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REVISIONING NORTH SAN DIEGO'S COUNTY TRANSIT HUB

OCEANSIDE TRANSIT CENTER TRANSIT-ORIENTED DEVELOPMENT: Revisioning North San Diego County's Transit Hub

CRP 462 - Senior Project
City and Regional Planning Department
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CAL POLY

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"A Transit-Oriented Development (TOD) is a mixed-use community within an average one-fourth-mile walking distance of a transit stop and core commercial area. The design, configuration, and mix of uses emphasize a pedestrian-oriented environment and reinforce the use of public transportation. TODs mix residential, retail, office, open space, and public uses within comfortable walking distance, making it convenient for residents and employees to travel by transit, bicycle or foot, as well as by car."

Peter Calthorpe

Source: Sacramento County - Transit-Oriented Development Design Guidelines, 1990

INTRODUCTION

1

1. INTRODUCTION

1.1 OVERVIEW

Many California coastal communities lack a supply of housing, produce high levels of greenhouse gas emissions by daily auto commuters and have existing local and commuter rail stations with large fields of parking surrounding them. Transit-Oriented Development (TOD) integrates the building of housing, retail, office, and public space together focused around transit stations. This infill of development locates people within comfortable walking distance, usually within a quarter mile, of a public rail transit station reducing automobile dependence for local trips or commuting for work as depicted in Peter Calthorpe's Conceptual TOD in Figure 1-1.

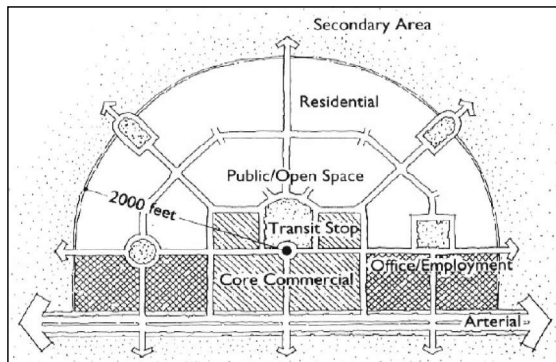


FIGURE 1-1 | Peter Calthorpe's Conceptual TOD
Source: *The Next American Metropolis* (1993)

The Oceanside Transit Center (OTC) is a major railway interchange, serving as a gateway to the San Diego county and region, located just blocks south from the center of downtown Oceanside, California. The station is serviced regionally by

Amtrak and Metrolink trains, service along the coast by the COASTER commuter rail and locally by the SPRINTER light rail. Transit service also includes Greyhound Lines and BREEZE as seen in the monument entrance signage in Figure 1-1. OTC is one of the busiest in the county, where more than 1.2 million passengers annually board trains and buses.



FIGURE 1-2 | Oceanside Transit Center Entry Monument
Source: *Chad Johnston*

The station and its surface parking lots, seen in Figures 1-2 & 1-3, consist of approximately +/- 10.2 acres owned by the North County Transit District (NCTD) and is located within a short walk from the Oceanside Civic Center, the heart of the downtown and community. Recently, Oceanside has experienced major growth through private investment and redevelopment in the downtown core due to its accepting government, beautiful beaches, casual lifestyle, and great sense of community.

The significant benefits of building adjacent to rail transit stations through Transit-Oriented Developments (TODs) are the strengthening of local economic conditions, increased transit ridership, improved social and health benefits, the increased values and real estate impacts

while creating a more sustainable community. The objective of this project is to analyze the existing conditions, refine the infill development potential for the underutilized surface parking lots owned by NCTD surrounding the Oceanside Transit Center and create a means to achieving that vision.



FIGURE 1-3 | Oceanside Transit Center Parking Lot
Source: *Chad Johnston*

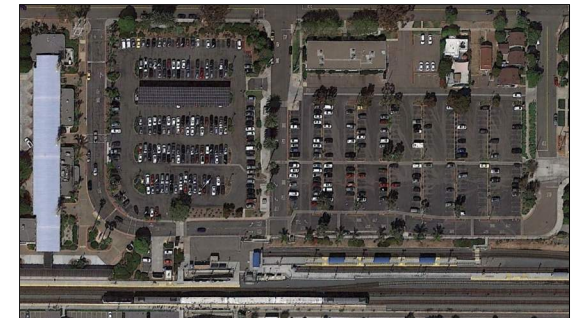


FIGURE 1-4 | Oceanside Transit Center Parking Lot Aerial
Source: *Google Earth*

1.2 REGIONAL FOCUS ON SMART GROWTH & TRANSIT-ORIENTED DEVELOPMENT

The *San Diego Association of Governments* (SANDAG) is the metropolitan planning organization for San Diego County governed by a Board of Directors composed of mayors, council members, and supervisors from each of the region's 18 cities and the county government.



FIGURE 1-5 | SANDAG
Source: SANDAG

SANDAG is the region's primary public planning, transportation, and research agency, providing the public forum for regional policy decisions about growth, transportation planning and construction, environmental management, housing, open space, energy, public safety, and binational topics.

In 2004, SANDAG adopted the Regional Comprehensive Plan (RCP) which was incorporated into San Diego Forward: The Regional Plan (Figure 1-5). This provides a vision for the region based on smart growth and sustainability. A key implementation action of the RCP was the development of a Smart Growth Concept Map (Figure 1-6) illustrating the location of existing, planned, and potential smart growth areas.



FIGURE 1-6 | SANDAG's San Diego Forward
Source: SANDAG

Visualization tools can help illustrate how communities can be transformed by smart growth development and transit-friendly design. The visual simulations, displayed in Figure 1-7, are meant to illustrate conceptual smart growth development alternatives and include elements such as mixed-use buildings, pedestrian-oriented streetscapes, public transit improvements, higher density and compact housing, and multimodal transportation options.

The goals of the simulations are to provide ideas for discussion in local communities, showcase different levels of smart growth in the place types identified on the Smart Growth Concept Map, and generate greater support for smart growth and Transit-Oriented Development in the San Diego region.

Score: www.sandag.org

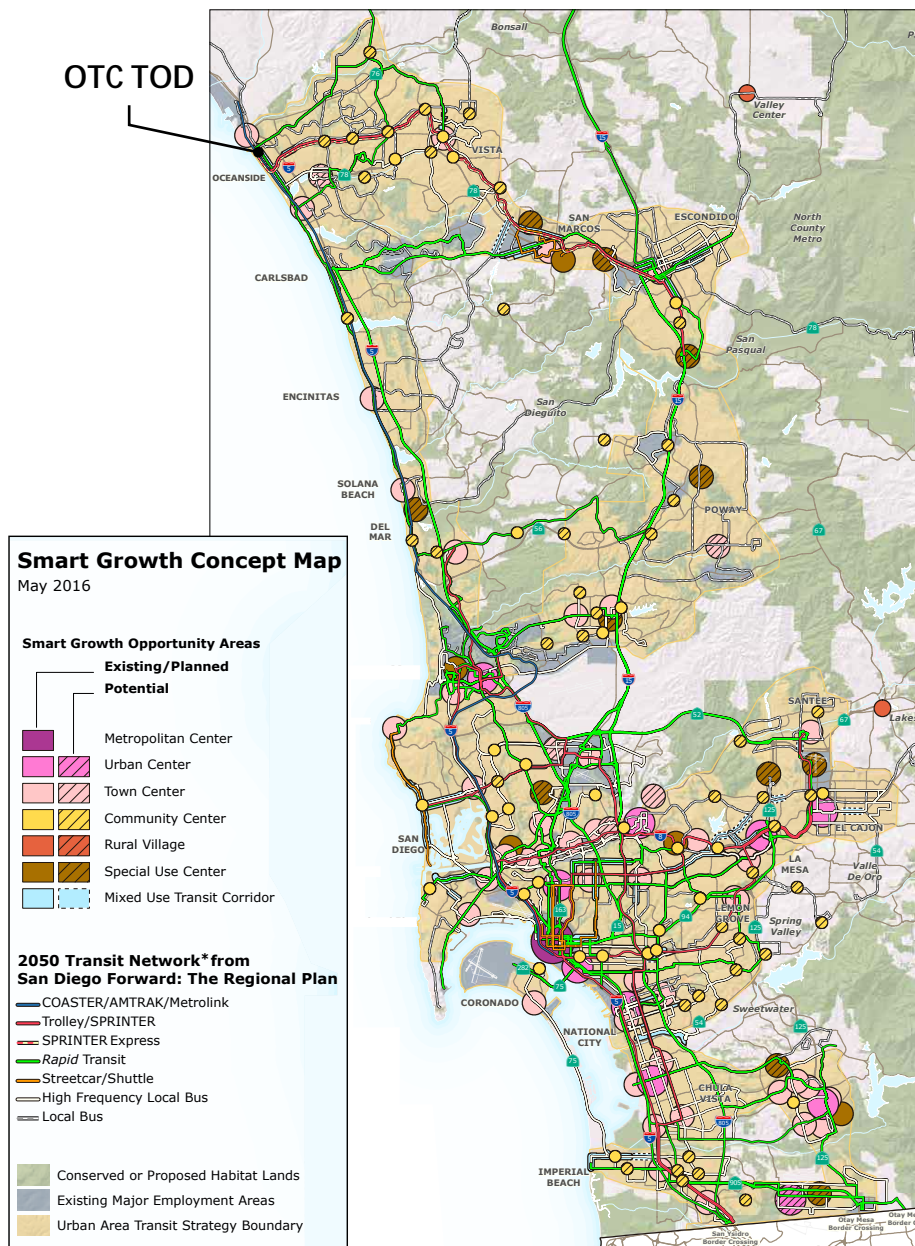


FIGURE 1-7 | SANDAG Smart Growth Concept Map

Source: SANDAG, 2016



FIGURE 1-8 | Visualizing Smart Growth Example

(Carlsbad Village COASTER Station)

Source: SANDAG

The SANDAG Smart Growth Concept Map - North County Subregional Scale Map (Figure 1-9) identifies Downtown Oceanside as a Town Center place type (OC-1) and the Oceanside Transit Center is located in the Mixed Use Transit Corridor place type (OC-2).

Each smart growth place type is associated with certain housing and employment density targets and transit service thresholds indicated in Figure 1-10 and typical characteristics listed below.

OC-1: Town Center (Downtown Oceanside)

- Suburban downtowns within the region
- Low- and mid-rise residential, office, and commercial buildings
- Some employment
- Draws people from the immediate area
- Served by corridor/regional transit lines and local services or shuttle services

OC-2: Mixed Use Transit Corridor (Oceanside Transit Center - study area)

- Areas with concentrated residential and mixed-use development along a linear transit corridor
- Variety of low-, mid- and high-rise buildings, with employment, commercial and retail businesses
- Draws people from nearby communities

Source: SANDAG - Smart Growth Concept Map Site Descriptions (May, 2016)
https://www.sandag.org/uploads/projectid/projectid_296_14002.pdf

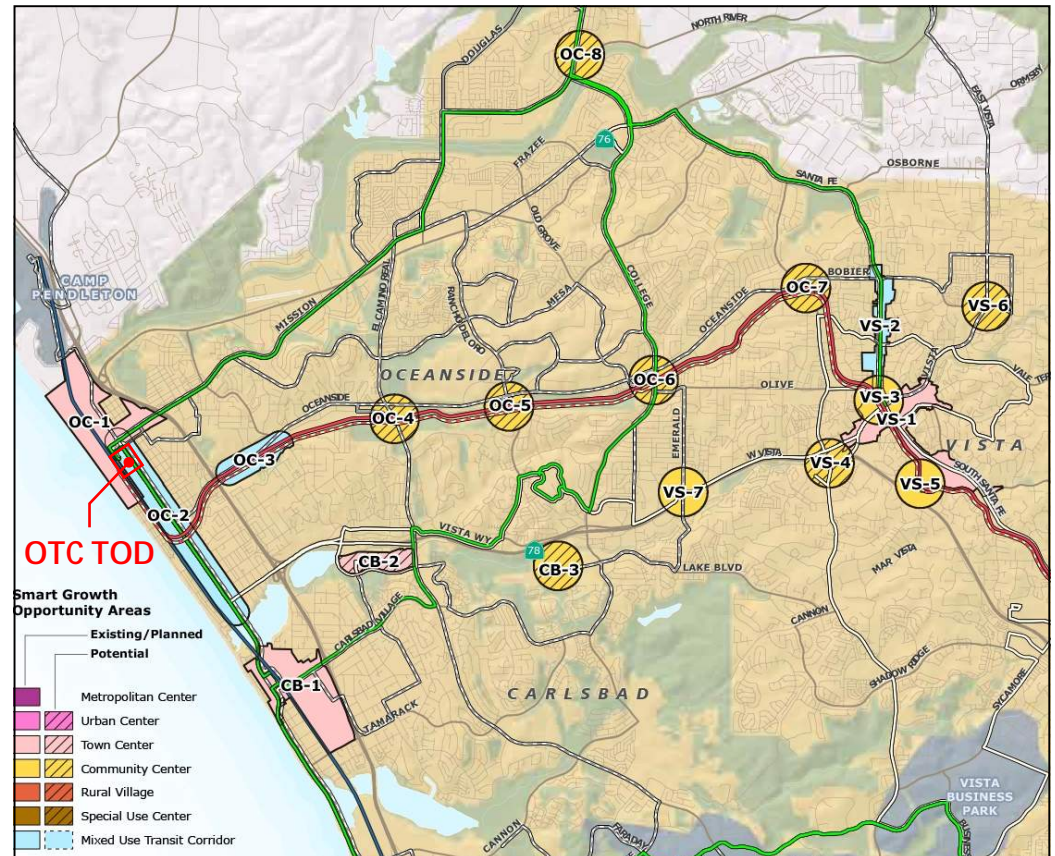


FIGURE 1-9 | SANDAG Smart Growth Concept Map - North County Subregional Scale Map
Source: SANDAG, 2016

Smart Growth Place Type	Minimum Residential Target	Minimum Employment Target	Minimum Transit Service Characteristics
Metropolitan Center	75 du/ac	80 emp/ac	COASTER, AMTRAK, Metrolink, Trolley, SPRINTER, or Rapid Service
Urban Center	40 du/ac	50 emp/ac	Trolley, SPRINTER, or Rapid Service
Town Center	20 du/ac	30 emp/ac	Trolley, SPRINTER, Rapid Service, or Streetcar/Shuttle*
Community Center	20 du/ac	N/A	High-Frequency Local Bus or Streetcar/Shuttle within Urban Area Transit Strategy Boundary
Rural Village	10.9 du/ac	N/A	N/A
Special Use Center	Optional	45 emp/ac	Trolley, SPRINTER, or Rapid Service
Mixed-Use Transit Corridor	25 du/ac	N/A	High-Frequency Local Bus or Streetcar/Shuttle

FIGURE 1-10 | SANDAG Smart Growth Concept Map - Land Use & Transportation Targets
Source: SANDAG, 2016

1.3 INTENT & BENEFITS

The Oceanside Transit Center Transit-Oriented Development (OCT TOD) provides a visionary foundation to guide the framework and guidance for future development and public improvements surrounding the existing transit station. The OCT TOD is intended to:

- Respond to changing market conditions.
- Enhance Oceanside's economic sustainability by creating a new vibrant economic center focused around the transit station to enhance the lives of Oceanside's residents and the region.
- Capitalize on major transit investment with appropriate land use in the transit center, with a vision towards long-term growth considerations.
- Ensure public and private investments maintain and enhance the intermodal aspects of the Oceanside Transit Center TOD, focusing on commuters and travelers on all transit services, including Amtrak, Metrolink, COASTER, SPRINTER, Greyhound and BREEZE.
- Reduce daily traffic congestion, auto accidents, incentive to sprawl and greenhouse gas emissions
- Increase public transport ridership by reducing the use of private cars and by promoting sustainable urban growth
- Healthier lifestyle with more walking
- Increase the walkable, urban nature of the city and reconnect all of Oceanside's neighborhoods together and beyond.



