designed and installed to be fully shielded to minimize glare and obstructive light and avoid misdirected or excessive illumination.*
- l. Rooftop Antennas.** *Minimize the number of rooftop antennas and other equipment, and co-locate the equipment whenever feasible to reduce risks to wildlife.*
- m. Guy Wires.** *Prohibit the use of guy wires to support monopole structures or antennas on buildings, in open areas, and at sports and playing fields and facilities.*

04

MOBILITY ELEMENT

A well-designed, safe, multimodal transportation system that meets the needs of all residents, visitors, and business owners, employees and customers regardless of income, background, ability, neighborhood, or mode of travel is essential to being a healthy, equitable and inclusive city and to protecting the environment and responding to the climate crisis.



THE GOALS OF THE MOBILITY ELEMENT ARE :

GOAL 1



EQUITY

Provide for the mobility needs of all Alameda residents, workers, and visitors regardless of income, age, ability, or neighborhood.

GOAL 2



SAFETY

Eliminate fatalities and severe injuries on Alameda's streets, sidewalks, crosswalks and trails.

GOAL 3



CHOICES

Expand and improve alternatives to low occupancy automobile trips to incentivize mode shift to more environmentally sustainable modes of transportation and recognizing the diverse needs for mobility.

GOAL 4



SUSTAINABILITY

Reduce the impacts of transportation systems on the environment, and transition to a more resilient transportation system to address the impacts of climate change.



SPOTLIGHT

CLIMATE CHANGE AND TRANSPORTATION

Over 70% of Alameda's greenhouse gas emissions are from Alameda's vehicle trips, and over 50% of Alameda's commuters are driving alone in a fossil fuel burning automobile each day to work. For Alameda to achieve its greenhouse gas emission reduction goals, Alameda must transform its transportation system to give residents convenient and safe, climate-friendly transportation choices and alternatives to the single occupant vehicle.

As Alameda works to transform its transportation system to be more efficient, flexible, and safe, Alameda will also need to prepare the transportation system to adapt to the impacts of climate change, including rising seas and groundwater. Redesigning streets and roads to work in concert with the natural ecosystem will reduce the impact of the system on the physical environment and prepare the system for the impacts of climate change.

In September 2019, the Alameda City Council adopted the Climate Action and Resiliency Plan which emphasized the need for mode shift, alternative fuel use, and land use decisions.



MODE SHIFT

Mode shift is increasing the number of trips Alamedans using low-carbon, low pollution forms of transportation, such as taking the bus, bicycling, or walking, over driving solo in conventional vehicles.



ALTERNATIVE FUEL USE

The second way to reduce transportation emissions is to reduce the carbon emissions from the vehicles we already use. This means driving alternative fuel vehicles such as all-electric, electric-gas hybrid, or hydrogen fuel cell vehicles.



LAND USE

Accommodating growth and housing needs with mixed-use, transit-oriented development, work-live development, allowing home offices and small neighborhood businesses in residential neighborhoods, and supporting telecommuting reduce the need for multiple daily automobile trips, which means less greenhouse gas emissions.

To accommodate a growing population and economy over the next 20 years, expand and improve the transportation system to serve the needs of a growing population, address existing and long term transportation problems and congestion choke points, and address the increasing impacts of climate change, the Mobility Element of the General Plan establishes a policy framework to guide the transformation of the city's transportation system to make more efficient use of the existing network of streets and bridges, introduce new ways to cross the estuary by boat or by bridge, increase the frequency and convenience of transit, make walking and biking a safer and more convenient choice for local trips, and embrace and support new modes of transportation. By doing so, Alameda can reduce its greenhouse gas emissions, reduce traffic congestion at well known choke points and crossings, reduce fatalities and serious injuries, make Alameda's neighborhoods quieter, safer, and more livable and provide for the mobility needs of all Alamedans, regardless of age, background, ability, income, or neighborhood.



SPOTLIGHT

WHAT MAKES A COMPLETE STREET?

“Complete” streets are streets that are designed to serve not just automobiles, but also pedestrians, bicyclists and public transport users to improve the quality of life for all users by designing streets as “public spaces” that are safe and comfortable that support high-performance, sustainable transportation networks.



COMPLETE STREETS INCLUDE THE FOLLOWING:

CONNECTED NETWORK

A comprehensive, integrated, and connected mobility network is crucial to improving mobility for all types of users.

ACCESSIBILITY FOR ALL

Balanced design to accommodate the needs of pedestrians, cyclists, transit systems and motorists, including innovative solutions for parking and deliveries.

AN ACTIVE STREETScape

A mix of interactive uses such as commercial, retail and food service encourages an active streetscape. A community where people share experiences and interact on a day-to-day basis tends to be a safer community.

PEDESTRIAN-SCALE LIGHTING

Well-lit environments are important for pedestrians, cyclists, and motorists. Pedestrian-scale lighting provides a safer and more secure environment in terms of both traffic safety and crime.

STREET FURNITURE AND SIGNAGE

Furnishing the street as well as providing for clear signage improves the experience of a public space and makes it more active and safe. Benches, bicycle racks, trash bins, bollards, community kiosks, art installations and transit shelters all contribute to an activated street. Traffic signs ensure the safety for all road users – pedestrians, cyclists and motorists.

STREETS ARE ECOSYSTEMS

Streets should be designed as ecosystems where man-made systems interface with natural systems. From pervious pavements and bioswales that manage storm-water run-off to street trees that provide shade and climate amelioration, greenspaces are critical to the health of the city and for long-term, sustainable design.

WELL-MAINTAINED FACILITIES AND INFRASTRUCTURE

On-going investments and maintenance of the complete street network are critical in preserving and creating active, walkable neighborhoods and a healthier, more equitable and resilient community.



A goal of the Mobility Element is to eliminate fatalities and severe injuries on Alameda's streets, sidewalks, crosswalks and trails.



GOAL 1: EQUITY

Provide for the mobility needs of all Alameda residents, workers, and visitors regardless of income, age, ability, or neighborhood.

POLICIES:

ME-1

Community Participation. Educate the public on transportation issues and encourage, promote and facilitate active and diverse community participation in the development, evaluation, and prioritization of transportation improvements and investments. (See also Policies LU-1, HE-13, and OS-5).

Action:

- a. **Public Engagement.** Seek out and facilitate input from community members, neighborhood organizations, business associations, interest groups, and transit providers. Ensure inclusion of underserved areas and socially vulnerable communities historically underrepresented in the transportation decision making process.

ME-2

Equitable and Inclusive Transportation Planning. Create a transportation system that equitably serves all Alamedans. (See also Policies LU-1, HE-13 and HS-6).

Actions:

- a. **Equity.** Ensure that all neighborhoods are equitably served by the citywide transportation system.*
- b. **Procedural Justice.** Ensure that traffic enforcement is implemented in a fair, respectful, and unbiased manner.*
- c. **Environmental Justice.** Ensure the fair treatment and meaningful participation of all people regardless of age, ability, culture, ethnicity, gender, race, socioeconomic status, or geographic location when considering the environmental impacts of transportation facilities and services.*

ME-3

Vulnerable Communities. Prioritize the transportation improvements needed to serve the most vulnerable communities, including youth, seniors, those with limited mobility, those with limited income, and historically underserved communities. (See also Policies LU-1 and ME-6).

Actions:

- a. **Engagement.** Evaluate and improve engagement with the most vulnerable communities, by meeting people in their neighborhoods and providing translation services or other support when appropriate in order to reach communities often left out of the planning process.*
- b. **Safe Path of Travel.** Continue to improve the transportation network to ensure a continuous and safe path of travel throughout the city for youth, seniors, and people with disabilities.*
- c. **Equal Access.** Continue to improve the transportation network to ensure that residents with limited income have affordable and convenient access to transportation choices, such as AC Transit bus service and paratransit.*
- d. **Costs.** When managing the transportation system through pricing (e.g. long term parking costs, congestion pricing, or other market based approaches to transportation system management, ensure that the pricing structure considers the impact of costs on lower income or other vulnerable communities and users.*

ME-4

Public Annual Review. Conduct an annual public review of the performance of the transportation system and adjust transportation investment priorities as necessary to support equity objectives.

Action:

- a. **Annual Capital Improvement Program Review.** Annually review the citywide Capital Improvement Program to prioritize investments in maintenance and improvement of existing facilities as well as the investments in new or expanded plans and programs to ensure that transportation services are being equitably distributed throughout the City.*



SPOTLIGHT

WHAT IS VISION ZERO?

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has proved successful across Europe — and it is now gaining momentum in major American cities. The City of Alameda is one of those cities that has committed to Vision Zero.

THE PROBLEM

From 2011 to 2018, 16 people died and 82 suffered severe, life-changing injuries on Alameda's streets, an average of 2 deaths and 10 severe injuries per year. Of the people who died using Alameda streets, two thirds were walking or riding a bicycle; and 75% of the pedestrians who died were 65 years old or older, and 100% were 59 years old or older.

A NEW VISION FOR SAFETY

Vision Zero starts with the belief that everyone has the right to move safely in their communities, and that system designers and policy makers share the responsibility to ensure safe systems. In 2019, the City Council adopted Alameda's Vision Zero Policy which establishes safety as the highest priority in all transportation plans, projects, and decisions with the goal of eliminating fatalities and serious injuries on Alameda streets.

TRADITIONAL	VS	VISION ZERO
Traffic deaths are inevitable		Traffic deaths are preventable
Perfect human behavior		Integrate human failing in approach
Prevent collisions		Prevent fatal + severe crashes
Individual responsibility		Systems approach
Saving lives is expensive		Saving lives is not expensive



More information: visionzeronetwork.org



GOAL 2: SAFETY

Eliminate fatalities and severe injuries on Alameda's streets, avenues, sidewalks, crosswalks, paths and trails.

POLICIES:

ME-5

Vision Zero. Maintain and implement Vision Zero as the guiding principle for transportation planning, design of streets and sidewalks, and the maintenance of the public rights-of-way. (See also Policies LU-3 and HS-5).

Actions:

- a. **Action Plan.** Complete, and regularly update, a Plan that summarizes specific changes to policies, practices, enforcement procedures, education efforts, infrastructure improvement priorities, and other action items that will reduce speeding, collisions, and collision severity.
- b. **Institutional Commitment.** Ensure that City staff and officials understand and work to support the City's commitment to Vision Zero; integrate Vision Zero into City driver policies and training; and focus on safety in City vehicle purchases and maintenance.
- c. **Community Support.** Foster community support and responsibility for the safety of people traveling within Alameda through outreach, communications, and partnerships.
- d. **Data.** Improve the use, collection, and organization of data to allow for evaluation and reporting that fosters transparency and creates trust with stakeholders and residents.
- e. **Annual Report.** Prepare an annual report on progress toward the Vision Zero goals, utilizing outcome metrics defined in the Vision Zero Action Plan.

ME-6

Vulnerable Users. When designing, redesigning or resurfacing streets, provide safe and convenient access for vulnerable users including children, seniors, people with disabilities, and people walking and bicycling. (See also Policies LU-2, LU-3 and OS-5).

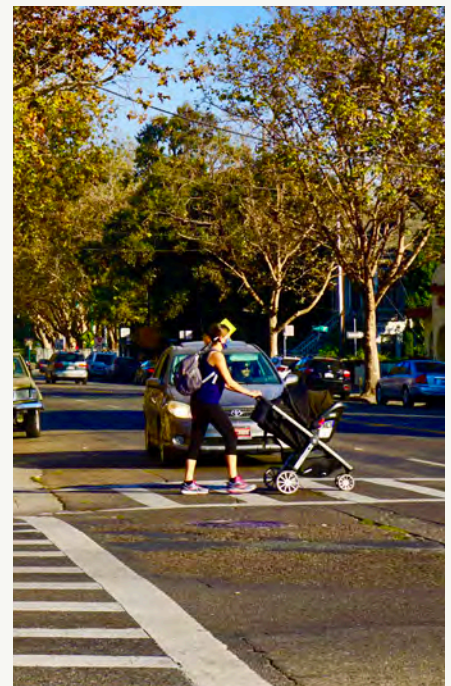
Actions:

- a. All Ages and Abilities Network.** *Street design and transportation projects should enable people of all ages to navigate the streets safely and confidently and be supported by amenities such as shade and benches.*
- b. Safety First.** *When designing streets, the safest treatments should be considered the default starting point, and be degraded only if necessary, and after documenting rationale for the approach.*
- c. Safe Routes to Schools.** *Collaborate with parents, schools, the Alameda County Transportation Commission, and AC Transit to identify needed infrastructure, educational and encouragement programs, and enforcement to provide for the safety of students riding the bus, walking and bicycling to school.*
- d. Safe School and Day Care Drop Off Zones.** *Work with Alameda Unified School district, private schools, day care centers and other institutions and businesses requiring drop off areas for children to ensure that drop off zones are well planned and ensure the safety of children and parents walking, bicycling, and driving their children to school.*
- e. Safe Crossings.** *Reduce the number of pedestrian and bicyclist fatalities and the severity of their injuries by minimizing vehicle turning speeds and intersection crossing distances. Limit automobile parking and other visual obstructions within 20 feet of an intersection to maintain sightlines and visibility for automobile drivers. Provide high-visibility crosswalk markings and bulb-outs at regular and frequent intervals on arterial and collector streets.*
- f. Construction Zones.** *Ensure safe and convenient continuity for pedestrians, bicyclists and transit users when construction occurs in the public right-of-way.*
- g. Space Priorities.** *When allocating public right-of-way space, the first consideration shall be for people walking, bicycling, and using transit. Space for on-street parking shall be the lower priority.*

**SPOTLIGHT****THE 25 MILE PER HOUR SPEED LIMIT: WHY DOES IT MATTER?**

Automobile speeds on Alameda streets determine the quality of life in Alameda. Automobile speed plays a critical role in the cause and severity of crashes as well as the comfortability, safety and health of Alameda's neighborhoods. Reducing auto speeds and the incidence of speeding, not only saves lives, but it also improves the neighborhood and commercial district environment, reduces the need for police enforcement activities, improves walkability, bikeability and the comfort of the street environment, and reduces noise pollution.

There is a direct correlation between higher speeds, crash risk, and the severity of injuries. The Institute of Transportation Engineers found that a pedestrian hit by an automobile traveling at between 20 and 25 miles an hour has a 95% chance of surviving the collision without dying. If the vehicle is traveling at 30 miles an hour, the chances for surviving death for the pedestrian drop to 70%. If the automobile is going 40 miles per hour or more, the pedestrian has a less than 15% chance of not being killed.





SPOTLIGHT

ROUNABOUTS

Modern roundabouts are a type of intersection characterized by a generally circular shape, yield control on entry, and features that create a low-speed environment while traveling counterclockwise around a central island. Mini-roundabouts or “traffic circles” are a type of roundabout characterized by a small diameter and traversable islands, and are best suited to environments where speeds are already low and environmental constraints would preclude the use of a larger roundabout with a raised central island.

Modern roundabouts have been demonstrated to provide a number of safety, operational, and other benefits when compared to other types of intersections:

Safety: Roundabouts can reduce the number of crashes in an intersection by 35% and injury crashes by 76%. Due to the reduction of vehicle speeds, roundabouts can improve pedestrian and bicyclist safety.

Speeding: Roundabouts can reduce illegal speeding.

Travel Time: A roundabout avoids the need for a stop light. Especially during non-peak times, roundabouts can reduce delays for automobiles caused by traffic signals.

Lower Maintenance Costs: A roundabout has lower operating and maintenance costs than a traffic signal

Environment: Roundabouts provide environmental benefits such as reduced noise impacts, air quality impacts and fuel consumption by reducing vehicle delay and the number and duration of stops compared with signalized or all-way stop-controlled intersection.

Aesthetics: The central island and splitter islands offer the opportunity to provide attractive entries or centerpieces to communities through use of landscaping, monuments and art.

Source: Federal Highway Administration, Roundabouts: An Informational Guide

ME-7

Safe Streets. Reduce collisions resulting in severe injuries and fatalities on Alameda streets by reducing automobile speeds and decreasing collisions between people driving, riding a motorcycle, biking, walking, or wheeling. (See also Policies LU-2, LU-3, and HS-5 and HS-6).

