



Ventura County  
Transportation  
Commission

TECHNICAL MEMORANDUM

# Task 1.2 Existing Conditions

---

DRAFT



Prepared for Ventura County Transportation Commission  
by IBI Group  
With Access Planning, Katherine Padilla & Associates, and KTUA  
May 12, 2022

# Document Control Page

---

CLIENT:	Ventura County Transportation Commission
PROJECT NAME:	Ventura County Transportation Commission 2023 Comprehensive Transportation Plan
REPORT TITLE:	Task 1.2 Existing Conditions
IBI REFERENCE:	133814
VERSION:	
DIGITAL MASTER:	[File Location]
ORIGINATOR:	[Name]
REVIEWER:	[Name]
AUTHORIZATION:	[Name]
CIRCULATION LIST:	
HISTORY:	



# Table of Contents

---

<b>1</b>	<b>Introduction .....</b>	<b>7</b>
1.1	Plan Purpose .....	7
1.2	Background .....	7
<b>2</b>	<b>Study Area .....</b>	<b>9</b>
2.1	Location .....	9
2.2	Regional Significance .....	9
2.3	Major Transportation Facilities.....	9
2.3.1	Freeways.....	9
2.3.2	Roadways .....	11
2.3.3	Transit .....	11
2.3.4	Rail .....	13
2.3.5	Active Transportation .....	15
<b>3</b>	<b>Demographic Conditions .....</b>	<b>17</b>
3.1	Population .....	17
3.1.1	Existing (2020) Population .....	17
3.1.2	Forecast (2045) Population.....	17
3.2	Employment .....	22
3.2.1	Existing (2020) Employment .....	22
3.2.2	Forecast (2045) Employment.....	23
<b>4</b>	<b>Land Use, Development, and Growth.....</b>	<b>28</b>
4.1	Existing Land Use .....	28
4.2	Future Land Use .....	30
4.3	Key Destinations/Activity Centers/Employment Centers .....	32
<b>5</b>	<b>Relevant Planning Documents .....</b>	<b>34</b>
5.1	Transportation/Mobility.....	34
5.1.1	2013 Ventura County Comprehensive Transportation Plan (CTP) .....	34

## Table of Contents (continued)

---

5.1.2	County of Ventura 2040 General Plan Circulation, Transportation, and Mobility Element.....	35
5.1.3	US 101 Communities Connected.....	36
5.1.4	Ventura County Freight Corridors Study.....	36
5.1.5	SCAG 2020-2045 RTP/SCS Connect SoCal (2020) .....	40
5.2	Climate Action Plans.....	40
5.2.1	Baseline GHG Emissions Inventory.....	40
5.2.2	GHG Emission Forecasts .....	41
5.2.3	GHG Reduction Measures.....	41
5.2.4	GHG Strategy Implementation and Monitoring.....	42
<b>6</b>	<b>Policy Review.....</b>	<b>44</b>
6.1	Ventura County General Plan.....	44
6.2	Local City Transportation Policies .....	46
	City of Camarillo (2020).....	46
	City of Fillmore (2003).....	46
	City of Moorpark (1992, General Plan update currently underway) .....	46
	City of Ojai (1997, General Plan update currently underway) .....	47
	City of Oxnard (2016).....	47
	City of Port Hueneme (2020) .....	47
	City of Santa Paula (2020).....	48
	City of Simi Valley (2012).....	48
	City of Thousand Oaks (1997, General Plan update currently underway) .....	49
	City of Ventura (2005, General Plan update currently underway).....	50
6.3	Local City Land Use Policies .....	50
	City of Camarillo (2020).....	50
	City of Fillmore (2005).....	50
	City of Moorpark (1992, General Plan update currently underway) .....	50
	City of Ojai (1997, General Plan update currently underway) .....	51
	City of Oxnard (2016).....	51
	City of Port Hueneme (2020) .....	52

## Table of Contents (continued)

---

	City of Santa Paula (2020).....	52
	City of Simi Valley (2012).....	53
	City of Thousand Oaks (1997, General Plan update currently underway) .....	54
	City of Ventura (2005, General Plan update currently underway) .....	54
6.4	Unincorporated Area Plans .....	54
6.4.1	Coastal Area Plan & Local Coastal Program (2017) .....	57
6.4.2	El Rio/Del Norte Area Plan (2020) .....	57
6.4.3	North Ventura Avenue Area Plan (2020) .....	58
6.4.4	Oak Park Area Plan (2020) .....	58
6.4.5	Ojai Valley Area Plan (2020).....	58
6.4.6	Piru Area Plan (2020) .....	58
6.4.7	Saticoy Area Plan (2015) .....	59
6.4.8	Thousand Oaks Area Plan (2020) .....	59
6.4.9	Lake Sherwood/Hidden Valley Area Plan (2020) .....	60
6.5	State Policy .....	60
6.5.1	Senate Bill 743 .....	60
<b>7</b>	<b>Mobility Conditions .....</b>	<b>62</b>
7.1	Vehicular Movement .....	62
7.1.1	Roadway Network .....	62
7.1.2	Average Weekday Traffic Volumes and Volume to Capacity Ratios .....	65
7.1.3	Vehicle Miles Traveled .....	75
7.1.4	Peak Hour Traffic Volumes .....	78
7.1.5	Existing and Future Travel Patterns .....	82
7.2	Transit .....	85
7.2.1	Existing Transit Services .....	85
7.2.2	Ridership/Performance Metrics .....	93
7.2.3	High-Demand Routes and Stops .....	96
7.3	Active Transportation .....	100
7.3.1	Existing Infrastructure/Plans .....	100
7.3.2	Collision and Safety Analysis .....	101

## Table of Contents (continued)

7.3.3	Bicycle-Pedestrian Propensity Analysis.....	107
7.3.4	Commute Characteristics.....	110
<b>8</b>	<b>Equity Analysis .....</b>	<b>117</b>
8.1	Disadvantaged Communities .....	117
8.1.1	Environmental Justice Areas .....	117
8.2	Public Health Metrics/Conditions .....	124
8.2.1	Health Trends.....	124
8.2.2	Socioeconomic Trends .....	129
8.2.3	Health Exposures.....	135
<b>9</b>	<b>Conclusion .....</b>	<b>138</b>
	Figure 2.1 Federal Highway Classifications.....	10
	Figure 2.2 Ventura County Existing Transit Network.....	12
	Figure 2.3 Freight Corridors.....	14
	Figure 2.4 Existing Bike Infrastructure .....	16
	Figure 3.1 Existing Population Density 2020 .....	18
	Figure 3.2 Forecasted Population Density 2045.....	19
	Figure 3.3 Forecasted Change in Population .....	20
	Figure 3.4 Forecasted Population Growth by Jurisdiction .....	22
	Figure 3.5 Existing Employment Density 2020 .....	24
	Figure 3.6 Forecasted Employment Density 2045.....	25
	Figure 3.7 Forecasted Change in Employment .....	26
	Figure 4.1 Existing Land Use.....	29
	Figure 4.2 Future Land Use .....	31
	Figure 4.3 Schools .....	33
	Figure 5.1 Ventura County Freight Corridors.....	38
	Figure 5.2: Daily Truck Volume (Vehicles with 3 or more Axles).....	39
	Figure 6.1 Area Plans .....	56
	Figure 6.2 California Coastal Trail .....	57

## Table of Contents (continued)

---

Figure 7.1 Federal Highway Classifications.....	64
Figure 7.2 Average Weekday Traffic Volume .....	66
Figure 7.3 AM Peak Period V/C 2016.....	68
Figure 7.4 AM Peak Period V/C 2040.....	70
Figure 7.5 PM Peak Period V/C 2016.....	72
Figure 7.6 PM Peak Period V/C 2040.....	74
Figure 7.7 Home-Based VMT per Capita by TAZ (2016) .....	76
Figure 7.8 Work-Based VMT per Employee by TAZ (2016).....	77
Figure 7.9 Ventura County AM Peak Period Traffic Volume .....	79
Figure 7.10: Ventura County P.M. Peak Period Traffic Volume .....	81
Figure 7.11 Ventura County Existing Transit Network.....	86
Figure 7.12 Ventura County Transit Ridership (2011-2017).....	93
Figure 7.13 VCTC Intercity Service Ridership .....	94
Figure 7.14 Passengers Per Service Hour .....	95
Figure 7.15 Service Cost Per Passenger .....	95
Figure 7.16 CAT Fixed Route Ridership (October 2018-2019).....	97
Figure 7.17 CAT Trolley Ridership (October 2018-2019).....	98
Figure 7.18 Existing Bike Infrastructure.....	102
Figure 7.19 Proposed Regional Wayfinding Routes.....	103
Figure 7.20 Bicycle Collision Locations .....	104
Figure 7.21 Pedestrian Collision Locations .....	105
Figure 7.22 Auto Collision Density.....	106
Figure 7.23 Bicycle and Pedestrian Propensity Model Analysis Results.....	108
Figure 7.24 High Propensity Areas .....	109
Figure 7.25 Commute Less Than 10 Minutes.....	113
Figure 7.26 Commute Mode to Work: Public Transit.....	114
Figure 7.27 Commute Mode to Work: Bike.....	115
Figure 7.28 Commute Mode to Work: Walk.....	116
Figure 8.1 CalEnviroScreen 4.0 Scores .....	118
Figure 8.2 Disadvantaged Communities.....	119

## Table of Contents (continued)

---

Figure 8.3 Environmental Justice Areas .....	120
Figure 8.4 Minority Population .....	122
Figure 8.5 Low-Income Households .....	123
Figure 8.6 Asthma .....	126
Figure 8.7 Low Birth Weight .....	127
Figure 8.8 Cardiovascular Disease .....	128
Figure 8.9 Educational Attainment .....	131
Figure 8.10 Linguistic Isolation .....	132
Figure 8.11 Poverty .....	133
Figure 8.12 Unemployment .....	134
Figure 8.13 Ozone .....	136
Figure 8.14 Particulate Matter .....	137

# 1 Introduction

## 1.1 Plan Purpose

The Ventura County Comprehensive Transportation Plan (CTP) is intended to be a guiding document for planning the future of transportation and mobility in Ventura County. The development of the CTP is guided by five (5) primary objectives:

- 1) Identify the future transportation needs for Ventura County.**
  - a. This includes the types of projects, their locations and details regarding project scope, including project limits and the transportation modes that would be served. The updated CTP will assess how these projects should be prioritized and discuss potential sources of funding for these projects.
- 2) Community participation is an integral component of the development of the CTP.**
  - a. Development of the CTP includes a robust effort to engage with community, stakeholders, and local agencies. The engagement effort will educate and empower residents to be actively involved in the transportation planning process. The CTP will be built from community-based local priorities, and community-expressed need to enhance regional connections.
- 3) Identify strategies and projects to help Ventura County meet State mandates related to reducing greenhouse gas emissions.**
  - a. These projects will also contribute to improving air quality and enhancing the sustainability and resiliency of the transportation network.
- 4) Emphasize projects and strategies that enhance equitable access to mobility.**
  - a. This approach is key to ensuring that all residents of Ventura County, regardless of their location, income, age, ability, or economic status have equal access to transportation options for travel to work, school, recreation, and other purposes.
- 5) Establish the vision for mobility in Ventura County for the next 30 years.**
  - a. An integrated, sustainable transportation network requires a visionary and creative approach to the plan development process.

## 1.2 Background

The previous Ventura County CTP was prepared in 2013 and was aimed at ensuring mobility and enhancing the quality of life for all Ventura County residents. This plan was built from community-based local priorities and a community-expressed need to enhance regional connections. It examined various funding strategies and options from the federal, state, regional, and local levels. The 2013 CTP provides a framework for future community-based planning and collaboration for Ventura County's long-range transportation decisions.

In light of several recent transportation modernization efforts across the county, the Ventura County Transportation Commission (VCTC) is developing an update to the 2013 CTP to address these opportunities to advance transportation and mobility. To establish a connected, equitable, and resilient transportation future, the updated CTP will address the following:

- Regional connectivity
- Active transportation networks
- Reducing greenhouse gas emissions from transportation

TASK 1.2 EXISTING CONDITIONS

Prepared for Ventura County Transportation Commission

- Age and demographic shifts
- Availability and affordability of housing proximate to high-quality transit
- Low-emission transportation options
- Efforts to address highway congestion and the associated environmental and health impacts
- Mitigating and adapting to a changing climate
- Preparing for significant future shifts in transportation technologies
- Issues of equity and access



## 2 Study Area

### 2.1 Location

Ventura County is located in the southern portion of central California, adjacent to Los Angeles County to the east and southeast, Santa Barbara County to the west, Kern County to the north and northeast, and the Pacific Ocean to the south and southwest. Ventura County is 1,843 square miles (not including water), and has a population of 916,677 (2020). Most of the population is concentrated in the southern portion of the County, as a little more than half of the County's total area is comprised of national forest primarily located in the northern section.