FIGURE 1-11 | Amtrak - Pacific Surfliner in the foreground of a recent build Mixed-Use infill project

Source: Chad Johnston



FIGURE 1-12 | Oceanside Transit Center - SPRINTER

Source: Chad Johnston

1.4 PLANNING CONTEXT

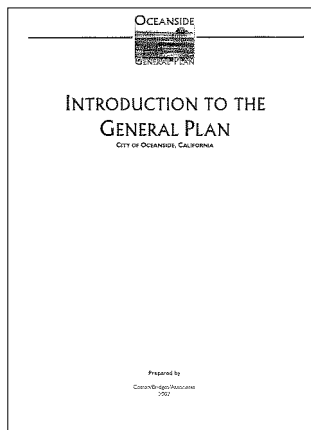
This section describes the regulatory framework, planning studies, and other initiatives relevant to the study area.

General Plan

The current General Plan was approved in 2002 and through goals and policies that reflect community values and aspirations, this document provides the policy framework for local land use decisions.

California law mandates that all local jurisdictions prepare and adopt a General Plan that addresses the following seven topics: Land Use, Circulation, Housing, Conservation, Open Space, Safety, and Noise. They can also choose to address additional topics, which the City of Oceanside elected to include the Economic Development Element (EDE), Energy and Climate Action Element (ECAE), and the Community Facilities Element.

Source: *City of Oceanside - General Plan*, <https://www.ci.oceanside.ca.us/gov/dev/planning/general.asp>



General Plan Update (GPU)

In 2019, the City of Oceanside began the process of completing its General Plan Update (GPU), which has adopted the tagline 'Onward Oceanside' to highlight the forward progress the City has made in recent years and emphasize the importance of building on the City's existing assets.

In late 2019, the City Council adopted Phase 1 of the General Plan Update; Economic Development Element (EDE), Energy and Climate Action Element (ECAE), along with the City's first Climate Action Plan (CAP).

Phase 2 of the General Plan Update will include updating of the City's existing Land Use, Circulation, Housing, Conservation and Open Space, Community Facilities, Safety, and Noise elements. This planning process aims to revisit important planning elements last updated in 2002, shape a forward-looking vision for Oceanside, and provide the City with a regulatory document that responds to its contemporary issues and legal context.

Source: *City of Oceanside - General Plan Update*, <https://www.ci.oceanside.ca.us/gov/dev/planning/gpu/default.asp>

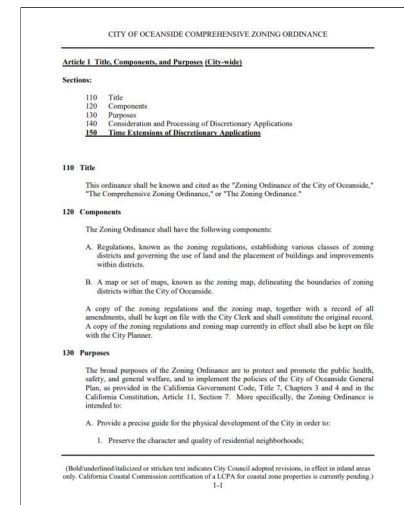


Zoning Code & Zoning Code Ordinance Update

The City of Oceanside currently utilizes multiple zoning ordinances to regulate land use within its boundaries; the 1986 Zoning Ordinance for coastal areas, the 1992 Zoning Ordinance for inland areas and the Redevelopment Zoning Ordinance for the downtown area. Existing discrepancies between zoning ordinances in administering regulations, development standards and project processing procedures have been at best confusing for the public and cumbersome for decision-makers and staff.

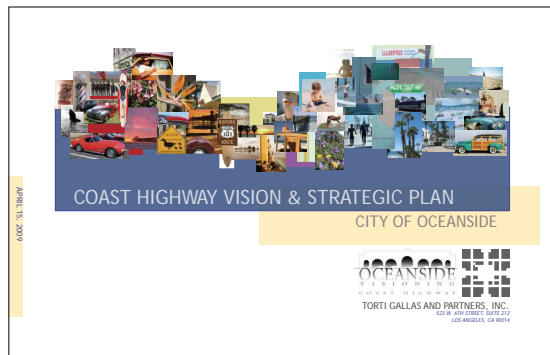
Under City Council direction, Planning Division staff has embarked on a multi-phase effort to update and consolidate the City's zoning ordinances in order to provide enhanced customer service.

Source: *City of Oceanside - Zoning Ordinance*, <https://www.ci.oceanside.ca.us/gov/dev/planning/zoning.asp>



Coast Highway Vision & Strategic Plan

In 2009, the City of Oceanside adopted Coast Highway Vision and Strategic Plan which serves as a blueprint for the revitalization and enhancement of the Coast Highway corridor. It is an advisory document that is used to guide future development in the area (via urban and building design guidelines) and to inform future legislative planning efforts such as General Plan, Local Coastal Plan and Zoning Ordinance changes pertinent to the project area.



Source: City of Oceanside - Coast Vision & Strategic Plan,
<https://www.ci.oceanside.ca.us/gov/dev/projects/chvs/strategic.asp>

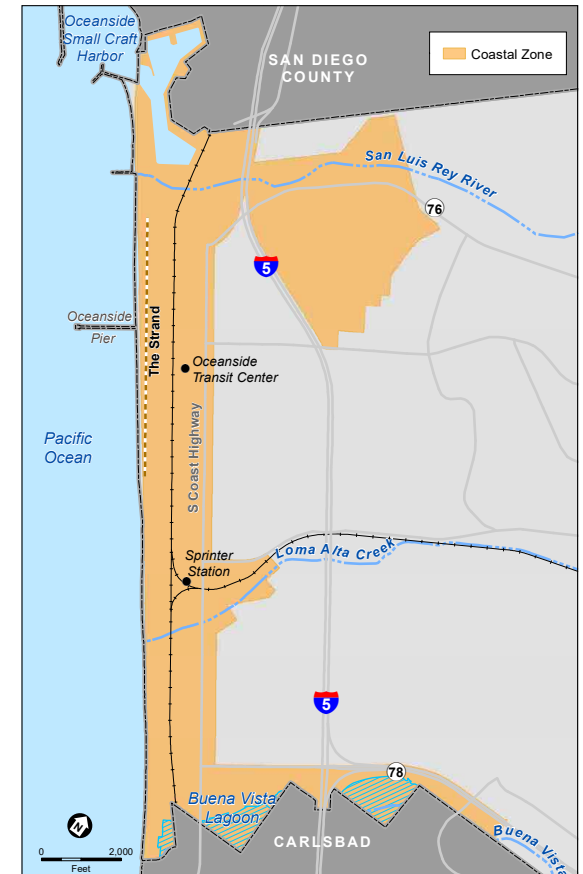
Local Coastal Program and Update

The California Coastal Act, passed in 1976, requires that all coastal jurisdictions in the state adopt a Local Coastal Program (LCP) to ensure local implementation of Coastal Act priorities, which include protection of coastal resources, preservation/enhancement of public access to the shoreline, and provision of adequate recreational amenities, visitor-serving commercial goods and services, and reasonably-priced overnight accommodations.

The City adopted its current Local Coastal Program in 1986, which at the time was certified by the California Coastal Commission. Over the past 34 years, the City has made enormous progress in revitalizing the coastal zone and improving public access to its many resources. Today, the coastal zone faces new challenges, including the threat of sea level rise, increasing visitor traffic, more stringent water quality and habitat management requirements, and aging infrastructure.

The City is concurrently updating its LCP with the preparation of two General Plan elements: the Economic Development Element (EDE) and the Energy and Climate Action Element (ECAP). The updated LCP must be consistent with the goals and policies of these two new General Plan elements along with the Coast Highway Corridor Study.

Source: City of Oceanside - Local Coast Program (LCP) Update,
https://www.ci.oceanside.ca.us/gov/dev/planning/local_coastal_program_update/local_coastal.asp



PLANNING AREA + SITE ASSESSMENT

2

2. PLANNING AREA + SITE ASSESSMENT

2.1 PLAN AREA & BACKGROUND

REGIONAL CONTEXT

The City of Oceanside is the northernmost coastal city of San Diego County, California (Figure 2-1). It is the third-largest city in the county with a population of 167,086 and 59,238 households at the 2010 census. Together with Carlsbad and Vista, it forms a tri-city area. Oceanside is located just south of Marine Corps Base Camp Pendleton and Orange County. It is about 38 miles north of Downtown San Diego via Interstate 5 and 50 miles south of John Wayne Airport in Orange County.

Oceanside is home to some of Southern California's widest beaches, historical landmarks and a distinct Southern California surf culture. Manufacturing, distribution, tourism and agriculture remain the region's top industries, but in recent years, Oceanside has become home to biotech industries that are among the area's fastest growing business sectors.

Downtown Oceanside has an opportunity to promote and facilitate higher density mixed-use development oriented towards transit.

Source:
https://en.wikipedia.org/wiki/Oceanside,_California

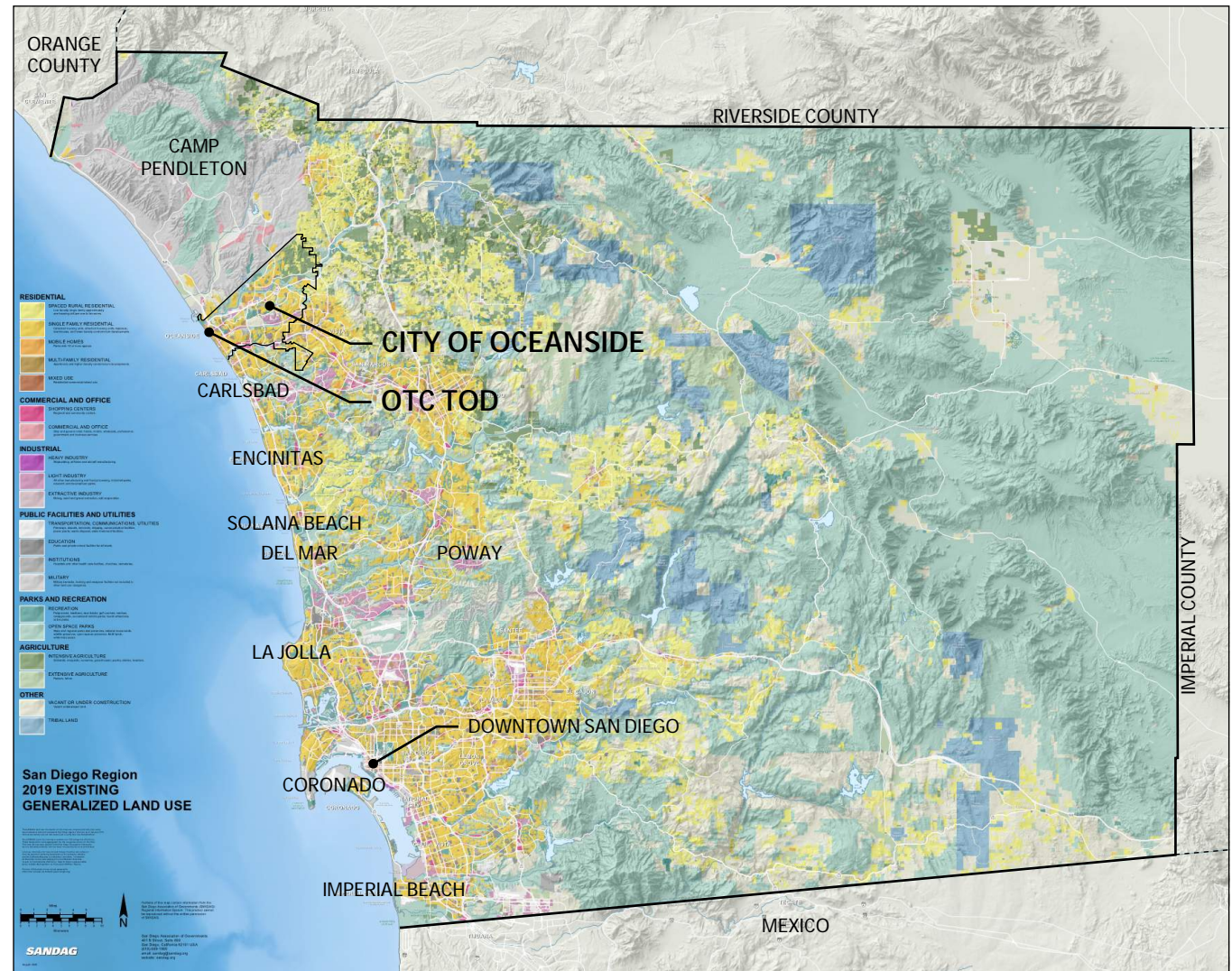


FIGURE 2-1 | Regional Context - San Diego County

Source: SANDAG, San Diego Region 2019 Existing Generalized Land Use

NEIGHBORHOOD CONTEXT

The OTC TOD is located adjacent to the Downtown core within the Townsite neighborhood which is bordered by the Pacific Ocean to the west, Interstate 5 to the east, Oceanside Boulevard to the south and Oceanside Harbor to the north, Figure 2-2 shows this relationship.

The Townsite neighborhood is the heart of the city, offering some of the best coastal living in North County San Diego and is ideally situated for commuters who prefer to live in downtown Oceanside with great amenities but can commute via the train to downtown San Diego. It also offers tourists a great place for a seaside escape who can also enjoy day trips via the trains.

As with many downtown areas across the country, some parts of downtown Oceanside have gone through periods of disrepair and have endured a tarnished reputation as seedier areas to be avoided. In 1975, the Oceanside Redevelopment Agency was formed and a plan to revitalize downtown Oceanside was adopted to redevelop some of the more deteriorated areas. This has led to new developments and infrastructure in downtown, including several resorts and the 450-space parking garage at the Oceanside Transit Center.

Source:
<https://yournorthcounty.com/oceanside-neighborhood-guide-townsite/>

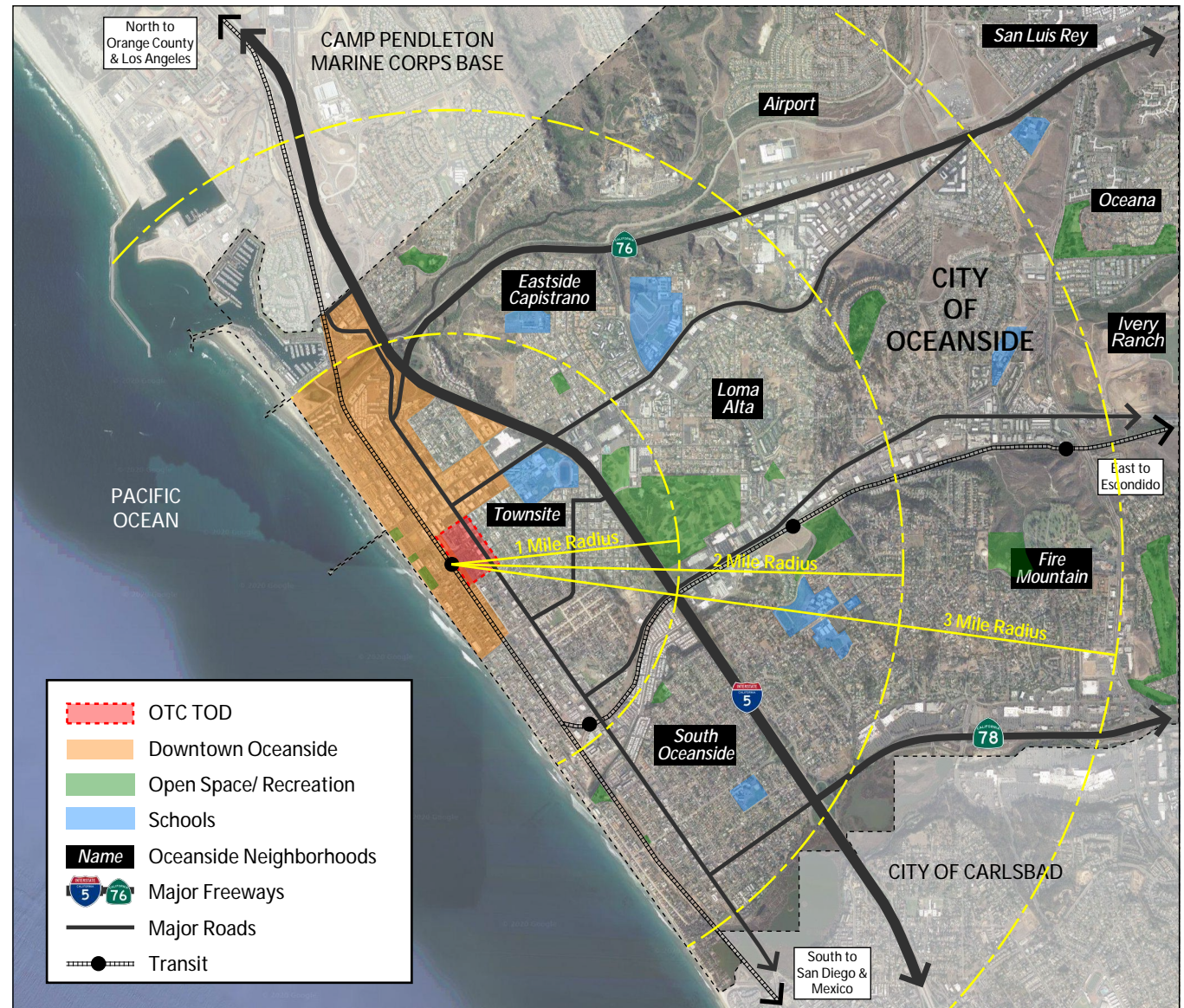


FIGURE 2-2 | Neighborhood Context

SITE CONTEXT

The study area centers on the existing Oceanside Transit Center owned by North County Transit District (NCTD), comprising of +/- 10.2 acres of land, roughly 556 parking spaces and extends east to capture both sides of the commercial parcels along Coast Highway, encompassing a total of approximately 32 acres (Figure 2-3).

