





































City of Huntington Beach General Plan

Adopted October 2, 2017













CITY OF HUNTINGTON BEACH GENERAL PLAN

ADOPTED OCTOBER 2017

City Council

Barbara Delgleize, Mayor Mike Posey, Mayor Pro Tempore Patrick Brenden, Council Member Jill Hardy, Council Member Billy O'Connell, Council Member Erik Peterson, Council Member

Lyn Semeta, Council Member

Planning Commission

Connie Mandic, Chair
Bill Crowe, Vice-Chair
Dan Kalmick, Commissioner
John Scandura, Commissioner
Michael Grant, Commissioner
Pat Garcia, Commissioner
Alan Ray, Commissioner

General Plan Advisory Committee

Dianne Thompson John Ventimiglia Roy Miller Jeff Coffman Robert Schaaf

Dan Kalmick

Ed Pinchiff

Kim Carr

John Scandura

Clem Dominguez

Leslie Mayes

Jessica Budica

Robert Sternberg

Ed Kerins

Bob Wentzel

Tim Mulrenan

Sue Taylor

Alan Walls

Darrel P. Arnold





Task Forces

Biological Resources

Vic Leipzig

Christine Whitcraft

Kim Kolpin

Hemal Patel

Gordon Smith

Greg Hickman

Circulation

Dan Kalmick

Janis Mantini

Mark Sheldon

Ed Mountford

David Cicerone

Michelle Schuetz

Market Trends

John Ventimiglia

Tony Smale

Brett Barnes

Steve Dodge

Tom Grable

Shawn Millbern

Sea Level Rise

Robert Schaff

Hemal Patel

Gordon Smith

Jack Kirkorn

Wes Warvi

Mike Van Voorhis

Robert Thompson

Mark Bixby

Ed Pinchiff

Jennifer Thomas

Pat Brenden

Jack Kirkorn

Dave Pryor

Tim McCormack

Sustainability

Teresa Howe

Tom Bock

Lyle Ausk

Keeli Scott Lisack

Sue Gordon

Kim Nicholson

Barbara Delgleize

Kathy Millea

Dan Kalmick

Mike Posey

Pat Brenden

John McGovern

Philip Eddins

City Staff

Fred Wilson, City Manager

Scott Hess, AICP, Community Development

Director

Jennifer Villasenor, Planning Manager

Consultants to the City

Michael Baker International

In association with:

Atkins Global

Moffatt & Nichol

Stantec

Stanley R. Hoffman Associates

Matrix Consulting Group





Table of Contents

i. Introduction	1-1
Plan Overview	1-2
Why a General Plan?	1-2
Geography	1-2
Demographics	1-3
Regulations	
California Government Code	
Regional Transportation Plan/Sustainable Communities Strategy	
California Environmental Quality Act	
Huntington Beach Zoning and Subdivision Ordinance	
California Coastal Act	
Planning Area	
Community Engagement	
Community Vision and Guiding Principles	
Community Vision	
Guiding Principles	
General Plan Elements	
Plan Organization and Use	1-20
II. Land Use	2-1
Introduction and Purpose	2-1
Scope and Content	2-2
Relationship to Other Elements	
Land Use Plan	
Characterizing Land Uses	
Distribution of Existing Uses	
Character of Change	
Land Use Map	
Land Use Designations	
Adopted Specific Plans	
Community Subareas	
Distribution of Land Uses	
Development Capacity	
Urban Design Plan	
Beach City Culture and Identity	
Fostering the Identity of Individual Neighborhoods and Districts	2-20
Accomodating Larger-Scale Development While Enhancing Character of Commercial Corridors	2-26
Maintaining Historic Character and Architectural Diversity in Downtown	
Economic Development Plan	
Economic Trends	
Economic Development Strategies	
Land Use and Urban Design Issues, Goals, and Policies	
Earla 505 and Orban 565ign 155a65, 50alo, and 1 ollolos	2-02





Coordinating Development Patterns and Protecting Community Character	2-32
Addressing Interactions Between Neighborhoods and Attractions	2-33
Providing a Range of Well-Maintained Housing Types	2-34
Protecting and Adaptively Reusing Industrial Areas	2-34
Maintaining Flexible Long-Term School Capacity	
Fostering the Identity of Individual Neighborhoods and Community Subareas	2-36
Maintaining Historic Character and Architectural Diversity in Downtown	2-36
Economic Development Issues, Goals, and Policies	2-37
Capitalizing on Location with Technology Infrastructure	
Retaining, Expanding, and Capturing Businesses	
Capturing Sales Tax Revenues	2-38
Encouraging Renovation and Revitalization of	
Commercial and Industrial Areas	
Adapting to a Changing Economy	
Enhancing Tourism and Hospitality	2-40
III. Circulation	3-1
Introduction and Purpose	3-′
Scope and Content	
Relationship to Other General Plan Elements	3-3
Circulation Plan	3-3
Measuring Traffic Flow	3-3
Land Use Plan and Forecasts	3-
Regional Mobility	3-6
Complete Streets	3-6
The Local Road System	3-7
Neighborhood Traffic Management	3-17
Public Transportation	
Transportation Demand Management and Air Quality	3-20
Parking	
Pedestrian, Bicycle, and Equestrian Paths and Waterways	
Scenic Corridors	
Transportation and Urban Runoff	
Issues, Goals, and Policies	
Maintaining Adequate Level of Service	
Providing Adequate Downtown and Beach Parking	
Enhancing Regional Transit	
Increasing Local Transit Options	
Ensuring Mobility Options for All Users	
Enhancing Bicycle, Pedestrian, Equestrian, and Waterway Options	
Protecting Scenic Corridors	
Providing for Alternative Fuel Vehicles and Infrastructure	
Ensuring Access for Emergency Vehicles	3-36
IV. Environmental Resources and Conservation	4-1
Introduction and Purpose	4-′
Scope and Content	4-



Relationship to Other Elements	4-2
Open Space Plan	4-3
Open Space Diagram	4-3
Parks and Recreation	4-7
Coastal Recreation and Beach Management	4-10
Conservation Plan	
Air Resources	4-12
Greenhouse Gas Emissions	4-14
Biological Resources	4-17
Energy Resources	4-22
Mineral Extraction Potential	
Water Resources	
Water Quality	
Issues, Goals, and Policies	
Meeting Parks and Facilities Needs	
Providing Recreation Programs and Services to Meet Community Needs	
Managing the Beach, Parks, and Recreation to Accommodate	
Diverse Recreational Needs	4-31
Reducing Air Pollution	
Meeting Greenhouse Gas Reduction Goals	
Identifying and Protecting Habitat Areas and Connections	
Protecting Habitat Resources in Wetlands	
Protecting Coastal Habitat Resources	
Protecting Trees	
Protecting Habitats in Parks	
Conserving Energy in Homes and Businesses	
Expanding Renewable Energy Sources	
Preserving Mineral Extraction Potential	
Protecting and Conserving Water Resources	
Maintaining Water Quality	
,	
. Natural and Environmental Hazards	5-1
Introduction and Purpose	5-1
Scope and Content	
Relationship to Other Elements	
Relationship to Local Hazard Mitigation Plan	
Hazards Plan	
Geologic and Seismic Hazards	
Coastal Hazards	
Flooding	
Dam Failure	
Urban Fires	
Hazardous Materials and Waste	
Aircraft/Airport Hazards	
Disaster and Emergency Preparedness	
Issues, Goals, and Policies	
Preparing for and Mitigating Geologic and Seismic Hazards	
-1 - 3	





Preparing for a Changing Coastline	5-20
Minimizing Flooding and Tsunami Hazards	
Reducing Potential Urban Fire Risks	5-21
Remediating Brownfield Sites	5-22
Managing Hazardous Materials and Wastes	5-22
Reducing Potential Aircraft Hazards	5-23
Preparing Residents and Businesses for Future Disasters	5-23
Reducing Potential Threats to Homeland Security	5-24
VI. Noise	6-1
Introduction and Purpose	6-1
Scope and Content	6-2
Relationship to Other Elements	6-3
Noise Plan	6-3
Measuring Noise	6-3
Noise Sources and Concentration Areas	6-5
Noise Standards and Land Use Compatibility	6-8
Noise Contours and Impact Areas	6-11
Noise Reduction Strategies	6-15
Issues, Goals, and Policies	6-18
Protecting Noise-Sensitive Land Uses	6-18
Ensuring Land Use/Noise Compatibility	6-18
Reducing Noise from Mobile Sources	
Mitigating Noise from Construction, Maintenance, and Other Sources	6-20
VII. Public Services and Infrastructure	7-1
Introduction and Purpose	7-1
Scope and Content	
Public Facilities and Services Plan	
Police	
Fire, Marine Safety, and Emergency Medical Services	
Libraries	
Community Services	7-5
Schools	7-5
Infrastructure Plan	7-5
Water Production and Distribution System	7-6
Wastewater Collection and Treatment	
Stormwater and Urban Runoff	7-7
Solid Waste Collection and Disposal	7-7
Dry Utilities	7-8
Infrastructure Finance	7-8
Issues, Goals, and Policies	7-9
Providing Adequate Police Staffing and Facilities	7-9
Providing Adequate Fire, Marine Safety, and Emergency Medical Services	7-10
Transforming Libraries into Community Cultural Centers	7-11
Providing Social and Community Services	7-12
Meeting Existing and Future Education Needs	7-12



Sewer Infrastructure	7_12
Supporting Storm Drain System Upgrades and Maintenance	
Improving, Replacing, and Funding Infrastructure	
Providing Solid Waste Collection and Disposal	
Meeting Dry Utility Needs	
Financing Public Services and Infrastructure	
Tillancing Fublic Services and initiastructure	
VIII. Implementation	8-1
Introduction	8-1
Implementation Programs	8-2
Land Use Element	8-3
City Plans, Ordinances, and Programs	8-3
Capital Improvements	
Development Review Requirements	8-12
Interjurisdictional Coordination	
Circulation Element	8-15
City Plans, Ordinances, and Programs	8-15
Capital Improvements	
Development Review Requirements	
Interjurisdictional Coordination	
Ongoing Education and Outreach	
Environmental Resources and Conservation Element	
City Plans, Ordinances, and Programs	
Capital Improvements	
Development Review Requirements	
Interjurisdictional Coordination	
Public Information and Outreach	
Natural and Environmental Hazards Element	
City Plans, Ordinances, and Programs	
Capital Improvements	
Development Review Requirements	
Interjurisdictional Coordination	
Public Information and Outreach	
Noise Element	
City Plans, Ordinances, and Programs	
Capital Improvements	
Development Review Requirements	
Interjurisdictional Coordination	
Public Services and Infrastructure Element	
City Plans, Ordinances, and Programs	
Capital Improvements	
Development Review Requirements	
Interjurisdictional Coordination	
Public Information and Outreach	გმ-ნგ





List of Figures

Figure I-1 Huntington Beach Planning Area	1-6
Figure LU-1 Character of Change	2-6
Figure LU-2 Land Use Plan	2-9
Figure LU-3 Adopted Specific Plans	2-16
Figure LU-4 Land Use Subareas	2-18
Figure CIR-1 Typical Roadway Cross Sections	3-9
Figure CIR-2 Arterial Highway Plan	3-14
Figure CIR-3 Proposed MPAH Amendments	3-15
Figure CIR-4 Bus Route Map	3-19
Figure CIR-5 Bikeway Plan	3-23
Figure CIR-6 Bikeway Cross Sections	3-24
Figure CIR-7 Scenic Highway Plan	3-28
Figure ERC-1 Open Space Diagram	4-4
Figure ERC-2 Park Locations and Service Areas	4-9
Figure ERC-3 Natural and Urbanized Communities	4-18
Figure ERC-4 Established Habitat Areas	4-21
Figure ERC-5 Mineral Resource Zones	4-26
Figure HAZ-1 Regional Fault Map	5-5
Figure HAZ-2 Local Faults	5-6
Figure HAZ-3 Seismic Hazard Zones (Liquefaction and Landslide)	5-7
Figure HAZ-4 Subsidence	5-8
Figure HAZ-5 Tsunami Evacuation Map	5-10
Figure HAZ-6 Potential Sea Level Rise Hazard Areas (2050)	5-12
Figure HAZ-7 Flood Hazard Areas	5-14
Figure HAZ-8 Dam Flooding Areas	5-15
Figure HAZ-9 Methane Hazard Overlay Districts	5-17
Figure N-1 Modeled Noise Contours for Baseline Year 2014	6-13
Figure N-2 Anticipated Changes in 2040 Noise Levels	6-14
Figure PSI-1 Public Facility Locations	7-3





List of Tables

Table LU-1 General Plan Distribution of Land Uses	2-24
Table LU-2 General Plan Development Capacity	2-25
Table CIRC-1 Peak Hour Level of Service Descriptions for Intersections	3-4
Table CIRC-2 Roadway Characteristics by Type	3-12
Table CIRC-3 Summary of Scenic Corridor Development Requirements	3-26
Table ERC-1 Open Space Land Uses	4-5
Table ERC-2 Huntington Beach 2005 and 2012 GHG Emissions	4-15
Table ERC-3 Huntington Beach 2020 and 2040 GHG Emissions	4-16
Table ERC-4 Natural and Urbanized Communities Occurring within the Huntington	ı
Beach Planning Area	4-19
Table ERC-5 Habitat Areas	4-20
Table ERC-6 Current and Forecasted Energy Use	4-22
Table ERC-7 City of Huntington Beach Planned Water Retail Demand	
(2020–2040)	4-25
Table ERC-8 2010 California 303(d) and TMDL Priority	4-28
Table N-1 Changes in Sound Pressure Levels, dB	6-4
Table N-2 Land Use-Noise Compatibility Standards	6-9
Table N-3 Sample Interior Noise Control Measures	6-17





This page is intentionally left blank.



I. The Introduction



The City of Huntington Beach has enjoyed a unique and rich history in its first century. Since 1909, the city has grown in land area, population, employment, transportation, and opportunity. Throughout this time, the highly coveted natural features and resources integral to the city's identity have been protected. Formerly an agriculture-based community, the city is now home to a variety of employment opportunities in the tourism, industrial, professional office, and healthcare sectors.

Today, Huntington Beach is known for its pristine beaches, diverse family-friendly community, and renowned Downtown. The city attracts millions of visitors from around the world, who enjoy the weather, recreation, events, and shopping. While experiencing steady population and economic growth, the city continues to meet the challenge of preserving its beach city culture and identity, protecting its natural resources, and enhancing quality of life for all community members.

The General Plan serves as a blueprint for the community through the year 2040. The plan provides a roadmap for new housing and job growth, while protecting those characteristics and values that make Huntington Beach a desirable and distinctive place to live, work, and visit.





Plan Overview

This overview of the General Plan describes Huntington Beach's geography and key demographic trends.

Why a General Plan?

The General Plan is a state-required policy document that provides guidance to City decision-makers on allocating resources and determining the future physical form and character of development. It is the City's official statement about the extent and types of development needed to achieve community physical, economic, and environmental goals. The General Plan consists of individual chapters, or "elements," each of which addresses a specific topic. It also embodies a comprehensive and integrated approach to planning. The General Plan clarifies and articulates the City's intentions with respect to the rights and expectations of the general public, property owners, community groups, developers, and businesses.

Geography

The City of Huntington Beach is located in the northwestern portion of Orange County along the Pacific Ocean. The city is bounded by the Pacific Ocean to the southwest, the City of Seal Beach to the northwest, the City of Westminster to the north, the City of Fountain Valley to the northeast, and the Cities of Newport and Costa Mesa to the east.

Huntington Beach's defining coastline, scenic viewsheds, and diverse neighborhoods create a unique sense of place and quality of life. The community provides a distinctive mix of coastal resources, protected open spaces, distinct residential neighborhoods, high-quality services, shopping opportunities, and a longstanding commitment to environmental stewardship.

From its early origins as a stop along the Pacific Electric Railway corridor to recent and possible future annexations, Huntington Beach has a long history of

KEY FACTS

- Area of City: 27.3 square miles¹
- Population: 193,189²
- Housing: 78,175 units¹
- Average Household Size: 2.62 persons³
- Population Density:
 7,179 inhabitants per square mile
- Jobs: 81,013 jobs⁴

Sources:

- 1) City of Huntington Beach 2014
- 2) California Department of Finance 2014
- 3) 2010–2014 American Community Survey
- 4) Stanley R. Hoffman Associates 2016



While Huntington Beach has experienced modest population growth over the past several decades, ongoing demographic and household trends indicate that the population will continue to gradually increase over the next several decades.

Furthermore, Huntington Beach's age profile is shifting from a younger to a more mature population. The number of young adults (25–44 years) has decreased over the past decade, while the number of middle-aged adults (45–64 years) and seniors (65+ years) has increased.

In 2014, Huntington Beach had a population of 193,189 and 78,175 total housing units. The average household size from 2000 to 2014 increased from 2.56 to 2.62 persons per household. The total employment in Huntington Beach was estimated at 81,013 in 2015. Total employment is projected to increase by 15.3 percent between 2015 and 2040 and strong evidence suggests that the rate of new housing unit construction will continue to increase as well.

This General Plan provides development capacity for approximately 17,862 additional residents and 12,386 additional jobs by 2040. The plan identifies how community amenities, services, and infrastructure will be provided to accommodate this planned growth, while maintaining community character and culture, conserving important resources, and adapting to changing economic and environmental conditions.

Regulations

A number of key state, regional, and local regulations set requirements that the General Plan must fulfill.

California Government Code

Each city and county in California is required to adopt a general plan and update this plan at regular intervals. Sections 65300–65404 and 65590–65590.1 of the California Government Code establish the requirements for the minimum contents of the general plan and rules for adoption and subsequent amendments. Together, state law and judicial decisions establish three overall guidelines for general plans. General plans should be:

Comprehensive. This requirement has two aspects. First, the general plan must be geographically comprehensive. Second, the general plan must address the full range of issues that affect the city's physical development.



Internally consistent. The general plan must fully integrate its separate parts and relate them to each other without conflict. All adopted portions of the general plan have equal weight, whether required by state law or not.

Long range. State law requires every general plan take a long-term perspective since anticipated development will affect the city and the people who live or work here into the foreseeable future.

Transportation Plan/Sustainable Communities Regional **Strategy**

The Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan (RTP)/Sustainable Communities Strategy: Towards a Sustainable Future provides a comprehensive outline of the regional vision for transportation investments in Southern California through 2040. The RTP was adopted in 2017 and is updated every four years to address regional transportation needs. The General Plan should be consistent with these regional planning efforts.

California Environmental Quality Act

The state legislature adopted the California Environmental Quality Act (CEQA) in response to a public mandate for thorough environmental analysis of projects that could affect the environment. The provisions of the law and environmental review procedures are described in the CEQA Statutes and Guidelines (Public Resources Code Sections 21000–21189). A separate Environmental Impact Report (EIR) prepared for the General Plan is the instrument for ensuring that environmental impacts of the plan are appropriately assessed and mitigated.

Huntington Beach Zoning and Subdivision Ordinance

The City of Huntington Beach Zoning and Subdivision Ordinance (Huntington Beach Municipal Code Title 20-Title 25) is the primary implementation tool for the General Plan. The Zoning and Subdivision Ordinance consists of two parts: the official Zoning Map divides the city into zones consistent with General Plan land use designations, and zoning text establishes development standards for each zone including permitted uses, density and intensity of uses, building height, performance standards, and other similar regulations.

California Coastal Act

The California Coastal Act (California State Public Resources Code, Division 20, Section 30000 et seq.) directs each local government lying wholly or partly within the coastal zone, as defined by the Coastal Act, to prepare a Local Coastal Program for its portion of the



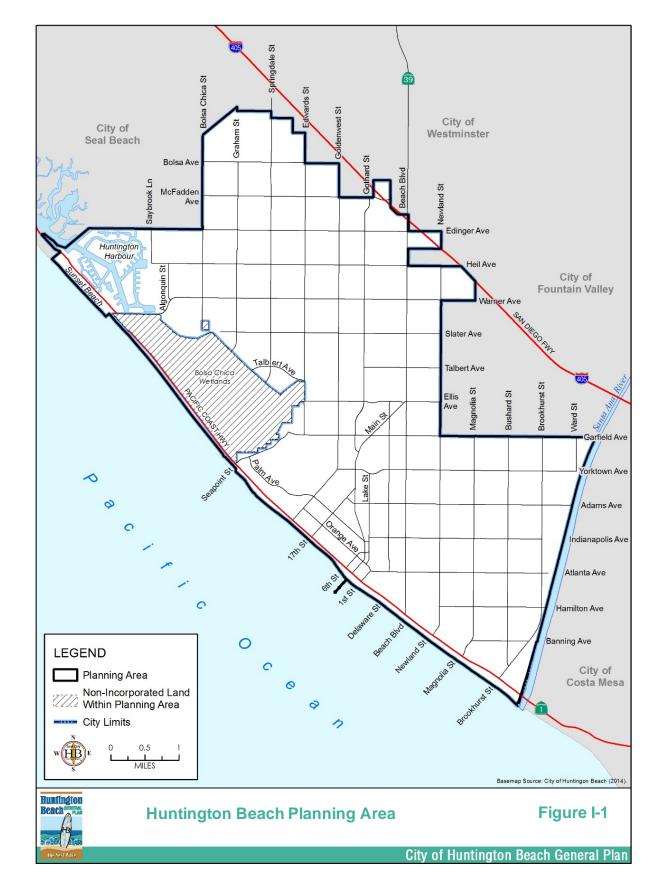
coastal zone. Local Coastal Programs are prepared so that local governments can carry out the policies and requirements of the Coastal Act. Local Coastal Programs must be reviewed and certified by the California Coastal Commission before being implemented by a local government. The City of Huntington Beach has a certified local coastal program, which is divided into two components: (1) a Coastal Element and (2) an Implementation Program. The Coastal Element includes a land use plan and goals and policies to be used by decision-makers when reviewing coastal-related issues and proposed development within the coastal zone boundary. The Huntington Beach Coastal Element was initially certified by the California Coastal Commission in 1985 and was last comprehensively updated in 2001.

Planning Area

The General Plan addresses all land within the city limits, as well as unincorporated Orange County properties surrounded by Huntington Beach, including the Bolsa Chica Wetlands. These areas are located within Huntington Beach's sphere of influence (SOI). While properties outside the city limits are under the jurisdiction of Orange County, they are critical to Huntington Beach's planning activities, resource conservation, and overall community value. The city and SOI comprise the "planning area" as illustrated in **Figure I-1**.

The planning area encompasses 29.6 square miles (18,971 acres) on the western edge of Orange County, located 37 miles southeast of downtown Los Angeles. Land within the current city limits (including the Huntington Beach Municipal Pier) comprises 27.3 square miles (17,482 acres), or 92 percent of the planning area, while unincorporated areas comprise 2.3 square miles (1,489 acres), or 8 percent of the planning area.







Community Engagement

Community engagement provides opportunities for input from residents, property owners, businesses, and concerned stakeholders. This feedback helps the City make quality decisions to create a more livable community. Updating the General Plan provided many opportunities for participants to help guide the future of Huntington Beach. The City invited the entire community to participate in a process of visioning, planning for the future, and reviewing the draft plan. The community engagement process helped define a community vision and widely shared guiding principles, but also exposed issues and opportunities, which informed the planning process. Community engagement activities conducted during the General Plan update included the following:

Plan General Advisory Committee. The General Plan Advisory Committee (GPAC) was created to provide input on the General Plan overall update process. The GPAC consisted of twelve community members and alternates: representatives from the Chamber of Commerce. Community Services Commission, Environmental Board, Planning



Commission, and Public Works Commission, and seven members appointed by City Council members. The GPAC met seven times over a one-year period, providing input on community themes and key issues, the community vision and guiding principles, technical reports, potential transformation areas and land use alternatives, and General Plan goals and policies.







Community Workshops and Open House. The City conducted community-wide workshops during the initial visioning phase of the project. The City hosted a beach bonfire, two community visioning workshops, and a pop-up workshop. The purpose of these workshops was to set a framework for future engagement on focused policy discussions in a transparent and collaborative way and to gather input on current priorities, issues, concerns, and a vision for the future. City staff also presented General Plan concepts to a number of community groups throughout the update process.

During the public review phase of the General Plan update, the document was posted on the City's General Plan update website (www.hbthenextwave.org) and advertised through the City's website, social media platforms (e.g., Facebook, Twitter), the Huntington Beach Wave newspaper, and the email distribution list gathered during the project.

Community-Wide Online Surveys. Community members participated in three online surveys throughout the course of the General Plan update. During the visioning phase of the project, community members described the demographics, preferences, and habits of the Huntington Beach community to help inform current and future community needs and wants. During the policy development phase, participants shared feedback regarding the draft guiding principles and potential transformation areas. During the draft plan review phase, participants shared feedback, questions, and concerns regarding the draft General Plan. Throughout this process, the City shared feedback from these surveys with the GPAC, Planning Commission, and City Council to maximize transparency.

Stakeholder Interviews. The City interviewed 16 stakeholders during the initial visioning phase of the project to capture a broad range of perspectives. Stakeholders were involved leaders in the community related to current planning processes, resource efficiency, circulation, market trends and fiscal considerations, resource conservation and wetland protection, land use, and social services. Stakeholders included City Council members, Planning Commissioners, existing and former City staff, business owners, civic organization leaders, Chamber of Commerce members, and neighborhood advocates.

Meetings with Community Groups. The City gave presentations to City and community groups to provide an overview of the General Plan purpose and process. The meetings also provided an opportunity for community group members to share their input. City staff met with homeowners, businesses, and environmental groups over the course of the update.

General Plan Website. A General Plan website provided access to background materials, information on the process, and progress of the project for easy reference. This website was the main access point for community members to participate in online surveys, access publicly available information and documents, and submit comments and questions to City staff.





Community Vision

A community vision is a long-term aspiration describing what a community wants to achieve in the future. Put simply, it describes the ideal condition of Huntington Beach in 2040, and outlines the factors that will sustain long-term community character and values over time. The Community Vision was crafted by the GPAC, City staff, and the consulting team, based on the input provided by the community during the community engagement process. This was reviewed by the City Council early in the General Plan update process. The City's Community Vision represents a summary of the future aspirations underlying the General Plan.

In 2040, the City of Huntington Beach is...

a desirable destination for all people to live, work, play, and visit. Huntington Beach is a healthy and safe, family-oriented community with flourishing schools and accessible community services for all ages. Natural resources are protected, while parks, open spaces, and the beach provide a variety of recreation opportunities. Community members travel easily by automobile, by bicycle, on foot, and using transit.

Well-maintained, high-quality infrastructure and cutting-edge technology help all businesses throughout the city prosper in a culture of innovation, offering a variety of job opportunities for residents and the region. Development is guided to ensure responsible growth while preserving and enhancing our community character, the beach, Surf City culture, and the environment.

The community and its priorities are resilient, withstanding the challenges posed by a changing coastline and economic base, and shifting demographics. The City, in partnership with the community, is sustainable—considering the needs of future generations while protecting what is valued today.

Guiding Principles

Guiding principles help to achieve the community's vision. They provide a foundation for General Plan goals and policies and offer guidance to the City Council, City commissions, and staff for making future decisions.

The following principles, supporting the Community Vision, are intended to guide future City decision making. The guiding principles were created through the GPAC's work and reviewed by the City Council early in the General Plan update process and provide an



overarching rationale for more specific General Plan goals and policies. Each principle is supported by a newspaper-style headline submitted by workshop participants, followed by a description of the community Huntington Beach wants to be in 2040 while underscoring both challenges and opportunities. Quotes from the community engagement process accompany the guiding principles and describe what workshop participants cherish about Huntington Beach and what they want for Huntington Beach in the future. Projects supporting these guiding principles will be pursued over the 25-year time frame of the General Plan, subject to available funding.



Economic Vitality

Local Businesses Thrive in an Innovation-Friendly Environment

Our local businesses are a top choice for highly qualified job seekers, and Huntington Beach is a place that businesses want to come to. Innovation and workforce diversity are creating high-paying jobs in the community. New businesses and jobs have emerged in areas capable of providing technology and infrastructure specifically to support business start-ups, allowing for smooth transition into larger spaces as businesses expand. The variety of building and development platforms provided to businesses in Huntington Beach makes the community resilient to future economic changes. Consistent and predictable development standards support businesses in their efforts to start or expand, minimizing commercial vacancy in the community.

Local attractions, such as the beach, accommodations, and amenities, draw tourists from near and far, while improved housing and transportation options support the service sector upon which Huntington Beach's tourist economy relies.







Infrastructure

Funds Flow Toward Improved Infrastructure Systems

Water, sewer, street, and other infrastructure facilities are updated to serve future generations of residents, businesses, and visitors. New infrastructure projects are coordinated using a comprehensive systems approach, supporting existing community members and providing adequate capacity for future growth.

A vibrant economy, expanded tax base, and sustainable infrastructure investments result in improved neighborhood quality and increased property values throughout Huntington Beach. The City and community groups are successful in seeking grant funding to support community infrastructure objectives.

Open Space and Recreation

Residents Don't Have to Travel Far to Play Outside

Both open space and recreational activities are highly valued. Residents and visitors cherish the beach, parks, trails, wetlands, and recreational activities available throughout the community. A careful balance between recreational structures, amenities, and activities is maintained. The beach is accessible, open, and clean, and natural open spaces have been managed carefully to accommodate varying preferences and changing priorities.

The City continues to successfully partner with regional agencies, Golden West College, local school districts, conservation organizations, and community groups to plan for parks, share facilities, and conserve resource areas.



"My priority for Huntington Beach is to provide nice places to get away and enjoy our family—grandchildren and all."





Surf City Community Image

Huntington Beach Voted Most Family-Friendly City in California

The beach community and Surf City culture are among the most cherished assets of Huntington Beach for locals and visitors alike. The beach, surfing, and related activities endure as part of the community's image and identity. The City and community organizations partner to preserve historic and cultural resources related to that identity, such as older neighborhoods and historic Downtown buildings. Surf City events and community art are promoted throughout the community to retain Huntington Beach's unique feel and culture.

"A celebration of the surfing, outdoor lifestyle."

"I like the small-town feel of Huntington Beach."





Public Safety

Huntington Beach Celebrates Top-Notch Public Safety Ratings

The City promotes public safety as an important part of maintaining a high quality of life in Huntington Beach. Community members and visitors feel safe and secure living and playing here. The community is prepared for catastrophic events such as earthquakes, tsunamis, and flooding.

Street lighting and design are enhanced in public areas, open spaces, and parks, and along streets and boulevards, improving the community's sense of safety. An increased police presence in some areas, particularly neighborhoods, Downtown, and the beach, leads to fewer incidents and safer community events.

"The residents of your neighborhood will know each other, and the exchange of information will increase community safety."



Redevelopment and Revitalization

Responsible Growth Is Accommodated to Maintain Community Character

Commercial corridors and older industrial areas are revitalized to support economic development. Downtown is thriving and safe, and successful infill projects enhance our community. A cautious and thoughtful approach has avoided land use conflicts and balanced the need for growth with the desire to maintain the community scale enjoyed by residents.

A diverse array of housing types, with a mix of densities, is available to provide Huntington Beach residents with a full range of housing opportunities. The housing supply matches diverse population and workforce needs, supporting the city's economic base.





Mobility and Access

Biking, Walking, and Transit Use Rates Reach All-Time Highs

Bicyclists, pedestrians, and transit users are a priority on roadways, and it is easy and pleasant to reach goods and services, as well as parks and recreation resources, by bike or on foot. High-traffic corridors are retrofitted to better connect cyclists and walkers, and to support use of alternative fuel vehicles. Downtown streetscape improvements enhance the pedestrian experience, create additional community gathering places, and provide valuable space for events.

Community members and visitors do not experience traffic congestion along high-traffic corridors. Expanded regional transit connections provide links between the beach and the Anaheim Regional Transportation Intermodal Center (ARTIC), resulting in improved access and mobility for residents and visitors, reduced traffic congestion, and accessible parking in the community.







Resource Conservation

Blue Ocean Meets Green City

Huntington Beach is a regional leader in sustainability, taking steps to conserve and protect natural resources within the community. The beach and wetland areas are protected and valued by residents and visitors. Water is a valued resource that the community conserves while also seeking additional and alternative sources. The community has shifted to renewable energy resources and conservation practices. Support for local businesses to develop new technologies leads to the use of these technologies to support further conservation and sustainability.

Continued relationships with and support for nonprofit organizations promote natural resource protection and enhance community pride in our clean, healthy, and vibrant resources. Efficient land use patterns and resilient design strategies minimize exposure to natural hazards, including rising sea levels.





Resident Services

City Reaches Every Resident Through Expanded Community Services and Programs

Community and social services are updated and expanded to meet the needs of all community members, including youth and seniors. Through efforts to collaborate with local schools, community-based organizations, and City departments, these community services are accessible and open to all residents.

Youth in the community have access to the same caliber of education or extracurricular programs as adults. Young adults find a range of employment, continuing education, and entertainment options in the community. Senior and elderly residents benefit from additional and accessible social services meeting their needs, and the senior center successfully provides a venue and forum for seniors to access services.



"Community that provides housing, economic opportunities, cultural, and recreational options to young families as well as seniors."



Culture and Arts

Cultural Opportunities Abound

New venues for arts, entertainment, and cultural activities elevate our reputation as a regional hub for culture and the arts. The expansion of cultural activities and events serves an important role in promoting the efforts of local artists, providing educational opportunities for our community's youth, and diversifying the activities and amenities available to visitors.

Huntington Beach will continue to recognize and appreciate its history and cultural heritage by supporting programs, activities, and facilities that celebrate our heritage.







General Plan Elements

The General Plan provides direction regarding many different development and conservation topics, organized by elements. These elements address all state-mandated topics plus additional topics of local importance. The plan format combines related topics in a concise, easy-to-read format that describes how the City will achieve the Community Vision in a manner consistent with the guiding principles.

The **Land Use Element** guides future development and designates appropriate locations for different land uses including open spaces, parks, residences, commercial uses, industry, schools, and other public and community-serving uses. The Land Use Element establishes standards for residential density and nonresidential building intensity for lands within the planning area. The element also establishes the City's long-term community design and economic development goals related to beach city culture and identity, community form, neighborhoods and districts, economic trends, and job development and retention strategies.

The **Circulation Element** defines the transportation network and describes how people move throughout the planning area, including the streets, railways, transit routes, bicycle paths, and sidewalks. The transportation network is a major determinant of development form and land use. Factors such as, but not limited to, traffic patterns and congestion, access to transit, and ease and safety of walking and biking may determine where people choose to live, work, and visit.

The **Environmental Resources and Conservation Element** describes the conservation, development, and use of natural resources (including open space), as well as parks and recreation opportunities, in Huntington Beach. This element also addresses key issues related to environmental resources and conservation, including biological resource areas, energy and water conservation, air quality, greenhouse gas emissions, and coastal resources.

The **Natural and Environmental Hazards Element** identifies areas prone to natural hazards and potentially hazardous conditions including ground shaking and surface rupture from earthquakes; ground failure; tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other geologic hazards; flooding; urban fires; hazardous materials; and evacuation routes.

The **Noise Element** describes the existing noise environment in Huntington Beach, identifies noise sources and problems affecting community safety and comfort, and establishes policies and programs that limit community exposure to excessive noise levels. The Noise Element sets standards for acceptable noise levels by various land uses



and provides guidance for how to balance the noise created by an active and economically healthy community with the community's desire for peace and quiet.

The **Public Services and Infrastructure Element** describes the water delivery system, wastewater collection and treatment system, stormwater and urban runoff, solid waste disposal, electricity, communications, and infrastructure finance. This element also identifies plans for preparing for health and safety hazards, including police protection, fire protection, marine safety, emergency response and preparedness, and airport safety.

The **Historic and Cultural Resources Element** identifies important local cultural, archaeological, and historic resources and establishes goals, policies, and actions for the protection and preservation of those resources.

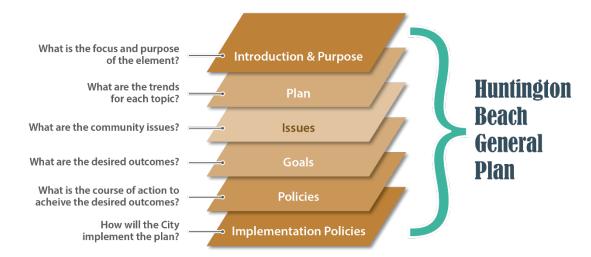
The **Housing Element** serves as a policy guide to address community housing needs. The element outlines the housing needs of the community, the barriers or constraints to providing that housing, and actions proposed to address these housing-related concerns pursuant to state housing element law (Government Code Section 65584).

The **Coastal Element** addresses the requirements of the California Coastal Act within the portions of Huntington Beach located in the coastal zone. Goals and policies in this element guide civic decisions regarding growth, development, enhancement, and preservation of coastal resources. The Coastal Element is part of the City's Local Coastal Program.

Measure M, approved by Orange County voters in 1990, requires all jurisdictions within the county to maintain a **Growth Management Plan** and a seven-year Capital Improvement Program. Measures M and M2, approved in 2006, raise the County's sales tax until 2041 to pay for specific voter-approved transportation projects. Local jurisdictions may receive tax monies for approved local projects if their Growth Management Plan and Capital Improvement Program conform to measure requirements. The City's Growth Management Plan is addressed by the Land Use and Public Services and Infrastructure Elements.



Plan Organization and Use



The *Introduction and Purpose* section of each element describes the purpose and scope of the element, and specifies the relationship of each element to other elements in the General Plan.

The *Plan* section provides important background information and key trends that provide a strategic basis for City policy. Many of the elements illustrate various opportunities, constraints, classifications, policies, and standards in either graphic or tabular form. For example, the Land Use Element contains a Land Use Map and a Land Use Plan that identify and describe the locations of future uses by type, density, and intensity.

The *Issues, Goals, and Policies* sections identify the most important community issues related to the element topic. For each issue, *goals* set direction by stating a desired future end state. *Policies* are guides for the City Council, Planning Commission, and City staff when reviewing development proposals and making other decisions that affect future development and conservation. Policies represent a commitment by the City to pursue a particular course of action, or to take action in the future consistent with the direction stated in the related goal. Policies are presented as written statements, tables, diagrams, and maps. All of these components must be considered together when making planning decisions.

Implementation Programs describe how the City will implement identified goals and policies. Unless otherwise stated, all policies are to be implemented on an as-appropriate or as-feasible basis, considering surrounding physical and environmental context and financial resources. These implementation programs are located in Chapter VIII. Implementation.

The organization of this General Plan allows for users to identify the sections that interest them and quickly obtain a sense of the City's policies on those subjects. However, plan users should realize that the policies in various elements are interrelated and examine them collectively.



II. Land Use



Introduction and Purpose

The fundamental pattern of Huntington Beach is set, as most of the land in the community is already developed or planned for a future use. However, communities are ever-evolving, and change, growth, and refinement can still be encouraged and cultivated. Land use is often considered the most overarching topic within a general plan, as it affects every other subject covered and directly influences the availability of housing and services, neighborhood and community character, economic stability, and quality of life for community members. By both focusing investment and embracing opportunity, Surf City can continue to thrive and expand into the future.





Scope and Content

California Government Code Section 65302(a) requires the City to adopt a Land Use Element that designates the proposed general distribution, location, and extent of land uses for housing, business, industry, open space, forest/timber, agriculture, natural resources, recreation, scenic beauty, education, public buildings and land, solid and liquid waste disposal facilities, and other public and private uses of land. The Land Use Element also establishes standards for residential density and nonresidential building intensity for designated land uses, and considers the impact of new growth on military readiness activities carried out on military facilities. Although the planning area does not contain any active military facilities, military facilities are located in the City of Seal Beach adjacent to the planning area's northern boundary. Land uses described in this element do not conflict with any military readiness activity associated with these facilities.

The Land Use Map is the visual component of the element, illustrating how land use, urban design, and economic development goals and policies translate on the ground, where specific uses are allowed, and their intended density and intensity. Together, the Land Use Map and Element ensure that future development is balanced, effective, and consistent with City and community interests.

The Land Use Element also addresses two related topics inherently related to land use decisions undertaken by the City: urban design and economic development. These are optional general plan topics under California law. Section 65303 of the California Government Code enables a county or city to adopt "any other elements or address any other subjects, which, in the judgment of the legislative body, relate to the physical development of the county or city." Any optional topics or elements must be consistent with the seven mandatory elements and, once adopted, they carry the same legal weight as any of the mandatory topics or elements.

The Land Use Element consists of this *Introduction and Purpose*, summarizing the general purpose of the Land Use Element; a *Land Use Plan* that defines land use standards and identifies the location and extent of land uses within the planning area; an *Urban Design Plan* outlining the fundamental components of community form in Huntington Beach; an *Economic Development Plan* recommending economic development strategies to sustain community character and economic vitality; *Issues, Goals, and Policies* outlining the most important land use, design, and economic issues affecting the planning area and policies to address these issues; and *Implementation Programs* describing how tools proposed to address land use issues are put into practice. Implementation programs are contained in a separate chapter at the conclusion of this General Plan.





Relationship to Other Elements

The Land Use Element affects every other element in the General Plan. Land use provides the basis for what uses are allowed where and in what shape and form. The Land Use Element lays out how uses are connected to ensure the Circulation Element provides for adequate transportation that meets the demands of current and future development. Likewise, the existing and planned transportation network can play a key factor in the economic success, safety, and character of specific land uses.

The Environmental Resources and Conservation Element includes goals and policies relating to the preservation and maintenance of open space areas identified in the Land Use Element for natural resource conservation and recreational access to parks and beaches.

Noise Element policies ensure that conflicts between uses proposed in the Land Use Element are minimized, and that uses producing higher noise levels are located away from residential areas and schools. The Natural and Environmental Hazards Element regulates proposed land uses in areas with higher potential for natural or human-caused hazards such as flooding or pollution.

The Public Services and Infrastructure Element ensures adequate services and upkeep of roadways, utilities, and other infrastructure. The City must account for the amount and location of growth and development laid out in the Land Use Element and identify the mechanisms necessary to ensure adequate infrastructure is in place to support the anticipated growth.

The Housing Element contains goals and policies relating to the availability, adequacy, and affordability of housing for all economic segments of the community. This is an important relationship, since the Land Use Element dictates where residential uses are allowed and prioritized within the planning area.

The Historic and Cultural Resources Element identifies important historical resources within the community and documents issues potentially affecting their status as significant resources. Land use compatibility can affect historic and cultural resources and the viability of future use, restoration, and preservation of these resources.

The Coastal Element is part of the City's Local Coastal Program and outlines the City's roles, responsibilities, and strategies to provide coastal access and protect coastal resources within the coastal zone consistent with the California Coastal Act.





Land Use Plan

The Land Use Plan categorizes and maps where residential, commercial, industrial, and community facilities are located today and where they are planned for the future. This plan describes the envisioned character of change to the current development pattern and land uses, the planned distribution and development density and/or intensity of future uses, and how land use goals will be achieved throughout the planning area and within each land use designation.

Characterizing Land Uses

Land uses are generally described by the maximum *density* and/or *intensity*, a measure of how much development exists or can be built on a site, and by the characteristics of use(s) located on a site. Density, intensity, and use characteristics form the basis for categorizing types of development into land use designations.

Density and Intensity

Density applies to residential and mixed-use designations that allow for residential development. This term describes the number of dwelling units accommodated within 1 net acre of land (dwelling units per net acre [du/ac]). As a secondary calculation, density can also refer to the population that can be accommodated within 1 acre of land (population per acre [pop/ac]).

Maximum Building Intensity (FAR)	
0.35	
0.5	
1.0-1.5	

Intensity applies to nonresidential developments such as commercial and industrial buildings, as well as nonresidential portions of mixed-use development. This term describes the floor-to-area ratio (FAR), or the relationship between the total area of a development and the area of the parcel where the development is located. FAR is calculated by dividing the gross floor area (the amount of floor space) of all buildings (excluding garages) on a lot by the net ground area of the lot.

FAR and other development factors, such as building square footage, building height, and the percent of lot coverage, are interrelated. For example, a 20,000-square-foot building on a 40,000-square-foot lot yields a FAR of 0.5:1 (comparable to 20,000:40,000). The 0.5:1 FAR could accommodate a single-story building that covers half the lot, or a two-story building on a quarter of the lot. FARs are typically expressed as a single number rather than a ratio (e.g., 0.5:1 is expressed as 0.5 FAR), and this notation will be used throughout this plan.



In some areas of Huntington Beach, intensity and density are regulated by development and design standards rather than FAR limits. These standards, sometimes referenced as form-based codes, may include specifications for setbacks (how far a building may be situated from a street or sidewalk), limits on building height and massing (e.g., size and shape), and requirements to include open space, among others. These standards apply to properties within the planning areas of specific plans, which establish these standards when they are adopted.

The maximum allowable development on any individual parcel is governed by the maximum measure of density or intensity permitted for that land use designation applied to the parcel. The General Plan uses these measurements to establish development capacity for each individual parcel and for the planning area at large. The planned (and actual) density or intensity on a parcel is usually less than the maximum, and is influenced by the physical characteristics of a parcel, access and infrastructure limitations, compatibility with other nearby uses, market factors, and past development trends.

Use Characteristics

Use characteristics refer to the intended character and development pattern of, and uses associated with, a parcel of land. The General Plan uses these use characteristics to classify buildings with similar characteristics into land use designations. To maintain compatible development on and between sites and within neighborhoods, overlay areas, and other defined areas, use characteristics for each designation are intentionally limited.

Distribution of Existing Uses

Existing land uses in Huntington Beach include a mix of residential, commercial, industrial, mixed use, parks, open space (e.g., wetlands, beaches), oil-related, and public uses. According to a 2014 land use survey, residential development is the predominant use in the city; housing uses constitute about 43 percent of all land uses in the planning area. Public uses, primarily comprising public rights-of-way, occupy an additional 28 percent of the planning area. Open space, commercial, and industrial development occupies most of the remainder of the planning area.

Character of Change

Change is a constant process observed over a specified time frame. Between now and 2040, Huntington Beach expects a certain continuing level of change resulting from a number of forces such as population growth, changing demographics, the need to replace aging buildings and improve existing homes, and an ever-changing economy. Physical changes are guided by new development that almost exclusively occurs through private forces based on market demand. The goals and policies provided in this element address areas and locations that would be best suited to accommodate transformational change that supports the Community Vision established in the General Plan.











Figure LU-1 indicates where change is encouraged to occur to accommodate future growth and development under this plan and to what degree it can be expected. As shown in the diagram, most areas in Huntington Beach are proposed to remain much as they are today, or would transform through guidelines provided by documents other than the General Plan. The terms used to describe the planned levels of change range from very little ("Preserve" and "Conserve") to substantial ("Transform"), as follows:

Preserve

"Preserve" areas are developed portions of Huntington Beach, where land use changes are not envisioned and are not necessary to implement the Community Vision. Preserve areas include all established residential neighborhoods; most commercial, retail, and employment centers; many visitor-serving commercial uses; and all of the Downtown area.

Conserve

"Conserve" areas include open space and recreational areas that provide valuable natural habitat or parkland and support the community recreational and aesthetic needs. This category includes the beach, the Bolsa Chica Wetlands, parks, golf courses, and other similar uses.

Transform

"Transform" areas consist of underdeveloped or underutilized portions of the planning area, where current developments might not adequately support future City goals. These areas are located within the Northwest Industrial Area and along the Gothard Corridor, where a majority of the city's industrial uses are located. To assist in transforming these areas, the General Plan proposes a new land use designation, Research and Technology, enabling a broader mix of lower-intensity industrial and commercial uses that better meet current and future market demands, and capture employment growth in emerging fields. Additional areas in the city could transform via means other than those established within the General Plan (e.g., specific plan areas).

Land Use Map

Land use designations are applied to every parcel within the planning area; however, the City can only regulate land uses located within the city limits. **Figure LU-2** illustrates the planned distribution and intensity of land use in the planning area.



Land Use Designations

The General Plan establishes 20 designations (18 primary land use designations and 2 overlay designations) that govern land uses within the planning area. These designations apply density and intensity requirements, use characteristics, development standards, and land use policies to individual parcels. As most of the planning area is already developed and maintained in good condition, the designations generally correspond to the pattern of existing uses. The following discussions identify the land use designations, land use characteristics associated with each designation, and the land use density/development intensity allowed within each designation.

Residential Designations

Four land use designations accommodate solely residential development in Huntington Beach. Collectively, these designations occupy the largest portion of the planning area (45 percent). The designations encompass a wide variety of densities and housing types, ranging from lower-density, primarily detached single-family residences in neighborhoods, to higher-density, mostly attached housing in and adjacent to Downtown, along the coast, and along select arterial roadway corridors.

Low Density Residential

Density range: up to 7.0 units/acre

The Low Density Residential designation provides for traditional detached single-family housing, zero-lot-line developments, mobile home parks, low-density senior housing, and accessory dwelling units or "granny" flats.



Medium Density Residential

Density range: >7.0-15.0 units/acre

The Medium Density Residential designation provides for uses allowed with the Low Density Residential designation, as well as smaller lot detached singlefamily housing, zero-lot-line developments, attached

single-family housing (e.g., duplexes, townhomes), and lower-density multiple-family housing, such as garden apartments.

Medium High Density Residential

Density range: >15.0-25.0 units/acre

The Medium High Density Residential designation provides for uses allowed in the Low and Medium Density Residential designations as well as attached single-family housing (e.g., townhomes), and a limited range of multiple-family housing (e.g., garden apartments, lofts).







Land Use Plan

Figure LU-2







High Density Residential

Density range: >30.0 units/acre

The High Density Residential designation provides for uses allowed in the Low, Medium, and Medium High Density Residential designations as well as a broad range of multiple-family housing types (e.g., apartments,

condominiums, lofts). The maximum density allowed within the area designated with the High Density Residential land use is prescribed on the Land Use Map for individual parcels/areas or within an adopted specific plan that covers the High Density Residential designated area.

Commercial Designations

Four land use designations accommodate commercial development in Huntington Beach. The businesses and other organizations located in these designations provide jobs, services, and goods, contributing to the economic vitality and shaping the physical environment. These commercial-focused designations are distinguished by location and the customers the uses are intended to serve. Neighborhood-serving commercial uses are located in low-scale stand-alone buildings or small centers near residential neighborhoods. Community- and regional-serving uses occupy larger properties near principal intersections. Visitor-serving uses are located near primary tourist destinations, including the beach and pier. One employment-focused office designation supports professional employment centers and complementary uses in and around Downtown and along arterial corridors.

Neighborhood Commercial

FAR range: up to 0.35

The Neighborhood Commercial designation provides for small-scale retail commercial, professional offices, eating and drinking establishments, financial institutions, household goods, food sales, drugstores, personal services, cultural facilities, institutional, health,



government offices, and similar uses designed to serve the needs of the surrounding residential area. The maximum building height is two stories.





General Commercial

FAR range: up to 1.5

The General Commercial designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational

commercial, hotels/motels, timeshares, cultural facilities, institutional, health care, government offices, educational, and similar uses designed to serve the needs of the community. The maximum building height is two stories.

Visitor Commercial

FAR range: up to 0.5

The Visitor Commercial designation provides for hotels/motels, timeshares, recreational commercial, eating and drinking establishments, retail, cultural facilities, and similar uses that are designed to serve the needs of tourists visiting the city and region.





Office

FAR range: up to 1.0

The Office designation provides for professional offices, ancillary commercial services (e.g., financial institutions, print shops), eating and drinking establishments, and similar uses designed to serve the needs of businesses and employees.

Mixed-Use Designation

One land use designation accommodates mixed-use development that currently occurs entirely within established specific plan areas. The designation is intended to provide for compact, pedestrian-oriented developments with commercial centers that range in scale from small neighborhood-serving centers to large community- and regional-serving centers. These developments will generally feature mixed types of commercial uses, and may include multiple-family residential housing, civic and cultural uses, and open spaces accessible to the public.





Mixed-Use

Building FAR range and residential densities are established per specific plan and shown on the Land Use Map for specific areas.

The Mixed-Use designation provides for any combination of commercial uses; offices; attached single-family housing, multiple-family housing, and livework units; institutional uses; cultural facilities;



developments including an open space component; and/or civic facilities. Mixing of these uses may occur in a vertical and/or horizontal orientation. Maximum FAR and residential density standards are established within individual specific plan areas. For some specific plans, FAR and density are not prescribed for individual properties or developments. In these cases, the overlaying specific plan includes a maximum development capacity for each land use.