There are 10 cities in Ventura County and 13 Census Designated Places that make up unincorporated Ventura County. Cities in Ventura County include Oxnard, Thousand Oaks, Simi Valley, Ventura, Port Hueneme, Moorpark, Santa Paula, Fillmore, Camarillo, and Ojai. Major unincorporated communities include Oak Park, El Rio/Del Norte, Somis, Casa Conejo, Santa Rosa Valley and the Ojai Valley.

### 2.2 Regional Significance

Ventura County has a strong economic base that includes major industries in biotechnology, health care, education, agriculture, oil production, military training and testing, and tourism. Naval Base Ventura County, which includes Point Mugu, Port Hueneme, and San Nicolas Island, is the largest employer with more than 16,000 employees. As of 2019, Ventura County had a gross domestic product (GDP) of nearly \$55 billion. For reference, this figure is 7% of what Los Angeles County produces in GDP, and 175% of Santa Barbara County's GDP<sup>1</sup>. Approximately 18% of the County land area is urban, while 49% is agricultural.

Ventura County is home to two universities, a private college, and three community colleges. It has a strong tourism draw due to its expansive oceanfront, rich history, artistic culture, and small-town charm.

### 2.3 Major Transportation Facilities

#### 2.3.1 Freeways

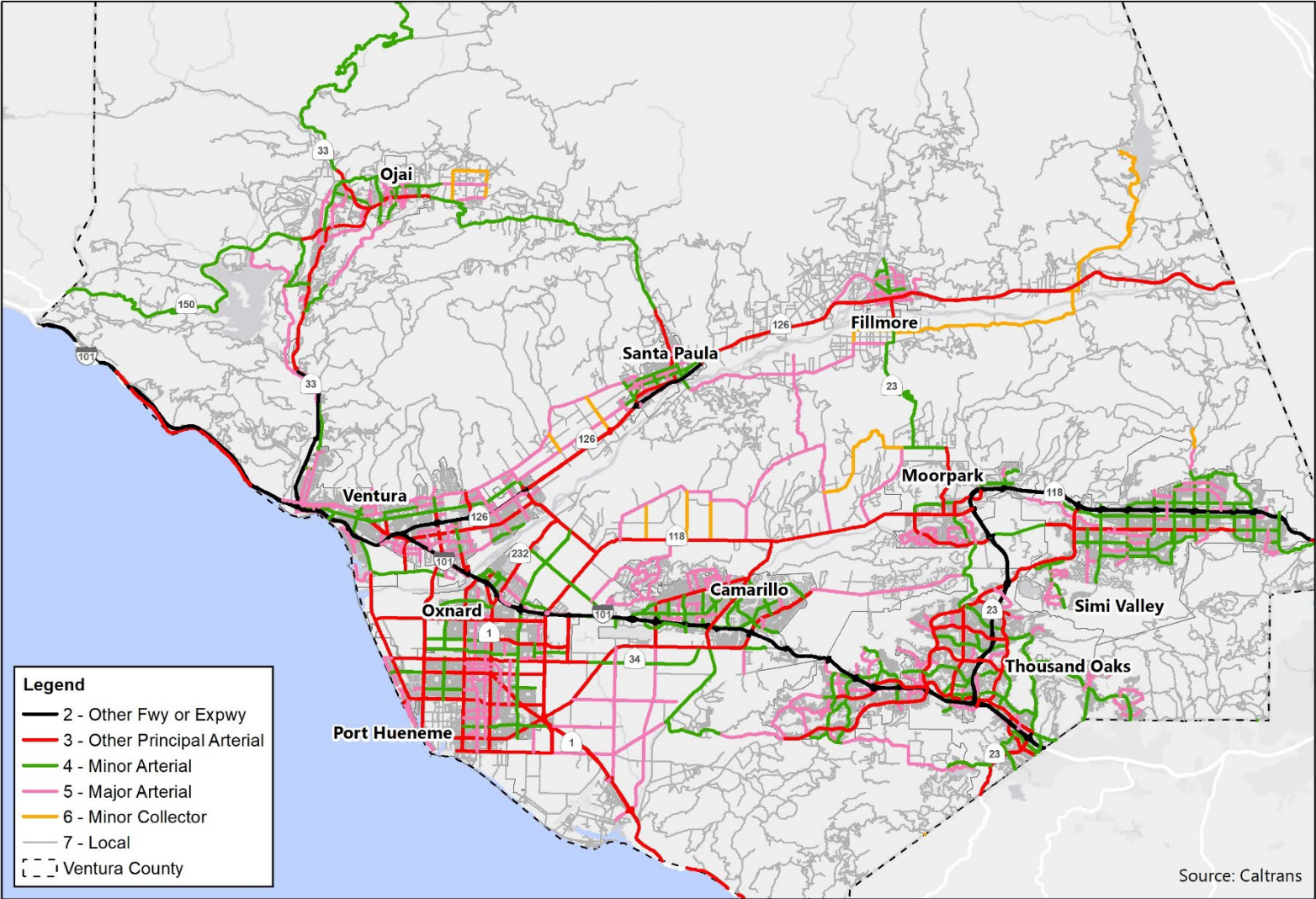
Ventura County features one U.S. freeway, U.S. Highway 101, which traverses in an east-west direction in south Ventura County connecting Thousand Oaks, Camarillo, Oxnard, and Ventura, before heading northbound to Carpinteria (Santa Barbara County) to the northwest and southbound to Westlake Village (Los Angeles County) to the southeast.

Ventura County features eight State Routes (SR), including SR 1, SR 23, SR 33, SR 34, SR 118, SR 126, SR 150, and SR 232 (Figure 2.1).

---

<sup>1</sup> Federal Reserve Bank of St. Louis Economic Data (FRED). "Gross Domestic Product: All Industries in Ventura County, CA" FRED, 2020. <https://fred.stlouisfed.org/series/GDPALL06111>

Figure 2.1 Federal Highway Classifications



**Federal Highway Classifications**

VCTC Comprehensive Transportation Plan



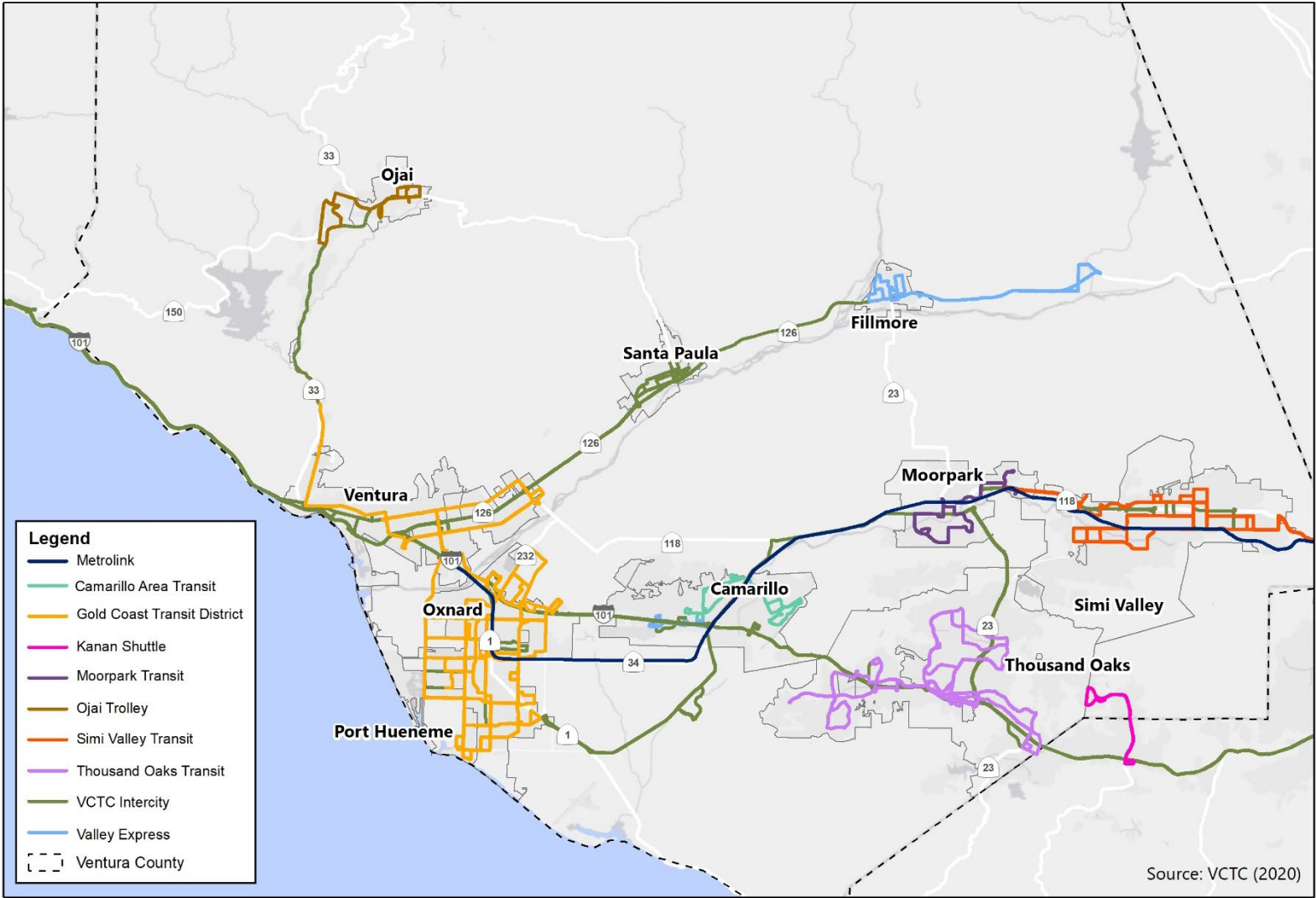
### 2.3.2 Roadways

The arterials in the urban sections of Ventura County are typically laid out in a grid-like pattern, but often follow the geography of mountain ranges in central locations of south Ventura County as you move away from the coast. Major roadways that interchange with U.S. Highway 101 include Seaward Avenue, Main Street, Telephone Road, Victoria Avenue, Johnson Drive, Oxnard Boulevard, Vineyard Avenue, Rose Avenue, Rice Avenue / SR 1 Pacific Coast Highway, Las Posas Road, Carmen Drive, Lewis Road, Santa Rosa Road, Wendy Drive, Borchard Road, Ventu Park Road, Lynn Road, Moorpark Road, the Moorpark Freeway (SR 23), Hampshire Road, and Westlake Boulevard.

### 2.3.3 Transit

Eight transit operators currently serve the area, including Ventura County Transportation Commission (VCTC) Intercity, Gold Coast Transit District, Camarillo Area Transit, Kanan Shuttle, Ojai Trolley, Moorpark City Transit, Simi Valley Transit, Thousand Oaks Transit, and Valley Express (Figure 2.2).

Figure 2.2 Ventura County Existing Transit Network



## Existing Transit Network

VCTC Comprehensive Transportation Plan



In 2021, VCTC initiated a Transit Integration and Efficiency Study (TIES) to review and improve transit operations throughout Ventura County. This study is intended to build on the 2012 VCTC Ventura County Regional Transit Study, which highlighted issues and challenges related to the provision transit service, opportunities to improve transit service, and policy topics for further consideration. The 2012 Regional Transit Study highlighted the need for improved coordination between transit operators or full consolidation with the establishment of a steering committee overseeing governance, financials, planning, operations, communications, marketing and fares. The ongoing TIES effort is intended to further examine current challenges related to disjointed service and poor coordination between operators, and identify potential strategies and solutions to address these challenges.