Actions:

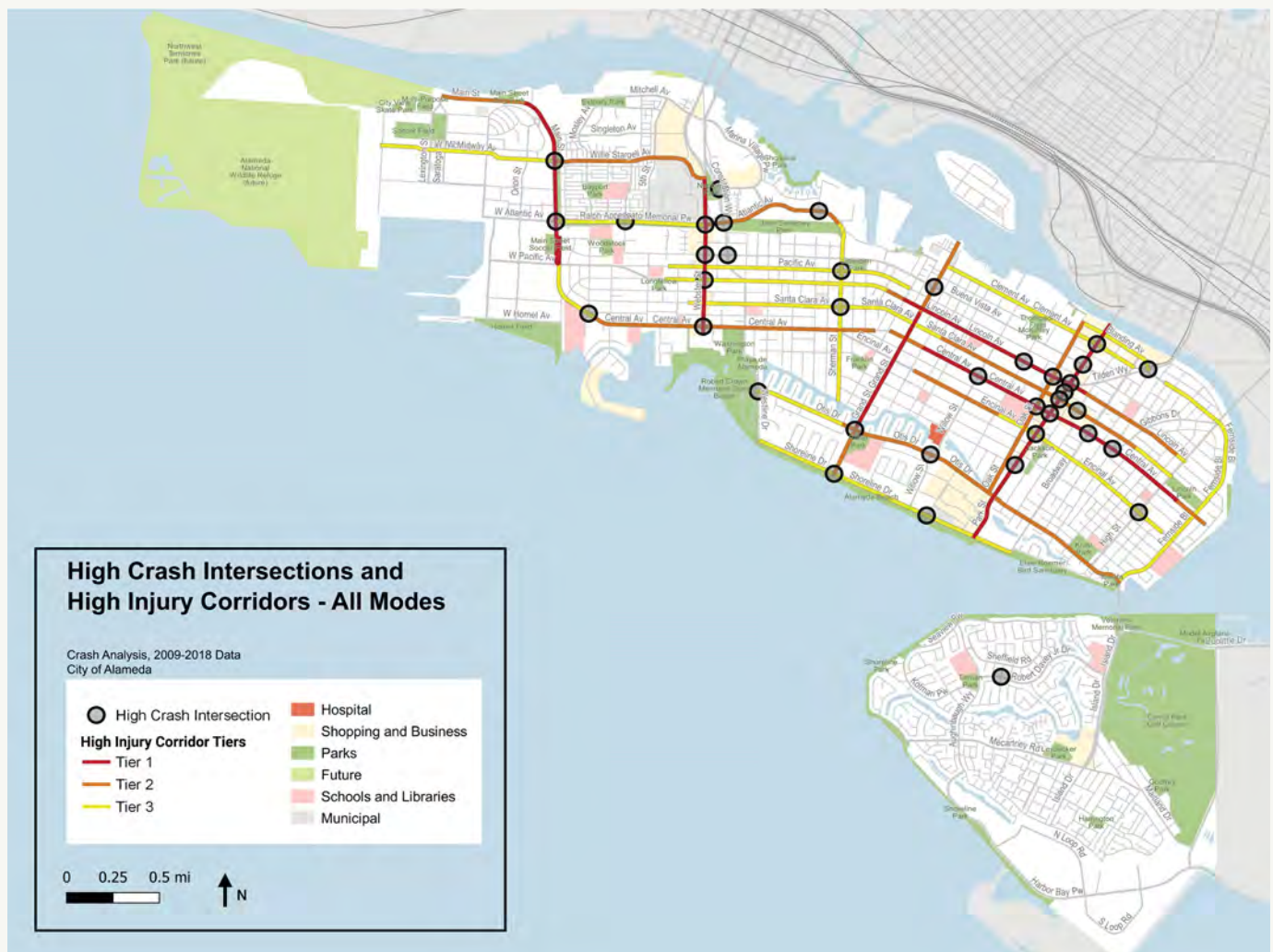
- a. **25 MPH.** *Reduce the severity of injuries and reduce fatalities by designing streets for a maximum vehicle speed of 25 miles per hour or less, except for Harbor Bay Parkway and Doolittle Drive.*
- b. **High Injury Corridors and Intersections.** *Prioritize high injury corridors and intersections for transportation infrastructure maintenance, project development, and implementation.*
- c. **School Zones, Construction Zones and Senior Areas.** *Where permitted by law, consider limiting automobile speeds to 15 MPH in zones adjacent to schools, construction sites or facilities for seniors.*
- d. **Traffic Calming Measures.** *Improve livability and safety for residents and enhance mobility for people walking, biking and using personal mobility devices by reducing automobile speeds in neighborhood and school areas with the use of traffic calming techniques such as mini-roundabouts, speed tables and cushions, chicanes, sidewalk bulb-outs, and public art.*
- e. **Roundabouts.** *Increase the use of roundabouts at intersections to improve the safety and lower maintenance costs compared to traffic signals.*
- f. **Traffic Signal Timing.** *Coordinate the timing of traffic lights and the design of intersections on key corridors to promote safe, efficient, and idle-free vehicle movements when driving at or below 25 miles per hour while disincentivizing vehicle speeds over 25 miles per hour to improve traffic flow while enhancing the safety and convenience of people traveling by bus, by foot, by mobility device, and by bicycle.*



WHAT IS A HIGH INJURY CORRIDOR?

On average, two people die and about 200 people are severely injured on roads each year in Alameda. Seventy three percent (73%) of collisions and crashes occur on twenty percent (20%) of Alameda's streets. Those roads with 73% of the collisions and crashes are identified as Alameda High Injury Corridors.

High injury corridor mapping is an important Vision Zero tool, enabling the City to prioritize traffic safety improvements where they are needed most. Alameda's high injury corridor maps identify the streets with the highest crash densities and weighting crashes by severity. Crashes that resulted in a fatal or life-altering injury received a higher weight than other injury crashes. The high injury corridors are broken into three tiers, with Tier 1 indicating the streets with the greatest frequency and severity of crashes. The City also maintains high injury corridor maps for all types of crashes together, as well as maps of injury crashes by individual modes: motorist, pedestrian, bicyclist, and motorcyclist. Reviewing the individual mode maps can help give a more nuanced understanding of what interventions would help most.



- g. Travel Lane Width.** *To reduce speeding, limit lane widths to 10 feet on all streets, except on designated truck routes and streets accommodating AC Transit services where 11 foot lanes are preferable. If no parking is present, one foot may be added to the above to provide shy distance from a vertical curb. Where auto traffic volumes are low, space is constrained, or automobile speeds need to be reduced, further reductions in lane widths may be considered. Where necessary to accommodate fire prevention aerial apparatus access, protect or improve public safety at specific locations and/or improve transit efficiency, additional clearance may be provided.*
- h. Roadway Widening.** *Discourage the widening of existing roadways to create additional automobile travel lanes to accommodate increased automobile traffic volumes, with the exception of increasing transit-exclusive lanes, transit-bicycle exclusive lanes, or non-motorized vehicle lanes, or creating roundabouts.*
- i. Intersection Widening.** *Discourage the widening of existing intersections beyond the width of the approaching roadway except for when necessary to create a single exclusive left turn lane, transit exclusive lanes, or non-motorized vehicle lanes, or for the construction of a roundabout.*
- j. Intersection Safety.** *To improve safety at a stop-controlled or signalized intersections, consider a roundabout design or eliminating right turns on red and adding pedestrian scrambles to existing signals*
- k. Roundabouts and Traffic Circles.** *When considering modification to an intersection, prioritize roundabouts and traffic circles for consideration recognizing that land acquisition needs, operational considerations, or other engineering factors or constraints may result in other intersection solutions on a case-by-case basis.*
- l. Enforcement.** *Focus traffic enforcement efforts on high injury corridors and against dangerous moving violations.*

ME-8

Roadway Diets. To reduce speeding and collisions on 4-lane roads on high-injury corridors, consider converting the 4-lane road to a 2-lane road with turning lanes, transit lanes, or bicycle lanes. (See also Policies CC-7 and CC-8).

Action:

- a. Citywide Street Classification System.** *Maintain a citywide street classification system to determine the appropriate function and configuration of street when considering road diets.*

ME-9**Emergency Response and Disaster Preparedness.**

Preserve access for emergency response vehicles to people and property and for evacuation. (See also Policies HS-1, HS-2 and HS-4).

Actions:

- a. Emergency Response Planning.** *Include emergency response needs in all transportation planning, the design of new facilities, and modifications to existing facilities. Establish and sign designated evacuation routes, and provide ongoing education and outreach to ensure that Alameda is evacuation ready. Continue to work with AC Transit and WETA to ensure coordinated services in the event of the need for evacuation.*
- b. Outreach.** *Educate the community on disaster preparedness using an all-hazard approach to emergency response.*
- c. Miller-Sweeney Bridge Life Line.** *Upgrade the Miller-Sweeney Bridge to meet lifeline standards to ensure that the bridge can be used for the movement of supplies, evacuations and emergency vehicles and to support recovery efforts in the event of a major earthquake.*
- d. Fruitvale Rail Bridge Hazard.** *Remove the abandoned Fruitvale Rail Bridge which poses a seismic hazard to the city's lifeline Miller-Sweeney Bridge. Consider replacing the hazardous structure with crossing for transit, bicycles and pedestrians.*



GOAL 3: CHOICES

Expand and improve alternatives to low occupancy automobile trips to incentivize trip planning and mode shift to more environmentally sustainable modes of transportation while recognizing the diverse needs for mobility.

POLICIES:

ME-10

Movement. Provide for the safe and efficient daily movement of people, goods, and services. (See also Policies LU-3, OS-7 and HS-6).

Actions:

- a. **Complete Streets.** Maintain a multimodal system of complete streets and multi-use paths designed for safe access for all modes of transportation and users of all ages and abilities.
- b. **Best Practices.** Rely on up-to-date, forward-looking design guides and manuals as well as countermeasure best practices such as those produced by the Federal Highway Administration and National Association of City Transportation Officials (NACTO) in the design of all transportation projects.
- c. **Self Enforcing Design.** Design streets and rights-of-way to support vehicle speeds of 25 miles per hour or less, efficient bus movements and safe bicycle and pedestrian movements, to reduce the need for active enforcement and the risk of bias.
- d. **Pilot Projects.** Experiment with low cost, easily reversible street design changes, such as temporary “slow streets”, weekend street closures, lane restriping, and low cost barriers to test new best practices or community ideas that support safe, multimodal transportation.

ME-11

Commercial Traffic. Work with local business associations and individual businesses to identify and implement transportation improvements to support the local economy, reduce commercial traffic, and improve safety.

Actions:

- a. **Customer Trips.** Use infrastructure improvements to ensure all commercial corridors are connected and accessible without requiring a car trip.
- b. **Deliveries.** Provide adequate loading zones and work with businesses to schedule deliveries to facilitate commercial activity while minimizing safety hazards of obstructed rights-of-way.
- c. **Truck Routes.** Maintain a citywide network of truck routes to provide for efficient movement of materials and products with the least impact on public health, safety and general welfare.



SPOTLIGHT

TRANSPORTATION CHOICES PLAN

In 2018, the City Council adopted the Transportation Choices Plan to ensure that the city sustains a high quality of life while accommodating population and employment growth. The plan identifies projects and programs to effectively support shifts to transportation modes that make more efficient use of the existing transportation network, are more equitable, less damaging to the environment, and reduce congestion.

THE PLAN INCLUDES:



MEASURE

Current goals and objectives to allow the City to measure its performance in providing effective travel choices and reducing single occupant vehicle trips.



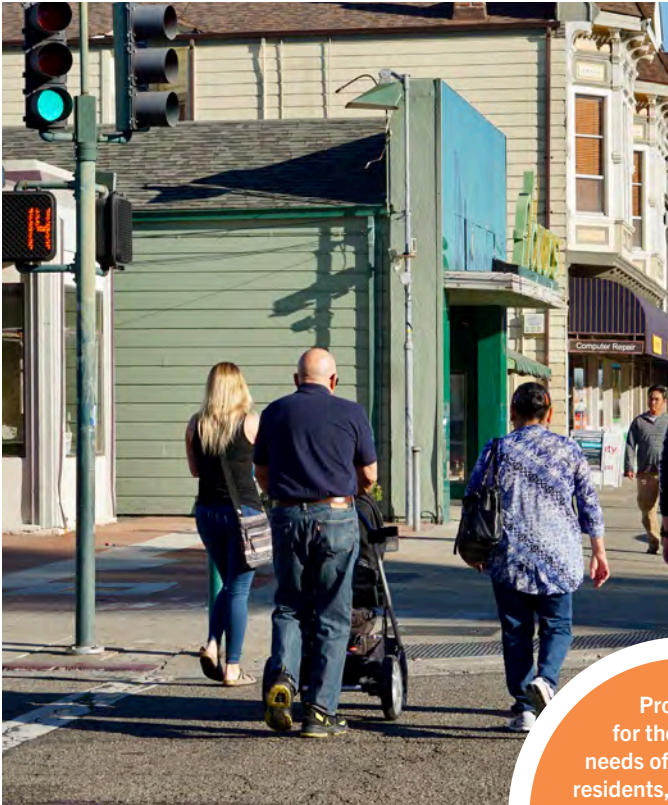
QUANTIFY

Quantification of existing and expected future travel characteristics in terms of cross estuary trips and trips within Alameda.



IDENTIFY

Identification of potential projects and programs that, if implemented, would move the City towards the achievement of the performance goals. These projects and programs have been categorized by their expected performance and by the time frame in which they could reasonably be implemented.



Providing for the mobility needs of all Alameda residents, workers, and visitors regardless of income, age, ability, or neighborhood is a main goal of the Mobility Element.



ME-12

School Traffic. Work with Alameda Unified School District, parents, and AC Transit to reduce school-related automobile traffic and congestion.

Action:

- a. Student Drop Offs.** While encouraging use of other modes for students to arrive at school, Drop Off Zones that allow safe pickups and drop offs from vehicles while removing these stopped vehicles from the flow of traffic will be considered.

ME-13

Alameda Street Grid. Manage and extend the Alameda street grid to maintain the character of Alameda, reduce traffic, and maximize mobility, access, and safety for all modes of transportation.

Actions:

- a. Cross Alameda Trail.** Complete the Cross Alameda Trail, the major cross town route for people walking and bicycling, from Seaplane Lagoon to the Miller-Sweeney Bridge.
- b. Bay Trail.** Complete the San Francisco Bay Trail along the shoreline and around the perimeter of Alameda.
- c. Shoreline to Sea View Bridge.** Evaluate the feasibility of connecting the South Shore area to Harbor Bay directly via a causeway and drawbridge for pedestrians, bicyclists and micromobility users, reducing trips by 1.5 miles each way.
- d. Central Avenue Safety Improvements.** Complete the Central Avenue Safety project to reduce speeding and improve safety for people walking and bicycling from Pacific Avenue/Main Street to Encinal Avenue/Sherman Street.
- e. Mitchell Avenue Extension.** Complete the Mitchell Avenue extension from Bette Street to Main Street.
- f. Clement Avenue Extension.** Complete the Clement Avenue extension from Sherman Street to Grand Street and from Broadway to Tilden Avenue.

- g. Tilden Avenue.** Reconfigure Tilden Avenue into a 25 mile per hour, complete street with sidewalks, low-stress bikeways and safe pedestrian crossings.

- h. Rights-of-Way.** Utilize former railroad and public rights-of-way for transportation improvements and extensions to the Alameda street grid and pathway network.

- i. Block Sizes.** When designing new streets, typical blocks should be between 200 and 400 feet in length to reflect typical, historic, Alameda block sizes.

ME-14

Active Transportation. Reduce traffic, improve public health, increase transportation equity, reduce greenhouse gas emissions, air and noise pollution, increase access to transit, enhance quality of life, and improve the efficiency of the transportation system by making Alameda a city where people of all ages and abilities can safely, conveniently, and comfortably walk, bike, and roll to their destinations. (See also Policies LU-2, LU-3, OS-7, OS-8, and CC-7).

Actions:

- a. Connectivity and Comfort.** Develop a well-connected, low-stress network of pedestrian and bicycle facilities that are comfortable and well-designed for people of all ages and abilities and seamlessly link with Alameda's key destinations such as schools, designated commercial corridors, grocery stores, parks and transit stops.
- b. Maintenance.** Regularly maintain the active transportation network for safety and comfort, and to ensure current design standards are being met.
- c. Community Awareness and Education.** Foster a strong culture of walking and bicycling through public outreach efforts such as community-wide campaigns, community-implemented street art and placemaking (such as painted bulbouts and intersections), and ongoing education in collaboration with community organizations and neighborhood groups.



SPOTLIGHT

WHAT IS ACTIVE TRANSPORTATION?