Industrial Designations

Two land use designations accommodate industrial development in Huntington Beach. To ensure that the city is well positioned for future prosperity, these designations continue to provide jobs in established industries, while also supporting new employment opportunities that accompany emerging technologies and the redevelopment of transitioning industrial areas. One designation accommodates a diverse mix of nonresidential uses. The other accommodates a range of industrial uses that have historically characterized established industrial areas.



Research and Technology

FAR range: up to 1.0

The Research and Technology designation provides for a wide variety of nonresidential mixed-use development in industrial areas that are undergoing or poised for transformation to support changing employment demand. The designation encourages both employment uses and

commercial uses designed to accommodate employees while continuing to allow traditional industrial uses such as manufacturing and production. Uses include clean and green manufacturing (e.g., medical devices, solar panels), research and development, technology, warehousing, business parks, professional offices, limited eating and drinking establishments that have an industrial component (e.g., a brewery), restaurants and cafes to accommodate employment uses and surrounding residential neighborhoods, and similar neighborhood commercial uses.





Industrial

FAR range: up to 0.75

The Industrial designation provides for manufacturing (e.g., assembly, fabrication), construction, transportation, logistics, auto repair, research and development, warehousing, business parks, professional offices, ancillary commercial services



(e.g., financial institutions, print shops), warehouse and sales outlets, and similar uses.

Open Space and Recreational Designations

Five land use designations accommodate resource conservation, parks, and recreation in Huntington Beach.



Conservation

The Conservation designation provides for environmental resource conservation and management (e.g., wetland protection) and supporting ancillary uses (e.g., maintenance equipment storage).

Park

The Park designation provides for public parks and recreational facilities and supporting ancillary uses (e.g., maintenance equipment storage).





Recreation

The Recreation designation provides for publicly or privately operated recreation facilities, such as golf courses. This designation also provides for supporting ancillary uses (e.g., food stands, recreational equipment rentals, maintenance equipment storage).

Water Recreation

The Water Recreation designation provides for water bodies used for recreational purposes, such as boating, swimming, and water sports.





Shore

The Shore designation provides for coastal beaches operated by the City and state, and publicly or privately operated ancillary uses (e.g., food stands, recreational equipment rentals, maintenance equipment storage).



Public and Semi-Public Designations

Two land use designations accommodate a wide variety of publicly owned facilities and community-serving uses.



Public

The Public designation provides for government administrative (e.g., City Hall) and related facilities, such as public utilities, public parking lots, and similar uses.

Public-Semipublic

The Public-Semipublic designation provides for public and private schools, hospitals, churches, cultural facilities, institutional, and similar semi-public community service uses. Most land use properties with a Public-Semipublic designation have an underlying designation



shown in parentheses on the Land Use Map. The underlying designation indicates the preferred land use in the event the sites permanently transitions to another use. A General Plan Amendment would be necessary to change these sites to the underlying designation or any other land use.

Overlay Designations

Two overlay designations are included on the Land Use Map. These overlay designations provide additional development criteria to supplement the underlying or base land use designation. Overlay designations are noted as a suffix to the base land use designation on the Land Use Map.

Mixed Use Overlay

The Mixed Use Overlay permits the development of residential uses in conjunction with the underlying commercial designation. Currently, the only area of the city with the Mixed Use Overlay designation is within the Sunset Beach Specific Plan, which permits residential units in conjunction with visitor-serving commercial uses on designated parcels in the specific plan area. Design and density standards are set forth in the specific plan.





Specific Plan Overlay

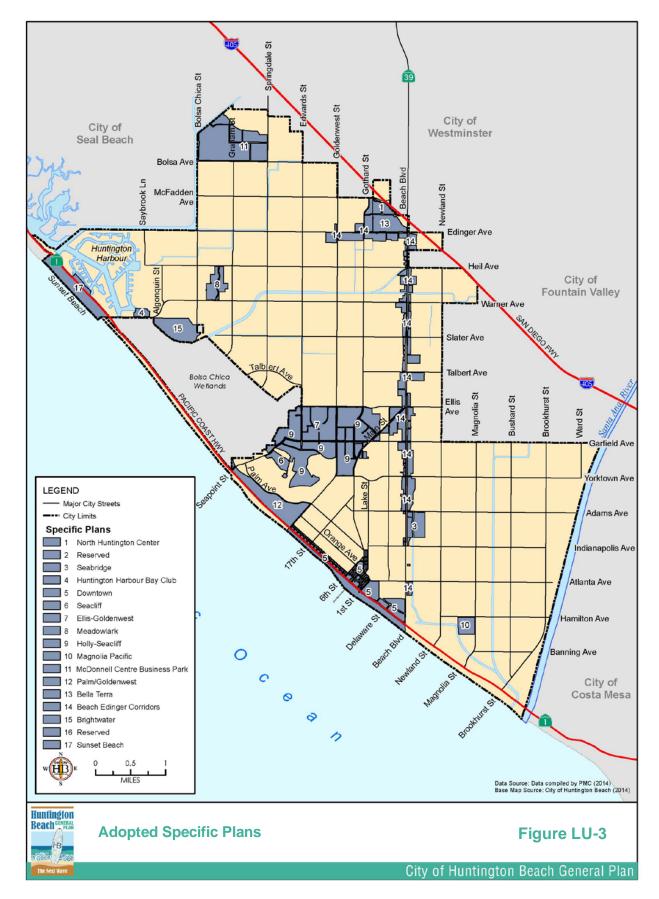
The Specific Plan Overlay permits the underlying land use designation and requires a specific plan to provide greater specificity for development of property and includes such things as land use and infrastructure plans, design and development standards, circulation and pedestrian access, and design guidelines. Permitted density and intensity is either shown on the Land Use Map in parentheses or established in the specific plan.

Adopted Specific Plans

There are 15 adopted specific plans in Huntington Beach, as identified in **Figure LU-3**. These plans have predominantly been used to focus on the characteristics unique to an area and customize the planning process and land use regulations and requirements to apply to that area of the city. Specific plans provide greater specificity for land use and infrastructure plans, design and development standards, and phasing/implementation. Designations for SP-2 and SP-16 are currently reserved for future specific plans, in the event they are needed.

The City has several specific plans that are also within the coastal zone and, as such, are incorporated into the City's certified Local Coastal Program Land Use Plan. Two adopted specific plans, Brightwater Specific Plan and Sunset Beach Specific Plan, have not been certified by the California Coastal Commission. The land use designations for these specific plan areas are shown on the Land Use Map with the notation that they have not been certified as part of the City's Local Coastal Program Land Use Plan.









Community Subareas

In addition to the specific plans identified throughout the planning area, the General Plan also identifies a number of community subareas (**Figure LU-4**), which are intended to supplement density/intensity standards, use characteristics, and urban design goals and policies provided in this element beyond the guidance offered by the land use designations. Each community subarea has been identified to further the economic goals and guiding principles of the City and to enhance areas where reinvestment or improvements are proposed during the life of the General Plan, but require additional consideration due to their locations and/or environmental setting. Although some subareas are contained partially or wholly within a specific plan, the description and goals of the subareas in this General Plan do not conflict with the respective specific plans. The following subareas have been identified through the General Plan process or carried over from the previous General Plan.

Intersection Enhancement Subareas

The following four community subareas represent opportunities to improve neighborhood gateways and commercial corridors within the planning area.

Subarea 1: Beach/Warner Intersection Enhancement

Encompassing the four corners of the Beach Boulevard and Warner Avenue intersection, within the Beach and Edinger Corridors Specific Plan, this 27-acre subarea is designated Mixed-Use and surrounded by Low Density Residential, Medium Density Residential, Medium High Density Residential, General Commercial, Mixed-Use, and Public uses. The subarea includes buildings of varying scales and architectural styles. The built environment and streetscapes lack a cohesive style. The predominant uses are retail stores, a gas station, a drug store, a car wash, and the 14-story Ocean Tower. The intersection is the subarea's defining feature.

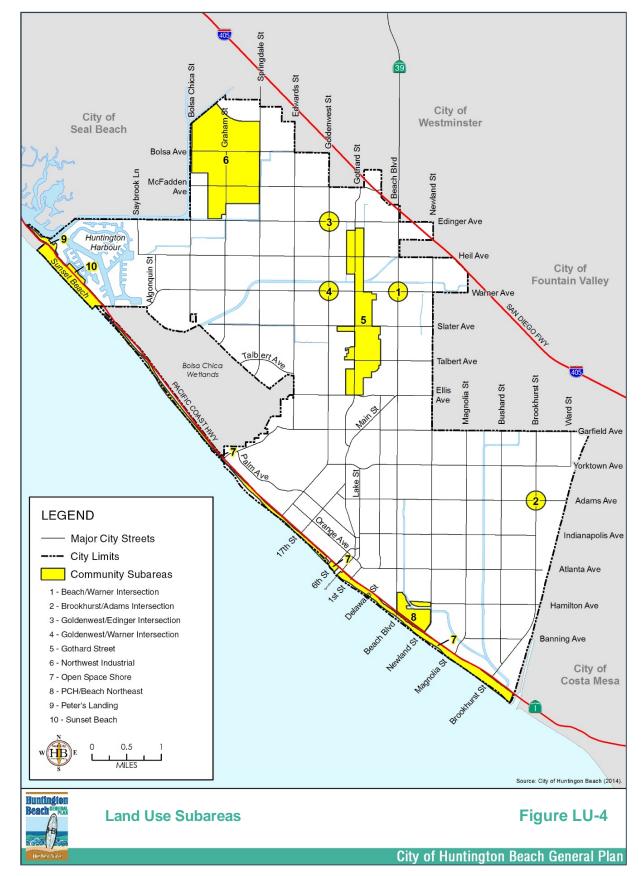
Subarea 2: Brookhurst/Adams Intersection Enhancement

Encompassing the four corners of the Brookhurst Street and Adams Avenue intersection, this subarea includes 58 acres of commercial use. Surrounded by low-density residential uses to the south and medium high-density residential uses to the north, each corner contains a variety of commercial uses within individual developments.

This subarea is characterized by large parking lots separated from the main roadways by landscape buffers. Strip retail and/or large format retailers are located behind the parking areas, and small pad retail buildings are dispersed within portions of the developments. The buildings generally maintain a low profile and the built environment and streetscapes lack a cohesive identity. Existing uses include banks, restaurants, a grocery store, a drugstore, and several small commercial service businesses. Both streets are wide and carry a large volume of traffic through the subarea.











Subarea 3: Goldenwest/Edinger Intersection Enhancement

Encompassing the four corners of the Goldenwest Street and Edinger Avenue intersection, within the Beach and Edinger Corridors Specific Plan, this 79-acre subarea includes portions of Goldenwest College and commercial development designated for future mixed commercial and residential use on three corners. The subarea is surrounded by additional public uses associated with Goldenwest College to the north/northeast, additional planned mixed commercial and residential uses to the east, and low-density residential uses to the south and west.

The remainder of the subarea consists of commercial development. The development pattern features large parking areas along both arterial streets, strip retail and/or large format retail stores located behind the parking areas, and pad buildings and smaller retail centers interspersed within the parking areas. The parcel located at the southwest corner of the intersection is currently vacant. The subarea's built environment and streetscapes lack a cohesive identity. The wide streets provide motorists with good access to the college and the retail uses, but limit pedestrian access, especially for students attempting to cross the streets to patronize businesses.

Subarea 4: Goldenwest/Warner Intersection Enhancement

Encompassing 64 acres along the four corners of Warner Avenue and Goldenwest Street, this subarea is predominantly designated for commercial and office use. It is surrounded by two low-density residential neighborhoods, a medium high-density residential development, Ocean View High School, Golden View Elementary School, two parks, and a flood control channel.

This subarea features various forms of commercial development. Large parking areas fronted by landscape buffers line both arterial streets; strip retail and/or large format retailers are located behind the parking areas; and small pad retail buildings are dispersed within the parking areas. The buildings generally maintain a low profile, and between each of the corners of the intersection, the buildings and streetscape/landscape currently lack a cohesive identity. In addition to large and small retail businesses, the overlay area also includes an assisted living facility and various small service businesses. Both Warner Avenue and Goldenwest Street are wide arterials, carrying large volumes of traffic through the intersection, but impeding pedestrian access from one corner of the site to another. The overlay area also currently lacks pedestrian connections to adjoining residential areas.



Technology and Innovation Subareas

Subarea 5: Gothard Street

Centrally located along Gothard Street between Edinger Avenue and Ellis Avenue, the 422-acre Gothard Street Subarea consists of both industrial and research and technology uses, along with a few isolated community service and public use parcels. The subarea is predominantly surrounded by residential development of varying density and character to the east and south, areas identified for mixed commercial and residential development to the north along Edinger Avenue, and Ocean View High School and Central Park to the west. The eastern edge of the subarea abuts the Oak View neighborhood. The Union Pacific Railroad (UPRR) right-of-way runs just east of the Gothard Street Subarea, extending from the northern city limits to its endpoint just north of Garfield Avenue.

The Gothard Street Subarea is predominantly occupied by smaller manufacturing and warehouse uses and auto repair facilities. Other uses include a lumberyard, some retail and office uses, Republic Services, several gyms/training facilities, Seabreeze Church, and City facilities. The built environment consists of small industrial buildings, isolated offices, and a few industrial parks. Incompatibilities between existing industrial uses in the subarea and residential uses in the Oak View neighborhood present existing environmental justice concerns, as expressed by community members. Given the proximity to residential uses and Ocean View High School, the potential for land use compatibility and environmental justice issues associated with typical industrial use remains an ongoing concern. The City has also designated the abandoned portion of the UPRR rail corridor south of Ellis Avenue for a future transportation corridor use. Potential uses include development of a bicycle or multipurpose trail or an exclusive transit corridor.

To support economic development goals to attract new incubator and technology-oriented uses, this subarea introduces the Research and Technology land use designation along with the existing Industrial designation to promote opportunities for new industrial uses that are generally greener, lighter, more mixed with commercial, and more compatible with surrounding sensitive uses. Similar to the Northwest Industrial Subarea, this subarea uses the Research and Technology designation to provide a flexible platform for both industrial and commercial uses that do not fit into the city's historically commercial or industrial areas. While the average building intensity of research and technology use is anticipated to be higher than that of traditional industrial use, the processes and operations of such uses are intended to have fewer potential air quality and noise impacts on surrounding sensitive uses than conventional industrial activities.

The maximum development intensity for uses in this subarea ranges from 0.75 FAR for traditional industrial uses to 1.0 FAR for proposed research and technology uses.





Subarea 6: Northwest Industrial

The 760-acre Northwest Industrial Subarea is located in the northwestern portion of the planning area. Comprising the McDonnell Centre Business Park Specific Plan north of Bolsa Avenue and industrial and research and technology uses south of Bolsa Avenue, the subarea is surrounded by residential uses to the north, south, and east, and is bordered by the City of Seal Beach to the west and by Interstate 405 and commercial developments to the east and north. This subarea is anchored by two of Huntington Beach's largest employers (Boeing and C&D/Zodiac Aerospace), as well as a variety of industrial, technology, commercial service, and fitness uses. The built environment ranges from large office buildings and business parks to small commercial pad and industrial spec buildings.

Given the proximity to residential uses, the potential for land use compatibility issues within typical industrial uses is a major concern. As a result, this subarea introduces the Research and Technology land use designation in areas adjacent to single-family residential neighborhoods to promote opportunities for new industrial uses that are more compatible with surrounding sensitive uses.

The Research and Technology designation provides a flexible platform for both industrial and commercial uses that do not fit into the city's historically commercial or industrial areas. Many new business types require this flexibility as they may need both commercial and industrial components to conduct business. As a result, the Research and Technology designation is a catalyst to spur employment growth and change within this opportunity area, reinforcing the City's desire to meet current and future needs and spur economic growth.

The maximum development intensity for uses in this subarea ranges from 0.75 FAR for traditional industrial uses to 1.0 FAR for proposed research and technology uses.

Pacific Coast Highway Coastal Corridor Subareas

These subareas intend to preserve and enhance the recreational character of the Pacific Coast Highway coastal corridor through the expansion of visitor-serving uses and maintenance of open spaces and recreational opportunities. The intent is to establish distinct commercial nodes, residential communities, and open spaces along its length.

Subarea 7: Open Space – Shore

The shoreline along Pacific Coast Highway is an amenity that requires a careful balance of preservation and enhancement of the recreational character through the expansion of visitor-serving uses and maintenance/improvement of open spaces and recreational opportunities consistent with policies and programs identified in the Coastal Element. No modifications to development intensities or use characteristics are proposed. However, future development or reuse projects will be required to highlight environmental awareness and education initiatives in project design.





Subarea 8: Pacific Coast Highway/Beach Northeast

This subarea allows for Open Space-Conservation (OS-C), Visitor Commercial (CV), and Medium Density Residential (RM) uses, with building heights up to three stories, and land use density/intensity limited to 15 du/ac and 0.5 FAR, respectively. Key elements of this subarea include:

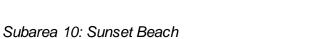
- Establishment of a major streetscape element to identify the Beach Boulevard-Pacific Coast Highway intersection.
- Site, design, and limit the scale and mass of development, as necessary, to protect wetlands.
- Maintain visual compatibility with Downtown.
- Incorporate on-site recreation amenities for residents.
- Minimize access to and from Pacific Coast Highway, providing an internal roadway system.
- Incorporate extensive landscape and streetscape.

Subarea 9: Peter's Landing

Located at the western end of the planning area, the Peter's Landing Subarea is located northeast of Pacific Coast Highway and Anderson Street. The purpose of this subarea is to promote revitalization and enhancement of the commercial center and to establish a unified "village" character. Through the use of consistent architecture, appropriate massing, and proper building placement and orientation, Peter's Landing should be redeveloped to promote extensive pedestrian activity and human-scale character.

A key component of any future redevelopment should include a major entryway into the subarea which also serves as a landmark entry into the City of Huntington Beach from the north. Future development should provide pedestrian linkages with surrounding areas that link Pacific Coast Highway to the waterways within Huntington Harbour and incorporate measures to reduce roadway noise from Pacific Coast Highway. Due to the scale and type of development desired by the community, development intensity in the Peter's Landing Subarea is limited to a maximum 0.5 FAR, building heights are limited to three stories, and uses permitted are limited to Visitor Commercial (CV).





In addition to the regulations and guidance provided in the Sunset Beach Specific Plan (SP 17), the Sunset Beach subarea was established to provide guidance for future development activities that ensure Sunset Beach maintains its distinctive and unique neighborhood character and to promote cohesion between Sunset Beach, Huntington Harbour, and the balance of Huntington Beach.



During the GPAC meetings, discussion of the Sunset Beach subarea emphasized the need for extensive outreach to existing property owners, residents, and businesses during planning activities. In addition, inclusion of key stakeholders, such as the Sunset Beach Sanitary District, Sunset Beach Community Association, Sunset Beach LCP Review Board, Las Damas, and Sunset Beach Woman's Club, is recommended.

Distribution of Land Uses

Table LU-1 identifies the distribution of land uses described in this element and in Figure **LU-2**. The largest land use in the planning area is residential, which makes up approximately 42.5 percent of the planning area with single-family residential comprising the majority of the residential land use designations. The next largest land uses in the planning area are public and rights-of-way (27.9 percent) and open space uses including recreation and conservation (17.4 percent).





Table LU-1
General Plan Distribution of Land Uses

Land Use Designation	Acres (approximate)	Percentage of Planning Area				
Residential						
Low Density	5,666.3	29.8%				
Medium Density	1,184.6	6.2%				
Medium High Density	1,034.4	5.5%				
High Density	180.7	0.95%				
Commercial						
Neighborhood	90.9	0.48%				
General	296.9	1.6%				
Visitor	165.7	0.9%				
Office	16.3	0.1%				
Mixed Use						
Mixed Use	637.9	3.4%				
Industrial						
Research and Technology	473.2	2.5%				
Industrial	654.6	3.5%				
Open Space and Recreational						
Conservation	1,661.9	8.8%				
Park	701.1	3.7%				
Recreation	237.8	1.3%				
Water Recreation	238.7	1.3%				
Shore	434.3	2.3%				
Public and Community Service						
Public	835.7	4.4%				
Public-Semipublic	779.2	4.1%				
Rights-of-Way	3,681.5	19.4%				
Total	18,971.8*	100%				

Source: City of Huntington Beach
* Totals may not add up due to rounding

Totals may not add up due to round

Development Capacity

Table LU-2 identifies the development capacity associated with the planned distribution of land uses described in this element and summarizes the land use distribution and the resulting residential and nonresidential levels of development that can be expected from implementation of land use policies established by the General Plan. As the density and intensity standards for each land use designation are applied to future development projects and land use decisions, properties will gradually transition from one use to another, and land uses and intensities will gradually shift to align with the intent of this Land Use Element.





Table LU-2					
General	Plan	Develo	pment	Cap	acity

Land Use Designation	Acres (approximate)	Total Estimated Dwelling Units (2040)	Nonresidential Square Feet (2040)
Residential	8,066.0	85,360	_
Commercial	1,207.7	43¹	18,442,316
Industrial	1,127.8	_	24,149,404
Open Space & Recreational	3,273.8	_	1,734,283
Public & Rights-of-Way	5,296.4	_	6,084,987
Total (2040)	18,971.8*	85,403	50,410,990
Existing (2014) Totals	18,971.8*	78,175	45,026,070
Change, 2014–2040	_	7,228	5,384,920

Source: City of Huntington Beach

Notes:

The Land Use Element does not directly specify a maximum population for Huntington Beach. The maximum possible number of residential units is determined by the different maximum densities allowed for each land use designation and the amount of land area with that designation. However, this maximum number of units is unlikely to be reached because every residential parcel in Huntington Beach would need to be developed to its maximum potential. Because most of the planning area is built out and existing buildings are generally in good condition, these changes will primarily occur within the "transform" areas identified in **Figure LU-1**. Forecasting assumptions are used to determine the realistic expected number of residential units that Huntington Beach will have when all of the parcels that are reasonably expected to redevelop have already done so.



^{*} Totals may not add up due to rounding

^{1.} Residential units located in the General Commercial designation represent existing residential units on land designated for a range of nonresidential uses where no land use change is anticipated.



Urban Design Plan

In 2000, the City adopted Urban Design Guidelines intended to address urban design issues citywide and guide new development in the city. This Urban Design Plan identifies key community issues related to urban design and includes goals and policies to ensure that these issues continue to be addressed throughout implementation of the Urban Design Guidelines and other City codes.

Beach City Culture and Identity

Future development should maintain and enhance the unique beach and "Surf City" feel of Huntington Beach. This includes preserving historic and cultural resources related to that identity, such as older neighborhoods and historic buildings; perpetuating traditional beach city architectural styles and design motifs in newer districts and neighborhoods; and



preventing development from encroaching on views of the Pacific Ocean, the Bolsa Chica Wetlands, and Huntington Harbour.

Fostering the Identity of Individual Neighborhoods and Districts

Some of Huntington Beach's established suburban districts, neighborhoods, and corridors lack a distinctive character, which can contribute to a weak visual community image. Future development occurring in these areas should foster or enhance the particular identity of the individual area and the ability of a person to identify or associate the area with the city's unique beach city identity. This can be accomplished through the use of appropriate architectural styles and treatments, more extensive landscaping and street trees, coordinated streetscape elements and signage, public art, and the enhanced treatment of walled superblock corridors.

Accommodating Larger-Scale Development while Enhancing Character of Commercial Corridors

Many of the city's suburban commercial corridors appear fragmented, lack a unified identity and sense of center, incorporate inconsistent and excessively large signage, and possess varied development scales that create a disjointed appearance within the corridor and conflict with surrounding uses. Future development should be designed to better





accommodate larger-scale development and to bring greater cohesion and enhanced character to these areas. This can be accomplished by designing projects to be visually distinctive, create a sense of place, provide adequate transitions in density, intensity, scale, and height, address public streets and tie into the city's grid street pattern, and incorporate attractive, coordinated signage that is properly scaled and located on the site.

Maintaining Historic Character and Architectural Diversity in Downtown

Major new projects in the Downtown area have joined and in some instances supplanted the older buildings traditionally associated with this area. Older structures should be integrated into Downtown's design themes. At the same time, Downtown should maintain some architectural diversity, as well as observe the retail street wall through consistent setbacks, taking care to coordinate new development setbacks with existing setbacks.

Economic Development Plan

Economic, demographic, social, and cultural conditions within Huntington Beach are interconnected. Land use decisions help to shape the local economy over time. Various aspects of urban design also determine the economic health of the community. This Economic Development Plan outlines the general economic issues and strategies the City intends to use to ensure a strong and healthy economy in the decades ahead.

Conditions affecting the local economy include land use decisions, business retention and development initiatives, job formation, and private and public investment patterns. This section covers general economic issues that have affected Huntington Beach in the recent past and highlights recent trends and growth patterns that illustrate future needs.

Economic Trends

Approximately 75,000 employees lived in Huntington Beach in 2012. For many decades, the economic engine of Huntington Beach was the aerospace industry. However, the past two decades have also seen the continued expansion of many high-tech light industrial and service industries. This reflects a long, ongoing shift away from land-intensive



industrial operations (i.e., oil extraction and processing). The four largest employment





sectors today are tourism, industrial, professional office, and healthcare/social assistance. Top employers include the aerospace industry and a number of businesses in the manufacturing, healthcare, waste management, and retail sectors. Together, these industries account for roughly 13 percent of the jobs in Huntington Beach.

Forecasts conducted in 2014 indicate Huntington Beach is heading toward a long-term period of slow but steady population and employment growth. Estimates indicate that employment is projected to experience a relatively higher growth rate than household growth, resulting in an increase in the jobs-housing ratio from 1.03 in 2012 to 1.10 in 2040. This level of growth is projected to be lower than most surrounding jurisdictions, including the county as a whole, which is projected to increase from 1.54 to 1.68 within the same time frame.

Average annual wages earned by Huntington Beach residents have increased approximately 29 percent between 2002 and 2011. However, accounting for inflation and the recent economic recession between 2009 and 2014, real income has not grown. In 2012 inflation-adjusted dollars, median household income decreased 11 percent from 2000 to 2012. However, the city's median household income is 5.8 percent greater than the median in Orange County.

Commuter Inflow/Outflow

Commuting behavior is linked to the jobs-housing ratio. Approximately 86 percent of Huntington Beach residents work elsewhere (a characteristic called outflow), while 82 percent of employees in Huntington Beach commute into the city for work (a characteristic called inflow). Approximately 14 percent of jobs in the city are held by Huntington Beach residents. The result is a large commuting population and longer commute times, which can in turn create increased traffic volumes and longer vehicle miles traveled for residents and nonresidents alike.

The high inflow and outflow of commuters indicates a degree of mismatch between residents' skills and education and the available training and jobs in the city, in addition to a relative lack of desirable and affordable housing for workers. Diversifying the economy toward professional/technical, specialized engineering, and research and development sector jobs could create greater job opportunities for residents, resulting in a better jobshousing balance. Likewise, providing a greater diversity of housing opportunities could also positively affect the jobs-housing ratio.

Real Estate Trends

Median home values in the city were \$616,700 in 2012, which is 21 percent higher than the county median. From 2000 to 2012, housing prices in the city increased 43 percent (in real dollars) versus 37 percent in Orange County. Due to a high quality of life, coastal





location, and compelling economic opportunity, for-sale housing, resale, and new development activity are expected to remain strong, and increase with growth of new industry and jobs. This makes affordable housing a key economic development issue.

The city's trend of higher real estate prices relative to other parts of the county extends to the retail, apartment, and industrial sectors, which have performed at or above market averages over the past five to seven years while experiencing low vacancy rates. The one notable exception is office sector uses, which experience lower rent and higher vacancy rates than the market average. As a result, Huntington Beach is generally considered a secondary office location for businesses requiring leased space.

Development Activity

Development activity in Huntington Beach is predominantly residential, with a marked increase in mixed-use multifamily style developments accounting for the largest share of new projects. Nonresidential development is dominated by retail uses, with a small portion of industrial uses.

Job generation associated with retail development tends to be lower than that associated with industrial development, and wages associated with retail jobs also tend to be lower on average. As a result, the City will continue to look for opportunities to attract employers offering higher paying technical, professional, and skilled labor positions.

Retail Capture and Leakage

Another way to describe the economic strength or weakness of specific economic sectors compared to the region is by considering capture and leakage. Taxable sales per capita provide an indication of where the city is underperforming in relationship to the local market area and Orange County and where retail sales that could be captured by local shops are being made elsewhere (a characteristic known as leakage).

Retail taxable sales per capita are significantly lower in Huntington Beach than both the Orange County and local market area averages. While the recent revitalization of the Bella Terra shopping center and Edinger Plaza addresses part of this issue, other similar opportunities likely exist. The Pacific City development is having a notable positive effect on leakage in this sector. Sites in the planning area that could host development serving these markets are discussed in the Economic Development Strategies section below.

Economic Development Strategies

Huntington Beach has established goals to bring new local businesses into the city, with a focus on start-ups and research and technology industries, while maintaining a diverse economic base and strong support for tourism. The City has identified target industries and opportunity areas in the Northwest Industrial Subarea and the Gothard Street Subarea





for new development to help meet these goals. These opportunity areas were identified because they either have significant concentrations of existing employment, or have future economic growth potential. The City could provide incentives to retain, expand, and capture new businesses, including research and development industries and start-ups. The City should also update the Huntington Beach Zoning and Subdivision Ordinance to ensure that development regulations and land use controls reflect the City's economic development goals.

Research and Technology Uses

When assessing Huntington Beach's location, employment, and land use potential, technology manufacturing and technology services industries present high potential for growth. A Research and Technology land use designation within the Northwest Industrial Subarea and the Gothard Street Subarea will accommodate these types of future uses. This designation provides for a wide variety of nonresidential mixed-use development and encourages both employment uses and commercial uses designed to accommodate employees while continuing to allow traditional industrial uses such as manufacturing and production. Uses may include clean and green manufacturing and industrial uses (e.g., medical devices, clean air technology), research and development uses, technology, warehousing, business parks, professional offices, limited eating and drinking establishments that have an industrial component (e.g., a brewery), restaurants and cafes to accommodate employment uses and surrounding residential neighborhoods, and similar neighborhood commercial uses.

Technology firms will demand newer or refurbished multi-tenant buildings that offer modern, high speed and high bandwidth infrastructure. Therefore, the City will also focus on encouraging development of a strong inventory of adequately improved and competitive industrial buildings within these districts that provide the resources and technological capacity desired by businesses in this industry.

Infrastructure

Along with bandwidth in facilities, adequate infrastructure across all services is also important to support new industry growth. The City must invest in water, sewer, drainage, street, and other infrastructure updates to serve future generations of residents, businesses, and visitors. There is much to be done to achieve long-term fiscal stability and to bring public services and capital infrastructure back to acceptable levels, which were impacted by the economic recession and loss of redevelopment funding.

The City will continue to maintain and expand its Capital Projects Reserve for the repair and construction of city infrastructure. New infrastructure projects will be coordinated using a comprehensive systems approach that balances serving existing community members and provides adequate capacity for future growth.





Quality of Life

Huntington Beach currently has an excellent quality of life. Its desirable residential neighborhoods, world-class beaches and recreation areas, and safe environment all contribute to a city that is a great place to live, work, and play. Improving the jobs-housing balance by planning for a range of housing types in appropriate focus areas in conjunction with industrial and commercial expansion is a key component of ensuring and maintaining the city's quality of life.

Fiscal Responsibility

Without redevelopment, new, creative, and innovative ideas to stimulate business and development will have to be implemented. Resolving these issues and many others will influence the level of net revenues that the City will have available to fund enhanced levels of service and to maintain and build new infrastructure necessary to support a strong, vibrant economy.

General Fund costs will now be subject to a fiscal impact analysis since they are so important to the fiscal health of the community. As part of this plan, the economic development recommendations will be tested using a fiscal impact model to provide guidance in the development of effective land use goals and policies that facilitate a strong local economy and long-term fiscal stability. As economic recovery is vulnerable to global, national, and state forces beyond the City's control, the City is committed to continue on the path of fiscal conservatism.

Tourism and Hospitality

An estimated 30 percent of jobs in Huntington Beach are tourism-based. Tourism is one of the city's competitive economic advantages, and continuing to foster the health of this sector is important to the overall strength and diversity of the city's economy. With over 10 miles of contiguous, accessible coastline, Huntington Beach hosts millions of visitors annually. Many of these visitors stay in one of the city's nearly 2,000 hotel and motel rooms, most of which are located along the coast. However, the current level of demand for overnight accommodations is not fully met within the city, leading to economic leakage and lost tax revenues. Therefore, identifying prime locations along the coastline as well as in other areas that provide a high-quality visitor experience remains an economic development priority.

The City will continue to work with existing and future operators to update or expand existing overnight accommodations and visitor-serving facilities, and develop new accommodations and facilities to meet future demands. To complement this strategy, the City will also continue to expand and enhance natural resources, open spaces, and recreation amenities to retain or improve its position among the top tourism destinations in Southern California.





Land Use and Urban Design Issues, Goals, and Policies

The land use and urban design issues addressed in this element include:

- Coordinating development patterns and protecting community character
- Addressing interactions between neighborhoods and nonresidential attractions
- Providing a range of well-maintained housing types
- Protecting and adaptively reusing industrial areas
- Maintaining flexible long-term school capacity
- Fostering the identity of individual neighborhoods and community subareas
- Maintaining historic character and architectural diversity in Downtown

Coordinating Development Patterns and Protecting Community Character

Much of the planning area has been developed, and many of the remaining undeveloped parcels are committed to development by specific plans and development agreements, or are preserved for open space. Consequently the fundamental patterns, distribution, and form of development has been established. However, protecting the traditional beach and the successful "Surf City" brand and feel of Huntington Beach is a community priority.

Continuing to preserve historic and cultural resources related to that "Surf City" identity, such as older neighborhoods; historic buildings, structures, and monuments; Native American, pioneer settlement, agricultural development; and historical periods including prehistory settlements, trading with Catalina, Civil War, World Wars, veterans' history etc., is an important step in retaining Huntington Beach's unique culture.

Goal LU-1. New commercial, industrial, and residential development is coordinated to ensure that the land use pattern is consistent with the overall goals and needs of the community.

Policies

- A. Ensure that development is consistent with the land use designations presented in the Land Use Map, including density, intensity, and use standards applicable to each land use designation.
- B. Ensure new development supports the protection and maintenance of environmental and open space resources.
- C. Support infill development, consolidation of parcels, and adaptive reuse of existing buildings.
- D. Ensure that new development projects are of compatible proportion, scale, and character to complement adjoining uses.





Goal LU-2. New development preserves and enhances a distinct Surf City identity, culture, and character in neighborhoods, corridors, and centers.

Policies

- A. Ensure that new development and reuse projects protect existing Surf City culture and identity and preserve and recognize unique neighborhoods and areas as the building blocks of the community.
- B. Ensure that new and renovated structures and building architecture and site design are context-sensitive, creative, complementary of the city's beach culture, and compatible with surrounding development and public spaces.
- C. Distinguish neighborhoods and subareas by character and appearance and strengthen physical and visual distinction, architecture, edge and entry treatment, landscape, streetscape, and other elements. Evaluate the potential for enhancement of neighborhood entrances and perimeter walls.
- D. Maintain and protect residential neighborhoods by avoiding encroachment of incompatible land uses.
- E. Intensify the use and strengthen the role of public art, architecture, landscaping, site design, and development patterns to enhance the visual image of Huntington Beach.

Addressing Interactions Between Neighborhoods and Attractions

Huntington Beach contains several well-defined places characterized by community activity and a high level of identity. These include the pedestrian-oriented Downtown area, the beach, Central Park (the city's primary recreation and cultural center), the Bolsa Chica Wetlands, neighborhoods such as Huntington Harbour and Sunset Beach, and the comparatively new Bella Terra area. Most other areas have developed as principally auto-oriented environments that pose a challenge for neighborhood interactions. Future planning should provide multiple ways for neighborhoods and attractions to interact through non-auto travel modes, drawing on existing and expanded bicycle and pedestrian facilities as well as enhanced transit facilities.

Goal LU-3. Neighborhoods and attractions are connected and accessible to all residents, employees, and visitors.

Policies

- A. Ensure that future development and reuse projects are consistent with the Land Use Map to provide connections between existing neighborhoods and city attractions.
- B. Improve trail, bicycle pathway, roadway, sidewalk, and transit connections to new development and reuse projects.
- C. Ensure connections are well maintained and safe for users.





Providing a Range of Well-Maintained Housing Types

Continued increases in land values and construction costs inhibit the ability to provide a range of housing types and prices to meet the needs of existing and future residents, particularly young family households, seniors, and low- and very low-income households. Providing a range of residential land use designations is crucial to meet existing and future housing needs. As the existing housing stock continues to age, ongoing efforts will be required to ensure it is maintained and does not physically or economically deteriorate.

Goal LU-4. A range of housing types is available to meet the diverse economic, physical, and social needs of future and existing residents, while neighborhood character and residences are well maintained and protected.

Policies

- A. Encourage a mix of residential types to accommodate people with diverse housing needs.
- B. Improve options for people to live near work and public transit.
- C. Encourage and provide incentives for residential property owners to maintain their homes and buildings.
- D. Ensure that single-family residences are of compatible proportion scale and character to surrounding neighborhoods.
- E. Encourage housing options located in proximity to employment to reduce vehicle miles traveled.

Protecting and Adaptively Reusing Industrial Areas

The nature of industrial uses has changed over the past few decades. Historically, most industrial land in Huntington Beach was used to support the aerospace industry and manufacturing. These uses were separated from residential and commercial uses to avoid transmitting excessive noise and odors, and located adjacent to arterial and rail corridors to support goods movement. Although aerospace and manufacturing uses continue to thrive in Huntington Beach, a variety of nonindustrial uses have been introduced in some industrial areas. Many of these uses have supported and been ancillary to the primary industrial function, while others provide diverse and valuable services to the community. Protecting the city's industrial areas is critical to promote the creation of more local jobs.





Goal LU-5. Industrial businesses provide employment opportunities for residents, supporting the local economy.

Policies

- A. Support and attract new businesses in the city's industrial areas.
- B. Encourage clean, less intensive industrial development in areas identified in the planning area.
- C. Ensure proposed development and uses in industrial areas contribute to the City's economic development objectives and do not minimize existing uses.
- D. Explore opportunities to optimize use of underutilized or underperforming industrial land that is sensitive to surrounding uses, and to introduce new industrial uses that create jobs.
- E. Encourage and assist existing and potential industrial owners to update, modernize, and expand their industrial properties.

Maintaining Flexible Long-Term School Capacity

Much of Huntington Beach was built during a time when demand for school facilities was high to accommodate the needs of the post-World War II baby boom. Today, demand for school facilities is experiencing a relative decline. Some schools in Huntington Beach are at or above capacity while others are under capacity depending on the school or district. Short-term demand for residential, commercial, and open space uses is competing with the ability to retain these sites for longer-term school use. Nonoperational schools are being leased for other uses, while other schools are overcrowded.

Goal LU-6. Neighborhood school sites adapt over time to meet the changing needs of the community.

Policies

- A. Consistent with state law, explore alternatives with school districts for public benefit and access to recreation and open spaces, as well as other uses for surplus school sites should a closure occur.
- B. Continue to consult with school districts in connection with any City-related or school district-related planning and environmental review of proposed non-education surplus school site projects.
- C. In consultation with school districts and consistent with state law, encourage flexible interim use options to maximize existing use of school sites while addressing future community needs.





Fostering the Identity of Individual Neighborhoods and Community Subareas

A lack of distinctive character within some of Huntington Beach's subareas, corridors, and neighborhoods can contribute to an overall weak visual community image. Fostering or enhancing the identity of individual communities is key to strengthening the city's overall image and the ability of a person to identify or associate it uniquely with Huntington Beach.

Goal LU-7. Neighborhoods, corridors, and community subareas are well designed, and buildings, enhanced streets, and public spaces contribute to a strong sense of place.

Policies

- A. Preserve unique neighborhoods, corridors, and subareas, and continue to use specific plans to distinguish districts and neighborhoods by character and appearance.
- B. Use street trees, signage, landscaping, street furniture, public art, and other aesthetic elements to enhance the appearance and identity of subareas, neighborhoods, corridors, nodes, and public spaces.
- C. Minimize visual clutter along commercial corridors.
- D. Enhance intersection subareas to create additional pedestrian connections and appeal of the area.
- E. Promote additional uses that complement and support the existing uses in the intersection subareas.
- F. Encourage undergrounding of utilities on approaches to and within the intersection subareas.

Maintaining Historic Character and Architectural Diversity in Downtown

New projects in the Downtown area have joined and in some instances supplanted the older buildings traditionally associated with Downtown. Older structures should be integrated into the design themes of the Downtown. At the same time, Downtown should maintain some architectural diversity, as well as observe the retail street wall through consistent setbacks, taking care to coordinate new development setbacks with existing setbacks.





Goal LU-8. Historic character and architectural diversity in Downtown Huntington Beach are protected and enhanced in new development and in the retrofit of existing buildings.

Policies

- A. Reinforce Downtown as the city's historic center and as a pedestrian and bicycle-oriented village with commercial, entertainment, and recreation uses to meet the needs of residents and visitors.
- B. Encourage development of underused parcels with a mix of uses and unique architecture.
- C. Ensure new development reflects the Downtown's historical structures and theme.
- D. Reinforce the unique Downtown character and visual distinctions, architecture, and streetscape.

Economic Development Issues, Goals, and Policies

The economic development issues addressed in this element include:

- Capitalizing on location with technology infrastructure
- Retaining, expanding, and capturing businesses
- Capturing sales tax revenues
- Encouraging renovation and revitalization of commercial and industrial areas
- Adapting to a changing economy
- Enhancing tourism, hospitality, and the high tech industry

Capitalizing on Location with Technology Infrastructure

The City must continue to capitalize on its location and reputation as an advantageous and competitive business location by encouraging expansion of state-of-the-art technology infrastructure related to communications, media, and computing systems that existing and new businesses can cost-effectively use.

Goal LU-9. Industrial uses provide job opportunities for existing and future residents, as well as the surrounding region, while generating revenue for the city.

Policies

A. Establish technology or innovation districts, such as the Gothard Street Subarea and the Northwest Industrial Subarea, where technology infrastructure is provided specifically to support existing and new businesses.





- B. Support the provision of technology infrastructure and services to supply necessary technological and communication tools for existing and new industry and businesses.
- C. Provide opportunities for new start-up businesses to develop innovative products and services in a business incubator environment.
- D. Support the ability for future industrial uses to accommodate new flexible work programs.

Retaining, Expanding, and Capturing Businesses

The city's business sector includes a sizable share of research, development, and startup businesses. However, there is an opportunity to attract more of these businesses to locate within the city and thrive, thus increasing the average wage rate of workers and improving the jobs-housing balance. Largely concentrated in the Northwest Industrial Subarea and the Gothard Street Subarea, most of these jobs are associated with technology manufacturing or technology services.

Goal LU-10. The City aggressively retains and enhances existing industrial businesses and technology businesses while attracting new firms to the city.

Policies

- A. Provide incentives to retain, expand, and capture new businesses, including research and development industries and start-ups.
- B. Promote the creation of jobs with increasing wage opportunities within the community.
- C. In partnership with regional, state, and federal agencies, provide workforce programs that facilitate workforce diversity in the city through expanded labor force training and hiring practices.
- D. Maximize the economic development services provided by the City to existing and prospective businesses and industries.

Capturing Sales Tax Revenues

The City must monitor taxable sales trends by key locations and work to reverse leakage trends in retail sales, with the objective of recapturing sales tax revenues that are leaving the city, by promoting targeted development and expansion of commercial uses that serve Huntington Beach and the surrounding region.

Goal LU-11. Commercial land uses provide goods and services to meet regional and local needs.

Policies

A. Encourage a variety of commercial uses that cater to local and regional demand to create an environment that meets resident needs and increases the capture of sales tax revenues.





- B. Encourage new businesses to locate on existing vacant or underutilized commercial properties where these properties have good locations and accessibility.
- C. Maximize the economic development services provided by the City to existing and prospective businesses and industries.

Encouraging Renovation and Revitalization of Commercial and Industrial Areas

There is a marked difference in development quality and property maintenance between older commercial/industrial corridors and newer commercial/industrial and mixed-use centers.

Goal LU-12. Commercial and industrial corridors throughout the planning area are renovated and revitalized.

Policies

- A. Establish in the Urban Design Guidelines that nonresidential buildings and sites be designed to be consistent with and use low-impact design techniques.
- B. Encourage renovation and revitalization of deteriorating and struggling nonresidential areas and corridors, particularly commercial locations.
- C. Expand shuttle services and pedestrian linkages between adjoining business areas, particularly along the coast, where a greater flow of local shoppers and visitors is encouraged.
- D. Seek opportunities to encourage the creation of business improvement districts or other economic development strategies where coordination and financing of mutually shared, enhanced services can increase business potential for all.

Adapting to a Changing Economy

As with the oil industry in the early 20th century, many new industries are getting their start in Huntington Beach in the 21st century. However, in the past decade, the way businesses operate has changed. Employees are looking for alternatives to long commutes, employers are considering ways to attract new talent, and communities desire greater workforce diversity.

Goal LU-13. The city provides opportunities for new businesses and employees to ensure a high quality of life and thriving industry.

Policies

A. Encourage expansion of the range of goods and services provided to accommodate the needs of all residents and the market area.





- B. Capture emerging industries such as, but not limited to, "knowledge"-based industries and research and development firms.
- C. Support development of new commercial and industrial projects and retrofits of existing buildings.
- D. Improve transit and other alternative transportation options, including shuttles and safe bicycle routes, for employees who live and work in the community.
- E. Do not preclude future mobility technologies in land use planning.

Enhancing Tourism and Hospitality

Anchored by the beach, Pier, natural resources, and cultural amenities, Huntington Beach is a world-renowned tourist destination. Annual events like the US Open of Surfing and Surf City Half Marathon draw hundreds of thousands of visitors. Huntington Beach is also enjoying an increase in conventions and meetings, and has expanded the number of available hotel rooms along Pacific Coast Highway. A limited number of other lower-cost lodging options are available, and ongoing provision of a variety of lodging options to ensure visitors of all income levels can enjoy the coast is a top priority of the Coastal Act. A healthy tourist and hospitality economy also requires a robust service economy.

Goal LU-14. Huntington Beach continues to attract visitors and provides a variety of attractions and accommodations during their stay.

Policies

- A. Encourage expansion of the range and location of available lodging for both tourist and business visitors.
- B. Encourage both coastal and inland visitor-serving uses to offer a wide spectrum of opportunities for residents and visitors.
- C. Improve the availability of affordable housing and accessible transportation options for service workers.
- D. Facilitate the provision of transit and bicycling linkages between the various tourist destinations which help encourage local residents and visitors to minimize the use of automobiles.
- E. Support a concert/entertainment venue within the city.





III. Circulation



Introduction and Purpose

Huntington Beach is an active, lively community that recognizes its circulation system is something more than just roads and the cars that drive on them. The city's multimodal system includes bikeways, equestrian trails, sidewalks and jogging paths, and waterways. Public transit services transport people within the planning area and to more distant destinations, using regional services provided by the Orange County Transportation Authority (OCTA).

Ensuring that mobility options in Huntington Beach remain diverse and efficient is both a fundamental goal and a necessity as concerns about air quality, greenhouse gas emissions, and the accessibility of transportation options to all members of the community grow. The Circulation Element describes and directs how people, goods, and services move within and through Huntington Beach. Through goals and policies contained in this element, the City guides how the circulation system will be shaped to respond to the needs and desires of the community. These needs and desires include reducing and preventing traffic congestion, providing for safe active transportation, and planning for new transit opportunities. Huntington Beach is a dynamic city, and the Circulation Element provides the means for the circulation system to adapt to dynamic conditions.





Accomplishing these objectives requires effective land use planning, roadway monitoring and improvement, transportation system and demand management, regional coordination, and commitment of significant personnel resources. The policies and programs in this element emphasize a balanced, multimodal transportation system that responds to the demands of current and planned land uses identified in the Land Use Element.

Scope and Content

The Circulation Element is a mandatory component of the General Plan. Pursuant to California Government Code Section 65302(b), the City must address major thoroughfares, transportation routes and various means of travel, terminals, and other local public utilities and facilities, all correlated with the Land Use Element. Huntington Beach has chosen to address utilities within the Public Services and Infrastructure Element.

In addition, Assembly Bill (AB) 1358, the Complete Streets Act of 2008, requires that cities and counties identify how they will provide for the routine accommodation of all users of roadways, including motorists, pedestrians, bicyclists, individuals with disabilities, seniors, and users of public transportation. Planning and building Complete Streets is one way cities and counties can meet this requirement. A complete street is a transportation facility that is planned, designed, operated, and maintained to enable access for all roadway users.

The Circulation Element consists of this *Introduction and Purpose* identifying the intent of the element, how it relates to other documents, and metrics commonly used to measure traffic flow; a *Circulation Plan* designating locations and standards for roadways and non-motorized circulation facilities, and stating the community's desired level of transportation service; and *Issues, Goals, and Policies,* which provide strategies to maintain and enhance Huntington Beach's dynamic circulation system.

The element addresses the physical circulation system consisting of streets, highways, bicycle routes, equestrian facilities, paths, and sidewalks, as well as available modes of transportation, including cars, buses, bicycles, and walking. How efficiently goods and people move about in a community is one of the most imperative issues a locality must address, as it affects land use, economic vitality, urban design, energy consumption, air quality, and ultimately, the city's infrastructure. Circulation decisions cannot be addressed solely at the local level, however; they must be coordinated with regional, state, and federal agencies, as well as with neighboring communities.





Relationship to Other General Plan Elements

State planning law requires that the Circulation Element be consistent with other General Plan elements. As circulation affects such a wide range of issues, consistency with other elements is especially important. The elements most closely linked with the Circulation Element are Land Use and Noise. The Land Use Element identifies the development potential of vacant or underutilized properties throughout the city, which is a major factor in developing future traffic volume estimates that are used to evaluate roadway adequacy in the Circulation Element. The transportation policies found in the Circulation Element are also directly linked to the programs and policies in the Noise Element, since transportation facilities users are largely responsible for excessive noise levels in certain locations in the community. Projected noise distributions, depicted as noise contours in the Noise Element, are in turn related to the Circulation Element. Policies and plans contained in the Noise Element are largely based on the Circulation Element and are aimed at minimizing the effects of transportation noise on current and planned land uses. The Natural Resources and Conservation Element is also related to this element, as it addresses air quality and greenhouse gas emissions.

Circulation Plan

Huntington Beach's circulation network consists of roadways, transit services, multiuse trails, waterways, bikeways, and air traffic from the various heliports in the city. Other facilities such as park-and-ride lots, transit shelters, bicycle racks and lockers, and public and private parking facilities support these methods of travel. Similarly, the overall circulation system supports the movement of goods and services via the various components of that system.

Measuring Traffic Flow

Roadway networks must be regularly evaluated to ensure they are moving vehicles efficiently and maintaining adequate capacity to support future growth. This element uses specific approaches to measure and describe traffic flow and roadway capacity. They involve a policy component with respect to desirable level of service (LOS) and vehicle miles traveled (VMT), and a technical component that outlines the criteria involved.

Volume-to-Capacity Ratio

The volume-to-capacity (V/C) ratio indicates how many vehicles travel on a roadway (volume) and the number of vehicles the roadway can carry (capacity). V/C ratios are calculated based on current or future traffic volumes and capacity values for various types of roadway facilities. Volume is established either by a traffic count (in the case of current volumes) or by a forecast for a future condition. Capacity is a critical component of roadway design. The higher the V/C ratio (approaching or above 1.00), the more congested the





roadway becomes. For example, a roadway that carries 1,000 vehicles per hour but has the capacity to accommodate 2,000 vehicles per hour at free flow speed has a V/C of 0.50, which drivers would experience as "free-flowing," with only minor delays.

The V/C ratio is used to reflect intersection performance through the intersection capacity utilization (ICU). This measure is applied using peak-hour volumes and the geometric configuration of traffic signal controlled intersections. The ICU sums the V/C ratios for the critical movements of an intersection, and thus accounts for the overall performance of intersections, which is typically the portion of the system that most influences the overall operations within a roadway system.