#### 2.3.4 Rail

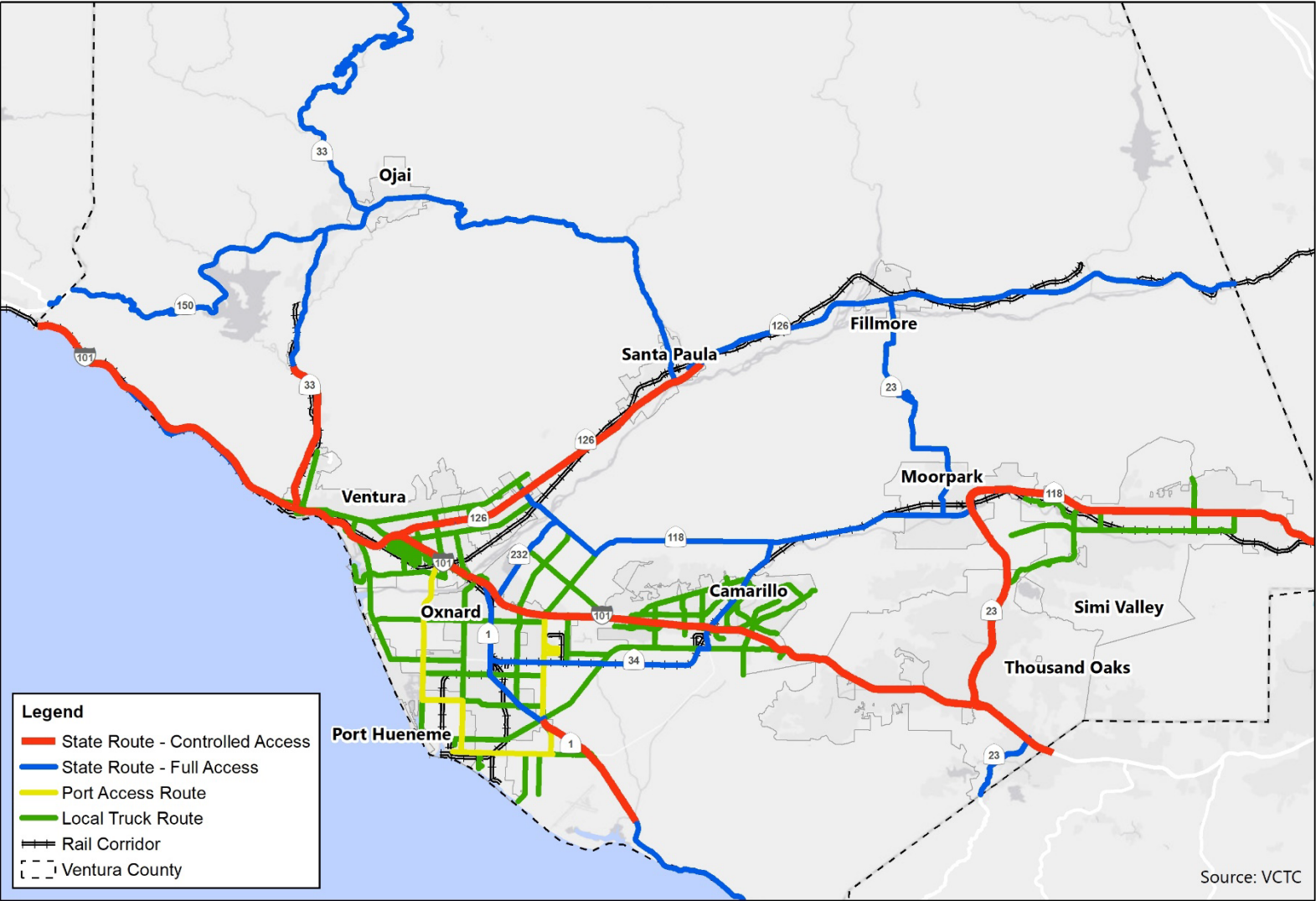
Ventura County is served by Amtrak and Metrolink trains via the Amtrak Pacific Surfliner and Coast Starlight and the Metrolink Ventura County Line. These passenger rail services operate within the existing Union Pacific rail corridor, which enters Ventura County from the south in Simi Valley and departs the county to the north near Carpinteria in Santa Barbara County. The Pacific Surfliner serves stops in Simi Valley, Moorpark, Camarillo, Oxnard, and Ventura. This service connects Ventura County to San Luis Obispo and Santa Barbara to the north, and Los Angeles, Orange County, and San Diego to the south. The Coast Starlight stops in Simi Valley and Oxnard and connects Los Angeles to Portland and Seattle. The Metrolink Ventura County Line make stops at Simi Valley, Moorpark, Camarillo, Oxnard and East Ventura, and connects Ventura County to the San Fernando Valley and Downtown Los Angeles.

The 2021 VCTC Ventura County Freight Corridor Study analyzes existing freight rail operations and movements, and develops strategies to reduce or avoid negative impacts to promote a safer, more efficient, and sustainable freight transportation network. Part of this study focuses on the rail freight system (Figure 2.3), which transfers bulk goods to and from port facilities, industrial customers, and intermodal transfer facilities located in Ventura County. The freight rail system overlaps with passenger rail service, creating scheduling challenges for both service types.

VCTC owns the Santa Paula Branch rail corridor operated by Sierra Northern Railway company. As of December 2021, the Sierra Northern Railway has a 35-year operating contract and is planning on expanding freight, film, and tourist operations. The line has one current freight customer located in Santa Paula, and is used intermittently for the movement and storage of freight rail cars in the area between Fillmore and Piru.



Figure 2.3 Freight Corridors



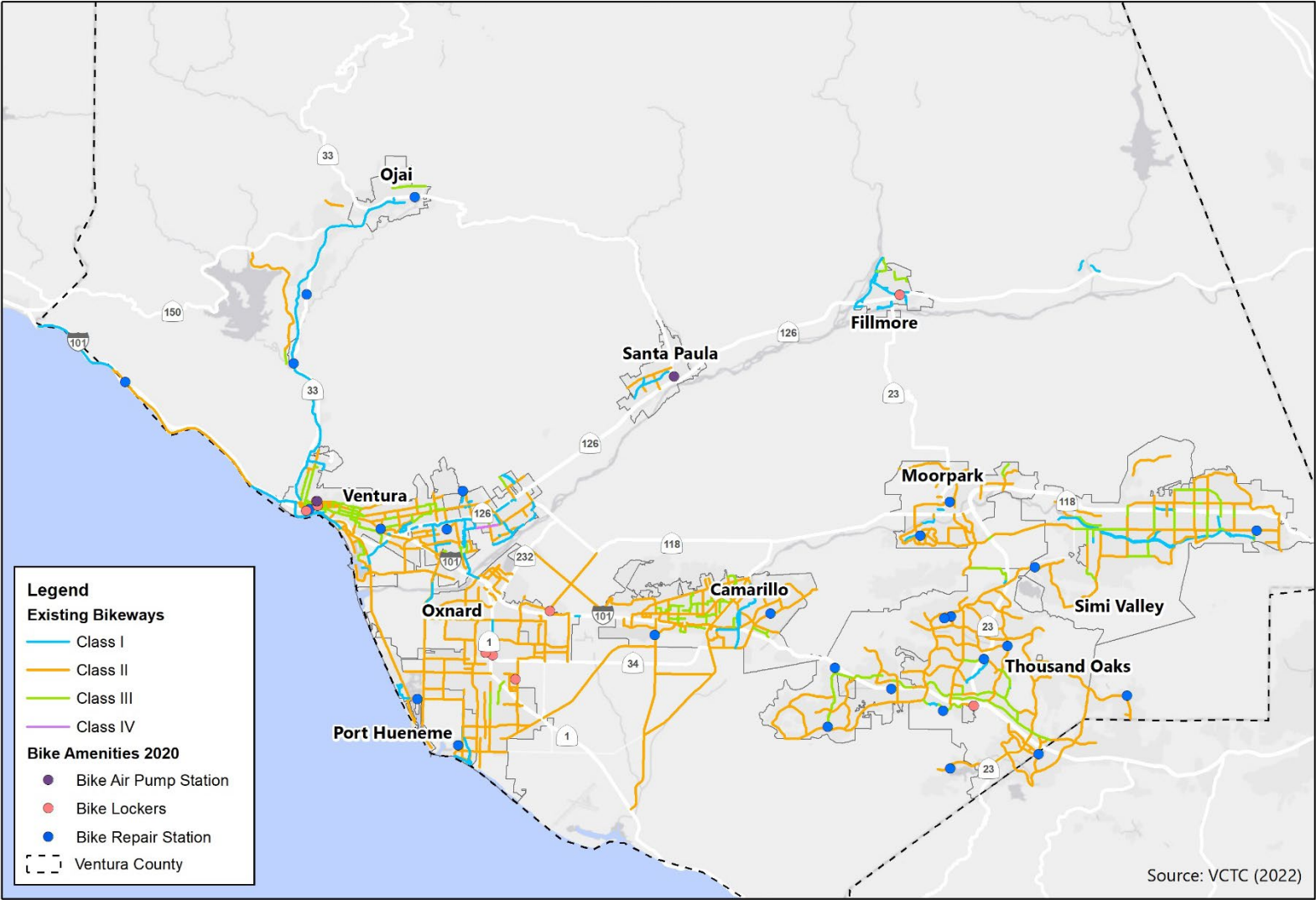
**Freight Corridors**  
VCTC Comprehensive Transportation Plan



### 2.3.5 Active Transportation

Ventura County features significant existing bicycle infrastructure among all four bicycle classifications in its urban areas, mainly near the Pacific Ocean and along arterial streets (Figure 2.4). As of 2016, just under 80 miles of Class I shared-use paths, just under 370 miles of Class II bicycle lanes, and over 69 miles of Class III bike routes traverse Ventura County, along with under one mile of Class IV separated bike facilities at one location for a portion along Telegraph Road. This infrastructure is further discussed in Section 7.3.

Figure 2.4 Existing Bike Infrastructure



**Existing Bike Infrastructure**  
VCTC Comprehensive Transportation Plan





## 3 Demographic Conditions

The following section summarizes data that describes the demographic make-up of the study area in Ventura County. Analysis of these indicators helps to identify who is traveling in the region and the characteristics of the community living here. Among the factors considered are population density, employment, land use, and the location of key destinations to which people travel.

### 3.1 Population

Understanding population distribution throughout the study area is important in determining the potential locations of where people may begin trips, as well as the distribution of travel. Population density is described in the following sections as the total number of people per square mile and is defined within traffic analysis zones (TAZ) within Ventura County. Population density data is derived from the Southern California Association of Government's (SCAG) 2020-2045 Regional Transportation / Sustainable Communities Strategy (RTP/SCS), also known as Connect SoCal. This document records population using a 2016 base year and projects growth for the entire SCAG region through the year 2045.

#### 3.1.1 Existing (2020) Population

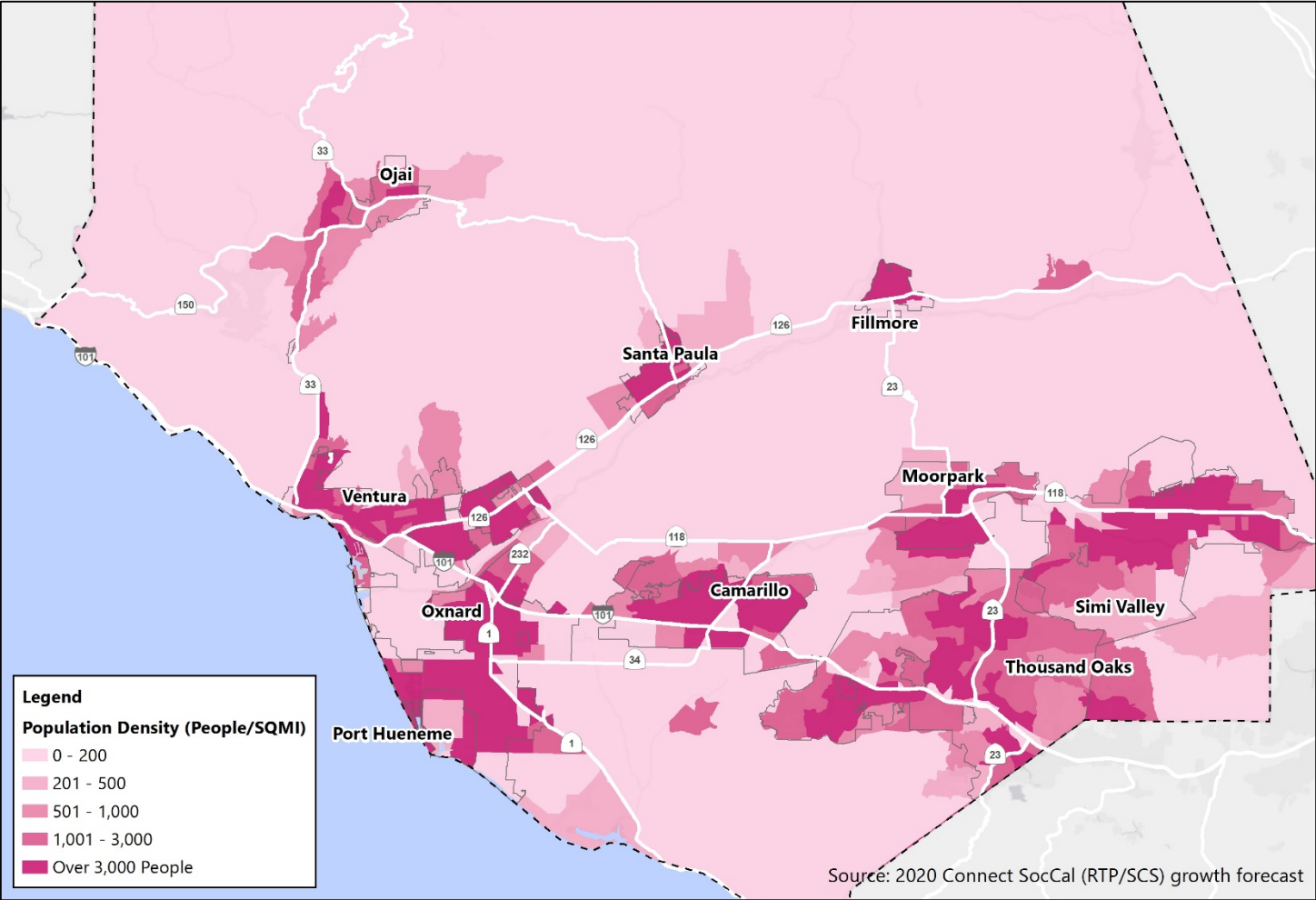
According to SCAG's 2020 Connect SoCal growth forecast, Ventura County has a population of about 916,677 residents. Using the 2020 Connect SoCal growth forecast, Figure 3.1 presents the existing population density for Ventura County by TAZ. Approximately half of the entire Ventura County population lives in the cities surrounding the 101 corridor within the cities of Ventura, Oxnard, Camarillo and Thousand Oaks. The most densely populated areas are generally located in the center of the ten cities in the county, particularly along SR 23 in Thousand Oaks, SR 118 in Simi Valley, SR 33 and SR 126 in the City of Ventura near the coast, SR 33 in Ojai, and SR 1 in Oxnard.