Active transportation modes are the original modes of transportation that predate the automobile: walking, biking, and wheelchairs. But they also include newer forms, such as skateboards and scooters. Whether new or old, these are the modes of transportation that rely on an excellent citywide network of sidewalks, bicycle lanes, and trails. They are also the types of transportation that have the least impact to our natural environment (little to no greenhouse gas emissions) and they are the modes of transportation that support a healthy life style.

The Active Transportation Plan is a plan for improvements to support people walking or rolling, which includes travel by bicycle, wheelchair, scooter, skateboard, or other similar wheeled vehicles allowed in bicycle lanes, paths or sidewalks. The Plan builds on plans and projects from the previous decade, with a focus on safety, user comfort, connectivity, and equity and mode share.



Photo: Maurice Ramirez

- d. Equity.** Ensure that comfortable bicycle and pedestrian facilities and programs are implemented equitably throughout the city.
- e. Safety.** Increase the safety of all people bicycling and walking by improving the design of streets and active transportation facilities, educating the public, and enforcing traffic laws.
- f. Design for Context.** Develop a pedestrian-specific street typology to apply to all city streets, based on street function and characteristics, and match recommended design treatments to each typology.
- g. Supportive Infrastructure.** Ensure the installation of plentiful secure short and long-term bicycle parking, including on-street bicycle corrals, throughout the city. Develop and implement a citywide bicycle wayfinding signage program.
- h. Low-stress Bikeways.** Prioritize low-stress biking infrastructure such as separated bicycle lanes, bicycle boulevards (Slow Streets) and bike trails, which is comfortable for the majority of the community. Build these facilities with enough width to comfortably and safely support all people and devices into the future, including cargo bikes, electric bikes, and scooters, all operating at different speeds. Provide separated bicycle lanes instead of unprotected, standard bicycle lanes, unless not feasible.
- i. Separate Pathways.** Where there is adequate space and existing or anticipated future demand, build separate facilities for people walking and bicycling, given their different speeds.
- j. Safer Intersections.** Use hardscape treatments and traffic signals to separate people walking and bicycling from motorists at busy and larger intersections.
- k. Legislative Agenda.** Support strong regulatory efforts to prioritize safety for people walking or biking, including efforts to improve and accelerate Caltrans' complete streets policies and allow the thoughtful deployment of automated speed cameras.

ME-15

Estuary Crossings. Work with Oakland, Alameda County, Caltrans, the Alameda County Transportation Commission, the State of California, the US Coast Guard, and other local, regional and federal partners to improve and ensure the maintenance and safe operations of Alameda's existing bridges and tubes, and improve bicycle, pedestrian and transit access between Alameda and Oakland.

Actions:**a. Pedestrian and Bicycle Access to Oakland.**

Upgrade walking and bicycling facilities on the Park Street Bridge, Miller-Sweeney Bridge, and High Street Bridge to current best practice standards.

b. West Alameda to Oakland Bicycle and Pedestrian Bridge. *Continue to work with Oakland, Caltrans, the Alameda County Transportation Commission, the State of California, the US Coast Guard, and other relevant agencies to design, fund, and construct a bicycle and pedestrian bridge from West Alameda to Oakland in order to increase bicycle and pedestrian access across the estuary.*

c. Transit Crossings. *Continue to work with Caltrans and the City of Oakland to improve transit access across the estuary in the short term by creating commute hour transit lanes and permanent queue jump lanes approaching the crossings. In the long term, begin planning for the eventual replacement of the Webster and Posey Tubes, which provides an opportunity to design a crossing that better serves transit.*

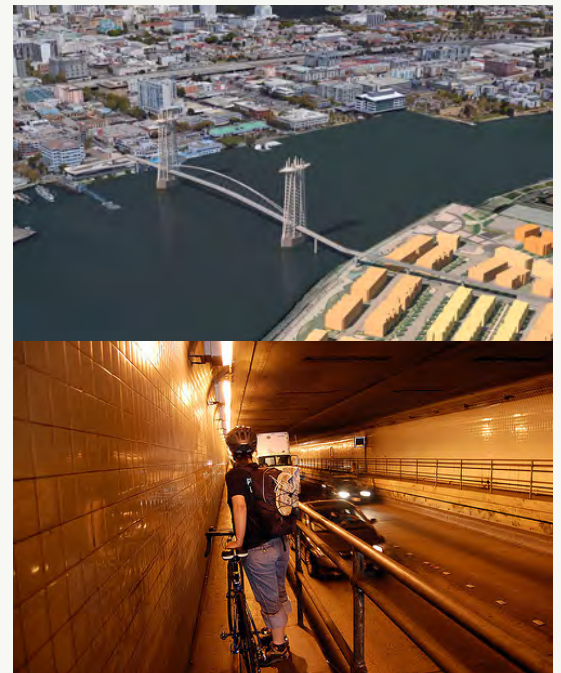
d. Water Shuttles. *Work with the Alameda Transportation Management Association, WETA, and Oakland stakeholders to develop and support water shuttles between Oakland and Alameda.*

e. BART to West Alameda. *Work with BART and other key stakeholders to extend BART to West Alameda as part of the second transbay tube between Oakland and San Francisco.*

**SPOTLIGHT****WEST ALAMEDA BICYCLE + PEDESTRIAN BRIDGE**

In 2021, Alameda, Oakland, the Alameda County Transportation Commission (ACTC), and a wide coalition of stakeholders and agencies are working together on a plan to build a pedestrian and bicycle bridge to enable pedestrians and bicyclists to safely and easily cross the 1,000 foot distance between West Alameda and Jack London Square.

As Alameda, Oakland, and the State of California work to reduce greenhouse gas emissions generated by automobile trips, create a more equitable and sustainable transportation system, and reduce the environmental justice impacts of the Webster and Posey tubes on the vulnerable communities in Downtown Oakland and West Alameda, the West Alameda-Oakland Bicycle and Pedestrian Bridge represents a major step forward. ACTC studies completed in 2020 demonstrated that the new bridge, if built, would be used by an estimated 5,000 to 6,000 bicyclists and pedestrians each weekday, resulting in 40,000 fewer auto trips each week on Oakland Chinatown and Jack London streets and along Webster Street and Constitution in West Alameda. In early 2021, the City secured funding from ACTC for the Project Study Report, which will determine the preferred alignment, detailed cost estimate, and the agency that should own and maintain the bridge. This report will allow this long-term project to move toward becoming a reality.



*Sketch of a potential bicycle and pedestrian bridge on the West End
Few cyclists and pedestrians choose to navigate the tube, their only estuary crossing on the West End*

ME-16

Transit. Improve mobility and reduce greenhouse gas emissions and air and noise pollution by making Alameda a city where more people have access to safe, reliable, high quality transit. (See also Policy CC-8).

Actions:

- a. Partnerships.** Collaborate and partner with AC Transit, the Water Emergency Transit Agency (WETA), BART, the Alameda Transportation Management Associations, community groups, and employers to provide expanded and more convenient transit services throughout the city as well as to downtown Oakland, San Francisco, and the BART system.
- b. Travel Time.** Incentivize transit use by making on- and off-Island transit ride times faster than or comparable to on- and off-Island drive times through traffic management and parking management.
- c. Bus Transit.** Work with AC Transit to provide convenient and frequent bus service within a 1/4 mile of every Alameda resident and business and establish a regular cross Alameda service connecting east Alameda and Park Street to west Alameda and the Alameda Point Ferry Terminals and key retail destinations.
- d. Land Use.** Coordinate transit investments with land use decisions in order to maximize returns, enhance livability, and minimize congestion. Adopt development regulations that discourage automobile ownership in new projects.
- e. Water Transit.** Expand ferry services from Alameda to San Francisco, the Peninsula, and other locations throughout the Bay Area. Consider the use of hovercraft and other water-based transportation technologies to connect the south shore of Alameda to employment centers and other destinations that cannot be served by traditional ferries.
- f. BART to Alameda.** Continue to work with BART to include an Alameda BART station in the design of BART's plan for a second San Francisco Bay crossing connecting Oakland and San Francisco.
- g. Transit Connections.** Improve connections between bus transit and water transit facilities and services, such as a cross-town bus service connecting east and west Alameda to the Ferry Terminal services at Alameda Point.
- h. Citywide "Transit Pass".** Work with AC Transit, WETA and MTC to develop a multi-modal fare payment system that could be used to develop an "Alameda Transit Pass" program that would provide every Alameda resident and employee with a pass for use on any bus or ferry at any time.
- i. Bus Transit Priority Infrastructure.** Provide transit priority lanes, transit signal priority, and transit queue jump lanes, and make traffic signal upgrades including coordination, to make transit faster and more reliable.
- j. Bus Stops.** Ensure consistency with AC Transit Multimodal Design Guidelines and move bus stops to the far side of the intersection to increase safety and improve bus speeds and reliability and work to make all bus stops fully ADA-accessible to accommodate those with mobility challenges.
- k. Committees.** Maintain committees such as the Interagency Liaison Committee that promote partnerships with transit service providers to improve transit services for Alameda.

ME-17

Shared Mobility. Promote shared mobility devices programs such as bicycle share, car share, and electric scooter share programs that reduce the need for an automobile trip. (See also Policy CC-9).

Actions:

- a. **Car Share.** Continue to partner with car share companies to provide car share services in all Alameda neighborhoods.*
- b. **Scooter Share.** Develop a permitting system to all electric scooter companies to operate in Alameda.*
- c. **Bike Share.** Continue to explore options and partners to provide bicycle share services in Alameda.*

ME-18

New Mobility and New Technology Infrastructure. Plan for new mobility technologies or customizable on-demand services, such as autonomous cars, taxis, shuttles, buses and delivery vehicles; bicycle, scooter, and car share; and other micromobility and new mobility transportation options.

Action:

- a. **Infrastructure.** Require the installation of communications and fiber infrastructure in excavation projects in the public right-of-way wherever and whenever feasible to facilitate interconnected traffic signals, improved transportation operations, new mobility options, and digital inclusion.*

ME-19

Active Management and Monitoring. Actively manage the use of public streets, parking areas, and transportation services through signal timing, design changes, and user fees to increase efficiency and capacity, decrease traffic, and to reduce collisions, congestion, greenhouse gas emissions, and vehicle miles traveled. (See also Policy CC-12).

Actions:

- a. **Signal Operations.** Implement multimodal, equitable, and reliable traffic signal operations.*
- b. **State and Regional Roadways.** Work with the State of California, Alameda County and the City of Oakland to ensure that any future user fees or congestion pricing on state and regional roadways, such as the Webster and Posey Tubes and the Estuary Bridges, are designed to reduce greenhouse gas emissions while being sensitive to the needs of lower income residents.*
- c. **Systemwide Monitoring.** Provide comprehensive citywide monitoring of the transportation system for all modes to be included in the Annual Report on Transportation.*



SPOTLIGHT

TRANSPORTATION DEMAND MANAGEMENT (TDM)

Transportation Demand Management (TDM) strategies are actions and programs to better manage the demands on the transportation system.

THESE INCLUDE:



CONSTRUCTING HIGH OCCUPANCY VEHICLE LANES



AUTOMATED SIGNAL TECHNOLOGY AND BUS PRIORITY SIGNALS



CONGESTION PRICING



PARKING PRICING



CURB MANAGEMENT



PEDESTRIAN AND BICYCLE IMPROVEMENTS



TELECOMMUTING



OTHER STRATEGIES TO MAKE USE OF THE SYSTEM MORE EFFICIENT

ME-20

New Development. Require that new development support citywide traffic reduction, greenhouse gas reduction, and sustainable transportation. (See also Policies LU-16 and CC-10).

Actions:

a. Transportation Demand Management Ordinance.

Prepare and adopt a Transportation Demand Management Ordinance requiring new development to actively meet the mobility needs of residents and employees, including but not limited to contributing to annual operations and capital improvements for supplemental transit, water shuttle, land-based shuttle services and improvements to the bicycle and pedestrian network.

b. Alameda Transportation Management Association. *Expand the Alameda Transportation Management Association to provide transportation services to all new developments, existing business associations and neighborhoods to improve citywide transportation service options and reduce greenhouse gas emissions and vehicle miles traveled in Alameda.*

ME-21

Parking and Curbside Management. Manage parking and allocate curb space to reduce congestion, reduce vehicle miles traveled, and increase safety. (See also Policy LU-34).

Actions:

a. Availability. *Manage parking pricing to ensure that approximately 15% of public parking is always available, allowing people to find parking faster and reducing emissions and potential conflicts with pedestrians while drivers circle for parking.*

b. Long-Term Parking. *Ensure that long-term parking pricing is equitable and considers the impact of the fees on lower income or other vulnerable users.*

c. On-street Metered Parking and Surface Lots. *Utilize parking pricing to encourage one or two open spots on every block, and a few open spots in city-owned surface lots to minimize circling for parking.*



As an island city, ferries and water shuttles represent a major untapped transportation opportunity.

- d. **Ferry Terminal Parking.** Establish daily parking fees at all of Alameda’s regional ferry terminals. Periodically adjust pricing to ensure that some spaces are always available for riders on later boats.*
- e. **Reinvest Funds.** Equitably reinvest net proceeds from parking revenues in improved access and amenities in the community and programs such as rebates or need-based parking passes.*
- f. **Disability Parking.** Provide appropriate, well-located, accessible parking for mobility impaired drivers.*
- g. **Carpool Parking.** Incentivize and reward carpooling by providing carpool-only parking spaces in locations throughout Alameda such as major employment sites and at ferry terminals and transit transfer locations.*
- h. **Bicycle and Scooter Parking.** Provide plentiful and secure parking for micromobility devices (i.e. scooters and bicycles). Where possible, include valet programs funded by parking fees at transportation transfer points, such as the ferry terminals and along commercial transit corridors.*
- i. **Shared Off-Street Parking.** Revise development requirements and ordinances to facilitate shared and well-managed off street parking facilities.*
- j. **Neighborhood Parking Permits.** Continue to provide opportunities for neighborhood preferential parking permits.*



GOAL 4: SUSTAINABILITY

Reduce the impacts of transportation systems on the environment and transition to a more resilient transportation system to address the impacts of climate change.

POLICIES:

ME-22

Environmentally Friendly Transportation. Reduce traffic, pollution, and greenhouse gas emissions by reducing reliance on the single occupancy vehicle and reducing vehicle miles traveled (VMT). (See also Policies CC-6, CC-7, CC-8, CC-9, CC-10, and CC-11).

Actions:

- a. Climate-Friendly Vehicles and Equipment.** Reduce pollution and transportation greenhouse gas emissions by promoting, and when appropriate, requiring the use of low and zero emission vehicles and equipment and taking action to support use of micro mobility devices to reduce energy use and carbon emissions from personal vehicles.
- b. Clean Transit.** Support and encourage use of hydrogen fuel cells and other alternative energy sources for transit vehicles.
- c. Climate-Friendly Modes of Transportation.** Reduce greenhouse gas emissions from transportation by improving the local roadway network to support environmentally sensitive mobility choices such as transit, walking and bicycling.
- d. Transit Use.** Reduce automobile greenhouse gas emissions by increasing transit use.
- e. Vehicle Sharing and Carpooling.** Reduce automobile greenhouse gas emissions by supporting and encouraging vehicle sharing and carpooling.



SPOTLIGHT

WHAT IS VEHICLE MILES TRAVELLED (VMT)?

VMT is the best measure of the impact on the environment of automobiles from new development. Reducing VMT reduces greenhouse gas emissions and reduces congestion on our streets and roads. VMT has replaced automobile level of service (LOS) as the recommended metric for use in the California Environmental Quality Act (CEQA). LOS measures the volume and speed of vehicles moving through an intersection or on a segment of roadway. Improving LOS increases the speed of vehicles and allows for a greater volume of vehicles through the intersection or on the segment. Increasing automobile speeds and volumes increases greenhouse gas emissions and increases safety hazards for pedestrians and bicyclists.



- f. Climate-Friendly, Walkable and Transit-Oriented Development.** Reduce reliance on automobile use and reduce vehicle miles traveled by requiring walkable, transit-oriented, medium and higher-density mixed-use development in transit-rich areas and along commercial corridors such as much of Park Street, Webster Street and Otis Drive, as well as near ferry terminals.
- g. Climate-Friendly Employment Commute Behavior.** To reduce vehicle miles travelled, greenhouse gas emissions, and commute hour congestion, make Alameda an ideal location to work from home in the Bay Area by collaborating with employers, Island businesses, and improving work-from-home infrastructure.