Level of Service

LOS is a tool used to describe the operating characteristics of the street system in terms of the level of congestion or delay experienced by vehicles. Service levels range from A through F, with each level defined by a range of V/C ratios, as shown in **Table CIRC-1**. LOS A, B, and C are considered good operating conditions, with only minor delays being experienced by motorists. LOS D represents operating conditions where drivers occasionally have to wait through more than one signal cycle to proceed through the intersection. LOS E is considered a near-capacity condition, and LOS F represents an oversaturated condition with long delays. The LOS designations are based upon ICU values calculated for intersections.

Table CIRC-1
Peak Hour Level of Service Descriptions for Intersections

Los	Description	V/C or ICU
Α	Low volumes; high speeds, speed not restricted by other vehicles; all signal cycles clear with no vehicles waiting through more than one signal cycle.	0.00-0.60
В	Operating speeds beginning to be affected by other traffic; between one and 10 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods.	0.61-0.70
С	Operating speeds and maneuverability closely controlled by other traffic; between 11 and 30 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods; recommended ideal design standards.	0.71–0.80
D	Tolerable operating speeds; 31 to 70 percent of the signal cycle have one or more vehicles which wait through more than one signal cycle during peak traffic periods; often used as design standard in urban areas.	0.81–0.90
Е	Capacity; the maximum traffic volume an intersection can accommodate; restricted speeds; 71 to 100 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods.	0.91–1.00
F	Long queues of traffic; unstable flow; stoppages of long duration; traffic volume and traffic speed can drop to zero; traffic volume will be less than the volume which occurs at level of service E.	Above 1.00

Source: Highway Capacity Manual 2000, Transportation Research Board, National Research Council





Vehicle Miles Traveled

SB 743 was passed by the state legislature in 2013. Among other topics, it discusses how transportation impacts are addressed under the California Environmental Quality Act (CEQA). Currently, an environmental impact report addresses impacts to traffic congestion and delays. SB 743 requires the Office of Planning and Research to update the State CEQA Guidelines so that impacts are instead measured by the predicted change in VMT rather than the change in LOS. This method allows for better calculation of the greenhouse gas and energy impacts. Local jurisdictions may still use LOS in making planning decisions, but it cannot be included as part of the CEQA process. This may result in significant changes to the way transportation systems are designed and operated in cities. The City of Huntington Beach will utilize VMT or a similar metric as a CEQA threshold of significance, while still maintaining the best possible traffic flow by assessing proposed development or reuse project impacts to LOS as a part of determining a project's consistency with the General Plan. Providing additional transportation mode options could improve LOS for vehicle travel, while also decreasing VMT for single-occupant vehicles.

The benefits of having a variety of travel options are numerous. Having access to public transit, cycling, and walking options increases the opportunity for residents to navigate the community and fulfill the necessary aspects of everyday life, regardless of age, ability, or economic status. Multiple options also provide individuals with greater choice and control over their mobility, and support a physically and socially active lifestyle. In addition, increased travel options have the potential to reduce automobile traffic, reduce greenhouse gas emissions, and minimize the need for large, multilane roadways and busy neighborhood streets.

Land Use Plan and Forecasts

The Circulation Element is designed to meet transportation needs based on assumptions about the intensity and location of development from the Land Use Plan. In turn, the Land Use Plan was developed through an iterative process with the Circulation Plan to ensure that the transportation network can meet the needs of proposed land uses.

Anticipated future development consistent with General Plan land use designations is presented in the Land Use Element. With implementation of the General Plan, up to 7,228 additional dwelling units and approximately 5.4 million additional nonresidential square feet could be constructed in the planning area. This additional development would result in the addition of approximately 148,000 average daily vehicle trips to roadways within the planning area.





Regional Mobility

Orange County has seen rapid growth since the 1990s, and is projected to have continued growth well into the 21st century. Regional transportation strategies are needed to successfully implement City and County plans accommodating future growth. These strategies must link Huntington Beach to other regional employment and



commercial centers, as well as airports and transportation hubs, and should prominently feature alternative modes of travel to the automobile.

Currently, regional and interregional roadway access is provided by a system of freeways and arterials. The San Diego Freeway (I-405) is the major north—south freeway, traversing the northeastern portion of the planning area. Pacific Coast Highway (SR 1) extends parallel to the coast on the western portion of the planning area. Pacific Coast Highway provides regional access to the City of Newport Beach to the south and the City of Seal Beach to the north, as well as points beyond.

OCTA provides local transit service and regional transit connections between the city and other areas of the county and region. OCTA provides a variety of transit services including bus service, passenger rail, and mobility services for those with special needs. OCTA continues to develop new transit alternatives to improve regional mobility.

Regional transportation plans and programs address regional and local transit, bicycle routes, and improved accessibility for Huntington Beach to and from points east of the Santa Ana River. Resolving these regional issues will require coordination between Huntington Beach, the County, and neighboring jurisdictions.

Complete Streets

Complete Streets are streets that accommodate all modes of travel in a convenient manner for all users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities must be able to move along and across a complete street in a relatively safe manner. Complete Streets help facilitate a variety of important community benefits, including the following:

- Complete Streets provide travel choices and give people the option to use alternative modes of transportation.
- Complete Streets encourage healthy physical activity. Public health experts promote walking and bicycling to combat obesity, especially in children.





- Complete Streets can lead to economic revitalization by reducing transportation costs and travel time while increasing property values and job growth in communities.
- Thoughtful design and accommodations for bicyclists and pedestrians reduces the incidence of crashes and improves safety for all transportation users.
- Complete Streets foster strong communities where all people feel welcome on the road and where walking and bicycling are an important part of improving public transportation and creating friendly, walkable neighborhoods.

Making a street more complete could include installing or improving sidewalks, adding bike or dedicated bus lanes, or maintaining frequent and visible crosswalks, roundabouts, or any number of other design features that suit the location and maintain or improve overall transportation flow. The City of Huntington Beach has built the vast majority of streets utilizing the Complete Streets approach, and expanding the Complete Streets efforts would require retrofit or redesign of existing streets.

In addition to providing ways to travel, and creating places for people, Huntington Beach's streets also provide access to private property and public sewer, water, electrical, and storm drain utilities.

The Local Road System

Roadways in Huntington Beach are generally laid out on a north-south, east-west trending grid system. The grid system becomes slightly modified in the Downtown area, where roadways trend northeast-southwest, and in the Huntington Harbour and Sunset Beach areas. As shown later in the Arterial Highway Plan, the local roadway system is organized in a hierarchical fashion, based on the grid system. However, due to natural barriers such as the Bolsa Chica Wetlands, the Santa Ana River, the Pacific Ocean, and the Seal Beach Naval Weapons Station, the grid system becomes discontinuous. This results in circuitous and somewhat limited access to certain locations, such as access to Pacific



Coast Highway from north-central Huntington Beach, or access across the Santa Ana River from the southeast.





Roadways are not equal in function or in their service of different travel modes. Major and primary arterials, like Warner Avenue or Goldenwest Street, must effectively balance the needs of both automobiles and mass transit vehicles in order to keep drivers from using adjacent neighborhood streets to avoid traffic. Secondary arterials like Newland Street or Slater Avenue still accommodate significant automobile traffic while also balancing the needs of more direct local access, on-street parking, and increased nonmotorized modes of transportation. Collector streets like Delaware Street or Orange Avenue are more supportive of other modes and uses, such as bicycles. Finally, local streets are mixed environments where all users interact, and the parkways and sidewalk areas can be used for recreation or gathering.

Roadway Types

The local street system is composed of various-sized roadways that allow for mobility from point-to-point and access to properties. Roads generally emphasize either mobility or access. In Huntington Beach, roadways are classified as follows:

- Freeway
- Smart Street Arterial
- Principal Arterial
- Major Arterial

- Primary Arterial
- Secondary Arterial
- Collector Arterial
- Local Street

Some roadway types have a standard cross section for use in selected areas. The standard roadway classifications and key mobility and access characteristics of each are described in the following paragraphs. Typical non-intersection cross sections are illustrated in **Figure CIRC-1**. Additional rights-of-way (beyond the standard width) may be required at higher volume intersections and to accommodate turning movements.

Freeways

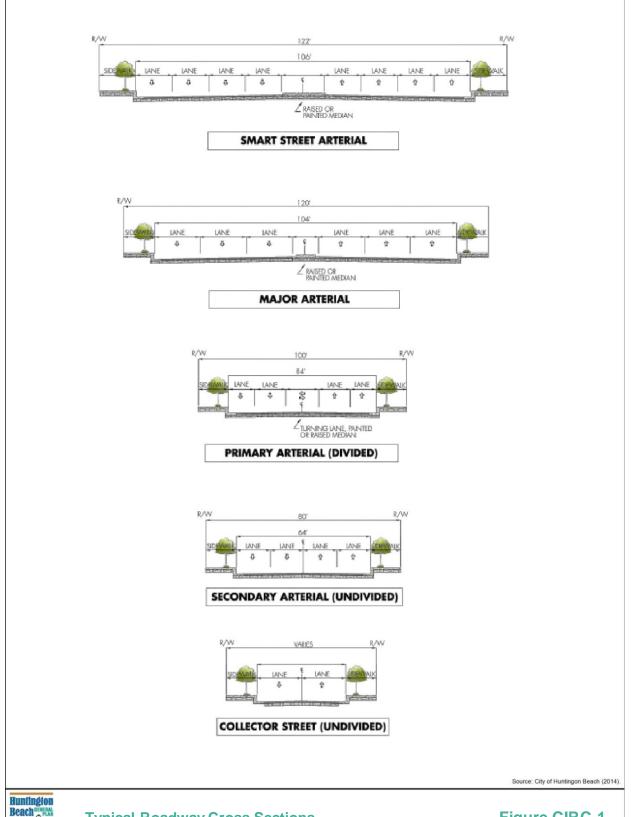
Freeways are limited access, highspeed, divided travelways of six lanes or more. Access is provided at strategically spaced, gradeseparated on- and off-ramps. I-405 provides regional freeway access at a number of interchanges in or adjacent to the city. Freeway design standards are dictated by Caltrans, District 12, and the Federal Highway Administration. Any interchange improvements



must be coordinated with and approved by Caltrans.









Typical Roadway Cross Sections

Figure CIRC-1

City of Huntington Beach General Plan







Smart Street Arterials

Smart street arterials are six-to eight-lane roadways with enhanced capacity compared to a standard arterial street. Smart streets are designated by OCTA as important regional routes and improved with Measure M funds to increase traffic capacity and flow through using techniques such as signal synchronization, bus turnouts, intersection improvements, driveway consolidation, and prohibition of on-street parking.

Traffic-carrying capacities of smart streets can range from 60,000 to 79,000 vehicles per day, depending on the number of lanes, degree of access control, peak-period

loading, and configurations of major intersections.

Beach Boulevard is designated as a smart street arterial by OCTA. Beach Boulevard (SR 39) and Pacific Coast Highway (SR 1) are under Caltrans's jurisdiction.

Principal Arterials

Principal arterials act as main thoroughfares and provide access to major activity centers and the regional freeway system. Principal arterials are typically eight-lane roadways featuring raised or striped medians. Desirable minimum spacing for street intersections along a principal arterial is approximately one-quarter mile. Unsignalized minor street and driveway access may be allowed, but signalized access is preferred and left-turn restrictions are typically planned at unsignalized access locations.

Curbside parking is prohibited. Traffic-carrying capacities of $\pm 65,000$ vehicles per day can be achieved depending on the degree of access control, peak-period loadings, and lane configurations at major intersections.

While the City does not currently have any principal arterials, this classification is part of the County Master Plan of Arterial Highways, and could be used for later reclassifications if appropriate. Principal arterials can be designated as smart streets with the appropriate capacity enhancements, as the two classifications are not mutually exclusive.

Major Arterials

Major arterials are high-capacity six-lane roadways with painted or raised landscaped medians. Left-turn restrictions at minor unsignalized driveways enhance vehicle flow.

Curbside parking is usually not appropriate along some of the more heavily traveled major arterial street segments in the city. Maximum service volumes of $\pm 50,000$ vehicles per day can be achieved, depending on the degree of access control, intersection operations, and peak-period loadings.





Major arterials can be designated as smart streets with the appropriate capacity enhancements, and so these two classifications are not mutually exclusive.

Primary Arterials

Primary arterials are four-lane divided roadways carrying local and regional commute traffic. Unsignalized minor street and driveway access may be allowed, but signalized access is preferred and left-turn restrictions are typically planned at unsignalized access locations.

Curbside parking is generally prohibited. Maximum service volumes of ±35,000 vehicles per day can be achieved depending on the degree of access control, peak-period loadings, and lane configurations at the major intersections.

Secondary Arterials

Secondary arterials are four-lane roadways without medians. Direct access from private residential properties to secondary arterials should be avoided where possible unless medians can be provided at such access points.

While secondary arterials have curbside parking, localized circumstances could warrant parking restrictions, such as prohibiting parking near intersections where left-turn lane striping is provided. In some locations, secondary arterials may include a limited median or be restriped to provide a left-turn pocket. Maximum service volumes of ±25,000 vehicles per day can be achieved depending on the degree of access allowed, intersection operations, and peak-period traffic loadings.

Collector Arterials

Collector arterials provide access to local streets from the arterial roadway network. Collectors are typically two-lane roadways that sometimes feature painted medians for left-turn movements.

Collectors allow curbside parking. Parking should be restricted near intersection approaches where a separate right-turn lane is provided. Maximum service volumes of ±12,500 vehicles per day can be achieved depending on the degree of access control and peak-period traffic loadings.

Augmented Roadways

The augmented designation for arterial street classifications provides flexibility for customizing sections of roadway while retaining the basic qualities of the classification such as the minimum number of lanes. Whether for aesthetic or capacity reasons, the intent is to allow these arterials to be compatible with their localized settings, providing a context-sensitive approach to the actual design parameters. Examples include the type and size of medians, the size and use of parkways, and in some cases, auxiliary lanes to facilitate local access.





Local Streets

Local streets are two-lane roadways without medians. Centerline striping is typically not provided, and curbside parking is generally allowed. Traffic-carrying capacity is physically similar to a collector; however, the qualitative limit of acceptable traffic volumes in a residential environment is lower (less than 5,000 vehicles per day). Local streets are not shown on the Arterial Highway Plan.

Table CIRC-2 summarizes the function, typical width, access constraints, and maximum volumes for each roadway type.

Table CIRC-2
Roadway Characteristics by Type

Standard Roadway Class	Mobility and Access Characteristics	Minimum width (ROW/ Pavement)	Typical Number of Lanes	Maximum Two-Way Daily Traffic Volume (at LOS E)
Smart Street Arterial	High-capacity arterial roadways featuring enhanced traffic signal synchronization, bus bays, intersection improvements, and additional travel lanes. Direct access to adjacent properties is discouraged, except at signalized intersections.	Variable ROW (120'–144')	6 to 8 lanes with raised or painted median and additional turn lanes at intersections	79,000
Principal Arterial	Main thoroughfares providing access to major activity centers and the regional freeway system. Direct access to adjacent properties is discouraged, except at signalized intersections.	120'/104'	8 lanes with raised or painted median and additional turn lanes at intersections	65,000
Major Arterial	Major arterials complement the principal system by providing a medium-capacity backbone system. Only limited access is provided, typically to commercial properties and not to residential properties.	120'/104'	6 lanes with raised or painted median and additional turn lanes at intersections	50,000
Primary Arterial	Roadways intended to carry traffic between local streets and principal or major arterials. They are similar to major arterials, with only limited access to adjacent properties.	100'/84'	4 lanes divided, with turn lanes as needed	35,000
Secondary Arterial	Roadways intended to carry traffic between local streets and principal or major arterials. They are similar to major arterials, with only limited access to adjacent properties.	80'/64'	4 lanes undivided, with turn lanes as needed	25,000
Collector Arterial	Roadways providing property access and linking properties to secondary, major, and principal arterials.	Varies	2 lanes undivided	12,500





Beach and Edinger Corridors Specific Plan

The sections of Beach Boulevard and Edinger Avenue that fall within the Beach and Edinger Corridors Specific Plan area have cross sections that are unique to the Specific Plan (for example, different lane configurations and median landscaping) and which allow for deviation from the standard cross sections described in **Table CIRC-2**.

Arterial Highway Plan

Circulation Element goals, policies, and implementation programs emphasize the need to provide a circulation system capable of serving current and future local and regional traffic. The planning horizon for the roadway system is 2040. The City's Arterial Highway Plan is illustrated in **Figure CIRC-2** and has been developed to accommodate anticipated volumes in 2040.

Relationship to County Master Plan of Arterial Highways (MPAH)

The plan depicted in **Figure CIRC-2** is the required initial plan that must be consistent with the current OCTA MPAH. Several amendments to the MPAH and, subsequently, the Arterial Highway Plan are recommended to be pursued. The recommended amendments to the current MPAH are depicted in **Figure CIRC-3**. Coordination with OCTA to pursue the MPAH amendments is required before any changes can be made to the City's adopted plan. Each amendment will be evaluated in cooperation with OCTA and other affected agencies prior to a final decision regarding amendment of the MPAH. As MPAH amendments are approved by OCTA, administrative amendments to the Arterial Highway Plan will be made when consistent with the recommendations identified in **Figure CIRC-3**.

Principal and Secondary Intersections

As a result of the way Huntington Beach's road network has been developed, many trips funnel through a few key intersections. If these intersections fail to operate at adopted performance standards, this failure seriously impacts the overall effectiveness of the entire roadway system. Such locations are defined as "principal intersections" and "secondary intersections." Principal intersections have been designated as such because they are considered to have strategic importance within the overall Arterial Highway Plan. Principal and secondary intersections are critical to the function of the entire network and are regularly monitored and given priority for roadway improvements.

Principal and secondary intersections will be identified in the Technical Administrative Report and will be amended based on annual review and reporting of conditions. Action involved in changing intersection designations (principal to secondary or secondary to principal) involves administrative review and approval by the Planning Commission. A General Plan Amendment is not required for such changes.

















The standard right-of-way and roadway widths specified in **Table CIRC-2** will vary on approaches to intersections to accommodate intersection improvements, such as auxiliary turn lanes and/or dual-left turn lanes. Parking will typically be restricted on the approaches to principal and secondary intersections to ensure adequate space to develop such improvements.

Critical Intersections

One further intersection definition is "critical intersection," which is recommended for isolated cases where the long-range LOS is projected to be worse than the desired threshold and no feasible improvements are identified (see discussion on LOS below). The intent is that such locations be monitored over time.

Performance Criteria

Performance standards for intersections involve a policy component, the desired LOS, and a technical component that involves the assumptions and procedures used to determine the LOS. The LOS standards are set by the City of Huntington Beach (Policy CIRC 1.B), except in the case of Orange County Congestion Management Program (CMP) intersections. The lowest acceptable performance standard for CMP intersections is LOS E. Seven CMP intersections are located in Huntington Beach:

- Beach Boulevard at Adams Avenue
- Beach Boulevard at Edinger Avenue
- Beach Boulevard at Pacific Coast Highway
- Beach Boulevard at Warner Avenue
- Bolsa Chica Street at Bolsa Avenue
- Bolsa Chica Street at Warner Avenue
- Pacific Coast Highway at Warner Avenue

Evaluation of volumes, capacities, and levels of service on the City street system are based on peak-hour intersection data since intersections are the primary limiting factor affecting traffic flow on city streets. The LOS standards as established by Policy CIRC-1.B are as follows:

Critical Intersections LOS E

Principal Intersections LOS D

Secondary Intersections LOS C

Included in the principal intersections are the CMP intersections listed above; hence City policy is to achieve LOS D for these CMP intersections, a higher standard than the CMP LOS E requirement.





The technical procedures used to determine LOS are based on the ICU methodology described earlier. Parameters and criteria used in such calculations will be defined in the Technical Administrative Report, which will be prepared following the adoption of this Circulation Element.

Future roadway improvements needed to fully implement the Arterial Highway Plan have been determined through use of a citywide traffic forecasting model maintained by the City. The Technical Administrative Report will list the intersection and roadway improvements required to transition to full implementation of the Arterial Highway Plan. The City will continue to use the five-year CIP process to prioritize, fund, and build these improvements, updating both the CIP and the Technical Administrative Report on an annual basis to reflect current needs, priorities, and financial conditions. New development project mitigation will also be used to address necessary improvements.

Relationship to Land Use

Planned land uses within Huntington Beach through the year 2040 influence future traffic volumes and highway capacity needs. Baseline (year 2014) daily trip generation within the planning area was around 1,618,820 trips per day, and 148,000 additional trips are anticipated by 2040 (an increase of about 9 percent). The Arterial Highway Plan is designed to accommodate this increase, but will require improvements including new roadway construction, improved transit service, and enforcement of the transportation demand management program.

Neighborhood Traffic Management

As vehicle traffic in Huntington Beach and the region increases, commuters and locals may look for less-crowded streets for quicker drive times. Drivers may choose to leave congested arterials in favor of local streets, impacting generally quiet residential neighborhoods. In busy commercial areas, employees and visitors may find it easier or less expensive to park in an adjoining neighborhood. Resulting increases in traffic, speeding on local streets, and inadequate parking can disrupt residential neighborhood activities.

Preserving the character and safety of neighborhoods is important to the City. Policies aimed at protecting neighborhoods from the negative effects of cut-through traffic and inappropriate parking include residential parking permits, site planning, and traffic-calming measures. Traffic-calming techniques are used to direct traffic elsewhere and slow traffic within neighborhoods. Specific traffic-calming measures will be identified in the neighborhood Technical Administrative Report prepared following adoption of this Circulation Element, and will be updated on an ongoing basis.





Public Transportation

Most regional connections from Huntington Beach to locations outside the city are made by personal automobiles. However, there are also many riders who use the public transportation system.

Fixed-route and demand-responsive services meet these needs. Fixed-route services are transit lines that operate on regular schedules along a set route. Demand-responsive services have defined service areas but do not operate on fixed routes or schedules.



In 2014, OCTA operated 16 routes through the city (see **Figure CIRC-4**). The number of lines and routes are adjusted as needed in response to ridership patterns. OCTA and the City both operate demandresponse services. OCTA operates the ACCESS program. The City, with the aid of OCTA, operates the Senior Services Mobility Program.

Two park-and-ride facilities allow commuters to park their personal vehicles at one location and utilize carpools, vanpools, or commuter bus service. The park-and-ride facilities are the Golden West Transportation Center at Gothard Street and Center Avenue, and a large lot at the Boeing Corporation campus at Bolsa Avenue and Bolsa Chica Street.

Future Plans

The Union Pacific Railroad right-of-way runs east of Gothard Street and extends from the northern city limits to its endpoint just north of Garfield Avenue. Approximately three trains per week use the active portion of the rail line north of Ellis Avenue. The City has designated the abandoned portion of the rail corridor south of Ellis Avenue for a future transportation corridor use. Future development of all or portions of the corridor, including the existing active rail section, for transportation purposes may be pursued by the City in the future. Potential uses include development of a bicycle or multipurpose trail or to function as an exclusive transit corridor. These options may be limited in some areas where portions of the corridor are no longer available for public use.











Helistops and Heliports

Local heliports are used primarily for air ambulance, business, emergency, and police uses. Heliports are located at the Boeing Corporation (Bolsa Chica Street at Bolsa Avenue), Guardian Center (Beach Boulevard at Warner Avenue), Huntington Beach Police Station (Gothard Street and Talbert Avenue), Cal Resources at Pacific Coast Highway (between Seapoint Street and Warner Avenue), and the Huntington Beach Civic Center (Main Street at Yorktown Avenue). City policy regarding heliports is to ensure that their development and operation are coordinated with the Airport Land Use Commission (ALUC) and to comply with conditions mandated by the Federal Aviation Administration, the ALUC, and Caltrans.

Transportation Demand Management and Air Quality

Huntington Beach is located within the South Coast Air Basin, which is a nonattainment area with regard to meeting state and federal air quality standards. The City has established a Transportation Demand Management (TDM) ordinance to mitigate potential impacts of development projects on mobility, congestion, and air quality. The City uses ordinance requirements and policies in this element to encourage individuals and employers to change their travel behavior. Fewer vehicle trips and miles translate to reduced pollutant emissions. Policies and implementation measures include requiring employers and new developments to provide appropriate transit and pedestrian facilities, encouraging current businesses and new development projects to submit TDM plans, and encouraging the creation of Guaranteed Ride Home and carpool programs.

The City also encourages the use of no-emission lowvehicles. including hybrids, electric vehicles, or other emerging technologies. One example is low-speed, zero-emission neighborhood electric vehicles (NEVs). These vehicles are usually restricted to roads with speeds of 35 mph or less and must be charged approximately every 30 miles. For these reasons, the City encourages businesses to provide charging



stations and is investigating alternative roadway systems for NEVs.





Parking

Huntington Beach is a popular destination for beachgoers and shoppers. Great demand for limited parking in Downtown, at the beach, and at parks, sports fields, high schools, churches, and industrial locations has been a continuing issue for many years. Excessive numbers of vehicles parked on city streets can potentially impede vehicle circulation, reducing the effective capacity of roadways and causing traffic congestion. Residential neighborhoods also experience heavy parking demand when large numbers of visitors use on-street parking, especially during special events. Pursuant to Coastal Act requirements, parking must be maintained within the coastal zone that allows visitors to access the beach and coastal resources.

The City operates parking lots and garages in Downtown and near the beach. To reduce associated impacts on adjacent residential neighborhoods, the City is committed to developing new parking facilities and programs and continuing to regulate neighborhood parking through residential permit programs. At the same time, the City will explore ways to reduce overall parking requirements when appropriate, in order to minimize the amount of land used for parking and encourage alternative forms of transportation.

Pedestrian, Bicycle, and Equestrian Paths and Waterways

Accomodating Pedestrians

Sidewalks and walking paths allow people to walk easily around most parts of Huntington Beach, particularly in areas such as Downtown, adjacent to the beach, and along portions of Beach Boulevard. Within master-planned



neighborhoods, pedestrian paths link homes to recreation facilities. In many other neighborhoods, sidewalks allow children to walk to schools and parks and surrounding uses.

The City seeks to improve the pedestrian experience and enhance pedestrian safety. Areas eligible for improvements will be designated as pedestrian enhancement zones (PEZs). PEZ improvements may include widened sidewalks, crosswalks, trees, pedestrian-scale lighting, and traffic-calming measures. The City will establish a designation process for PEZs, coordinating with County and regional transportation agencies to assess the need for improved facilities and balance the demand for improved pedestrian facilities with the need to maintain adequate vehicular traffic flows.





Routes for Bicyclists

Huntington Beach's mild climate permits bicycle riding year-round, and the growing popularity of bicycling has drawn enthusiasts onto the streets and bike trails near the beach and throughout the planning area. The bikeway plan shown in **Figure CIRC-5** identifies the planned system of



bikeways to accommodate growing demand and provide a real alternative to the car for local trips. The plan establishes three classes of bicycle routes:

- Class I Bike Paths Off-road routes located along designated multiuse trails or vacated rail lines separated from streets.
- Class II Bike Lanes On-road routes delineated by painted stripes and other identifying features.
- Class III Bike Routes On-road routes sharing use with pedestrians or motor vehicle traffic that are signed but not striped.

Cross sections for each type of route are shown on **Figure CIRC-6**. Class II and III routes along the north-south and east-west arterials connect to pedestrian trails and Class I routes. Given the built out nature of the city, creating new Class I routes is difficult. Thus, where bicyclists and pedestrians share the road with automobiles, the City will work to meet appropriate traffic safety standards.

Equestrian Facilities

Huntington Beach, despite its generally suburban character, has managed to retain a few residential neighborhoods near Central Park where the keeping of horses is permitted. To support equestrian activities, the City has required the development of horse trails around and through these neighborhoods with a planned route west to Pacific Coast Highway. Visitors and others also use the trails for rented horses available at the Huntington Central Park Equestrian Center. The center and equestrian trails provide welcome recreation options for residents and others, and the



HB

City will retain these facilities as community resources.









Class 1 Multi-Use Bike Path













Provides a completely separated right-ofway for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

Description: Right-of-way separated from motor vehicle traffic. Used where adjacent roadway speeds and the volume of traffic is too high for safe shared use. Also used for connections through open space areas and parks, or where no other facility type is feasible.

Design Guidelines:

- · Eight foot paved with two foot graded edge minimum width for two-way use. Greater width is recommended for high use corridors.
- Bike paths adjacent to a highway closer than five feet from the edge of the shoulder shall include a physical barrier such as rails, dense shrubs or trees.

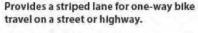
References:

Caltrans Highway Design Manual Chapter 1000 California MUTCD 2012

Class 2 Bike Lane

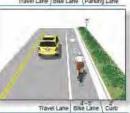






Description: Provides a striped lane for one-way bike travel on a street or highway. Installed along streets in corridors where there is significant bicycle demand, and where there are distinct needs that can be served by them. In streets with on-street parking, bike lanes are located between the parking area and the traffic lanes.









Design Guidelines:

- · Five foot minimum width for bike lanes located between parking area and traffic lanes.
- Four foot minimum width if no gutter or parking exists. Including a normal two foot gutter, minimum bike lane width shall be five feet.

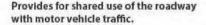
Caltrans Highway Design Manual Chapter 1000 & 300 California MUTCD 2012

Class 3 Bike Route









Description: Within vehicular right-of-way, delineated by directional signage. Used where roadway speeds and traffic volume are fairly low and shoulder provides adequate room. Bike Routes indicate to cyclists that there are particular advantages to using these routes compared to alternative routes.

Design Guidelines:

- Wider than standard outside lane recommended.
- Because cyclists are permitted on all roadways (except prohibited freeways), bicycle routes should offer a higher degree of service than other streets.

References:

Caltrans Highway Design Manual Chapter 1000 California MUTCD 2012



Bikeway Cross Sections

Figure CIRC-6

City of Huntington Beach General Plan



Boating

Given the city's coastal location, Huntington Beach residents take advantage of its local waterways largely for recreation from Huntington Harbour, Sunset Channel, and the Orange County Sunset Aquatic Marina. Additional future uses could include ferries to employment centers or water taxis. The City supports and encourages private development of such waterborne transportation options.

Scenic Corridors

The practice of identifying scenic corridors and routes was introduced by the state of California in the 1960s as a way to protect the aesthetic value of lands adjacent to highways. In Huntington Beach, this practice has been extended to cover corridors that the City has determined to have notable aesthetic appeal for the community.

Caltrans defines scenic corridors as lands generally adjacent to and visible from the highway, using a motorist's line of vision. Scenic corridors in Huntington Beach consist of roads that offer motorists, cyclists, and pedestrians attractive vistas and pleasing street scenes. Though not officially designated by the state, Pacific Coast Highway in Sunset Beach is an informal "Scenic Highway," which is effectively the equivalent of a major urban scenic corridor. The City has established policies regarding treatment of scenic corridor rights-of-way, selection criteria for appropriate surrounding land uses, and rigorous development review procedures to protect the aesthetic appeal of these corridors.







The City defines three types of scenic corridors:

- Major Urban Scenic Corridors Major corridors offering views of either natural or built environments. Development may be regulated to preserve views within the coastal zone, and landscaping and detailing are required to reinforce the aesthetic beauty of the surrounding area. Major urban scenic corridors are prominent, signature boulevards conveying arrival and identity, and in many cases will connect with adjacent cities.
- Minor Urban Scenic Corridors Minor corridors terminate within the city boundaries
 and typically carry less traffic than major corridors. Development may be regulated to
 preserve views within the coastal zone, and landscaping and detailing are required to
 reinforce the aesthetic beauty of the surrounding area.
- Landscape Corridors Corridors requiring specific treatment of signage, landscaping, or other details to reinforce the design continuity of the area.

Scenic corridors are regulated by design standards summarized in **Table CIRC-3**.

Table CIRC-3
Summary of Scenic Corridor Development Requirements

Scenic Corridor Type	Development Requirements
Urban Scenic Corridors (Major and Minor)	 Utilities to consist of underground facilities Prohibit off-site signs and billboards Require open space easements for natural areas adjacent to corridor Require adjacent developments to incorporate compatible landscaping Other design requirements as specified in the Land Use Element Utilize the City's Design Review Board to evaluate developments within designated scenic corridors
Landscape Corridors	 Prohibit off-site signs and billboards Require adjacent developments to incorporate compatible/increased landscaping Other design requirements as specified in the Land Use Element

There are several intersections along the edges of Huntington Beach that serve as entry points to the various scenic corridors in the community. These intersections, known as entry nodes, are key locations that help to demarcate the corridor and set it apart from the surrounding areas. There are 11 primary entry nodes and 5 secondary entry nodes in Huntington Beach. The locations of the scenic corridors and entry nodes are shown in **Figure CIRC-7**.





Transportation and Urban Runoff

The quality and quantity of stormwater runoff flowing into the Santa Ana River and Pacific Ocean are regulated by the State of California. Urban environments such as Huntington Beach contain expanses of impervious surfaces that prevent stormwater from percolating into the ground; instead, runoff drains lead directly to the river or ocean. The circulation system—comprising sidewalks, roads, and parking lots—makes up a large proportion of the impervious surface acreage in the planning area and resulting pollution. Many of the pollutants entering the stormwater system are byproducts of motor vehicles, including gas and oil.

To responsibly address the water quality impacts of urban runoff, and to meet Santa Ana Regional Water Quality Control Board National Pollutant Discharge Elimination System (NPDES) permit requirements, the City will continue to require mitigation of potential impacts of transportation-related sources of water pollution, particularly in urban runoff.









Issues, Goals, and Policies

The circulation issues addressed in this element include:

- Maintaining adequate level of service
- Providing adequate Downtown and beach parking
- Enhancing regional transit
- Increasing local transit options
- Ensuring mobility options for all users
- Enhancing bicycle, pedestrian, equestrian, and waterway options
- Protecting and developing scenic corridors
- Providing for alternative fuel vehicles and infrastructure
- Ensuring access for emergency vehicles

Maintaining Adequate Level of Service

While the City has generally maintained adequate levels of service over time, congestion occurs at some key intersections and on several arterial roadways during commute hours, on the weekends, and during the tourist season. The City does not control operations on some roadways, such as Beach Boulevard and Pacific Coast Highway, as they are under Caltrans jurisdiction. Maintaining adequate levels of service enhances quality of life for Huntington Beach residents, promotes traffic safety, and improves the ability of emergency service providers to respond to emergency situations.

Goal CIRC-1a. The circulation system supports existing, approved, and planned land uses while maintaining a desired level of service and capacity on streets and at critical intersections.

Goal CIRC-1b. The implementation of citywide systems and driver applications, such as vehicle detection, traffic signal coordination, collision avoidance systems, traffic calming measures, and emergency or traffic notification systems, creates a quality circulation system.

Goal CIRC-1c. Through ongoing evaluation of jurisdiction, efficient transportation management provides the highest level of safety, service, and resources.

Policies

A. Develop and maintain the city street network and pursue completion of missing roadway links identified on the Arterial Highway Plan (Figure CIRC-2) and standard roadway cross





sections (Figure CIRC-1), including appropriate roadway widths, medians, and bicycle lanes.

- B. Maintain the following adopted performance standards for citywide level of service for traffic-signal-controlled intersections during peak hours.
 - a. Locations with specific characteristics identified as critical intersections: LOS E (ICU to not exceed 1.00)
 - b. Principal Intersections: LOS D (0.81-0.90 ICU)
 - c. Secondary Intersections: LOS C (0.71-0.80 ICU)
- C. Monitor the capacity of principal intersections. When principal intersections approach or have reached unacceptable levels of service, consider elevating the priority of Capital Improvement Program (CIP) projects that reduce traffic congestion at these intersections.
- D. Require additional right-of-way and restrict parking on segments adjacent to principal intersections to allow for future intersection improvements and turning movements as needed to satisfy performance standards.
- E. Maintain compliance with the OCTA Congestion Management Program or any subsequent replacement program.
- F. Require development projects to provide circulation improvements to achieve stated City goals and to mitigate to the maximum extent feasible traffic impacts to adjacent land uses and neighborhoods as well as vehicular conflicts related to the project.
- G. Limit driveway access points, require driveways to be wide enough to accommodate traffic flow from and to arterial roadways, and establish mechanisms to consolidate driveways where feasible and necessary to minimize impacts to the smooth, efficient, and controlled flow of vehicles, bicycles, and pedestrians.
- H. Protect residential neighborhoods from adverse conditions associated with cut-through and nonresidential traffic.
- I. Pursue technological innovations to ensure Huntington Beach has the best available traffic management systems.
- J. Investigate current jurisdictional control of roadways and determine where adjustments may be made in the future.

Providing Adequate Downtown and Beach Parking

Parking can be a challenge in Downtown throughout the year, but especially during the high tourist season and special events. Street parking and Downtown parking structures are the current primary parking options. While drivers circulate looking for available parking spaces, congestion increases. This congestion may diminish the visitor experience.





Goal CIRC-2. Parking is easy for both residents and visitors to locate, and provided in sufficient quantity to handle peak parking times such as tourist season and special events.

Policies

- A. Provide enhanced wayfinding signs to direct users toward existing parking areas.
- B. Evaluate options for increased parking in Downtown and beach areas and determine the best method to accommodate future parking demand. Off-site parking locations in tandem with parking shuttles should be investigated as part of this strategy.
- C. Establish a parking management program and require that new development projects supply parking that supports anticipated demands.
- D. Allow for shared parking and other creative parking arrangements that optimize available parking areas, and support and collaborate with property owners to manage the available parking supply. Identify rideshare service opportunities that could reduce parking demand, where feasible.

Enhancing Regional Transit

Enhancing regional transit connections would improve access and mobility for residents and visitors and could reduce vehicle miles traveled, traffic congestion, and parking limitations in the community.

Goal CIRC-3a. Convenient and efficient connections between regional transit and areas of employment, shopping, recreation, and housing will increase ridership and active mobility, with a focus on first/last mile solutions.

Goal CIRC-3b. The City is positioned to expand transit, through a long-range strategy that allows the City to carry out transportation goals as funding and infrastructure are feasible.

Policies

- A. Pursue an urban transit system that serves Huntington Beach, and evaluate local and regional transit service to identify areas of opportunity for existing regional transit linkages.
- B. Ensure that local transit is reliable and safe, and provides high-quality service to and from regional transit and destination areas.
- C. Use the best available transit technology to streamline and link destinations and improve rider convenience and safety.
- D. Require new projects to contribute to the transit and/or active transportation network in proportion to their expected traffic generation.





- E. Include or promote multimodal transit centers and stops that allow for seamless connections between regional and local transit systems, pedestrian and bicycle networks, and commercial and employment centers.
- F. Explore the possibility of locating a transportation center in or near Downtown.

Increasing Local Transit Options

Existing local bus service has been characterized as limited and slow. A negative perception of the transit system dissuades ridership, and current ridership levels do not warrant expanded routes or frequencies. Because driving remains the preferred travel mode for most residents and visitors, creating a successful local transit system will be challenging. Still, Huntington Beach can take steps to improve local transit conditions over the long term by incorporating transit amenities within local roadway improvements, preserving existing rail rights-of-way for future rail or trail use, and dedicating additional rail rights-of-way to form connections to the regional transit system.

Goal CIRC-4. A balanced and integrated multimodal transportation system that increases mass transit opportunities for Huntington Beach residents.

Policies

- A. Continue to reserve abandoned rail rights-of-way for future transportation uses such as transit and bicycle facilities.
- B. Increase bus lines and services along commute routes and connecting to regional transit such as ARTIC, in partnership with OCTA and LA Metro.
- C. Use roadway improvement projects as an opportunity to enhance transit amenities and options.
- Maintain a system of transit and paratransit services that assist seniors and persons with disabilities.
- E. Provide alternative transportation options for residents and visitors to travel to Downtown.
- F. Increase ridership by providing attractive, comfortable, and convenient options for local transit.
- G. Ensure that construction and operation of heliports and helistops and construction or alteration of structures more than 200 feet above ground level fully comply with provisions of federal and state law, and with referral requirements of the Airport Land Use Commission.





Ensuring Mobility Options for All Users

Traditional circulation planning tends to focus on travel by cars, many times at the expense of other modes of transportation, such as walking, biking, train, and transit. The Circulation Plan is intended to accommodate and encourage these other modes of travel. In addition to carrying traffic between destinations, streets are integral to neighborhoods and provide places for people to gather and recreate. The City's objective is to balance the many competing roles that streets play in the lives of residents, businesses, and visitors.

Goal CIRC-5. The City's active transportation system integrates seamlessly with transit and vehicle circulation as part of a Complete Streets system.

Policies

- A. Maximize use of transportation demand management strategies to reduce total vehicle miles traveled and improve regional air quality.
- B. Develop Complete Streets that create functional places meeting the needs of pedestrians, bicyclists, transit riders, wheelchair users, and motorists. Provide safe, accessible, and connected multimodal routes, especially along popular and arterial routes.
- C. Coordinate with neighboring jurisdictions to ensure that bicycle routes connect to and are consistent with routes in adjacent jurisdictions.
- D. Maintain and repair bicycle lanes and sidewalks as necessary to expand use and safety.
- E. Improve citywide awareness of pedestrian and bicycle safety.
- F. Include low-impact stormwater system design techniques in Complete Streets designs (i.e., natural stormwater retention basins, curb cuts to planter areas for stormwater management).
- G. Support alternative fuel vehicles where feasible.

Enhancing Bicycle, Pedestrian, Equestrian, and Waterway Options

The existing development pattern in Huntington Beach limits the ability in some areas of the city to commute via bicycle or by walking, and could result in limiting access to goods, services, schools, and parks and recreation resources. It is generally considered challenging and unpleasant to cross or travel along major roadways as a bicyclist or pedestrian. Enhancements to the roadway system through Complete Streets serve the needs of all users equally and can increase the viability of bicycling and walking for both commute and local service trips. At the same time, some portions of Huntington Beach (e.g., Downtown/Main Street) are dominated by pedestrians during the peak tourist season and would benefit from improvements that balance the needs of other users.





Equestrians and boaters are also important circulation system users requiring access to facilities.

Goal CIRC-6. Connected, well-maintained, and well-designed sidewalks, bike lanes, equestrian paths, and waterways allow for both leisurely use and day-to-day required activities in a safe and efficient manner for all ages and abilities.

Policies

- A. Provide pedestrian and bicycle routes that integrate with local and regional transit, connect destinations, and provide end-of-trip facilities.
- B. Designate and improve pedestrian enhancement zones (PEZs) at appropriate locations.
- C. Require new commercial and residential projects to integrate with pedestrian and bicycle networks, and that necessary land area is provided for the infrastructure.
- D. Implement and operate appropriate traffic control devices to reduce conflicts between pedestrians, bicycles, and motor vehicles.
- E. Ensure that bicycle and pedestrian facilities comply with accessibility provisions of the Americans with Disabilities Act.
- F. Increase bicycle parking in or near Downtown, near the beach, and throughout the planning area. Identify opportunities for a pilot bikesharing program in Downtown.
- G. Encourage the use of easements and/or rights-of-way along flood control channels, public utilities, railroads, and streets, for use by bicyclists and/or pedestrians, where safe and appropriate.
- H. Maintain an equestrian trail network that supports horse properties and local stables, and link trails to regional facilities that can be combined with hiking trails.
- I. Maintain navigable waterways in Huntington Harbour and Sunset Channel for both recreational and commuter use.

Protecting Scenic Corridors

Scenic corridors enhance the visibility and attractiveness of the community, and in some cases, provide visual access to the beach and ocean. Protecting the aesthetic appeal of these areas is an ongoing City priority.





Goal CIRC-7. Designated scenic corridors protect and enhance visual quality and scenic views.

Policies

- A. Establish and implement landscape and urban streetscape design themes for landscape corridors, minor urban scenic corridors, and major urban scenic corridors that create a distinct character for each, enhancing each corridor's surrounding land uses.
- B. Require that any bridges, culverts, drainage ditches, retaining walls, and other ancillary scenic and landscape corridor elements be compatible and architecturally consistent with surrounding development and established design guidelines, to the greatest extent practicable.
- C. Require that slopes and earthen berms along scenic corridors be landscaped consistent with design objectives and standards.
- D. Provide landscaped medians and sidewalk treatments in accordance with City standards within major and primary arterial streets designated as landscape corridors, and continue to require the construction of landscaped medians and sidewalk treatments in new developments.
- E. Require that development projects adjacent to a designated scenic corridor include open spaces, plazas, gardens, and/or landscaping that enhance the corridor and create a buffer between the building site and the roadway.
- F. Continue to locate new and relocated utilities underground within scenic corridors to the greatest extent possible. All other utility features shall be placed and screened to minimize visibility.

Providing for Alternative Fuel Vehicles and Infrastructure

Increasing the use of alternative fuels (e.g., natural gas, hydrogen, fuel cells) in traditional vehicles and increasing the use of electric vehicles represent important strategies to maintain mobility while reducing air pollution and greenhouse gas emissions.

Goal CIRC-8. Planning and infrastructure support electric and alternative fuel vehicles through power or fueling stations and other means.

Policies

- A. Encourage inclusion of power stations and alternative fuels at traditional gas stations.
- B. Plan for conversion of all government fleet vehicles to alternative fuel or electricity.





Ensuring Access for Emergency Vehicles

Ensuring the ability of the City's emergency services to respond to emergency situations is crucial to the community's public safety. Congestion may impede the ability of the City's emergency services to respond in a timely manner. It is important to implement new devices and programs to improve the ability of emergency personnel and vehicles to respond to calls for assistance and direct residents during emergencies.

Goal CIRC-9. The circulation system is prepared for emergency vehicle response by reducing congestion or other roadway- and traffic-related impediments which can slow response times.

Policies

- A. Provide a circulation system that helps to meet emergency response time goals and incorporates technology infrastructure to clear intersections during emergency response events.
- B. Complete transportation improvements that assist in meeting the response goals for emergency services.
- C. Provide a system of primary, major, and secondary arterials that can be used for evacuating persons during emergencies or for ingress when emergency response units are needed.





IV. **Environmental Resources and Conservation**



Introduction and Purpose

Huntington Beach benefits tremendously from surrounding natural resources, which include City parks, wetlands, mineral resources, biological diversity, clean air and water, and the community's world-famous beach and shoreline. These resources contribute substantially to the local economy, provide rest and recreational opportunities, and help support public health. In order to continue to benefit from these resources, Huntington Beach must protect and enhance them when possible while still allowing for economic growth.

Scope and Content

The Environmental Resources and Conservation Element establishes goals and policies to protect and conserve Huntington Beach's environmental resources, including open space and beaches, and addresses air quality and greenhouse gas (GHG) emissions, water quality, biological diversity, and mineral resources.



California Government Code Sections 65302(d), 65302(e), and 65560 direct local governments to include a conservation element and an open space element in their general plans. The conservation element must provide for the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources to the extent that they are present in the planning area. The open space element protects open space intended for the preservation of natural resources, managed resource production, outdoor recreation, and public health and safety. This Environmental Resources and Conservation Element meets state requirements for both a conservation element and an open space element. It addresses all required content for each element, in addition to locally important issues.

The Environmental Resources and Conservation Element consists of this *Introduction and Purpose* identifying the intent of the element and how it relates to other documents; an *Open Space Plan* identifying local open spaces, including the beach and other coastal areas, and the issues facing open spaces in the community; a *Conservation Plan* discussing the quality of natural resources in Huntington Beach and how they are used; and *Issues, Goals, and Policies*, for both open space and conservation, providing tools to protect and improve the environmental resources present in Huntington Beach. The proposed tools to put policies that address environmental resources and conservation issues into practice are included in the Implementation Programs chapter of this General Plan.

Relationship to Other Elements

The Environmental Resources and Conservation Element most closely relates to the Land Use, Circulation, Housing, Natural and Environmental Hazards, and Historic and Cultural Resources Elements.

The Land Use Element identifies desired future uses for all lands in the planning area. Such uses relevant to the Environmental Resources and Conservation Element include parks, recreational facilities, and public and privately owned open spaces to meet the needs of existing and future generations. Circulation Element goals and policies identify, and ensure access to, open spaces and recreational areas requiring access. The Circulation Element also assigns the location of streets and trail systems for pedestrians, bicyclists, and equestrians in open spaces.

The Natural and Environmental Hazards Element provides goals and policies addressing public health and safety, including open space lands such as parks, trails, lakes, and the beach. The Historic and Cultural Resources Element is a companion element to the Environmental Resources and Conservation Element, and provides policies and programs related to conservation of historic and cultural resources within the planning area.



Open Space Plan

Open Space land use designations comprise approximately 3,274 acres (17 percent) of the planning area, exclusive of open space located within specific plan areas. Open space in Huntington Beach ranges from small mini parks to the Bolsa Chica Wetlands. Residents and visitors use these sites for active and passive recreation, including organized sports, running, walking, picnics, and as children's play areas. They often serve as



buffers between different land uses, and can provide habitat for a number of species. Open spaces provide numerous benefits to the community and contribute substantially to a high quality of life.

Open Space Diagram

Open space in the planning area consists of habitat conservation areas, parks, shoreline, and recreation areas. **Figure ERC-1** designates each existing open space use in the planning area. **Table ERC-1** identifies the acreage of each open space use type and identifies how each is categorized under state open space law.







Table ERC-1 Open Space Land Uses

Use Type	California Government Code Category	Acreage	Percentage of Open Space
Conservation (OS-C)	Preservation of Natural Resources	1,662	51%
Parks (OS-P)	Outdoor Recreation/Public Health and Safety	701	21%
Recreation (OS-R)	Outdoor Recreation/Public Health and Safety/Preservation of Natural Resources	238	7%
Water Recreation (OS-WR)	Outdoor Recreation/Public Health and Safety/Preservation of Natural Resources	239	7%
Shore (OS-S)	Outdoor Recreation/Public Health and Safety	434	13%
Total		3,274	100%*

Note: Open space categories correspond to those identified in California Government Code Section 65560(b).

Conservation (OS-C) areas constitute the largest open space use category at 1,662 acres. Much of this area is located in the Bolsa Chica Wetlands, which is considered part of the planning area, but is not currently incorporated as part of the city. The other major concentration of conservation land is located in the Huntington Beach wetlands near the southeast edge of the city. The Conservation designation provides for environmental resource conservation and management (e.g., wetland protection) and supporting ancillary uses (e.g., maintenance equipment storage). Habitat conservation lands are exposed to environmental degradation due to upstream water quality issues, ecological connectivity problems, and increasing tidal variability. This element includes goals, policies, and programs to protect these resources such as restoring and enhancing habitat resources, enhancing habitat connectivity, and naturalizing flood channels.

^{*} Totals may not add up due to rounding



Parks (OS-P) make up the second largest land area among open space uses, accounting for 701 acres. The Parks designation provides for public parks and recreational facilities and supporting ancillary uses (e.g., maintenance equipment storage) and consists of uses ranging from mini parks to larger regional parks. Central Park accounts for about half of the parkland. The Parks and Recreation discussion below



addresses challenges, opportunities, and the City's desired future for parks.

Recreation (OS-R) areas are the third largest Open Space land use designation, covering 238 acres. The Recreation designation provides for publicly or privately operated recreation facilities, such as golf courses. This designation also provides for supporting ancillary uses (e.g., food stands, recreational equipment rentals, maintenance equipment storage). Recreation uses in the planning area face numerous challenges including competing user needs, surrounding land use compatibility issues, and environmental quality challenges. Goals, policies, and programs in this element seek to mitigate these challenges by providing for diverse recreation facilities and evaluating potential incompatibilities.

Water Recreation (OS-W) accounts for 239 acres of the planning area. The Water Recreation designation provides for water bodies used for recreational purposes, such as boating, fishing, swimming, and water sports. Currently the OS-W designation is used in the Huntington Harbour waterways.

Shore (OS-S) accounts for 434 acres of the planning area. The Shore designation provides for coastal beaches operated by the City and the State, and publicly or privately operated ancillary uses (e.g., food stands, recreational equipment rentals, maintenance equipment storage). Lands located in the Shore designation face many challenges including conflicting user needs, and erosion and physical impacts associated with coastal storms and increasing tidal variability. The City seeks to protect and enhance these economic and ecologically important land resources through goals, policies, and programs that maintain the recreational and cultural identity of the beach while improving and enhancing the overall habitat value of coastal areas.



Parks and Recreation

The City of Huntington Beach maintains and operates public park grounds and landscaped areas. In total, 79 parks consisting of 1,073 acres are located in Huntington Beach, ranging in size from mini parks (smaller than 2.5 acres) up to Central Park, a 343-acre regional park (**Figure ERC-2**), and including City-operated beaches and a public golf course. Along with park facilities, recreation programming is an important part of creating and maintaining a healthy community with a high quality of life. Huntington Beach residents enjoy many recreation opportunities, provided by a City government committed to ensuring a well-rounded, healthy community. Recreation programming includes volunteering opportunities, human services programs, classes, sports, cultural arts, school programs, nature programs, and special events for residents from every walk of life. The City is committed to ensuring that residents of all ages, backgrounds, and interests have abundant available recreation opportunities.