Downtown Oceanside and its main east-west commercial corridor, Mission Avenue, lays to the north with limited vehicle and pedestrian access to the study area. Established residential neighborhoods surround the study area to the east, south and west. Vehicle movement to the west is very limited with an at-grade crossing at Mission Avenue. Pedestrian access is handled with a walking tunnel under the tracks at the transit station.

Recent development in the downtown include several new mixed-use high-density housing projects, multiple single parcel in-fill projects and two beachfront resorts with a total of 387 rooms (opening Spring 2021).

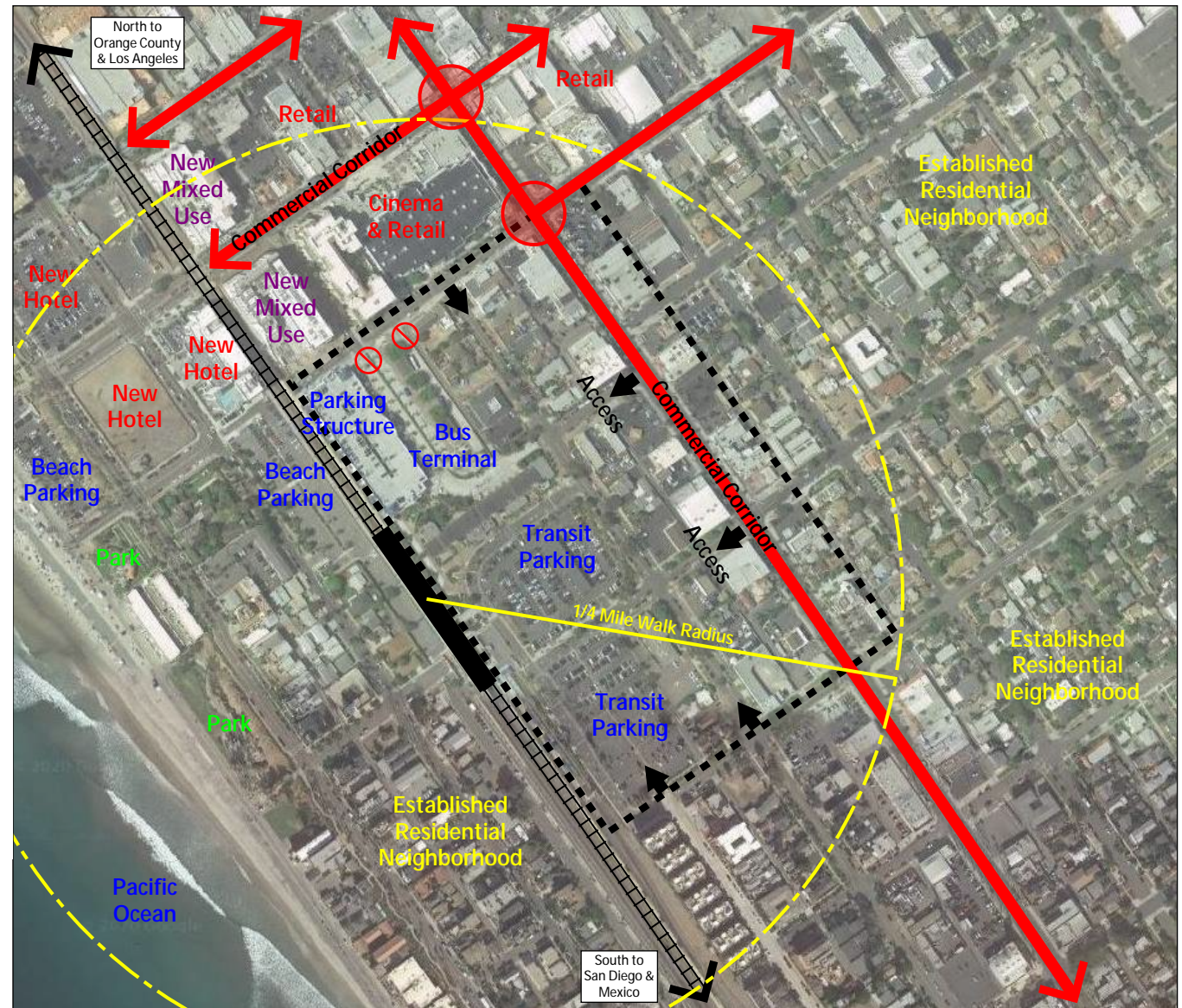


FIGURE 2-3 | Site Context

CIRCULATION

The City of Oceanside is served by a diverse circulation system, seen in Figure 2-4, consisting of roadways, public transit, rail service, airport, and pedestrian and bicycle facilities.

The Oceanside Transit Center (OTC) is a major transportation hub with multiple rail lines including the COASTER traveling south to San Diego, Metrolink traveling north to Los Angeles, Amtrak traveling south to San Diego and north to San Clemente, Irvine, Los Angeles, San Bernardino County and Northern California. SPRINTER is a light rail line train system between Oceanside and Escondido terminating at the OTC. Bus service includes Greyhound Lines and BREEZE, traveling throughout the city and beyond.

Access from Interstate 5 includes off ramps at Mission Avenue and at the terminus of San Luis Rey Mission Expressway (State Route 76).

Coast Highway is the main north/south commercial corridor cutting through the east portion of the study area.

Source:
<https://www.ci.oceanside.ca.us/visitors/transportation.asp>

<https://www.ci.oceanside.ca.us/civicax/filebank/blobload.aspx?blobid=44627>

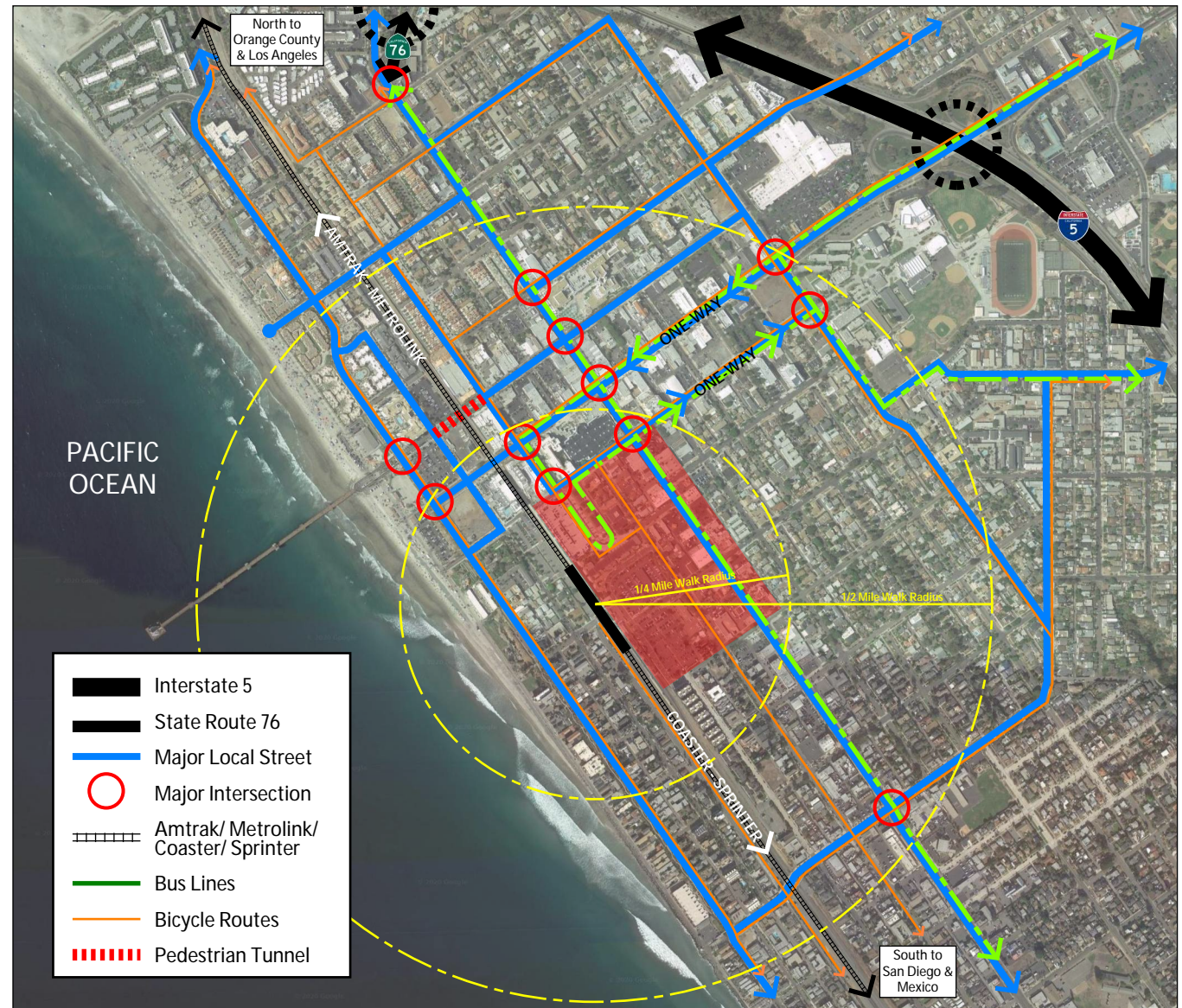


FIGURE 2-4 | Circulation

OPPORTUNITY & CONSTRAINTS

Figure 2-5 diagrams the existing Opportunities and Constraints conditions surrounding the study area.

Opportunities:

- Oceanside Pier and oceanfront parks
- Recent adjacent development investments
- Ocean views from the upper floors
- Existing 556 public parking structure at the train station
- Adjacent to local retail corridors (Mission Avenue and Coast Highway/ US Historical Route 101)
- Oceanside Civic Center
- Located at the 'Heart of the City'

Constraints:

- Limited access across the tracks
- Train noise
- Tracks act as a movement barrier
- Interstate 5 disconnects the neighborhoods

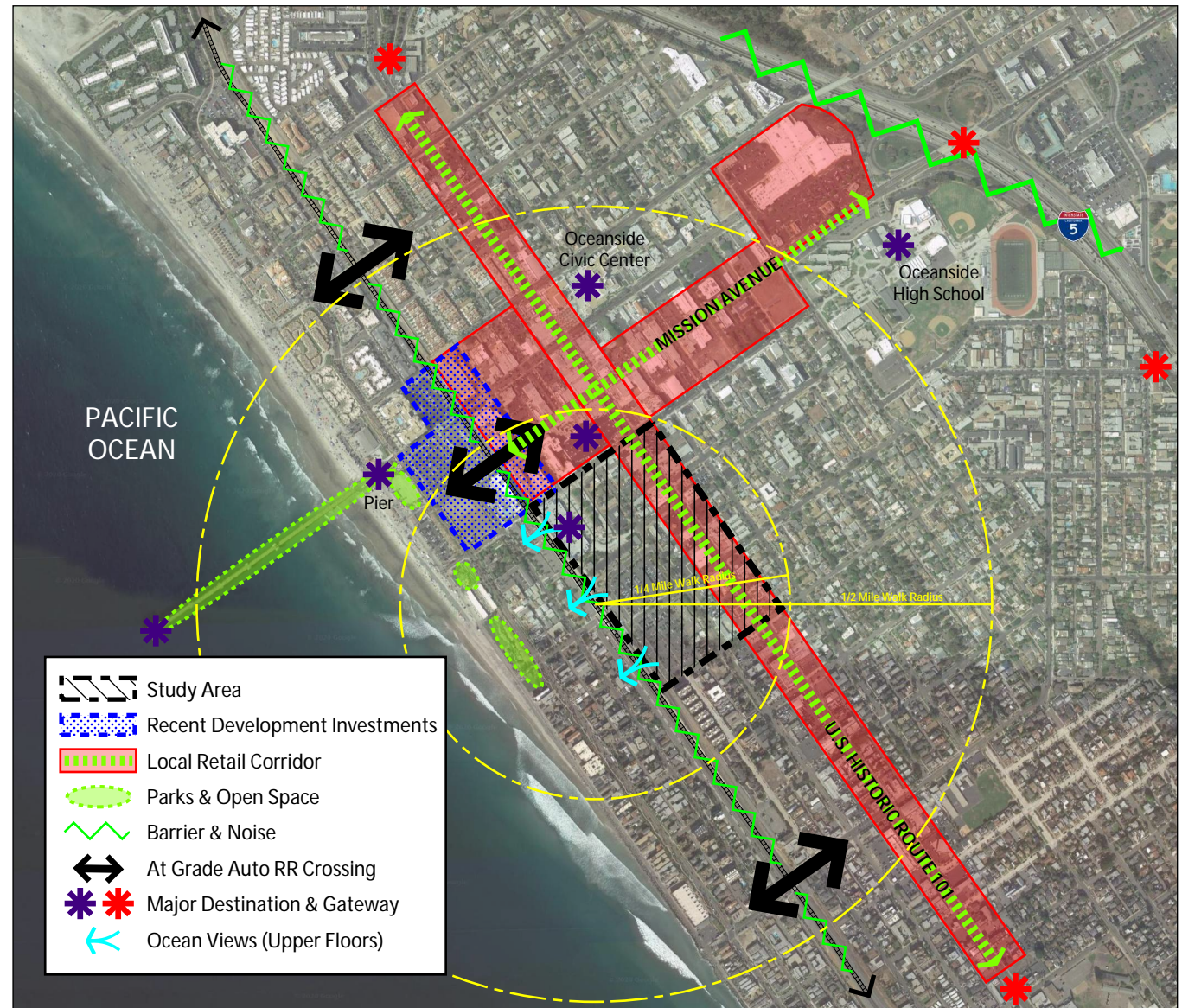


FIGURE 2-5 | Opportunities & Constraints

2.2. EXISTING CONDITIONS

The analysis for this section utilized Urban Footprint (<https://urbanfootprint.com>), an open source scenario urban planning platform tool for the comprehensive assessment of the existing conditions. This software is a new state-of-the-art tool which uses open source geographic information system (GIS) technology to map existing land use, zoning, mobility networks, current property values and also identifies natural features, development patterns, housing types and employment mix along with transit accessibility. This data will assist with analyzing and evaluating the existing conditions of the site and surrounding community.

LAND USE - CITY

The City of Oceanside has a total area of 42.2 square miles, of which 41.2 square miles (97.77%) is land and 0.9 square miles (2.23%) is water. The 2010 United States Census states Oceanside has a population of 167,086 with 59,238 households.

The main east-west corridor, Oceanside Boulevard, contains the majority of industry uses while San Luis Rey Mission Express, Highway 78 and Downtown encompass the commercial uses in the City, with a variety of housing densities mixed between as seen in Figure 2-6.