ME-23

Resilient Transportation Infrastructure. Plan, develop and construct transportation infrastructure that is resilient to the impacts of climate change and reduces greenhouse gas emissions. (See also Policies LU-14, CC-3, CC-7, and HS-21).

Actions:

- a. Adaptation Strategies.** Implement improvements to protect critical transportation facilities threatened by sea-level rise or rising groundwater.
- b. Nature Based Design.** Require the use of bioswales, rain gardens, trees, coastal habitat restoration, and pervious materials as an integral part of an adaptation solution to enhance water quality, ecosystem health and the visual appearance of the facility, and to reduce greenhouse gas emissions, the urban heat island effect and the flooding impacts on the stormwater system and the San Francisco Bay.
- c. Lifecycle Emissions.** Reduce lifecycle emissions by considering variables such as asphalt compaction effect on vehicle fuel efficiency and transportation project design specifications.

ME-24

Regional Partners. Work with Caltrans, the East Bay Regional Park District (EBRPD), the Alameda County Transportation Commission and the City and Port of Oakland to prepare regional facilities for the impacts of climate change and identify funding to adapt the regional and local roadways in Alameda. (See also Policies OS-2 and HS-16).

Actions:

- a. Webster and Posey Tubes and the Northern Waterfront.** Work with Caltrans and northern waterfront property owners to develop sea-level rise protection for the Webster and Posey Tubes and the connecting on-island roadway network along the northern waterfront.
- b. State Route 61 and Bay Farm Island.** Work with Caltrans, the EBRPD and the City and Port of Oakland to develop sea-level rise protections for Doolittle Drive, State Route 61, the east end of Alameda, the San Francisco Bay Trail access including East Bay Regional Park District's (EBRPD) bike/pedestrian wooden bridge on Bay Farm Island, Packet Landing Road Lagoon Outfall, and the Veterans Court area.
- c. Shoreline Drive and the Southshore.** Work with the EBRPD and south shore residential and commercial property owners to prepare Shoreline Drive and the adjacent roadway network for sea-level rise.
- d. Fernside Drive and the Eastern Shoreline.** Work with Fernside Drive and eastern shoreline homeowners to prepare Shoreline Drive and the adjacent roadway network for sea-level rise.

06

PARKS + OPEN SPACE ELEMENT

A well designed and maintained interconnected network of neighborhood and community parks, waterfront open spaces, recreational facilities and natural habitat areas is essential to supporting the health and well being of the community, sustaining and preserving the quality of the natural environment, and countering climate change.



THE GOALS OF THE OPEN SPACE, RECREATION + PARKS ELEMENT ARE TO:

GOAL 1



MAINTAIN & ENHANCE

Maintain, enhance and improve the existing system of parks, open spaces, refuges, trails, and recreational facilities.

GOAL 2



EXPAND & IMPROVE

Expand and improve the parks and open space system to address the evolving needs of a growing community, serve all residents and neighborhoods equitably throughout the city, and adapt to the climate crisis.



photo: Maurice Ramirez

INTRODUCTION TO THE OPEN SPACE, RECREATION + PARKS ELEMENT

A growing population, evolving community needs and recreational preferences, and a changing climate are placing new demands and financial challenges on the community's network of open spaces, parks and recreational facilities.

Alameda's island setting provides a variety of unique open space, recreation, park and natural habitat resources for its residents and visitors. The San Francisco Bay, Oakland Estuary, San Leandro Bay, wetlands, marshes, tidal flats, beaches, public boat launches, small boat marinas, neighborhood and community parks, and recreational facilities provide an interconnected network of open space, parks, and recreational facilities that serve all Alameda residents, business employees, visitors, and local wildlife.

As the demands on the network grow, including rising groundwater and sea levels, many parks, trails and buildings must be managed to maximize the services they provide Alameda. Planning for the future of the community's open space, parks, and recreation network

must include planning for the financial resources needed to preserve, maintain and expand the size and diversity of that network. The City's recreation and parks program maintains more building floor area in support of its public programs than any other department or function in the City of Alameda. Unfortunately, many of these buildings are old, are suffering from the effects of deferred maintenance, and are not adequately accommodating access for individuals with disabilities. Expanding and modifying the network of parks and open spaces to address the needs of a changing population and climate will require additional financial resources and expanded partnerships with other public agencies, the private sector, and the Alameda community. Providing adequate maintenance for the growing network and the buildings and infrastructure that support those lands and facilities will also require increased expenditures of public resources. This will require a wide variety of funding sources, including state and federal grants, local General Fund allocations, development impact fees, and corporate funding.



The East Bay Regional Park District, the College of Alameda, and the Alameda Unified School District all provide important open space, and sports and recreational facilities that complement and support the City's open space and parks network.



TABLE A: City of Alameda Owned and Operated Open Space, Park and Recreational Park Facilities

Community Parks	Approximate Size in Acres
Jean Sweeney Open Space Park	10.64
Krusi Park	7.46
Leydecker Park	5.88
Lincoln Park	7.8
Main Street Linear Park	11
Neptune Park	3.08
Shoreline Park	31.83
Washington Park	14.71
Washington Dog Park	5.7
TOTAL COMMUNITY PARK ACREAGE	98.1
Neighborhood Parks	Approximate Size in Acres
Bayport Park	4.25
Enterprise Park	13.4
Franklin Park	2.98
Godfrey Park	5.45
Jackson Park	2.27
Lexington Fields	6.96
Littlejohn Park	3.45
Longfellow Park	1.14
Main Street Dog Park	1.3
Marina Cove Waterfront Park	3.2
Marina Village Park	4.5
McKinley Park	1.22
Portola Triangle	2.15
Rittler Park	4.81
Tillman Park	4
Towata Park	1.55
Woodstock Park	3.96
TOTAL NEIGHBORHOOD PARK ACREAGE	66.59
Regional Parks	Approximate Size in Acres
Alameda Point City Skate Park + Multipurpose Field	5.35
Bill Osborne Model Airplane Field	1.3
Corica Park and Golf Complex	332
Estuary Park Athletic Fields	4.26
Harrington Soccer Field	2.02
Grand Street Boat Launch Facility	n/a
Encinal Boat Ramp Launch Facility	n/a
TOTAL RECREATION ACREAGE	344.93
TOTAL EXISTING	509.62





GOAL 1: MAINTAIN & ENHANCE

Maintain, enhance and improve the existing system of parks, open spaces, refuges, trails, and recreational facilities.

POLICIES:

OS-1:

Parks and Open Space Funding. Secure adequate and reliable funding for the development, rehabilitation, programming and maintenance of parks, community and recreation facilities, trails, greenways, and open space areas.

Actions:

- a. Equitable Budget Process.** *Provide an annual opportunity for a representative group of the public to review the park maintenance budget and comment on upcoming priorities and plans to ensure compliance between the biannual Capital Improvement Program and the General Plan.*
- b. Maintenance.** *Monitor parks and open space and recreational facilities on a regular basis and identify those sites that require repair, renovation and/or improvements. Assign high priority to maintenance and renovation of existing parks and facilities.*
- c. Assessment Districts.** *Consider establishing neighborhood park assessment districts to fund neighborhood park maintenance and improvements.*
- d. Natural Areas.** *Annually consider restoring and preserving natural areas for habitat protection, climate adaptation and passive recreation use such as walking, hiking, and nature study.*
- e. Recreation Areas.** *Annually consider developing areas for recreation use, active transportation and public access along the islands' shorelines and interior. Improve parks and related open space facilities to ensure safety for users and adjacent properties.*

OS-2

Partnerships. Pursue and develop partnerships with federal, regional, and local non-profits, agencies, organizations, and districts to reduce the costs borne by the City of Alameda for the acquisition, construction, operations, and or maintenance of parks, open space, facilities and programs. (See also Policies ME-24 and HS-16).

Actions:

- a. Alameda Unified School District (AUSD)**
Partnerships. *Continue to support and collaborate with the AUSD to ensure that school and park open space joint uses are optimized.*
- b. East Bay Regional Park District (EBRPD)**
Partnerships. *Continue to support and collaborate with the EBRPD to ensure and protect the benefits of regional parks in Alameda. Collaborate with the EBRPD to develop, operate and maintain facilities and programs at regional parks including Alameda Point Northwest Regional Shoreline Park, Encinal Beach, Crown Memorial State Beach and Alameda Beach, portions of the Bay Trail, and the Elsie D. Roemer Bird Sanctuary.*
- c. Federal Partnerships with the U.S. Veterans Administration and U.S Fish and Wildlife.** *Continue to develop and sustain partnerships with the Veterans Administration and the U.S. Department of Fish and Wildlife to ensure the protection and maintenance of the Wildlife Refuge at Alameda Point.*
- d. Private Sector Partnerships.** *Continue to develop public-private partnerships for the development, maintenance and operation of publicly accessible open space and recreational facilities, such as the Corica Park Golf Course Complex, Alameda Point Sports Complex, and the development of new parks at Alameda Point and along the Northern Waterfront.*

OS-3

Revenue Generating Opportunities. Pursue and develop revenue generating approaches, including cost recovery opportunities, concessions, design flexibility, independent use, and opportunities for rentals.

Actions:

- a. **Leases.** Consider long term leases for complementary revenue generating uses, such as concessions or other uses available to the public.*
- b. **Sponsorship.** Consider corporate sponsorship and/or naming rights agreements.*

OS-4

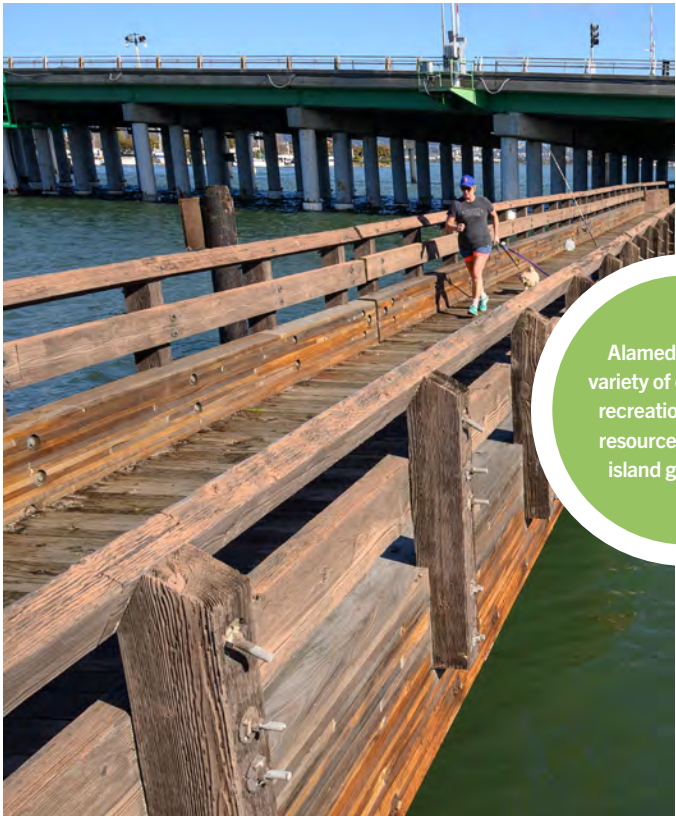
Grant Funding Opportunities. Continue to pursue park and open space grant opportunities and cooperative agreements with local, regional, state and federal agencies for expansion of the City's park and open space system.

OS-5

Accessibility For All. Continue to upgrade parks, trails, and community facilities to ensure accessibility and inclusivity for all residents. (See also Policies LU-2, LU-3 and LU-24).

OS-6

Efficient Operations. Reduce operational duplication and provide services, programs, and facilities as efficiently as possible.



Alameda enjoys a variety of open space, recreation and park resources due to its island geography.

Photo by Alain McLaughlin



SPOTLIGHT



MONARCH BUTTERFLY

These orange and black butterflies make massive migrations from August-October, flying thousands of miles south to winter along the California coast and in central Mexico. Every fall, the monarch flies to the same overwintering sites and frequently to the same trees. Alameda Point, Estuary Park, and the Chuck Corica Golf Complex on Bay Farm Island have all served as autumnal roost sites for these unique butterflies on their long annual travels. Given the subspecies of the Monarch Butterfly that calls North America home, *Danaus plexippus plexippus*, is imperiled, preserving winter habitats along the California coast is a conservation priority.



LEAST TERN

The California Least Tern, by far the smallest member of the gull family, has become a top priority in recent decades for Open Space planning at Alameda Point. In the summer breeding and hatching season, the endangered species often has over 300 nests on Alameda Point thanks to continued efforts to protect and improve its habitat. The tern migrates south each year to Baja California and feeds primarily on small fish and shrimp.



GOAL 2: EXPAND & IMPROVE

Expand and improve the parks and open space system to address the evolving needs of a growing community, serve all residents and neighborhoods equitably throughout the city, and adapt to the climate crisis.

POLICIES

OS-7

An Interconnected Network. Promote the creation of and maintenance of a comprehensive, seamless, interconnected system of parks, open space, commercial recreation, trails, and urban forest that frames and complements the City's waterfronts, neighborhoods, and commercial areas. (See also Policies LU-3 and ME-10).

Actions:

- a. **Trails.** Continue to create a network of safe and convenient pedestrian and bicycle trails connecting all public open spaces, parks, and recreational facilities to improve access to parks and destinations throughout Alameda.
- b. **On-Street Connections.** Promote improvements to on-street connections to ensure pedestrian and bicycle safety where separated trails are not feasible.
- c. **Slow Streets.** Work with community stakeholders to expand a network of slow streets to create additional spaces for active recreation throughout the city while maximizing existing trails, open spaces and destinations to make them more accessible and enjoyable to more people.
- d. **Flexible Spaces.** Consider public and privately owned sites that could be made available for public use, such as community gardens and sports fields.
- e. **Collaborative Design.** Work with neighborhoods in the design of parks and recreational facilities to meet the unique needs and interests of residents.

OS-8

Waterfront Access. Ensure safe and convenient access to the Alameda waterfront from all Alameda neighborhoods. (See also Policy LU-30).

Actions:

- a. **Trails.** Expand the City's trail system to provide additional north-south trails and safe on-street connections to link neighborhoods to the closest waterfront shoreline facilities.



b. Bike Parking. Provide bike parking at public access points along the waterfront.

c. Preservation of View Corridors. Preserve view corridors to the waterfront along public streets, pathways, and trails.

d. Protect Public Right-of-Ways. Prohibit private encroachments on public property and ensure that the use of public property does not create significant negative impacts to adjacent property owners.

e. School Partnerships. Work with the Alameda Unified School District in obtaining shoreline access at Lincoln Middle School, Paden School and Encinal High School.

f. Boat Launches. Add access to the water with public boat launches for non-motorized craft at strategic points around the island.

g. Continuous Public Shoreline Access. Require that new developments along or adjacent to the waterfront provide continuous shoreline access to serve the public.



SPOTLIGHT

SF BAY
WATER TRAIL

The SF Bay Water Trail is a regional program that encourages non-motorized small boaters to safely enjoy the San Francisco Bay. Just as the SF Bay Trail connects people to the bay by land, this project promotes recreational access to the water itself.

While there are a couple trailheads in and around Alameda, the Encinal Beach and Boat Launch is Alameda's signature launch site for the Water Trail. This site, located between rich wildlife habitat areas, offers a unique way to see the wide variety of birds and other Bay wildlife that spend time near the shore.

OS-9

San Francisco Bay Trail. Support the completion of a continuous shoreline Bay Trail along the entire perimeter of the City of Alameda, refer to Figure 6.3. (See also Policies LU-30 and ME-13).

Actions:

- a. Diversity of Uses.** *Support a variety of recreation activities including walking, rolling, running, bicycling, fishing, and vista points along the Bay Trail.*
- b. Destinations.** *Promote the creation of a sequence of open spaces and activity areas that occur at significant points along the waterfront and offer recreational opportunities and enhance other uses along the waterfront.*
- c. Room for Everyone.** *Ensure that the public access path along the waterfront includes a separated path for bicyclists or is wide enough to minimize conflicts between pedestrians and bicyclists.*
- d. Neighborhood Connectivity.** *Support the creation of pedestrian and bicycle pathways and visual corridors along the waterfront that link the waterfront to inland neighborhoods.*
- e. Resilience.** *Utilize current sea level rise projections when planning trail expansion and maintenance and design trail upgrades to ensure long-term resilience.*

OS-10

Cross Alameda Trail. Promote the completion of the Cross Alameda Trail for people walking, rolling and cycling from the Alameda Point park at Seaplane Lagoon to the Miller Sweeney Bridge to support access to the citywide network of parks. Refer to Figure 6.3. (See also Policy ME-13).