Parks Inventory and Acreage Standards

Huntington Beach contains a number of different types of parks. **Figure ERC-3** includes a list and the location of the city's 79 parks as well as the City Gym and Pool.

Mini parks are generally smaller than 2.5 acres and typically do not have enough room for organized recreation facilities, but support passive recreational activities such as walking (e.g., Booster Park, French Park, Tarbox Park).

Neighborhood parks are between 2.5 and 10 acres in size and often provide recreational opportunities to families with young children. They typically have children's play areas and structures, and many are located near a school (e.g., Burke Park, Conrad Park, Drew Park, Wieder Park).



Community parks are 10 to 40 acres

in size and are often centrally located to serve multiple neighborhoods. These facilities provide a wide range of recreational opportunities for children and adults, and offer a more diverse range of activities than neighborhood parks (e.g., Chris Carr Park, Gisler Park, Langenbeck Park, Marina Park).

Regional parks, which exceed 40 acres in size, provide specialized recreational facilities such as equestrian areas and campsites. In addition to serving Huntington Beach community members, regional parks often attract visitors from a wider region (e.g., Huntington Central Park).



Most cities establish parkland acreage standards, which ensure that the community has enough parks to serve the population. In Huntington Beach, based on the existing population of 193,189 in 2014, there are approximately 5.4 acres of parkland for every 1,000 Huntington Beach residents including parks, City-operated beaches, a public golf course, and the City Gym and Pool.

Site Selection Standards for New Parks

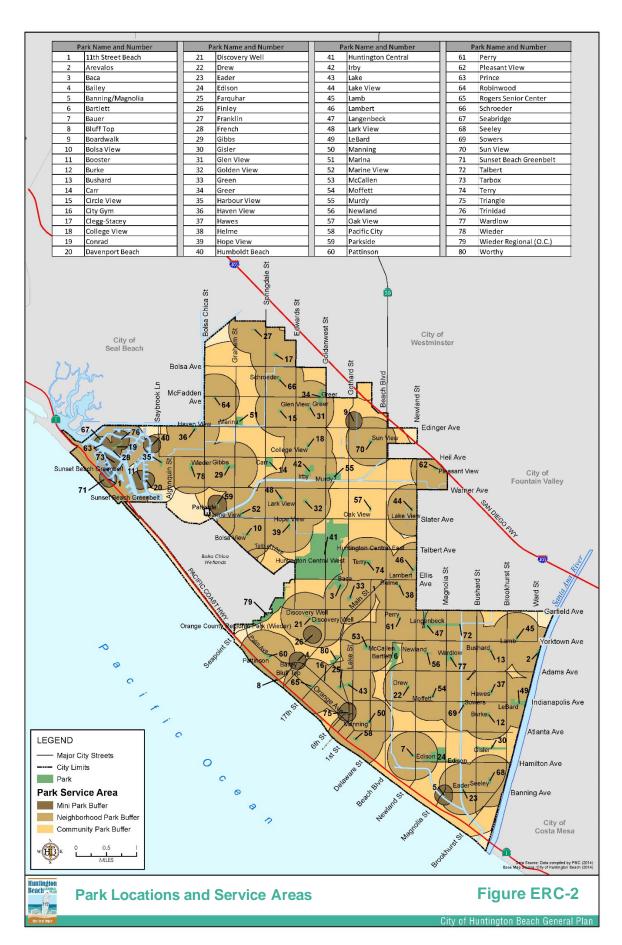
The Environmental Resources and Conservation Element maintains an established citywide parkland level of service goal of 5 or more acres of parkland per 1,000 residents. This General Plan has an anticipated year 2040 buildout population of 211,051 residents. Under this population scenario, assuming no net loss of parkland acreage, the City would have a parkland level of service of 5.1 acres per 1,000 residents, which would degrade the existing level of service, but still meets the established standard without the addition of new parkland.

Because Huntington Beach is largely a built-out city, locating new parks will be difficult. The City will prioritize developing new park facilities in underserved areas in a way that equitably serves neighborhood and community needs while balancing budget constraints. The City will continue to locate future neighborhood parks adjacent to elementary schools with independent street frontage when possible. Additionally, the City will seek to retain existing open spaces in the event that schools close or are decommissioned.

A park that is inaccessible, lacks usable open space, or is otherwise constrained has limited utility to the residents it is designed to serve. Therefore, the City will also prioritize accessibility as a factor in the selection of future park sites, with an emphasis on pedestrian and bicycle accessibility.

Recreation Facilities and Services

Huntington Beach is home to a wide range of public recreation facilities and services including indoor activities, baseball/softball diamonds, tennis courts, swimming pools, handball courts, volleyball courts, horseshoe pits, basketball courts, disk golf courses, a skate park, lakes in parks, and other sports fields. These facilities are faced with the challenge of constantly changing public demands, and many facilities are not readily adaptable to changing community preferences and needs. The City addresses this challenge through policies and programs that seek to diversify recreation facilities and services.









Coastal Recreation and Beach Management

The entire Huntington Beach coastline supports a contiguous sandy beach totaling 9.5 miles and 434 acres. This includes both state and City beach areas, the pier, the multi-use trail running the length of the beach, recreational amenities, parking, and a range of private retail, food, and personal service activities associated with the beach. The



beaches, from north to south, are Sunset Beach, Bolsa Chica State Beach, Huntington Beach City Beach, and Huntington State Beach.

The beach is used for a variety of recreational activities, from swimming, surfing, fishing, and sunbathing to jogging and volleyball, to major sporting and cultural events. Beach access and recreational activities are important to the city's economic vitality and cultural identity. The beaches and adjacent marine habitats also provide habitat for numerous species, including federally protected birds that use the beach for nesting. It is important that beach management practices maintain a careful balance between recreational uses and providing functional habitat for native species.

Beaches in the planning area face numerous challenges ranging from conflicting user needs, ecological sensitivity, erosion, and increasing tidal variability. The policies in this Environmental Resources and Conservation Element work to ensure the beach maintains and improves its recreational, economic, and ecological value.

State Beaches

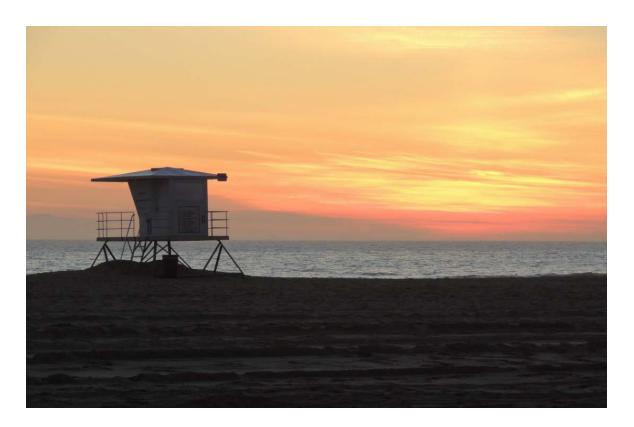
Bolsa Chica State Beach extends approximately 3 miles from Seapoint Street to Warner Avenue. This beach is a popular destination for surfing, fishing, and other recreation. The beach is also a popular grunion run during the summer months. Shorebirds forage in the intertidal zone. Special-status western snowy plover may forage along the beach as well.

Huntington State Beach extends approximately 2 miles from the mouth of the Santa Ana River north to Beach Boulevard. The beach features a multi-use trail and fire rings for bonfires. Huntington State Beach includes the Least Tern Natural Preserve, which also provides sanctuary for other birds, including the western snowy plover.



City Beaches

The City operates two public beaches, consisting of 3.5 miles of shoreline, extending from Beach Boulevard to Seapoint Street. 2.5 miles of this area is owned by the State of California and operated by the City. Sunset Beach consists of a 1.1-mile stretch of shoreline extending from Warner Avenue to Anderson Street. Both beaches are popular destinations for recreation such as volleyball, fishing, surfing, and swimming. The beaches receive millions of visitors each year and require routine maintenance. Shorebirds forage in the intertidal zone. Special-status western snowy plover may forage along the beaches as well.



Conservation Plan

Natural resources in Huntington Beach are critical for the safety and well-being of the community. Clean air and a reliable water supply help ensure the health of Huntington Beach residents, while the community's mineral resources and biological diversity support the local economy by attracting jobs and visitors. Although often overlooked, modern life in Huntington Beach would be very difficult without abundant local and regional energy resources. This section discusses where these key resources are located in the planning area and outlines a conservation strategy for each resource. Please refer to the Historic and Cultural Resources Element for discussion of cultural resources, and the Public



Services and Infrastructure Element for discussion concerning solid waste-related resources.

Air Resources

Huntington Beach is located within the South Coast Air Basin. Of the various pollutants monitored for human health, the key pollutants of concern in the air basin are ozone, small particulate matter (PM₁₀ and PM_{2.5}), and nitrogen dioxide (NO₂), which are collectively part of a group called criteria air pollutants. Other criteria air pollutants include carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb). These air pollutants can come from a number of sources, including major facilities (manufacturing centers, power plants, and large commercial and institutional buildings), construction and landscaping activities, and moving vehicles.

While ozone plays an important role high in the atmosphere to protect the earth from excess ultraviolet light, it creates health risks near the surface. Exposure to excessive levels of ozone can lead to breathing problems, headaches, and nausea. It is also the primary component in smog, in which ozone mixes with other pollutants, and can create additional health hazards. Ozone is created when fossil fuels (e.g., petroleum and natural gas) are burned, and when various chemicals evaporate creating certain chemical compounds. These compounds react in the presence of sunlight to create ozone. Low wind speeds or stagnant air, warm temperatures, and clear skies help prevent ozone from dissipating, keeping ozone levels elevated. The South Coast Air Basin is not currently in compliance with state and federal air quality standards for ozone, but localized ozone levels in and around Huntington Beach do comply with these standards.

Particulate matter consists of dust, soot, and smoke. Larger particles are known as PM_{10} , while smaller particles are known as $PM_{2.5}$. They are formed from the burning of fossil fuels, wood burning, and construction activities. Particulate matter can cause breathing problems when inhaled, and can make existing respiratory and cardiovascular conditions more severe. $PM_{2.5}$ is particularly dangerous, as it can settle deep in the lungs and create long-term health impacts. The air basin exceeds federal and state standards for both PM_{10} and $PM_{2.5}$. Huntington Beach and surrounding areas currently exceed state (but not federal) standards for PM_{10} , and are below federal annual standards for $PM_{2.5}$ (although the community exceeds federal daily standards).

Nitrogen dioxide is a brown-colored gas formed by the burning of fossil fuels. When inhaled, it can cause breathing difficulties, chest pains, and a rapid heartbeat. In severe cases, exposure to NO_2 can lead to bronchitis and reduced lung capacity. The air basin is currently below state and federal standards for NO_2 .

In addition to criteria air pollutants, a second category, toxic air contaminants (TACs), consists of air pollutants that can create a risk of illness or death, even in relatively low concentrations. Particulate matter from diesel engines (diesel PM) is the TAC that poses



the greatest health risk in California. Diesel PM is generated by diesel engines, including diesel passenger and freight vehicles, rail engines, and diesel generators and other equipment. The state has also identified close to 200 other TACs.

Environmental Justice Considerations

Environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The South Coast Air Quality Management District (SCAQMD) has an environmental justice program to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air in their communities.

Both criteria air pollutants and TACs can have greater health impacts on children, the elderly, and people with existing cardiovascular respiratory or conditions. Places with a larger number of these vulnerable people are called sensitive land uses (or sensitive receptors). For purposes of the General Plan, sensitive land uses include schools, hospitals, nursing homes and senior care centers, and residential areas. Recreational land uses, such as parks, can also be sensitive land uses, as exercise places a higher demand on people's respiratory systems, which can be stressed by air pollution.

Air quality in the South Coast Air Basin has significantly improved since the 1990s, and it is likely that this trend will continue. However, this trend may be challenged by increases in population, and air quality may become worse in future years as a result of climate





change. Poor air quality tends to be more prevalent in areas with higher numbers of lower-income individuals and minorities, which can create a lack of public health equity across the community. Some sensitive land uses, such as schools and residential areas located near heavy industrial uses, may expose individuals to higher levels of TACs. The State of California has prepared a database called CalEnviroScreen, which helps identify communities with environmental justice considerations at the census block level by looking at pollution levels, health data, and demographics. Huntington Beach has one census block (tract 994.02), bordered by Warner Avenue, Beach Boulevard, Talbert Avenue, and Goldenwest Street, which ranks in the top 25 percent for environmental justice considerations of all census blocks in the state.

To maintain high standards of health and aesthetics in the community and to improve public health equity for all community members, the City will work to improve air quality conditions for all criteria air pollutants and minimize exposure of sensitive uses to TACs. This includes identifying opportunities to locate new air pollutant sources away from sensitive uses and disproportionately affected communities, and to work with existing air pollutant sources to help reduce air pollutant emissions.

Greenhouse Gas Emissions

GHGs trap heat radiated out by the earth and reflect it back to the surface rather than allowing it to escape into space, similar to the glass roof and walls of a greenhouse. Some level of GHGs in the atmosphere is necessary to keep the planet at a comfortable temperature. However, since the Industrial Revolution, the concentration of these gases has increased significantly in the atmosphere. These higher concentrations of GHGs are increasing temperatures worldwide and resulting in global climate change. The direct risks posed by climate change include more extreme heat events, rising sea levels, changes in precipitation levels, and more intense storms. California law (the Global Warming Solutions Act) declares that climate change is a serious risk, specifically saying that it threatens to cause "the exacerbation of air quality problems, a reduction in the quality and supply of water to the state...a rise in sea levels resulting in the displacement of thousands of coastal businesses and residents, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human-related health problems." In order to address this risk, the law requires the state to significantly reduce its emissions of the GHGs, which contribute to climate change.

The state has identified seven key GHGs, the most common of which is carbon dioxide (CO_2) . Other GHGs include methane (CH_4) and nitrous oxide $(N_2O, not to be confused with <math>NO_2$, a criteria air pollutant). Unlike criteria air pollutants and TACs, which do not stay in the atmosphere long, some GHGs can persist in the atmosphere for hundreds or thousands of years. Although CO_2 is the most common GHG, other rarer gases can trap thousands of times as much heat as an identical amount of CO_2 . GHGs are measured in a unit called carbon dioxide equivalent (CO_2e) , which accounts for their varying potency.



Sources of GHG emissions in Huntington Beach include cars and trucks, electricity and natural gas use in buildings, decomposition of solid waste, landscaping and construction equipment, oil drilling, and water and wastewater distribution, treatment, and use. GHG emissions in 2005 in Huntington Beach totaled 1,452,070 metric tons of carbon dioxide equivalent (MTCO₂e). On-road vehicle use represented the largest source of GHGs, followed by energy use in residential and nonresidential buildings. Collectively, these sources comprised 91 percent of Huntington Beach's 2005 GHG emissions, with all other sources comprising the remaining 9 percent.

In 2012 Huntington Beach's GHG emissions fell to 1,432,540 MTCO₂e, a decline of approximately 1 percent. Emissions from on-road vehicle use were largely unchanged, while emissions from energy use in residential and nonresidential buildings increased slightly. These three sources comprised 95 percent of Huntington Beach's GHG emissions in 2012.

Table ERC-2 summarizes Huntington Beach's GHG emissions in 2005 and 2012 by sector.

Table ERC-2
Huntington Beach 2005 and 2012 GHG Emissions

GHG Source	2005 Emissions (MTCO ₂ e)	2012 Emissions (MTCO₂e)	Percentage Change, 2005–2012
Residential built environment	313,310	327,340	4%
Nonresidential built environment	286,260	301,840	5%
Transportation	723,440	726,190	<1%
Off-road equipment	35,240	11,580	-67%
Solid waste	67,210	38,620	-43%
Water and wastewater	10,000	10,410	4%
Oil drilling	16,610	16,560	<-1%
Total	1,452,070	1,432,540	-1%

Huntington Beach's GHG emissions will continue to change going forward due to new policies, technological improvements, and population growth and new development. For example, as more houses are built in Huntington Beach, emissions from the residential built environment may increase. However, as energy becomes cleaner and as new construction becomes more energy efficient, these improvements may offset some of the increased GHG emissions from a growing population. An estimate of Huntington Beach's 2020 and 2040 GHG emissions, without any additional actions to reduce emissions, is shown below in **Table ERC-3**.



Table ERC-3
Huntington Beach 2020 and 2040 GHG Emissions

GHG Source	2020 Emissions (MTCO₂e)	2040 Emissions (MTCO₂e)	Percentage Change, 2012–2040
Residential built environment	332,010	355,380	9%
Nonresidential built environment	321,680	355,170	18%
Transportation	755,700	840,750	16%
Off-road equipment	22,040	37,510	224%
Solid waste	40,120	43,540	13%
Water and wastewater	10,800	11,730	13%
Oil drilling	16,560	16,560	0%
Total	1,498,910	1,660,640	16%

Transportation activities are expected to remain the source of approximately half of Huntington Beach's GHG emissions in future years, with the residential and nonresidential built environment sectors continuing to account for much of the community's remaining GHG emissions. As the population and economic activity of Huntington Beach increases, GHG emissions are expected to increase unless actions are taken to reduce emissions. Without any GHG reduction activities, Huntington Beach's GHG emissions are expected to rise to 16 percent above 2012 levels by 2040. The most significant increase, in the offroad equipment sector, is expected to result from substantially increased construction activity relative to the 2012 baseline.

Greenhouse Gas Reduction Program

This element contains goals and policies that direct the City's approach to reducing GHGs below the levels shown in **Table ERC-3**, including emissions reduction targets and general emissions reduction strategies. An accompanying Greenhouse Gas Reduction Program provides specific GHG emissions reduction measures applicable to various sectors of the community and the City's municipal operations. The Greenhouse Gas Reduction Program as a whole is considered an implementation measure for the policies described in this element. The Greenhouse Gas Reduction Program will meet the six specific requirements for these programs that are spelled out in the State California Environmental Quality Act (CEQA) Guidelines, allowing the Greenhouse Gas Reduction Program to be used to streamline environmental review of new development. These six requirements are as follows:





- Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.
- Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable.
- Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.
- Be adopted in a public process following environmental review.

Biological Resources

Huntington Beach is located within the Southern California Coast ecological section of California. The city is characterized by broad, sandy beaches backed by low bluffs and mesas, and lowland areas that historically supported extensive wetlands. Despite being part of a dense urban landscape, the beaches, lowlands, bluffs, and mesas of Huntington Beach today support a variety of natural communities that provide habitat for numerous plant and wildlife species.

Table ERC-4 summarizes the types and acreages of natural and urbanized communities present in the planning area. Figure ERC-3 identifies the location of these communities. Natural communities occurring in undeveloped areas include coastal salt and freshwater marshes, dune communities, riparian scrub, grassland, and coastal sage scrub. In addition to terrestrial communities, aquatic features such as the Santa Ana River, flood control channels, and marine waters and associated beaches provide important habitat for local and migratory species. Although several natural communities occur in the planning area, urbanized communities make up the majority of the area. Urbanized communities include nonnative/ornamental plants, ruderal/disturbed areas, eucalyptus groves, and a limited amount of agriculture consisting mostly of nurseries located under power lines and adjacent to the Santa Ana River. Although subject to high levels of human disturbance, these areas still provide habitat for numerous species.



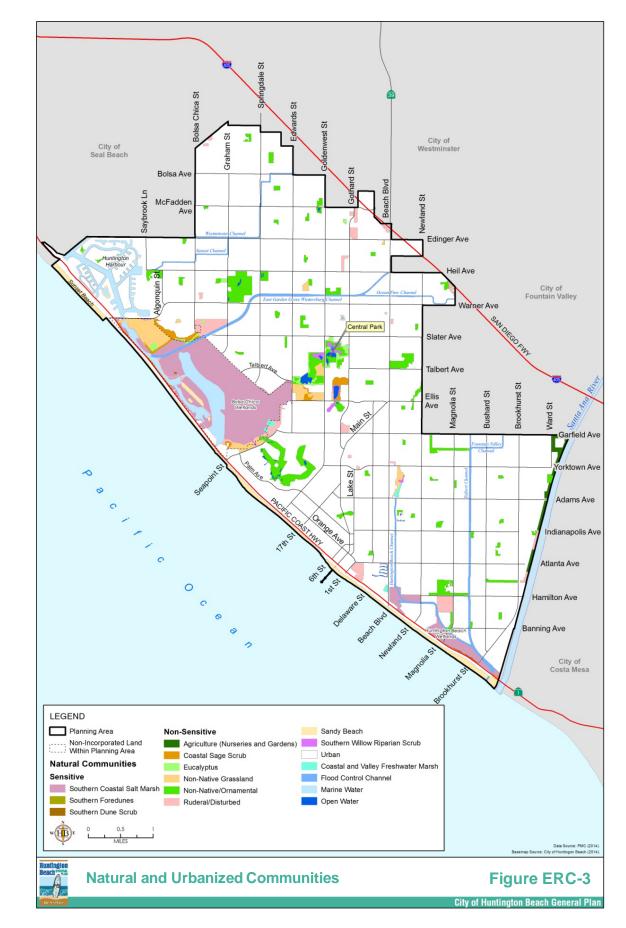




Table ERC-4 Natural and Urbanized Communities Occurring Within the Huntington Beach Planning Area

Community Types	Area (acres)
Southern Coastal Salt Marsh*	1,068
Southern Foredunes*	6
Southern Dune Scrub*	4
Marine Water	546
Sandy Beach	291
Southern Willow Riparian Scrub	32
Nonnative Grassland	225
Coastal Sage Scrub	77
Coastal and Valley Freshwater Marsh	18
Urban	15,477
Nonnative/Ornamental	614
Eucalyptus	61
Ruderal/Disturbed	231
Agricultural (Nurseries and Gardens)	58
Flood Control Channels	263
Santa Ana River	N/A
Total Planning Area	18,971

^{*} Identified as a sensitive natural community by the California Department of Fish and Wildlife.

Several of these natural communities are considered sensitive by resource agencies such as the California Department of Fish and Wildlife, US Fish and Wildlife Service, and National Marine Fisheries Service. In addition, several Environmentally Sensitive Habitat Areas (ESHAs) designated by the California Coastal Commission are located in the planning area. Sensitive communities include southern coastal salt marsh, dune habitats, freshwater marsh, and riparian areas. In addition, eelgrass beds occur in the coastal wetlands, bays and flood control channels and are considered a sensitive marine resource.

Several state- and federally listed species are known to occur in Huntington Beach, including western snowy plover, California least tern, Belding's savannah sparrow, coastal California gnatcatcher, light-footed clapper rail, and tricolored blackbird. Other special-status species known to utilize habitats in and adjacent to the city include southern tarplant, monarch butterfly, white-tailed kite, silvery legless lizard, burrowing owl, northern harrier, peregrine falcon, loggerhead shrike, California brown pelican, black skimmer, and special-status bats.



Habitat Areas

Though most of Huntington Beach is urbanized, several open space areas remain that are capable of supporting habitat for special-status species. These areas are managed by a variety of agencies and organizations that have different levels of jurisdiction and authority over the resources present. Several established habitat areas also support other uses requiring routine maintenance (e.g., beaches, parks). **Table ERC-5** and **Figure ERC-4** identify these areas and the organization(s) responsible for managing them.

Table ERC-5
Habitat Areas

Area	Acres	Management Organization
Within City Limits		
Bolsa Chica State Beach	130	California Department of Parks and Recreation
Brightwater Conservation Area (includes 5-acre eucalyptus ESHA)	34	Brightwater Homeowners Association
Brightwater Environmental Protection Area	2	Brightwater Homeowners Association**
Flood Control Channels	368	Orange County Flood
Huntington Beach Wetlands	172*	Huntington Beach Wetlands Conservancy
Huntington City Beach (City Beach and Sunset Beach)	122	City of Huntington Beach
Huntington Harbour and associated shorelines	253	City of Huntington Beach and Orange County
Huntington State Beach (includes Least Tern Natural Preserve)	144	California Department of Parks and Recreation
Waterfront Wetland	3	City of Huntington Beach
City parks and open spaces (includes open space areas, and parts of Central, Bartlett, and Norma Gibbs Parks)	256	City of Huntington Beach
Seagate-created Wetland Area	5	Seagate Homeowners Association
Shea Parkside Property ESHA	3	Future Homeowners Association
Shea Parkside Property Wetlands/Buffer	16	Future Homeowners Association
Outside City Limits		
Bolsa Chica Ecological Reserve (includes eucalyptus grove and Warner Pond ESHAs)	1,334	California Department of Fish and Wildlife
Bolsa Chica Basin State Marine Conservation Area	450	California Fish and Game Commission
Bolsa Bay State Marine Conservation Area	45	California Fish and Game Commission
Goodell Property	1	Property owner
Unincorporated Open Space Areas	57	Various agencies and organizations

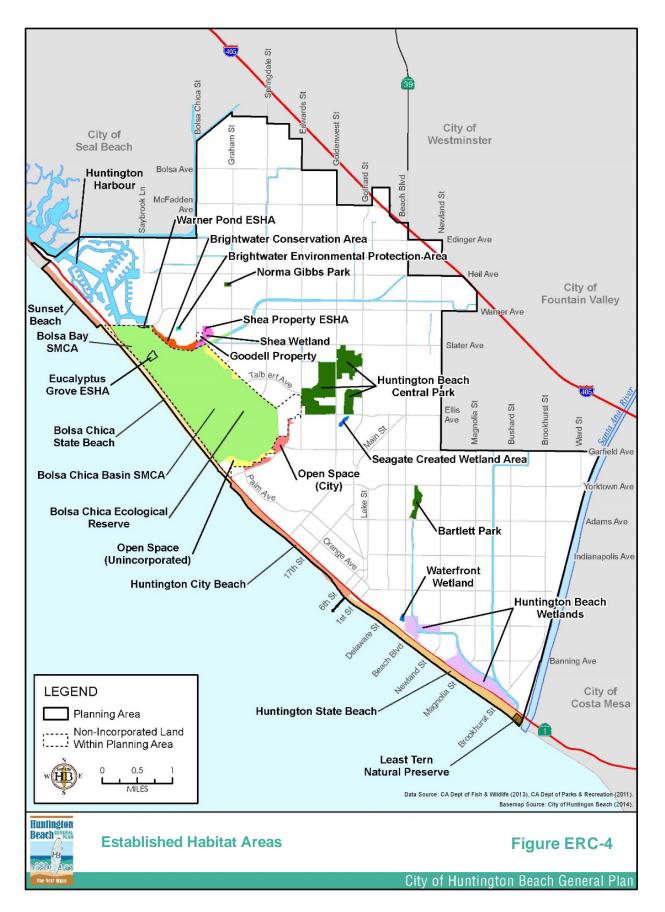
^{*} Huntington Beach Wetlands acreage includes Newland Marsh, which was owned by Caltrans at the time this plan was prepared.

Note: Acreages cannot be totaled, as several established habitat areas overlap.



^{**} Presently the developer manages the Brightwater Conservation Area and Environmental Protection Area; the Brightwater HOA will ultimately take over this responsibility.







The City faces numerous key challenges to maintaining and protecting habitat including a complicated regulatory environment, numerous overlapping stakeholder groups, ecological degradation through water and air pollution, invasive pest plants, and changing climate conditions. This element establishes policies to collaboratively maintain, manage, and expand, when possible, important habitat lands, including the coast, wetlands, bay, and inland areas.

Energy Resources

Energy comes in numerous forms, including chemical fuels such as coal and oil, heat energy, and nuclear energy. This element focuses on electricity and natural gas (a form of chemical energy), which are two of the most common kinds of energy used in Huntington Beach. Electrical energy is used to run innumerable appliances, devices, and pieces of technology, including lights,



computers, and air conditioners. It can also be used as a transportation fuel for electric vehicles. Natural gas can be used to generate electricity and to heat water and indoor spaces. Electricity in the planning area is supplied by Southern California Edison, while natural gas is supplied by the Southern California Gas Company. **Table ERC-6** shows current and forecasted electricity and natural gas use in Huntington Beach.

Table ERC-6
Current and Forecasted Energy Use

	2005	2012	2020*	2040*
Residential electricity use (kWh)	485,753,410	487,243,550	490,786,730	494,662,470
Nonresidential electricity use (kWh)	726,213,200	703,114,370	743,073,060	791,265,320
Total electricity use (kWh)	1,211,966,610	1,190,357,920	1,233,859,780	1,285,927,790
Residential natural gas use (therms)	31,156,530	30,363,590	30,735,350	31,796,430
Nonresidential natural gas use (therms)	9,328,020	10,210,450	10,857,240	11,811,700
Total natural gas use (therms)	40,484,550	40,574,040	41,592,590	43,608,120

Source: Southern California Edison; Southern California Gas Company

В

^{*2020} and 2040 values are projections without locally driven efforts to reduce energy use.



Huntington Beach has the option of establishing an alternative to Southern California Edison by participating in a Community Choice Aggregation (CCA, sometimes called Community Choice Energy or CCE) program. CCA is a mechanism that allows local governments to control the electricity supply and rates for their communities. Under a CCA, local governments procure electricity from their desired sources, but rely on existing infrastructure owned by private utilities to distribute the energy and conduct billing. Residents and businesses in CCA communities can choose to receive electricity from the CCA, or they can continue to receive service from a private utility. CCAs are government agencies, formed by a single community or by multiple communities working jointly.

Energy use in homes and nonresidential buildings is determined by the design and construction of the building, the types of devices and appliances in the building, the presence of any on-site renewable energy systems such as rooftop solar panels, and the behavior of the people who use it. In general, new buildings are being designed and constructed to use less energy, and many newer appliances use less energy than older models. The California Building Standards Code (BSC, also called Title 24) specifies minimum energy efficiency standards for new buildings. These standards are updated to require increased energy efficiency standards for new construction approximately every three years, moving toward a goal of zero net energy (ZNE) for all new buildings. A ZNE building is one that generates as much energy as it uses, as measured over the course of one year. ZNE buildings combine extensive energy efficiency features with on-site renewable energy systems. The state plans for new houses to be ZNE by 2020, and for new nonresidential buildings to be ZNE by 2030.

In future years, state and federal policies are likely to continue to require increased and greater energy efficiency for buildings and appliances. At the same time, the cost of energy for Huntington Beach's homes and businesses is expected to continue to increase. Huntington Beach will work to keep energy bills low, foster increased energy independence, and promote a healthy environment by supporting energy efficiency, energy conservation, and renewable energy throughout the community. These strategies will also help move the community in the direction supported by California's ZNE policies.

Mineral Extraction Potential

Oil and Natural Gas

Huntington Beach is home to numerous land-based resources including oil and natural gas. Huntington Beach has been the site of oil extraction since the 1920s, and large-scale oil and gas production continues today. Most oil and gas production to date in California and in Huntington Beach has been from vertical wells into traditional oil and natural gas reservoirs. Oil wells in Huntington Beach are scattered throughout much of the planning area. Most are concentrated along the coastal areas and mesas. According to the US Geological Survey (USGS), oil reserves in the Huntington Beach oil field are estimated to be between 117 and 866 million barrels of recoverable oil.



Natural gas extraction exists onshore and offshore in and around Huntington Beach. According to the California Department of Conservation, roughly 745,000 million cubic feet of natural gas was withdrawn from Huntington Beach in 2012. When it is extracted, natural gas is composed of approximately 80 percent methane and 20 percent other substances. Large amounts of the other components of natural gas are removed during processing.

All oil and gas wells drilled and constructed in California must adhere to strict requirements, including general laws and regulations regarding the protection of underground and surface water, and specific regulations regarding the integrity of well casings, the cement used to secure well casings inside bore holes, and the cement and equipment used to seal off wells from underground zones bearing fresh water and other hydrocarbon resources. Given the city's history of oil extraction activities and the presence of natural gas fields under the city, there is a high potential for methane to be present in subsurface soils. High concentrations of methane can pose a health or safety risk. Methane hazards have resulted in City regulations and procedures to ensure proper mitigation and abatement.

In future years, oil and natural gas extraction in the planning area is expected to continue. While these activities will provide economic benefits to the community, they may also pose health, safety, and environmental hazards. Huntington Beach will work to continue oil and natural gas extraction and receive the benefits these actions provide, while continuing to ensure that the impacts to the community from oil and natural gas extraction are minimized.

Mining Resources

Soils in Huntington Beach are known to contain peat. Peat production occurred in the area from 1941 to 1954. No further mining of peat or other soil conditioners has been known to occur since that time. However, peat is present in various parts of the planning area. Soils containing peat have poor engineering properties, as they are prone to liquefaction, collapse, and settlement and are not suitable for building purposes. Soils containing peat also have a high potential for methane gas. Methane hazards have resulted in City regulations and procedures to ensure proper mitigation.

The State Mining and Geology Board (SMGB) identifies Mineral Resource Zone (MRZ) classifications for land located in the planning area. Based on this mapping, a majority of the planning area is designated as MRZ-1 or MRZ-3, which indicates information is unavailable or historic mining has not occurred, and therefore the significance of mineral resources is unknown. Additionally, the urbanized character of Huntington Beach generally precludes mining activities.



A small area of land is designated as MRZ-2, which indicates that adequate information is available to indicate that significant construction aggregate deposits are present. This area is generally located along the uplifted mesa north of Talbert Avenue, west of Beach Boulevard, and east of Huntington Harbour. Active mining no longer occurs at these sites, and new uses have been introduced, which deter future mining activities. **Figure ERC-5** shows MRZ classifications within the Huntington Beach planning area.

Water Resources

Water Supply

The City provides water to over 50,000 service connections. The Metropolitan Water District of Southern California (Metropolitan) and the Municipal Water District of Orange County (MWDOC) provide water to Huntington Beach. The City's water comes from a combination of groundwater (approximately three-fourths) and imported water resources (approximately one-fourth) purchased from Metropolitan through the MWDOC. Metropolitan's principal sources of water are the Colorado River and the Lake Oroville watershed in Northern California, and this water is treated at the Robert B. Diemer Filtration Plant located north of Yorba Linda. The Orange County Water District (OCWD) manages the groundwater in the Orange County Basin and allocates a proportion of that groundwater for Huntington Beach.

According to the City's 2015 Urban Water Management Plan, total water demand in Huntington Beach is forecasted to increase by roughly 8 percent from 2020 to 2040, with the increase being met using a combination of groundwater sources and imported water based on the OCWD-established Basin Pumping Percentage. **Table ERC-7** identifies expected planning area retail demands (i.e., the amount of water used by residential and nonresidential water customers, and unaccounted water loss) through 2040.

Table ERC-7
City of Huntington Beach Planned Water Retail Demand (2020–2040)

Water Sources	2020	2025	2030	2035	2040
Total (AFY)	28,090	30,153	30,360	30,352	30,396

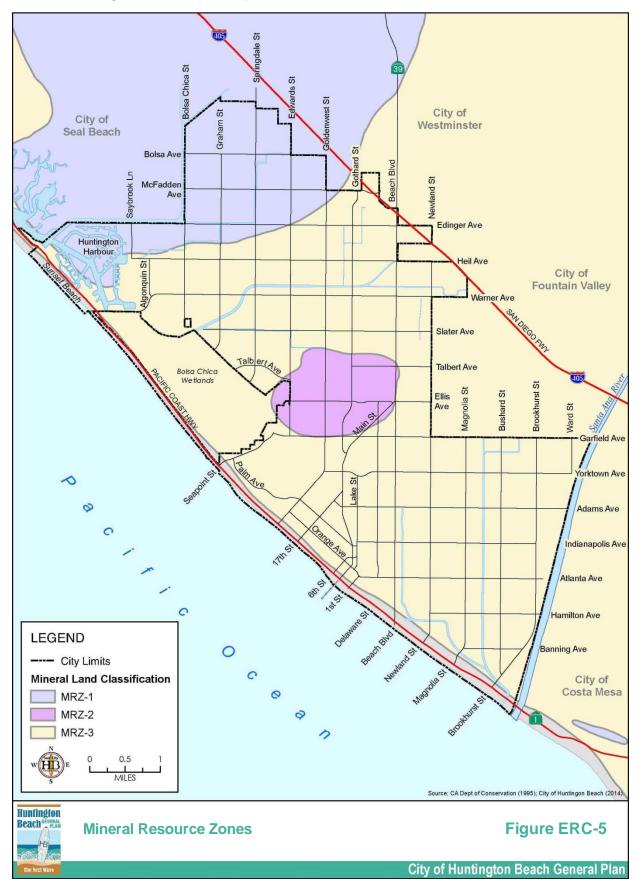
Note: AFY = acre-feet per year

As a result of recent drought conditions since 2012, water conservation efforts significantly reduced the city's water consumption from 2011 to 2015 by over 17 percent, from around 30,000 acre-feet to around 25,000 acre-feet.

Orange County Water District's Groundwater Replenishment System Facility takes highly treated wastewater that would otherwise be discharged into the Pacific Ocean, further purifies it, and pumps it into seawater barriers and groundwater recharge basins.



Additional water resources could be provided by coastal desalination plants and recycled water for irrigation and other nonpotable uses.





Water Quality

Huntington Beach is associated with the Santa Ana Watershed. The Santa Ana River borders the planning area to the southeast; Anaheim-Barber City channels border the planning area to the north. Several other flood control channels traverse the planning area, including the Bolsa Chica, Sunset, Westminster, Ocean View, East Garden Grove-Wintersburg (EGGWC), Slater, Murdy, Huntington Beach, Talbert, and East Valley-Fountain Valley channels. All water in the planning area ultimately drains into the Pacific Ocean via storm drains, flood control channels, the Santa Ana River, the Bolsa Chica Basin/Wetlands, and Huntington Harbour.

Urban debris, litter, and pollution can enter coastal and marine environments either from direct dumping or through the storm drain system. This can adversely affect water quality in the coast, Huntington Harbour, bays, wetland waters, and flood control channels. Debris and litter can be deadly for wildlife which may ingest or become tangled in it. Bacteria or other pollutants that enter surface water bodies may be harmful to human health. In addition to detrimental effects on human and wildlife health, debris, litter, and pollution also greatly reduce the aesthetic appeal of open space areas. Several local organizations and open space parks host public cleanup days multiple times a year.

Under Section 303(d) of the Clean Water Act, states, territories and authorized tribes are required to develop a list of water quality limited segments. The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The Clean Water Act requires that these jurisdictions establish priority rankings for waters on their lists and develop action plans, called Total Maximum Daily Loads (TMDL), to improve water quality. **Table ERC-8** shows the quality limited segments by pollutants in the planning area.



Table ERC-8 2010 California 303(d) and TMDL Priority

	Wa	ater Bo	dy				
EGGWC	Bolsa Chica Channel	Anaheim Bay	Huntington Harbour	Huntington State Beach	Pollutants/ Stressors	Source	Priority ²
					Enterococci	Unknown	Low
	Х				Indicator Bacteria	Unknown	Low
			Х		Chlordane	Unknown	Low
			Х		Copper	Unknown	Low
			X¹		Lead	Unknown	Low
		Х	X ¹		Nickel	Unknown	Low
			X¹		Pathogens	Urban Runoff/Storm Sewers	Low
		Х			Dieldrin	Unknown	Low
		Х	X¹	Х	PCBs	Unknown	Low
X	Х				Ammonia	Unknown	Low
	Х				рН	Unknown	Low
		Х	Х		Sediment Toxicity	Unknown	Low

X = Listed on the 2006 Clean Water Act Section 303(d) List of Water Quality Limited

The City faces numerous water supply and water quality problems. Water supply concerns include continued groundwater overdraft conditions, future imported water costs and allocations, continuing drought conditions, State Water Resources Control Board water use reductions, and the financial and ecological costs associated with developing alternative supplies. Water quality issues include pollution associated with local and upstream urban runoff and sensitive ecological conditions. In this Environmental Resources and Conservation Element, the City addresses these issues with goals, policies, and programs that require water conservation, pursue recycled and alternative water resources, and reduce local water pollution in new and existing development.

^{1 =} Listing made by US Environmental Protection Agency.
2 = Priority determined by "estimated TMDL completion data" listed in the State Water Resources Control Board's 2010 Integrated Report on Water Quality. All pollutants and water bodies on this list have an estimated completion date of 2019 or later, indicating "low" priority.



Issues, Goals, and Policies

The open space issues addressed in this element include:

- Meeting parks and facilities needs
- Providing recreation programs and services to meet community needs
- Managing the beach, parks, and recreation to accommodate diverse recreational needs

The conservation issues addressed in this element include:

- Reducing air pollution
- Meeting greenhouse gas reduction goals
- Identifying and protecting habitat areas and connections
- Protecting habitat resources in wetlands
- Protecting coastal habitat resources
- Protecting trees
- Protecting habitats in parks
- Conserving energy in homes and businesses
- Expanding renewable energy sources
- Preserving mineral extraction potential
- Protecting and conserving water resources
- Maintaining water quality

Meeting Parks and Facilities Needs

The City currently meets established standards for providing park and recreation facilities. However, anticipated growth will increase demand for increasingly diverse and everchanging recreation programs, park facilities, and community youth and senior center services. Recreation programs, available park acreage, and potential sites for new or expanded parks should be periodically assessed. Demand is strong for parks that feature active recreational facilities and support team sports as well as those that provide access to natural environments. Since much of Huntington Beach has been developed, park space must be used efficiently and strategically added as part of new developments or reuse of existing facilities, such as closed schools. The adequacy of Quimby Act in-lieu fees and parkland open space development impact fees to meet community needs and alternative funding methods for park development, renovation, and repurposing should be periodically evaluated.



Goal ERC-1. Adequately sized and located parks meet the changing recreational and leisure needs of existing and future residents.

Policies

- A. Maintain or exceed the current park per capita ratio of 5.0 acres per 1,000 persons, including the beach in the calculations.
- B. Seek opportunities to develop and acquire additional parks and open space in underserved areas where needed, including pocket (mini) parks, dog parks, athletic fields, amphitheaters, gardens, and shared facilities.
- C. Distribute future developed park and recreational sites to equitably serve neighborhood and community needs while balancing budget constraints.
- D. Require all park improvement projects to consider ways to improve access to park facilities by foot and bicycle.
- E. Continue to locate future neighborhood parks adjacent to elementary schools with independent street frontage when possible.
- F. Continue to balance and maintain a mix of recreational focused and passive and natural environment areas that preserve and protect special-status species within open spaces.
- G. Develop a comprehensive trails network linking hiking, biking, and equestrian trails to parks, beaches, recreation facilities, and open spaces both within and outside the planning area.
- H. Administer the City's open space program in a manner that supports lands, resources, and services provided in regional parks, open spaces, and conservation plans.

Providing Recreation Programs and Services to Meet Community Needs

The aging of the general population and resulting increases in the senior population will increase demand for senior services. The city's senior and elderly population would greatly benefit from additional and accessible social services to serve their needs. Meanwhile, demand for programs for families, children, and other components of the community remain high.

Goal ERC-2. Diverse recreational and sports facilities provide active and educational opportunities that meet the changing needs of residents and visitors of all ages.

Policies

A. Enhance and expand accessible and affordable recreation programs and sports facilities, providing new programs and adaptive facilities that respond to changing community demographics and needs.



- B. Ensure that buildings, equipment, fields, and other recreation amenities are in full use and capable of accommodating changing program demands.
- C. Partner with neighboring cities and the County to provide access to a wider range of recreational services.
- D. Encourage and coordinate with private commercial recreational businesses to provide recreational services and facilities that may not otherwise be offered by the City.
- E. Partner with school districts to offer after-hours recreational activities at both open and closed school sites.
- F. Work with the school districts to encourage after school hours access to playgrounds and playing fields on school properties.

Managing the Beach, Parks, and Recreation to Accommodate Diverse Recreational Needs

The beaches and adjacent marine environments provide habitat for numerous species, including federally listed birds that use the beach for nesting. While important biologically, coastal dunes, beach, the surf zone, and the off-shore areas are also recognized as important cultural amenities. Beach management practices should improve the sustainability of extensive recreational beach use while protecting sensitive natural resources.

Goal ERC-3. Maintain the recreational and cultural identity of the beach while improving and enhancing the overall habitat value of coastal areas.

Policies

- A. Maintain the beach and ocean as natural recreational resources, not only for the city but also for the Southern California region.
- B. Maintain the current high level of recreational access to the coast and its recreational facilities and continue to provide resources that improve accessibility to the beach for all users.
- C. Consider devoting certain portions of the beach to different preferred recreational uses while maintaining access for all users and meeting the recreation needs of both visitors and residents.
- D. In areas known to be utilized by special-status species, encourage low-intensity uses that provide public access and passive recreational resources such as picnic/observation areas, nature trails, peripheral bike paths, and informational signs/displays.



Reducing Air Pollution

Air quality in the South Coast Air Basin has generally been improving for a long period of time due to cleaner vehicles, technological advances, and increased regulatory oversight. Continued improvements in air quality will help improve public health and increase the overall quality of life in Huntington Beach. The community should work to support cleaner air while addressing challenges posed by population growth and climate change, which could stall or reverse these hard-fought gains in air quality.

Goal ERC-4. Air quality in Huntington Beach continues to improve through local actions and interagency cooperation.

Policies

- A. Continue to cooperate with the South Coast Air Quality Management District and other regional, state, and national agencies to enforce air quality standards and improve air quality.
- B. Continue to require construction projects to carry out best available air quality mitigation practices, including use of alternative fuel vehicles and equipment as feasible.
- C. Enforce maximum idling time regulations for off-road equipment.
- D. Require grading, landscaping, and construction activities to minimize dust while using as little water as possible.
- E. Continue to explore and implement strategies to minimize vehicle idling, including traffic signal synchronization and roundabouts.
- F. Minimize exposure of sensitive land uses to toxic air contaminants by locating new pollutant sources away from sensitive uses and disproportionately affected communities and by encouraging existing pollutant sources to reduce emissions when changes to existing operations or permits are proposed.

Meeting Greenhouse Gas Reduction Goals

As there are numerous sources of GHG emissions, a variety of strategies are available to help local communities reduce these emissions. Establishing and meeting GHG emissions reduction goals will help to decrease the threat posed by climate change, while providing multiple benefits to Huntington Beach community members. Efforts to reduce GHG emissions can help save money for residents and businesses, enhance the local economy, improve public health, support improved air quality, and conserve water and other natural resources.

The goals and policies below establish emissions reductions goals and create a high-level framework for GHG reduction efforts. Policies that support GHG emission reductions are located elsewhere in this element, as well as in the Circulation and Public Services and Infrastructure Elements. Specific strategies, anticipated reductions, and associated action items are addressed in the Greenhouse Gas Reduction Program.



Goal ERC-5. Greenhouse gas emissions from activities occurring in Huntington Beach are reduced to levels consistent with state goals.

Policies

- A. By 2020, reduce community-wide greenhouse gas emissions to 15 percent below 2005 levels. By 2040, reduce greenhouse gas emissions by 53.33 percent below the 2020 target, placing the community on a path to meet the state's 2050 greenhouse gas emissions reduction goals.
- B. Encourage oil drilling operators to implement cost-effective best practices to reduce greenhouse gas emissions associated with oil extraction.
- C. Explore strategies to reduce greenhouse gas emissions from off-road construction and landscaping equipment.
- D. Support efforts by the South Coast Air Quality Management District and the California Air Resources Board to decrease greenhouse gas emissions from large industrial facilities and other stationary sources.
- E. Pursue funding sources to develop and implement programs and projects identified in the Greenhouse Gas Reduction Program.

Identifying and Protecting Habitat Areas and Connections

Protecting areas in Huntington Beach that have potential habitat area, such as wetlands, coastal areas, parks, and water bodies, can be challenging as they are managed by a variety of agencies and organizations which have different levels of jurisdiction and authority over the resources present. Several areas that provide potential habitat value also support other uses requiring routine maintenance (e.g., beaches, parks).

Connectivity between open space areas is an essential element of species conservation. Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Corridors are present in a variety of habitats and link areas of suitable wildlife habitat that are otherwise separated by changes in vegetation, rugged terrain, or human disturbance. Fragmentation of open space areas by urbanization creates isolated islands of wildlife habitat. Maintaining the continuity of established wildlife corridors is important to (a) sustain species with specific foraging requirements, (b) preserve a species' distribution potential, and (c) retain diversity among many wildlife populations. The majority of Huntington Beach, including its surroundings, has been built out; however, the undisturbed portions around the perimeter and off-site could facilitate regional wildlife movement. Specifically, Huntington Harbour connects the Bolsa Chica Wetlands to the off-site Seal Beach National Wildlife Refuge.



Goal ERC-6. Various agencies that oversee habitat areas and wildlife corridors, including but not limited to parks, beaches, coastal dunes, marine waters, and wetlands, coordinate decision-making and management to ensure ongoing protection of resources.

Policies

- A. Create, improve, and/or acquire areas that enhance habitat resources and identify, prioritize, and restore as habitat key areas of land that link fragmented wildlife habitat, as funding and land are available.
- B. Support land acquisition, conservation easements, or other activities undertaken by landowners to create and preserve habitat linkages that support the integrity of ecosystems.
- C. Preserve and enhance the connection between the Huntington Beach Wetlands and the wetland/riparian area in Bartlett Park via the Huntington Beach Channel.
- D. Use future specific and area plans as a means to complete wildlife corridors.
- E. Establish aquatic and terrestrial connections between the Bolsa Chica Wetlands and Central Park by restoring areas in the oil fields to a more natural environment.

Protecting Habitat Resources in Wetlands

Huntington Harbour, the Bolsa Chica Wetlands, the Huntington Beach Wetlands, the Talbert and Huntington Channels, and Anaheim Bay are used as spawning and nursery areas for a number of marine fishes, including important commercial fishes, and are utilized by threatened and endangered birds. Past development and the ongoing modifications to the Santa Ana River mouth and Huntington Beach Wetlands outlet have directly impacted areas through filling, dredging, and channelization. Urban runoff has also affected these areas. Stormwater runoff from streets with oil, grease, and



trash is known to adversely impact marine biological resources and wetlands. Possible sea level rise also threatens to affect the stability of the wetlands.

Goal ERC-7. Wetland areas that serve as important biological resources for threatened and endangered birds, fish, and other species are protected and restored.

HB



Policies

- A. Protect important wetland areas in the planning area through land use regulation or through nonprofit land trust or public ownership and management.
- B. Maintain and enhance existing natural vegetation buffer areas surrounding riparian habitats and protect these areas from new development.
- C. Support County efforts to designate and manage environmentally sensitive lands—such as the Bolsa Chica Wetlands, the Huntington Beach Wetlands, and lands near the mouth of the Santa Ana River and north of Newland Street—for inclusion into a coastal wetlands preserve.
- D. Minimize filling, dredging, and channelization of river and wetland areas other than necessary dredging to keep the tidal channel open.
- E. Reduce pollutant runoff from new development and urban runoff to the maximum extent practicable.
- F. Continue to evaluate and mitigate the effects of domestic and industrial wastes on living marine resources.
- G. Seek opportunities to naturalize flood channels while also enhancing flood protection capacity.

Protecting Coastal Habitat Resources

Coastal dunes, the beach, the surf zone, and offshore areas serve both important biological functions and as important recreational amenities. Coastal dunes have been reduced by urban development erosion and degradation and the intensification of beach uses.

Goal ERC-8. Coastal dunes and habitat resources remain resilient to potential impacts of encroaching development, urban runoff, and possible sea level rise.

Policies

- A. Sustain the biological productivity of coastal waters and maintain healthy populations of species of marine organisms adequate to support long-term commercial, recreational, scientific, and educational purposes.
- B. Promote the improvement of tidal circulation in the Bolsa Chica Wetlands, Huntington Harbour, Huntington Beach Wetlands, and Anaheim Bay and minimize impacts to sand migration, aesthetics, and usability of the beach area.
- C. Prohibit development that jeopardizes or diminishes the integrity of sensitive or protected coastal plant and animal communities, accounting for expected changes from sea level rise.



Protecting Trees

The city has many established trees, some of which form groves, such as those in Central and Norma Gibbs Parks. These trees provide nesting and roosting areas for both birds and butterflies, as well as perches for raptor species. The City has not developed a system to identify and protect trees and groves of biological value. Tree maintenance and utilities within the public right-of-way are often in conflict, leading to some trees not being replaced.

Goal ERC-9. Huntington Beach's trees and groves serves important biological functions, including but not limited to nesting and roosting areas for both birds and butterflies, and perches for raptor species.