Source:
https://en.wikipedia.org/wiki/Oceanside,_California

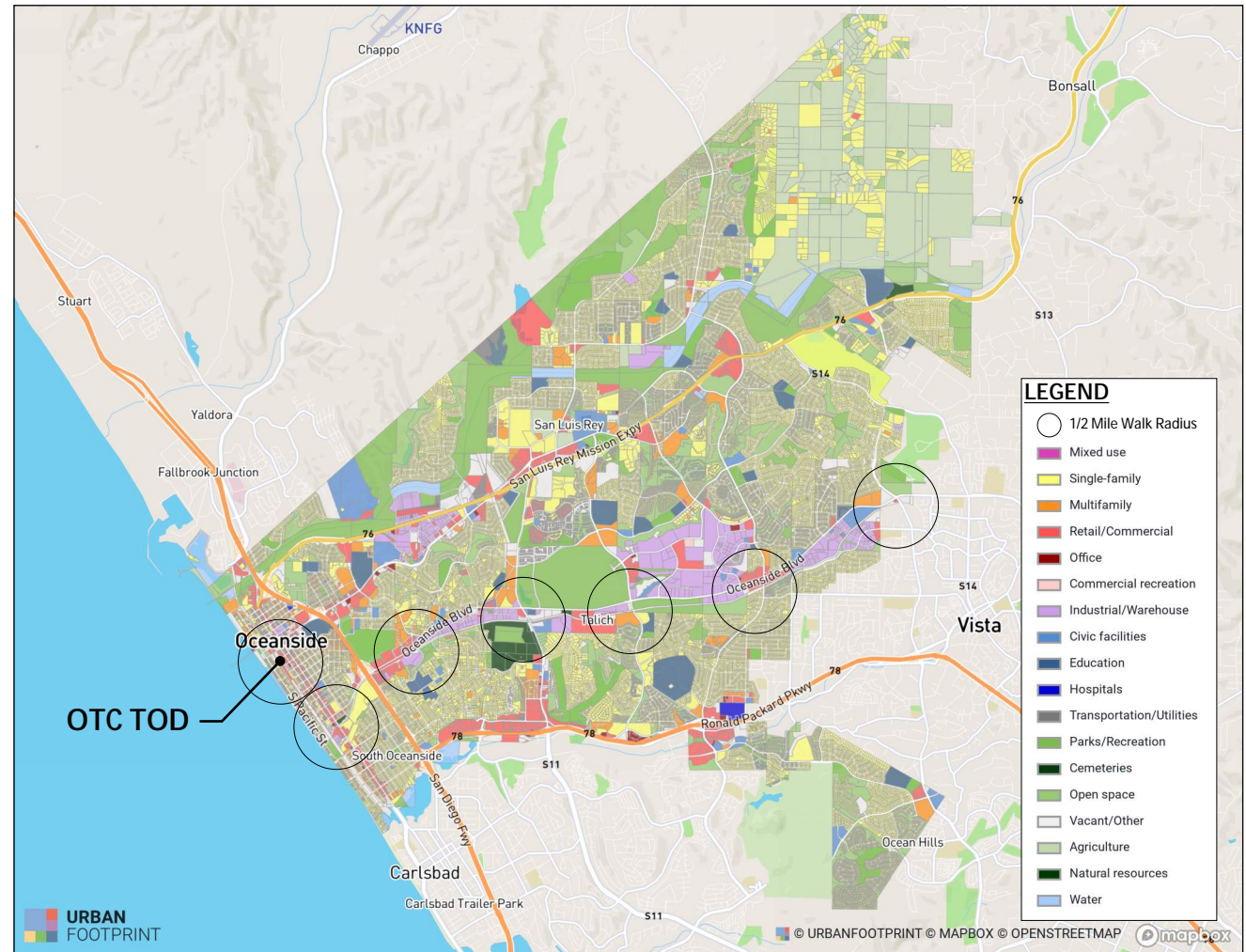


FIGURE 2-6 | Land Use - City

Source: Urban Footprint, 2020

LAND USE - CITY (WEST)

Land uses west of the San Diego Freeway (Interstate 5) and closer to the oceans are typically higher in urban form and density compared to the rest of the City. East of the freeway consists of mostly of lower density single-family residential with commercial and industrial uses lining the major east-west arterials which is represented in Figure 2-7.

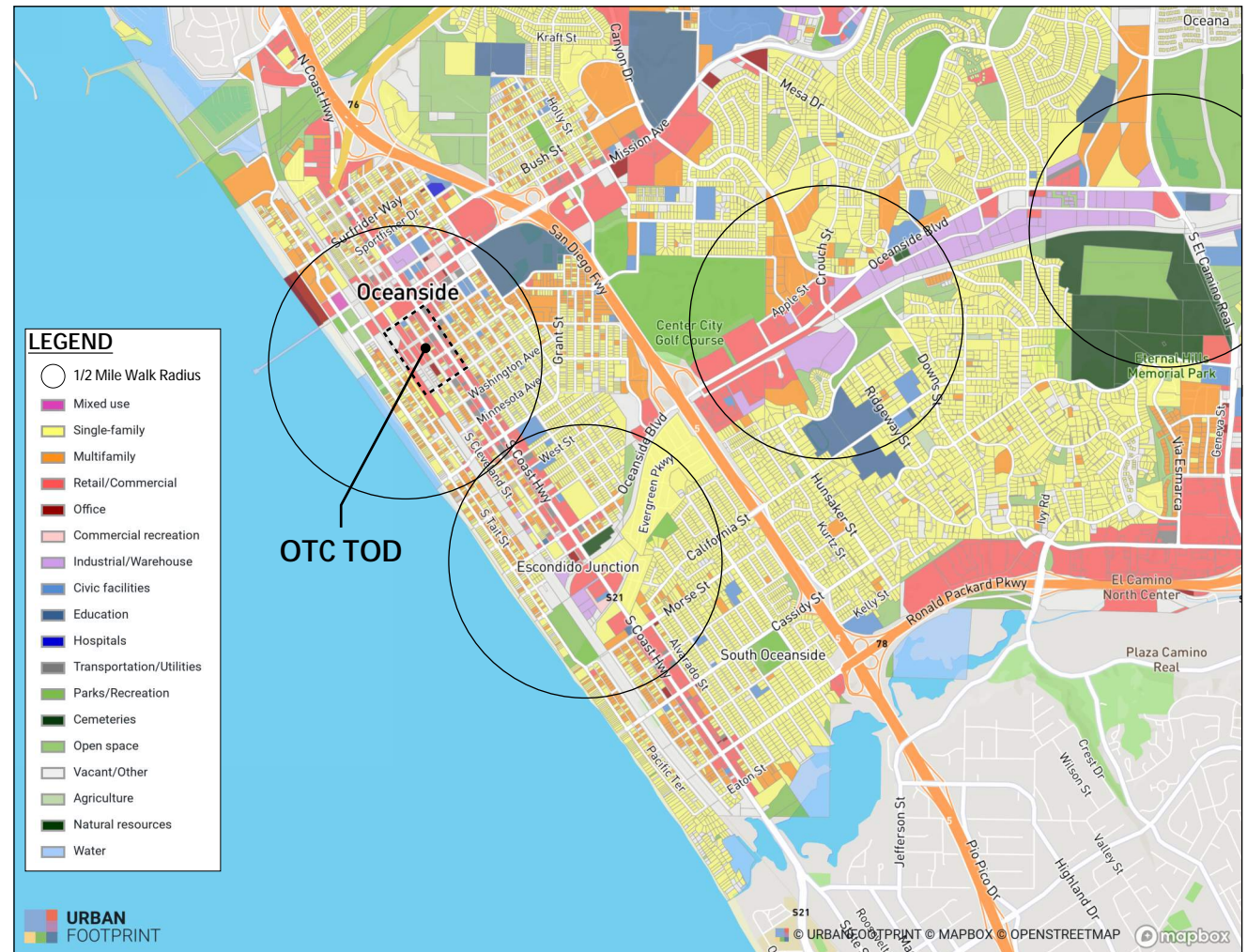


FIGURE 2-7 | Land Use - City (West)

Source: Urban Footprint, 2020

LAND USE - DOWNTOWN

Most of the land uses in Downtown Oceanside consist of Civic, Multifamily, Mixed Use, and Commercial due to the high value of land costs and concentration of population close to the coastline. Figure 2-8 outlines the Downtown area and the OTC TOD study area.

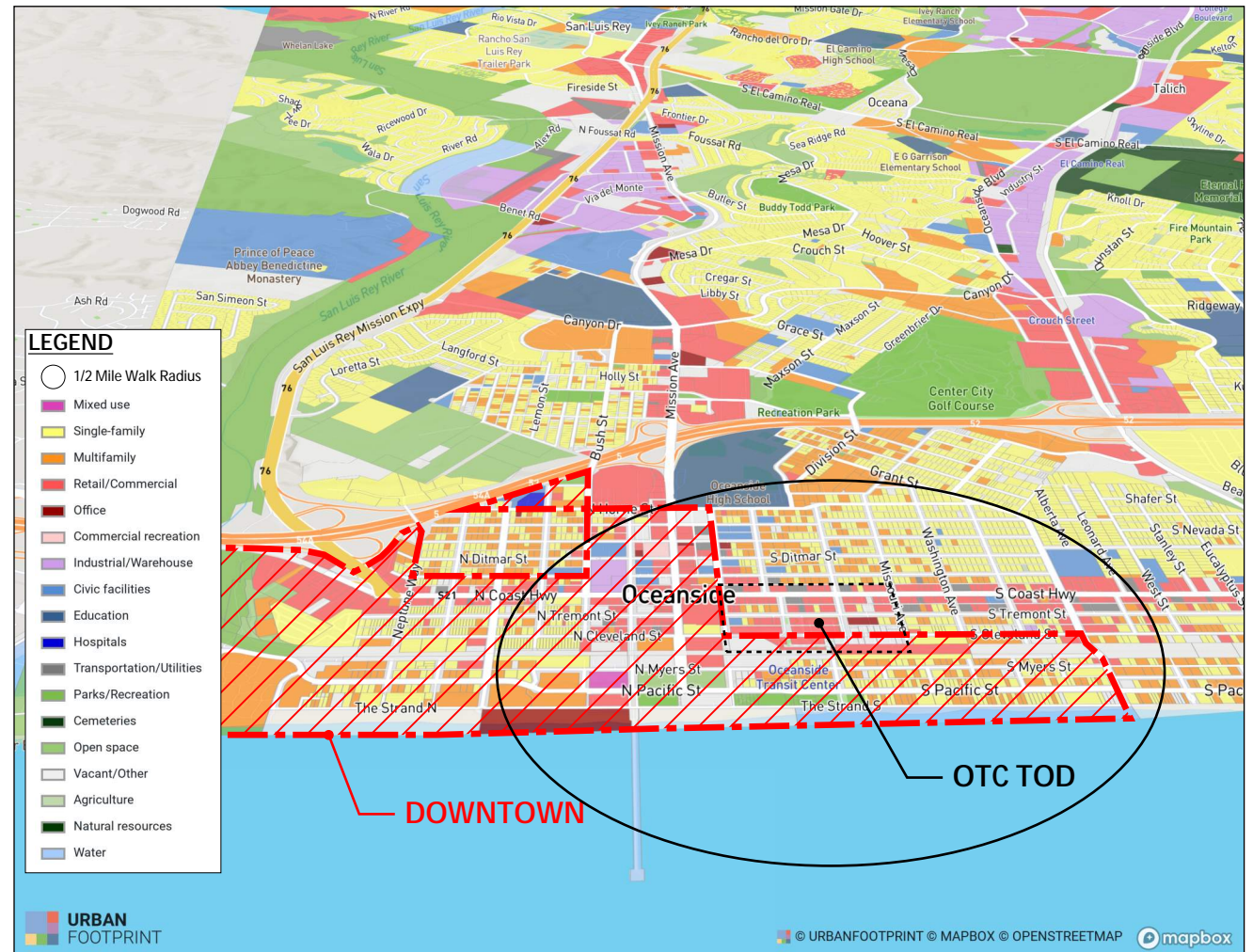


FIGURE 2-8 | Land Use - Downtown

Source: Urban Footprint, 2020

ZONING - CITY

The City of Oceanside is comprised of 39 base zoning districts and 9 Overlay districts which is simplified in the Zoning Map in Figure 2-9.

Source: City of Oceanside Comprehensive Zoning Ordinance, Article 230.B, Establishment of Base Zoning Districts

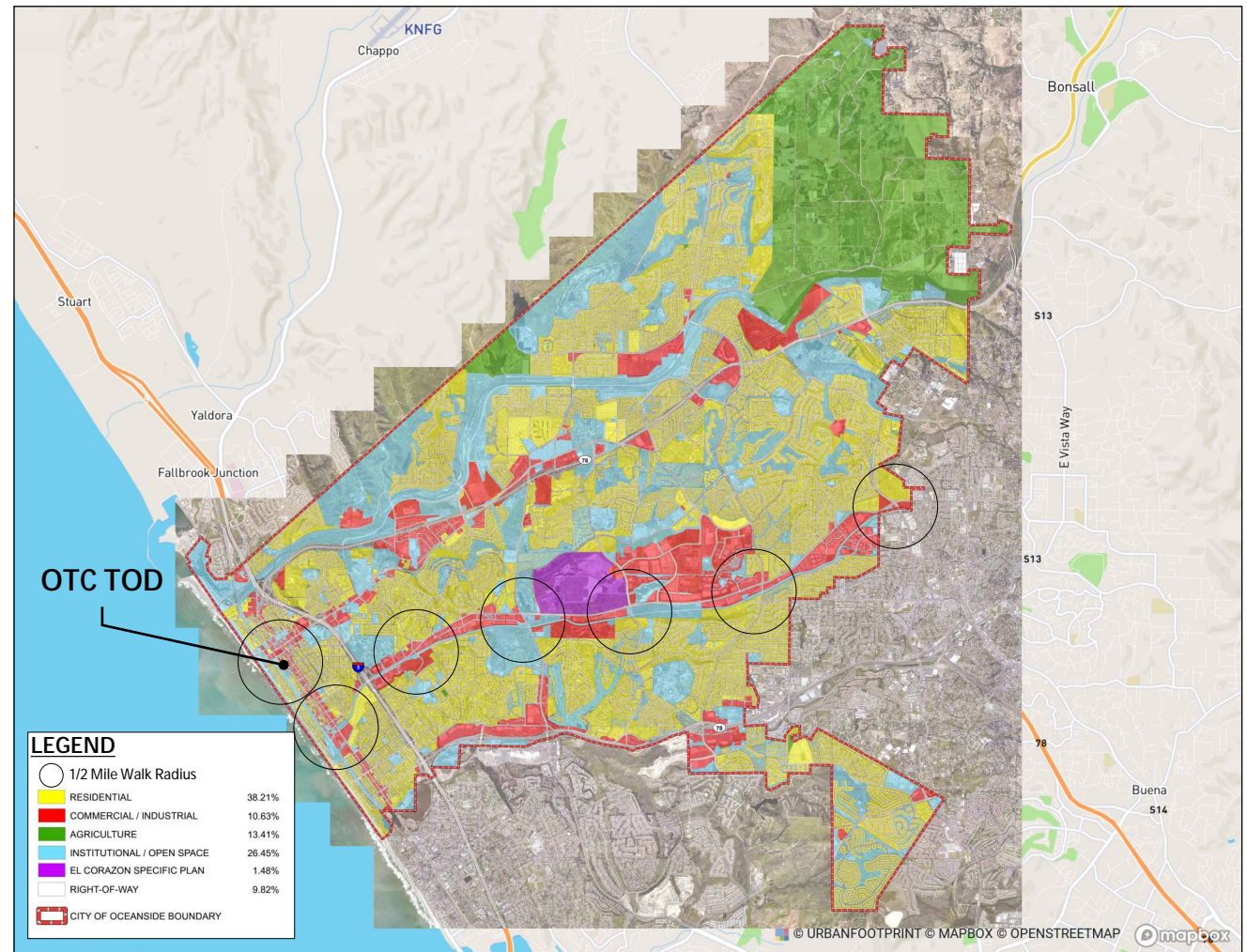


FIGURE 2-9 | Zoning - City

Source: City of Oceanside - Zoning Map, Year Unknown overlaid on a Urban Footprint base map

ZONING - CITY (WEST)

Figure 2-10 shows the parcel level zoning in the western portion of City, surrounding the study area and also other transit stations along the SPRINTER service.