Action:

- a. Oakland Connection.** *Work with the County of Alameda and the City of Oakland to provide safe and convenient pedestrian and bicycle facilities from the Cross Alameda Trail across the Miller Sweeney Bridge to the Bay Trail in Oakland.*



SPOTLIGHT

THE SAN FRANCISCO BAY TRAIL

One of the most ambitious trail networks in the United States, the San Francisco Bay Trail follows much of the shoreline of the San Francisco Bay. It is planned to provide over 500 miles of trails connecting residents of 77 cities with opportunities for active and passive recreation while enjoying fresher air and pleasant views that come with being close to the Bay. With the addition of ferry terminals, the Bay Trail will become a more important commuting corridor, especially waterfront cities like Alameda.

CROSS ALAMEDA TRAIL

The Cross Alameda Trail, when completed, will provide a safe bicycle and pedestrian connection from Alameda Point to the Fruitvale Bridge. The rails-to-trails movement has become a massive success around the United States, with Atlanta's BeltLine as the largest example of how linear parks can completely transform a city's central neighborhoods. These linear parks have an advantage over their shoreline cousins in that they are surrounded by destinations, and ideally, connections, on all sides. The crown jewel of the Cross Alameda trail, Jean

Sweeney Open Space Park, is a rails to trails project that turned an old rail yard into a park that provides key walking and biking connections between Constitution Avenue and Sherman Street. With the rise of electric-assisted, shared micro-mobility options, the Cross Alameda trail could lead to a major reduction in car trips and improved access to Alameda's top destinations as well as to key transportation hubs like the new ferry terminal at Seaplane Lagoon.





Planning for sea level rise and the impacts of climate change on the city's parks is an important goal of the General Plan.



OS-11

Climate Adaptation. Adapt the existing park and open space network to rising sea levels, more severe storm events and wave energy and rising groundwater. (See also Policies CC-21 and CC-33).

Actions:

- a. **Green Infrastructure.** Utilize natural, green or 'soft infrastructure' such as sand dunes and wetlands over 'hard infrastructure' (concrete seawalls and/or levees) wherever possible.
- b. **Hidden Benefits.** Recognize and promote the open space network as an expanding asset that contributes to community character, reduces stormwater runoff and increases citywide resiliency.

OS-12

Wildlife Habitat. Promote the preservation, protection and expansion of wildlife habitat areas, open space corridors, and ecosystems as essential pieces of the overall network and important contributors to building citywide resilience. (See also Policy CC-27).

OS-13

Jean Sweeney Open Space Park. Support the completion of the last two phases of the 25-acre Jean Sweeney Open Space Park to include a community garden, demonstration gardens, walking trails, a bicycle skills loop, an outdoor classroom, picnic areas, and large areas of open space and trees.

OS-14

Estuary Park. Support the completion of the 8-acre Estuary Park to provide recreational facilities for the neighborhoods on the former Naval Air Station property in western Alameda to include passive recreational space, picnic areas, and basketball courts.

OS-15

City Aquatic Center. Partner with the Alameda Unified School District to develop a City Aquatic Center to serve the community's swimming needs and AUSD swim programs.

OS-16

Alameda Point Northwest Shoreline Park and Bay Trail Extension. Partner with the East Bay Regional Park District to develop a 158-acre waterfront, public park and Bay Trail extension on the Northwest Territories.

OS-17

Alameda Point Wildlife Refuge and Bay Trail Extension. Partner with the Bureau of Veterans Affairs and the Department of Fish and Wildlife to create a seasonal trail along the shoreline of the Wildlife Refuge. (See also Policy CC-28).

Action:

- a. **Education.** *Support creation of related educational facilities and programs.*
- b. **Ship/Ferry Access.** *Ensure access for ships, ferries, and water-taxis within the deep-water channel to the Alameda Point piers and the Seaplane Lagoon through the southern bay waters of the Wildlife Refuge.*
- c. **Habitat.** *Promote the maintenance of the breakwater gap and Island Breakwater for wildlife habitat.*
- d. **Wetlands.** *Support actions by the federal government that improve and manage wetlands, increase carbon sequestration, and support long-term climate resiliency for Alameda.*

OS-18

De-Pave Park on the Seaplane Lagoon and Bay Trail Extension. Implement the development of the 22-acre western shore of the Seaplane Lagoon as a passive nature park with upland and floating wetlands, educational and interpretive programs, picnic areas, camping opportunities, and nature trails. (See also Policy CC-27).

OS-19

Seaplane Lagoon Park and Bay Trail Extension. Support the development of the northern and eastern shore of the Seaplane Lagoon as an urban waterfront with access to the Ferry Terminal, the Bay Trail, waterfront dining and cafes, passive recreation space, an outdoor amphitheater, public boat launches, and non-motorized watercraft rentals and lessons.

**SPOTLIGHT****WILDLIFE HABITAT
AREAS OF INTEREST**

The San Francisco Bay is the largest estuary along California's coastline, and the estuarine environment of marshlands, mudflats, salt production lands, and open water supports close to 100 species of fish. As an essential portion of the Pacific Flyway, a bird migration route which spans from Canada to Mexico, the Bay supports countless migratory as well as year-round bird species.

Alameda Point Open Space Wildlife Refuge: the endangered California Least Tern has its nesting sites in the Refuge. In spite of its restricted access, citizen scientists have identified 96 different species of birds from 2010 to 2019 in the Reserve (source: eBird).

Elsie Roemer Bird Sanctuary has had sightings of 165 different species of birds from 2010-2019.

Robert W. Crown State Marine Conservation Area has had sightings of 189 species of birds (2010-2019), while in the last year (2019) Alameda County as a whole had 298 species of birds identified in its borders.

Bay Farm Island was identified by the Bay Area Greenprint as having much of Alameda's especially valuable habitat for federally endangered and threatened species throughout.

Bay Farm Island Shoreline has had documented sightings of 126 species of birds (from 2010-2019), with its habitat value higher thanks to its proximity to Arrowhead Marsh (214 species) and other rich habitat areas like Peet's Pond (96 species).

The egret rookery on Bay Farm Island (on the lagoon by the Peter Pan School) has had sightings of 53 species of birds from 2010-2019.

Seaplane Lagoon has had sightings of 89 different bird species from 2010-2019.

Wetlands: Two separate beds of eelgrass provide distinctive habitat for marine organisms living in the waters off of Alameda. The bed which is southwest of Bay Farm Island is believed to be the richest grass bed left in San Francisco Bay, with respect to the presence of small animals. The grass is long and wide, grows quickly, and dozens of common species are known to be associated with this bed of eelgrass. The endangered Least Terns are known to forage on herring living in and around this eelgrass. The second bed of eelgrass off of Crab Cove, although shorter and growing in shallower water, probably also provides a nursery for fish species which the Least Terns nesting at Alameda Point (GPA 01-01) forage.

Continuing to upgrade parks, trails, and community facilities to ensure inclusivity for all residents and visitors is a primary goal of the General Plan.

(PHOTO BY ALAIN MCLAUGHLIN)

OS-20

Regional Sports Park. Promote the development of a 55-acre regional sports complex for active recreational uses and team sports, including baseball and softball diamonds, multi-purpose rectangular fields, expanded skate park, BMX park, tennis and pickleball courts.

OS-21

Waterfront Developments. Partner with private property owners to develop publically accessible waterfront open space and Bay Trail facilities in new waterfront development. (See also Policies LU-18, LU-23, and CC-34).

Action:

a. New Open Space. Partner with private property owners and businesses to develop publicly accessible waterfront parks and trails at:

- » Alameda Landing Waterfront
- » Ballena Isle
- » Marina Village Shipways property
- » Former Windriver property on the Alaska Basin
- » Encinal Terminals and the Alaska Basin
- » Alameda Marina
- » Other future waterfront development

OS-22

Alameda Point Marine Conservation, Wildlife and Recreation Area. Partner with regional, state, and federal conservation agencies and volunteer non-governmental organizations to seek funding to enhance and protect habitat values, ensure safe public access, and foster appreciation of the marine environment just south of Alameda Point. (See also Policy CC-29).

**SPOTLIGHT****SPECIAL STATUS WILDLIFE SPECIES**

A number of species known to occur in and around Alameda are protected pursuant to federal and/or State of California endangered species laws, or have been designated Species of Special Concern by the California Department of Fish and Wildlife. Special status wildlife species that have been observed or have a moderate to high potential to occur in and around Alameda, include:

**MARINE SPECIES:**

- | | |
|--|--|
| + Green sturgeon | + Central Valley spring-run Chinook salmon |
| + Central California coast coho salmon | + Longfin smelt |
| + Central California coastal steelhead | + Pacific herring |
| + Central Valley steelhead | + Central Valley fall/late fall-run Chinook salmon |
| + Sacramento River winter-run Chinook salmon | + Pacific harbor seal |
| | + California sea lion |

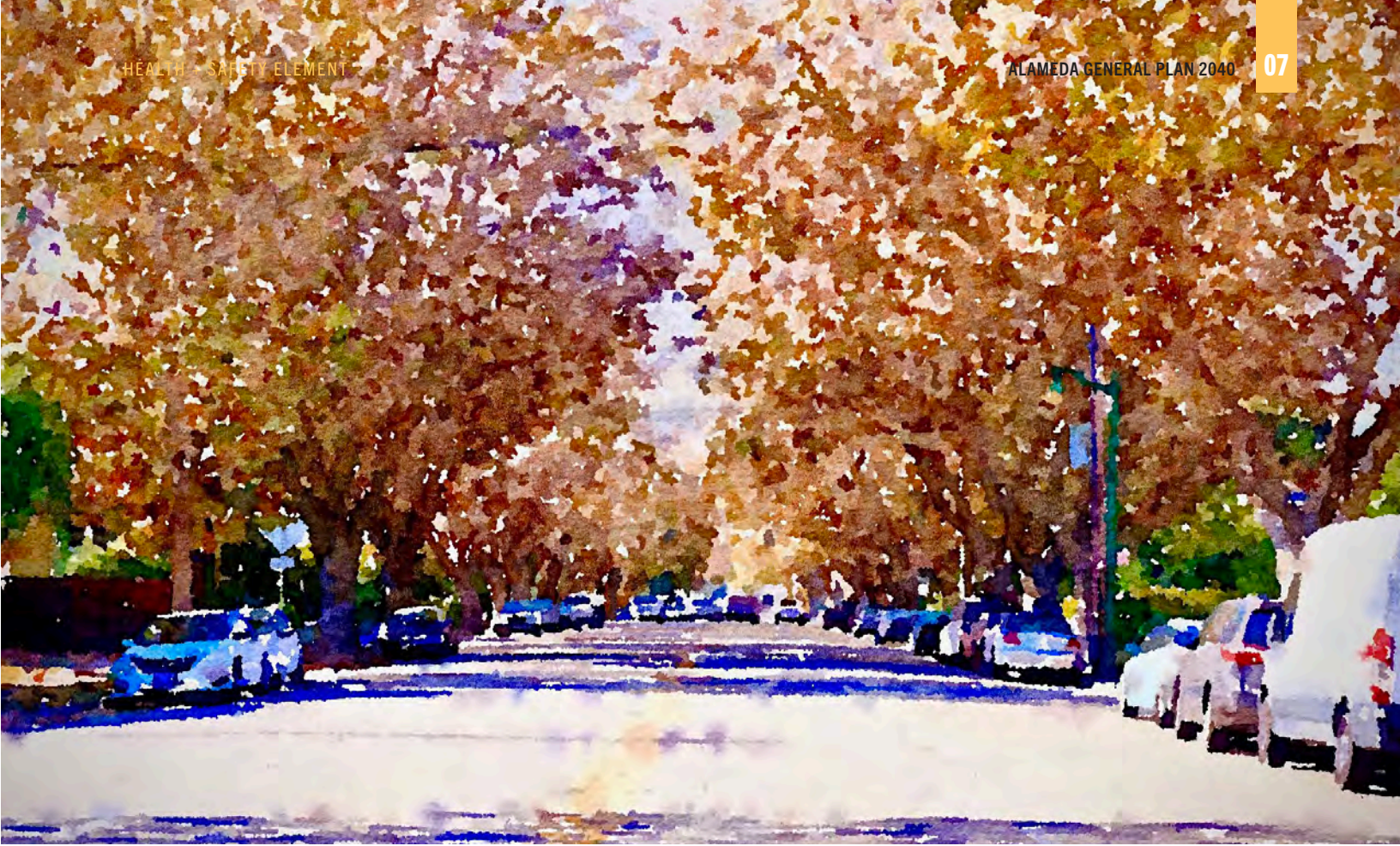
**BIRDS, BUTTERFLIES, AND BATS:**

- | | |
|----------------------------|----------------------------|
| + California least tern | + Red-shouldered hawk |
| + Western snowy plover | + Northern harrier |
| + White-tailed kite | + Snowy egret |
| + Peregrine falcon | + California horned lark |
| + California brown pelican | + American kestrel |
| + Monarch butterfly | + Caspian tern |
| + Cooper's hawk | + Loggerhead shrike |
| + Great egret | + California gull |
| + Great blue heron | + Alameda song sparrow |
| + Burrowing owl | + Osprey |
| + Great horned owl | + Double-crested cormorant |
| + Red-tailed hawk | + Townsend's big-eared bat |

07

HEALTH + SAFETY ELEMENT

The Health and Safety Element identifies the policies and actions necessary to sustain the health and safety of Alameda residents and visitors to reduce the risk of death, injuries, property damage, environmental degradation, economic and social dislocation, and excessive and harmful noise from the natural and man-made hazards in the city of Alameda.



THE GOALS OF THE SAFETY + NOISE ELEMENT ARE TO:

<p>GOAL 1</p>  <p>PROTECT</p> <hr/> <p>Protect the health, safety and general welfare of Alameda residents, workers and visitors.</p>	<p>GOAL 2</p>  <p>LIMIT</p> <hr/> <p>Limit exposure to natural and man-made hazards.</p>	<p>GOAL 3</p>  <p>MINIMIZE</p> <hr/> <p>Minimize disruption of essential public services, facilities, and infrastructure as the result of public health emergencies or natural disasters.</p>
<p>GOAL 4</p>  <p>RECOVER</p> <hr/> <p>Facilitate timely and complete recovery from a natural disaster.</p>	<p>GOAL 5</p>  <p>AWARENESS</p> <hr/> <p>Increase public understanding and awareness of hazard and hazard mitigation.</p>	<p>GOAL 6</p>  <p>INCLUSION</p> <hr/> <p>Promote participation in mitigation and resiliency preparation by Alameda residents, workers, and partner agencies.</p>



SPOTLIGHT

THE HEALTH + SAFETY ELEMENT IS INFORMED BY:

- The City of Alameda Local Hazard Mitigation Plan
- City of Alameda Emergency Operations Plan
- Association of Bay Area Government's Resiliency Program
- Adapting to Rising Tides, Transportation Vulnerability and Risk Assessment Pilot Project (prepared by Metropolitan Transportation Commission, California Department of Transportation and Bay Conservation and Development Commission)
- Adapting to Rising Tides: Alameda County Shoreline Vulnerability Assessment (prepared by the Alameda County Flood Control and Water Conservation District and Bay Conservation and Development Commission)
- California Governor's Office of Emergency Services
- United States Geological Survey Earthquake Preparedness
- The National Oceanic and Atmospheric Administration: Weather-Ready Nation
- Alameda Climate Action and Resilience Plan + Social Vulnerability Assessment Appendix

INTRODUCTION TO HEALTH + SAFETY ELEMENT

Alameda residents are susceptible to a number of global natural hazards, including climate warming and pandemics, which pose immediate and future health and safety risks for Alameda residents.

Alameda is also susceptible to a variety of local natural hazard disasters, including severe ground shaking and liquefaction of soils due to earthquake activity, flooding due to storm events, and inundation as the result of Tsunami and sea and groundwater rise.

Man-made hazards include health and safety risks from the Oakland airport's operations, including airplane emissions and noise, automobile and truck emissions and noise, and subsurface and above ground storage and use of hazardous materials.

7.1 EMERGENCY MANAGEMENT

The City of Alameda aspires towards resiliency through the continual implementation of emergency management actions that reduce the potential for loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters. To be a resilient city, Alameda is reliant on functional infrastructure systems, buildings, and programs to keep public services operational, assist damaged areas to rebuild, and assist businesses through emergencies and assist in their economic recovery.