Policies

- A. Identify, track, and protect trees and groves on public property that provide valuable habitat.
- B. Maximize and maintain tree coverage on public lands and in open spaces.

Protecting Habitats in Parks

While City parks are designed primarily to support recreational use, portions of parks that have remained undeveloped or have been "naturalized" (e.g., the Shipley Nature Center in Central Park) provide habitat resources. The three freshwater lakes in Central Park are used by a number of waterfowl and other birds. Other lakes located throughout the planning area can provide habitat for a variety of resident and migratory bird species. These areas should be protected from impacts that may occur from recreation or nearby uses, such as trash or urban runoff.

Goal ERC-10. An enhanced network of parks, open spaces, and recreation facilities contributes to habitat preservation.

Policies

- A. Continue to preserve portions of parks as natural habitat for a variety of species.
- B. Continue to naturalize disturbed areas within parks and prevent the invasion of exotic plants. Design nature parks and natural areas so that habitat value for wildlife is emphasized on par with recreational value for people.
- C. Evaluate incompatible recreation activities which may damage open spaces and sensitive habitat areas.
- D. Support the use of native vegetation and green infrastructure in parks to manage water use, reduce urban runoff impacts, and provide natural habitat.





Conserving Energy in Homes and Businesses

Despite high electricity prices, Huntington Beach community members and other residents and businesses in California enjoy some of the lowest electricity bills in the country due in part to widespread energy efficiency and conservation efforts. Continuing and enhancing energy efficiency and conservation strategies help residents and businesses save money, and conserve valuable resources needed to generate energy. Energy efficiency programs also help support the local economy and can make Huntington Beach more resilient to future disasters by decreasing stress on existing energy distribution networks.

Goal ERC-11. Energy use in existing buildings declines due to energy efficiency upgrades and energy-conscious behavior.

Policies

- A. Publicize rebates and other financial incentives available to community members to improve energy efficiency in their homes and businesses, and market these rebates and incentives to all community members through a variety of outreach strategies.
- B. Promote low-cost or free weatherization programs for disadvantaged residents, including low-income families and elderly individuals.
- C. Identify ways to increase energy efficiency retrofits in multifamily buildings, renter-occupied homes, low-income homes, and leased nonresidential space through retrofits and educational programs.
- D. Retrofit existing City facilities to be more energy efficient as opportunities arise.

Goal ERC-12. New buildings are increasingly energy efficient and ultimately equipped to support zero net energy performance.

Policies

- A. Create incentives for proposed development and reuse projects to exceed the minimum energy efficiency standards established in the California Building Standards Code when constructing new or significantly renovated residential and nonresidential buildings, including achieving zero net energy performance in advance of state-level targets.
- B. Promote the use of passive solar design techniques and technologies in new buildings to reduce energy use for heating and cooling.
- C. Construct all new City facilities to be more energy efficient than the minimum energy efficiency standards in the California Building Standards Code, and achieve zero net energy performance for new City facilities when possible.

Expanding Renewable Energy Sources

Current energy resources are generally viewed as limited and unsustainable. Consequently, the City should prepare for and encourage conservation and pursue



alternative energy sources. Community education regarding energy efficiency continues to be important, and the City could take additional steps to encourage both municipal and distributed solar photovoltaic development and new technologies and energy sources.

Goal ERC-13. Increase both distributed generation and utility renewable energy sources within municipal and community-wide practices.

Policies

- A. Encourage the use of solar energy systems in homes and commercial businesses as a form of renewable energy, including in support of zero net energy goals.
- B. Encourage renewable energy options that are affordable and benefit all community members.
- C. Create incentives that promote renewable energy systems as a component of new development or reuse projects.
- D. Maximize renewable energy capacity on municipal property and renewable energy use in City-sponsored projects and activities.
- E. Support opportunities to increase energy storage capacity in the community.
- F. Support Community Choice Aggregation (CCA) feasibility studies.
- G. Support public-private partnerships on energy efficiency, energy storage, and microgrid development to achieve cost savings, reduce energy use, and improve energy reliability.

Preserving Mineral Extraction Potential

Oil, gas, sand, gravel, and peat extraction has occurred in the past in Huntington Beach; large-scale oil and gas production continues to the present time. Mineral extraction provides economic benefits, but also exposes the community to hazards such as subsidence, methane exposure, and potential environmental contamination. The City intends to balance these considerations and safely preserve mineral extraction potential.

Goal ERC-14. Mineral resource extraction continues to provide economic benefits, while threats to health, safety, and environmental resources are minimized.

- A. Identify appropriate access areas, and permit extraction of significant oil and other mineral resources in designated resource areas.
- B. Ensure that mineral/oil resource production activities avoid or minimize potential environmental impacts and are compatible with adjacent uses.
- C. Ensure mineral/oil resource extraction areas are properly reclaimed and/or remediated after resource extraction has been terminated.





Protecting and Conserving Water Resources

Although Huntington Beach has relatively good access to available groundwater, additional steps should be taken to protect water resources and conserve water in home, business, and public settings to prepare the city to sustain the future population. Drought-tolerant landscaping, recycled water infrastructure, saltwater reclamation, and groundwater replenishment represent opportunities to conserve water, develop new water supplies, and sustain valuable groundwater resources for long-term use.

Goal ERC-15. Adequate water supply is available to the community through facilities, infrastructure, and appropriate allocation.

Policies

- A. Maintain a system of water supply and distribution facilities capable of meeting existing and future daily and peak demands, including fire flow requirements, in a timely and cost-efficient manner.
- B. Monitor demands on the water system, manage new development and reuse projects and existing land uses to mitigate impacts and/or facilitate improvements to the system, and maintain and expand water supply and distribution facilities.
- C. Evaluate participation in Orange County Water District's recycled water program, and explore opportunities for the City to produce its own recycled water for use within the community.
- D. Continue to explore innovative alternative water infrastructure improvements, including but not limited to groundwater injection, maximizing groundwater recharge/percolation, and desalination.

Goal ERC-16. Water conservation efforts are maximized in every aspect of use.

- A. Continue to require incorporation of feasible and innovative water conservation features in the design of new development and reuse projects.
- B. Encourage maximum water conservation in existing land uses, and provide incentives that encourage building owners and homeowner associations to complete water efficiency retrofits.
- C. Require the use of recycled water for landscaping irrigation, grading, and other non-contact uses in new development or substantial retrofit projects where recycled water is available or expected to be available.
- D. Partner with and provide information to community organizations, residents, and businesses regarding methods to reduce water use.



Maintaining Water Quality

Urban stormwater runoff occurs when rainfall is collected by storm drains instead of being absorbed by groundcover or soil (commonly seen in a nonurban environment). When it rains, trash, silt, automotive chemicals, fertilizers, animal wastes, and other contaminants are washed into the storm drain system. Since storm drains are designed only to carry stormwater, they are typically not equipped with filters or cleaning systems. Consequently, they can carry contaminants found in urban runoff directly into flood control channels, creeks, rivers, and the ocean. Many of the contaminants found in runoff affect water quality, and can, at elevated levels, be toxic to aquatic and marine life. Increased surface water runoff will likely result from new development and reuse projects and existing land uses in Huntington Beach, potentially degrading already polluted waters.

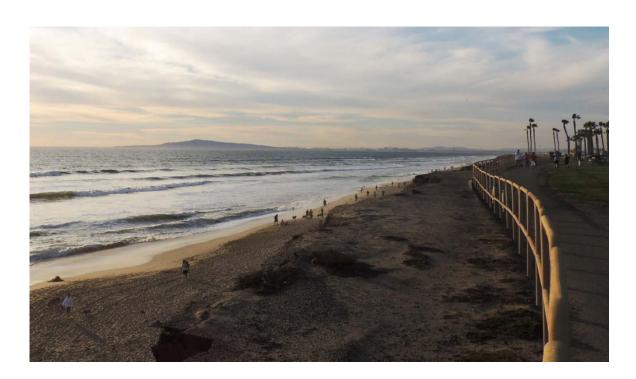
Goal ERC-17. Enhance and protect water quality of all natural water bodies including rivers, creeks, harbors, wetlands, and the ocean.

- A. Require redevelopment to comply with the City's National Pollutant Discharge Elimination System permit and other regional permits issued by the State Water Resources Control Board and the Santa Ana Regional Water Quality Control Board.
- B. Require that new development and significant redevelopment projects employ innovative and efficient drainage technologies that comply with federal and state water quality requirements and reduce runoff and water quality impacts to downstream environments.
- C. Continue to require new development and significant redevelopment projects to propose protective safeguards and implement best management practices that minimize non-point source pollution and runoff associated with construction activities and ongoing operations.
- D. Continue to require that new development and significant redevelopment projects incorporate low-impact development best management practices, which may include infiltration, harvest and reuse, evapotranspiration, and bio-treatment.
- E. Prioritize investment in green stormwater infrastructure that restores natural landscapes before employing other management solutions.
- F. Reduce pollutant runoff from new development to marine biological resources and wetlands by requiring the use of the most effective best management practices currently available.
- G. Partner with and provide information to community organizations, community members, and businesses regarding best practices to minimize runoff and improve groundwater recharge.
- H. Reduce impacts of new development and significant redevelopment project sites' hydrologic regime (hydromodification).
- Continue working with the County and the Regional Water Quality Control Board (RWQCB)
 on the Integrated Regional Water Quality Management Plan to explore and expand more
 regional treatment of stormwater runoff.





V. Natural and Environmental Hazards



Introduction and Purpose

Maintaining a safe environment for community members and visitors is one of the City's most important responsibilities. Huntington Beach's continued ability to thrive will depend in part on its ability to prepare for future emergency situations, particularly in the context of changing environmental conditions. The community must be resilient to a wide range of safety hazards and able to recover quickly when emergencies occur. Planning decisions should consider the risks posed by natural and environmental hazards, so that the community can grow and evolve in a way that reduces potential hazards as much as possible. This element offers a background and tools to address the risk from various safety threats.





Scope and Content

The Natural and Environmental Hazards Element satisfies the Safety Element requirements of state planning law, which is a mandated component of the General Plan. Section 65302(g) of the California Government Code sets forth the following list of issues that the element must cover, if these items pertain to conditions in the planning area:

- Seismically induced conditions including ground shaking, surface rupture, ground failure, tsunami, seiche, and dam failure
- Slope instability leading to mudslides and landslides
- Subsidence, liquefaction, and other geologic hazards
- Flooding
- Wildland and urban fires
- Evacuation routes

State law allows communities to address additional safety issues. The following additional issues are addressed in this element:

- Coastal hazards
- Hazardous materials and waste
- Aircraft hazards
- Disaster and emergency preparedness

The Natural and Environmental Hazards Element consists of this *Introduction and Purpose* identifying the intent of the element and how it relates to other documents; a *Hazards Plan* discussing the natural and environmental risks present in Huntington Beach and how they may change; and *Issues*, *Goals*, *and Policies* providing tools to prepare for emergency situations, improve community resilience, and allow for rapid recovery.

Relationship to Other Elements

The Natural and Environmental Hazards Element identifies areas prone to natural hazards, which must be considered in the designation of land uses in the Land Use Element. For example, proposed land uses must comply with the land use compatibility standards contained in this element for various types of hazards. Traffic-calming goals and policies in the Circulation Element may have implications for emergency response, and recommendations for evacuation and emergency access routes in the Natural and Environmental Hazards Element affect the Circulation Element. The Environmental Resources and Conservation Element is also linked to the Natural and Environmental Hazards Element, because open space zones and allowable uses are often related to hazard-prone locations. For example, areas prone to landslide hazards are often set aside as open space because their steep slopes limit other uses.





Relationship to Local Hazard Mitigation Plan

Under the provisions of the federal Disaster Mitigation Act of 2000 and California Government Code Sections 8685.9 and 65302.6, local governments can adopt a local hazard mitigation plan into their safety element. If a community has not done so, the state will only reimburse the community up to 75 percent of eligible costs associated with emergency response and recovery from a specific situation. Communities with a hazard mitigation plan incorporated into their safety element may receive more than 75 percent of eligible costs from the state.

The City of Huntington Beach adopted a Local Hazard Mitigation Plan in 2012, which was approved by the Federal Emergency Management Agency (FEMA) and is in compliance with the federal Disaster Mitigation Act of 2000. The 2012 Huntington Beach Local Hazard Mitigation Plan and all subsequent amendments and updates are hereby incorporated into this Natural and Environmental Hazards Element by reference as though they were fully set forth herein. A copy of the Local Hazard Mitigation Plan is on file in the City's Emergency Operations Center.

Hazards Plan

The following natural and environmental hazards pose a safety risk in the planning area.

Geologic and Seismic Hazards

Geologic and seismic hazards are risks caused by the movement of different parts of the earth's crust, or surface. The most familiar type of geologic or seismic hazard is an earthquake, which occurs when parts of the earth's crust move rapidly past each other and cause the ground to shake. This movement can in turn trigger many other types of secondary hazards, including the following:

- Surface rupture, which occurs when the surface of the ground cracks or breaks above the area where an earthquake occurs.
- Liquefaction, which occurs when soil becomes waterlogged and loses much of its strength, damaging or destroying structures built on or in it.
- Landslides, which happen when the shaking of an earthquake causes loose material to slide down a slope.
- Subsidence, which occurs when the ground surface drops.
- Tsunamis, which are large, fast-moving waves or walls of water that can flood lowlying coastal areas.

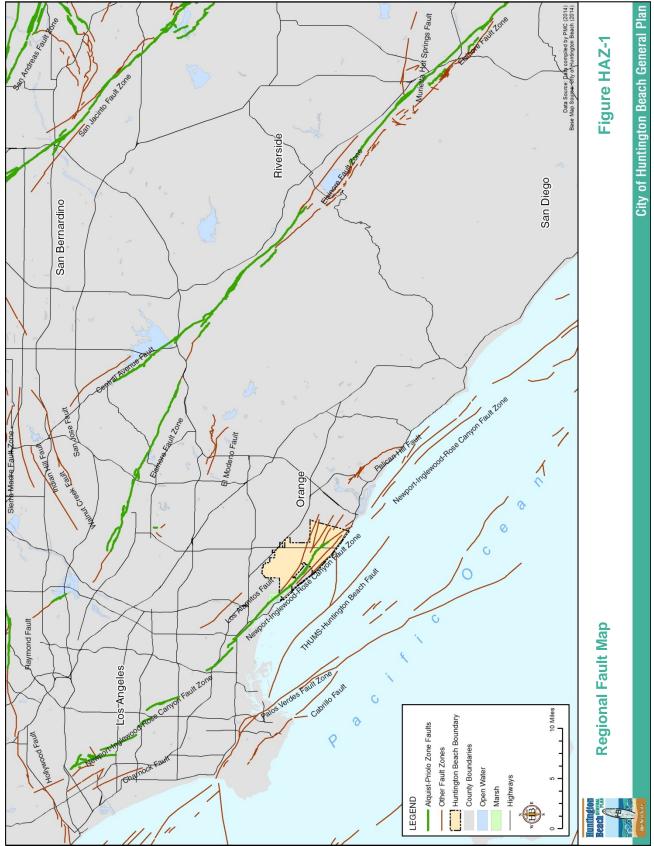




Figures HAZ-1 through HAZ-4 identify locations of known geologic and seismic hazards in the planning area.

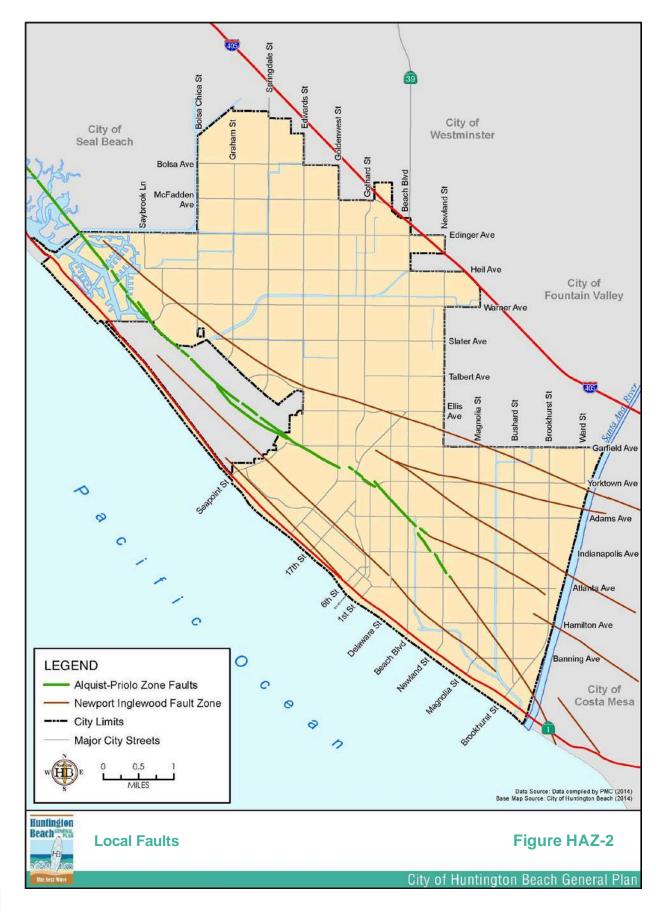
Like much of California, Huntington Beach is located in a seismically active area (Figure HAZ-1). The Newport-Inglewood Fault Zone runs through the community (Figure HAZ-2), and other faults, including the San Andreas Fault, the Elsinore Fault, and the San Jacinto Fault, are located within approximately 50 miles. These faults and many others are capable of causing major earthquakes which could impact the planning area. Parts of the planning area are at an elevated risk of liquefaction (Figure HAZ-3), particularly near the coast and in the Huntington Harbour neighborhood. Although largely flat, some areas of the community are at risk from earthquake-induced landslides (Figure HAZ-3). Historically, the area between Goldenwest Street and Seapoint Street is prone to subsidence (Figure HAZ-4), and tsunamis may threaten low-lying coastal areas of the community, including Huntington Harbour and parts of Downtown.





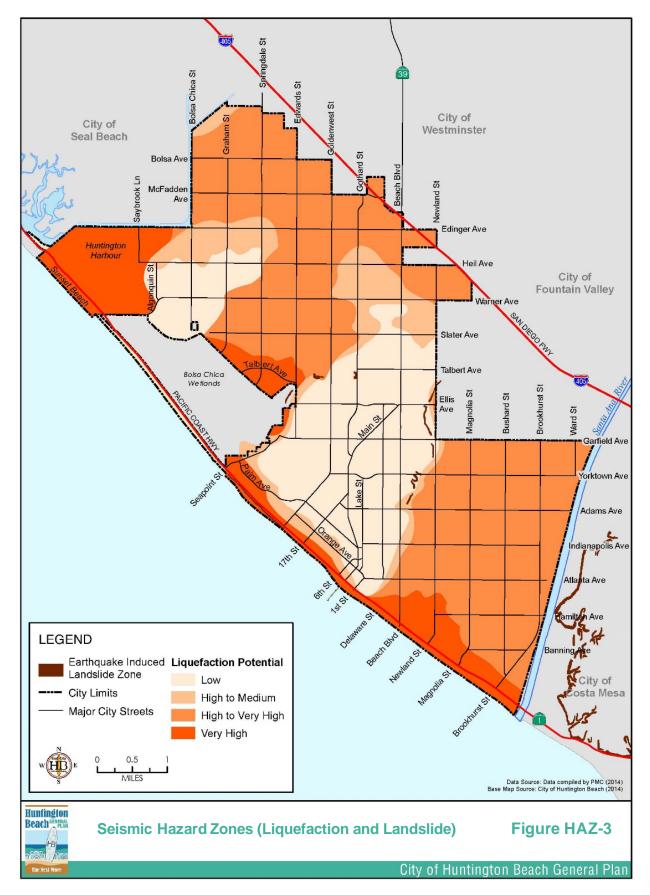




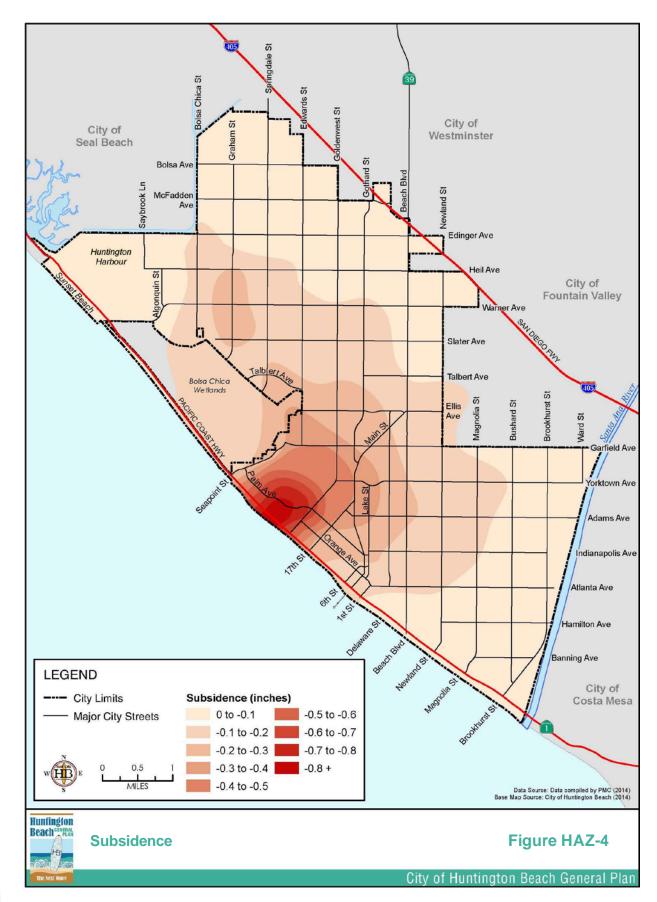
















Tsunamis are an important hazard of concern for Huntington Beach, with the ability to impact the entire length of coastline in the planning area. Tsunamis are often caused by earthquakes occurring below or near the ocean floor, although underwater volcanic eruptions and landslides can also generate these waves.

Tsunamis can travel vast distances, and are capable of causing damage far away from the site of event that generated them. Huntington Beach may be affected by a tsunami caused by a local event, or by an event thousands of miles away elsewhere in the Pacific Ocean. The California Office of Emergency Services (Cal OES) estimates that the Huntington Harbour neighborhood, the area northeast of the Bolsa Chica Wetlands, and the southeast corner of Huntington Beach are at an elevated risk of a tsunami, as shown in **Figure HAZ-5**.

Coastal Hazards

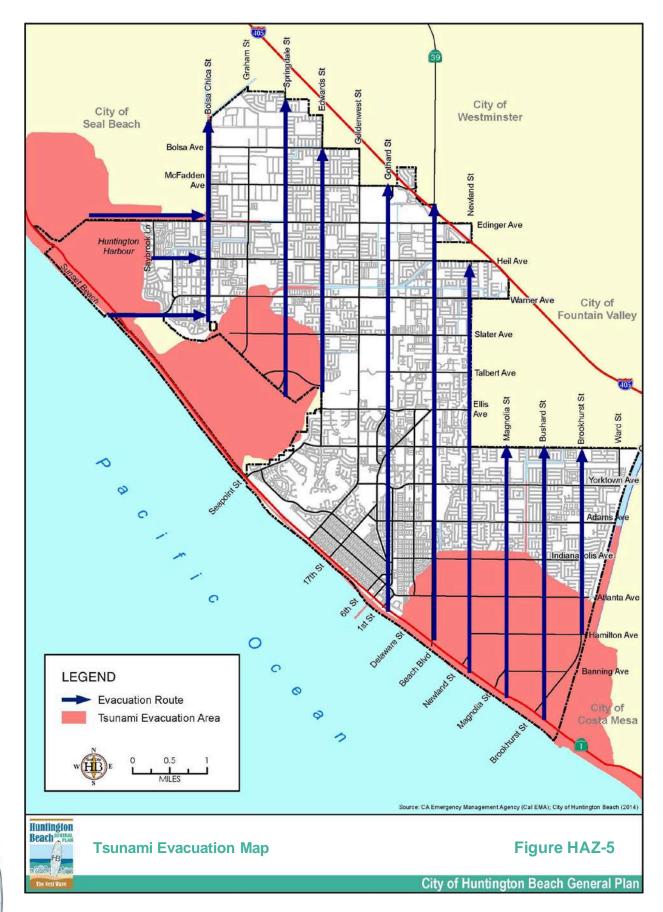
As a community with both bluffs and low-lying areas near the coast, Huntington Beach is at risk from two types of coastal hazards. High tides and high surf continually erode coastal bluffs located along the shoreline. This condition is often exacerbated by wind and inadequate drainage practices from development on top of bluffs. Beaches underneath the coastal bluffs can act as a protective buffer; however, these protective beaches themselves can be eroded away, particularly when structures such as seawalls, jetties, and breakwaters interrupt the natural processes that maintain the beaches.

The Huntington Beach coastline totals 9.5 miles of shoreline, including both state and City beach areas. Beaches and other low-lying portions of the planning area are threatened by sea level rise, a slow but gradual process that may cause average sea levels to increase by as much as 5.5 feet or more by the year 2100. Current science indicates that sea level rise is directly linked to climate change, and sea level is expected to increase over time. An increase in the frequency of intense storms that affect California is one possible effect of climate change, and any such increase would also likely increase erosion through high surf and storm surges. Higher sea levels may increase community vulnerability to hazards such as storm surges and tidal flooding, and may also exacerbate coastal erosion by decreasing the size of protective beaches.

To support the General Plan, and in accordance with adopted guidelines of the California Coastal Commission, the City prepared a vulnerability assessment estimating the consequences, probability, and resulting risk from various sea level rise scenarios. Depending on the scenario, additional land located near the coast could be subject to varying degrees of shoreline erosion and more extreme storm-related flooding. These hazards could threaten private buildings, public facilities, roads, and beaches.









This assessment looks forward to 2100 to determine the specific extent of the city's vulnerability to sea level rise, including an inventory of potentially affected assets and their estimated replacement value. Although most of this General Plan looks to the year 2040, the sea level rise assessment identifies vulnerabilities on a much longer horizon for multiple reasons. First, while the sea level rise assessment relies on the best available science and methods, there is an inherent degree of uncertainty in these projections, meaning sea levels could rise faster or slower than the estimated projections. Second, as current science indicates that sea level rise is a consequence of climate change, the amount of sea level rise could exceed estimates if the activities that cause climate change end up being greater than expected. Additionally, a building constructed within the horizon of this General Plan may still be used toward the end of the century; thus, it is important to understand potentially hazardous conditions within the planning area in 2100 to cover the life span of a building.

Both coastal and inland areas face threats from sea level rise. The threat to coastal areas is the result of erosion and flooding from wave run-up (particularly from large waves associated with coastal storms). Sea level rise threatens the inland areas by exacerbating flooding from very high tides, and by contributing to flooding from extreme rainfall events.

Areas subject to potential coastal or inland sea level rise by 2050 are identified as a Potential Sea Level Rise Hazard Area in **Figure HAZ-6**. The Sunset Beach and Huntington Harbour neighborhoods and areas located south of the Huntington Beach Pier face the highest risks. The planning horizon of this General Plan is 2040, although the hazard area reflects areas of potential impact by 2050. This extra time helps ensure that projects proposed near the end of the General Plan horizon will still benefit from increased resiliency to sea level rise for several more years. It also provides a safety margin in the event that future sea level rise is more severe or occurs more rapidly than anticipated in current modeling, as previously discussed.

Sea level rise risks within the hazard area are addressed by the Huntington Beach Coastal Resiliency Program (CRP). Strategies outlined in the CRP include monitoring and implementation of regulations to minimize impacts in low-lying coastal areas of the city, constructing new infrastructure in less vulnerable areas or using methods more resilient than current standards, considering sea level rise when planning shoreline protection structures, and encouraging new development in less vulnerable areas.







Flooding

Flooding in the planning area can be caused by a number of natural events, including heavy rains and coastal storms. Less often, floods can be caused by high tides (tidal flooding), or tsunamis (discussed in the Geologic and Seismic Hazards section). Flood events can also happen as a result of infrastructure failure; for example, if a water tank breaks. Flooding is the most common hazard in the planning area.

Areas at an elevated risk of flooding are generally divided into 100-year flood zones and 500-year flood zones. A 100-year flood zone has a 1 percent chance each year of a major flood; a 500-year flood zone has a 0.2 percent chance of flooding each year. As identified in **Figure HAZ-7**, the planning area has areas within both flood zones. As land uses and climate conditions shift and as improvements are made to flood control channels, the size of these flood zones is likely to change.

Dam Failure

Dam failure is a specific type of flood event that occurs when a dam experiences a partial or complete collapse, releasing a large volume of water that can rapidly flood downstream areas. Dam failure can occur due to structural weaknesses of the dam itself, as a result of another hazard such as an earthquake, or as a combination of both. Dam failure events are very rare, as dams that are large enough to hold back large quantities of water are usually built to very high safety standards. If there is an elevated risk of dam failure, dam operators will often release water from the dam in a controlled manner, so that if the dam does fail the resulting flood will be minimal.

No dams are located in the planning area, although two dams upstream along the Santa Ana River, Seven Oaks Dam and Prado Dam, could flood large portions of the planning area if they experienced a catastrophic failure (see **Figure HAZ-8**). Both dams are flood control dams that usually store water during and after a flood event. However, Prado Dam stores water most of the year and releases it in a controlled manner down the Santa Ana River to recharge the groundwater aquifer underlying Orange County. Although upstream dam failure could occur, it is likely only a threat to Huntington Beach during a relatively small part of the year when the reservoir behind Prado Dam is at its fullest.













Urban Fires

As an urbanized area surrounded by other urbanized communities, Huntington Beach does not face the wildfire risks that are a threat to other areas of California. Urban fires are the primary fire hazard in the planning area, which can be caused by electrical faults, unattended cooking, or flammable or combustible materials exposed to a heat source, among other causes. Several areas and activities pose unique urban fire challenges due to the age of buildings, the size and density of structures, and the presence of flammable or combustible materials.

The California Government Code requires safety elements of a general plan to identify land designated as a State Responsibility Area for fire services and land designated within a very high fire severity zone. There is no land with either designation located in the planning area.

Hazardous Materials and Waste

Hazardous materials are materials that pose a significant risk to public safety or human or environmental health. These include toxic chemicals, flammable or corrosive materials, petroleum products, and unstable or dangerously reactive materials. They can be released through human error, malfunctioning or broken equipment, or as an indirect consequence of other emergencies (e.g., if a flood damages a hazardous material storage tank). Hazardous materials can also be released accidentally during transportation, as a consequence of vehicle accidents.

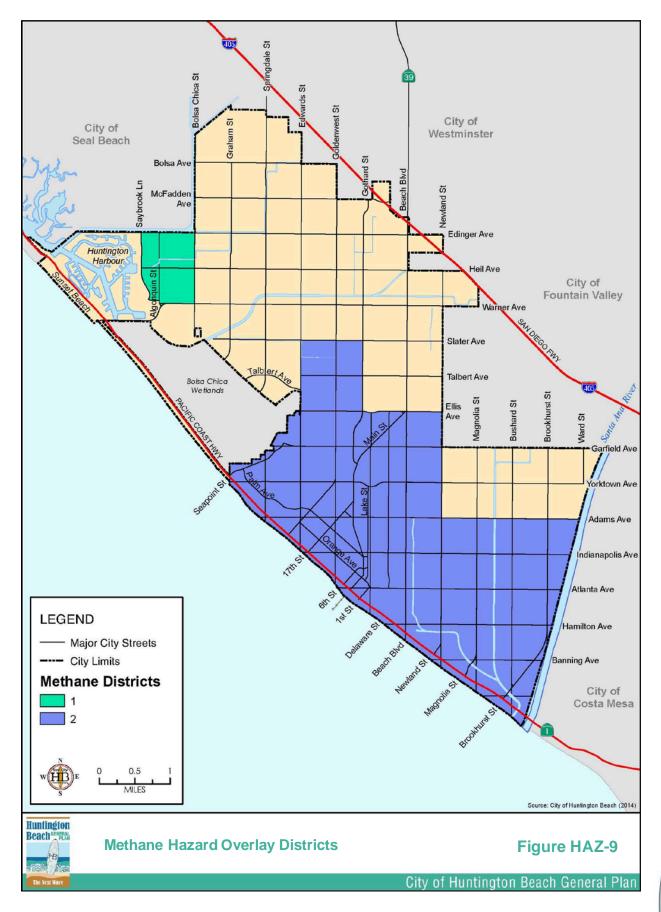
The majority of hazardous materials in the community are being transported on truck routes along major roadways. Some parts of the planning area, including in the northwest industrial area and along the Gothard Street corridor, have large concentrations of industrial facilities that may store, manufacture, use, and/or dispose of hazardous materials on site. In previous years, sewage and petroleum products were involved in the majority of hazardous material spills reported in the planning area.

Soils in Huntington Beach have a high likelihood to contain methane gas, which is often found in the same location as petroleum and in areas with peat in the soil. Methane is the primary component of natural gas and so is a valuable natural resource. In 2014, fossil fuel companies extracted approximately 754 billion cubic feet of natural gas from Huntington Beach and surrounding areas.

Despite its usefulness, methane is extremely flammable, potentially explosive, and may cause asphyxiation in high enough concentrations. As shown in **Figure HAZ-9**, the City has identified Methane Hazard Overlay Districts where soils are likely to contain increased areas of methane. Future development sites located in these districts must be tested for elevated levels of methane in the soil prior to construction, and future development or reuse projects may be required to include vent systems and/or barriers to reduce the level of methane to a safe concentration. There is no difference in requirements between the two districts.











Aircraft/Airport Hazards

Aircraft crashes can be a major hazard, as they can significantly damage or destroy structures adjacent to airport facilities or within flight paths, and cause harm to both people in the aircraft and on the ground. These events typically cause fires, which may spread beyond the initial emergency site if not contained and can release hazardous materials into the environment.

While there are no airports in the planning area, there are multiple airports in the vicinity, including John Wayne Airport, Long Beach Airport, and Los Angeles International Airport, as well as the military Joint Forces Training Center in nearby Los Alamitos. Studies have found that aircraft departing from or arriving at these airports may pass lower than 2,000 feet above the planning area, which can generate noise in excess of 70 dBA. There are also multiple heliports within the planning area.

Disaster and Emergency Preparedness

The Huntington Beach Emergency Management and Homeland Security (EMHS) office is responsible for coordinating emergency preparedness activities in the planning area, often in cooperation with neighboring cities, the Orange County Sheriff's Department, the Water Emergency Response Organization of Orange County (WEROC), and state and federal agencies. As part of this responsibility, the EMHS office and other City organizations have set up multiple programs to make Huntington Beach more resilient to disasters and to improve the effectiveness of emergency response activities when a disaster occurs. These programs include the Community Emergency Response Team (CERT), which trains members of the public to effectively respond to a disaster; drills and exercises for emergency response staff; the Radio Amateur Civil Emergency Services (RACES) program; and the preparation of preparedness plans such as the Huntington Beach Emergency Operations Plan (EOP).





Issues, Goals, and Policies

The natural and environmental hazard issues addressed in this element include:

- Preparing for and mitigating geologic and seismic hazards
- Preparing for a changing coastline
- Minimizing flooding and tsunami hazards
- Reducing potential urban fire risks
- Remediating brownfield sites
- Managing hazardous materials and wastes
- Reducing potential aircraft hazards
- Preparing residents and businesses for future disasters
- Reducing potential threats to homeland security

Preparing for and Mitigating Geologic and Seismic Hazards

Earthquakes and other geologic and seismic hazards are among the most severe threats facing the planning area. Studies by the US Geological Survey indicate that Southern California will be affected by a major earthquake within the next few decades. In addition to the impacts associated with ground shaking, such an earthquake could cause other geologic/seismic hazards, urban fires, hazardous material spills or other incidents. To prepare for such events, the City will ensure that existing buildings are resilient to geologic and seismic hazards; community members are informed on how to stay safe during and after these events; and key City facilities can continue to provide vital services during response and recovery activities.

Goal HAZ-1. Structures are designed and retrofitted to be more resilient to earthquakes and other geologic and seismic hazards, protecting against injury while also preserving the structural integrity of the structure.

- A. Ensure that new and significantly retrofitted structures are sited and designed to reduce the risk of damage from geologic and seismic hazards.
- B. Support retrofits to existing structures to improve resiliency to geologic and seismic hazards.
- C. Construct new key facilities to be resistant to damage from geologic and seismic hazards.





D. Maintain records of existing structures in Huntington Beach that may be vulnerable to geologic and seismic hazards, including unreinforced masonry structures, older concrete buildings, and wood structures with weak first floors.

Preparing for a Changing Coastline

Under the most conservative planning scenarios, both coastal and inland portions of Huntington Beach could be periodically flooded due to the cumulative impact of storm surge and higher high tides, as well as the possibility of sea level rise. In anticipation, the City will establish new standards and requirements to ensure that vulnerable areas are protected; new development is planned appropriately to accommodate changing



conditions; and existing beach and wetland resources adapt and become more resilient.

Goal HAZ-2. Coastal environments accommodate coastal changes and reduce coastal development impacts.

- A. Promote appropriate land uses and development patterns within potential sea level rise areas identified in the Sea Level Rise Hazard Area established in **Figure HAZ-6**.
- B. Implement priority measures to reduce and mitigate sea level rise impacts to property and infrastructure outlined in the Coastal Resiliency Program.
- C. Promote land use changes and development patterns that conserve coastal resources and minimize bluff and coastal erosion.
- D. Continue to support beach sand replenishment projects located north of the planning area that will support sand deposition on beaches in the planning area.
- E. Provide information to property owners about the risks associated with coastal erosion and flooding and encourage them to take adequate steps to prepare for these risks.
- F. Provide sufficient warning and evacuation assistance to community members impacted by coastal flooding events.
- G. Increase the City's understanding and funding for public improvements with respect to potential vulnerabilities and impacts to infrastructure associated with changes in sea level elevation.
- H. Monitor potential ocean surf line hazards.





Minimizing Flooding and Tsunami Hazards

Portions of Huntington Beach are susceptible to flooding and many areas experience recurring local flooding during extreme high tide events, rainstorms, and storm surges. In addition, some open space and residentially developed areas (approximately 2 percent of the planning areas) are below sea level. These conditions could be exacerbated by sea level rise in the future. For example, low-lying areas that experience flooding may experience greater flooding for longer periods of time. In addition, areas that are prone to flooding could have unsustainable flood-insurance requirements in the future, potentially depressing property values and making homes less desirable. The failure of Prado Dam near the head of Santa Ana Canyon poses a remote flooding threat if the basin were nearly full during a failure. Due to the location on the coast, Huntington Beach is also subject to potential run-up and tsunami damage from both distant and locally generated tsunamis. Long-term ponding of water during heavy rains or lengthy periods of precipitation is likely in some areas.

Goal HAZ-3. Residents, businesses, visitors, and resources are adequately protected from risks associated with flood and tsunami hazards.

Policies

- A. Establish and maintain local flood prevention standards and practices that adequately protect public and private development and resources within the planning area.
- B. Maintain and increase local storm drain capacity to meet 100-year or greater flood protection requirements to protect residents and businesses from flood risks.
- C. Provide sufficient warning and evacuation assistance to residents and others impacted by flooding and tsunami events.
- D. Continue to identify tsunami-prone areas and establish development, emergency response, and recovery standards and procedures within these areas.
- E. Continue to identify, manage, and repair or renovate areas that experience long-term ponding during heavy rain events.

Reducing Potential Urban Fire Risks

Building size and density, age of structures, and the presence of certain materials or activities all contribute to the risk of urban fires in Huntington Beach.

Goal HAZ-4. The risk of urban fires is reduced through effective building design and effective fire services.

Policies

- A. Ensure that all new construction is designed for easy access by fire and other emergency response personnel.
- B. Ensure that existing buildings are maintained to minimize fire risks.

HB



Remediating Brownfield Sites

Due to historical aerospace, oil, and energy production uses and related contamination, several opportunity sites for future cleanup and remediation are located within the community. These sites offer new opportunities for brownfield development and reduce the potential for exposure to contaminants for future generations. For the purposes of this General Plan, brownfield sites are defined as properties that are contaminated and underutilized due to perceived remediation costs and liability concerns. The goals and policies provided below are intended to assist the City in the future development of sites that meet this criteria rather than regulate sites with current hazardous waste activities.

Goal HAZ-5. Environmental cleanup and management of brownfield sites improves environmental quality of life, desirability of surrounding neighborhoods, economic development, and housing options in the community.

Policies

- A. Continue to identify, map, and remediate existing hazardous waste sites and require remediation when a property is redeveloped.
- B. Encourage use of remediated brownfields for housing, commercial, industrial, public, and recreational uses and for open space opportunities while prioritizing open space uses, energy facilities, and other community-supporting facilities as preferred options for future use of remediated brownfield sites.
- C. Prohibit the future placement of sensitive land uses in close proximity to hazardous material and waste sites.

Managing Hazardous Materials and Wastes

While brownfield sites pose a risk from hazardous materials that may have leaked into the environment in previous years, Huntington Beach community members and visitors also face risks from hazardous materials that are transported through the community or used as part of current activities, including vehicle and pipeline transport. The City can reduce risks from these materials by ensuring that proper safety practices are in place, and that emergency responders and community members have information necessary to protect themselves.

Goal HAZ-6: The risk of exposure to hazardous materials in Huntington Beach is substantially decreased.

- A. Avoid locating facilities that use, store, transport, process, or dispose of hazardous materials near residential areas or other sensitive uses.
- B. Promote the use of roadways with minimal exposure to residential areas or other sensitive uses as routes suitable for transporting hazardous materials.





- C. Ensure that all community members have access to information about proper handling, storage, and disposal of hazardous materials, including electronic waste.
- D. Continue to develop and enforce Methane District Regulations to reduce the hazards from methane-containing soils.
- E. Continue to implement the Certified Unified Program Agency (CUPA) program to identify, inspect, and monitor businesses that use and store hazardous materials in the city.

Reducing Potential Aircraft Hazards

Several widely used airports are located close to the planning area. Although accidents involving aircraft are rare and there is little the City can do to decrease the risk of such an event happening, Huntington Beach can take proactive steps to ensure a safe and effective response.

Goal HAZ-7: The damage from potential aircraft hazards is reduced through increased preparation and coordination.

Policies

- A. Maintain consistency with the Airport Environs Land Use Plans for all applicable airports and helipads.
- B. Review and update City emergency preparedness and response plans and procedures for responding to aircraft emergency situations.
- C. Coordinate any aircraft disaster response activities with the appropriate airport fire response organization.

Preparing Residents and Businesses for Future Disasters

No matter how low the risk, natural and environmental hazards can never be completely eliminated. However, education and training programs can reduce property damage and bodily harm resulting from emergency situations. Community members can also prepare themselves for hazard events to improve response and recovery after an emergency occurs.

Goal HAZ-8: Community members are well informed and equipped to make their homes and businesses more resilient to natural and environmental hazards, and to rapidly and successfully recover from them.

Policies

A. Educate community members about hazard risks present in Huntington Beach and ways to effectively reduce risk.





- B. Ensure that all emergency plans are fully inclusive of the community members of Huntington Beach.
- C. Support the Community Emergency Response and Training (CERT) program, as feasible, depending on the availability of funding and volunteers.

Reducing Potential Threats to Homeland Security



Huntington Beach is a desirable location to live and work as well as a destination for over 11 million visitors annually. Large-scale events such as the US Open of Surfing attract large crowds every year. In addition, the beach and Downtown area attract a wide variety of visitors on a regular basis. These conditions have increased the need for enhanced emergency response and preparedness activities throughout the community. As a result, a portion of the City's emergency response resources are used to address planning and policy

issues associated with homeland security, as well as to regularly monitor activities within these areas. In recent years, some events have escalated, causing minor property damage and injuries and resulting in additional police response.

Goal HAZ-9. Residents and businesses are protected from human-caused and terrorism-related hazards.

- A. Recommend emergency personnel become engaged in proactive community policing activities during special events.
- B. Ensure City procedures and protocols are updated to reference departmental roles in the Emergency Operations Plan, which outlines response and recovery activities for terrorism and civil unrest in the city.
- C. If deemed necessary during a large community event, activate the Emergency Operations Center to ensure effective coordination of emergency response activities.
- D. Expand emergency management planning and preparedness activities to include antiterrorism components.





VI. Noise



Introduction and Purpose

The Noise Element describes how the City considers noise control in the planning process. This element identifies noise-sensitive land uses and noise sources, evaluates existing noise issues, defines potential noise impact areas, and advocates creative methods to protect the community from excessive noise. The element provides proactive solutions to noise problems varying from construction noise and clamoring mechanical equipment to roadway noise and the cacophony of barking dogs, and describes noise control measures designed to avoid noise problems before they occur.

The noise environment relates to a community's quality of life. Noise has been linked directly to numerous human health factors; aside from general annoyances, excessive noise is a source of discomfort, interferes with sleep, and disrupts communication and relaxation.





Recognizing that excessive or unusual noise affects human health and welfare, the state has developed guidelines both for determining community noise levels and for establishing programs to reduce community exposure to adverse noise levels. Policies, plans, and programs outlined in the Noise Element are designed to minimize the effects of humancaused noise in the community, and to improve residents' quality of life by regulating and reducing noise, particularly in residential areas and near such noise-sensitive land uses as residences, hospitals, convalescent and day care facilities, schools, and libraries. The element provides direction regarding practices and strategies to protect city residents and businesses from severe noise levels.

Mixed-use residential and commercial development present unique noise reduction challenges. Although located in predominantly commercial environments, the residential portions of mixed-use projects are nonetheless subject to residential noise standards and guidelines established by the state. Strategies to address these noise concerns focus on incorporating noise-reducing features into project design.

Scope and Content

California Government Code Section 65302(f) establishes the requirement for a noise element to "identify and appraise noise problems in a community" and to "analyze and quantify, to the extent practicable...current and projected noise levels." The noise element must identify the sources of noise and identify both existing and future noise contours distances at which a predicted noise level will occur. State law requires that the noise element consider the following major noise sources:

- Highways and freeways
- Primary arterials and major local streets
- Railroad operations
- Aircraft and airport operations
- Local industrial facilities
- Other stationary sources

This element consists of this Introduction and Purpose summarizing the general purpose of the Noise Element; a Noise Plan describing fundamentals of sound and noise, defining noise standards, presenting contour maps, and recommending strategies to achieve goals and implement policies; and Issues, Goals, and Policies outlining the most important noise issues affecting the planning area.





Relationship to Other Elements

Noise policies and programs affect implementation of the Land Use Element as it relates to both noise sources and noise-sensitive uses. The noise contours and land use compatibility standards contained in the Noise Element should be used when evaluating planning and development decisions.

The Noise Element also relates directly to the Circulation Element, because Huntington Beach's primary noise sources are transportation-related noise along arterial roadways and highways, and, to a lesser extent, the freeway, railways, and aircraft. Noise policies mitigate excessive noise along transportation routes. Similarly, noise policies relate to the Housing Element by directing new housing development to appropriate sites away from sources of excessive noise and requiring that design features be incorporated to ensure acceptable indoor noise levels.

Noise Plan

The following describes the fundamentals of sound and noise, defines noise standards, and presents contour maps.

Measuring Noise

Noise Fundamentals

Noise sources in Huntington Beach fall into two categories: transportation oriented and non-transportation oriented. Examples of transportation-oriented noise include noise generated by vehicles, airplanes, and rail cars operating within the planning area. Examples of non-transportation noise include noise generated from mechanical or industrial processes, such as oil extraction, lawn equipment, and construction activities.

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perception of noise levels is subjective and the physical response to sound complicates the analysis of its effects on people. People judge the relative magnitude of sound sensation in subjective terms such as noisiness or loudness. Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which gives the level of sound in decibels (dB). **Table N-1** presents the subjective effect of changes in sound pressure levels.





Table N-1
Changes in Sound Pressure Levels, dB

Decibel Change	Change in Apparent Loudness
+/- 3 dB	Threshold of human perceptibility
+/- 5 dB	Clearly noticeable change in noise level
+/- 10 dB	Twice/half as loud
+/- 20 dB	Louder/much quieter

Source: Engineering Noise Control, Bies and Hansen (1988).

To account for the pitch of sounds and an average human ear's response to such sounds, a unit of measure called an A-weighted sound pressure level (dBA) is used.

Noise Descriptors

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise as well as the time of day when the noise occurs. The following common metrics describe the way humans perceive sound:

- L_{eq}, the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{dn}, the Day-Night Average Level, is a 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m., and an additional 5 dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. to account for noise sensitivity in the evening and nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
- L_{min}, the minimum instantaneous noise level experienced during a given period of time.
- L_{max}, the maximum instantaneous noise level experienced during a given period of time.





Assigning the proper noise descriptor when evaluating a noise source is essential to determining potential environmental impact on the community. Stationary-source noise (e.g., leaf blowers; heating, ventilation, and air conditioning; and loading docks) is generally analyzed using an hourly standard (L_{eq}). Transportation noise sources (e.g., vehicular traffic, aircraft overflights, and train passbys) occur as variable, individual events throughout the day. Hourly descriptors are not effective at describing transportation noise because it occurs at all hours. Instead, a 24-hour descriptor (L_{dn} or CNEL) is used to analyze transportation noise sources because the evening and nighttime penalties are applied to reflect increased sensitivity to noise during the evening and nighttime hours. CNEL is the noise level descriptor, consistent with state guidelines, applied by the City throughout this Noise Element to describe the current and future noise environment affected by transportation-generated noise.

Noise Sources and Concentration Areas

Land uses in the planning area include a range of residential, commercial, institutional, industrial, recreational, and open space areas. In general, the greatest source of noise throughout Huntington Beach is vehicle roadway noise generated along arterial roadways, as well as minor arterial roads within residential areas, and various stationary sources such as commercial heating, ventilation, and air conditioning (HVAC) units and petroleum extraction activities.

Mobile Sources

Roadways



Traffic noise originates from vehicles traveling on roads, with major roads such as Beach Boulevard, Bolsa Chica Street. Goldenwest Street, Adams Avenue. Brookhurst Street, and Pacific Coast Highway being significant contributors due to the volume and composition of traffic. Roadway noise is a combination of direct noise emissions from vehicles and

the sound of tires passing over the road surface. In addition, large volumes of truck traffic can dramatically contribute to roadway noise, as the sounds generated from some vehicle brake technologies, large tires, and diesel engines greatly exceeds noise from passenger cars and light trucks.





Railways

The Union Pacific Railroad right-of-way runs east of Gothard Street, extending from the northern city limits to a terminus just north of Garfield Avenue. It provides freight service for the industrial corridor located along Gothard Street and is generally not located adjacent to noise-sensitive land uses. Current rail service is extremely limited, with approximately three trains per week traveling through the planning area. Although no specific proposal is anticipated at this time, the City intends to preserve options for future passenger rail transit along this corridor throughout the planning horizon of the General Plan.

Aircraft

No airport is located in the planning area, and no major flight corridors overlie Huntington Beach, although aircraft approaching or leaving nearby airports may fly over the community. Long Beach Airport is located approximately 12.5 miles to the northwest of the planning area, and John Wayne Airport is located approximately 3.5 miles to the southeast. The planning area is not located within the noise contours for either airport.

According to a Noise Analysis Report prepared by Veneklasen Associates in 2007, flights approaching Long Beach Airport regularly pass over the area near the intersection Bolsa Chica Street and Edinger Avenue at an altitude ranging between 1,600 feet to 2,100 feet. Individual commercial aircraft flying at these altitudes can result in noise levels of approximately 72 dBA on the ground. The control of aircraft flying over the city and the noise they make are under the jurisdiction of the Federal Aviation Administration (FAA). As such, the City has no authority over their operations.

Stationary Sources

Construction Activities

Construction activities are a regular and ongoing source of noise throughout the planning area. Noise levels generated by construction activities are generally isolated to the immediate vicinity of a construction site and occur during daytime hours in accordance with City regulations for relatively short-term periods ranging from a few weeks to a few months.

Commercial and Industrial Uses

Existing commercial uses are predominantly located in regional shopping centers such as Bella Terra, in Downtown Huntington Beach, and along the blocks adjacent to both sides of Beach Boulevard, Gothard Street, Edinger Avenue, and Warner Avenue. The primary noise sources associated with commercial







uses are commercial HVAC systems. Other noise sources include truck noise associated with the delivery of goods, as well as human activity.