Generally, population density decreases as the distance from highways increases. It should also be noted that 2,969 square miles in the northern portion of Ventura County is designated as "undevelopable and protected land", as it is part of the Los Padres National Forest. Therefore population is extremely limited in this area, resulting in a population density that is significantly lower than other parts of the county.

#### 3.1.2 Forecast (2045) Population

Using the 2020 Connect SoCal growth forecast, Figure 3.2 presents the population density forecasted for the year 2045, while Figure 3.3 presents the forecasted change in population between 2020 and 2045. According to this data, population growth is forecast to continue to occur in the areas that had the highest observed population density in 2020, such as in the City of Ventura, along SR 23 in Thousand Oaks, SR 118 in Simi Valley, and in Oxnard along the coast. Although the population in these communities is not forecasted to grow significantly, the forecasted distribution of growth across the county will remain consistent with the current distribution of population density. The populations within the cities of Fillmore, Camarillo, Oxnard, Ventura, Moorpark, Santa Paula, and Thousand Oaks are forecasted to increase most significantly within the County in terms of percentage change.

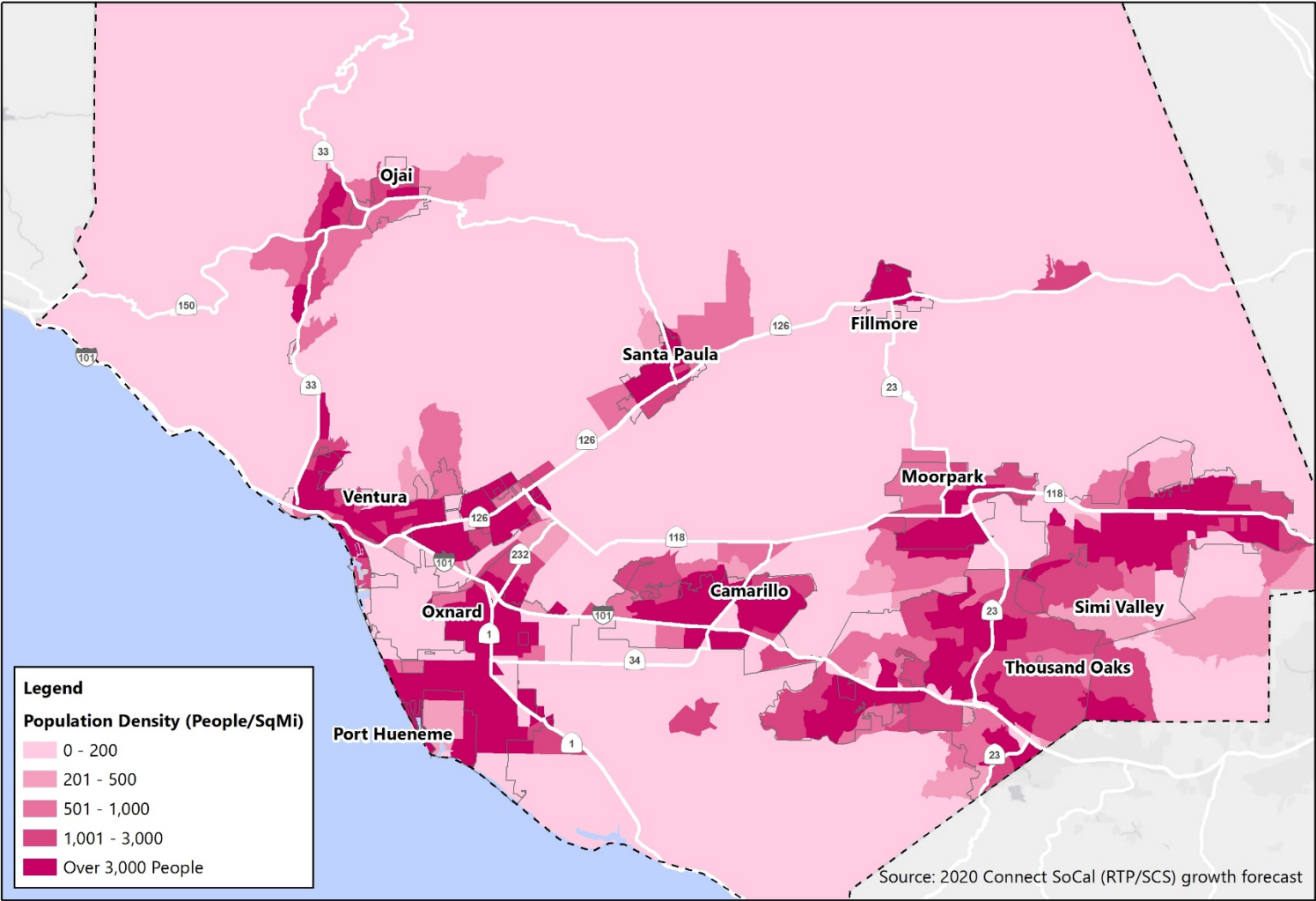
Figure 3.1 Existing Population Density 2020



**Existing Population 2020**  
VCTC Comprehensive Transportation Plan



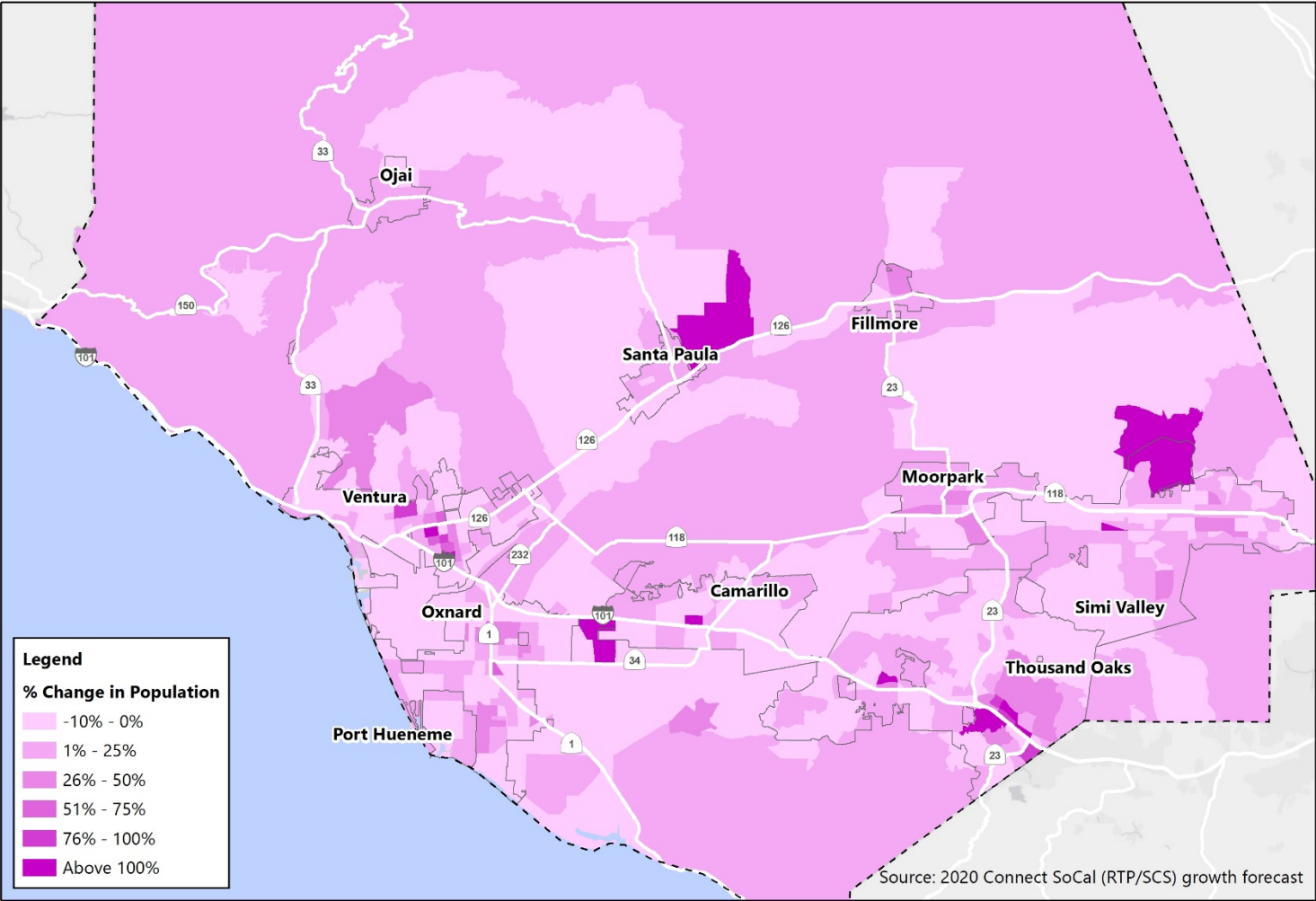
Figure 3.2 Forecasted Population Density 2045



**Forecasted Population 2045**  
VCTC Comprehensive Transportation Plan



Figure 3.3 Forecasted Change in Population



**Forecasted Change in Population (2020-2045)**

VCTC Comprehensive Transportation Plan



**Population Growth by Jurisdiction**

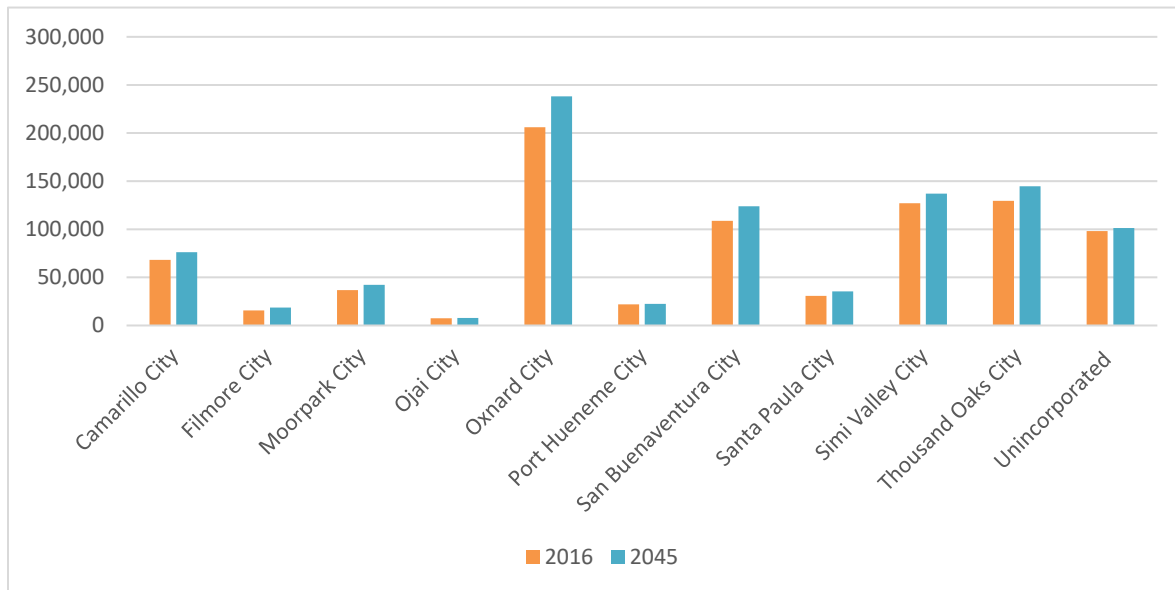
Table 3.1 and Figure 3.4 present the forecasted population growth for each jurisdiction in Ventura County between 2020 and 2045.