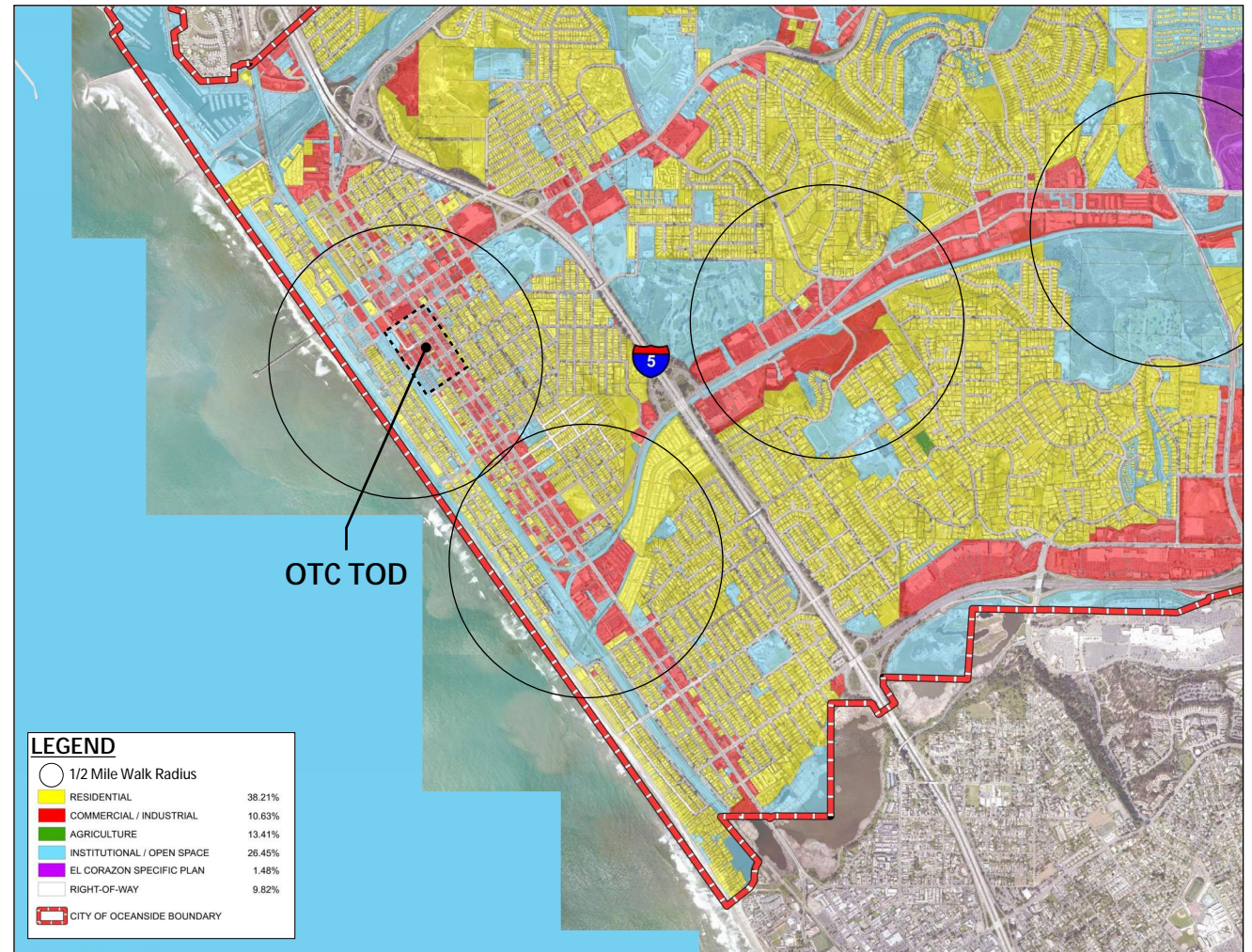


FIGURE 2-10 | Zoning - City (West)

Source: City of Oceanside - Zoning Map, Year Unknown overlaid on a Urban Footprint base map

PARKS, RECREATION & OPEN SPACE

Oceanside's parks and recreation facilities consist of five recreation centers, two senior centers, 15 community parks, 17 neighborhood parks, one regional park, five skate parks, two pools, and two gymnasiums. Other facilities include 3.5 miles of beach, miles of trails, acres of open space, a small craft harbor, a fishing pier, two community theaters, an art museum, a surf museum, a nature center, and two municipal golf courses.

Providing a network of existing open space, parks, and natural features, seen in Figure 2-11, is the foundation to build a comprehensive sustainable City and community.

Source: City of Oceanside, Parks & Recreation Master Plan (2019)



FIGURE 2-11 | Parks, Recreation & Open Space

Source: Urban Footprint, 2020

MOBILITY NETWORK - ROADS

The City of Oceanside is served by a diverse circulation system consisting of roadways, public transit, rail service, airport, and pedestrian and bicycle facilities. Figure 2-12 shows the City's street network hierarchy with a description of each listed below.

Freeways are designed for uninterrupted, high flow travel, with limited access points.

Arterial is a major through roads providing regional, sub-regional, and intra-city travel.

Collector roads collect traffic from local roads, and distributes it to Arterials.

Local roads have the lowest speed limit and carry the least volume of traffic.

Source: City of Oceanside, General Plan. Circulation Element (2012)



FIGURE 2-12 | Mobility Network - Roads

Source: Urban Footprint, 2020

MOBILITY NETWORK - TRANSIT, BICYCLE & PEDESTRIAN

Oceanside's public transit, rail service and bicycle network, seen in Figure 2-13, is an integral part of its multimodal system, connecting citizens and its visitors throughout the City.

Increasing transit system ridership would reduce reliance on the automobile, decrease the need for street capacity improvements, make more efficient use of the existing street system, reduce the demand for parking, improve air quality, increase interaction among people, and enhance the quality of life for residents of Oceanside.

Below is a list of public transit and rail systems in the City of Oceanside:

Amtrak - intercity rail service

Metrolink - commuter rail (north bound)

COASTER - commuter rail (south bound)

SPRINTER - passenger rail (east bound)

BREEZE - bus system with 12 routes

Source: City of Oceanside, General Plan. Circulation Element (2012)



FIGURE 2-13 | Mobility Network - Transit, Bicycle & Pedestrian

Source: Urban Footprint, 2020

WALKABILITY INDEX

Walkability is a measure of how friendly an area is to walking which supports community health, safety, livability, and reduced car dependence. The walkability index score is derived from physical characteristics of the urban environment that support walking including residential density, sidewalk presence and completeness, land use mix, retail floor space ratio, and intersection density.

Oceanside's walkability index is based upon characteristics of the built environment that influence the likelihood of walking being used as a mode of travel.

Figure 2-14 shows that the OTC TOD is located in the most walkable area of the City.

Source: EPA, Smart Location Mapping

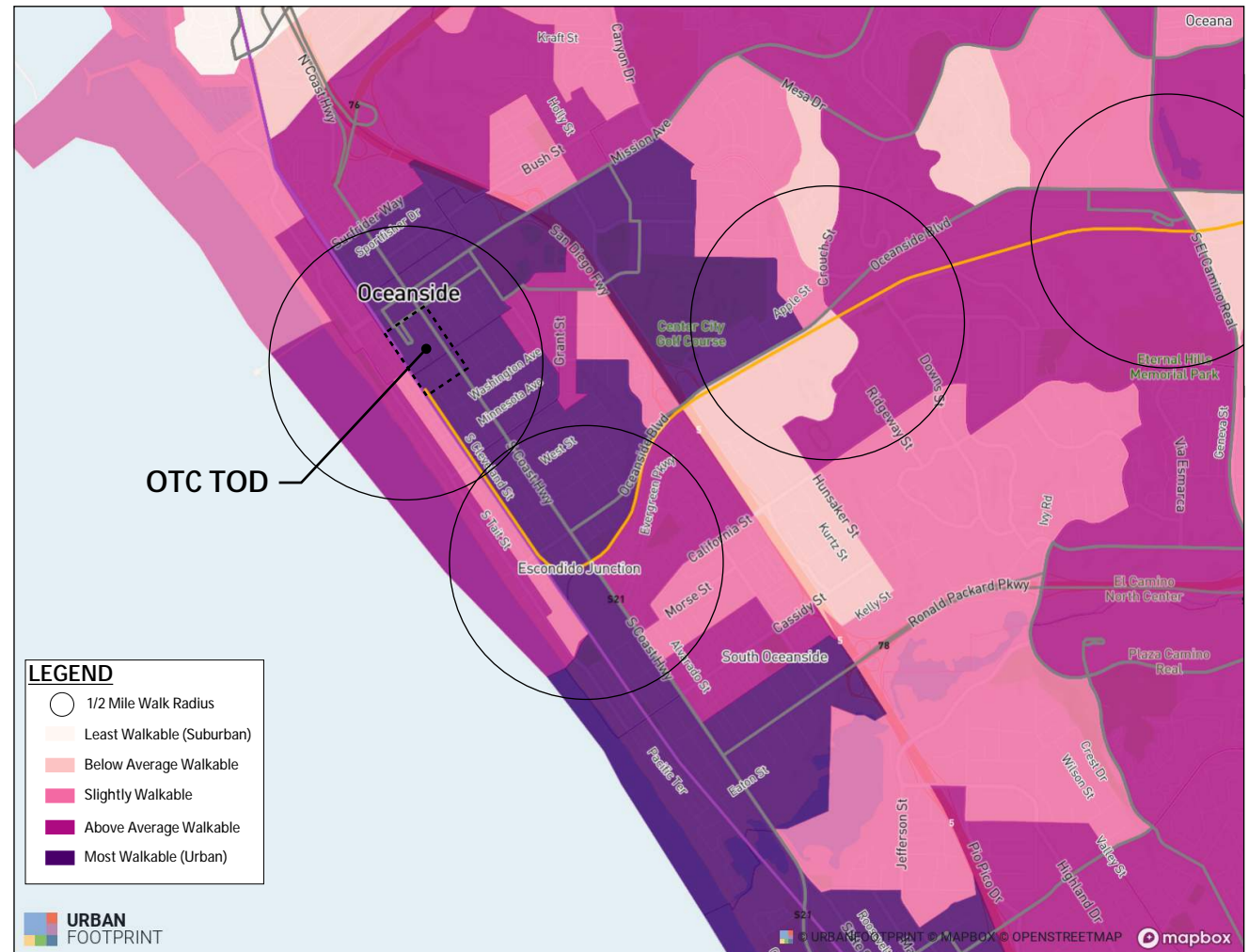


FIGURE 2-14 | Walkability Index

Source: Urban Footprint, 2020

WALK ACCESS TO TRANSIT

The ability to walk to transit stations is an important component of living a car-free transit-oriented lifestyle. The red-orange color in the Walk Access to Transit map, Figure 2-15, indicates a short pleasant walk to transit, while teal-blue notes a much longer, less desirable walk. Most people are willing to walk five to ten minutes, or approximately 1/4-to 1/2-mile to a transit stop. The design of streets and sidewalks in these capture areas are important elements for pedestrian access to transit.

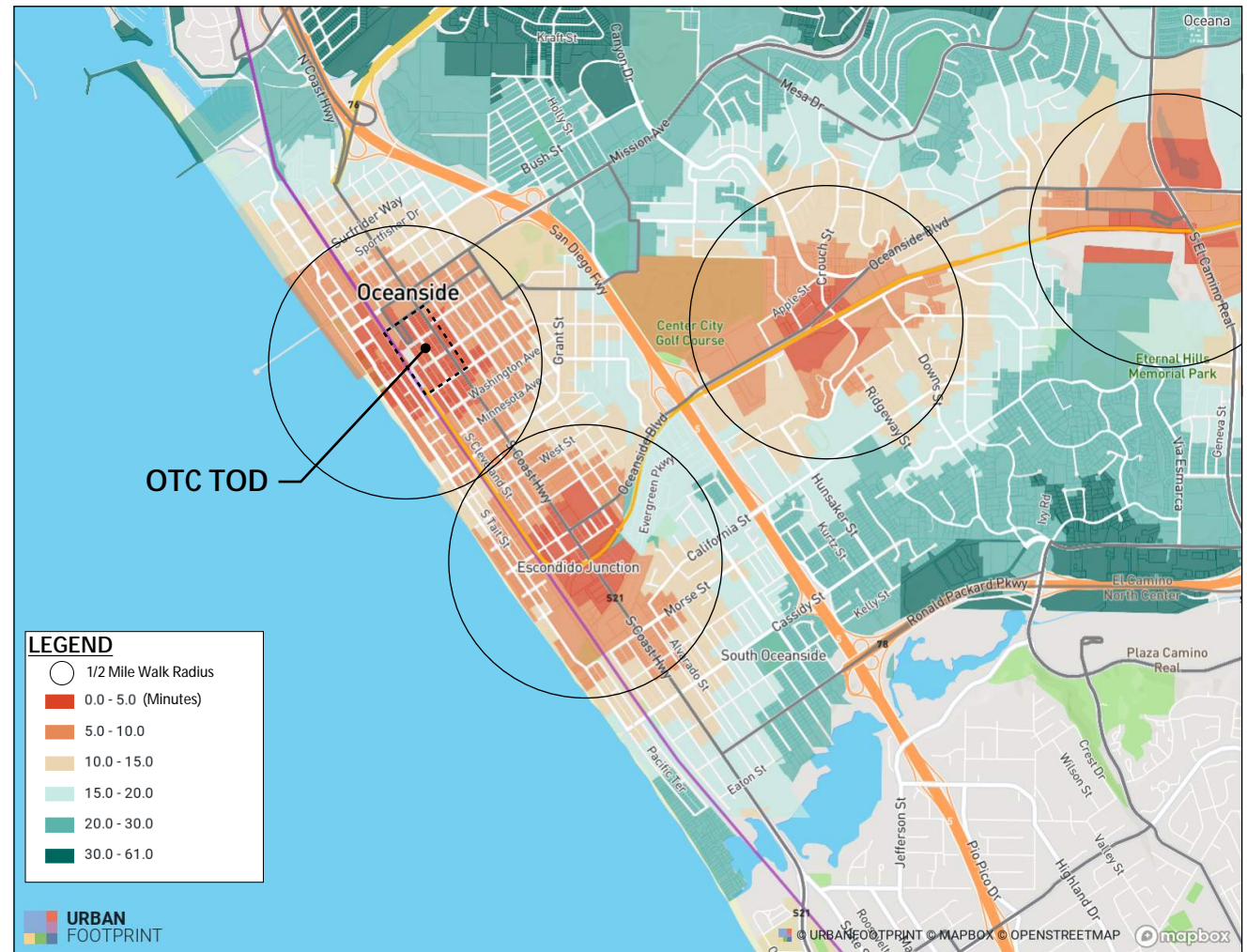


FIGURE 2-15 | Walk Access To Transit (In Minutes)

Source: Urban Footprint, 2020

HOUSEHOLDS ADJACENT TO TRANSIT

Real estate trends are shifting with consumers choosing smaller, more compact housing in urban neighborhoods where shops and services are within walking distance to high quality transit service.

The number of households adjacent to transit increases the likelihood of transit ridership while reducing vehicle miles travels on roads, lowering greenhouse gas emissions while creating a array of economic and social benefits.

The darker blue shades in Figure 2-16 indicate roughly 2,400 to 3,700 households that are within a 15-minute walk to transit, typically located in a grid street pattern. As the blue shade lightens, the quantity of households decrease and the street network transforms to a non-grid pattern typical of a auto dependence living environment.