Disasters are rarely limited to jurisdictional boundaries. The Federal Disaster Mitigation Act of 2000 encourages State, regional and local agencies to work together to mitigate hazards. The Alameda Emergency Operations Management program establishes the procedures and communication networks needed to coordinate responses to future public health and safety emergencies or natural disasters.



OBJECTIVE 1

Minimize risks of loss of life, personal injury, property damage and environmental degradation by developing, monitoring and updating comprehensive and collaborative emergency preparedness and recovery programs.

POLICIES:

HS-1

Emergency Preparedness. Maintain emergency management and disaster preparedness as a top City priority.

Actions:

- a. **Update Emergency Management and Operations Plan.** Maintain and update the recommendations and standards established in the City of Alameda's Emergency Management and Operations Plan as the guide for disaster planning in Alameda.*
- b. **Training.** Maintain training programs to ensure that City personnel are sufficiently prepared to respond to an emergency and staff the Emergency Operations Center.*
- c. **Facilities.** Identify and publicize essential emergency facilities in the City, including shelters, evacuation routes, and emergency operation staging areas, and take the necessary actions to ensure that they will remain operational following a disaster.*
- d. **Exercises.** Conduct periodic emergency response exercises to test the effectiveness of local preparedness response, recovery, and mitigation procedures.*

HS-2

Emergency Operations Center. Continue to maintain and support the Operations Center with current technology and emergency preparedness best practices so the City is well prepared to respond to a major emergency event. (See also Policy ME-9).

HS-3

Mutual Aid Agreements. Coordinate local emergency preparedness efforts with the Federal Emergency Management Agency (FEMA), Coast Guard, United States Maritime Administration Ready Reserve Fleet (MARAD), the San Francisco Bay Area Water Emergency Transportation Authority (WETA), the Port of Oakland, adjacent jurisdictions, the Alameda Unified School District, the various private schools in Alameda, local hospitals, housing facilities for seniors or individuals with disabilities, and other local and regional police, fire and public health agencies in preparation for natural and man-made disasters, and ensure that the City's disaster response communication technologies are compatible with other agency communication technologies. (See also Policy CC-3).



SPOTLIGHT

EARTHQUAKE HAZARDS

72%

According to the United States Geological Survey (USGS), the chance of an earthquake of M6.7 or greater in the **Bay Area in the next 30 years is 72%.**

31%

The chance of a M6.7 or greater earthquake on our closest fault, the **Hayward Fault - Rodgers Creek Fault, in the next 30 years is 31%.**

10%

Combining all likely scenarios, Alameda has a **10% chance of experiencing “Very Strong” to “Violent” (MMI 8 to MMI 9) shaking in the next 50 years.**

0.2%

This probability can also be expressed as a **0.2% chance per year, or a 500-year event, which could happen any time.**

HS-4

Public Communication. Maintain and promote community programs to train volunteers, support groups for seniors and individuals with disabilities, food banks, and other local aid organizations to assist police, fire, and civil defense personnel during and after a major earthquake, fire, or flood. (See also Policy CC-1).

Actions:

- a. **Volunteers.** *Maintain community-based emergency preparedness training programs targeted to neighborhoods and business groups including outreach and coordination with Voluntary Organizations Active in Disasters (VOAD) and other community based programs.*
- b. **Education.** *Prepare and/or make available public education and awareness materials in multiple languages on all aspects of emergency preparedness, including the type and extent of hazards in the community, measures to reduce the likelihood of damage and injury, provisions for emergency supplies, steps to take immediately after a disaster, and the locations of shelters and medical facilities.*
- c. **Targeted Communication.** *Engage Alamedans using a wide range of tools, languages and strategies to communicate about all types of health threats and planning, with a special emphasis on the most vulnerable people who are least likely to know about or be able to adapt to various threats.*

HS-5

Vision Zero. Ensure that the City prioritizes public safety through the implementation of a Vision Zero policy to reduce annual pedestrian and bicyclist fatalities and serious injuries resulting from collisions with faster moving vehicles and unsafe street design. (See also LU-3, ME-5, ME-7, ME-10 and the Mobility Element Spotlight on Vision Zero).

HS-6

Crime, Policing and Safety. Prioritize resources for prevention instead of enforcement. (See also Policies ME-2, ME-7 and ME-10).

- a. **Lighting.** *Ensure public rights-of-way are well-lit at night, especially at intersections and on bike and pedestrian trails, to improve traffic and crime safety for people walking and rolling.*
- b. **Eyes and Feet on the Street.** *Promote walkable places that are oriented to the public right-of-way to prevent crime and to increase security.*
- c. **Mental Health.** *Prioritize use of mental health professionals over use of police officers when addressing complaints regarding nuisance or illegal behavior by individuals with potential mental health issues.*

HS-7

Infectious Disease Preparedness. Prepare for future outbreaks of infectious diseases and pandemics. (See also Policies ME-14, CC-5, CC-6, and CC-13).

Actions:

- a. Response Plans.** *Maintain comprehensive local response plans to infectious diseases, in consultation with Public Health Departments, focused first on protecting the most vulnerable populations from disease, displacement and other consequences of an infectious disease event.*
- b. Space.** *Provide flexibility to adapt public and private space, such as public streets, parking lots, parking lanes and sidewalks to accommodate different uses such as outdoor dining, drop off and pick up zones, slow streets, and parklets that allow for increased distance between individuals to reduce risk of spreading infection.*
- c. Contactless.** *Continue to modernize public facilities and equipment, such as traffic signal “push buttons,” parking meters, and gates, to minimize the need for touching shared surfaces to reduce the risk of spreading infection.*
- d. Digital Infrastructure.** *Continue to work with service providers to ensure that all Alameda residents and businesses are adequately and served by digital infrastructure needed to work or learn remotely.*
- e. Overcrowding.** *Minimize residential overcrowding by meeting local and regional housing needs.*
- e. Curb Flexibility.** *Explore more flexible uses for curb space to facilitate parklets, outdoor dining and pickup/dropoff zones.*
- f. Air Quality.** *Continue to work to improve indoor and outdoor air quality.*

HS-8

Resilience and Recovery. Develop informed long range plans to respond to economic and health crises.

Actions:

- a. Data and Information.** *Ensure that data collection is prioritized so that data-informed decisions are driving recovery efforts with regard to equity, prioritization of investments, infrastructure, public health and safety.*
- b. Budget and Prioritization.** *Ensure that revenue projections are well integrated into plans and assessments are made for immediate and long-term priorities regarding what items have a direct impact on recovery, what items are required by the State, and what items should be longer-term investments.*
- c. Economic Recovery.** *Be most responsive to the needs of the most economically vulnerable members of the community including small businesses.*
- d. Community Resiliency.** *Plans should strive for quick and effective responses both organically from within the communities most impacted and from the City itself.*



7.2 SEISMIC + GEOLOGIC HAZARDS

Earthquakes are the single-most significant short-term geologic hazard facing the residents and businesses in Alameda. In addition to the initial shaking, secondary seismic hazards associated with earthquakes include liquefaction, lateral spreading, and cracking of the ground surface, sand boils, slope failure, and seiches. Figure 7-1 illustrates the proximity of Alameda to the Hayward and San Andreas faults. The likelihood of occurrence of these secondary effects due to ground shaking in Alameda is high due to underlying soil conditions in Alameda, such as artificial fill, bay mud, and expansive soils. The 1989 Loma Prieta earthquake caused damage to private and public buildings, water mains, sewer lines, streets, and bulkheads. Liquefaction (mud boils) occurred at Alameda Point and Harbor Bay Business Park. South Shore experienced buckled streets and sidewalks and subsidence that disrupted the sanitary sewer and required construction of a new sanitary sewer pump station.

Figure 7-2 illustrates Alameda's susceptibility to severe liquefaction in the event of ground shaking. Climate change increases the risk of liquefaction. Rising sea levels will cause rising groundwater levels in Alameda. Soils that are more saturated with groundwater are at increased risk to liquefy and subside. Alameda's relatively old housing stock and unique historic commercial buildings were generally constructed without the benefit of modern Building Code requirements that strengthen buildings against earthquake shaking.



OBJECTIVE 2

Minimize risks of loss of life, personal injury, property damage and environmental degradation posed by earthquakes and other geologic hazards.

POLICIES:

HS-9

Building Standards. Maintain up-to-date local building codes that incorporate new standards for construction pertaining to development on areas of fill or underlain by bay mud or merritt sand.

HS-10

Transportation Facilities. Work with Caltrans, the Metropolitan Transportation Commission, the Alameda County Transportation Commission and other regional, state and federal partners to fund earthquake strengthening protection for critical public regional transportation facilities, such as the Posey and Webster Tubes, the Miller Sweeney Bridge and the High Street Bridge. (See also Policies ME-9 and ME-15).

HS-11

Life-line Standard Estuary Crossing. Work with Caltrans, Alameda County, and other regional agencies to retrofit and improve at least one estuary crossing to meet a life-line standard to ensure access to the larger region for emergency access, equipment supplies, and disaster response and recovery in the event of a major seismic event. (See also Policy ME-6).



SPOTLIGHT

ABANDONED FRUITVALE RAIL BRIDGE: PUBLIC SAFETY HAZARD

Built in 1951, the last train crossed the Fruitvale Rail Bridge 20 years ago, in 2000. Owned by the U.S. Army Corps of Engineers, the bridge poses a seismic safety hazard to the adjacent Miller-Sweeney Bridge. According to a 2011 U.S. Army Corps of Engineers report, the rail bridge “is severely overstressed for current seismic loading requirements and it is likely that the structure would collapse from such an event,” and the capability of the bridge to withstand current earthquake loading “is significantly below current code requirements.” In contrast, the Miller-Sweeney Bridge has been maintained to a “no collapse” structural standard by the County of Alameda and serves as a critical link to the region in the event of a major seismic event, provided that the abandoned rail bridge does not collapse onto it. The City of Alameda is working with the federal government to fund the removal or rehabilitation of this public safety hazard.



HS-12

City Buildings and Infrastructure. Continue to strengthen and rehabilitate City Buildings and other city infrastructure, including but not limited to waste water systems and pump stations, storm water systems and pump stations and electric systems and facilities to ensure that the City can respond effectively to a seismic event. (See also Policies CC-4, CC-5, CC-13, CC-14, CC-16).

HS-13

Private Buildings. Require owners of vulnerable structures, to the extent feasible, to retrofit existing structures to withstand earthquake ground shaking, and require retrofitting when such structures are substantially rehabilitated or remodeled.

Actions:

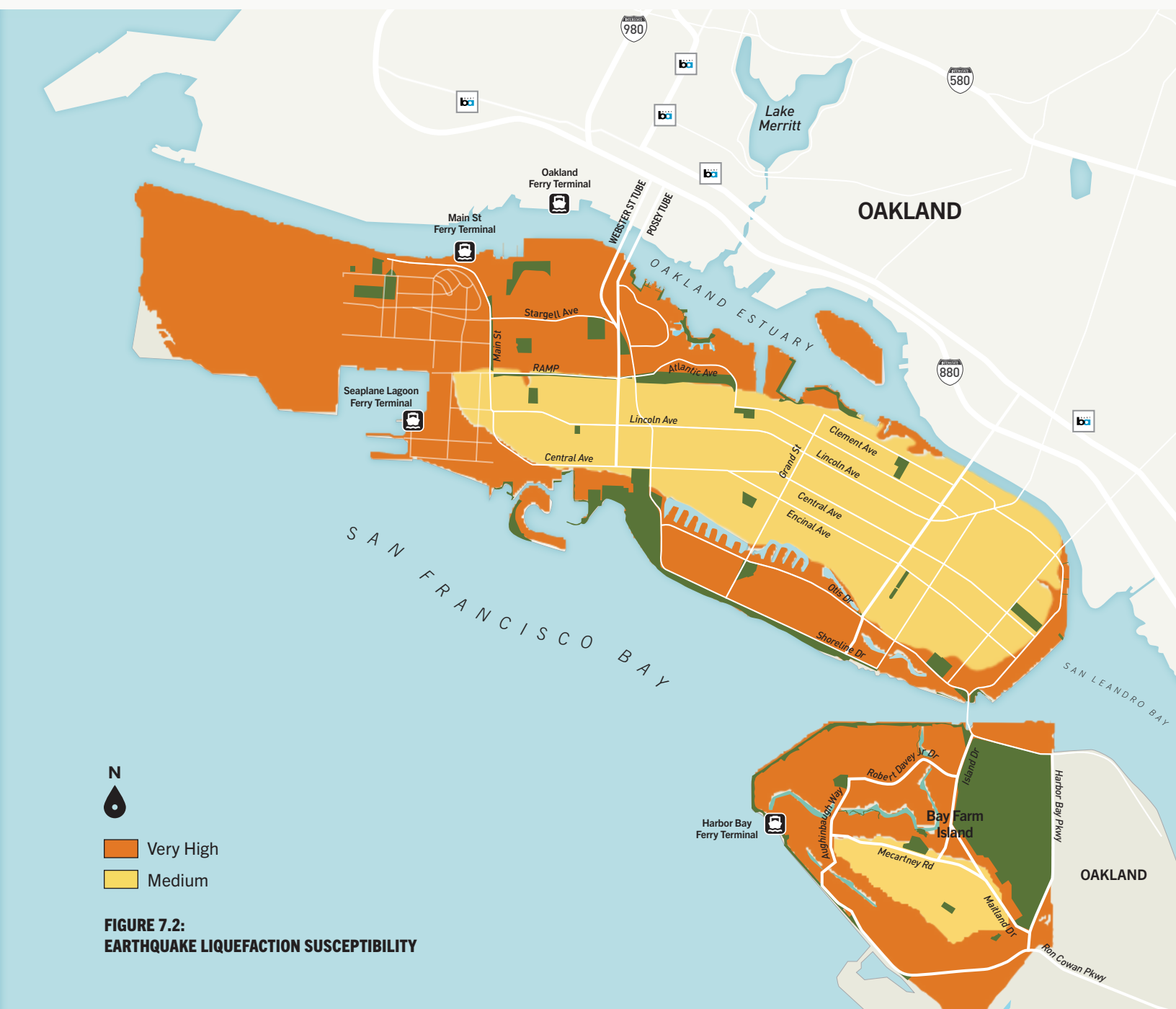
- a. **Soft Story Program.** Continue to implement the City’s Soft Story Program including mandatory requirements for substantially improving the seismic performance of multi-family wood frame residential buildings with “soft stories.”
- b. **Wood Framed Building Program.** Continue to implement the City’s Wood Framed Building Program including voluntary requirements for substantially improving the seismic performance of one and two story wood frame residential buildings with vulnerable “cripple walls”.
- c. **Incentives.** Develop incentives and assistance to help property owners make their homes and businesses more earthquake-safe. Pursue a variety of funding sources, such as grants, low-interest loans, and tax credits, to assist residents and businesses with seismic upgrades.
- d. **Shoreline Property Management.** Require owners of shoreline properties, to the extent feasible, to inspect, maintain, and repair the perimeter slopes to withstand earthquake ground shaking, consolidation of underlying bay mud, and wave erosion.
- e. **Rehabilitation Incentives.** Establish incentives and exemptions from City zoning code requirements, such as off-street parking and/or on-site common open space, to facilitate private rehabilitation and strengthening of soft story multi-family buildings.