Increasing population growth is expected to result in an increase in traffic congestion and VMT in more densely populated areas within the County. Therefore, sustainable transportation alternatives should be explored in these areas to mitigate the potential negative environmental impacts of increased travel demand.

**Table 3.1: Population Growth Forecast Between 2016 and 2045 by Jurisdiction**

JURISDICTION	2020	2045	% INCREASE
Camarillo	70,741	76,100	7.58%
Fillmore	16,419	18,600	13.28%
Moorpark	36,284	42,200	16.30%
Ojai	7,637	7,900	3.44%
Oxnard	202,063	238,100	17.83%
Port Hueneme	21,954	22,400	2.03%
Ventura	110,763	123,900	11.86%
Santa Paula	30,657	35,400	15.47%
Simi Valley	126,356	137,000	8.42%
Thousand Oaks	126,966	144,700	13.97%
Unincorporated Areas	95,001	101,300	6.63%
Ventura County	843,643	947,600	12.32%

*Source: 2020 Connect SoCal (RTP/SCS) Growth Forecast*

**Figure 3.4 Forecasted Population Growth by Jurisdiction**

### Aging Population

In addition to a growing population, the demographics of the county are forecasted to change. More specifically, the population within the county is aging and a significant portion of the population will be aged 65 and over by 2045. It is important to consider this demographic shift and its impact on travel demand, as the population is likely to become more reliant on paratransit, curb-to-curb deliveries, and dial-a-ride services. Understanding where this demographic shift is occurring most significantly and by what magnitude will help to identify where transit service or other mobility options would be most beneficial. According to SCAG's Connect SoCal, the senior population in Ventura County is projected to grow from 14.5% of the total population in 2016 to 22% in 2045.

## 3.2 Employment

Another indicator that provides insight into where people may be traveling is employment density. Employment density is calculated using the total number of jobs per square mile and is defined within each TAZ in Ventura County. Employment density data is derived from the 2020 Connect SoCal growth forecast. This document records employment using a 2020 base year and projects growth for the entire SCAG region through the year 2045.

### 3.2.1 Existing (2020) Employment

Employment density in Ventura County is concentrated in several areas throughout the County (Figure 3.5). According to the 2020 Connect SoCal growth forecast, high concentrations of employment can be found along SR 126 in the City of Ventura, along Highway 101 in Thousand Oaks, near the SR 34 and Highway 101 interchange in Camarillo, in Port Hueneme, and along SR 118 in Simi Valley. Other areas with slightly lower employment densities are located near the SR 150/SR 33 interchange in Ojai and along SR 126 in the City of Santa Paula.

Areas with high employment density will be further analyzed when proposing transportation solutions, as they provide an opportunity to enhance transit connections to key employment centers. The State of the Region report also highlighted that jobs within Ventura County are shifting from manufacturing toward those centered on service and information. Sectors within the service industry providing the highest level of employment include the transportation and utilities, education, and health services. Understanding the type of work that Ventura County residents



pursue is vital to understanding the unique travel needs and patterns of employees and will help create a network that is best suited for them.

In addition to these thriving employment sectors, Naval Base Ventura County serves as one of the largest employment centers in Ventura County. Other major employment centers within the study area include the Amgen Campus in Thousand Oaks, Haas Automation Plant in Thousand Oaks, Oxnard and Camarillo airports, Camarillo Outlets, Meisner Filtration Offices in Camarillo, Ventura County Government Center, Los Robles Regional Medical Center, and several agricultural areas.

### 3.2.2 Forecast (2045) Employment

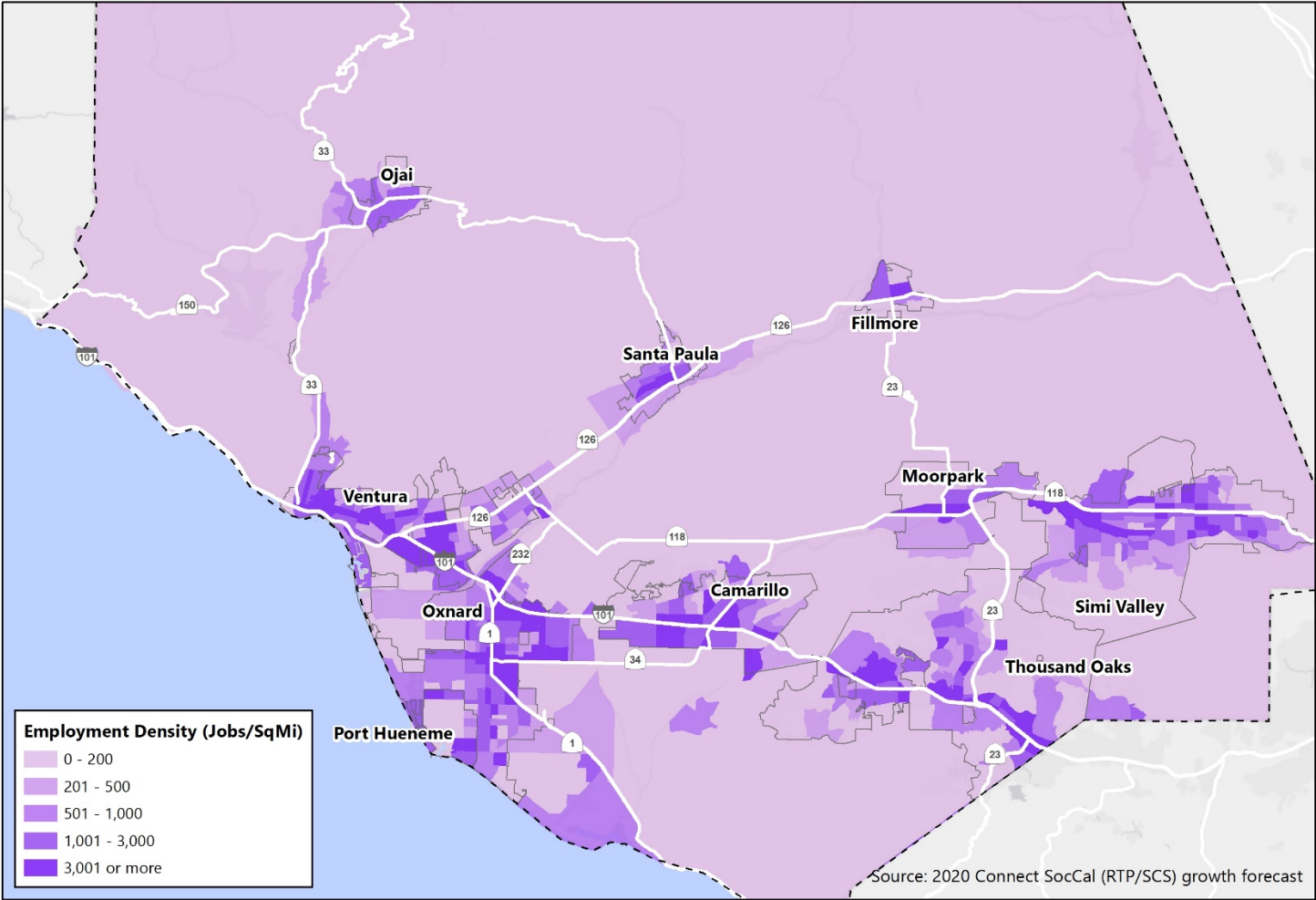
Employment within Ventura County is anticipated to increase by 12.9% from 2020 to 2045, as forecasted by the 2020 Connect SoCal employment projections. Employment continues to be concentrated in several areas throughout the County, including the City of Ventura, Port Hueneme, Camarillo, Thousand Oaks, Simi Valley, and Oxnard (Figure 3.6). More specifically, the City of Oxnard will host several new or expanded employment hubs including the Sakioka Farms development, a new Amazon Distribution Center, and the Collection at Riverpark, which will contribute to the region's growing employment. Figure 3.7 reflects the percent change in employment by TAZ between 2020 and 2045 in Ventura County, while Table 3.4 reflects the employment growth and percent increase for each city within the county. Cities forecasted to experience the most growth in employment include Fillmore, Moorpark, Oxnard, Ventura, and Santa Paula.

**Table 3.2: Forecasted Employment Growth by City in Ventura County**

JURISDICTION	2020	2045	% CHANGE
Camarillo	33,918	37,500	10.56%
Fillmore	3,158	4,800	52.02%
Moorpark	11,172	15,000	34.27%
Ojai	5,702	5,800	1.71%
Oxnard	59,932	76,100	26.98%
Port Hueneme	3,792	4,000	5.48%
Ventura	47,543	60,800	27.89%
Santa Paula	7,789	11,000	41.22%
Simi Valley	46,427	53,800	15.88%
Thousand Oaks	68,728	80,000	16.40%
Unincorporated Areas	30,764	36,900	19.95%
Ventura County	345,356	389,900	12.90%