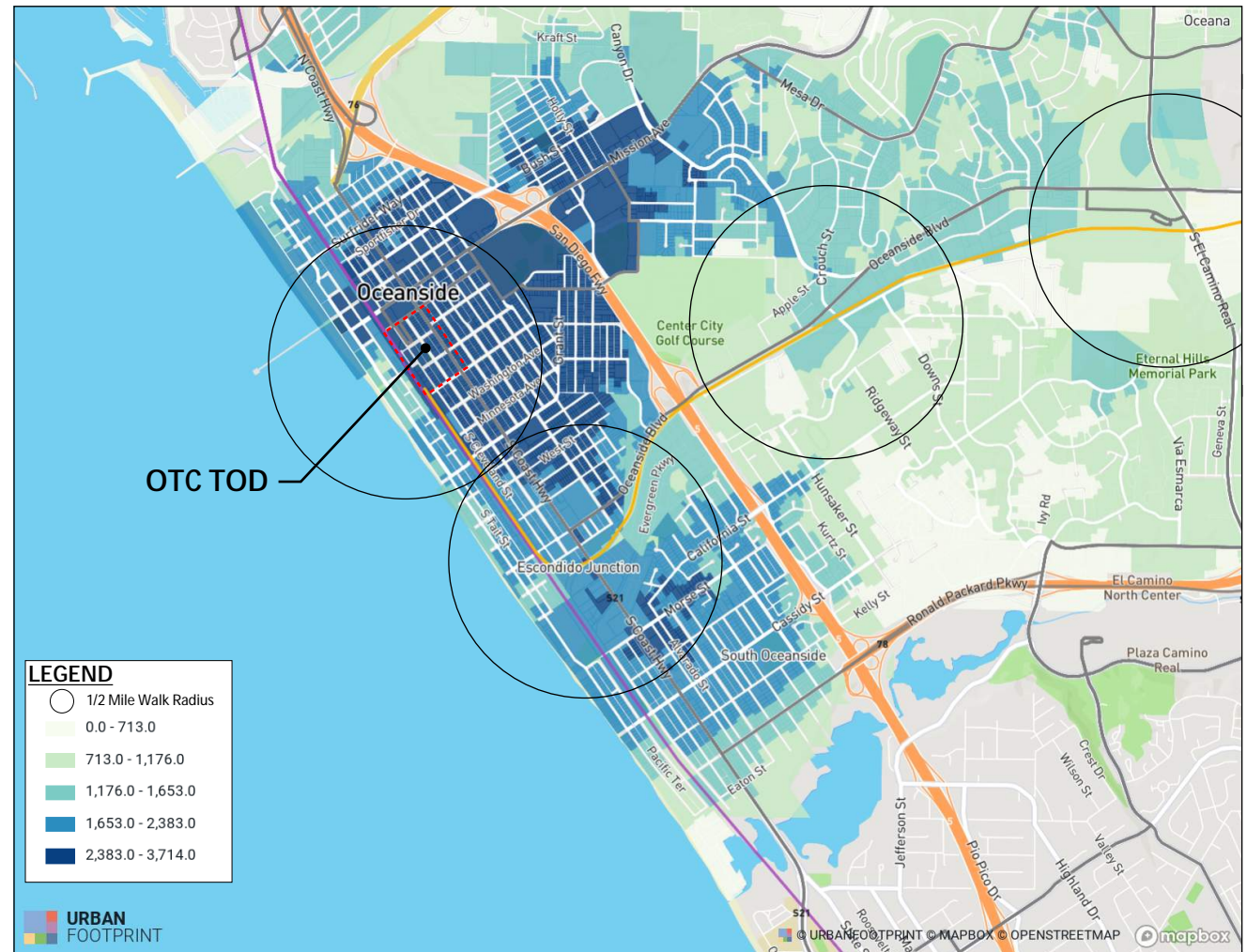


FIGURE 2-16 | Households Within 15 Minutes To Transit

Source: Urban Footprint, 2020

VEHICLES PER HOUSEHOLD

When individuals have convenient transit options near their housing, vehicle ownership decreases as indicated in Figure 2-17. Households further from transit, vehicle ownership increase dramatically.

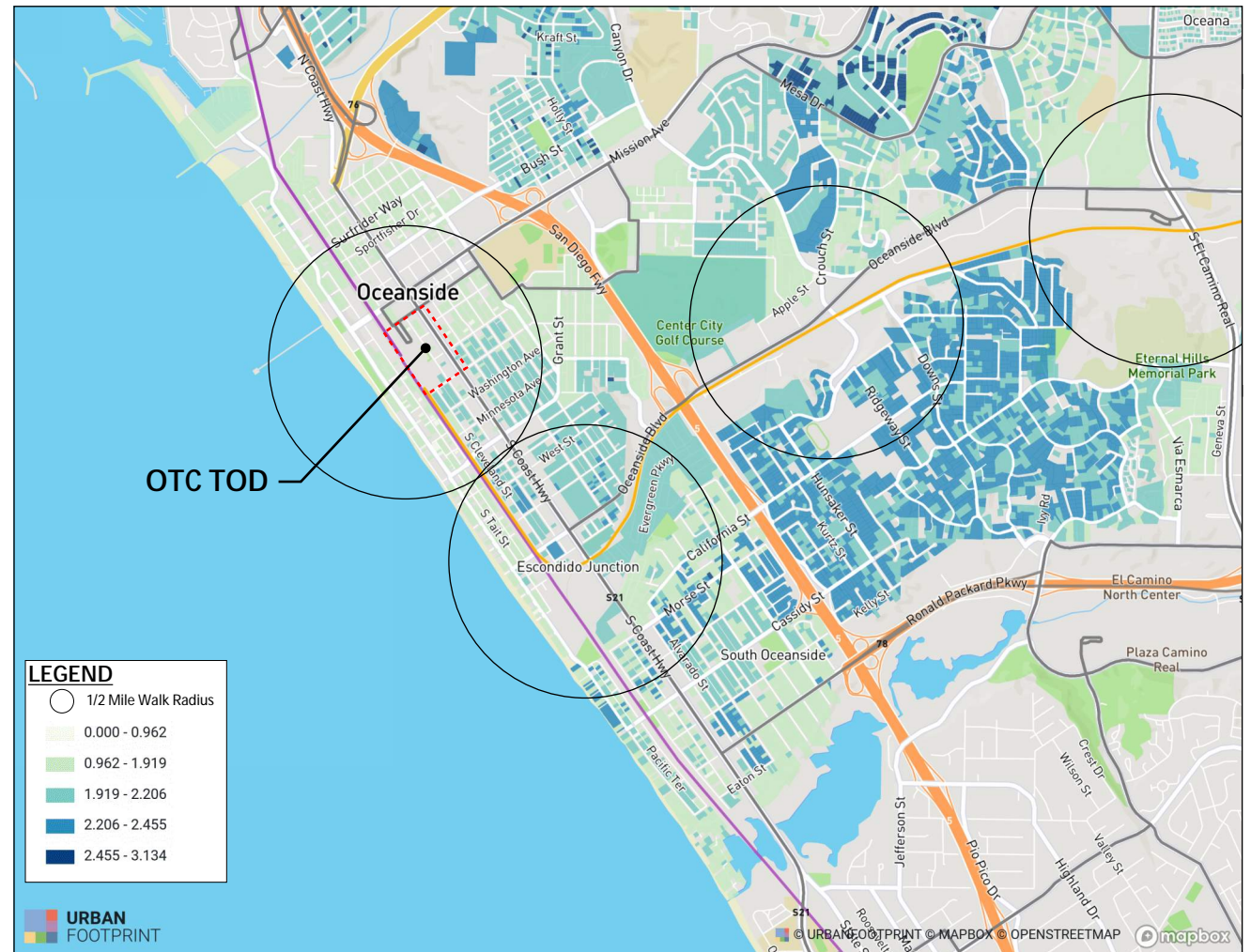
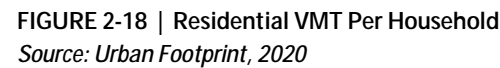


FIGURE 2-17 | Vehicles Per Household

Source: Urban Footprint, 2020

Combining the data from Figure 2-17, Vehicles Per Household, and the data from Figure 2-18, the concept of individuals living near transit options, travel less in their vehicles per year.



According to the United States Environmental Protection Agency (EPA), the transportation sector is the largest contributor to Greenhouse Gas (GHG) emissions with light-duty vehicles (cars, SUVs and trucks running on gasoline) as the highest producing source of that sector. Figure 2-19 indicates that households which are near transit stops, produce less GHG emissions.

Source:
<https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions>

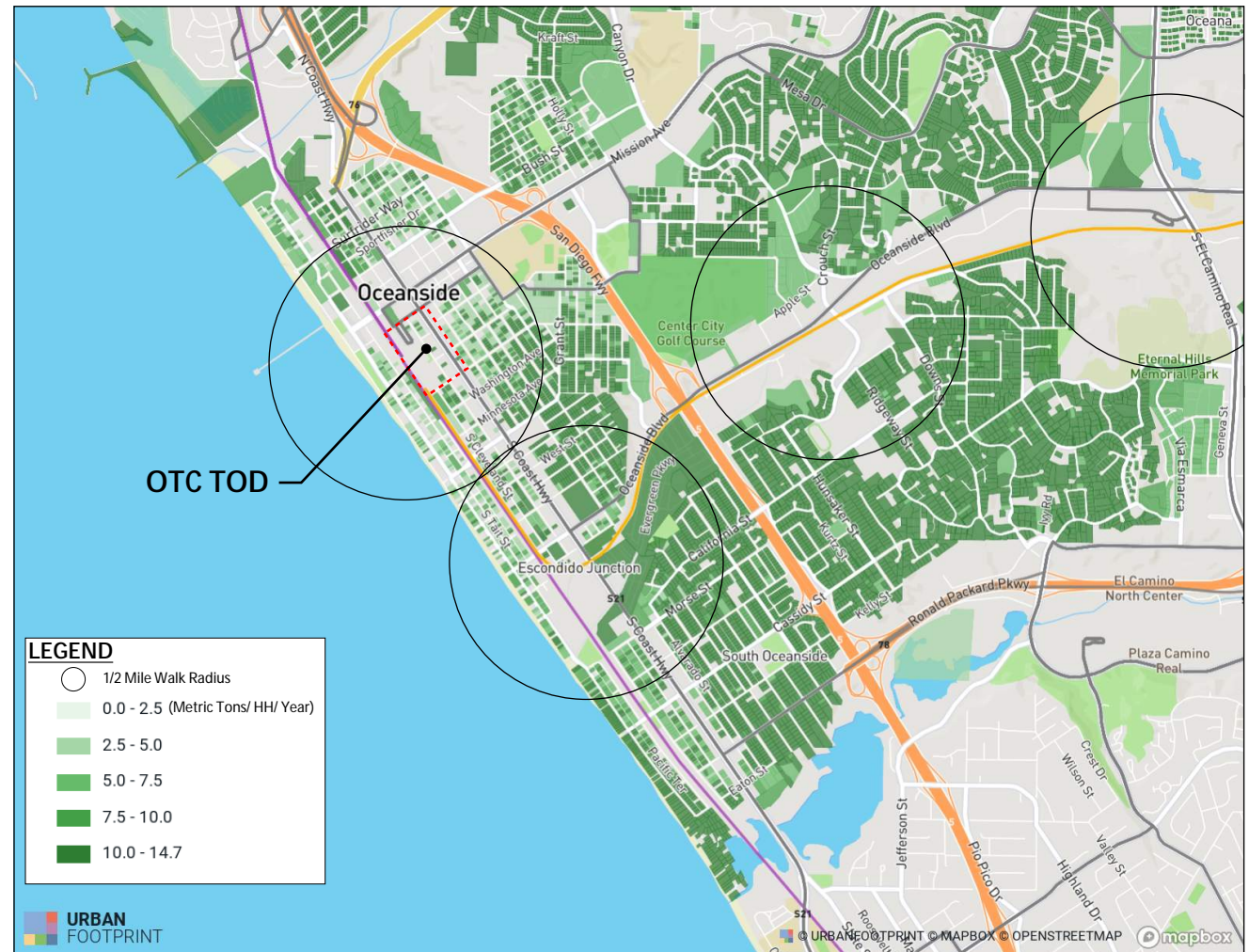


FIGURE 2-19 | GHGs Per Household
Source: Urban Footprint, 2020

SEA LEVEL RISE IMPACT

Individuals living in an auto dependence single family house further distance from transit, produce more greenhouse gases which warms the atmosphere contributing to sea level rise, which is one of the most severe impacts of climate change. As seen in Figure 2-20, the OTC TOD study area is not in a sea level impact zone.

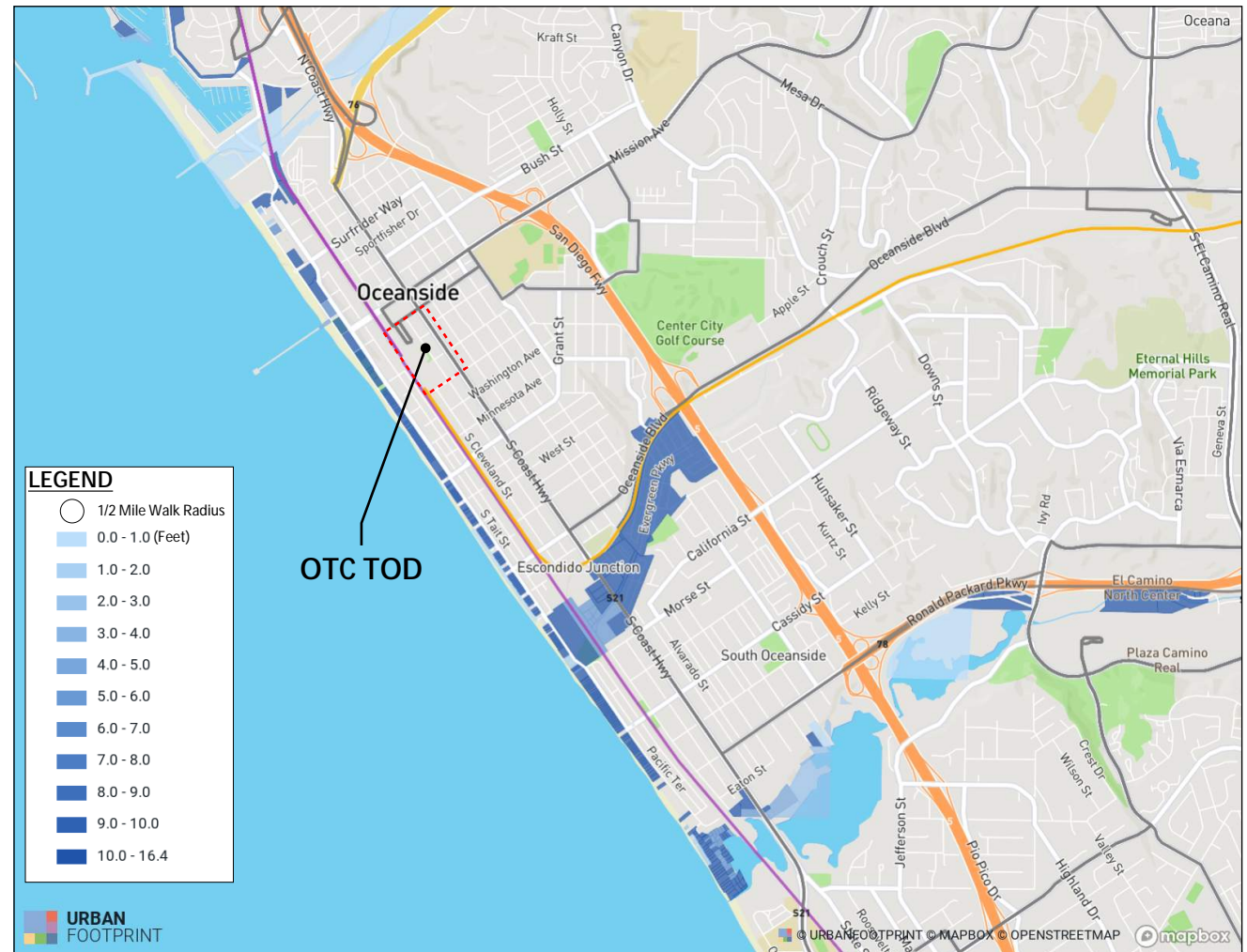


FIGURE 2-20 | Sea Level Rise Impact

Source: Urban Footprint, 2020

FLOOD ZONE HAZARD

The Oceanside Transit Center TOD is located in a relatively low flood risk area, per Figure 2-21.