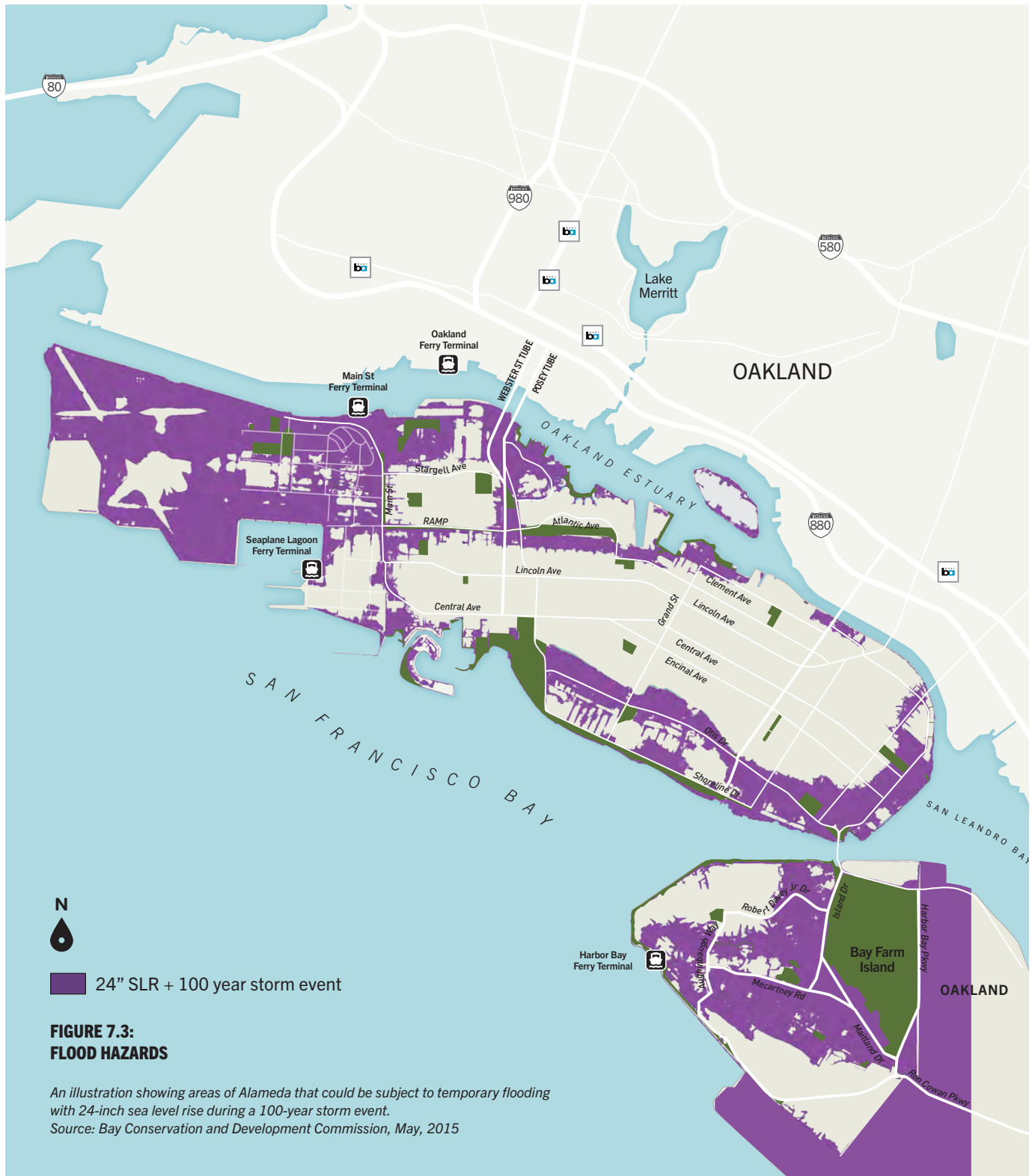


SPOTLIGHT

WHAT IS LIQUEFACTION?

Liquefaction is a phenomenon where saturated sand and silt take on the characteristics of a liquid during the intense shaking of an earthquake. The highest hazard areas are concentrated in regions of man-made landfill, especially fill that was placed many decades ago in areas that were once submerged bay floor.





7.3 FLOODING + GROUNDWATER + SEA LEVEL RISE

Due to its relatively flat topography and proximity to the San Francisco Bay, Alameda is uniquely sensitive to flooding caused by high tides, storm events, and climate change induced sea level rise. The city of Alameda normally experiences tides that range from -0.2 Mean Lower Low Water (MLLW) to +6.4' Mean Higher High Water (MHHW), based on the NAVD88 datum. (The NAVD88 datum or zero elevation is approximately the same as the elevations used in local tide tables.) The highest tide of the year, or “king tide”, normally occurs during the winter months of November to February, and is usually about 7.4'. Every year, there is a 1% chance the king tide will exceed 9.4'. The ten highest king tides recorded by NOAA in Alameda for the last 75 years measured 8.6' to 9.5' elevation.

Winter months are also when Alameda is likely to experience storms. During an extreme storm event, the level of the sea can temporarily rise several feet above the level predicted by tide tables. During the El Niño event of 1997- 98, up to 2 feet of standing water occurred on Main Street, due to higher sea levels during high tide and heavy rainwater runoff. In 1981, storms eroded Crown Beach to the edge of Shoreline Drive. In 2006 storm waves damaged the Harbor Bay Ferry Terminal, and washed away portions of the adjoining Bay Trail.

Storm hazards will occur more frequently and more extensively in the future due to climate change, which contributes to both sea level rise and more intense storms. The Webster and Posey Tubes, Ron Cowan Parkway, and the Main Street Alameda Gateway Terminal Ferry and other major public infrastructure are vulnerable to inundation as the result of climate induced storms and sea level rise. As the sea level rises, the groundwater levels will also rise so that even smaller high tides and storms result in flooding along shorelines, lagoon systems, and in low lying inland areas throughout Alameda. Rising groundwater levels will undermine foundation strength, damage sewer and other underground utilities, and facilitate the emergence of underground hazardous materials.



Protecting public and private property from natural disasters and hazards is a main goal of the General Plan.





OBJECTIVE 3

Minimize risks of loss of life, personal injury, property damage and environmental degradation posed by drought, sea level and groundwater rise, flooding and stormwater runoff.

POLICIES:

HS-14

Flood Insurance. Continue the City's participation in the National Flood Insurance Program.

HS-15

Flood Hazard Maps. Continue to review and publish for public discussion the latest and most up to date flood hazard and sea level rise forecasts from all trusted sources. (See also Policy CC-19).

HS-16

Regional Partnerships. Actively participate in regional discussions on drought, groundwater and sea level rise mitigation, infrastructure improvements and adaptation strategies. (See also Policies LU-14, CC-3 and ME-24).

Action:

- a. **Funding and Partnerships.** *Develop partnership opportunities with regional and state agencies such as the Municipal Oakland International Airport, Coast Guard, BCDC and other agencies to fund and build selected adaptive strategies.*

HS-17

Public Infrastructure Priorities. Identify public transportation, open space, and stormwater and wastewater facilities, shoreline assets, and other public assets vulnerable to sea level and groundwater rise and flooding hazards, and prioritize projects for adaptation funding. (See also Policy CC-22).

Action:

- a. **Shoreline Facilities Program.** *Implement a program for Resilient Shoreline Facilities, including performing appropriate seismic, storm, flooding and other safety analyses based on current and future use for all City-owned shoreline facilities, including dikes, shore protection (rip rap), lagoon sea walls, storm water outfalls, marinas and protective marshlands.*

HS-18

Preferred Strategies. Develop sea level and groundwater rise adaptive strategies for different areas of the City for public discussion and evaluation, including but not limited to: avoidance/planned retreat, enhanced levees, setback levees to accommodate habitat transition zones, buffer zones, beaches, expanded tidal prisms for enhanced natural scouring of channel sediments, raising and flood-proofing structures, and/or provisions for additional flood water pumping stations, and inland detention basins to reduce peak discharges. (See also Policies LU-14 and CC-24).

HS-19

Public Infrastructure. Protect and upgrade public infrastructure, including but not limited to streets, wastewater systems and pump stations, storm water systems and pump stations and electric systems and facilities to ensure capacity and resilience during storm events, high tides, and groundwater and sea level rise, to decrease the chance of flooding of nearby streets, utilities, and private property.

HS-20

Tsunami Awareness. Reduce the risk of tsunami inundation through public tsunami education, with special emphasis on evacuation protocols and procedures.

HS-21

Resilient Rights-of-Way and Open Spaces. Design street rights-of-way, parks, other public spaces, street trees and landscaping to be resilient to temporary flooding. (See also Policies LU-2, LU-3, ME-9 and ME-10 and ME-23).

HS-22

New Development. Require all new development to design for sea level and associated ground water rise based upon the most current regional projections. (See also Policies LU-30 and CC-20).

Action:

- a. **Waterfront Setbacks.** Require new development to provide adequate setbacks along waterfront areas for the future expansion of seawalls and levees to adapt to sea level rise.*
- b. **Data.** Update maps and publish open data that display these risks clearly as soon as new data or guidelines are created, such as a Digital Elevation Model, sea and groundwater risks, or the latest risk tolerance guidance provided by the State of California.*

HS-23

Easements. Require the creation and maintenance of easements along drainage ways necessary for adequate drainage of normal or increased surface runoff due to storms.

HS-24

Groundwater Management. Require and enforce stringent groundwater management programs to prevent subsidence. (See also Policy CC-23).

HS-25

Green Infrastructure. Require the use of “green infrastructure”, landscaping, pervious surfaces, green roofs, and on-site stormwater retention facilities to reduce surface runoff and storm drain flooding during storm events. (See also Policy CC-33).

**SPOTLIGHT****GLOBAL WARMING +
SEA LEVEL RISE**

Global warming and sea level rise will have severe long-term effects on Alameda.

Following sea level rise adaptation guidance from the State of California, the City of Alameda will plan for a potential:

1.9ft

INCREASE IN SEA LEVEL BY

2050

ON THE ALAMEDA CO COASTLINE

6.9ft

INCREASE IN SEA LEVEL BY

2100

Source: State of California Sea level Rise Guidance. 2018 Update.

7.4 FIRE HAZARDS + EMERGENCY RESPONSE

Major fires resulting from the rupture of local gas or electric lines during an earthquake could be severely compounded by water main failures and substandard fire protection systems in older buildings.



OBJECTIVE 4

Minimize risks of loss of life, personal injury, property damage and environmental degradation posed by fire hazards.

POLICIES:

HS-26

Fire Prevention Capabilities. Maintain the City's fire prevention, disaster preparedness, and fire-fighting and emergency medical service capabilities.

HS-27

Response Time. Maintain a response time of 5 minutes, 20 seconds, 90 percent of the time, for the first fire unit to be on-scene of a fire.

HS-28

Collaboration. Work collaboratively with other jurisdictions and agencies to reduce fire hazards in Alameda, with an emphasis on effective vegetation management and mutual aid agreements.

Actions:

- a. **Shutoff Protocol.** *Establish a protocol with PG&E to shut off natural gas supply if multiple ruptured gas line breaks occur.*
- b. **EBMUD.** *Develop emergency water storage facilities to provide drinking water to EBMUD customers as well as fight fires in the event an earthquake disrupts the water supply to Alameda.*

HS-29

Building Codes for New Development. Require new development to comply with the City's current fire, seismic, and sprinkler codes.

HS-30

Prevention in New Development. Require new development to minimize the risks of fire and includes adequate provisions for vegetation management, emergency access and appropriate firefighting equipment.

HS-31

Underground Utilities. Require new development to underground utilities to minimize disruption by fire or other natural disasters. (See also Policy CC-5).

7.5 HAZARDOUS MATERIALS + WASTE

The careful management of hazardous materials and the reduction in generation and safe disposal of hazardous waste is critical to public health and safety. Hazardous materials are stored and transported throughout Alameda. Hazardous materials used in industrial and commercial areas and in households include: flammable and combustible liquids, solvents, paint, plating or photographic solutions, acids, and pesticides. Waste oil, gases, and other hazardous liquids associated with vehicle and heavy machinery maintenance are also present.



OBJECTIVE 5

Minimize risks of loss of life, personal injury, serious illness, property damage and environmental degradation posed by the use, transport, treatment, and disposal of hazardous materials and hazardous wastes.

POLICIES:

HS-32

Transportation of Hazardous Materials. Continue to identify and assess the risks associated with various hazardous materials transported in Alameda.

HS-33

Awareness. Increase public awareness of hazardous material use and storage in the City, the relative degree of potential health hazards, and the appropriate channels for reporting odor problems and other nuisances.

Action:

- a. **Education on Safe Disposal.** *Promote public education about the safe disposal of household hazardous waste, such as motor oil and batteries, including the locations of designated household hazardous waste disposal sites.*

HS-34

Hazardous Waste Reduction. Work with County, regional, state and federal agencies to implement programs for hazardous waste reduction, hazardous material facility siting, hazardous waste handling and disposal, public education and regulatory compliance.

Action:

- a. **Landfill Methane.** *Continue to remove and monitor methane gas produced as a waste product of materials decomposing in the former landfill on Doolittle Drive.*

HS-35

Contaminated Sites Cleanup. Work with County, regional, state, and federal agencies and private property owners to ensure that the necessary steps are taken to clean up residual hazardous wastes on any contaminated sites.

Action:

- a. **New Construction.** *Require that all new construction, including construction on former industrial sites, has been cleared for residential, commercial or industrial uses from the appropriate federal, state and local agencies and acts, including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Program, the Resource Conservation and Recovery Act (RCRA), the California Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board (RWQCB) and the Alameda County Department of Environmental Health (ACDEH), which is the Certified Unified Program Agency (CUPA) responsible for implementing state environmental regulations related to hazardous waste and hazardous materials.*

HS-36

Resource Recovery Initiatives. Continue to support the various resource recovery initiatives and other measures specified in the Alameda County Countywide Integrated Waste Management Plan. (See also CC-17).

HS-37

Hazardous Material Incident Plan. Ensure that the City's Emergency Preparedness programs include provisions for hazardous materials incidents, as well as measures to quickly alert the community and ensure the safety of residents and employees following an incident. (See also CC-27).

Action:

- a. **Training and Capability.** *Improve the training and capability of the Fire Department to handle accidental releases of hazardous materials. Provide ongoing training for hazardous materials enforcement and response personnel. Apply the Emergency Operations Plan, if necessary, in response to a hazardous materials release disaster.*

HS-38

Separation of Uses. Require adequate and safe separation between areas and uses with hazardous materials and sensitive uses such as schools, residences and public community facilities.

HS-39

Hazardous Material Containment. Require that all facilities that handle and/or store hazardous materials are designed to minimize the possibility of environmental contamination and adverse off-site impacts and that they are in compliance with state and federal standards and requirements designed to protect public health and the environment.

HS-40

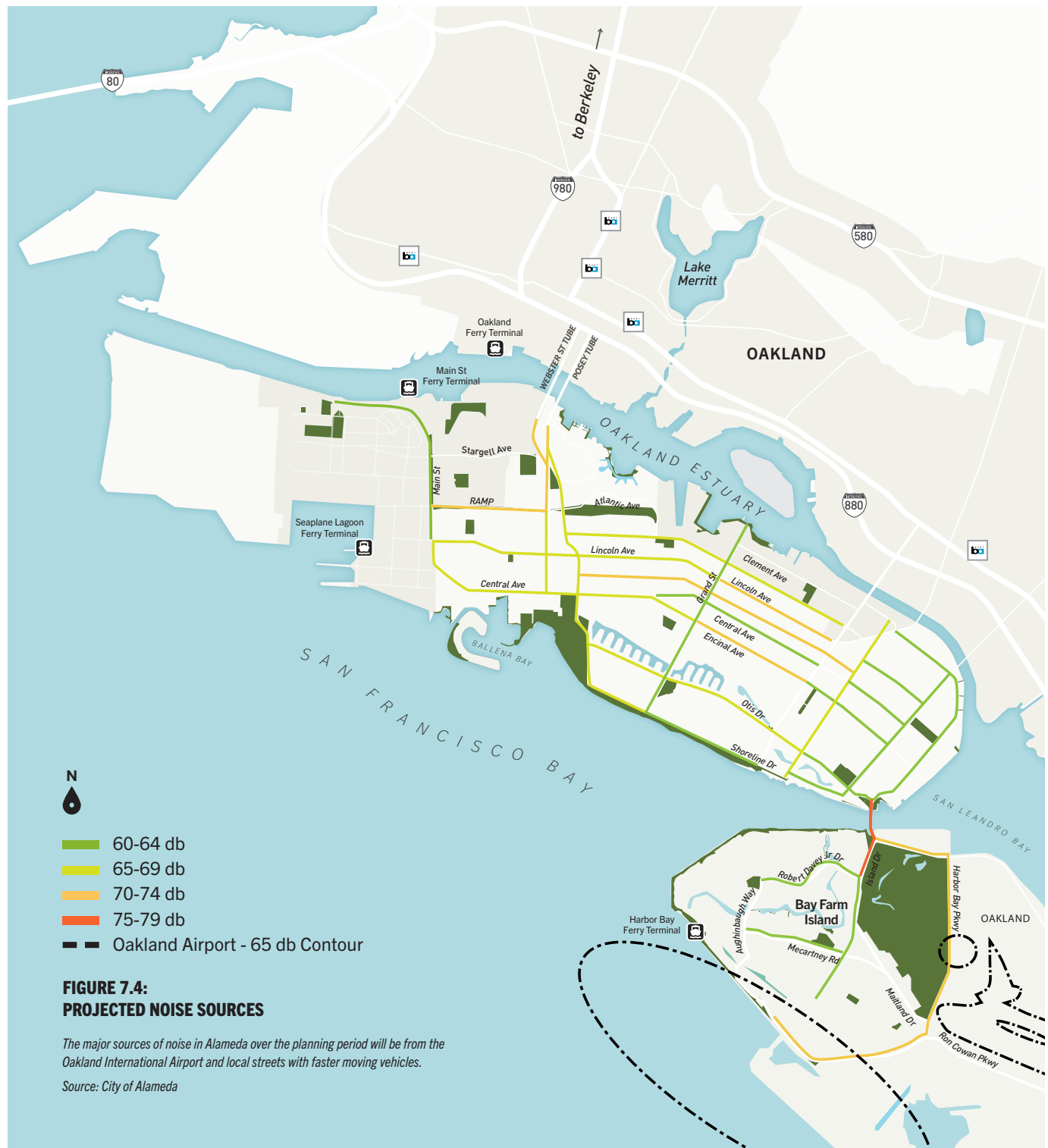
Radon Gas. Encourage residential, commercial and industrial property owners to test their properties for elevated levels of radon gas (more than 4 picocuries per liter).