*Source: 2020 Connect SoCal (RTP/SCS) Growth Forecast*

Figure 3.5 Existing Employment Density 2020

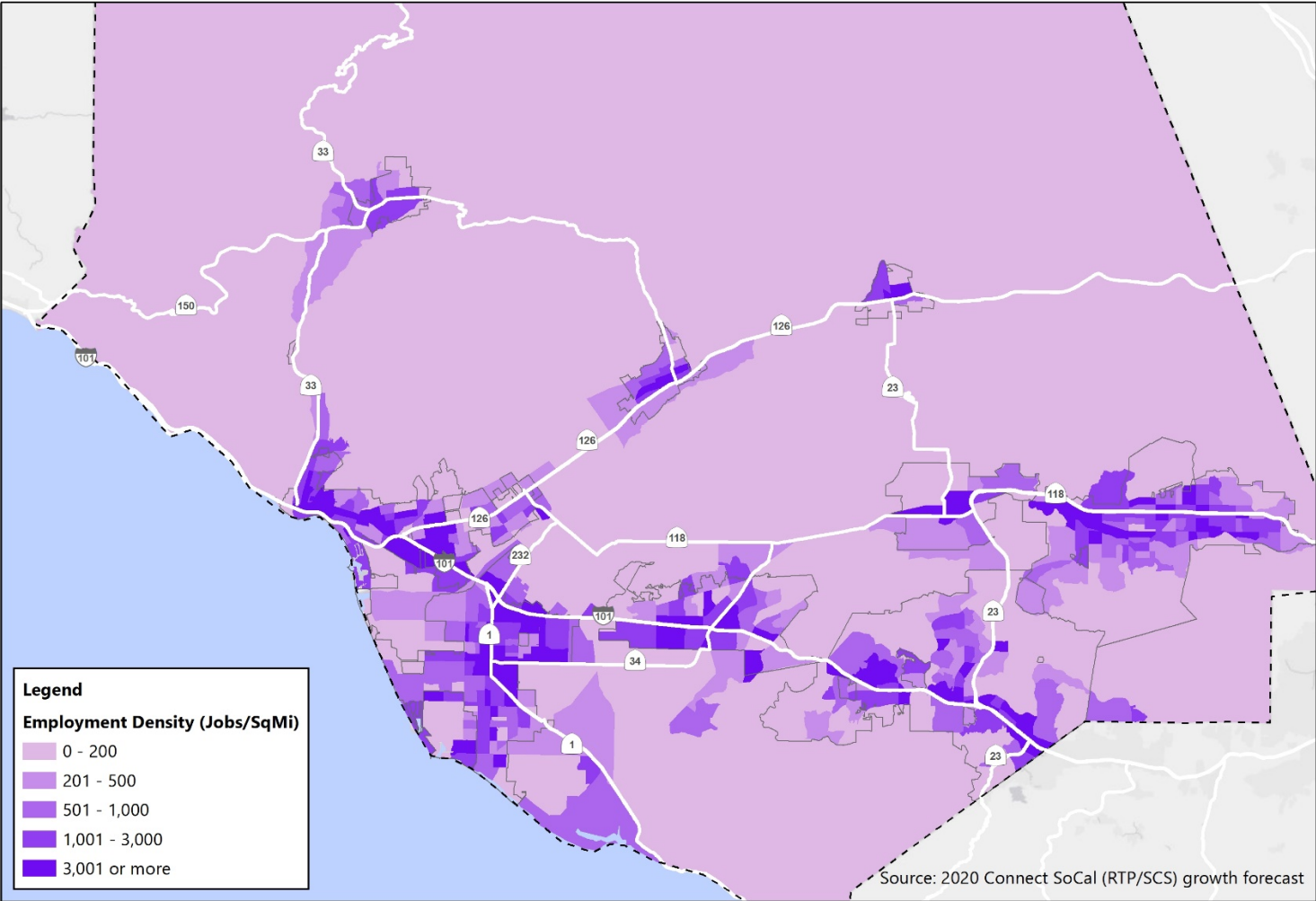


**Existing Employment 2020**  
VCTC Comprehensive Transportation Plan





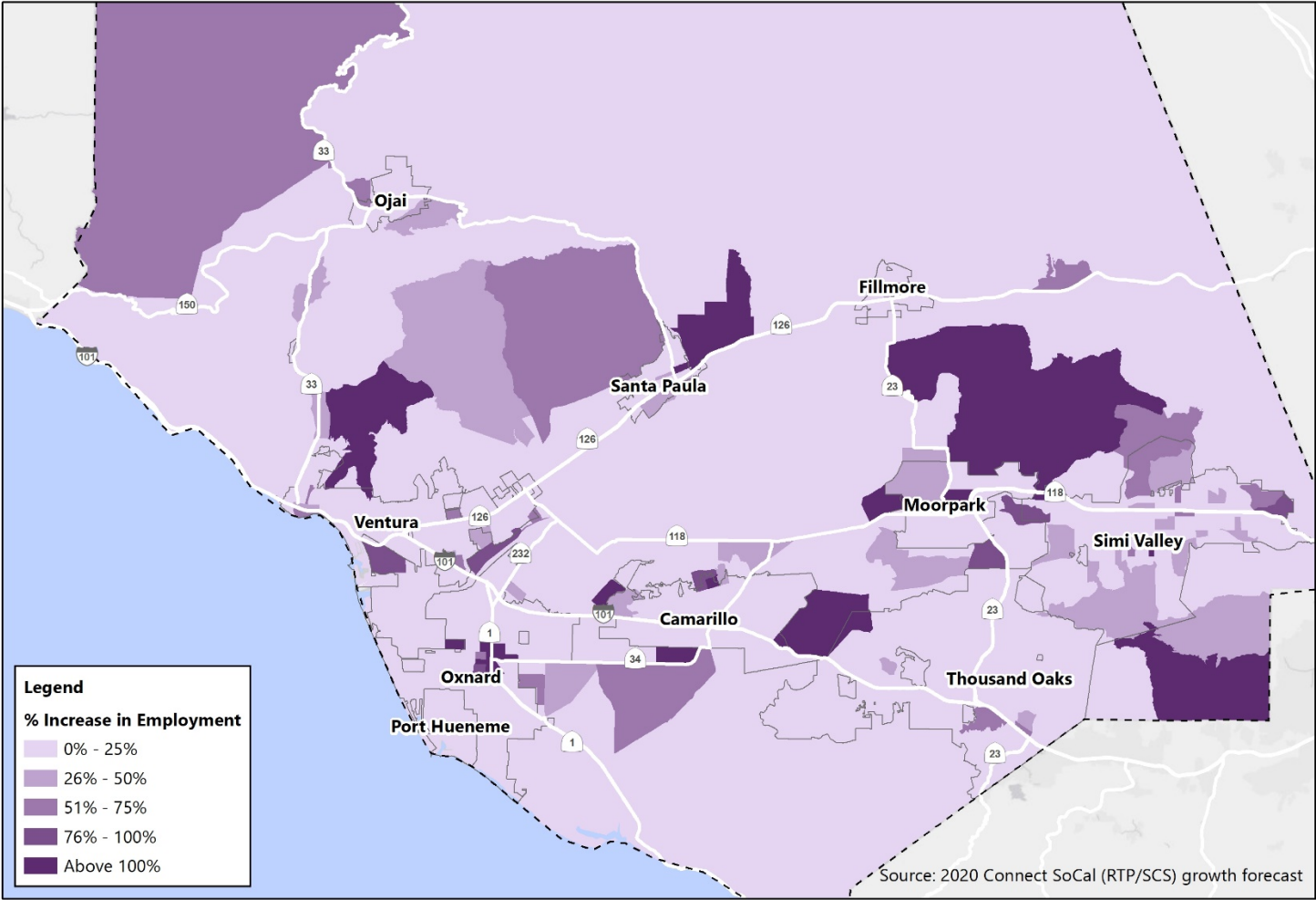
Figure 3.6 Forecasted Employment Density 2045



**Forecasted Employment 2045**  
VCTC Comprehensive Transportation Plan



Figure 3.7 Forecasted Change in Employment



**Forecasted Change in Employment (2020-2045)**

VCTC Comprehensive Transportation Plan



Areas where housing is expected to grow will impact employment as well as transportation needs and commute patterns. For context, the Regional Housing Needs Allocation (RHNA) prepared by SCAG for the eight-year planning period of 2021 to 2029 projects a total of 24,452 new residential units in Ventura County for the next planning period (Table 3.5).

The cities of Oxnard and Ventura are expected to provide the most number of residential units, followed by the cities of Simi Valley and Thousand Oaks. In these jurisdictions, 32-48% of those units will be allocated for those with above-moderate income. Proportionately, the jurisdictions with the highest percentage of units needed for low income or very-low income residents are Moorpark, Thousand Oaks, Simi Valley, Camarillo, and the Unincorporated Areas. In these jurisdictions 17-18% of the total new units are allocated for low income, while 25-29% of units are allocated for very low income.

**Table 3.3 Regional Housing Needs Allocation: 2021-2029**

JURISDICTION	VERY-LOW INCOME (<50% OF MEDIAN)		LOW INCOME (51-80% OF MEDIAN)		MODERATE INCOME (81-120% OF MEDIAN)		ABOVE-MODERATE INCOME (>120% OF MEDIAN)		TOTAL	
Camarillo	353	25.7%	244	17.7%	271	19.7%	508	36.9%	1,376	100%
Fillmore	73	17.6%	61	14.7%	72	17.3%	209	50.4%	415	100%
Moorpark	377	29.2%	233	18.1%	245	19.0%	434	33.7%	1,289	100%
Ojai	13	24.5%	9	17.0%	10	18.9%	21	39.6%	53	100%
Oxnard	1,840	21.5%	1,071	12.5%	1,538	18.0%	4,100	48.0%	8,549	100%
Port Hueneme	26	20.8%	16	12.8%	18	14.4%	65	52.0%	125	100%
Ventura	1,187	22.3%	865	16.3%	950	17.9%	2,310	43.5%	5,312	100%
Santa Paula	102	15.5%	99	15.1%	121	18.4%	335	51.0%	657	100%
Simi Valley	749	26.8%	493	17.7%	518	18.5%	1,033	37.0%	2,793	100%
Thousand Oaks	735	28.0%	494	18.8%	532	20.3%	860	32.8%	2,621	100%
Unincorporated Areas	319	25.3%	225	17.8%	250	19.8%	468	37.1%	1,262	100%
Ventura County	5,774	23.6%	3,810	15.6%	4,525	18.5%	10,343	42.3%	24,452	100%

Source: SCAG 6<sup>th</sup> Cycle Final RHNA Allocation Plan (2021)

The proportion of housing units according to income level expected in each jurisdiction in the county provides further context for potential commute patterns. This is because the availability and affordability of housing can impact how far people need to travel for work. If employment centers are surrounded by housing that is not affordable for the people that work there, workers will need to live further away and thus travel a further distance to get to work every day.

In Ventura County, the Jobs-Housing Ratio in 2016 was 1.03, according to Connect SoCal. The Low-Wage Jobs-Housing Fit was 1.62, the second highest in the SCAG region after Orange County, showing that there is a relatively higher concentration of low-wage jobs (earning \$1,250 a month or less), but a lack of affordable rentals for people who are employed in those jobs. The plan also reported that those employed in lower-wage jobs tend to commute further to work than those with higher-wage jobs. Improving the jobs-housing balance can help reduce congestion.

## 4 Land Use, Development, and Growth

To provide context for demographic and mobility conditions in the county, the following section presents information related to existing and future land use referenced from the Ventura County 2040 General Plan. This section includes a description of the land use characteristics present in the county, as land use is a key indicator for understanding travel patterns, traffic flows, and vehicle miles traveled (VMT). In addition, the key destinations described in Section 4.3 have been identified to understand locations that will attract local and regional traffic flows. More detailed information regarding land use policies for each jurisdiction is provided in Section 6.

### 4.1 Existing Land Use

Development within Ventura County is concentrated within the ten incorporated cities. The Los Padres National Forest in the northern portion of Ventura County is classified as “undevelopable or protected land”, contributing to its low population density. A significant portion of land just south of the Los Padres National Forest is designated for agriculture. There are pockets of residential and commercial development located within this central portion of the county in the Cities of Ojai, Santa Paula, and Fillmore.

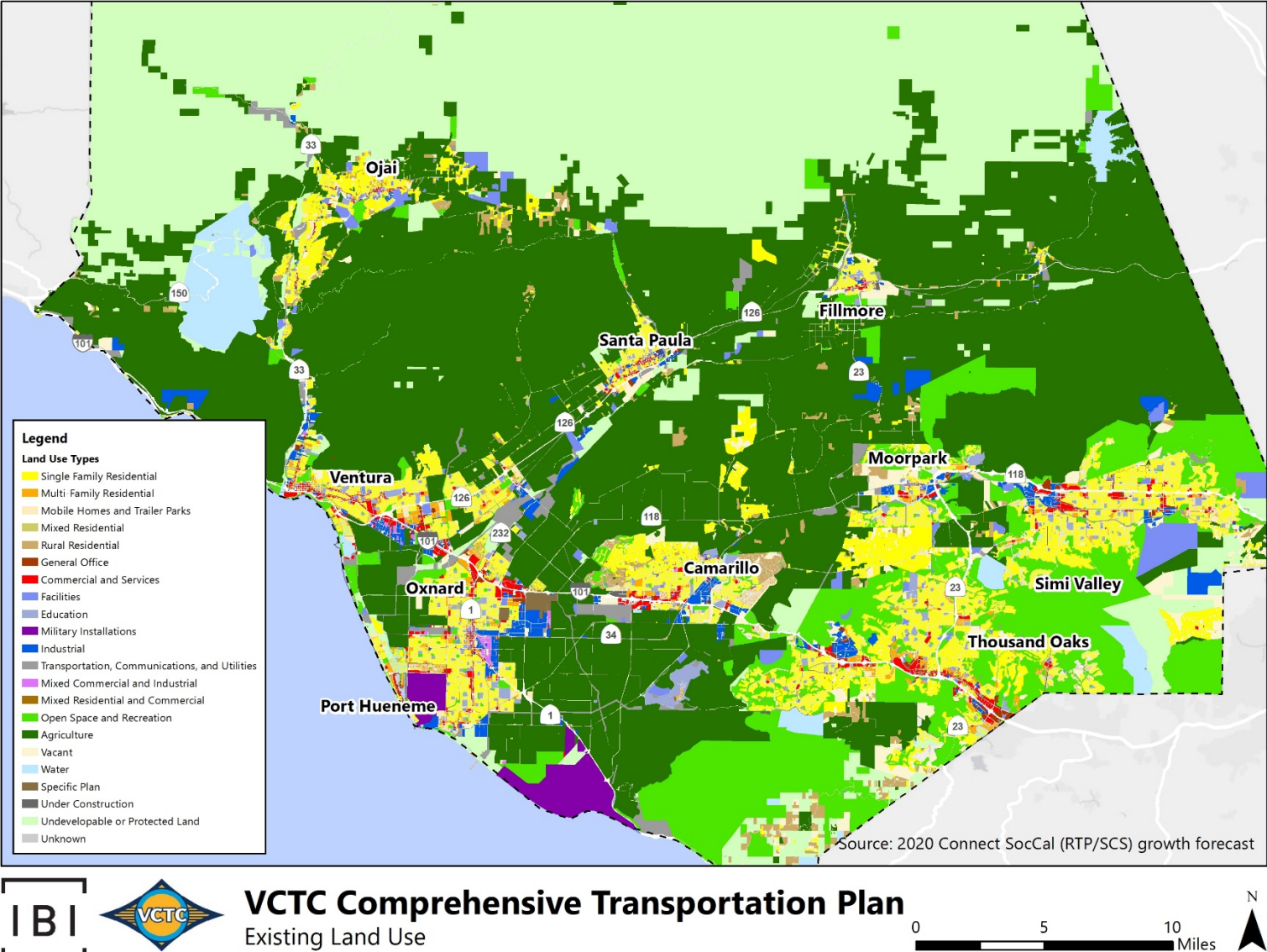
The southern portion of Ventura County is primarily comprised of agricultural land and a mix of single family residential, multi-family residential, commercial, and industrial land uses, with majority of development located in Oxnard, Port Hueneme, Camarillo, Thousand Oaks, Moorpark, and Simi Valley. Within these cities, residential, commercial, and mixed-use areas are surrounded by significant agricultural and open space/recreational land uses.