Source:
<https://www.fema.gov/glossary/flood-zones>

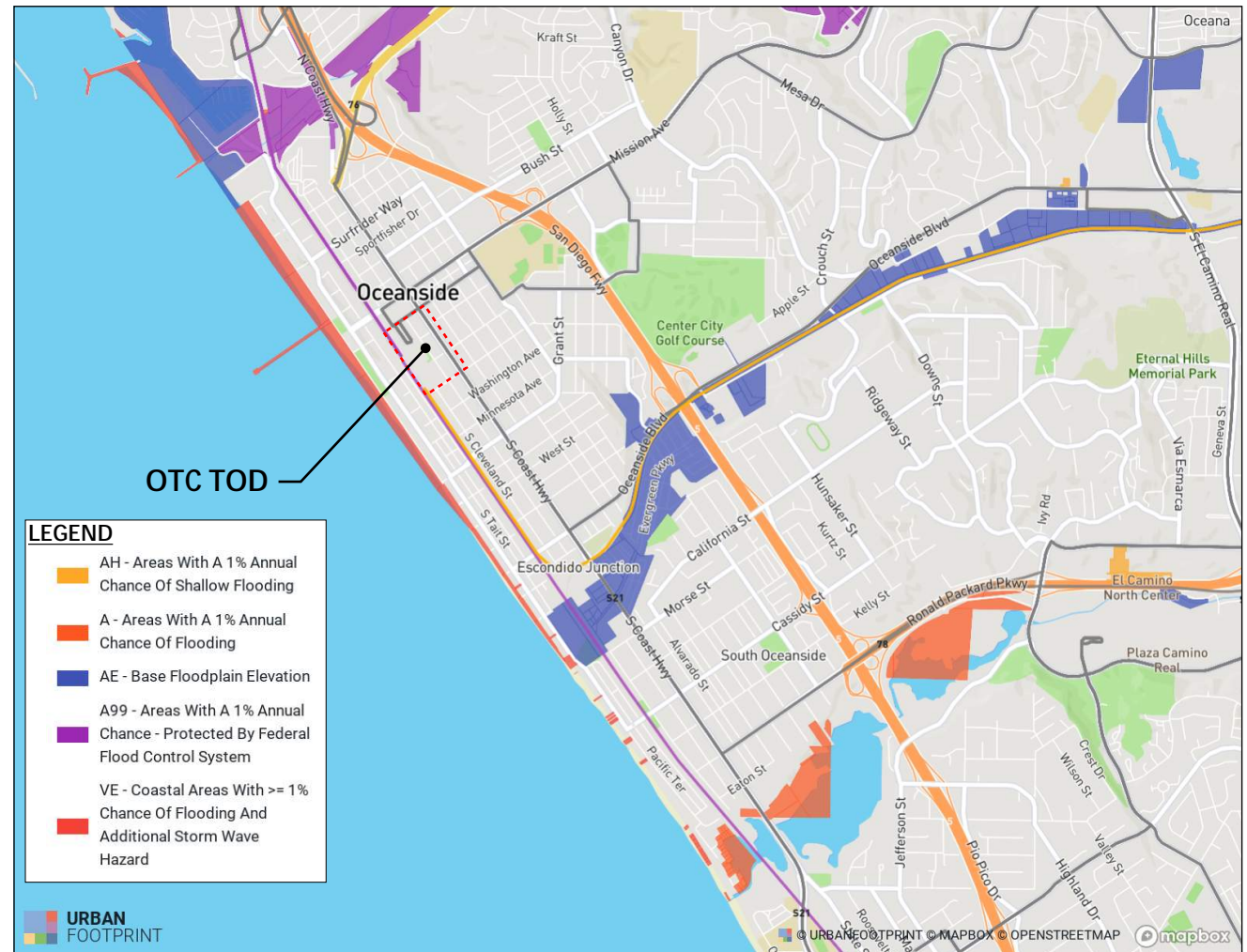


FIGURE 2-21 | Flood Zone Hazard

Source: Urban Footprint, 2020

FIRE HAZARD

Fire hazard zones are mapped based on factors such as fuel, slope, and fire weather, as displayed in Figure 2-22, Downtown Oceanside and the OTC TOD study area are designated a relatively safe area to build due to its urban local and environment.

Source:
<https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>

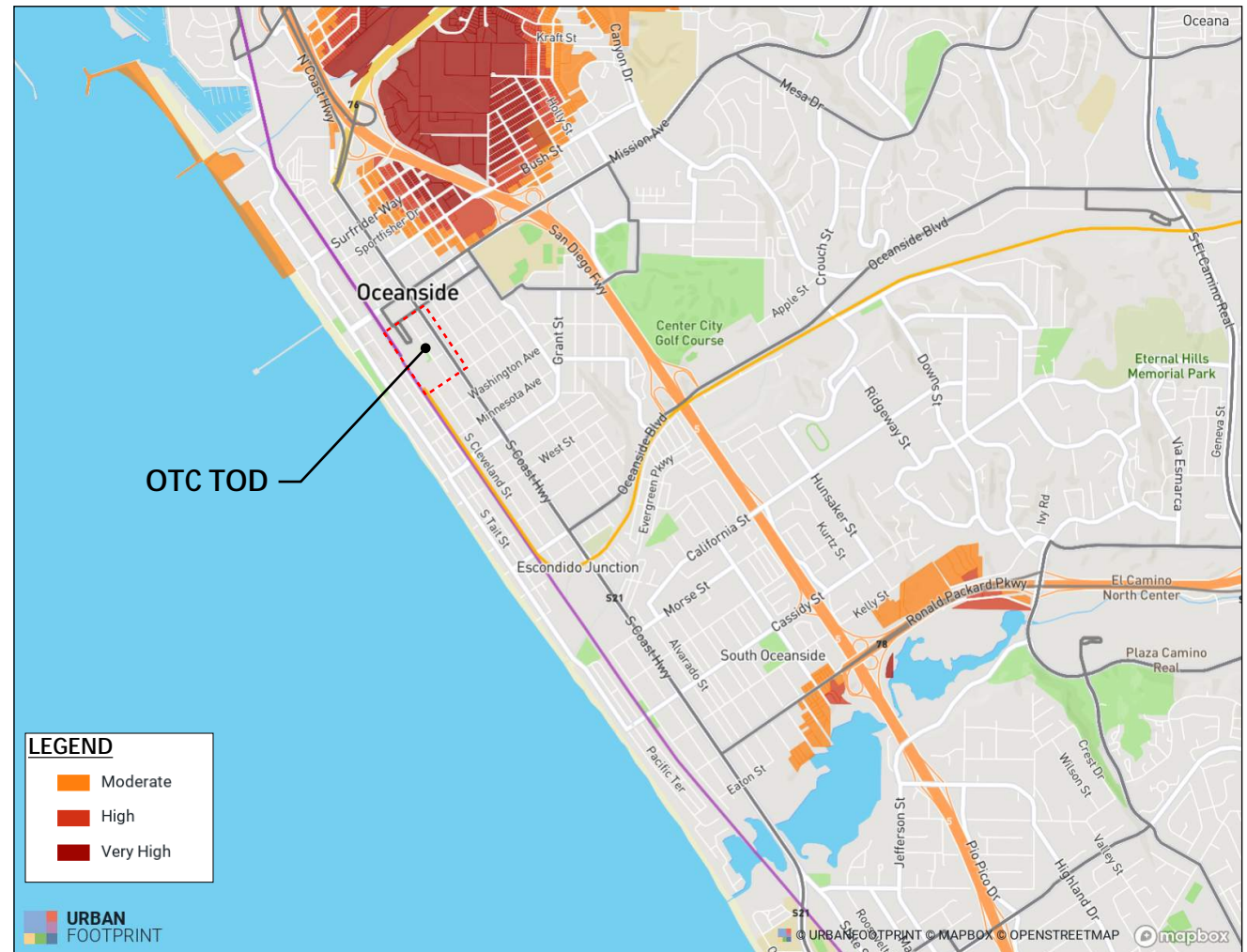


FIGURE 2-22 | Fire Hazard
Source: Urban Footprint, 2020

ASSESSED LAND VALUES

As indicated in Figure 2-23, assessed land values in downtown Oceanside, the OTC TOD study area and surrounding neighborhoods are relatively low compared to other areas of the City where recent development investments have been made.

The study area, combined with an transit station with a public parking structure, its adjacently to downtown Oceanside, existing public infrastructure, this is a prime area for future development investment.

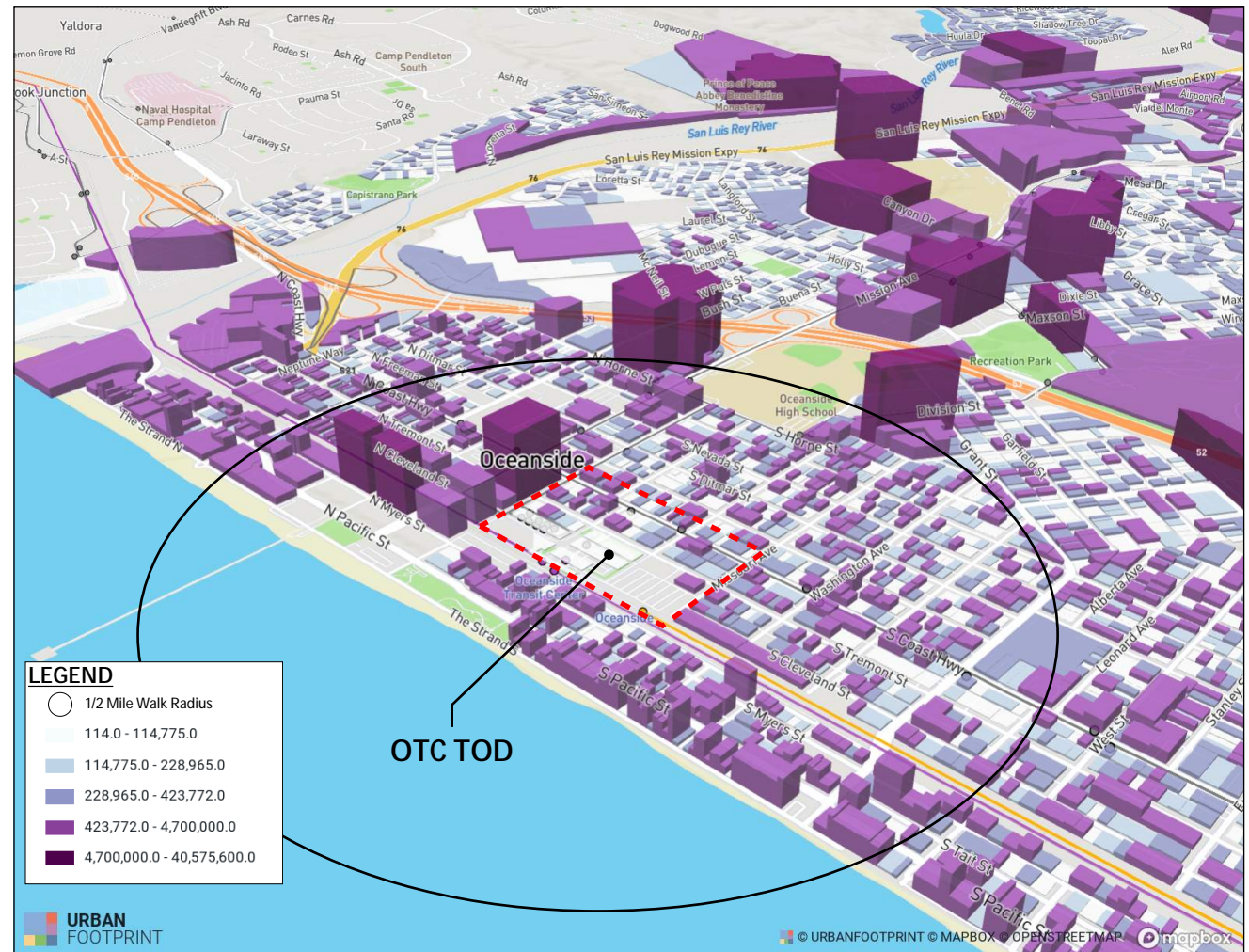


FIGURE 2-23 | Assessed Land Values (In US Dollars)

Source: Urban Footprint, 2020



FIGURE 3-1 | Oceanside Transit Center TOD Vision Plan

- | | |
|--|--|
| ■ Mixed-Use (Residential/ Retail) | ■ Multifamily Residential |
| ■ Mixed-Use (Office/ Retail) | ■ Townhouse |
| ■ Retail | ■ Civic |



FIGURE 3-1 | OTC TOD Development Blocks
Source: Aerial - Google Earth

Oceanside Transit Center TOD Vision Plan Development Program

Block	Acres	Land Use	Building Floors	Use	Retail (Square Feet)	Office (Square Feet)	Public Park/ OS (Acres)	Dwelling Units (DU)	Density (DU/ AC)	Parking (Private)	Parking (Public)
A	0.64	MU (Office/ Retail)	2	Ground Floor Retail	16,800						12
				2nd Floor Office		16,800					12
B	1.13	MU (Res/ Retail)	2	Ground Floor Retail	22,750						31
				2nd Floor Residential				27	24	20	
				Park			0.08				
C	0.86	MU (Res/ Retail)	2	Ground Floor Retail	19,800						14
				2nd Floor Residential				24	27	25	
D	1.69	MU (Res/ Retail)	4	Ground Floor Retail	22,300						60
				Multifamily				140	83	154	
E	0.45	Park		Park			0.45				
F	2.18	MU (Res/ Retail)	3	Ground Floor Retail	28,500						82
				Multifamily Residential				227	104	249	
G	1.07	MU (Res/ Retail)	2	Ground Floor Retail	23,700						27
				2nd Floor Residential				28	26	20	
H	1.07	Residential	3	Townhouse				32	30		
I	1.98	MU (Res/ Retail)	5	Ground Floor Retail	14,000						55
				Multifamily Residential				249	126	274	
J	0.10	Park		Park			0.10				
K	2.12	MU (Res/ Retail)	4	Ground Floor Retail	12,000						67
				Multifamily Residential				201	95	221	
L	1.11	Residential	4	Multifamily Residential				134	121	147	122
M	1.11	Residential	3	Townhouse				28	25		
N	1.50	Civic		Parking Garage (Existing)							556
O	0.71	MU (Res/ Retail)	3	Ground Floor Retail	13,200						
				Multifamily Residential				39	55		
P	1.08	Residential	4	Multifamily Residential				111	102	165	78
Q	1.47	Retail	1		4,000						
TOTAL:	20.27				177,050	16,800	0.63	1,240		1,276	1,116

Assumptions:

Average Dwelling Unit (DU) sizes were calculated from new adjacent Mixed-Use developments; Studio: 615 sf, 1B/ 1B: 840 sf, 2B/ 2B: 1,170 sf