Action:

- a. **Promote public education** *about the safe disposal of household hazardous waste, such as motor oil and batteries, including the locations of designated household hazardous waste disposal sites.*

7.6 NOISE + AIRPORT ENVIRONS

Located within a major urban metropolitan area, the major noise sources in Alameda are: Aircraft noise, automobile and truck noise, and noise associated with certain commercial and industrial land uses, such as the Port of Oakland seaport and Coast Guard Island. Research shows excessive roadway, aircraft and/or wind turbine noise negatively impacts the memory, learning acquisition, test scores and physical well-being of children. Every effort should be made to minimize these risks in the placement of children with exposure to these noise sources. Aircraft operations at the Oakland International Airport and San Francisco International Airports are the most significant sources of noise impacts in Alameda neighborhoods. Some Alameda residents currently experience single event noise in excess of 80 dBA on a nightly basis.





OBJECTIVE 6

Protect Alameda residents from the harmful effects of exposure to excessive noise from aircraft, buses, boats, trucks and automobiles, and adjacent land uses.

POLICIES:

HS-41

Support Policies to Reduce Transportation Noise. Support state and federal legislation to reduce transportation noise from cars, trucks, and aircraft.

HS-42

Aircraft Noise Reductions. Through the City's federal lobbying agenda, support and advocate for operational practices, changes to aircraft, new technologies, and physical improvements that would reduce the number of properties in Alameda that are impacted by aircraft noise.

HS-43

Oakland International Airport Expansion and Settlement Agreement. Oppose any expansion of operations at Oakland International Airport that would exceed the limits established by the existing Settlement Agreements.

HS-44

Single Event Noise Exposure. Work with Oakland International Airport to reduce the incidence of single event noise exposure above those currently experienced.

HS-45

Reduce Neighborhood Noise Impacts. Promote the reduction of existing and future potential harmful aircraft noise impacts in Alameda neighborhoods. (See also Policy LU-1 and ME-2).

Actions:

- a. **Community Participation.** *Actively promote participation in forums and discussions regarding operations and expansion plans for Oakland International Airport, including various working groups composed of individuals representing the City of Alameda, the City of San Leandro, the Port of Oakland, the Federal Aviation Administration (FAA), and the air transport industry to monitor the airport's noise control program and to make recommendations for the benefit of City of Alameda residents. These groups include the South Field & North Field Research Groups, Oakland Airport-Community Noise Management Forum and Oakland International Airport Aviation Stakeholder Advisory Committee.*
- b. **Representation.** *Seek local representation on all task forces, commissions and advisory boards established to guide airport policies and programs.*
- c. **Adherence.** *Seek adherence by airport operators to operational, development and management policies that will minimize noise nuisance and safety concerns for Alameda.*
- d. **North Field.** *Work with Oakland International Airport and the FAA to limit night use of North Field to Stage 3 and Stage 4 aircraft, and pursue mitigation of aircraft noise impacts to the fullest extent possible.*

- e. **Mitigation.** Ensure that any changes to aircraft operations that would potentially result in increased noise levels in Alameda incorporate comprehensive noise mitigation measures, even when the impacts will be of limited duration. To the greatest extent feasible, any changes in airport activity should avoid impacts to noise sensitive uses such as residential areas and schools.
- f. **Noise Abatement.** To the extent permitted by the 1976 Settlement Agreement, the 2001 Settlement Agreement, the 2002 Settlement Agreement, the 2003 Addendum to the Settlement Agreement and the Written Compliance Plan, advocate for noise abatement and mitigation programs that are based not only on the airport's noise contour maps, but that consider other factors such as the frequency of overflights, single-event noise levels, the altitude of aircraft, the hours of operation, low frequency noise, and sensitive receptors. Monitor implementation and compliance with the Settlement Agreements of 1976, 2001 and 2002 and the Written Compliance Plan.
- g. **Monitoring and Assurance.** Obtain assurance that the future noise exposure for Alameda is known and that aircraft operations will be controlled to ensure that the projected noise levels are not exceeded. Validation of the 65 dB CNEL contour is to be carried out by means of a permanent full-time noise monitoring system to ensure compliance with the California Airport Noise standards and the ALUC Plan.

HS-46

Airport Expansion. Advocate for the following operational measures to be incorporated into any plans for the expansion of the Oakland International Airport:

Actions:

- a. **Stage 3 and Stage 4 (least noisy) aircraft.** Continue to only allow Stage 3 and 4 aircraft on all runways directly overflying Alameda residential areas.
- b. **Enforced flight path alterations for noise abatement.** Continue to enforce flight path alterations for noise abatement for all runways, with remote monitoring sites maintained in locations mutually acceptable to the Port and the City.
- c. **Prohibition of Touch-and-Go Operations.** Continue to prohibit touch and go operations by jet aircraft.
- d. **Prohibition of Noisy Engine Ground Run-Ups at Night.** Continue to prohibit Ground Run-Ups outside of the Ground Run-Up Enclosure.
- e. **Prohibition of Intersection Departures.** Continue to prohibit intersection departures on Runway 28.

**SPOTLIGHT****MEASURING NOISE**

The volume or intensity of sound is measured in units called decibels (dB), generally on a scale from zero to 140 (any higher than 140 and you are in trouble immediately). The higher the number in decibels, the louder the noise. The louder the noise, the greater the risk of hearing loss. Hearing loss can occur with regular exposure to noise levels of 110 decibels or more for periods longer than one minute.

COMMON NOISES AND THEIR DECIBEL LEVELS:**AIRCRAFT AT TAKE-OFF: 180 DB****FIREWORKS: 140 DB****AMPLIFIED MUSIC: 110 DB****NOISY OFFICE: 90 DB****CITY TRAFFIC: 80 DB****NORMAL CONVERSATION: 60 DB****LEAVES RUSTLING: 10 DB**

HS-47

Noise Monitoring. Support the Port of Oakland in continuing to maintain a permanent full-time noise monitoring system that will (a) measure noise continuously, (b) separate OAK noise events from other noise source events, particularly overflights from other airports, (c) measure and augment CNEL values, (d) provide information on excessively noisy aircraft operations, (e) monitor effectiveness of noise abatement programs, and (f) meet the performance specifications of the California Noise Standards.

HS-48

Airport Safety Zones. Regulate land uses within designated airport safety zones, height referral areas, and noise compatibility zones to minimize the possibility of future noise conflicts and accident hazards.

HS-49

Aircraft Crash Readiness. Maintain a high degree of readiness to respond to aircraft crashes through participation in preparedness drills and mutual aid activities with the City and Port of Oakland to ensure quick and effective response to emergencies.

HS-50

Vehicles. Enforce compliance with noise emissions standards for all types of automotive vehicles established by the California Vehicle Code and by federal regulations.

HS-51

Ships. With the cooperation of the U.S. Coast Guard, the City of Oakland, and the Port of Oakland, enforce California noise emission standards for engine-driven maritime vessels.

HS-52

Transit. Encourage BART and AC Transit to develop and apply noise-reduction technologies that reduce noise impacts associated with BART trains and buses.

HS-53

Streets. Where feasible and appropriate, develop and implement noise reduction measures when undertaking improvements, extensions or design changes to Alameda streets. (See also Policies LU-2, ME-10 and ME-14).

HS-54

Truck Routes. Maintain day and nighttime truck routes that minimize the number of residents exposed to truck noise. (See also Policy ME-11).

HS-55

Bay Farm Island Settlement Agreement. Require new or replacement residential development within 500 feet north of the 65 dB CNEL Settlement Agreement line on Bay Farm Island, to include noise insulation that meets the standards established in the Airport Land Use Commission Plan for assumed exterior 65 dB CNEL.

HS-56

Interior Noise. Support interior noise reduction strategies in all buildings, especially new or replacement residential construction, hotels, motels, and schools to ensure acceptable interior noise levels consistent with Figure 7.5.

COMMUNITY NOISE EXPOSURE

LAND USE CATEGORY	Ldn or Cnel, dB					
	55	60	65	70	75	80
Residential - Low Density Single family, Duplex, Mobile Homes	Orange	Orange	Light Gray	Light Gray	Light Gray	Dark Gray
Residential Multi. Family	Orange	Orange	Light Gray	Light Gray	Light Gray	Dark Gray
Transient Lodging Motels, Hotels	Orange	Orange	Light Gray	Light Gray	Light Gray	Dark Gray
Schools, Libraries, Churches, Hospitals, Nursing Homes	Orange	Orange	Light Gray	Light Gray	Light Gray	Dark Gray
Auditoriums, Concert Halls, Amphitheaters	Light Gray	Light Gray	Light Gray	Light Gray	Dark Gray	Dark Gray
Sports Arena, Outdoor Spectator Sports	Light Gray	Light Gray	Light Gray	Light Gray	Dark Gray	Dark Gray
Playgrounds, Neighborhood Parks	Orange	Orange	Orange	Light Gray	Light Gray	Dark Gray
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Orange	Orange	Orange	Orange	Dark Gray	Dark Gray
Office Buildings Business Commercial and Professional	Orange	Orange	Orange	Light Gray	Light Gray	Dark Gray
Industrial, Manufacturing, Utilities, Agriculture	Orange	Orange	Orange	Orange	Light Gray	Dark Gray

INTERPRETATION:

Normally Acceptable

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable

New construction or development should generally not be undertaken.

FIGURE 7.5:
CALIFORNIA LAND USE COMPATIBILITY GUIDELINES



SPOTLIGHT

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

Average noise exposure over a 24-hour period often is presented as a community noise equivalent level (CNEL). CNEL values are calculated from hourly equivalent noise level values, with a 5 dBA annoyance penalty added to the evening (7:00 p.m. to 10:00 p.m.) equivalent noise level values and a 10 dBA penalty added to the nighttime (10:00 p.m. to 7:00 a.m.) equivalent noise level values.

The settlement agreement as described in Policy HS-43 set Alameda's CNEL at 65dB for aircraft operations (See Figure 7-4 for Oakland Airport 65dB contour). Validation of the 65 dB CNEL contour is to be carried out by means of a permanent full-time noise monitoring system to ensure compliance with the California Airport Noise standard and the ALUC plan.

HS-57

Disclosure. Ensure that purchasers of property within or adjacent to the following areas are aware of existing and future potential noise conditions and the limitations of the City's ability to abate existing or future noise conditions: the Oakland International Airport Influence Areas, as defined by the Alameda County Airport Land Use Commission (ALUC), commercial districts, truck routes, major arterials, Alameda Unified School District facilities, City recreation facilities, and business parks. Require the full disclosure of the existing and potential future noise levels within deeds and lease agreements as a condition of project approval, whenever possible.

HS-58

Business Operations. To the extent feasible, through the development entitlement process, require local businesses to reduce noise impacts on the community by avoiding or replacing excessively noisy equipment and machinery, applying noise-reduction technology, and following operating procedures that limit the potential for conflicts.

HS-59

Require Noise Reduction Strategies in All Construction Projects.

Require a vibration impact assessment for proposed projects in which heavy-duty construction equipment would be used (e.g. pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City shall require all feasible mitigation measures to be implemented to ensure that no damage to structures will occur and disturbance to sensitive receptors would be minimized.

HS-60

Significant CEQA Impacts. In making a determination of impact under the California Environmental Quality Act (CEQA), consider the following impacts to be "significant" if the proposed project causes: an increase in the Ldn noise exposure of 4 or more dBA if the resulting noise level would exceed that described as normally acceptable for the affected land use, as indicated by State guidelines, or any increase in Ldn of 6 dBA or more.

HS-61

Community Noise Ordinance. Continue to Enforce the Community Noise Ordinance by promptly responding to local noise complaints.

7.7 AIR QUALITY

Located within a major urban metropolitan area, the most consistent pollution sources in Alameda are generated from car and truck traffic. Wildfire smoke has quickly become a regular seasonal issue during the warmer months and is made significantly worse by existing local sources of air pollution. Less significant sources of air pollution include wood smoke and construction related emissions. Every effort should be made to minimize these risks, especially to the most vulnerable populations such as children and seniors.



OBJECTIVE 7

Protect Alamedans from the harmful effects of air pollutants.

POLICIES:

HS-62

Wildfire Smoke. Prepare for future wildfire smoke events. (See also Policy CC-25).

Actions:

- a. **Shelters.** *Work with local organizations and institutions to provide for public, clean air, temporary shelters such as the Alameda Free Library at locations throughout the City. (See also Policies CC-2 and CC-25).*
- b. **Vulnerable Communities.** *Strengthen protocols and procedures for identifying and notifying the most vulnerable residents to wildfire smoke of shelter locations and other potential support.*
- c. **Indoor Air Quality.** *Facilitate and expedite efforts by local property owners and businesses to improve indoor air quality and filtration systems. (See also Policy CC-13).*
- d. **Outdoor Air Quality.** *Continue to work with regional and local organizations and businesses to reduce local sources of air pollutants. (See also Policy CC-26).*

HS-63

Diesel Emissions. Continue to work with the Bay Area Air Quality Management District (BAAQMD) to reduce diesel related air quality impacts throughout the region and in Alameda. (See also Policy CC-3).

Actions:

- a. **Government Vehicles.** *First, ensure a completed transition away from diesel fuels for all government operations and vehicles.*
- b. **Ban Diesel Vehicles by 2033.** *Set a date prior to 2033 to ban diesel vehicles from entering Alameda altogether, only allowing exceptions where no reasonable substitute exists.*

HS-64

Wood Smoke. Adopt ordinances and regulations to reduce wood smoke in Alameda.

Actions:

- a. **Wood Burning Fireplaces and Heaters.** *Prohibit wood burning fireplaces and heaters in all new development and remodels.*
- b. **Incentives.** *Provide incentives to replace wood burning fireplaces and wood burning heating devices in existing buildings.*
- c. **Collaboration and Education.** *Continue to work with BAAQMD to reduce wood smoke and to raise awareness on the health effects of wood smoke.*

photo: Maurice Ramirez

A main goal of the Health + Safety Element is to minimize disruption of essential public services, facilities, and infrastructure as the result of natural disasters.

HS-65

Construction Air Pollution. Protect public health by requiring best management practices at construction sites and carefully evaluating the potential health risks of projects that generate substantial toxic air contaminants or projects that proposed to place a sensitive use in proximity to an existing source of contaminants.

Actions:

- a. **Construction Dust.** *Reduce dust and harmful air pollutants resulting from construction activities by requiring compliance with best management practices (BMPs) as recommended by the Bay Area Air Quality Management District (BAAQMD).*
- b. **Health Risk Assessment.** *Require preparation of a Health Risk Assessment in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and the BAAQMD and adoption of any recommended health risk mitigations for projects that generate substantial toxic air contaminant (TAC) emissions within 1,000 feet of sensitive receptors or for sensitive receptor uses proposed to be located within 1,000 feet of an existing major source of toxic air contaminants.*

HS-66

Air Quality Alerts. Continue to partner with BAAQMD to enhance awareness of air quality index alerts and related outreach and education to protect the health of residents.

HS-67

Aircraft Air Pollution. Work with Federal, State, local agencies and the Port of Oakland to advocate for improvements in aviation technology and standards to reduce aviation air quality impacts.

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