Land use patterns in the City of Oxnard are primarily residential, with a high percentage of land being designated for single family residential use. However commercial development and multi-family residential land uses also have a presence along Highway 101 and SR 1. There is also significant and diverse level of development in the City of Port Hueneme. Land uses in this city include single family residential, commercial, industrial, multi-family residential, mixed-commercial and industrial, and a portion of the Naval Base Ventura County installation. Similar land use patterns are followed in Camarillo and in Moorpark, as residential, industrial, and commercial are the primary uses. However, portions of both Camarillo and Moorpark are dedicated to rural residential land use. Thousand Oaks and Simi Valley are characterized by a significant portion of open space along the eastern edge of the cities, combined with significant single family residential land use. Existing land use patterns are further highlighted in Figure 4.1 below.

Land use development within Ventura is guided by policies that protect agriculture and open space between more urbanized areas. These policies have been in effect since the adoption of the Guidelines for Orderly Development in 1969. These efforts are reinforced through voter approved Save Open Space and Agricultural Resources (SOAR) initiatives, which establish City Urban Restriction Boundary (CURB) lines around the cities. Moreover, SOAR initiatives require a majority vote to urbanize lands zoned for open space, agricultural or rural land uses. SOAR initiatives are active in the cities of Oxnard, Camarillo, Thousand Oaks, and in unincorporated Ventura County through 2050. In addition to the Guidelines for Orderly Development and SOAR ordinances, Greenbelt Agreements reinforce protections for open space and agriculture lands. Under a Greenbelt Agreement, cities agree not to annex any property within a greenbelt while the Board of Supervisors agrees to restrict development to uses consistent with existing zoning.



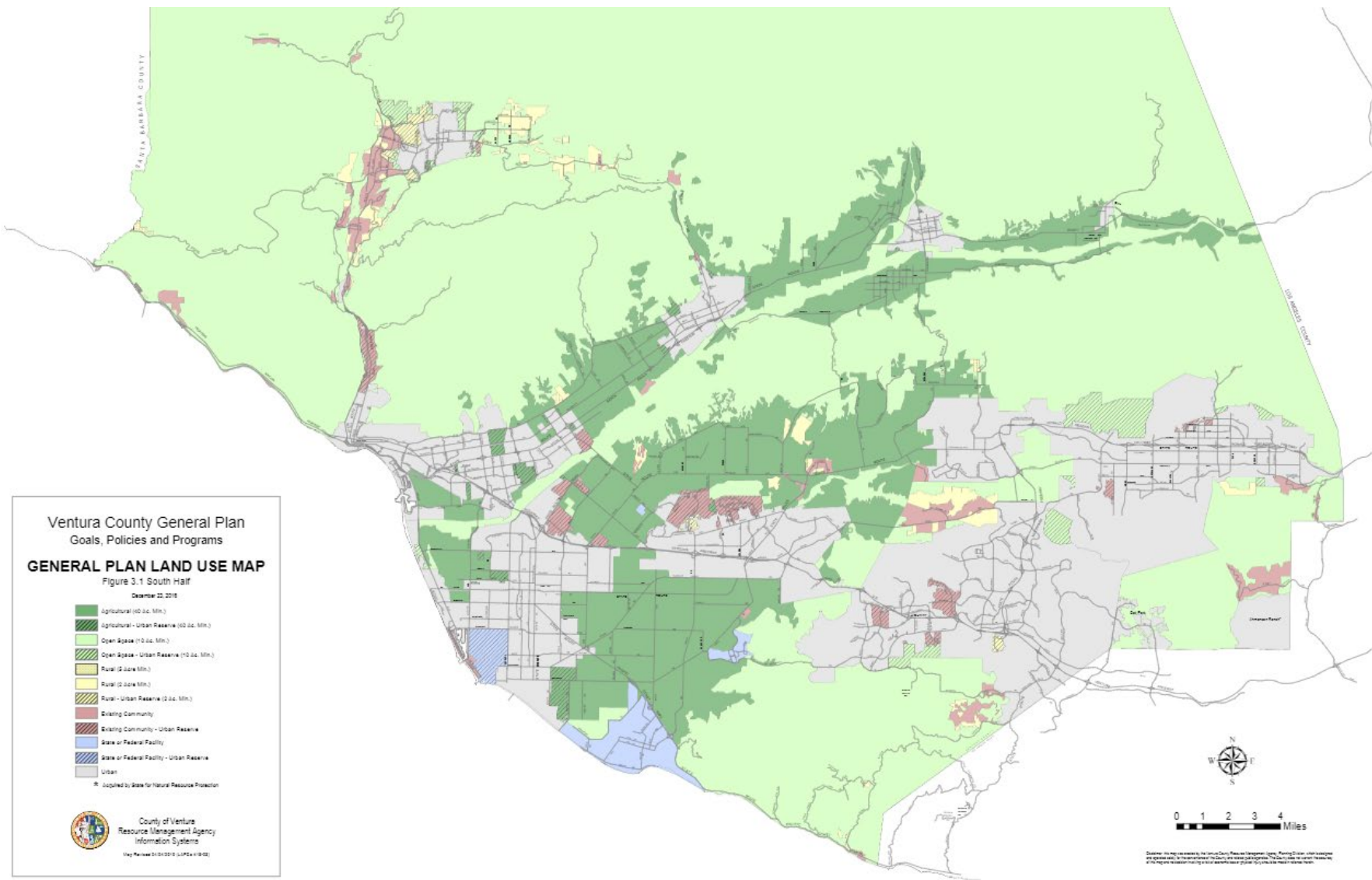
Figure 4.1 Existing Land Use



## 4.2 Future Land Use

As a representative example, future land use contained in the Ventura County General Plan for unincorporated Ventura County by year 2040 is presented in this section. As reflected below in Figure 4.2, future land uses are not planned to change significantly from the existing land uses shown in Figure 4.1. A large portion of the unincorporated county will continue to be dedicated to rural and agricultural land uses, as the Los Padres National Forest composes a significant portion of the county. Smaller changes to the county's land use patterns include increased urban development in each of the ten cities of Ventura County. This includes housing, business, industry, and public facilities, which are further discussed in the County's Area Plans summarized in Section 5.4.

Figure 4.2 Future Land Use



Source: Ventura County 2040 General Plan

### 4.3 Key Destinations/Activity Centers/Employment Centers

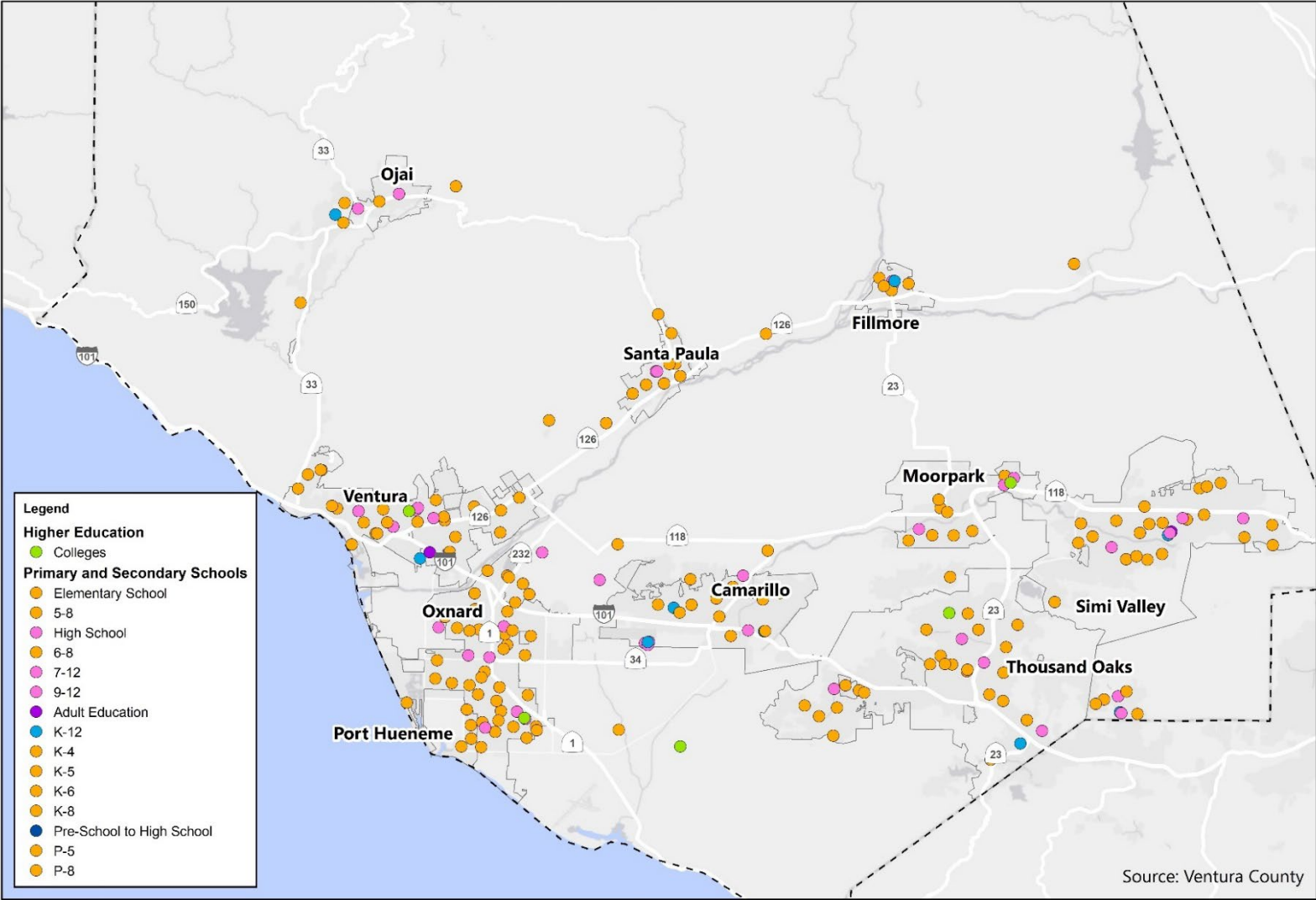
Key Destinations within Ventura County include recreational areas, employment centers, centers for art and culture, and colleges. These destinations are concentrated in several areas throughout the county, with a high density located in the City of Ventura. These include, but are not limited to the Ventura Harbor Village, the Ventura Pier, Downtown Ventura, and the Ventura County Government Center.

The Naval Base Ventura County (NVBC), including Point Mugu and Port Hueneme, serves as a major employment center in the county. Healthcare and related industries are some of the county's largest employers, with the Ventura County Medical Center, Community Memorial Health System, Adventist Health Simi Valley, St. John's Regional Medical Center, Los Robles Regional Medical Center, Amgen Inc., and Baxter Healthcare serving as major employment areas. The City of Oxnard also has key agricultural and industrial areas that serve as employment hubs. The majority of jobs in the unincorporated areas of the County are in the agricultural, forestry, fishing, and hunting industries.

Institutional uses also serve as key activity centers within Ventura County. Identifying the locations of schools in the area helps to identify the potential need for safe walking and biking infrastructure, as these locations will typically have higher proportions of children traveling to and from school. In addition to primary and secondary education facilities, several colleges and universities are located within Ventura County, including CSU Channel Islands, California Lutheran University, Ventura College, Oxnard College, and Moorpark College. Enrollment at these institutions continues to increase, with travel demand also increasing as a result. Given the high volume of travelers who visit these locations daily, these locations serve as excellent candidates for enhanced public transit and active transportation connections and therefore should be considered throughout the planning process. The distribution of schools is presented below in Figure 4.3.



Figure 4.3 Schools



**VCTC Comprehensive Transportation Plan**  
Schools



## 5 Relevant Planning Documents

The CTP is being prepared to be consistent with current and past planning documents. Preparation of the CTP is necessary to establish countywide transportation goals and targets, and to stay in compliance with federal, state, and regional legislation.