Industrial uses are located primarily in the northwestern portion of the planning area (including and adjacent to the Boeing campus), along the Gothard Street corridor, in the Holly-Seacliff area, and along Pacific Coast Highway (near and including oil production facilities and the AES power plant). Aside from oil extraction, most industrial uses consist of warehousing, including vehicle and equipment storage along the Gothard Street corridor. Similar to commercial uses, the primary exterior noise sources associated with these uses are related to HVAC systems and medium-duty commercial trucks.

Land use changes anticipated in both the northwest industrial area and along the Gothard Street corridor will gradually transition to a mix of lighter industrial and commercial uses characterized by research and development and technology uses. These land use transitions are intended to be more compatible with sensitive receptor uses located in the vicinity of these areas, as these uses would be less noise intensive.

Oil Extraction

Huntington Beach has been an active site for oil extraction since the 1920s, and large-scale oil and gas production continues. Oil wells are scattered throughout much of the planning area, although most are concentrated along the coastal areas and mesas. Noise sources associated with oil extraction activities are related to heavy-duty vehicle use, including noise associated with site preparation, and are considered similar to construction noise levels.



Special Events

Many parks provide facilities for organized sports including baseball, soccer, and basketball. Noise from these activities can have a negative impact on neighboring residential land uses, particularly at parks where lighted fields allow evening activities. Additionally, the City regularly hosts special events on a local, regional, and international level. Local events include farmers markets, Surf City Nights, and evening music events in public parks, drawing crowds from a few

dozen to a few thousand people. Regional and international events include the Huntington Beach Association of Volleyball Professionals Finals, the BB Jazz Festival at Central Park, and the Association of Surfing Professionals US Open of Surfing. Special events often use amplification devices, such as public address systems, and feature amplified music.





Noise Standards and Land Use Compatibility

Huntington Beach has developed land use compatibility standards, based on recommended parameters from the California Governor's Office of Planning and Research, that rate compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. Using these land use compatibility guidelines, the City has established interior and exterior noise standards.

Some types of noise are only short-term irritants, like the banging of a hammer, the whine of a leaf blower, or amplified music and crowd noise from outdoor events. City noise regulations, including the Noise Control Ordinance, can control this type of noise. The City's Noise Ordinance (Chapter 8.40 of the Huntington Beach Municipal Code) identifies exterior and interior noise standards, specific noise restrictions, exemptions, and variances for sources of noise in the city. As such, the Municipal Code provides standards against intrusive noises such as loud gatherings, unauthorized construction-generated noise, and other invasive noises.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels would generally be considered low below 55 dBA CNEL, moderate in the 55 to 70 dBA CNEL range, and high above 70 dBA CNEL.

The City's land use-noise compatibility standards are presented in **Table N-2**. These standards are used in the land planning stage of the development process to identify project opportunities and constraints. In conjunction with the noise contour maps (Figures N-1 and N-2), the standards may be used to determine whether a certain type of land use would be compatible with the existing and future noise environment. Proposed land uses should be compatible with existing and forecasted future noise levels. Projects with incompatible land use-noise exposures should incorporate noise attenuation and/or control measures within the project design that reduce noise to an acceptable interior level of 45 dBA CNEL or lower, as required by state regulations (California Code of Regulations Title 24) for residential uses.

The City's compatibility standards provide only for normally acceptable conditions, and are generally based on state recommendations and City land use designations. These standards, which use the CNEL noise descriptor, are intended to be applicable for land use designations exposed to noise levels generated by transportation-related sources. Land use compatibility noise exposure limits are generally established as 60 dBA CNEL for low-density and medium-density residential uses. However, for medium-high density residential, high-density residential, and mixed-use land use designations, a higher 65 dBA CNEL is permitted. Higher exterior noise levels are more often permitted for multiplefamily housing and housing in mixed-use contexts than for single-family houses. This is





because multiple-family complexes are generally located in transitional areas between single-family and commercial districts or near major arterials served by transit, and a more integrated mix of residential and commercial activity (accompanied by higher noise levels) is often desired in such locations. These standards establish maximum interior noise levels for new residential development, requiring that sufficient insulation be provided to reduce interior ambient noise levels to 45 dBA CNEL.

The City's land use compatibility standards are based first on the General Plan land use designation of the property, and secondly on the proposed use of the property. For example, in the mixed-use designation, a multiple-family use exposed to transportation-related noise would have an exterior noise standard of 65 dBA CNEL, and an interior noise standard of 45 dBA CNEL. Noise standards for multiple-family and mixed-use land use designations are higher than those for single-family residential areas, reflecting that these uses are generally located along arterial roadways with higher ambient noise levels than single-family residential neighborhoods. The standards are purposefully general, and not every specific land use is identified. Application of the standards will vary on a case-by-case basis according to location, development type, and associated noise sources.

Table N-2
Land Use-Noise Compatibility Standards

General Plan Land Use Designation	Proposed Uses	Exterior Normally Acceptable ¹ (dBA CNEL)	Exterior Conditionally Acceptable ² (dBA CNEL)	Exterior Normally Unacceptable ³ (dBA CNEL)	Interior Acceptable ⁴ (dBA CNEL)
Residential					
Low Density	Single-family, mobile home, senior housing	Up to 60	61–65	≥66	45
Medium Density, Medium High Density, High Density	Attached single-family, duplex, townhomes, multi-family, condominiums, apartments	Up to 65	66–70	<i>≱</i> 71	45
Mixed-Use					
Mixed-Use	Combination of commercial and residential uses	Up to 70	71–75	≥76	45
Commercial					
Neighborhood Commercial, General Commercial	Retail, professional office, health services, restaurant, government offices, hotel/motel	Up to 70	71–75	≱76	45
Visitor Commercial	Hotel/motel, timeshares, recreational commercial, cultural facilities	Up to 65	66–75	>75	45





General Plan Land Use Designation	Proposed Uses	Exterior Normally Acceptable ¹ (dBA CNEL)	Exterior Conditionally Acceptable ² (dBA CNEL)	Exterior Normally Unacceptable ³ (dBA CNEL)	Interior Acceptable ⁴ (dBA CNEL)	
Office	Office, financial institutions	NA	NA	NA	NA	
Public/Semi-pu	Public/Semi-public					
Semi-public (School)	Schools	Up to 60	61–65	≥66	45	
Semi-public (Other)	Hospitals, churches, cultural facilities	Up to 65	66–70	≥71	45	
Public	Public utilities, parking lot	NA	NA	NA	NA	
Industrial						
Research and Technology	Research and development, technology, warehousing, business park	NA	NA	NA	NA	
Industrial	Manufacturing, construction, transportation, logistics, auto repair	NA	NA	NA	NA	
Open Space an	d Recreational					
Conservation	Environmental resource conservation	NA	NA	NA	NA	
Park	Public park	Up to 65	65–75	≥76	NA	
Recreation	Golf courses, recreational water bodies	Up to 65	66–75	≥76	NA	
Shore	City and state beaches	NA	NA	NA	NA	

Notes:

- Normally acceptable means that land uses may be established in areas with the stated ambient noise level, absent any unique noise circumstances.
- 2. Conditionally acceptable means that land uses should be established in areas with the stated ambient noise level only when exterior areas are omitted from the project or noise levels in exterior areas can be mitigated to the normally acceptable level. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
- 3. Normally unacceptable means that land uses should generally not be established in areas with the stated ambient noise level. If the benefits of the project in addressing other General Plan goals and policies outweigh concems about noise, the use should be established only where exterior areas are omitted from the project or where exterior areas are located and shielded from noise sources to mitigate noise to the maximum extent feasible. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
- Interior acceptable means that the building must be constructed so that interior noise levels do not exceed the stated maximum, regardless of the exterior noise level. Stated maximums are as determined for a typical worst-case hour during periods of use.





In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply. To ensure that noise produced by stationary sources does not adversely affect noise-sensitive land uses, the City applies a second set of standards. These hourly and maximum performance standards (expressed in $L_{\mbox{\tiny eq}}$) for stationary noise sources are designed to protect noise-sensitive land uses.

Noise Contours and Impact Areas

The community noise environment can be described using contours derived from monitoring major sources of noise. Noise contours define areas of equal noise exposure. Future noise contours have been estimated using information about both current and projected future land uses and traffic volumes. The contours assist in setting land use policies for distribution and establishing development standards.

The City completed a study of baseline noise sources and levels in June and July 2014. As part of the study, the City collected long-term (24-hour) noise measurements during a typical weekday at seven locations, and short-term (one-hour) noise measurements at eight locations, in the planning area. Long-term monitoring sites included locations characterized by unique noise generators due to high traffic volumes, large numbers of truck trips, or commercial or industrial activities occurring in the vicinity of noise-sensitive land uses. Short-term monitoring sites were generally located in residential areas where ambient noise levels are anticipated to be lower than those along major transportation corridors and commercial areas. The primary purpose of noise monitoring was to establish a noise profile that could be used to estimate current and future noise levels.

Measurements represent motor vehicle noise emanating from highways and freeways, the local roadway network, and industrial land uses. Typical noise sources measured during the short-term survey included vehicular traffic; standard gardening and landscaping equipment such as lawn mowers and leaf-blowers; police, ambulance, and fire sirens; motorcycles; heavy trucks; and typical home maintenance equipment such as handsaws. Of these sources, traffic noise was determined to be the predominant noise source in Huntington Beach. Typical of developed areas, noise levels in commercial and industrial areas were substantially higher than those in residential neighborhoods, particularly along major arterials such as Beach Boulevard, Goldenwest Street, and Bolsa Chica Street. Additionally, the planning area experiences regular aircraft overflight from commercial airlines from Los Angeles International Airport, Long Beach Airport, and John Wayne Airport.

Figure N-1 identifies modeled noise contours for baseline year 2014. A number of locations experience noise levels above 65 dBA CNEL, including areas near Pacific Coast Highway, Beach Boulevard, Goldenwest Street, Warner Avenue, Edinger Avenue, Brookhurst Street, Bushard Street, Springdale Street, Yorktown Avenue, and Heil Avenue.





The Land Use Element anticipates that Huntington Beach will accommodate additional future growth, accompanied by an increase in citywide traffic volumes. Traffic volume increases represent the major anticipated measurable new noise sources in the community over the long term. **Figure N-2** identifies anticipated changes in 2040 noise levels along major roads based upon future traffic levels. Noise levels may be expected to rise in areas located near roadways where traffic volumes will increase over time. Specifically, these areas include Bolsa Avenue, Atlanta Avenue, Adams Avenue, Pacific Coast Highway, Bolsa Chica Street, Goldenwest Street, and Brookhurst Street.

Developments along the following roadway segments should be reviewed for potential future noise impacts:

- Talbert Avenue between Goldenwest Street and Gothard Street
- Edinger Avenue between Gothard Street and Beach Boulevard
- Heil Avenue between Algonquin Street and Bolsa Chica Street
- Bolsa Avenue between Edwards Street and Goldenwest Street
- Edwards Street between Ellis Avenue and Garfield Avenue
- Yorktown Avenue between Goldenwest Street and Main Street
- Indianapolis Avenue between Lake Street and Beach Boulevard
- Main Street between Palm Avenue and Pacific Coast Highway
- Orange Avenue between 3rd Street and 1st Street
- Atlanta Avenue between Beach Boulevard and Newland Street
- Newland Street between Hamilton Avenue and Pacific Coast Highway

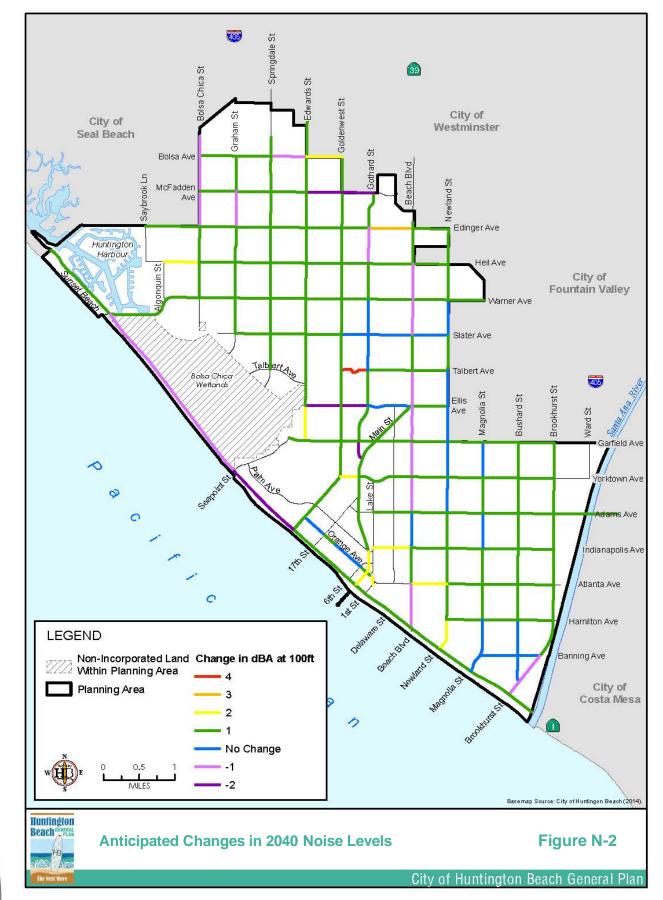
Many neighborhoods located along busy arterial streets have existing masonry walls between the roadway and the residential uses. Furthermore, topography in the planning area does not vary considerably. As a result, the contours shown in **Figures N-1** and **N-2** are considered reasonably representative of actual traffic noise conditions. Nonetheless, it is not possible to evaluate the localized effects of topography and screening by intervening structures on traffic noise within the framework of the Noise Element. Therefore, the City should consider the contour distances conservative estimates of traffic noise exposure (i.e., assuming noisier conditions than may be the case) to be supplemented by more detailed and project-specific study as needed.













Noise Reduction Strategies

The following strategies are intended to reduce noise impacts within Huntington Beach. These strategies should be employed along the roadway segments identified on page 6-12.

Noise Control Ordinance

The Noise Control Ordinance authorizes the City to regulate noise at its source, protect noise-sensitive land uses, and establish exterior and interior noise standards for residential properties. The City will continue to apply provisions of the Noise Control Ordinance.

State Noise Standards

Title 24 of the California Code of Regulations, also known as the California Building Code, establishes acoustical regulations for both exterior-to-interior sound insulation and sound and impact isolation between adjacent spaces of various occupied units. The Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dB L_{dn}, with windows closed, in any habitable room for general residential uses.

Roadway Noise Barriers

The most efficient and effective means of controlling noise is to reduce noise at the source. However, the City has no direct control over noise produced by trucks, cars, and trains because federal and state noise regulations preempt local laws. Because the City cannot control transportation noise at the source, noise programs and standards use noise reduction methods that interrupt the path of the noise or shield adjacent land uses to reduce transportation noise along freeways, arterial roadways, and rail corridors. Such reduction methods may include building orientation, spatial buffers, landscaping, and noise barriers proposed during site planning and project design.

Using noise barriers, such as sound walls, is an effective way to achieve noise standards, but should be considered only after all other practical design-related noise reduction measures have been integrated into a project. New technologies should be used in place of sound walls as they become widely available, unless no other feasible options exist. Sound walls may not be desirable in some locations, such as intersections in commercial areas where visibility and access are equally important. For some projects, including those implemented by the California Department of Transportation (Caltrans) or the Orange County Transportation Authority (OCTA), using sound walls may be the only feasible option or may be beyond the City's control.





Truck Routes

Truck traffic generates noise that can disturb people in residential and other noise-sensitive land uses. Heavy trucks are not permitted to drive through residential neighborhoods unless they are making a delivery in the neighborhood. Truck routes in Huntington Beach are located mostly on higher capacity roadways to reduce noise on other streets, increase safety, reduce roadway maintenance needs, and improve traffic operations.

Stationary Sources

Noise levels from stationary sources are addressed primarily at the source. In a mixed-use development, acoustical design should be applied to reduce the exposure of residents to noise from both commercial portions of the development and external noise sources. When addressing stationary noise at the source is infeasible, the aforementioned noise reduction methods will be employed to reduce noise exposure to the levels presented in **Table N-3**.

The most common and feasible method to control exterior-to-interior noise levels is to improve the building structure and use wall/façade treatments that reduce noise levels. Buildings constructed consistent with the Title 24 of the California Building Code typically provide approximately 15 dBA of exterior-to-interior noise level reduction with windows open, and 25 dBA of noise level reduction with windows closed. Therefore, special consideration must be given to reducing interior noise levels to the required 45 dBA CNEL at noise-sensitive land uses exposed to noise levels in excess of 60 dBA. The ability to perform these calculations requires detailed floor plans and façade construction details. A qualified acoustical consultant should calculate the required noise level reduction and resulting interior noise levels. **Table N-3** provides an example of varying levels of building façade improvements that may be required to comply with the interior noise level standard of 45 dBA CNEL for land uses exposed to three different noise levels: 60 dBA CNEL, 65 dBA CNEL, and 70 dBA CNEL.

Residential Project Design

To mitigate non-transportation-related noise, the City will require adjustments to site plans, design features, higher insulation performance, spatial buffers, and other measures that absorb and block sound as needed. For example, bedrooms, balconies, and open space areas can be located away from streets and focused toward the interior of a project to reduce noise exposure. The City will develop guidelines to assist developers in designing structures that respond to noise concerns.





•				
Noise Level Exposure	Exterior-to- Interior Noise Level Reduction Required to Achieve 45 dBA CNEL	Noise Control Measures and Façade Upgrades		
Less than 60 dBA CNEL	15 dBA	Normal construction practices consistent with the Uniform Building Code are typically sufficient.		
60 dBA to 65 dBA CNEL	20 dBA	Normal construction practices consistent with the Uniform Building Code are sufficient with the addition of the following specifications: Air conditioning or mechanical ventilation systems are installed so that windows and doors may remain closed. Windows and sliding glass doors are mounted in lowair infiltration rated frames. Exterior doors are solid core with perimeter weather stripping and threshold seals.		
66 dBA to 70 dBA CNEL	25 dBA	Normal construction practices consistent with the Uniform Building Code are sufficient with the addition of the following specifications: Air conditioning or mechanical ventilation systems are installed so that windows and doors may remain closed. Windows and sliding glass doors are mounted in lowair infiltration rated frames. Exterior doors are solid core with perimeter weather stripping and threshold seals. Glass in both windows and exterior doors should have a Sound Transmission Classification rating of at least 30. Roof or attic vents facing the noise source of concern should be boxed or provided with baffling.		

Notes:

The information listed in this table represents sample guidance for interior noise control recommendations and is not intended for application to individual development projects, renovations, or retrofits. Noise-sensitive land uses located in areas with noise level exposures exceeding 65 dBA CNEL should perform acoustical analysis on a case-by-case basis.





Issues, Goals, and Policies

The noise issues addressed in this element include:

- Protecting noise-sensitive land uses
- Ensuring land use/noise compatibility
- Reducing noise from mobile sources
- Mitigating noise from construction, maintenance, and other sources

Protecting Noise-Sensitive Land Uses

Sensitive land uses have associated human activities that may be subject to stress or significant interference from noise. Noise-sensitive land uses are located in portions of the planning area that vary from moderately quiet residential areas to noisy major transportation corridors.

Goal N-1. Noise-sensitive land uses are protected in areas with acceptable noise levels.

Policies

- A. Maintain acceptable stationary noise levels at existing noise-sensitive land uses such as schools, residential areas, and open spaces.
- B. Incorporate design and construction features into residential, mixed-use, commercial, and industrial projects that shield noise-sensitive land uses from excessive noise.

Ensuring Land Use/Noise Compatibility

Some residential, commercial, and institutional land uses, particularly those located along arterial roadways, experience excessive vehicular noise. Commercial and industrial land uses also have the potential to generate noise that can be considered intrusive to noise-sensitive land uses. Mixed-use development projects often include both residential uses located above or in close proximity to commercial



uses and stand-alone multi-family residential uses. A unique challenge presented by mixed-use development is that on one hand, such uses desire locations along busy street





corridors, and on the other hand, state-mandated interior noise requirements for residential uses must be met within the residential portions of such uses.

Goal N-2. Land use patterns are compatible with current and future noise levels.

Policies

- A. Require an acoustical study for proposed projects in areas where the existing or projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-2. The acoustical study shall be performed in accordance with the requirements set forth in this Noise Element.
- B. Allow a higher exterior noise level standard for infill projects in existing residential areas adjacent to major arterials if no feasible mechanisms exist to meet exterior noise standards.
- C. Minimize excessive noise from industrial land uses through incorporation of site and building design features that are intended to reduce noise impacts to sensitive land uses.
- D. Encourage new mixed-use development projects to site loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from residential portions of the development, to the extent feasible.

Reducing Noise from Mobile Sources

Roadway noise from vehicle traffic is the most common source of noise in Huntington Beach. New development supporting anticipated population growth will increase traffic levels on arterials, resulting in increased noise levels. Future development of several vacant parcels and parcels that may support infill development or reuse will also have the potential to increase roadway noise levels in surrounding neighborhoods. In addition to roadways, rail and aircraft operations create noise in certain portions of the planning area. The general noise environment also includes occasional noise from private, police, emergency medical, and news/traffic monitoring helicopters.

Goal N-3. The community is not disturbed by excessive noise from mobile sources such as vehicles, rail traffic, and aircraft.

- A. Mitigate noise created by any new transportation noise source so that it does not exceed the exterior or interior sound levels specified in Table N-2.
- B. Prioritize use of site planning and project design techniques to mitigate excessive noise. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.
- C. Employ noise-reducing technologies such as rubberized asphalt, fronting homes to the roadway, or sound walls to reduce the effects of roadway noise on noise-sensitive land uses.





- D. Continue to work with local, state, and federal agencies to install, maintain, and renovate highway and arterial right-of-way buffers and sound walls.
- E. Continue to work with regional, state, and federal agencies, including officials at John Wayne Airport and Long Beach Airport, to implement noise-reducing measures and to monitor and reduce noise associated with aircraft:
 - a. Coordinate with Long Beach Airport to modify the approach of commercial aircraft to an altitude of 2,100 feet or higher when passing over the area near Bolsa Chica Street.
 - b. Coordinate with Long Beach Airport so that aircraft delay deployment of landing gear and flaps until they are over the Naval Weapons Station to reduce the noise levels they produce over the community.
- F. Continue to coordinate with the Federal Aviation Administration, Caltrans Division of Aeronautics, and the Orange County Airport Land Use Commission regarding the siting and operation of heliports and helistops to minimize excessive helicopter noise.

Mitigating Noise from Construction, Maintenance, and Other Sources

Construction is a necessary of community part development. Construction noise typically occurs intermittently. and amount of noise depends on the nature or phase of construction. Activities such as site preparation, trucks hauling materials, concrete pouring, and use of power tools can generate noise.



Construction equipment also creates noise that reaches high levels for brief periods. Although these types of noise sources tend to be short term, temporary, and limited, they can be a source of annoyance.





Goal N-4. Noise from construction activities associated with discretionary projects, maintenance vehicles, special events, and other nuisances is minimized in residential areas and near noise-sensitive land uses.

- A. Reduce construction, maintenance, and nuisance noise at the source as the first and preferred strategy to reduce noise conflicts.
- B. Require that new discretionary uses and special events such as restaurants, bars, entertainment, parking facilities, and other commercial uses or beach events where large numbers of people may be present adjacent to sensitive noise receptors comply with the noise standards in Table N-2 and the City Noise Ordinance.
- C. Encourage shielding for construction activities to reduce noise levels and protect adjacent noise-sensitive land uses.
- D. Limit allowable hours for construction activities and maintenance operations located adjacent to noise-sensitive land uses.





This page is intentionally left blank.





VII. Public Services and Infrastructure



Introduction and Purpose

Infrastructure forms the backbone of a city, supporting growth and providing mobility, connectivity, and essential services to the people and places that make up the community. Without adequate water, power, safety, and services, a community cannot grow and thrive. The availability of these services also directs the shape in which the city grows, what development options are available, and how and why people and goods flow in and out of the area.

While including a Public Services and Infrastructure Element in the General Plan is not required, it provides a means to highlight the existing and future service and infrastructure needs of the community. This element examines the current and desired future characteristics of energy, water, wastewater, solid waste, and sewer infrastructure, as well as public services such as police and fire, libraries, marine safety, and schools.



Scope and Content

The Public Services and Infrastructure Element is an optional General Plan element. Section 65303 of the California Government Code enables a county or city to adopt "any other elements or address any other subjects, which, in the judgment of the legislative body, relate to the physical development of the county or city." An optional element must be consistent with the seven mandatory elements and, once adopted, carries the same legal weight as any of the mandatory elements.

This element begins with this *Introduction and Purpose*, which describes the intent of the element and applicable legal requirements. The *Public Facilities and Services Plan* identifies the services provided by the police and fire departments, the library and school systems, and other community services. In turn, the *Infrastructure Plan* describes the infrastructure systems supporting water conveyance, wastewater collection and treatment, stormwater management, solid waste collection and disposal, power, communications, and infrastructure finance. *Issues, Goals, and Policies* then outline community service and infrastructure needs, and identify the desired future conditions for providing services and infrastructure and a strategy to provide them efficiently and affordably.

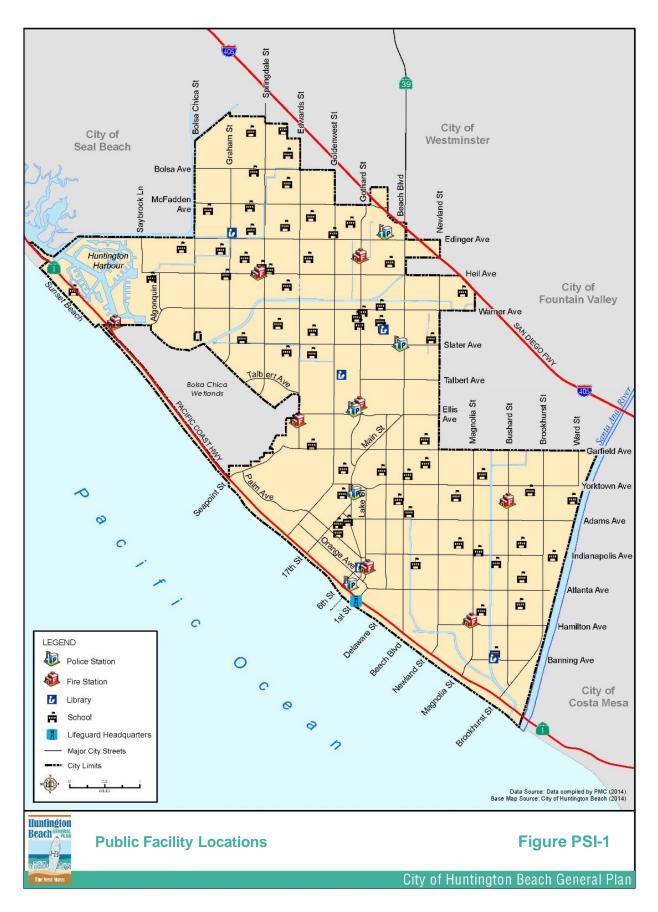
Public Facilities and Services Plan

The City of Huntington Beach provides a variety of public facilities and services to support residents, businesses, and visitors. The following discussions identify providers and key facilities supporting police services, fire services, marine safety services, emergency medical services, library services, community services, and schools in the planning area. **Figure PSI-1** identifies the location of these facilities.

Police

The Huntington Beach Police Department (HBPD) provides law enforcement services for the 27.3-square-mile Huntington Beach area. The HBPD consists of three divisions: the Administrative Operations, Uniform, and Investigation Divisions. The Administrative Operations Division provides oversight, management, and administrative duties. The Uniform Division is responsible for patrol, air support, traffic enforcement, and special enforcement. The Investigation Division is composed of the Detective, Special Investigation, and Jail Bureaus, providing follow-up on crimes, undercover investigations, and detention facilities, respectively. The Huntington Beach police station is located at City Hall. In addition, three police substations are located on Beach Boulevard, Bella Terra, and 5th Street. The HBPD focuses on providing adequate services to the community it serves. Ensuring plentiful staffing, effective response times, and updated technology are ongoing goals for police services in Huntington Beach.









Fire, Marine Safety, and Emergency Medical Services

The Huntington Beach Fire Department (HBFD) provides fire, technical rescue, hazardous materials, and marine safety response and emergency medical services for the city. In addition to emergency response, the **HBFD** provides prevention services, including construction plan review and inspections, fire safety inspections, and public education. Fire station locations and response vehicle allocation provides



effective response to emergency calls in the city a majority of the time.

The HBFD is dedicated to providing the highest quality fire, marine safety, and emergency medical services to protect its community. The HBFD has standards for both fire and emergency medical services, and strives to adhere to them at all times. Tailoring these standards to the Huntington Beach service area, utilizing modern facilities and advanced technology, and being involved in development and right-of-way projects help to ensure continued fire and emergency medical services.

Libraries

The Huntington Beach Library System comprises five facilities. Program attendance at city libraries is higher than average, indicating strong support for programs and special activities that could benefit from additional space. The library system also has a strong focus on enhancing technology to maximize and supplement the programs and services offered.



The library has a vision to strengthen public internet access, create and improve early reader programs, and provide resources and aid to help students succeed in school. These goals, as well as the desire to reinforce the library system as a cultural and community center for Huntington Beach and surrounding areas, are reflected in the policies of this plan.





Community Services



The City operates numerous public recreational facilities that offer a wide range of activities. These activities include, but are not limited to, adult education, fitness classes, and historical preservation.

Enhancing services and facilities for seniors is a particular concern for the City, as these must keep pace with the aging of the population. Meeting this and other changing needs for the

evolving demographics of Huntington Beach are a priority to ensure the mental, physical, and social well being of residents.

Schools

Huntington Beach is served by one high school district, the Huntington Beach Union High School District (HBUHSD), which also serves portions of Fountain Valley, Garden Grove, Seal Beach, Westminster, and parts of unincorporated Orange County. The Huntington Beach City School District (HBCSD), Westminster School District (WSD), Ocean View School District (OVSD), and Fountain Valley School District (FVSD) provide middle and elementary school services in the planning area. The HBCSD is the only school district that provides services solely within the planning area, while all others cover areas within surrounding communities.

School facilities were built during a time of high demand to accommodate the needs of the post-World War II baby boom. As space demands for the school districts decrease in response to demographic shifts in the community, the City has the potential to work with the school districts to promote healthy environments for learning. This includes focusing on improving and supporting existing facilities, and supporting school district efforts to promote programs for all stages of education. Engendering a positive, mutually beneficial relationship between schools and the City can also promote and expand the availability of useable, active parks and open spaces throughout Huntington Beach.

Infrastructure Plan

Although often unseen, the following infrastructure systems that support the Huntington Beach community provide valuable services that enhance the health, safety, welfare, and economic viability of the community. The following discussions highlight key challenges





and opportunities surrounding provision of water conveyance, wastewater collection and treatment, stormwater management, solid waste collection and disposal, and dry utility services in Huntington Beach.

Water Production and Distribution System

The Utilities Division of the City Public Works Department oversees and maintains the water infrastructure owned by the City. City crews perform routine maintenance and repairs necessary to keep the system operating at peak performance levels.

The city's water comes from a combination of groundwater (approximately three-fourths) and imported water resources (approximately one-fourth). The city's main source of water supply is groundwater from the Lower Santa Ana River Groundwater Basin, also known as the Orange County Groundwater Basin. Groundwater is currently pumped from eight active wells operated by the City. Water is stored in four storage and distribution reservoirs, also operated by the City, located throughout Huntington Beach. Providing safe water to meet the needs of residents and businesses is one of the primary infrastructure goals for the City, and maintaining adequate, cost-effective, and well-maintained delivery systems is an important part of reaching that goal.

Additional information on water resources, including supply and water quality, is located in the Environmental Resources and Conservation Element.

Wastewater Collection and Treatment

The Utilities Division of the City Public Works Department oversees and maintains the wastewater infrastructure owned by the City. City crews perform routine maintenance and repairs necessary to keep the wastewater collection system operating at peak performance levels.

The City owns and maintains most sewer collection pipelines, although many of the pipelines in the Sunset Beach area are owned and maintained by the Sunset Beach Sanitary District (SBSD). The SBSD contracts with the City to convey all sewage collected by the SBSD through City pipelines to the OCSD for treatment. All sewage collected by City pipelines is transported to OCSD collection mains and is then transported to OCSC Treatment Plant No. 2 at Brookhurst Street and Pacific Coast Highway.

Funding upgrades and regular maintenance of the wastewater system are challenges faced by many communities, and the City is dedicated to keeping wastewater collection and treatment infrastructure effective and cost-efficient. Policies and actions in this plan recommend diversification of funding through increased use of development fees and other sources to upgrade and maintain wastewater infrastructure and facilities.





Stormwater and Urban Runoff

Huntington Beach lies within the Lower Santa Ana River Basin under the Water Quality Control Plan (Basin Plan) adopted by the Santa Ana Regional Water Quality Control Board. Urban runoff in the city drains into streams, lakes, bays, wetlands, estuaries, Huntington Harbour, and the Pacific Ocean. The runoff is directed by a storm drainage system owned and operated by the City, although several major channels transporting runoff from areas upstream of the city are owned and maintained by Orange County. Runoff originating in Huntington Beach and areas located upstream can contain contaminants, and proper drainage is necessary to prevent flooding. To prevent flooding, the drainage system needs to be properly maintained and upgraded when necessary. As with wastewater collection, achieving this is both a primary challenge and an important goal for the City.

Solid Waste Collection and Disposal

Huntington Beach contracts services for solid waste, recycling, and green waste composting services. Solid waste is taken to a transfer station in Huntington Beach, where it is processed and transported to the Frank Bowerman Landfill in Irvine, which is expected to remain open until 2053. In addition, the City also offers used oil recycling services and household hazardous waste disposal services through the Orange County Household Hazardous Waste Collection Center.

California has an adopted policy goal that directs the state to recycle, compost, or source reduce 75 percent of all solid waste generated in California by 2020. Increased composting of organic materials, which make up approximately one-third of all waste disposed of in the state, is one of five key strategies the state has identified to meet this goal. In particular, there is significant potential for improved composting of residential and commercial food waste, which make up approximately 18 percent of all waste generated in California and is the single most common waste material in the state. Beginning in 2016, communities must develop programs for businesses to begin recycling organic waste, including food waste. Multifamily residences with at least five units must also begin recycling organic waste, although food waste does not have to be included in the multifamily program. While organic composting programs have already been successful in several communities throughout California, these requirements in support of the 75 percent goal will implement organic recycling programs statewide.

As state regulations for waste diversion increase, Huntington Beach should continue efforts to maximize recycling, composting, and source reduction to ensure continued compliance. Improving waste collection services to commercial businesses and multifamily housing units and increasing the community's knowledge of waste diversion practices are the primary ways the City plans to eliminate landfill waste. In addition to reaching diversion goals, maintaining the cleanliness of the beach and other common areas, particularly following large public events, is an important future focus.





Dry Utilities

Dry utilities provided in Huntington Beach include electricity, natural gas, internet and cable communications, and both wired and wireless telephone service. Electricity is provided to residents and businesses in Huntington Beach through Southern California Edison, and natural gas is provided by Southern California Gas Company (SoCal Gas). Southern California Edison provides renewable



energy as part of its energy portfolio, with wind and geothermal providing the most energy of the renewable sources. The City has also installed 2.13 megawatts of solar panels at City Hall and the Central Library, helping to reduce City costs and providing the City more control over its energy supplies. Internet, cable, and/or communications services are provided by third-party purveyors. Cellular service is available from all major cellular networks. The City is committed to working with utility providers so that the most advanced and effective services are available to all residents and businesses.

Infrastructure Finance

Major infrastructure projects, including construction, expansion, renovation, or replacement of infrastructure, facilities, or equipment, are known as "capital projects." The City funds capital projects using a variety of sources. The largest sources are special revenue funds and enterprise funds.

Special Revenue Funds

Special revenue funds are derived from entitlement funds, such as the gas tax, or developer funds, such as development impact fees. Entitlement funds are distributed based on population, whereas developer funds are used to minimize the impacts a development project will have on infrastructure. Special revenue funds include the Air Quality Fund, Traffic Impact Fund, Gas Tax Fund, Park Acquisition Fund, Measure M Fund, and Traffic Congestion Relief (Proposition 42) Fund.

Enterprise Funds

Enterprise funds are acquired from users paying for the use of a service, such as water and sewer. These funds support the cost of operations, maintenance, and upgrades to the system and service. Enterprise funds include the Water Fund, the Sewer Service Fund, and the General Fund Capital Improvement Reserve.





In addition to these two funding types, a variety of grants aid in the cost of developing and improving infrastructure. Maximizing the use of these types of funding and ensuring that development fees are set appropriately relative to the impact a project causes to infrastructure and services are the primary methods the City uses to ensure adequate funding for future capital programs.

Issues, Goals, and Policies

The public facility and service issues addressed in this element include:

- Providing adequate police staffing and facilities
- Providing adequate fire, marine safety, and emergency medical services
- Transforming libraries into community cultural centers
- Providing social and community services
- Meeting existing and future education needs

The infrastructure issues addressed in this element include:

- Maintaining optimal physical condition of water and sewer infrastructure
- Supporting storm drain system upgrades and maintenance
- Improving, replacing, and funding infrastructure
- Providing solid waste collection and recycling/disposal
- Meeting dry utility needs
- Financing public services and infrastructure

Providing Adequate Police Staffing and Facilities

The safety and well-being of Huntington Beach's neighborhoods and businesses is a core component of the community's quality of life. New development and anticipated population growth will change the police response needs of the community, especially given the anticipated decreases in federal, state, and county funding in the future. Huntington Beach will continue to sustain and improve its commitment to safety through a comprehensive approach to police services, which includes providing adequate facilities and personnel, planning for public safety in the built environment, and public information and community partnerships.





Goal PSI-1. Public safety services, education, facilities, and technology protect the community from illicit activities and crime.

Policies

- A. Consider the relationship between the location and rate of planned growth and resulting demands on police facilities and personnel.
- B. Achieve optimal utilization of allocated public safety resources and provide desired levels of response and protection within the community.
- C. Establish proactive time targets and clearance rates that meet or exceed national averages and enhance and maintain police department staffing and facilities to achieve them.
- D. Ensure that new development and reuse projects and existing land uses promote community safety.
- E. Consider emergency response needs of police when improving streets and critical intersections.
- F. Decrease incidents of criminal activity at high or repetitive crime locations and in conjunction with special events.
- G. Continue to support community-based crime prevention efforts by neighborhood groups and civic organizations.
- H. Continue to provide public information about community, neighborhood, household, school, and business safety.
- Research, procure, and use innovative technologies to optimize police services and reduce crime.

Providing Adequate Fire, Marine Safety, and Emergency Medical Services

The HBFD provides comprehensive fire prevention and suppression services and emergency medical services (EMS) within the community. The fire department also oversees the City's Marine Safety Division, which provides public safety services along city beaches. In addition to fighting fires, the fire department works to prevent and minimize death and injury, environmental damage, and property loss by taking steps to prevent fire in the community. The City will need to continue to provide EMS and fire services sufficient to meet anticipated population growth as well as marine safety services to accommodate increased tourism and visitors to the city's beaches.





Goal PSI-2. Huntington Beach residents and property owners are protected from fire hazards and beach hazards, and adequate marine safety and emergency medical services are provided by modern facilities and advanced technology.

Policies

- A. Consider the relationship between the location and rate of planned growth, the placement of critical facilities, and the resulting demands on fire, marine safety, and EMS facilities and personnel.
- B. Adopt locally defined performance objectives for emergency response to fire and EMS calls, and periodically evaluate fire service and EMS facilities and personnel relative to community needs.
- C. Consider fire-related emergency response needs when improving streets and critical intersections.
- D. Research, procure, and use modern equipment, advanced technology, and other innovative techniques to optimize fire, marine safety, and EMS services.
- E. Ensure that new development and reuse projects and existing land uses promote fire safety.
- F. Continue to provide adequate marine safety services, and consider additional safety measures to address increases in visitors to the city's beach areas and protect citizens from ocean surf line hazards.
- G. Ensure development provides adequate access for public safety responders in the event of an emergency.

Transforming Libraries into Community Cultural Centers

Public libraries are valuable cultural centers that are well used by a variety of community members. Increases in library patronage generated by development may overload the library system's capacity to provide adequate services without appropriate funding increases. The City has an opportunity to transform libraries to offer expanded cultural, artistic, and educational activities.

Goal PSI-3. Libraries are central community facilities and library services respond to changing community needs.

- A. Adapt libraries to become expanded cultural centers providing public space to meet community needs for after-school programs, job training programs, workshops, and other activities while ensuring they maintain the basic service of providing public access to information, reading, and education resources.
- B. Consider constructing new libraries and rehabilitating and expanding existing libraries and programs to meet changing community needs.





- C. Expand library outreach services to the maximum extent feasible for seniors and others who are physically unable to visit library facilities.
- D. Support technology and facility upgrade efforts in libraries to ensure community members have access to state-of-the-art amenities.

Providing Social and Community Services

The expansion of cultural activities and events serves an important role in promoting the efforts of local artists, providing educational opportunities for community youth, and diversifying the activities and amenities available to visitors. With the number of visitors that are drawn to Huntington Beach, the city is poised to be a regional hub for culture and arts.

As the general population ages, demand for senior services will increase. Huntington Beach's senior and elderly population would greatly benefit from easily accessible services to meet their needs. Facilities like senior centers, community rooms, and libraries can provide needed services to the elderly. Many of these facilities also support programs for youths and families within the community.

Goal PSI-4. A broad range of public and private programs meet diverse community needs, including mental health, arts, educational, and cultural programs.

Policies

- A. Ensure that programs and services meet the needs of a diverse group of users (e.g., seniors, youths, and special needs populations), and accommodate a range of ages and abilities.
- B. Maintain a rich artistic and cultural dimension within the community's identity that supports cultural tourism initiatives.
- C. Support social service programs that meet the changing needs of the Huntington Beach community.
- D. Support the provision of educational and other social services in existing public facilities, such as libraries and community centers.
- E. Ensure that the senior center is accessible to all residents by supporting a variety of transportation options.

Meeting Existing and Future Education Needs

With declining demand for school facilities, regional school districts have the opportunity and challenge to provide for existing and future demands using the current facilities. The City will continue to support efforts by the districts to provide and expand continuing education, after-school programs, and educational programs for all ages.





Goal PSI-5. A range of educational programs and facilities meets the needs of all ages of the community.

Policies

- A. Continue to consult with school districts to maximize existing use of school sites while addressing future community and school district needs.
- B. Continue to support and expand continuing education, after-school programs, and educational programs for all ages including educational opportunities offered in neighboring universities and colleges.
- C. Continue to work with school districts for shared use of school district park spaces for public recreational activities and the use of City parks to support school education purposes.
- D. Ensure that developers consult with the appropriate school district with the intent to mitigate a potential impact on school facilities prior to project approval by the City.

Maintaining Optimal Physical Condition of Water and Sewer Infrastructure

Water and sewer infrastructure is managed through the use of separate enterprise funds. As the water and sewer systems continue to age, deterioration will occur. Water system infrastructure is much more costly to construct and maintain than the sewer system. Water Master Plan (WMP) updates are performed typically every five years, with the last update adopted in 2016. The Sewer Master Plan study was last performed in 2003 and will be updated as needed to identify new major improvements to maintain and replace aging sewer infrastructure.

Goal PSI-6. The costs of water and sewer infrastructure improvements are addressed by benefitting development projects.

- A. Provide and maintain wastewater collection facilities which adequately convey wastewater generated by existing land uses and future projects while maximizing cost efficiency.
- B. Ensure that the costs of water and wastewater infrastructure improvements are borne by those who benefit, through adequate fees and charges or the construction of improvements.
- C. Explore additional funding sources to support necessary maintenance, expansion, and upgrades to the water and sewer systems.





Supporting Storm Drain System Upgrades and Maintenance

With anticipated growth, the City must assess the efficacy of the storm drain system. The existing system relies on pump stations, catch basins, and pipelines, in tandem with flood control channel improvements that should be evaluated and improved. The Storm Drain Master Plan identifies deficiencies within the system. New storm drain infrastructure will be required to reduce flooding and accommodate expected growth. Funding for this infrastructure comes from a variety of sources including impact fees, grants, and the General Fund; however, available funding is not adequate for all anticipated improvements. Additional funding is necessary to construct and maintain adequate drainage facilities.

Goal PSI-7. The flood control system supports permitted land uses while preserving public safety.

Policies

- A. Ensure that adequate storm drain and flood control facilities are provided and properly maintained.
- B. Maintain, upgrade, and expand flood control facilities and coordinate with the County to improve County storm drain and flood control facilities within the city.
- C. Monitor demands and manage future development and reuse projects and existing land uses to mitigate impacts and/or facilitate improvements to the storm drainage system.
- D. Ensure that the costs of infrastructure improvements to the storm drain system are borne by those who benefit, through adequate fees.
- E. Control surface runoff water discharge into the stormwater conveyance system to comply with the City's National Pollutant Discharge Elimination System Permit and other regional permits issued by the Santa Ana Regional Water Quality Control Board.
- F. Explore additional funding sources to support necessary maintenance, expansion, and upgrades to the storm drain system.

Improving, Replacing, and Funding Infrastructure

As health and safety standards evolve, infrastructure system designs and operations must also remain current and relevant. Much of the sewer, water, and roadway infrastructure in Huntington Beach is aging and will require improvements or replacement over time. As population increases and federal, state, and county funding becomes uncertain, the ability to provide adequate facilities and services may be diminished. Much of the future growth in the community is planned for arterial corridors, including Beach Boulevard, Edinger Avenue, Gothard Street, and portions of Pacific Coast Highway. Future street, sewer, and





water infrastructure will need to accommodate additional residents and businesses along these corridors, as in the northwest industrial area. The City should continue to explore creative and alternative means to fund the repair and expansion of public facilities and services.

Goal PSI-8. Coordinated infrastructure improvements are identified and funded.

Policies

- A. Prepare and adopt coordinated, citywide infrastructure master plans to establish priority and identify funding options for future capital improvement projects.
- B. Ensure that individual infrastructure maintenance and improvement projects are consistent with infrastructure master plans when infrastructure crosses multiple jurisdictions, and are completed in an efficient and cost-effective manner.
- C. Assess, and, if necessary, adjust development impact fees to ensure they are coordinated with infrastructure management plans and provide for ongoing and future infrastructure needs in an equitable manner.

Providing Solid Waste Collection and Disposal

Solid waste collection services provide several benefits to residents and businesses, including waste pickup, recycling services, green waste composting, a public dumpsite, and a compressed natural gas fueling station. Although waste generation in Huntington Beach is consistently below per capita standards established by the state, the many regional and national events and activities occurring in the city create a particular waste challenge. Trash is often left behind after these events, degrading visitors' and residents' beach experiences.

Goal PSI-9. An adequate and orderly system for solid waste collection and disposal meets the demands of new development and reuse projects, existing land uses, and special events.

- A. Ensure that new development and reuse projects provide adequate space for recycling and organics collection activities to support state waste reduction goals.
- B. Continue to exceed state solid waste reduction goals and work toward making Huntington Beach a zero-waste community.
- C. Maintain adequate solid waste collection, recycling, and disposal services to reduce traditional commercial, industrial, and residential waste.





- D. Improve solid waste collection and recycling services associated with special events and the availability of trash and recycling receptacles in public areas, including but not limited to Downtown, Beach Boulevard, City parks, and along the beach.
- E. Continue to expand household recycling services and provide public information regarding how community members can dispose of or recycle materials correctly.
- F. Reduce the amount of waste disposed per employee in the business community by improving commercial recycling services and providing information to support waste reduction.
- G. Expand the types of waste that can be recycled or otherwise diverted from the community waste stream, including organic materials in compliance with state law.
- H. Continue to provide public information regarding residential collection of household hazardous wastes including paint containers, electronics, household chemicals, motor oils, and pesticides, and promote development of facilities that collect these materials.

Meeting Dry Utility Needs

Dry utility services, such as electricity, natural gas, telephone, and data services, both meet basic needs and enhance quality of life for Huntington Beach residents. Supporting or providing enhanced data services in industrial and employment/technology areas is also an important economic development strategy. These services are provided by independent entities that set their own service standards and facility improvement strategies. The City works with service providers to ensure that goals and service expectations are met for both current and future development.

Goal PSI-10. Superior electricity, natural gas, telephone, and data services improve quality of life and support economic development.

- A. Continue to consult with dry utility service providers to ensure that the community's current and future needs are met.
- B. Continue to require utilities to be placed underground as part of new development projects.
- C. Support the use of new and emerging communication technologies.
- D. Promote provision of high-capacity data systems to support new development and reuse projects, particularly within the Research and Technology land use designation.
- E. Encourage integrated and cost-effective design and technology features within new development and reuse projects to minimize demands on dry utility networks.
- F. Create and maintain a "dig once" policy.





Financing Public Services and Infrastructure

Given the loss of redevelopment agency powers and the limited financing sources available for public infrastructure, it is important that the City manage and expand existing financial resources and explore the availability of new financing legislation and programs. The fiscal balance of the City is important to continue to maintain a high quality of public services and provide new programs as the need arises.

Goal PSI-11. The City's financial resources are managed and expanded to support infrastructure maintenance and expansion.

- A. Prepare a capital improvement program that identifies priorities for the expenditure of public capital resources in combination with private financing sources.
- B. Ensure that development impact fees keep pace with the cost of new infrastructure, and that new development pays its fair share.
- C. Consider a wide range of additional financing approaches, such as assessments, special taxes, and innovative techniques to improve and expand infrastructure systems.





This page is intentionally left blank.





VIII. Implementation



Introduction

This Implementation Plan will guide Huntington Beach elected and appointed officials, City staff, and members of the public in putting the goals and policies in the General Plan into effect. The Implementation Plan helps ensure that the General Plan leads to meaningful and applied actions.

Each implementation program is an item that requires City action, either alone or in collaboration with non-City organizations, including private businesses, nonprofit organizations, and federal/state/regional agencies. These implementation programs may be modifications to existing City processes or procedures, such as the review of new development projects. Other implementation programs can include physical changes to the city (such as new infrastructure), new types of work for City officials and staff, and new planning efforts. Depending on the type of implementation program, a funding source may have to be identified and secured before the program can be put into effect.



Implementation Programs

The implementation programs are organized by General Plan element. Within the section for each element, the implementation programs are organized into the following subsections based on the type of program and the nature of the City's responsibility. Not all element sections will have implementation programs for each of these subsections.

- I. City Plans, Ordinances, and Programs
- II. Capital Improvements
- III. **Development Review Requirements**
- IV. Interjurisdictional Coordination
- ٧. Public Outreach and Information

Each implementation program is directly linked to one or more of the General Plan policies. For each implementation program, this chapter also identifies the responsible City departments or agencies, the potential funding source or sources, and the recommended time frame.

These implementation programs may be used as the basis to prepare the Annual Report to the City Council on implementation of the General Plan, as required by the California Government Code. Many of these implementation programs may also serve as mitigation actions for the environmental impacts of the goals and policies in the General Plan, as identified by the General Plan Environmental Impact Report. As a result, the Annual Report can also help the City monitor implementation of the environmental mitigation actions, as required by the California Public Resources Code. In order to ensure that the implementation programs remain useful and consistent with City policy, they should be reviewed and updated as needed at appropriate times. The programs should be assessed concurrently with the annual Huntington Beach budget process, and whenever the General Plan is amended or updated.

The programs developed as part of the General Plan are organized by their corresponding element on the following pages.





Land Use Element

City Plans, Ordinances, and Programs

LU-P.1. Related Programs and Governmental Agencies

Continue to ensure compliance with federal, state, and local programs and regulations, including but not limited to the following:

- California Coastal Act and Local Coastal Program
- Regional Transportation Plan/Sustainable Communities Strategy
- Orange County Local Agency Formation Commission
- Huntington Beach Zoning and Subdivision Ordinance
- Huntington Beach Municipal Code

Departments: Community Development, Public Works, Police, Fire

Related Policies: LU-1.A, LU-1.B.

Funding Source: General Fund, development fees

Time Frame: Ongoing

LU-P.2. Surf City Culture and Identity

Continue to ensure that all new development and reuse projects in the city are designed in a manner that preserves the Surf City culture and identity. Encourage project applicants to emphasize the Surf City culture and identity through building orientation and design, landscaping, and other visual features. Provide specific guidelines and resources for how to incorporate the Surf City culture and identity into proposed developments. The Surf City theme should be emphasized in development projects throughout the city, not only in visitor-serving areas.