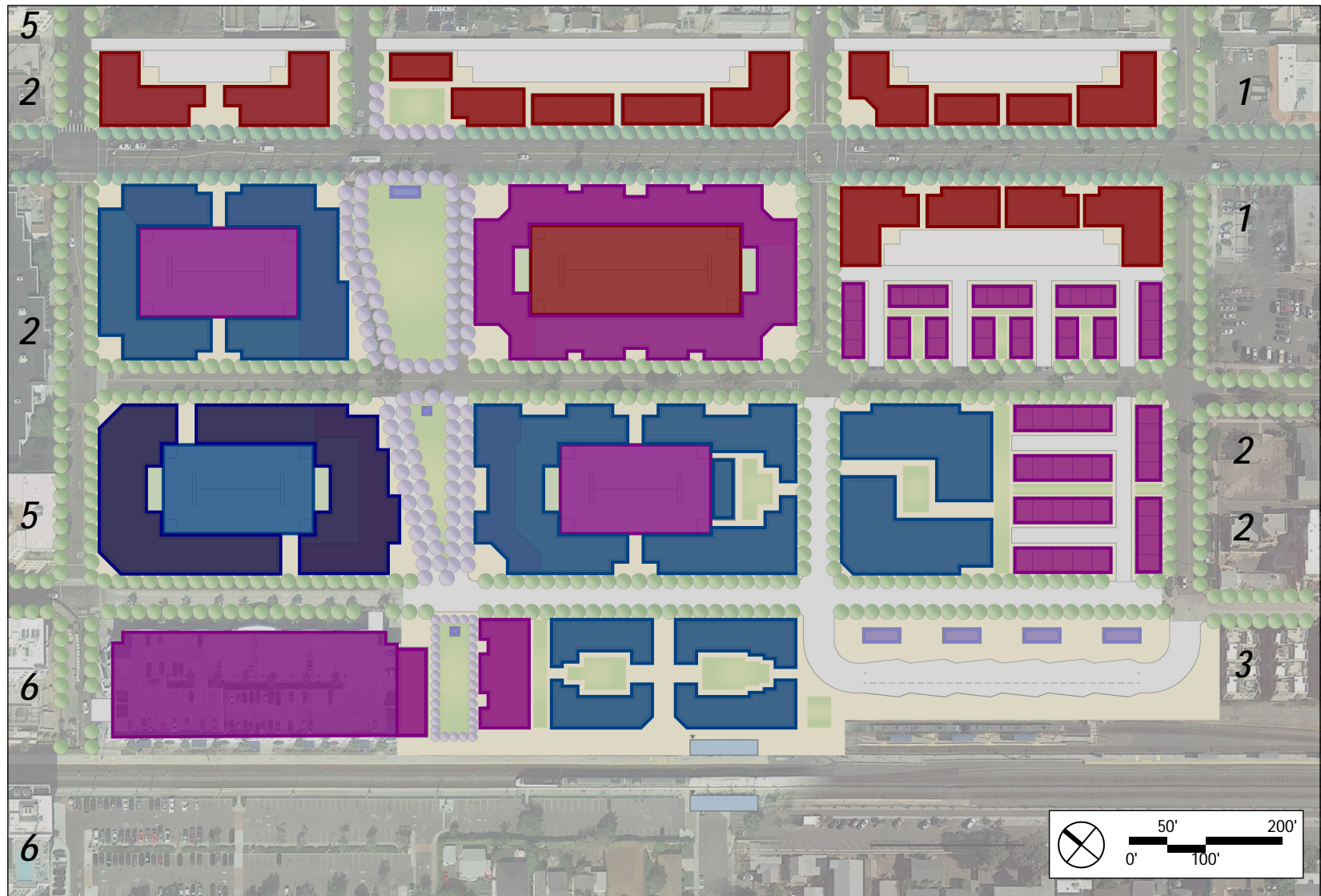
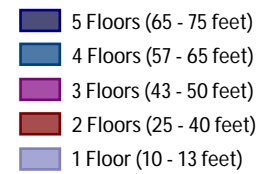


FIGURE 3-1 | OTC TOD Building Heights



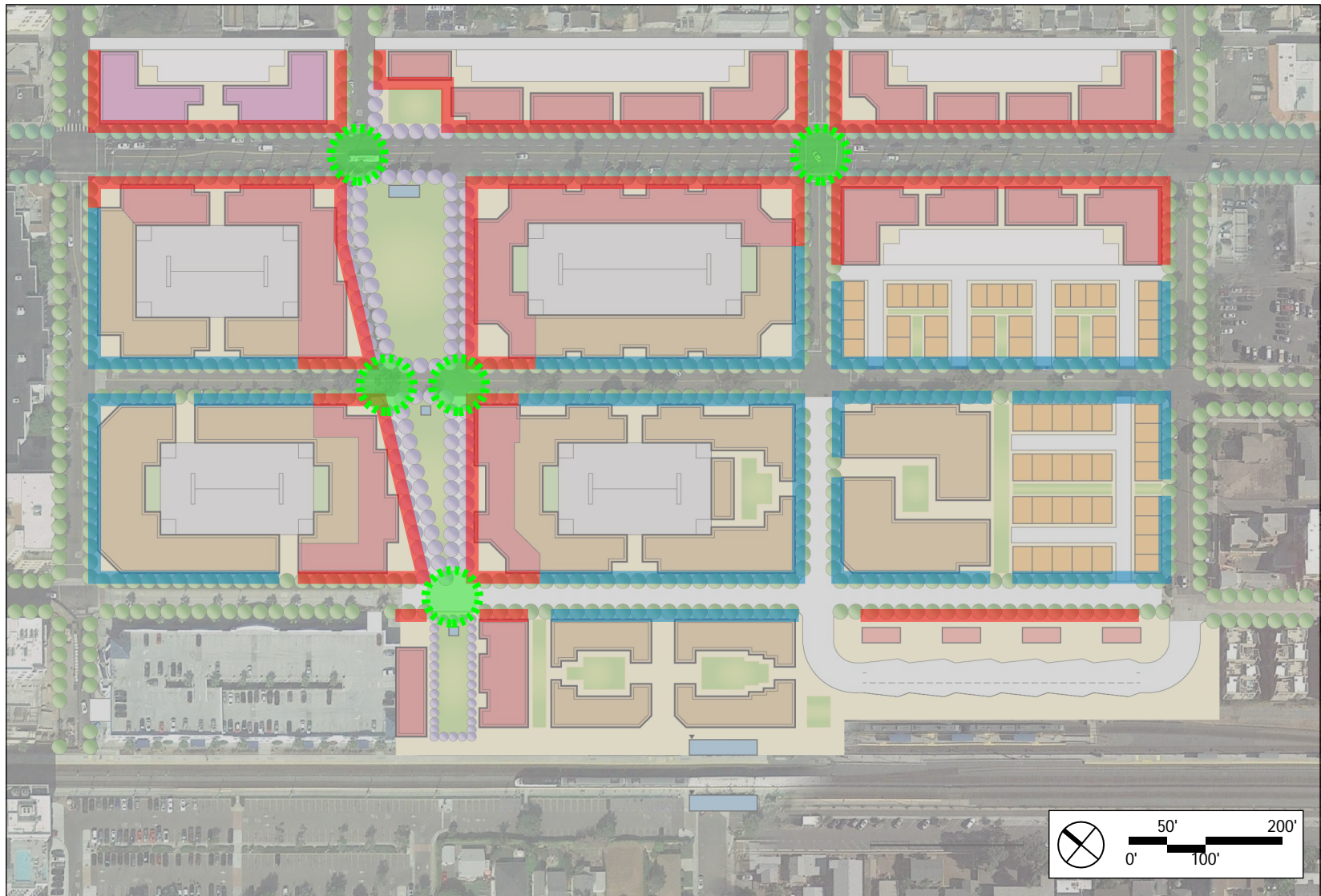


FIGURE 3-1 | OTC TOD Active Frontage Types

- Type A: Very Active Ground Floor Uses
(Retail Cafes/ Shops/ Restaurants, 75% Transparent)
- Type B: Moderately Active Ground Floor Uses
(Residential Entries/ Porches/ Balconies)
- ★ Key Corners

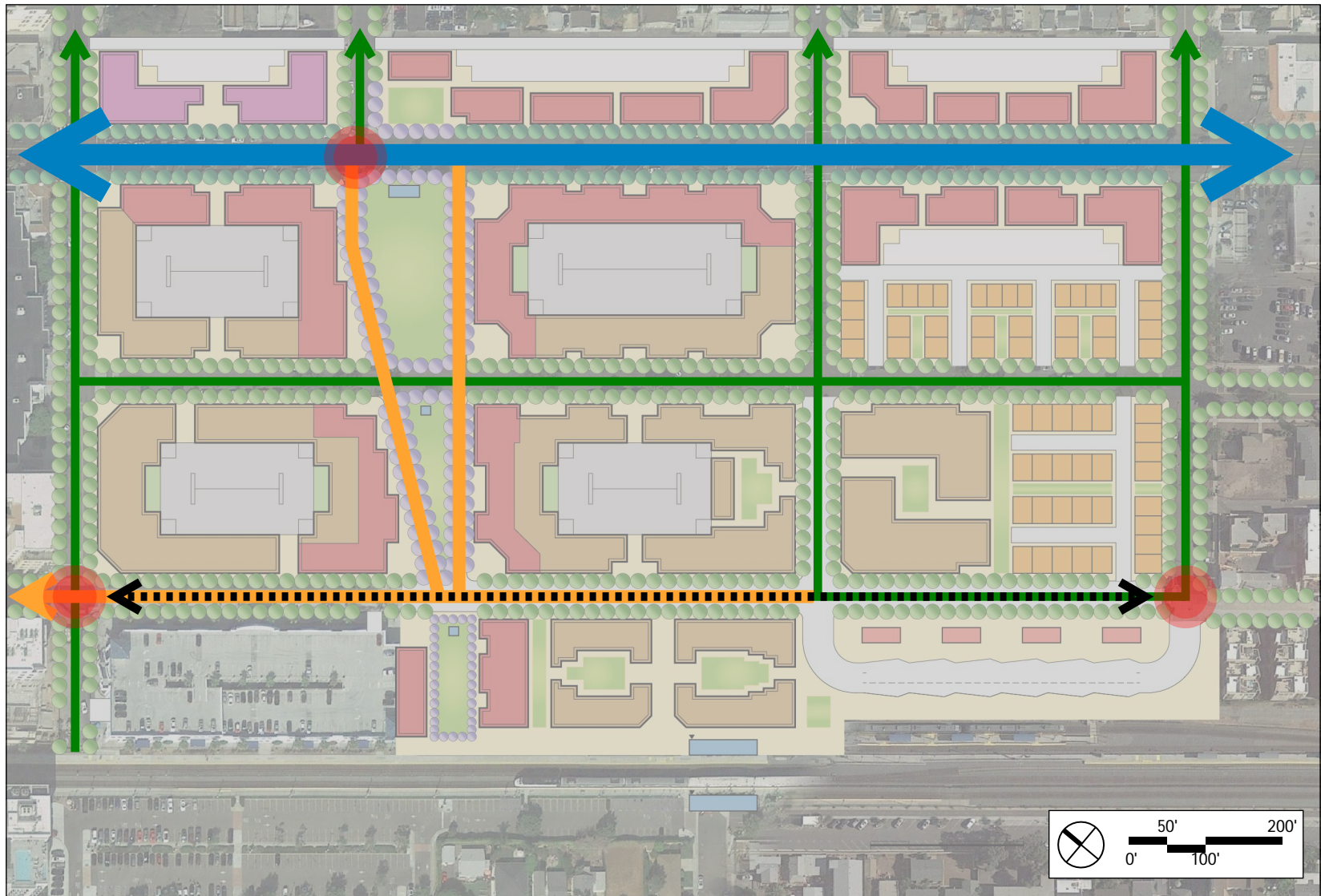


FIGURE 3-1 | OTC TOD Street Network

- Urban Corridor
- Urban Street
- Local Street
- ■ ■ New Street (Extend Cleveland Street)
- Intersection Improvement (Reconnect Grid)

CONCLUSION

4

4. CONCLUSION

Combining insights and findings from this study:

This vision plan demonstrates the potential development opportunities by transforming the Oceanside Transit Center into a Mixed-Use community asset with a balanced of renters and owners.

Oceanside Transit Center's visibility is limited from Oceanside's main north-south arterial, Coast Highway, the placement and size of the urban parks improves access emphasizing this key resource in the community's transportation network.

The opportunity of infill development is outstanding with North County Transit District's (NCTD) ownership and control of approximately +/- 10.2 acres, roughly one-third of the vision plan, adjacent to the transit station.

The grid block pattern provides flexibility allowing developers to build in phases responding to the market and demand.

Integrates residential, office, and supporting retail uses with active, street-facing urban facades along with new public open spaces focused around transit.

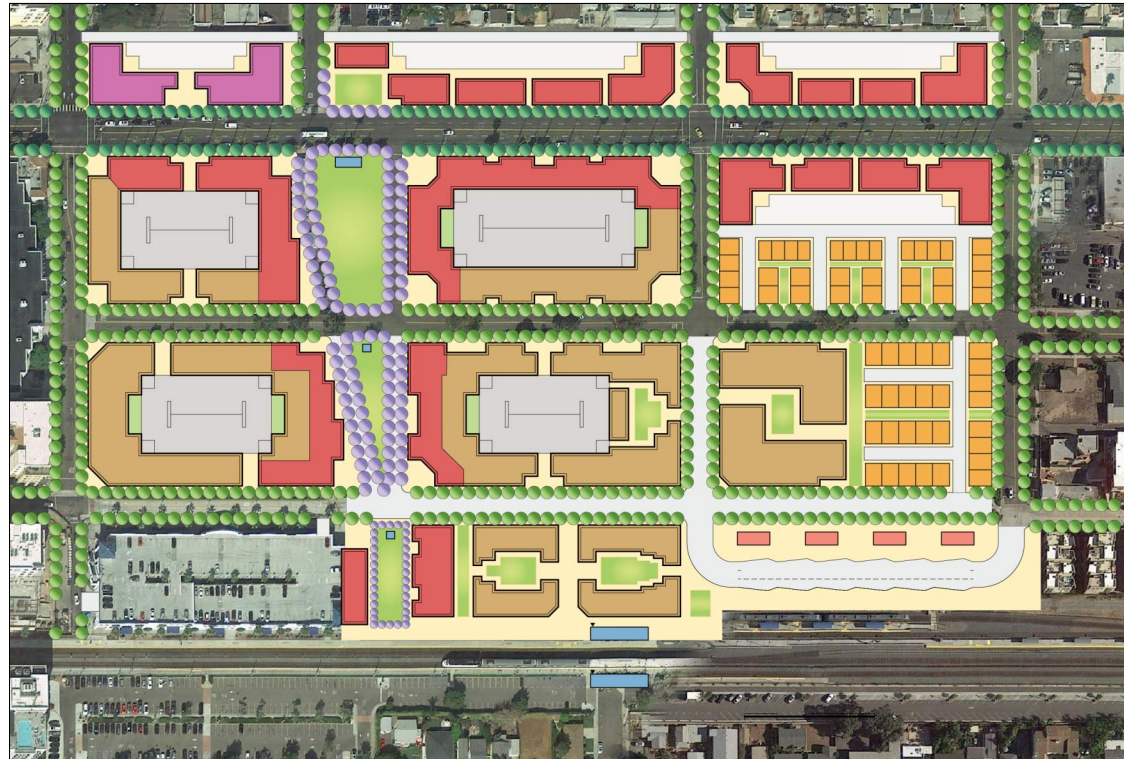
OTC TOD will support and accommodate the recent adjacent development investments by providing shops for consumers, restaurants and services for commuters, attractions for tourists, and housing for local residents.

Creates a highly-sustainable community for future generations and fostering a neighborhood with walking, biking and public transit options.

Provides the opportunity to improve jobs-housing balance, which promotes new housing opportunities for employees, and reduces vehicle miles traveled and greenhouse emissions.

OTC TOD's design respects the character and scale of the existing neighborhood by creating appropriate transitions to the existing surrounding homes and businesses.

The combination of these factors make the OTC TOD one of the most desirable place and ideal location for urban in-fill development in Oceanside and San Diego County.



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https://www.sandag.org/programs/land_use_and_regional_growth/comprehensive_land_use_and_regional_growth_projects/RCP/targets.pdf

SANDAG. Smart Growth Concept Map & Subregion

An aerial photograph of North San Diego, showing a mix of urban development, green spaces, and coastal areas. A grid of six circular icons is overlaid on the image, each with a letter inside and a label below it. The icons are arranged in two rows of three. The letters are O, T, C in the top row and T, O, D in the bottom row. The labels are OCEANSIDE, TRANSIT, CENTER, TRANSIT-, ORIENTED, and DEVELOPMENT respectively. A rectangular area of dense urban development is highlighted in the lower right quadrant of the image.

O

OCEANSIDE

T

TRANSIT

C

CENTER

T

TRANSIT-

O

ORIENTED

D

DEVELOPMENT

REVISIONING NORTH SAN DIEGO'S COUNTY TRANSIT HUB