Departments: Community Development

Related Policies: LU-2.A, LU-2.B, LU-2.C, LU-2.D, LU-2.E,

Funding Source: General Fund, development fees

Time Frame: Ongoing

LU-P.3. Downtown Preservation

Continue to maintain the character, function, and visual feel of Downtown as the central commercial, entertainment, and recreational district in Huntington Beach. Allow for new development in Downtown that supports the area's characteristics and purpose. All design standards applied in Downtown, including building and architectural design guidelines,





street furniture standards, landscaping requirements, and sign standards, shall emphasize the character of Downtown and reinforce Downtown as distinct from the rest of the city. The Downtown area shall continue to emphasize pedestrian and bicycle-oriented transportation. Ensure that Downtown continues to meet the needs and expectations of residents, local businesses, and visitors.

Departments: Community Development, Office of Business Development, Public Works,

Police, Fire

Related Policies: LU-8.A, LU-8.B, LU-8.C, LU-8.D **Funding Source:** General Fund, development fees

Time Frame: Ongoing

LU-P.4. Residential Compatibility

Protect existing residential neighborhoods from increased development or redevelopment on surrounding parcels that may prove incompatible with residential uses, including development or redevelopment that generates substantial traffic volumes, produces noise or unpleasant odors, or involves the use of hazardous materials. Identify opportunities to convert existing land uses near residential neighborhoods that are incompatible with the neighborhood to more suitable uses. Ensure that all new homes in existing residential neighborhoods are compatible with surrounding structures, while still allowing for variations in appearance to maintain an interesting visual character.

Departments: Community Development, Police

Related Policies: LU-4.D, LU-7.A, LU-7.B,

Funding Source: General Fund

Time Frame: Ongoing

LU-P.5. Protection for Unique Areas

Ensure that the unique neighborhoods, corridors, and land use subareas within the planning area maintain their distinct character and visual appearance. All standards for building design, streetscape design, and landscaping in these areas should be consistent with the area's look and feel. Work closely with residents and business owners in these areas to ensure that new development proposals are consistent with the character and visual appearance of the neighborhood, corridor, or subarea.

Departments: Community Development, Public Works

Related Policies: LU-2.C, LU-2.E, LU-7.C, LU-7.D, LU-7.E, LU-7.F

Funding Source: General Fund, development fees, Business Improvement District

funding

Time Frame: Ongoing





LU-P.6. Visual Identity

Develop and enforce standards to establish and maintain a unique visual identity in different portions of the planning area. Consider building designs and architectural treatments, street furniture, edge and entry treatments, street trees, planters and landscaping features, signs and wayfinding features, and other visual elements. Design elements should be consistent throughout the area and not create visual clutter. Work to avoid new development and visual elements that conflict with these standards.

Departments: Planning Division, Public Works

Related Policies: LU-2.C, LU-2.E, LU-1.A, LU-7, B

Funding Source: General Fund, development fees, Business Improvement District

funding

Time Frame: Ongoing

LU-P.7. Infill and Redevelopment

Encourage reinvestment and redevelopment on vacant and underutilized parcels, particularly along key corridors and in key subareas. Work with property owners and neighbors to identify the most appropriate uses for these parcels. If neighborhoods lack specific important services or features, encourage vacant and underutilized parcels to be developed to provide these services or features. Maintain a database of vacant and underutilized parcels.

Departments: Planning Division, Office of Business Development

Related Policies: LU-1.C, LU-12.B

Funding Source: General Fund, Business Improvement District funding

Time Frame: Ongoing

LU-P.8. Mixed-Use Development

Promote mixed-use development that combines residential and commercial uses such as retail and office space. Mixed-use development should be concentrated along major corridors and in suitable neighborhoods such as Downtown. Ensure that mixed-use areas are easily accessible by multiple modes of transportation, including walking, bicycling, and public transit. Provide a wide range of residential units at different sizes and prices to make mixed-use developments a viable option for a diverse range of community members. Commercial uses in mixed-use areas should provide jobs to residents of the areas as well as attracting customers from other locations in the planning area and from surrounding communities.

Departments: Community Development, Office of Business Development, Public Works

Related Policies: LU-4.A, LU-4.B, LU-8.A, LU-8.B

Funding Source: General Fund, Business Improvement District funding





LU-P.9. Accessibility of New Development

Focus new development, particularly larger developments with a high number of residents, employees, customers, and/or visitors, in areas that are easily accessible by alternative modes of transportation, including walking, bicycling, and transit use. Work with applicants to include project improvements that support alternative transportation. Consider the ease of reaching other destinations from the proposed development using alternative transportation, and identify opportunities to improve local and regional transportation networks. Coordinate with the Orange County Transportation Authority to ensure consistency between proposed land uses and changes to transit operations.

Departments: Planning Division, Public Works

Related Policies: LU-3.B, LU-4.B, LU-13.D, CIRC-3.D, CIRC-6.C

Funding Source: General Fund, development fees

Time Frame: Ongoing

LU-P.10. Affordable Housing

Ensure that Huntington Beach has a sufficient supply of housing for individuals and families of all incomes, including extremely low- and very low-income residents. Meet or exceed the target number of affordable units specified in the city's Regional Housing Needs Allocation. Integrate affordable housing into mixed-use projects and market-rate residential developments. Locate affordable housing near high-quality jobs, and ensure that affordable housing sites have sufficient access to alternative modes of transportation.

Departments: Community Development, Office of Business Development

Related Policies: LU-4.A, LU-4.B, LU-4.E, LU-14.C **Funding Source:** General Fund, development fees

Time Frame: Ongoing

LU-P.11. Industrial Expansion and Redevelopment

Attract new businesses to the city's industrial areas, and encourage existing businesses to expand. Work with property owners in industrial areas to ensure that buildings provide the amenities necessary to attract and retain high-value tenants. Amend zoning and development codes to remove regulatory barriers that may prevent businesses in new and emerging fields from locating in Huntington Beach. Identify opportunities to allow businesses that support industrial uses and provide services to employees to locate in or near industrial areas. Ensure that new and expanded businesses do not create conflicts with surrounding land uses and community character, and work with businesses to reduce existing conflicts. Require preparation of a health risk assessment for new uses located in the Industrial and Research and Technology designations that potentially generate diesel particulate matter emissions and potential toxic air contaminant (TAC) emitters located





within 1,000 feet of existing sensitive uses, and use recommendations outlined in the health risk assessment to determine siting limitations and mitigation approaches.

Departments: Community Development, Office of Business Development

Related Policies: LU-5.A, LU-5.B, LU-5.C, LU-5.D, LU-5.E

Funding Source: General Fund, Business Improvement District funding

Time Frame: Ongoing

LU-P.12. Technology and Innovation Subareas

Recruit and incentivize new business uses in the Northwest Industrial and Gothard Street Subareas suitable for light industrial and manufacturing activities, with an emphasis on high-tech businesses, research and development, small-scale advanced manufacturing, and similar land uses, as well as supportive uses that provide basic services to employees. Buildings in these subareas should be flexible enough to support a variety of potential tenants and provide the amenities sufficient to attract and retain desired types of businesses, including necessary energy and communication infrastructure. Ensure that Technology and Innovation Subareas are easily accessible by multiple modes of transportation, including walking and biking.

Departments: Community Development, Office of Business Development

Related Policies: LU-9.A, LU-9.B, LU-9.C, LU-9.D

Funding Source: General Fund, Business Improvement District funding

Time Frame: Ongoing

LU-P.13. Intersection Enhancement Subareas

Develop a City-defined landscape program for major intersections in the Intersection Enhancement Subareas to unify the landscaping between individual developments and further enhance the aesthetic appeal of the areas. Develop design guidelines that define appropriate colors, materials, signage, and architectural treatments for commercial developments located at major intersections to enable developments to become more unified as new uses are established and properties are updated over time. Work with individual property owners to create additional pedestrian connections and modify the circulation patterns in parking areas to create pathways for pedestrians to access the site and internal uses. Identify and remove existing curb cuts that no longer meet current safety requirements, and work with property owners to develop new circulation patterns within sites affected by this activity.

Departments: Planning Division, Public Works, Office of Business Development

Related Policies: LU-7.D, LU-.E, LU-7.F

Funding Source: General Fund





LU-P.14. Housing for Industrial and Research/Technology Employees

Consider allowing housing near Industrial and Research/Technology areas to create convenient residences for employees in these land uses. Ensure that any housing in or near these areas does not conflict with Industrial or Research/Technology activities, and is not exposed to any potential undesirable impacts that may be generated by these land uses. Avoid building housing on land that is more suitable for nonresidential land uses within the Industrial or Research/Technology zones. Consider opportunities to locate housing above nonresidential buildings.

Departments: Community Development, Office of Business Development

Related Policies: LU-4.E

Funding Source: General Fund

Time Frame: Ongoing

LU-P.15. Commercial Revitalization

Identify and improve struggling commercial areas within the planning area. Work with property owners and local business groups to select and implement revitalization strategies, including renovations to the building stock, changes to the streetscape and landscaping, and improved access for multiple modes of transportation. Determine which types of land uses are most suitable for the area, including the potential to build residential units above commercial properties. Use existing assets such as historic buildings, and consider how older buildings may be renovated to support new land uses. Pursue all available sources of funding to provide economic assistance to businesses in revitalized areas.

Departments: Planning Division, Office of Business Development, Public Works

Related Policies: LU-12.A, LU-12.B, LU-13.C

Funding Source: General Fund, grant funding, Business Improvement District funding

Time Frame: Ongoing

LU-P.16. Business Improvement Districts

In coordination with business groups, establish Business Improvement Districts or other economic development strategies to generate funding for area improvements that will result in increased customers and economic activity. Coordinate improvements funded through Business Improvement Districts to ensure that all businesses are benefiting. Identify opportunities to use Business Improvement Districts for improvements that result in long-term improved economic sustainability, including resource conservation programs and hazard resiliency.

Departments: City Manager's Office, Office of Business Development

Related Policies: LU-12.D

Funding Source: General Fund, grant funding, Business Improvement District funding





LU-P.17. Residential Property Maintenance

Provide residential property owners with resources to support preserving a high quality of housing, including available economic incentives, financing programs, and assistance in obtaining the necessary City permits. These items should allow residential property owners to maintain safe, healthy, and comfortable living environments, as well as provide opportunities for improvements such as energy efficiency retrofits. Ensure that support and incentives are also made available to residential landlords to maintain and improve the quality of rental stock, while maintaining affordability.

Department: Building Division, Code Enforcement Division, Office of Business

Development, Police, Fire Related Policies: LU-4.C

Funding Source: General Fund, grant funding

Time Frame: Ongoing

LU-P.18. Economic Development Assistance

Maintain existing economic development programs, and identify and implement opportunities to expand and improve these programs. Through economic development assistance, emphasize businesses that provide for unmet or undermet needs in Huntington Beach, provide high-quality jobs, support new and emerging industries, or provide economic opportunities to historically underrepresented persons such as ethnic minorities, women, or disabled individuals. Coordinate with local business groups and academic institutions to improve these programs and expand their reach. Monitor and report on the effectiveness of economic development assistance programs, and revise programs as needed to improve success.

Department: Office of Business Development Related Policies: LU-10.A, LU-10.D, LU-11.C

Funding Source: General Fund, grant funding, Business Improvement District funding

Time Frame: Ongoing

LU-P.19. Local and Diverse Economy

Encourage the establishment and expansion of businesses which provide an increase in job type diversity and support a healthy jobs-housing balance in the planning area. Emphasize jobs for people with a wide variety of education backgrounds, skills, and passions. Work to ensure that jobs provide a sufficient wage, allowing employees to live near their workplace, and that such jobs include opportunities for advancement.

Departments: Planning Division, Office of Business Development

Related Policies: LU-11.B, LU-13.A, LU-13.B

Funding Source: General Fund, grant funding, Business Improvement District funding





LU-P.20. Commercial Diversity

Work with the local business community to ensure that retail and other commercial facilities in Huntington Beach meet resident needs by providing desired types of goods and services at reasonable prices. Consider the varying commercial needs of residents, including lower-income individuals, minority groups, and non-traditional families. Identify opportunities to meet commercial demand from surrounding communities and to attract customers from a wider region. Encourage businesses to fill unmet commercial demand through economic incentives and favorable development policies.

Departments: Office of Business Development **Related Policies:** LU-11.A, LU-11.B, LU-11.C

Funding Source: General Fund, Business Improvement District funding

Time Frame: Ongoing

LU-P.21. Retail Sales Monitoring

Track all taxable retail sales in Huntington Beach, and publicize this information regularly to City officials, members of the public, and the local business community. Use this information to determine the amount of retail leakage (consumers purchasing items from retailers outside of the city) for key categories. Work with business groups to determine the causes of retail leakage, including why consumers may favor a store in another community, and if there is residual demand for retail goods that are not met within Huntington Beach. Identify strategies to address the causes of retail leakage.

Departments: City Treasury, Office of Business Development

Related Policies: LU-11.A

Funding Source: General Fund

Time Frame: Ongoing

LU-P.22. Closure of Surplus School Sites

In the event of the closure of a surplus school site, work with school districts to develop and implement alternative uses for the property. Consistent with state law, explore with the school districts alternative uses for the site that serve a public benefit, including other education facilities, community centers, recreation facilities, and open space, although all uses should be considered.

Departments: Community Services, Planning Division, City Manager's Office, Office of

Business Development

Related Policies: LU-6.A, LU-6.B, LU-6.C

Funding Source: General Fund

Time Frame: Ongoing

HB 8-10



LU-P.23. Overnight Accommodations

Encourage additional expansion of overnight accommodations in Huntington Beach, consisting of both new businesses and expansion and renovation of existing properties. Identify suitable locations for new and expanded accommodations, and work with property owners and business groups to consider whether lodging on these properties is feasible. Support the inclusion of smaller lodging uses as part of mixed-use developments. Ensure that the supply of lodging in Huntington Beach meets the needs of different types of visitors, including vacationing families, single adults and couples, and business travelers. Support a range of different lodging options at various price points. Explore the feasibility of short-term vacation rentals.

Departments: Community Development, Office of Business Development

Related Policies: LU-14.A

Funding Source: General Fund, Business Improvement District funding

Time Frame: Ongoing

LU-P.24. Shuttle Services

Explore creating a free or low-cost shuttle service connecting the shore and Downtown to major shopping districts, hotels, and other visitor destinations. The shuttle should have sufficient hours of operation and arrive frequently enough to offer a viable alternative to car travel. As funding allows, adjust the operating schedule to support employee commutes to visitor destinations. The shuttle service and supportive infrastructure (such as stops) should be comfortable, safe, visually engaging, and marketed with unique branding.

Departments: Office of Business Development, Public Works

Related Policies: LU-12.C, LU-13.D

Funding Source: General Fund, development fees, Business Improvement District

funding

Time Frame: Consider feasibility by 2020

Capital Improvements

LU-P.25. Pedestrian Networks

Maintain a high degree of pedestrian connectivity between new development and other parts of the planning area through an extensive, high-quality trail and sidewalk network. Trails and sidewalks should be safe, attractive, and comfortable to use. The pedestrian network should connect to major destinations and reach throughout Huntington Beach, making it convenient for residents and visitors throughout the planning area.





Department: Public Works

Related Policies: LU-3.B, LU-7.D, LU-8.A, LU-12.C

Funding Source: General Fund, development fees, Business Improvement District

funding, grant funding **Time Frame:** Ongoing

LU-P.26. Bicycle Infrastructure

Continue to install new bicycle lanes throughout the planning area to connect all parts of Huntington Beach. Emphasize connections to major destinations, including the shore, Downtown, commercial hubs, and major residential and employment centers. Promote dedicated bike lanes as opposed to shared traffic lanes, and identify opportunities to install grade-separated (Class I) bike trails and innovative bike paths such as counterflow bike trails, bike boulevards, and raised bike lanes. Install supportive infrastructure such as bicycle racks and lockers along with new bike lanes. Coordinate with bicycle rider groups to identify opportunities for improvement.

Department: Public Works, Fire

Related Policies: LU-3.B, LU-8.A, LU-13.D, CIRC-6.A, CIRC-6.C

Funding Source: General Fund, development fees, Business Improvement District

funding, grant funding **Time Frame:** Ongoing

Development Review Requirements

LU-P.27. Land Use and Urban Design Standards

Continue to require all development to be consistent with the standards in the Land Use Map, Urban Design Plan, other components of the General Plan, Urban Design Guidelines, and other City policies. Development shall comply with all standards for land use, density and intensity, environmental protection, open space, and other requirements. Periodically review and update Urban Design Guidelines to guide new development in the city. Clearly communicate all requirements to project applicants throughout the application and review process, and ensure that City staff and officials have sufficient authority to enforce standards.

Departments: Planning Division **Related Policies:** LU-1.A, LU-3.A

Funding Source: General Fund, development fees





LU-P.28. Site Design and Quality

Ensure that all new and renovated/expanded buildings in Huntington Beach continue to meet the community's high standards for architectural design, site planning, and construction and operation. Enforce minimum standards for resource conservation, including green building requirements, water conservation, and stormwater management, and encourage project applicants to exceed minimum requirements. Avoid projects that are visually unappealing or incompatible with community character.

Departments: Community Development, Public Works

Related Policies: LU-1.D

Funding Source: General Fund, development fees

Time Frame: Ongoing

LU-P.29. Commercial Building Maintenance

Continue to maintain a high degree of safety for all commercial buildings, including retail spaces, offices, restaurants, entertainment venues, and lodging. Property owners and operators shall continue to comply with all mandatory maintenance requirements and other standards. Promptly investigate all reports of unsafe conditions, and require property owners and operators to conduct maintenance and make other improvements as needed. Hold owners and operators who fail to maintain high safety standards accountable through all available legal mechanisms. Work with local business groups to provide outreach, resources, and financial assistance to support compliance with maintenance and safety standards.

Departments: Fire, Building Division, Code Enforcement, Office of Business

Development

Related Policies: LU-12.B

Funding Source: General Fund

Time Frame: Ongoing

LU-P.30. Development Agreements

Where appropriate, use development agreements as binding implementation tools. Development agreements are authorized by state law to enable a city to enter into a binding contract with a developer that assures the city as to the type, character, and quality of development and additional benefits that may be contributed and assures the developer that the necessary development permits will be issued regardless of changes in regulations.

Departments: Community Development

Related Policies: LU-2.A, LU-8.C

Funding Source: General Fund, development fees

Time Frame: Ongoing

City of Huntington Beach General Plan (Adopted October 2, 2017)





Interjurisdictional Coordination

LU-P.31. Marketing and Visibility

In coordination with regional and statewide efforts, market Huntington Beach to increase visibility and support population growth, business development, and tourism. Seek to appeal to a wide audience in terms of geographic location, socioeconomic demographics, and business type. Monitor the effectiveness of a marketing campaign and make adjustments as needed, including emphasizing new destinations and opportunities in Huntington Beach. Involve community residents and local business groups in developing marketing materials.

Departments: City Manager's Office, Office of Business Development

Related Policies: LU-11.A

Funding Source: General Fund

Time Frame: Ongoing

LU-P.32. Workforce Coordination

Work with federal, state, and regional agencies to develop and support programs that encourage increased workforce training and hiring. Ensure that such programs support industries currently present in Huntington Beach as well as new and emerging industries that are suitable for the community, including software development, sustainability-focused industries, and small-scale manufacturing. Workforce programs should provide opportunities for high-paying jobs with career growth to people with a range of skill sets and education. Coordinate with local education institutions and workforce training agencies. Publicize available workforce training programs through in-person workshops and events, print media, radio, television, and online/social media, and ensure materials are made available in multiple languages.

Department: Office of Business Development

Related Policies: LU-10.C

Funding Source: General Fund, grant funding





Circulation Element

City Plans, Ordinances, and Programs

CIRC-P.1. Related Programs and Governmental Agencies

Continue to ensure compliance with federal, state, and local programs and regulations, including but not limited to the following:

- Sustainable Communities Act
- Measure M
- Orange County Congestion Management Program

Departments: Planning Division, Public Works

Related Policies: CIRC-1.E, CIRC-5.B

Funding Source: General Fund, development fees

Time Frame: Ongoing

CIRC-P.2. Development Monitoring

Review an annual summary of development in recent years to determine immediate and cumulative impacts of proposed developments on the city's transportation system.

Departments: Planning Division, Public Works

Related Policies: CIRC-1.B

Funding Sources: General Fund

Time Frame: Annually

CIRC-P.3. Emergency Response Times

Monitor and analyze emergency response time information to determine locations where response times are deficient, and evaluate and implement system improvements needed to improve response when possible.

Departments: Public Works, Fire, Police

Related Policy: CIRC-9.A

Funding Sources: General Fund

Time Frame: Annually



CIRC-P.4. Emergency Access

Provide approved means for emergency vehicles to access and turn around on all streets.

Departments: Public Works, Planning Division, Fire, Police

Related Policy: CIRC-9.B

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.5. Emergency Management and Homeland Security Program

Implement the City's Emergency Management and Homeland Security (EMHS) Program according to requirements and provisions of the State Emergency Management System (SEMS). Ensure that the program establishes community evacuation routes and emergency shelter facilities, and is easily available to the public.

Departments: Fire, Police, Public Works **Related Policies:** CIRC-9.A, CIRC-9.C

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.6. Neighborhood Circulation Improvements

Prepare and maintain a Neighborhood Traffic Management Technical Administrative Report (TAR) that identifies needed methods to address cut-through traffic volumes, high speeds, truck traffic intrusions, demonstrated accident history, parking shortages, or school-related traffic congestion in city neighborhoods such as:

- Discouraging creation of new major roadway connections that would adversely impact the character of existing residential neighborhoods.
- Continuing to develop and implement parking and traffic control plans for neighborhoods that are adversely impacted by spill-over parking and traffic, as feasible.
- Implementing the Residential Parking Permit Program (Municipal Code Chapter 10.42) in residential areas as prescribed in the Municipal Code.
- Considering appropriate traffic-calming measures such as raised medians and provision of bike or transit lanes to mitigate problems posed by schools and other land uses that generate high traffic volumes at specific times. Provide solutions to mitigate these problems as warranted by local studies.

Department: Public Works, Fire **Related policies:** CIRC-1.H **Funding Source:** General Fund

Time Frame: Report completed by 2020, revised annually





CIRC-P.7. Bikeway Plan

Implement and update Huntington Beach's Bikeway Plan to plan and prioritize facilities for both recreational cyclists and commuters, including:

- Reviewing neighboring jurisdictions' bikeway plans every five years to ensure consistency.
- Linking bicycle routes with bus routes to promote an interconnected system.
- Evaluating potential for a future bicycle parking structure in or near Downtown.
- Ensuring compliance with ADA accessibility standards.

Department: Public Works

Related Policies: CIRC-5.B, CIRC-6.A, CIRC-6.B, CIRC-6.C, CIRC-6.D, CIRC-6.E,

CIRC-6.F

Funding Source: General Fund

Time Frame: Plan update every five years, implementation ongoing

CIRC-P.8. Transportation Demand Management Ordinance

Create and implement programs that will aid in improving air quality by reducing motor vehicle trips, such as those programs recommended by the SCAQMD, required by the Transportation Demand Management (TDM) ordinance (Zoning Code Title 23, Chapter 230, Section 230.36), or funded by the Mobile Source Air Pollution Reduction Ordinance vehicle fee allocation. The TDM ordinance requires employers of 100 or more persons to support alternative forms of transportation by providing appropriate facilities, including showers and lockers, parking for vanpools, bicycle parking, and passenger loading areas.

Departments: Planning Division, Public Works

Related Policies: CIRC-5.A

Funding Source: General Fund, grant funds

Time Frame: Ongoing

CIRC-P.9. Scenic Corridors

Continue to maintain scenic corridors and seek grant funding to support their maintenance. Prepare and maintain a Scenic Corridors TAR describing proposed improvements such as landscaped medians and enhanced landscaping.

Departments: Public Works, Planning Division, Community Services **Related Policies:** CIRC-7.A, CIRC-7.B, CIRC-7.C, CIRC-7.E, CIRC-7.F

Funding Source: General Fund, grant funding

Time Frame: Scenic Corridors Technical Administrative Report completed by 2020,

ongoing





CIRC-P.10. Waterborne Transportation

Continue to support the maintenance of existing waterways and encourage private development of waterborne transportation for recreation or commuting.

Departments: Planning Division, Community Services, Public Works

Related Policy: CIRC-6.1

Funding Source: General Fund

Time Frame: Ongoing

Capital Improvements

CIRC-P.11. Capital Improvement Program

Use the City's 5-year Capital Improvement Program (CIP) process to prioritize, fund, and build required roadway and bikeway improvements, and to address phasing and construction of traffic infrastructure throughout the city.

To prioritize these improvements, the City's TARs will be reviewed and updated regularly with current citywide traffic counts for roadway links and intersections. Roadways and intersections that are approaching the LOS standards stated in Policy CIRC-1.B should be prioritized appropriately for improvements including road widening, paving, parking restrictions, or intersection improvements.

Departments: Public Works, City Council, Community Development

Related Policies: CIRC-1.A, CIRC-1.B, CIRC-1.C

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.12. Principal and Secondary Intersection Improvements

Prepare and maintain a Principal and Secondary Intersections TAR that will include information such as roadway dimensions, a listing of intersections and roadway improvements required to transition from the current system of roadways to full implementation of the Arterial Highway Plan, current citywide traffic counts for roadway links and intersections, and other useful traffic-related information. Content included will be based on need, as determined by the Director of Public Works. Updates to the TAR will be coordinated annually in tandem with the Capital Improvement Program. The TAR will be available for use by City staff and decision-makers, and should be available for review by the public. Include TAR information in the City's GIS system as appropriate and feasible.

Departments: Public Works, City Council, Police, Fire

Related Policies: CIRC-1.C, CIRC-1.D

Funding Source: General Fund

Time Frame: Annually

HB



CIRC-P.13. Traffic Technology

Use appropriate technologies to improve traffic flow and reduce and manage congestion, such as:

- Intelligent transportation system (ITS) measures to reduce congestion at intersections, as applicable.
- Synchronizing traffic signals along primary and secondary arterials, particularly along streets with clustered intersections.
- Installing and maintaining preemptive emergency signaling devices for each direction at appropriate traffic signal-controlled intersections in the city.
- Developing a citywide traffic management center.

Department: Public Works

Related Policies: CIRC-1-I, CIRC-3.F, CIRC-9.A

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.14. Transit

Encourage and support development of convenient and attractive transit facilities in addition to the Golden West Transportation Center. Support efforts to make both new and existing facilities available and accessible to the disabled and seniors.

Departments: Planning Division, Public Works

Working with: Orange County Transportation Authority

Related Policies: CIRC-3.D, CIRC-3.E, CIRC-3.F, CIRC-4.C, CIRC-4.D, CIRC-4.E, PSI-

4.E

Funding Source: General Fund, grant funds, development fees

Time Frame: Ongoing

CIRC-P.15. Complete Streets Priority Routes

Identify priority routes for certain modes of transportation as appropriate to guide the development of streets that are safe and accessible to all users.

Departments: Planning Division, Public Works

Related Policies: CIRC-5.B, CIRC-6.A, CIRC-6.B, CIRC-6.H

Funding Source: General Fund

Time Frame: Identify routes by 2020





CIRC-P.16. Pedestrian Facilities and Enhancement Zones

Maintain existing pedestrian facilities and require new development to provide accessible pedestrian walkways between developments, schools, and public facilities. Review potential areas in or near Downtown, adjacent to the beach, and along portions of Beach Boulevard for designation as pedestrian enhancement zones. Prepare and maintain a Pedestrian Facilities TAR and other pedestrian facility related analyses describing the location and proposed improvements in enhancement zones. Such improvements may include wider sidewalks, enhanced or new crosswalks, trees, pedestrian-scale lighting, or traffic-calming measures. All improvements shall comply with ADA accessibility standards. Exact improvements will vary depending on location.

Departments: Planning Division, Public Works

Working With: School districts

Related Policies: CIRC-5.B, CIRC-5.D, CIRC-5.E, CIRC-6.A, CIRC-6.B, CIRC-6.C,

CIRC-6.E

Funding Source: General Fund

Time Frame: Prepare Pedestrian Facilities Technical Administrative Report by 2020,

ongoing implementation

CIRC-P.17. Equestrian Facilities

Continue to ensure that trails and other equestrian facilities are maintained by the responsible party and expanded as opportunities arise.

Departments: Community Services, Public Works

Related Policy: CIRC-6.H

Funding Source: General Fund

Time Frame: Ongoing

Development Review Requirements

CIRC-P.18. Site Development Permit Process and CEQA

Utilize the site development permit process and the California Environmental Quality Act (CEQA) to:

- Review potential impacts of proposed projects to the circulation system and require appropriate mitigation measures as required by CEQA.
- Require preparation of traffic impact studies as described in the City's traffic study quidelines.
- Require new development proposals to consider and minimize vehicle miles traveled.





- Review new development proposals to mitigate the impacts of traffic generation, including pedestrian, bicycle, and vehicular conflicts, to ensure that the City's circulation system meets appropriate safety standards.
- Review driveways in proposed developments to ensure they are located in such a way as to facilitate smooth, efficient, and controlled traffic flow.
- Review new development and redevelopment proposals for mitigation of potential impacts of transportation-related sources of water pollution, particularly in urban runoff.

Departments: Planning Division, Public Works

Related Policies: CIRC-1.F, CIRC-2.C, CIRC-3.D, CIRC-6.C, CIRC-7.E

Funding Source: General Fund, development fees

Time Frame: Ongoing

CIRC-P.19. Access Control

Locate new developments and their access points in such a way that vehicular traffic is not encouraged to use local residential streets. Require, where appropriate, an irrevocable offer of mutual access across adjacent nonresidential properties fronting arterial roadways and require use of shared driveway access. Minimize driveway access points, require driveways to be wide enough to accommodate traffic from and to arterial roadways, and establish mechanisms to consolidate driveways where appropriate.

Departments: Planning Division, Public Works

Related Policies: CIRC-1.G, CIRC-1.H **Funding Source:** Development fees

Time Frame: Ongoing

CIRC-P.20. Alternative Transportation Mode Design Features

Require new development to incorporate transit-oriented design features and attractive, accessible, and appropriate transit, bicycle, equestrian, and pedestrian amenities to promote and support public transit and alternate modes of transportation, including but not limited to:

- Requiring bus turn-outs and shaded bus stops where appropriate.
- Requiring new development to provide convenient and well-lit pedestrian facilities consistent with applicable standards.
- Requiring that all new bicycle trip destinations, including schools, shopping areas, and transit stops, be equipped with bicycle racks and/or bicycle lockers.
- Continuing to allow equestrian access to the beach.





- Encouraging developments to incorporate easements and/or rights-of-way along flood control channels, public utilities, railroads, and streets for the use of bicyclists and/or pedestrians.
- When possible, designing bicycle lanes and sidewalks with barriers to partially or fully separate active transportation users from vehicle traffic.

Departments: Planning Division, Public Works

Related Policies: CIRC-3.D, CIRC-3.E, CIRC-6.C, CIRC-6.G, CIRC-6.H

Funding Source: Development fees

Time Frame: Ongoing

CIRC-P.21. Transportation Demand Management and Air Quality

Require new employers to comply with the City's TDM ordinance and the Environmental Resources and Conservation Element of the General Plan.

Department: Planning Division

Related Policies: CIRC-5.A, CIRC-6.C Funding Source: Development fees

Time Frame: Ongoing

CIRC-P.22. Scenic Corridor Development Review

Through the development review process for proposed development along scenic corridors:

- Require analysis evaluating the impacts on public views to the ocean.
- Require developments adjacent to designated scenic and landscape corridors to incorporate and maintain landscaping that is compatible with the visual character of the corridor and supporting scenic features.
- Utilize the City's Design Review Board to evaluate developments within designated scenic corridors.
- Require that open space easements be dedicated to the City, master homeowners association, or other responsible party as a condition of the approval for all new projects proposed in natural open space areas along scenic corridors.

Department: Planning Division, Public Works

Related Policies: CIRC-7.B, CIRC-7.C, CIRC-7.D, CIRC-7.E, CIRC-7.F

Funding Source: Development fees





CIRC-P.23. Pacific Coast Highway Billboards

Continue to pursue the removal of and prohibit new billboards along Pacific Coast Highway. Continue to remedy problems or hindrances which prohibit Pacific Coast Highway from qualifying as a State Scenic Highway.

Department: Planning Division **Related Policies:** CIRC-7.A **Funding Source:** General Fund

Time Frame: Ongoing

CIRC-P.24. Helistops/Heliports and Building Height Restrictions

Ensure that each applicant seeking approval for the construction of (a) a heliport or helistop or (b) a structure more than 200 feet above ground level complies fully with federal and state permit procedures provided for by law, with referral requirements of the Orange County Airport Land Use Commission (ALUC), and with all conditions of approval imposed or recommended by the Federal Aviation Administration (FAA), by the ALUC, and by the Caltrans Division of Aeronautics, including the filing of a Form 7480-1 (Notice of Landing Area Proposal) with the FAA. This requirement shall be in addition to all other requirements of the City.

Departments: Planning Division, Public Works

Related Policy: CIRC-4.G

Funding Source: Development fees

Time Frame: Ongoing

Interjurisdictional Coordination

CIRC-P.25. Caltrans

Coordinate with Caltrans regarding the following actions:

- Administration of state highways within the planning area.
- Approval of heliports and helistops.
- Achievement of State Scenic Highway status for Pacific Coast Highway.
- Mutual establishment of clear policies and objectives for meeting regional and local transportation needs.
- Development of a plan to reduce dry weather urban runoff and pollutants from highway and street storm flow runoff.
- Coordination on all plans, activities, and projects which may affect state roadway facilities.





• Improvement of signal operations on state highways in the city, including the development and implementation of effective signal synchronization programs and advanced signal communications infrastructure.

Investigate the potential for Caltrans to relinquish Beach Boulevard and Pacific Coast Highway to the City.

Departments: Public Works, Planning Division, City Council

Related Policies: CIRC-1.J, CIRC-5.C

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.26. Southern California Association of Governments

Participate with the Southern California Association of Governments and represent the City's interests in development of regional transportation initiatives such as the Regional Transportation Plan.

Departments: Public Works, Planning Division, City Council

Related Policies: CIRC-5.C Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.27. South Coast Air Quality Management District

Work closely with the South Coast Air Quality Management District to improve air quality and incorporate the Air Quality Management Plan into the City's practices and programs.

Department: Public Works, Planning Division, City Council

Related Policies: CIRC-5.C
Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.28. Orange County Transportation Authority

Work with the Orange County Transportation Authority (OCTA) to achieve the following:

- Maintain consistency with the County Master Plan of Arterial Highways (MPAH) within the city.
- Pursue amendment of the MPAH to reclassify or delete street segments as identified in Figure CIRC-3. Implement the Congestion Management Program (CMP) in the city.
- Expand and improve bus service throughout the city, and between Huntington Beach and other communities.
- Encourage provision of attractive and appropriate transit amenities, including shaded bus stops.





- Provide special transit services (such as direct shuttle or dial-a-ride services).
- Support and implement the OCTA Commuter Bikeways Strategic Plan, and participate in future updates and revisions to the plan.
- Plan and implement an urban rail system that links the city to central Orange County and Los Angeles County.
- Investigate the development of a transportation center in the coastal area.
- Plan and implement Measure M and M2 projects.
- Maintain consistency with OCTA's Long Range Transportation Plan.
- Review, every five years, the Orange County Master Plan of Bikeways to ensure consistency. Update Huntington Beach's Bike Plan, as appropriate.
- Work with OCTA to study vehicle-to-vehicle and vehicle-to-infrastructure technology.
- Support the OC Loop project.
- Pursue Measure M Project S funding to link the Goldenwest Transit Center to the resort area of Anaheim as funds are available.

Departments: Public Works, City Council

Related Policies: CIRC-1.E, CIRC-4.B, CIRC-5.C

Funding Source: General Fund, federal New Starts, state proposition funding, Measure

M2

Time Frame: Ongoing

CIRC-P.29. Future Santa Ana River Bridge Crossings

Participate in ongoing regional planning efforts regarding future Santa Ana River bridge crossings.

Departments: Public Works, City Council

Related Policy:

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.30. Single-Occupancy Vehicle Legislation

Remain aware of national, state, and regional legislation directed at reducing use of single-occupancy vehicles, and do what is feasible to support it.

Departments: Public Works, City Manager's Office

Related Policy: CIRC-5.A

Funding Source: General Fund





CIRC-P.31. Adjacent Jurisdictions and Transportation Agencies

Work with adjacent jurisdictions, including the Cities of Costa Mesa, Fountain Valley, Newport Beach, Seal Beach, and Westminster and Orange County, to ensure that traffic impacts do not adversely impact Huntington Beach. Continue to work with other public agencies to ensure that the city's circulation and transportation system is efficient and meets applicable safety standards.

Engage in discussions with Caltrans, OCTA, and Orange County regarding the City assuming jurisdictional control of key areas, and being involved in the decision-making processes of areas in the city which are to remain under Caltrans jurisdiction.

Departments: Public Works, Planning Division, City Council

Related Policy: CIRC-1.E

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.32. Transit System Coordination

Encourage the inclusion of facilities that transport bicycles, surfboards, and other beach activity equipment on public transit vehicles (both fixed route and paratransit) wherever possible. Work to make routes and vehicles available and accessible to the disabled and seniors.

Departments: Public Works

Related Policies: CIRC-4.D, CIRC-4.F

Funding Source: General Fund

Time Frame: Ongoing

CIRC-P.33. Preserve Abandoned Rights-of-Way

Continue to work with rail agencies to reserve existing and abandoned rights-of-way for future transportation uses, such as transit or bicycle facilities.

Department: Public Works **Related Policies:** CIRC-4.A

Funding Source: General Fund





CIRC-P.34. Undergrounding Utilities

Continue to work with utility service providers to underground wires and transmission lines, especially within scenic corridors.

Department: Public Works **Related Policy:** CIRC-7.F

Funding Source: General Fund

Time Frame: Ongoing

Ongoing Education and Outreach

CIRC-P.35. Transportation Management Outreach

Promote, publicize, and encourage the use of transportation management strategies that will aid in meeting South Coast Air Quality Management District mandates and guidelines, including:

- Use of low emission and alternative fuel vehicles in the city, including neighborhood electric vehicles (NEVs).
- Use of carpools, vanpools, walking, and multi-occupancy programs for midday uses.
- Employers creating Commuter Rideshare Matching Services or databases containing employees' zip codes and commuting preferences to be provided to interested participants.
- Employers participating in Guaranteed Ride Home programs that provide rides home to employees.
- Employers using flex time, staggered working hours, and other means to reduce commuter traffic during peak hours.
- Creating NEV roadway systems and encouraging electrical vehicle charging stations.

Continue to participate with the Southern California Association of Governments in ongoing updates to the Regional Transportation Plan/Sustainable Communities Strategy.

Department: Planning Division, Public Works, City Manager's Office

Related Policies: CIRC-5.E, CIRC-5.G, CIRC-6.C, CIRC-8.B

Funding Source: General Fund





Environmental Resources and Conservation Element

City Plans, Ordinances, and Programs

ERC-P.1. Related Programs and Governmental Agencies

Continue to ensure compliance with federal, state, and local programs and regulations, including but not limited to the following:

- California Global Warming Solutions Act of 2006 and Scoping Plan (AB 32)
- California Coastal Act and the California Coastal Commission
- California Environmental Quality Act
- California Endangered Species Act
- California Fish and Game Code
- Quimby Act
- National Pollutant Discharge Elimination System permit
- Sustainable Communities and Climate Protection Act of 2008 (SB 375)

Departments: Planning Division, Public Works, Community Services

Related Policies: ERC-3.D, ERC-4.A, ERC-5.A, ERC-5.D, ERC-7.C, ERC-7.E, ERC-8.A,

ERC-8.C, ERC-17.A, ERC-17.B, ERC-17.I

Funding Source: General Fund, development fees

Time Frame: Ongoing

ERC-P.2. Greenhouse Gas Emissions Tracking

Monitor the status of greenhouse gas emissions in the city, as directed in the Greenhouse Gas Reduction Program, and report the results to City officials and members of the public as part of an annual reporting effort, through the following actions:

- Estimate community greenhouse gas emissions to track progress toward adopted greenhouse gas emissions reduction goals of 15 percent below 2005 levels by 2020, and 53.33 percent below 2020 levels by 2040.
- Track implementation of all greenhouse gas emissions reduction measures and actions, including the status of each effort and progress toward the performance metrics in the Greenhouse Gas Reduction Program.

Department: City Manager's Office

Related Policies: ERC-5.A, ERC-5.B, ERC-5.C, ERC-5.D, ERC-5.E

Funding Source: General Fund

Time Frame: Annually beginning in 2017





ERC-P.3. Greenhouse Gas Reduction Program Maintenance

Amend the Greenhouse Gas Reduction Program regularly based on the results of annual monitoring efforts, to achieve the adopted greenhouse gas emissions reduction targets in a manner consistent with community values. Support increased implementation of successful strategies, and identify opportunities to revise strategies as appropriate.

Department: City Manager's Office

Related Policies: ERC-5.A, ERC-5.B, ERC-5.C, ERC-5.D, ERC-5.E

Funding Source: General Fund

Time Frame: Annually beginning in 2017

ERC-P.4. Greenhouse Gas Reduction Program Funding

Secure the funding necessary to implement the strategies and implementation actions in the Greenhouse Gas Reduction Program. Identify funding sources as part of an annual report, and integrate funding needs into City department budgets, capital improvement plans, and other plans as appropriate. Pursue federal, state, regional, and local sources of funding as appropriate. Work to ensure that funds are returned to areas where greenhouse gas emissions are generated and that programs benefit the communities impacted by emissions.

Departments: City Manager's Office, Finance Department

Related Policies: ERC-5.E

Funding Source: General Fund, grant funding

Time Frame: Annually beginning in 2017

ERC-P.5. Water Supply Adequacy

Continue to evaluate the adequacy of available water supply and distribution systems relative to proposed development, under both daily operating conditions and in emergency situations. Ensure that the evaluation accounts for forecasted changes in drought conditions and precipitation levels resulting from climate change.

Departments: Public Works

Related Policies: ERC-15.A, ERC-15.B, ERC-15.C, ERC-15.D

Funding Source: General Fund





ERC-P.6. Energy Efficiency Audits

Develop a program to provide low- or no-cost energy audits to homes and businesses to help identify the most cost-effective ways to improve building energy efficiency. Recommendations should include low-cost actions which can be taken by renters. Publicize the availability of these energy audits, and strongly encourage all building owners interested in installing solar energy systems to conduct an energy efficiency audit prior to installation.

Departments: City Manager's Office, Building Division

Related Policies: ERC-11.A, ERC-11.C

Funding Source: General Fund, grant funding

Time Frame: By 2017

ERC-P.7. Energy Efficiency Retrofits

Explore strategies to encourage energy efficiency retrofits in existing buildings by making upgrades more economically feasible, including offering incentives or financing mechanisms, and implement cost-effective strategies as feasible. Work to increase participation in property assessed clean energy (PACE) programs. Investigate the feasibility of a revolving loan program to support energy efficiency retrofits. Collaborate with residential and commercial landlords to support energy efficiency upgrades in rental units and leased commercial space.

Department: City Manager's Office, Community Development **Related Policies:** ERC-11.A, ERC-11.B, ERC-11.C, ERC-11.D

Funding Source: General Fund, grant funding

Time Frame: Ongoing

ERC-P.8. Energy Efficiency in Large Facilities

In partnership with business groups, utility companies, and other involved stakeholders, work with large nonresidential properties to support energy efficiency retrofits in major facilities. Provide recommendations about available rebates and financing mechanisms, encourage highly effective lower-cost actions such as lighting upgrades and retrocommissioning, and work toward providing customized specific solutions for individual facilities based on energy audits or other assessments. Publicize participating facilities in events and in local media.

Departments: City Manager's Office, Office of Business Development

Related Policies: ERC-11.A, ERC-11.C, ERC-11.D

Funding Source: General Fund, grant funding

Time Frame: Ongoing

HB R 30



ERC-P.9. Green Building Strategy

Develop and publicize a voluntary strategy to encourage new buildings to exceed the minimum green building requirements in the current California Building Standards Code, in support of achieving the state's zero net energy targets and other green building goals. Explore the feasibility of offering incentives for new buildings that exceed minimum requirements, including economic rebates, reduced development fees, and streamlined permitting. Make information on green buildings, including cost savings from green building features, available to project applicants throughout the building application process.

The Huntington Beach Green Building Strategy should address all elements of a building, including building location and orientation, energy efficiency and renewable energy features, building materials, waste, water conservation and landscaping, and other relevant areas. It should be useful to both residential and nonresidential project applicants. Build on earlier programs such as the Green Building Scorecard.

Departments: Community Development, City Manager's Office **Related Policies:** ERC-12.A, ERC-12.B, ERC-12.C, ERC-13.C

Funding Source: General Fund, grant funding

Time Frame: Establish program by 2020

ERC-P.10. Community Shared Solar

Explore the feasibility of a community shared solar program, which allows residents and businesses to receive the economic and environmental benefits of solar energy without needing to purchase panels or install them on their own buildings. Look to examples of successful community shared solar programs in similar jurisdictions, and partner with local solar energy companies and financial institutions to establish a program if one is found to be appropriate for Huntington Beach.

Departments: City Manager's Office, Office of Business Development

Related Policies: ERC-13.B

Funding Source: General Fund, grant funding

Time Frame: By 2020

ERC-P.11. Energy Storage

Ensure that building-integrated energy storage facilities, relying on non-intrusive technologies such as batteries, are permitted in all land uses that allow residential or nonresidential buildings. Allow stand-alone energy storage facilities in land uses such as industrial and manufacturing areas, where energy storage facilities are compatible with surrounding activities. Confirm that the City building review process, including permit





applications and safety evaluations, does not pose unnecessary regulatory barriers to energy storage facilities. Work with utility providers and energy storage companies to encourage them to locate energy storage facilities in Huntington Beach, in support of California's energy storage mandates.

Departments: City Manager's Office, Office of Business Development, Community

Development, Fire

Related Policies: ERC-13.E, ERC-13.G

Funding Source: General Fund

Time Frame: By 2020

ERC-P.12. Rooftop Solar Installations

Encourage new and existing buildings to install rooftop solar panels in support of energy cost savings, energy independence, and statewide zero net energy goals. Provide resources about sizing, financing, and constructing rooftop solar energy systems to community members. Continue to ensure that the City's solar energy permitting process complies with all requirements of AB 2188, and identify opportunities to exceed the requirements of AB 2188 where feasible.

Departments: Community Development, Fire

Related Policies: ERC-13.A, ERC-13.B, ERC-13.C, ERC-13.D

Funding Source: General Fund

Time Frame: Ongoing

ERC-P.13. Community Choice Aggregation

Study the feasibility of creating a new Community Choice Aggregation (CCA) program or joining any existing regional programs, in partnership with nearby communities to the extent possible, and establish or join a CCA program if found to be economically feasible and compatible with community values. Any CCA program the City creates or joins should offer multiple tiers of service with different levels of renewable energy, including a voluntary tier offering 100 percent renewable energy. The CCA's default tier should provide as much or more renewable energy than Southern California Edison's default service. Ensure that a CCA program will be economically competitive with Southern California Edison, and work with local financial institutions to obtain economic support.

Departments: City Manager **Related Policies:** ERC-13.F

Funding Source: General Fund, grant funding **Time Frame:** Begin feasibility study by 2020





ERC-P.14. Public Trees

Continue to ensure that trees on public lands are preserved to the extent possible, and emphasize protection of trees and groves that provide habitat to sensitive species. Identify opportunities to plant additional trees on public lands and open spaces, including streetscapes. All new trees should be native and drought-tolerant species, and should provide increased habitat for native species to the extent possible. Any public trees that are removed, including due to disease or for public safety reasons, shall be replaced with at least two new trees. Replacement trees should be of a mature size, be the same or similar species, and provide similar public and environmental benefits. Develop a Street Tree Selection Manual to provide guidance and examples of trees that meet these criteria.

Department: Public Works

Related Policies: ERC-9.A, ERC-9.B, ERC-10.A

Funding Source: General Fund, Capital Improvements Fund, development fees

Time Frame: Ongoing

ERC-P.15. Recreation Programs

Continue to provide public recreation programs to Huntington Beach community members. Ensure that such programs are accessible to all community members, including non-English speakers, lower-income residents, and people with physical and developmental disabilities. Identify opportunities to provide additional recreation programs in response to changing community demographics and needs. When planning new recreational facilities, consider how the facilities will be capable of accommodating future recreational programs.

Department: Community Services

Related Policies: ERC-2.A, ERC-2.B, ERC-2.C, ERC-2.D, ERC-2.E, ERC-2.F

Funding Source: General Fund, user fees

Time Frame: Ongoing

ERC-P.16. Water Efficiency and Conservation Retrofits

Encourage residents and businesses to conduct water efficiency and conservation retrofits, including appliances and landscaping. Identify existing rebates for water efficiency and conservation retrofits, and evaluate opportunities to create additional financial incentives.

Departments: Public Works, Building Division

Related Policies: ERC-16.B, ERC-16.D Funding Source: General Fund, user fees



Capital Improvements

ERC-P.17. Alternative Vehicles for City Fleet

Transition the City vehicle fleet to alternative fuels such as electricity, biofuel, or hydrogen. Replace conventional vehicles at the end of their operational lives with alternative fuel vehicles as feasible. Consider the cost of alternative fuel vehicles relative to conventional vehicles over the entire lifetime of the vehicles.

Department: Public Works

Related Policies: CIRC-5.G, CIRC-8.B

Funding Source: General Fund, grant funding

Time Frame: Ongoing

ERC-P.18. Renewable Fuel Stations

Install renewable fuel stations, including DC Fast Chargers and biofuel pumps, at Cityowned facilities to support alternative fuel fleet vehicles. Open renewable fuel stations to members of the public to the extent feasible. Integrate solar photovoltaic systems into public electric vehicle charging facilities as possible. Encourage installation of renewable fuel stations as part of existing and new development projects.

Department: Public Works

Related Policies: CIRC-5.G, CIRC-8.A, CIRC-8.B

Funding Source: General Fund, grant funding

Time Frame: Ongoing

ERC-P.19. Municipal Microgrid

Study opportunities to develop a microgrid for critical municipal facilities, allowing them to continue to operate during a power interruption with greater flexibility and in a more environmentally responsible way than currently allowed by diesel backup generators. Proposed microgrids should link key City administration and public safety buildings, as well as other critical facilities such as water pumping stations as feasible, rely on energy storage and renewable energy systems as much as possible, and be consistent with broadband and wireless master plans.

Departments: City Manager, Fire, Police, Public Works

Related Policies: ERC-13.D, ERC-13.G

Funding Source: General Fund, grant funding

Time Frame: Study completed by 2020





ERC-P.20. Municipal Green Buildings

Explore minimum standards for new municipal facilities that require green building and energy efficiency features that exceed state requirements, and explore opportunities to retrofit existing municipal facilities. Study the feasibility of installing renewable energy systems on new and retrofitted municipal facilities, in support of state zero net energy goals. Pursue green building certification for new and retrofitted municipal facilities, and publicize successes in local and regional media.

Departments: City Manager, Community Development, Public Works

Related Policies: ERC-11.D, ERC-12.C, ERC-13.D

Funding Source: Capital Improvement Funds, grant funding

Time Frame: Ongoing

ERC-P.21. New Parks and Open Space

Explore opportunities to acquire and develop new parkland and open space, including mini parks, dog parks, athletic fields, amphitheaters, gardens, and shared facilities. Emphasize creating new parkland and open space in currently underserved areas, and in areas expected to see significant new development. Ensure that community members are served equitably by new parkland and open space, and that future parks and open space meet community needs and values. All new parkland and open space should be easily accessible by foot and by bicycle, as well as via public transit to the extent feasible. When possible, locate new parks near elementary schools with independent street frontage.

Departments: Community Services, Community Development

Related Policies: ERC-1.A, ERC-1.B, ERC-1.C, ERC-1.D, ERC-1.E

Funding Source: Capital Improvement Funds

Time Frame: Ongoing

ERC-P.22. Open Space Preservation

Continue to preserve open space in Huntington Beach, including by setting aside areas within parkland for natural areas. Structures or other development in open space should encourage low-intensity and passive activities such as nature trails, picnic and observational areas, informational signs and displays, and peripheral bike paths. Avoid development or recreational activities that may damage open space areas or be otherwise incompatible with existing habitat and native species.

Department: Community Services

Related Policies: ERC-1.H, ERC-6.A, ERC-6.B, ERC-10.A, ERC-10.B, ERC-10.C

Funding Source: General Fund, Capital Improvement Funds

Time Frame: Ongoing

HB



ERC-P.23. Park and Open Space Restoration

Continue to restore disturbed areas within open space land and natural parkland areas. Prevent any invasive plant species from becoming established in open space and natural parkland, and replace nonnative species with native vegetation to the extent possible. While areas should be restored to serve both environmental and public needs, the needs of wildlife and the natural ecosystem should be emphasized over the recreational value of the open space and natural parkland. Use noninvasive green infrastructure and trail design to minimize environmental impacts.

Department: Community Services

Related Policies: ERC-6.A, ERC-6.E, ERC-7.B, ERC-10.B, ERC-10.D, ERC-17.E

Funding Source: General Fund, grant funding

Time Frame: Ongoing

ERC-P.24. Vehicle Idling

Continue to explore and implement improvements to the local road system to minimize vehicle idling, in coordination with the California Department of Transportation and neighboring jurisdictions. Strategies should include traffic signal synchronization, roundabouts, and modifications to lane configuration where appropriate. Place particular emphasis on reducing idling time near sensitive land uses and in disproportionately affected neighborhoods.

All strategies should enhance pedestrian and bicycle safety and connectivity to the extent possible, and support additional transit use. No vehicle idling improvement shall reduce pedestrian or bicyclist safety, or significantly increase travel time for pedestrians, bicyclists, and transit users.

Department: Public Works

Related Policies: ERC-4.C, ERC-4.E

Funding Source: Capital Improvement Fund, grant funding, development fees

Time Frame: Ongoing

ERC-P.25. Trails Network

Develop and preserve a comprehensive trails network connecting parks, beaches, recreational facilities, and open spaces within the planning area. The trails network should support walking and biking, and should be compatible with equestrian uses where feasible. The trails network should include extensive signage with unique branding, and trail maps should be made available online and at easily accessible locations. Trails should be designed to minimize impacts to natural habitats. Coordinate with neighboring jurisdictions to connect the trails network to existing or proposed trails in surrounding communities.





Departments: Public Works, Community Services **Related Policies:** ERC-1.G, ERC-3.B, ERC-3.D

Funding Source: General Fund, Capital Improvement Funds, grant funding

Time Frame: Ongoing

ERC-P.26. Green Stormwater Infrastructure in Parks and Open Spaces

Use green infrastructure for stormwater management in parks and open spaces to the maximum extent possible. Such infrastructure should be sited and designed to minimize runoff and filter water pollutants. Green infrastructure should be integrated into the natural setting to avoid creating disturbances, and should provide additional habitat and other environmental benefits to native species. Other management solutions should only be used if green infrastructure is not feasible.

Department: Public Works

Related Policies: ERC-10.D, ERC-17.E

Funding Source: General Fund, Capital Improvement Funds, grant funding

Time Frame: Ongoing

Development Review Requirements

ERC-P.27. Oil and Mineral Extraction Projects Review

Continue to review all mineral and oil extraction projects, including any access roads, under CEQA and the Surface Mining and Reclamation Act. Continue to require that all mineral and oil extraction projects comply with all federal, state, and local standards and attainment programs for air quality and greenhouse gas emissions, protection of rare/threatened/endangered species, conservation of water quality, protection for basins and watersheds, and erosion protection.

Require projects to mitigate noise, odor, and dust impacts. Minimize the amount of land occupied by resource extraction facilities. Visually integrate facilities with adjacent uses through appropriate buffers and walls. Consider limiting the hours of production activities as needed. Require annual inspections and monitoring, including ensuring accurate reporting of production figures. Establish mitigation activities as needed to maintain the standards and conditions required when the permit was issued.

Departments: Community Development, Fire

Related Policies: ERC-14.A, ERC-14.B

Funding Source: Development fees





ERC-P.28. Oil and Mineral Project Site Reuse

Enforce decommissioning and abandonment standards for mineral and oil extraction projects as a condition of approval. Require applicants to include a cost estimate for decommissioning and site restoration work following the cessation of extraction activities, and to post a bond for the estimated amount. Conduct an inspection after decommissioning and site restoration to ensure that all remediation activities have been satisfactorily completed. Require operators to dismantle all structures that cannot be effectively reused, and to recycle all materials as much as possible. Require that all hazardous waste, including electronics or toxic materials, is disposed of in accordance with applicable health and environmental safety standards, and in compliance with the standards of the Basel Convention.

Departments: Planning Division, Fire

Related Policies: ERC-14.C

Funding Source: Development fees

Time Frame: Ongoing

ERC-P.29. Minimum Energy Efficiency Standards

Continue to implement the energy efficiency standards in the California Building Standards Code for all new development, additions, and significant retrofits, and implement new versions of the California Building Standards Code as they are adopted. Ensure that City building staff receives training and support materials necessary to implement the requirements of the Building Standards Code when new codes become effective.

Department: Building Division

Related Policies: ERC-11.A, ERC-11.C, ERC-11.D, ERC-12.A, ERC-12.B

Funding Source: General Fund, development fees

Time Frame: Ongoing

ERC-P.30. Development Standards for Coastal Protection

Create standards to minimize all development, including additions or revisions to existing structures, that jeopardizes or reduces the biological integrity of sensitive coastal plant and animal communities, including all protected species. Work with coastal property owners and project applicants to amend project designs and identify mitigation activities that allow development to proceed while continuing to protect coastal biological communities. All restrictions on development should consider the future condition of biological communities with the effects of sea level rise over the anticipated lifetime of the structure, in accordance with the Coastal Resiliency Program.





Departments: Community Development

Related Policies: ERC-8.C

Funding Source: General Fund

Time Frame: Standards established by 2020

ERC-P.31. Construction Activity Emissions

In partnership with the South Coast Air Quality Management District, continue to enforce standards to reduce air pollutant and greenhouse gas emissions from construction activities, and impose these standards on new projects as a condition of development. Continue to require the use of best management practices to reduce dust and other airborne debris, reduce idling time for construction equipment, and explore the feasibility of requiring construction projects to use alternative fuel construction equipment. Require monitoring and reporting throughout construction activities to ensure the standards are being properly applied, and promptly remedy any violations. Update standards as needed to support new technologies and practices.

Departments: Community Development, Public Works

Related Policies: ERC-4.B, ERC-4.C, ERC-4.D, ERC-5.C

Funding Source: General Fund, development fees

Time Frame: Ongoing

ERC-P.32. Coastal Access and Recreation

Continue to provide a high degree of access to the coast, and identify opportunities to equitably improve coastal access for all community members that all Huntington Beach community members and visitors have reasonable access to an array of active and passive coastal recreational uses, and consider providing additional recreational uses in other locations to improve access without diminishing existing uses or coastal biological integrity.

Departments: Planning Division, Community Services, Public Works

Related Policies: ERC-3.A, ERC-3.B, ERC-3.C, ERC-3.D

Funding Source: General Fund, development fees

Time Frame: Ongoing

ERC-P.33. Water Conservation for New Development

Continue to require new development projects to include feasible and innovative water conservation features as appropriate. Require the use of recycled water for landscaping irrigation, grading, and other non-contact uses where recycled water is available or expected to be available. Require new projects to include low-impact development strategies as feasible, which may include green stormwater infrastructure and graywater





systems. Continue to enforce all applicable landscaping standards, including the Huntington Beach Water Efficient Landscape Requirements and the state Water Efficient Landscape Ordinance.

Departments: Building Division, Public Works

Related Policies: ERC-16.A, ERC-16.C

Funding Source: General Fund, development fees

Time Frame: Ongoing

ERC-P.34. Drainage and Pollution Standards

Continue to require all new development and reuse projects to minimize non-point source pollution and runoff associated with construction activities and ongoing operations. All development projects should employ drainage technologies that reduce runoff and water quality impacts to downstream environments, in accordance with all federal and state water quality requirements.

Departments: Building Division, Public Works

Related Policies: ERC-17.B, ERC-17.C, ERC-17.F Funding Source: General Fund, development fees

Time Frame: Ongoing

Interjurisdictional Coordination

ERC-P.35. Energy Efficiency Coordination

Continue to coordinate with other jurisdictions in Orange County and in the Southern California region to provide education and incentives to improve energy efficiency in new and existing buildings. Work with state partners, utility companies, and regional advocacy groups to maximize community awareness and to provide community members with necessary resources.

Departments: City Manager's Office

Related Policies: ERC-11.A, ERC-11.C, ERC-12.A, ERC-13.G

Funding Source: General Fund, grant funding

Time Frame: Ongoing

ERC-P.36. Marine Biological Productivity Coordination

Coordinate with federal, state, and regional agencies and jurisdictions to sustain the biological productivity of coastal waters and maintain healthy populations of marine species. Work to provide viable population sizes and genetic diversity to ensure long-term survival of the species, and to support long-term commercial, recreational, and educational purposes as viable.





Departments: Public Works, Community Services

Related Policies: ERC-8.A

Funding Source: General Fund

Time Frame: Ongoing

ERC-P.37. Tidal Circulation Coordination

Work with surrounding jurisdictions to improve the tidal circulation in the Bolsa Chica Channel, Huntington Harbour, the Huntington Beach Wetlands, and Anaheim Bay. Coordinate to minimize construction of features that impact natural sand migration and littoral drift within the local environment. Develop ways to improve tidal circulation while also supporting increased biological integrity of coastal habitats, and improving the aesthetics and recreational viability of coastal areas. Work with the State Lands Commission and the California State Parks Division of Boating and Waterways to ensure they secure funding to maintain the Bolsa Chica tidal inlet.

Departments: Public Works, Community Services

Related Policies: ERC-8.B

Funding Source: General Fund

Time Frame: Ongoing

ERC-P.38. Air Pollutants and GHG Emissions from Stationary Sources

Work with the South Coast Air Quality Management District and the California Air Resources Board, in coordination with local business groups, to decrease air pollutant and greenhouse gas emissions from large industrial facilities and other stationary sources. Pursue funding to reduce emissions from major sources, and prioritize emissions reduction activities near sensitive land uses and in disproportionally affected neighborhoods. Continue to coordinate with federal, state, and regional agencies to enforce air quality standards and improve air quality. As future land use plans are proposed and/or amended, undertake heightened consideration of policies and strategies to minimize exposure of sensitive land uses and disproportionally affected neighborhoods to health risks related to air pollution.

Departments: City Manager's Office, Community Development

Related Policies: ERC-4.A, ERC-4.F, ERC-5.D

Funding Source: General Fund





ERC-P.39. Regional Recreation Coordination

Partner with surrounding communities and Orange County to increase access to a wide range of recreational services and programs for Huntington Beach community members. Explore opportunities to work with private recreational businesses to provide facilities and services to community members that cannot be feasibly provided by public programs. Work with local school districts to offer after-hours recreational activities for children and adults at school sites. Ensure that information on expanded recreational opportunities resulting from coordination with other agencies and private businesses is made readily available to community members through multiple sources and in multiple languages.

Department: Community Services, Library Services

Related Policies: ERC-2.A, ERC-2.C, ERC-2.D, ERC-2.E, ERC-2.F

Funding Source: General Fund

Time Frame: Ongoing

ERC-P.40. Alternative Water Source Coordination and Expansion

Continue to provide water through the Orange County Water District's Green Acres recycled water project and Groundwater Replenishment System. In coordination with the Orange County Water District and surrounding communities, continue to explore opportunities to improve and expand alternative water sources to reduce imported water supplies and sustainably manage the Coastal Plains of Orange County Groundwater Basin. Alternative water sources shall meet community water supply and quality needs while minimizing environmental impacts and maximizing cost effectiveness.

Department: Public Works

Related Policies: ERC-15.C, ERC-15.D

Funding Source: General Fund, Capital Improvements Funds, utility fees

Time Frame: Ongoing

ERC-P.41. Greenhouse Gas Reduction Program Collaboration and Public Outreach

Develop partnerships with other public agencies, private organizations and nonprofits, businesses and trade groups, local institutions, and members of the public to support implementation of the Greenhouse Gas Reduction Program. Establish and maintain formal partnerships with organizations that provide tools and support for greenhouse gas reduction efforts. Keep members of the public informed about ongoing Greenhouse Gas Reduction Program implementation efforts, and provide opportunities for community members to offer feedback on these efforts.

Departments: City Manager's Office

Related Policies: ERC-5.E

Funding Source: General Fund, grant funding

Time Frame: Annually beginning in 2017





Public Information and Outreach

ERC-P.42. Energy Efficiency and Conservation Education

Widely distribute information about energy efficiency and conservation strategies, including information about rebates, financing opportunities, and low-cost and free strategies. Provide information about energy efficiency and conservation strategies for both residential and nonresidential facilities. Distribute information in multiple languages through in-person events and workshops, print media, television, radio, and online/social media. Identify members of the Huntington Beach community that are not easily reached by conventional outreach campaigns, and develop community engagement strategies to involve these community members.

Department: City Manager's Office

Related Policies: ERC-11.A, ERC-11.B, ERC-11.C

Funding Source: General Fund, grant funding

Time Frame: Ongoing

ERC-P.43. Water Efficiency and Conservation Education

Expand existing water efficiency and conservation education campaigns to provide information about reducing water use to Huntington Beach residents and businesses. Include information about available rebates, financing opportunities for retrofits, and low-cost and free water efficiency and conservation options. Information should be distributed in multiple languages through in-person events and workshops, print media, television, radio, and online/social media. Identify members of the Huntington Beach community that are not easily reached by conventional outreach campaigns, and develop community engagement strategies to involve these community members. Continue water efficiency and conservation efforts during normal or wet water years, and work to ensure that water efficiency and conservation accomplishments continue outside of drought conditions.

Departments: Public Works

Related Policies: ERC-16.B, ERC-16.D

Funding Source: General Fund, grant funding

Time Frame: By 2020



Natural and Environmental Hazards Element

City Plans, Ordinances, and Programs

HAZ-P.1. Related Programs and Governmental Agencies

Continue to ensure compliance with federal, state, and local programs and regulations, including but not limited to the following:

- Alquist-Priolo Earthquake Fault Zoning Act
- Emergency Services Act
- Hazardous Waste Control Act
- Seismic Hazards Mapping Act

Departments: Community Development, Public Works, Fire

Related Policies: HAZ-1.A, HAZ-5.A

Funding Source: General Fund, development fees

Time Frame: Ongoing

HAZ-P.2. Inventory Existing Geologic and Seismic Vulnerabilities

Conduct an inventory of existing structures that may be vulnerable to geologic and seismic hazards, including unreinforced masonry structures, older concrete buildings, and wood structures with weak first floors. Advise owners and occupants of potentially vulnerable structures of available mitigation opportunities and available funding sources.

Departments: Community Development

Related Policies: HAZ-1.D

Funding Source: Grant funds, General Fund

Time Frame: Inventory complete by 2020

HAZ-P.3. Potential Sea Level Rise Hazard Area

Update the Certified Local Coastal Program to establish a Sea Level Rise Hazard Zone based on the Potential Sea Level Rise Hazard Area identified in General Plan Figure HAZ-6. Within the hazard zone:

- Encourage new development applicants to design projects to address coastal hazards.
- Identify preferred strategies to help existing property owners in the hazard area to improve resiliency to sea level rise, and ensure that funding mechanisms are available to support resiliency efforts. Funding should emphasize the use of soft shore stabilization and avoid shore armoring structures.





Departments: Community Development

Related Policies: HAZ-2.A

Funding Sources: General Fund, grant funds

Time Frame: Local Coastal Program amendment by 2020, ongoing implementation

HAZ-P.4. Runoff and Ponding Standards

Amend the Municipal Code to establish standards for new development and significant retrofit projects to reduce the risk of increased runoff and ponding, and to support increased groundwater recharge. These standards shall emphasize the use of permeable paving, bioswales, and other low-impact development strategies.

Departments: Community Development, Public Works

Related Policies: HAZ-3.A, HAZ-3.E

Funding Source: General Fund

Time Frame: Standards established by 2020, ongoing implementation

HAZ-P.5. Fire Inspections

Continue to conduct regular inspections of nonresidential buildings to ensure that fire safety standards are met. Residential occupancies, based on type, shall be inspected at a minimum frequency as required by state law.

Department: Fire

Related Policies: HAZ-4.A, HAZ-4.B

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.6. Abandoned Oil Wells

Reevaluate the safety and status of abandoned oil wells on brownfield properties where new development or reuse projects are proposed. Identify whether the well was properly decommissioned or whether mitigation activities may be necessary.

Department: Fire

Related Policies: HAZ-5.A

Funding Source: General Fund





HAZ-P.7. Alternative Brownfield Uses

Identify and maintain a database of brownfield sites that may not be suitable for residential or nonresidential development. Work with property owners to encourage alternative use of such sites, including but not limited to renewable energy facilities, open spaces, or other community-supporting uses. Seek federal, state, and private funds for the assessment and remediation of brownfield sites in the city that have redevelopment potential.

Departments: Community Development **Related Policies:** HAZ-5.A, HAZ-5.B **Funding Source:** General Fund

Time Frame: Database completed by 2020, ongoing implementation

HAZ-P.8. Hazardous Materials Inspections and Database

Continue to conduct inspections of facilities that manufacture, transport, store, process, or dispose of hazardous material and waste. Ensure that all information in City databases is up to date and that facilities are complying with all applicable requirements. Identify opportunities for facilities to improve their hazardous materials and waste methods to comply with best management practices. The City's participating agency will coordinate with other certified unified program agencies (CUPAs) in Orange County and with the California Environmental Protection Agency CUPA office to ensure the program is funded and equipped and that the employees receive proper training.

Department: Fire

Related Policies: HAZ-6.E

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.9. Hazardous Materials Response Protocols

Establish and maintain emergency response protocols to ensure that City staff and any other emergency responders are notified immediately if there is a hazardous materials or waste release, or if another emergency situation poses the significant chance of such a release occurring.

Departments: Fire, Police

Related Policies: HAZ-6.C, HAZ-6.E **Funding Source:** General Fund

Time Frame: Ongoing

HAZ-P.10. Methane Overlay Districts

Continue to evaluate the locations and concentrations of soils that may contain methane, and adjust the boundaries of the Methane Overlay Districts as needed. Continue to require methane testing and appropriate mitigation activities prior to any new development in a Methane Overlay District, including methane isolation barriers, collection systems, and vent systems.





Departments: Community Development, Fire

Related Policies: HAZ-6.D

Funding Source: Development fees

Time Frame: Ongoing

HAZ-P.11. Special Event Staff

Identify key staff to be mobilized during special events for proactive community policing, and provide staff with training that focuses on maintaining security during special events while engaging and respecting community members.

Departments: Fire, Police, Community Services

Related Policies: HAZ-9.A, HAZ-9.C Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.12. Homeland Security and Emergency Operations Plans

Regularly update the Huntington Beach Emergency Operations Plan to identify key staff to participate in homeland security emergency response and recovery operations; the structure and operating protocols of the City's homeland security emergency response and recovery organizations; and community engagement practices during homeland security emergency response and recovery activities.

Departments: Fire, Police **Related Policies:** HAZ-9.B **Funding Source:** General Fund

Time Frame: Ongoing

Capital Improvements

HAZ-P.13. Funding for Geologic and Seismic Retrofits

Identify funding sources to help property owners retrofit existing structures vulnerable to geologic and seismic hazards. Explore state and regional incentives, federal programs, and grant opportunities from private organizations. Study available financing mechanisms the City can establish to support retrofits, including property-based financing and a City-backed seismic retrofit fund. Any available financing program should include strategies to limit impacts to affordable housing.

Departments: Office of Business Development, City Manager's Office

Related Policies: HAZ-1.B, HAZ-1.C

Funding Source: General Fund

Time Frame: Identify funding sources by 2020, ongoing updates





HAZ-P.14. Resilient Critical Facilities

Require all new critical, essential, or high-occupancy buildings, including public safety buildings, to be sited, designed, and constructed so as to minimize damage and maximize continuation of key functions during and after a geologic and seismic hazard event.

Prepare an inventory of City-owned facilities that may be vulnerable to seismic and geologic hazards, particularly facilities that serve vital functions. Coordinate with utility companies and districts to conduct reviews of power lines, key surface streets, natural gas pipelines, and other critical infrastructure not owned by the City. Use this inventory to pursue funding to retrofit vulnerable City-owned facilities, and work with other organizations to support retrofits of non-City-owned infrastructure.

Departments: Community Development, Fire, Public Works

Related Policies: HAZ-1.C, HAZ-1.D

Funding Source: Grant funds, Capital Improvement Plan **Time Frame:** Standards and inventory established by 2020

HAZ-P.15. Shore Stabilization and Beach Management

In accordance with the Coastal Resiliency Program, promote the use of soft shore stabilization strategies such as vegetated dunes, beach nourishment, and marsh restoration as an alternative to shore-armoring projects (e.g., seawalls, jetties, breakwaters). Allow for shore armoring only in instances where soft stabilization is insufficient to prevent a potential health hazard or significant structural damage. Identify opportunities to replace shore armoring with soft stabilization features. Continue to coordinate with other regional coastal communities, particularly upshore communities, to support a regional strategy for beach nourishment and sediment management. This strategy should allow for anticipated changes to sea levels and minimize the use of shore armoring.

Department: Public Works, Community Services

Related Policies: HAZ-2.D

Funding Sources: Grant funds, Capital Improvement Plan, General Fund

Time Frame: Ongoing

HAZ-P.16. Flood Control Infrastructure

Employ natural, on-site drainage strategies such as low-impact development to minimize the amount of stormwater that flows into pipes or conveyance systems. Work to improve the flood infrastructure in Huntington Beach through the following actions:

• In coordination with OC Flood and the US Army Corps of Engineers, retrofit and improve existing flood control infrastructure, and identify needs for new infrastructure.





 Conduct/expand routine maintenance and upgrades to City-owned drainage infrastructure to clear blocked storm drains, upgrade infrastructure to accommodate an increased volume of stormwater, secure additional funding, and maximize system efficiency and minimize system overload during periods of heavy rainfall.

Department: Public Works **Related Policies:** HAZ-3.B

Funding Source: Capital Improvement Plan

Time Frame: Ongoing

HAZ-P.17. Hazardous Materials Transport Routes

Identify roadways with minimal exposure to residential areas or other sensitive uses that provide convenient access to major industrial areas and regional highways, and are designed to accommodate large vehicles as Hazardous Materials Transport Routes. Encourage all organizations in Huntington Beach that send or receive hazardous materials or waste to use these roadways for transportation to the extent possible, and to transport hazardous materials or waste during off-peak times. Conduct retrofits to otherwise suitable roadways to provide additional alternatives for the transportation of hazardous materials and waste.

Department: Public Works **Related Policies:** HAZ-6.B

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.18. Emergency Alerts

Continue to update and improve City plans to effectively alert and warn all community members in the event of a potential threat, an imminent threat, and/or a need to evacuate. Distribute notices and pre-prepared messages through multiple methods, including television, phone, online, social media, mobile devices, radio, and door-to-door notification. Notices should be in all languages widely spoken in the community, including Spanish, Vietnamese, and Chinese. All notifications should be accessible for people with disabilities and with access/functional needs.

Departments: Fire, Police, Community Services, City Manager's Office

Related Policies: HAZ-2.F, HAZ-8.B, HAZ-8.C

Funding Source: General Fund





Development Review Requirements

HAZ-P.19. Geologic and Seismic Assessments and Resiliency

Require a geologic and seismic hazard assessment prior to the construction of new buildings or significant retrofits to existing buildings located within an Alquist-Priolo Earthquake Fault Zone. The assessment shall address fault location and activity, soil engineering and building foundations, slope stability and erosion control, liquefaction risk, groundwater, and any other geologic and seismic conditions which may affect structural stability.

Require new structures to include appropriate engineering and building practices to improve resiliency to ground shaking and liquefaction, including meeting or exceeding the minimum standards in the California Building Standards Code. Work with applicants to construct buildings that can remain safely habitable following an earthquake, to the extent possible, particularly in areas of elevated vulnerability to geologic and seismic hazards.

Departments: Community Development, Public Works

Related Policies: HAZ-1.A

Funding Source: Development fees

Time Frame: Ongoing

HAZ-P.20. Bluff Erosion Drainage Plans

Require all new proposed bluff-top development projects to prepare and implement drainage plans to minimize erosion. Drainage plans shall encourage to the extent possible the use of "soft infrastructure" such as landscaping, low-impact development, and natural grading.

Departments: Public Works

Related Policies: HAZ-2.C, HAZ-2.E Funding Source: Development fees

Time Frame: Ongoing

HAZ-P.21. Flood and Sea Level Rise Hazard Mitigation

During development review, determine if any structures meant for human habitation are to be constructed within the 100-year flood plain or in the Potential Sea Level Rise Hazard Area.

If necessary, evaluate each structure's safety from flood and sea level rise-related hazards, and recommend remedial actions, including changes to building design and siting, drainage infrastructure, and low-impact development features. This evaluation should include mention of the structure's likely economic life span, and whether sea level rise may threaten the structure at any point during its life span.





New development projects should conduct a soil analysis to determine if there is an
elevated potential for ponding or runoff, and, if needed, improved drainage and lowimpact development strategies should be included in the project design.

Departments: Planning Division, Public Works

Related Policies: HAZ-3.A, HAZ-3.B **Funding Source:** Development fees

Time Frame: Ongoing

HAZ-P.22. Fire Hazard Reduction

Continue to review all new development and reuse projects to ensure that structures meet or exceed all minimum standards for fire safety and access by emergency personnel, including the requirements in the California Building Code and California Fire Code.

Departments: Community Development, Fire

Related Policies: HAZ-4.A, HAZ-4.B Funding Source: Cost of development

Time Frame: Ongoing

HAZ-P.23. New Development on Brownfield Sites

Conduct testing on any site known or suspected to have previously contained potentially hazardous materials or waste, and require appropriate mitigation if the concentration of such materials exceeds minimum safety standards. Mitigation activities shall be conducted prior to construction and be subject to ongoing monitoring. Subsequent testing must find that any potentially hazardous materials or waste is below unsafe concentrations before construction permits are issued.

Departments: Planning Division, Fire

Related Policies: HAZ-5.B

Funding Source: Development fees

Time Frame: Ongoing

HAZ-P.24. Hazardous Materials in New Development

Limit the risk associated with hazardous materials in new development through the following actions:

Discourage any facility that manufactures, transports, stores, processes, or disposes
of significant quantities of hazardous materials or waste from being located in
residential areas, or in close proximity to a school, park, hospital, key community
facilities, or other sensitive uses.





 Require that all new development or reuse projects that propose to manufacture, transport, store, process, or dispose of hazardous materials or waste store such material in storage tanks that meet or exceed all required and recommended safety standards, including resiliency to seismic and geologic events, flooding, and fire.

Department: Fire

Related Policies: HAZ-6.A

Funding Source: Development fees

Time Frame: Ongoing

HAZ-P.25. New Development Consistency with Aircraft Operations

Continue to ensure that all new development proposals more than 200 feet above ground level or development proposals for new heliports comply fully with all state and federal permit procedures, with the requirements of the Orange County Airport Land Use Commission, and with all conditions of approval imposed or recommended by the Federal Aviation Administration and the Caltrans Division of Aeronautics.

Departments: Community Development

Related Policies: HAZ-7.A

Funding Source: Development fees

Time Frame: Ongoing

Interjurisdictional Coordination

HAZ-P.26. Regional Tsunami Coordination

Continue to consult with neighboring communities and regional, state, and federal agencies regarding tsunami preparedness and evacuation efforts.

Department: Fire

Related Policies: HAZ-3.C, HAZ-3.D

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.27. Waste Disposal and Contaminated Materials Coordination

Coordinate with federal, state, and county agencies to ensure that contaminated wastes do not migrate onto adjacent sites or impact groundwater resources. Work with regional, state, and federal agencies engaged in cleanup efforts of uncontrolled contaminated sites previously used for waste disposal.





Departments: Fire, Public Works

Related Policies: HAZ-6.B, HAZ-6.C

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.28. Hazardous Materials Source Reduction

Coordinate with industry representatives, researchers, and government agencies to identify cost-effective ways for businesses to reduce the amount of hazardous waste generated by normal operations, and encourage businesses to adopt these methods as part of their regular practice. Publicly recognize businesses that successfully reduce the amount of hazardous waste produced.

Departments: Fire, Office of Business Development

Related Policies: HAZ-6.C, HAZ-6.E

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.29. Hazardous Materials Coordination

Continue to coordinate with federal, state, and county agencies on hazardous materials and waste programs, including site selection and screening for hazardous waste management facilities, household hazardous waste collection efforts, sharing and standardization of hazardous materials and waste data, and comprehensive emergency response actions for spills and illegal dumping of hazardous materials and waste.

Departments: Fire, Public Works

Related Policies: HAZ-6.E

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.30. Regional Aircraft Operation and Hazards Coordination

Continue to coordinate with regional agencies to ensure local land use plans are consistent with the safe and effective operation of airports and helipads, and that City emergency response plans address the potential hazards associated with aircraft.

Departments: Planning Division, Fire

Related Policies: HAZ-7.A, HAZ-7.B, HAZ-7.C

Funding Source: General Fund





HAZ-P.31. Homeland Security Coordination

Continue to coordinate with regional, state, and federal agencies on homeland security threats. Distribute and share intelligence on potential threats, create synchronized plans for consistent emergency response, and work together on preventative homeland security actions.

Departments: Fire, Police, City Manager's Office

Related Policies: HAZ-9.A, HAZ-9.B, HAZ-9.C, HAZ-9.D

Funding Source: General Fund

Time Frame: Ongoing

Public Information and Outreach

HAZ-P.32. Tsunami-Ready Program

Continue to participate in the National Weather Service Tsunami-Ready program. Provide clearly labeled tsunami warning and evacuation signs, designate tsunami shelters, conduct public tsunami education efforts, monitor and rapidly publicize any tsunami notifications, and comply with all other requirements of the Tsunami-Ready program.

Department: Fire

Related Policies: HAZ-3.C, HAZ-3.D

Funding Source: Grant funding, General Fund

Time Frame: Ongoing

HAZ-P.33. Household Hazardous Waste Disposal

Require that waste franchise haulers offer information about how residents, businesses, and other organizations may conveniently dispose of small quantities of hazardous materials, including electronic waste, cleaning supplies, paints and varnishes, landscaping chemicals, and automotive fluids. These methods shall be low-cost, or free to the extent possible. All hazardous materials shall be disposed of or reprocessed in a responsible manner that fully complies with all articles of the Basel Convention.

Department: Public Works **Related Policies:** HAZ-6.C **Funding Source:** User fees

Time Frame: Ongoing

HAZ-P.34. Emergency Preparation

Improve local emergency preparedness through the following community engagement and outreach actions:





- Offer free emergency planning and response classes, including participation in Community Emergency Response Teams training, to Huntington Beach community members.
- Distribute information about possible risks in Huntington Beach, ways to reduce risk, and effective post-emergency recovery strategies to community members through inperson events, online, and in print and electronic media in multiple languages, including Spanish, Vietnamese, and Chinese.
- Work with local businesses to prepare workplace emergency plans, and to conduct regular drills and other preparatory exercises for emergency situations.
- Work with the school districts to educate schoolchildren about ways to prepare for emergency situations, and to coordinate school emergency plans with City plans. Consider shelter in place provisions, evacuation needs, provisions for school closure, and consistency with City and regional shelter plans.
- Develop emergency education programs for elderly and disabled persons, in collaboration with medical providers, residential care workers, and other supportive organizations.
- Ensure that City evacuation plans include provisions for the safe and efficient evacuation of individuals with limited mobility, including elderly residents and persons with disabilities.
- Continue to have the Huntington Beach Fire Department sponsor the Senior Home Inspection Program (Project SHIP), where volunteers conduct free home fire safety inspections for seniors in the city which can provide free smoke detectors and carbon monoxide detectors as funding is available.

Departments: Fire, Police

Related Policies: HAZ-2.E, HAZ-6.C, HAZ-8.A

Funding Source: General Fund

Time Frame: Ongoing

HAZ-P.35. Neighborhood-Based Coastal Resiliency Task Forces

Convene neighborhood specific coastal resiliency task forces, or utilize existing neighborhood specific groups and committees to vet and implement resilience strategies that balance the diverse stakeholder interests. Prioritize neighborhoods with highly vulnerable communities and assets such as Huntington Harbour and Sunset Beach and include community members, City staff, and relevant stakeholders such as Caltrans, Southern California Edison, Sunset Beach Sanitary District, homeowners associations, and the County of Orange.

Departments: Planning Division, Public Works

Related Policies: HAZ-2.E Funding Source: General Fund





Noise Element

City Plans, Ordinances, and Programs

N-P.1. Noise-Mitigating Design Guidelines

Establish design guidelines for residential, commercial, industrial, and mixed-use structures that respond to noise concerns. Provide the guidelines to developers at an appropriate time during the development review process.

Departments: Community Development

Related Policies: N-1.B, N-2.C

Funding Sources: General fund, development fees

Time Frame: Guidelines established by 2020, ongoing implementation

N-P.2. Industrial Hours of Operation

Update the Municipal Code to establish and enforce appropriate hours of operation for industrial activities with the potential to result in excessive noise with potential to disturb noise-sensitive land uses. Such activities include, but are not limited to, mechanical operations and truck deliveries.

Departments: Community Development, Police

Related Policies: N-4.A

Funding Source: General fund

Time Frame: Code updates completed by 2020, ongoing implementation and

enforcement

N-P.3. Noise Ordinance Updates

Update the Noise Ordinance regularly on a cycle of no more than every 10 years. During each update, conduct the following:

- Monitor on-the-ground conditions in areas of existing or likely noise-related conflict.
- Conduct public outreach.
- Evaluate the adequacy of enforcement mechanisms, and implement a system for tracking and monitoring locations where known or repetitive violations of noise standards have occurred or in locations where excessive noise disproportionately impacts disadvantaged communities.
- Identify specific exterior noise standards for industrial and commercial properties located adjacent to sensitive land uses, and incorporate project design features that reduce noise conflicts between industrial and commercial properties and sensitive land uses.





Departments: Community Development

Related Policies: N-1.A

Funding Source: General fund

Time Frame: Every 10 years, ongoing

Capital Improvements

N-P.4. Noise Barrier Construction Funding

Secure funding to support construction of noise barriers to protect private outdoor yard areas along arterial roadways where existing homes are exposed to noise levels above the standards identified in Noise Element Table N-2. Develop a priority program for the construction of such barriers.

Department: Public Works

Related Policies: N-3.B, N-3.C

Funding Sources: General fund, grant funding

Time Frame: Ongoing

Development Review Requirements

N-P.5. Construction Hours

Enforce the following requirements during environmental review of proposed projects:

- Limit construction activities that would produce an hourly L_{eq} above 85 dBA to between the hours of 10:00 a.m. to 4:00 p.m. if such activities are proposed to occur within 100 feet of identified noise-sensitive uses.
- Alternative mitigation may be considered for projects that would require pile driving or nighttime activities such as pumping or truck hauling.

Departments: Community Development, Public Works

Related Policies: N-4.A, N-4.D

Funding Source: Development fees

Time Frame: Ongoing

N-P.6. Acoustical Studies

Acoustical studies will be required for all discretionary projects where any of the following conditions apply:

 The proposed project includes a noise-sensitive land use that is located within the existing or future (Figure N-2) 65 dBA CNEL contour for transportation noise sources.





- The proposed project will cause future traffic volumes to increase by 25 percent or more on any roadway that fronts a sensitive land use.
- The proposed project will expose a noise-sensitive land use to a stationary noise source or vibration source exceeding the standards outlined in the Noise Ordinance.
 Such stationary sources may include mechanical equipment operations, entertainment venues, and industrial facilities.
- The proposed project includes a noise-sensitive land use in the vicinity of existing or proposed commercial and industrial areas.
- The proposed project is a mixed-use development that includes a residential component. The focus of this type of acoustical study is to determine likely interior and exterior noise levels and to recommend appropriate design features to reduce noise.

An acoustical analysis prepared in accordance with the Noise Element and the Huntington Beach Noise Ordinance (Section 8.40 of the Municipal Code) shall:

- Be the financial responsibility of the applicant seeking City approval of a project.
- Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and predominant noise sources.
 Noise level measurements must be conducted at the time of greatest potential for noise level increases above baseline conditions or allowed by law.
- Estimate existing and projected cumulative noise in terms of CNEL or L_{eq}, and compare those noise levels to Noise Element standards and policies.
- Recommend appropriate mitigation to achieve compliance with Noise Element policies and standards. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
- Estimate noise exposure after the prescribed mitigation measures have been implemented.

Departments: Community Development

Related Policies: N-2.A

Funding Source: Development fees





N-P.7. Noise Considerations in Development Review

Review development proposals to ensure that noise standards and compatibility criteria set forth in Noise Element Table N-2 are met. Consult Noise Element guidelines and standards for noise-compatible land uses to determine the suitability of proposed projects relative to existing and forecasted noise levels. Enforce the California Noise Insulation Standards to ensure an acceptable interior noise level of 45 dbA CNEL in habitable rooms.

Departments: Community Development

Related Policies: N-1.A, N-4.B

Funding Source: Development fees

Time Frame: Ongoing

Interjurisdictional Coordination

N-P.8. Noise Barrier Coordination

Coordinate with Caltrans to complete the installation of freeway noise barriers along Interstate 405 and Beach Boulevard (State Route 39) facilities to attenuate noise for existing noise-sensitive land uses.

Department: Public Works **Related Policies:** N-3.E

Funding Source: General fund



Public Services and Infrastructure Element

City Plans, Ordinances, and Programs

PSI-P.1. Related Programs and Governmental Agencies

Continue to ensure compliance with federal, state, and local programs and regulations, including but not limited to the following:

- National Flood Insurance Program (NFIP)
- National Pollutant Discharge Elimination System (NPDES)
- Municipal Separate Storm Water System Permit Program
- Groundwater Management Act
- California Public Resources Code
- California Water Code
- California Urban Water Management Planning Act
- California Integrated Waste Management Act
- California Education Code
- Orange County NPDES Municipal Storm Water Permit

Departments: Community Development, Public Works

Related Policies: HAZ-3.A, PSI-7.E

Funding Source: General Fund, development fees

Time Frame: Ongoing

PSI-P.2. Fire and Emergency Response Performance Objectives

Adopt locally defined performance objectives for fire, marine safety, and emergency response. Track compliance with adopted performance goals for fire and emergency medical services quarterly and report the information annually to the City Council and community residents. Use annual report results to modify and better locate fire resources (e.g., stations, equipment, personnel) to meet established emergency response performance objectives.

Annually evaluate fire department staffing levels and workload projections, and modify the Capital Improvement Program and operations plans, as necessary, to ensure facilities, equipment, and personnel meet established performance objectives.





Department: Fire

Related Policies: PSI-2.A, PSI-2.B, PSI-2.D, PSI-2.F

Funding Sources: General Fund

Time Frame: Annually

PSI-P.3. Fire Hazard Response

Minimize the amount of time needed for dispatch and turnout to effectively respond to any reported fire hazard, and identify remedial actions that should be taken to reduce travel time based on conditions experienced during the incident.

Departments: Fire

Related Policies: PSI-2.A, PSI-2.B, PSI-2.C, PSI-2.D, PSI-2.E, PSI-2.G

Funding Source: General Fund

Time Frame: Ongoing

PSI-P.4. Urban Water Management Plan

Continue to update the Huntington Beach Urban Water Management Plan every five years to include estimates for population, water demand, and water supply with projections in five-year increments.

Department: Public Works

Related Policies: ERC-15.A, ERC-15.B, PSI-6.B, PSI-6.C

Funding Sources: General Fund or grant funding

Time Frame: Every five years

PSI-P.5. Citywide Infrastructure Master Plans

Prepare and adopt coordinated, citywide infrastructure master plans and conduct annual evaluations. Review and update infrastructure master plans within one year of evaluation if information or policies are found to be outdated or no longer relevant.

Department: Public Works

Related Policies: PSI-6.A, PSI-6.B, PSI-6.C, PSI-7.A, PSI-7.B, PSI-7.C, PSI-7.F, PSI-

8.A, PSI-8.B, PSI-8.C, PSI-11.B, PSI-11.C

Funding Sources: General Fund

Time Frame: Develop citywide infrastructure master plans by 2020, review annually

PSI-P.6. Water Reuse and Recycling Plan

Examine the feasibility and potential benefits of a water reuse and recycling plan. As appropriate, amend the Huntington Beach Municipal Code to establish a pre-plumbing





ordinance that supports installation of future greywater systems within all new development and reuse projects.

Department: Public Works

Related Policies: ERC-15.C, ERC-16.A, ERC-17.D

Funding Sources: General Fund

Time Frame: Municipal Code revisions completed by 2020

PSI-P.7. Public Library Facilities Plan

Establish and implement a public library facilities plan to:

- Ensure the library system both meets California State Library recommended standards and adequately serves community needs.
- Explore with local school districts the use of school libraries serving as City library satellites.
- Continue to support after-school programs, job training programs, workshops, and other activities.
- Expand library outreach services for seniors and others who are physically unable to visit library facilities.
- Explore all funding and grant options available to support upgrading library facilities
 and amenities; support library efforts to incorporate the best technology and facilities;
 and support technology and facility upgrade efforts in libraries to ensure community
 members have access to state-of-the-art amenities.

Department: Library Services

Related Policies: PSI-3.A, PSI-3.B, PSI-3.C, PSI-3.D, PSI-4.D

Funding Sources: General Fund

Time Frame: Facilities plan completed by 2020

PSI-P.8. Development Fees

Perform a nexus fee study and revise City development fees to ensure that new development and reuse projects pay for a fair share of public infrastructure in a manner coordinated with improvements identified in the City's infrastructure management plans.

Departments: Community Development, Public Works, Fire, Police, Library Services,

Community Services

Related Policies: PSI-6.B, PSI-7.D, PSI-8.A, PSI-8.C, PSI-11.B

Funding Sources: General Fund

Time Frame: Complete nexus fee study by 2020, update fees annually





PSI-P.9. Police Department

Annually review police department staffing levels and workload projections and modify the Capital Improvement Program and operations plans, as necessary, to ensure facilities, equipment, and personnel meet established performance objectives. Annually evaluate crime trends and police services, facilities, personnel, and response times relative to community needs and established state and federal standards.

Departments: Police

Related Policies: PSI-1.A, PSI-1.B, PSI-1.C, PSI-1.F, PSI-1.I

Funding Sources: General Fund Time Frame: Ongoing, annually

PSI-P.10. Special Events

Review special events for the need to coordinate enhanced solid waste removal and police protection in conjunction with the permitting process. Identify fees associated with additional costs to be paid by event sponsors.

Departments: Community Services Beach Division, Police

Related Policies: PSI-1.F, PSI-9.D

Funding Sources: General Fund, user fees

Time Frame: Fee structure based on individual agreements or as events are proposed

PSI-P.11. Public Service and Infrastructure Improvements

Continue to adopt and update the City's operating budget to maintain adequate public services, facilities, and infrastructure, exceed national averages, and coordinate development of community facilities and amenities and capital projects. Evaluate the cost-effective provision of public services and seek innovative funding sources to provide services and maintain and upgrade existing infrastructure systems to counteract decreasing federal, state, and county funding sources, including grants, infrastructure financing districts, and other sources.

Department: Public Works, Community Development

Related Policies: PSI-1.B, PSI-2.B, PSI-3.A, PSI-3.D, PSI-4.A, PSI-4.C, PSI-6.A, PSI-6.A

6.C, PSI-7.A, PSI-7.B, PSI-7.F, PSI-8.A, PSI-9.C, PSI-11.A, PSI-11.C

Funding Sources: General Fund, federal, state and county funds, grants, infrastructure

financing districts





PSI-P.12. Infrastructure Technology

Expand infrastructure technology in Huntington Beach by:

- Partnering with local utility and telecommunication companies to coordinate and implement the most advanced and effective infrastructure technology possible.
- Ensuring that budgeting for police, fire, and EMS services enables procurement of the most advanced technology accessible to aid in these services.
- Encouraging and facilitating the installation of fiber optic internet service starting in the Research and Technology designated industrial areas.
- Evaluate a comprehensive information systems platform based on geospatial reckoning across all City departments to keep residents informed.

Departments: Public Works, Fire, Police, City Manager's Office

Related Policies: PSI-1.I, PSI-2.D, PSI-10.A, PSI-10.C, PSI-10.D, PSI-10.D

Funding Sources: General Fund

Time Frame: Ongoing

PSI-P.13. Recycling and Composting

In coordination with the City's waste hauler, build on existing waste collection and reduction programs to support California's goal of a 75 percent recycling rate by 2020 and to support long-term zero-waste efforts. Develop a composting program for commercial businesses, and expand participation to include single-family and multifamily residences as feasible. Identify materials that cannot be easily recycled or composted in Huntington Beach, and develop strategies that allow for effective diversion of these items. Improve the amount of construction and demolition (C&D) waste recycled in the community, and establish minimum diversion criteria that exceed state requirements for all future waste hauler contracts.

Departments: Public Works

Related Policies: PSI-9.A, PSI-9.B, PSI-9.C, PSI-9.E, PSI-9.F, PSI-9.G

Funding Sources: General Fund





Capital Improvements

PSI-P.14. Capital Improvement Program

Use the City's 5-year Capital Improvement Program (CIP) process to prioritize, fund, and build required infrastructure and public facility improvements, including:

- Wastewater collection facilities
- Water supply and distribution facilities
- Water storage and transmission facilities
- Storm drain and flood control facilities

Use public capital resources in combination with private financing sources and seek regional, state, and federal funds to supplement local funding of infrastructure projects listed in the CIP.

Department: Public Works, Community Development

Related Policies: PSI-6.C, PSI-7.F, PSI-8.A, PSI-8.C, PSI-11.A, PSI-11.C

Funding Sources: Enterprise funds, service fees, impact fees, grants, General Fund

Time Frame: Ongoing

PSI-P.15. Storm Drain Improvements

Design, preserve, and acquire land for water storage and transmission facilities, storm drain, and flood facilities. Provide for the construction of necessary pump and storage facilities to ensure adequate water supply and proper water system balance and the installation of stormwater drain gates. Evaluate existing environmental degradation or potential degradation from current or planned storm drain and flood control facilities in wetlands or other sensitive environments.

Departments: Public Works

Related Policies: ERC-7.G, PSI-7.B, PSI-7.C

Funding Sources: Impact fees, grants, General Fund

Time Frame: Ongoing

PSI-P.16. Installation of Trash and Recycling Receptacles

Design and install additional trash and recycling receptacles in public areas, including but not limited to Downtown, Beach Boulevard, City parks, and along the beach.

Departments: Community Services, Public Works

Related Policies: PSI-9.D

Funding Sources: General Fund

Time Frame: 2020





Development Review Requirements

PSI-P.17. Development Review

Through the development and design review processes for new development and reuse projects, require or continue to require the following:

- That sufficient utility and water capacity is available. If sufficient capacity is not currently available, additional capacity or adequate mitigation shall be provided by the project.
- Use of energy- and water-efficient fixtures and design elements to the maximum extent feasible consistent with City codes and policies.
- Use of drought-tolerant and native landscaping to the maximum extent feasible consistent with City codes and policies.
- Adequate receptacles for trash, recycling, and composting, as applicable.
- Completion of studies to determine water and sewer right-of-way and infrastructure requirements for future development projects, including that study recommendations be incorporated into the design of proposed projects. Payment of costs associated with providing new and improving wastewater, stormwater, and solid waste services shall be the responsibility of the project applicant.
- Incorporation of Crime Prevention through Environmental Design (CPTED) techniques
 into site planning and architectural design including territoriality, natural surveillance,
 activity support, and access control.
- Adequate street widths and clearance for emergency access and the provision of all appropriate safety features.
- Evaluate the need for additional technology infrastructure in building design, both from the street and within the building.

Continue to consult with the fire and police departments and utility providers to:

- Evaluate the need for additional fire and police facilities or resources to serve new development projects during the development review process.
- Evaluate the need for safety features when improving streets and critical intersections.
- Ensure capacity and infrastructure is adequate for the projected demand.

Departments: Community Development, Fire, Police, Public Works

Related Policies: ERC-12.A, ERC-16.A, ERC-16.C, PSI-1.A, PSI-1.D, PSI-1.E, PSI-2.A,

PSI-2.C, PSI-2.E, PSI-2.G, PSI-6.B, PSI-9.A, PSI-10.D,

Funding Sources: General Fund





PSI-P.18. National Pollutant Discharge Elimination System

Require new development and reuse projects to submit plans to demonstrate compliance with National Pollutant Discharge Elimination System (NPDES) requirements, including but not limited to:

- Mitigation of pollutant flows.
- Limitation of impervious surfaces.
- Preservation and usage of natural filtration systems such as wetlands and bioswales.
- Provision of on-site infiltration and runoff, as well as temporary on-site retention areas.
- Limitation of disturbance to natural bodies of water, drainage systems, and highly erodible areas.
- Use of pollution prevention measures, source controls, and treatment strategies.
- Implementation of erosion protection during and after construction.

Department: Public Works, Community Development

Related Policies: ERC-17.A, ERC-17.B, PSI-7.E

Funding Sources: General Fund

Time Frame: Ongoing

Interjurisdictional Coordination

PSI-P.19. Regional Coordination

Coordinate with regional agencies, surrounding jurisdictions, and service providers on actions including:

- Coordinating the installation or renovation of infrastructure to ensure compliance with regional plans and uninterrupted continuation of services across jurisdictional borders.
- Maintaining an updated list of nonprofit organizations and interested parties, and ensuring they are included in planning decisions.
- Working with state safety personnel to coordinate emergency response and safety efforts.

Departments: Community Development, Public Works, City Manager's Office

Related Policies: HAZ-9.B, HAZ-9.C, PSI-8.B

Funding Sources: General Fund





PSI-P.20. School District Coordination

Meet with local school districts to ensure continued coordination of maintenance and operations for the use of school facilities for public recreational activities, and the use of City parks for school educational purposes.

Department: Community Services, City Manager's Office **Related Policies:** ERC-2.E, ERC-2.F, PSI-5.A, PSI-5.C

Funding Sources: General Fund

Time Frame: Ongoing

Public Information and Outreach

PSI-P.21. Community-Based Crime Prevention

Offer advice and support to community-based crime prevention efforts by neighborhood groups and civic organizations. Specific efforts may include, but are not limited to:

- Advising and assisting neighborhoods in efforts to watch the homes of others and report suspicious activity to the police.
- Providing crime prevention inspections of homes and businesses, including assessing CPTED principles which have been or could be implemented.

Department: Police

Related Policies: PSI-1.D, PSI-1.G, PSI-1.H

Funding Sources: General Fund

Time Frame: Ongoing

PSI-P.22. Fire Safety Outreach

Provide continuous education and outreach on fire safety through regular workshops, informational posts on City websites and social media, partnerships with schools and community groups, and development review requirements.

Departments: Fire

Related Policies: HAZ-4.B, HAZ-8.A

Funding Sources: General Fund





PSI-P.23. Recycling and Composting Outreach

Require the regular distribution of information to all residences and businesses regarding the benefits and processes of recycling and composting through actions such as:

- Posting signs at waste disposal locations in multifamily complexes and businesses directing users to the correct bin for waste disposal.
- Providing public information regarding composting options for household, commercial, and public waste and exploring the feasibility of providing a curbside composting program.
- Encouraging residents to donate or recycle surplus furniture, old electronics, clothing, and other household items rather than disposing of such materials in landfills.
- Identifying which materials are disposed of incorrectly, and conducting focused outreach efforts to improve diversion rates of these materials.

Departments: Public Works, Information Services Department

Related Policies: PSI-9.D, PSI-9.F, PSI-9.H

Funding Sources: General Fund

Time Frame: Ongoing

PSI-P.24. Expanded Library Programs

Maximize the cultural, educational, and social capabilities of the library system by expanding services to underrepresented age and ability groups; enhancing and expanding online and digital services; and partnering with art centers, cultural groups, and historical societies.

Departments: Library Services, Community Services

Related Policies: PSI-3.A, PSI-3.B, PSI-3.C, PSI-3.D, PSI-4.D

Funding Sources: General Fund, user fees

Time Frame: Ongoing

PSI-P.25. Marine Safety Outreach

Develop a marine safety outreach program to educate the community on ocean surf line safety.

Departments: Fire

Related Policies: PSI-2.F

Funding Source: General Fund





This page is intentionally left blank.