Each document summarized below ties to the preparation of the CTP and contains relevant information for the CTP to build upon. The documents include the previous CTP prepared in 2013, the Connectivity and Land Use Elements of the Ventura County 2040 General Plan, the 101 Communities Connected Multimodal Corridor Study, the Ventura County Freight Corridors Study, SCAG's Regional Transportation Plan/Sustainable Communities Strategy Connect SoCal 2020, and the County's Climate Action Plan. Additionally, relevant policies from each city's General Plan, as well as each of the nine Ventura County Area Plans are summarized in Section 6.

### 5.1 Transportation/Mobility

#### 5.1.1 2013 Ventura County Comprehensive Transportation Plan (CTP)

The 2013 CTP is a community-based policy document that provides a framework for Ventura County's long-range transportation decisions. The vision of the Plan is to create "a connected and integrated transportation system that provides convenient, safe and accessible options. This system is inclusive of all community members and needs, balancing all interests. It is intended to be built from a sustainable plan that reflect local priorities."

The 2013 CTP developed a list of solutions for the future, including:

- Keep roads in good condition, develop complete streets, and add lanes on the busiest city streets;
- Create a more customer-focused transit system through sub-regional consolidation;
- Obtain supplemental revenue for arterials through adequate levels of developer fees and reciprocal traffic mitigation fees;
- Relieve US Highway 101, State Route 23, and State Route 118 peak period capacity pressure by availability of State and federal highway funds;
- Connect existing bicycle networks between cities through unincorporated areas on a regional scale;
- Implement pedestrian amenities and walkable communities through programs and projects;
- Implement environmental and mitigation programs to mitigate localized environmental impacts and encourage transportation-supportive land use and development; and
- Sustain freight movement operations and connections while balancing their impact on local communities.
- Introduce a Countywide Tax Measure to help fund future local transportation projects

VCTC developed costs and revenues for the main transportation categories for the future, including:

- Local Roads

- In the next 30 years, there would be a \$2.4 billion need to maintain existing roads, streets and arterials in their existing condition in Ventura County. Within the same time period, \$1.1 billion in revenue is projected to be available, creating a \$1.3 billion shortfall.
- Public Transit
  - The effort for a more coordinated and consolidated transit system would be covered by the projected \$2.5 billion in projected revenue over the next 30 years, which will also be used to maintain existing service.
- Freeways/Highways
  - Over the next 30 years, there would be \$780 million in projected revenue, which is \$450 million short to cover Ventura County's top two priority projects, U.S. Highway 101 and SR 118 widening (\$1.230 billion).
- Bicycle/Pedestrian
  - Over the next 30 years, there would be a \$258.3 million need to construct proposed bicycle lanes throughout the County. Within the same time period, there would be \$230 million in revenue, creating a \$28.3 million shortfall. The \$258.3 million for bicycle lanes does not create a countywide network or include annual maintenance costs.

To summarize, for the 30-year revenue forecasts across State and federal revenue sources, VCTC would receive \$5.685 billion in revenue, of which \$806.8 million would be allocated in the 2018/19-2022/23 fiscal years. VCTC also projected that 53% of the budget would be expended on public transit, followed by local roads (23%), freeways/ highways (17%), and a smaller portion for bicycle/pedestrian (5%), and planning/management (2%). To bridge the gap between projected revenue and monies required to fulfill infrastructure needs for local roads, highways, transit, and active transportation, VCTC considered the following strategies:

- A \$0.10 per gallon gas tax
- Tolling/express lanes
- Vehicle registration fees
- A countywide sales tax measure

### 5.1.2 County of Ventura 2040 General Plan Circulation, Transportation, and Mobility Element

The County of Ventura adopted its 2040 General Plan in September 2020 and certified the project's Environmental Impact Report (EIR) and related documents. One of the elements contained in the 2040 General Plan is the Circulation, Transportation, and Mobility Element. This element provides guidance for the next 20 years on the roadway network, the regional multimodal system, vehicle trip length and frequency, air transportation, emerging technologies and sustainable practices, funding, and implementation programs. To effectively advance a successful transportation system, the 2040 General Plan established seven goals in its Circulation, Transportation, and Mobility Element, which are described in more detail in Section 6.

The County maintains 542 centerline miles of roadway in unincorporated area and 58.2 miles of bike lanes. Class II and Class III bike lanes account for 56.64 miles of bike lanes, while the remaining 1.56 are Class I facilities. These facilities are discussed in more detail in Section 7.3.

### 5.1.3 US 101 Communities Connected

Initiated by SCAG, VCTC, and Caltrans, US 101 Communities Connected establishes the need for a shared vision and comprehensive plan for the US 101 corridor in Ventura County to connect the jurisdictions of Ventura, Oxnard, Camarillo, and Thousand Oaks. The US 101 corridor plays a central role in the vitality of Ventura County, as it connects diverse communities, businesses, with coastal portions of California to the north and south. US 101 Communities Connected seeks to foster a resilient, sustainable, and efficient transportation future to meeting the diverse needs of the adjacent communities. It also provides a roadmap for collaboration across jurisdictions and develops funding priorities for infrastructure investment to improve connectivity, reduce vehicle miles traveled, and better serve Ventura County.

US 101 Communities Connected introduces goals and guiding principles to improve the overall corridor mobility while balancing safety and environmental considerations:

- **Safety and Health:** Improve safety and health by reducing the frequency and severity of safety incidents and hazards for all modes, improve air quality, and provide safe routes for children to get to school.
- **Social Equity:** Be inclusive of all community members and their needs by ensuring a fair share of benefits of the transportation system for disadvantaged communities, provide viable transportation options for people who do not have cars, and improve workers' access to jobs.
- **Multimodal Mobility:** Improve mobility and accessibility for a connected and integrated transportation system by reducing Vehicle Miles Traveled, congestion and delay, increasing throughput and reliability for all users, and increasing transit ridership and active transportation participation.
- **Robust Economy:** Improve freight movement while mitigating its impacts, manage curb demand, and improve access to jobs.
- **Environmental Stewardship:** Preserve and increase access to habitat and open space, reduce GHG emissions and improve air quality.

US 101 Communities Connected highlights projects that have a high priority, as determined through the study's Communities Connected Index (CCI), shown in four categories:

- **Active Transportation Projects:** Bike lanes northeast of Oxnard Transportation Center; Ventura River Trail; Ventura Eastside Sidewalk ADA Poinsettia; Santa Paula Branch Recreational Trail
- **Arterial Projects:** Oxnard Rice Avenue Grade Separation; Ventura Harbor Boulevard Widening Improvement; Harbor Boulevard at Gonzales Road Enhancement; Stanley Avenue/ SR 33 New Freeway Bridge; Pleasant Valley Road Widening
- **Highway Projects:** US 101 HOV Project; Reconfigure northbound California Street off-ramp; US 101/ Lynn Road intersection improvement; US 101 auxiliary lane from Santa Rosa Road to Central Avenue
- **Transit Projects:** Multi-modal Transportation Center in Downtown Ventura; SCORE Metrolink Rail Expansion Program; VCTC Countywide Bus Expansion (including Paratransit); Oxnard Route 23 Bus Stop Improvement; VCTC Countywide Transit Service Expansion

### 5.1.4 Ventura County Freight Corridors Study

The Ventura County Freight Corridors Study was recently adopted by VCTC. This study identifies and prioritizes the most significant freight in Ventura County corridors for safer, more

efficient, and sustainable freight connections. The study also establishes an understanding for highway freight corridors in Ventura County to inform future highway planning and investment decisions. It will also assist the Port of Hueneme and Ventura County to move toward achieving State and regional emission reduction goals and increase social equity by planning for a transportation system that is efficient but not disproportionately centralized around disadvantage communities.

The long-range transportation infrastructure decisions resulting in the study will ensure future investments yield the greatest sustainability benefit to the County's agricultural sector, economic competitiveness and growth, as well as human and environmental benefits.

The project objectives are to:

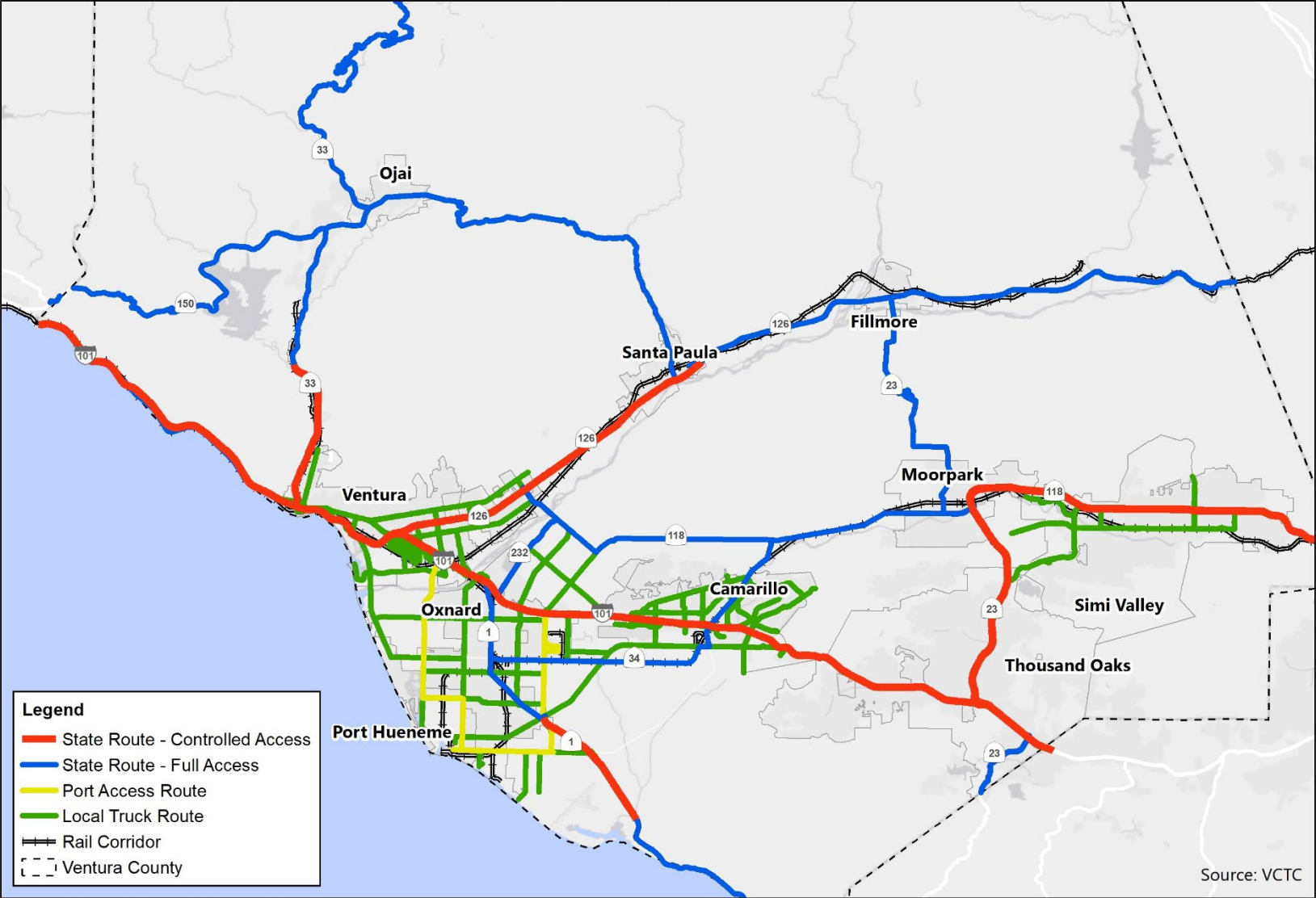
- Establish a thorough understanding of Ventura County's freight corridors (Figure 5.1) and use the knowledge to inform future highway planning and investment decisions;
- Support cleaner freight, reduce greenhouse gas emissions, and improve air quality;
- Promote Ventura County's industry and agricultural economy;
- Plan a transportation system that does not disproportionately impact disadvantaged communities; and,
- Develop innovative solutions to benefit the economy and environmental health.

The study examined numerous elements, including:

- The importance of goods movement
- Goods movement in residential communities
- Safety in rail corridors, especially at highway/rail crossings
- Proximity of schools and parks to truck routes
- Availability of public truck parking
- A freeway connection from westbound SR 126 and southbound US 101, bypassing residential Victoria Avenue
- Truck origin-destination analysis
- Zero-emission goods movement

Predominate truck flows in the County are east/west along State Route 126, State Route 118, and U.S. Highway 101. Trucks access areas with major truck generating land uses in Oxnard, and to a lesser degree in Camarillo, Ventura, and agricultural areas adjacent to Camarillo, Oxnard, and Ventura. Figure 5.2 shows daily truck volume in Ventura County.

Figure 5.1 Ventura County Freight Corridors



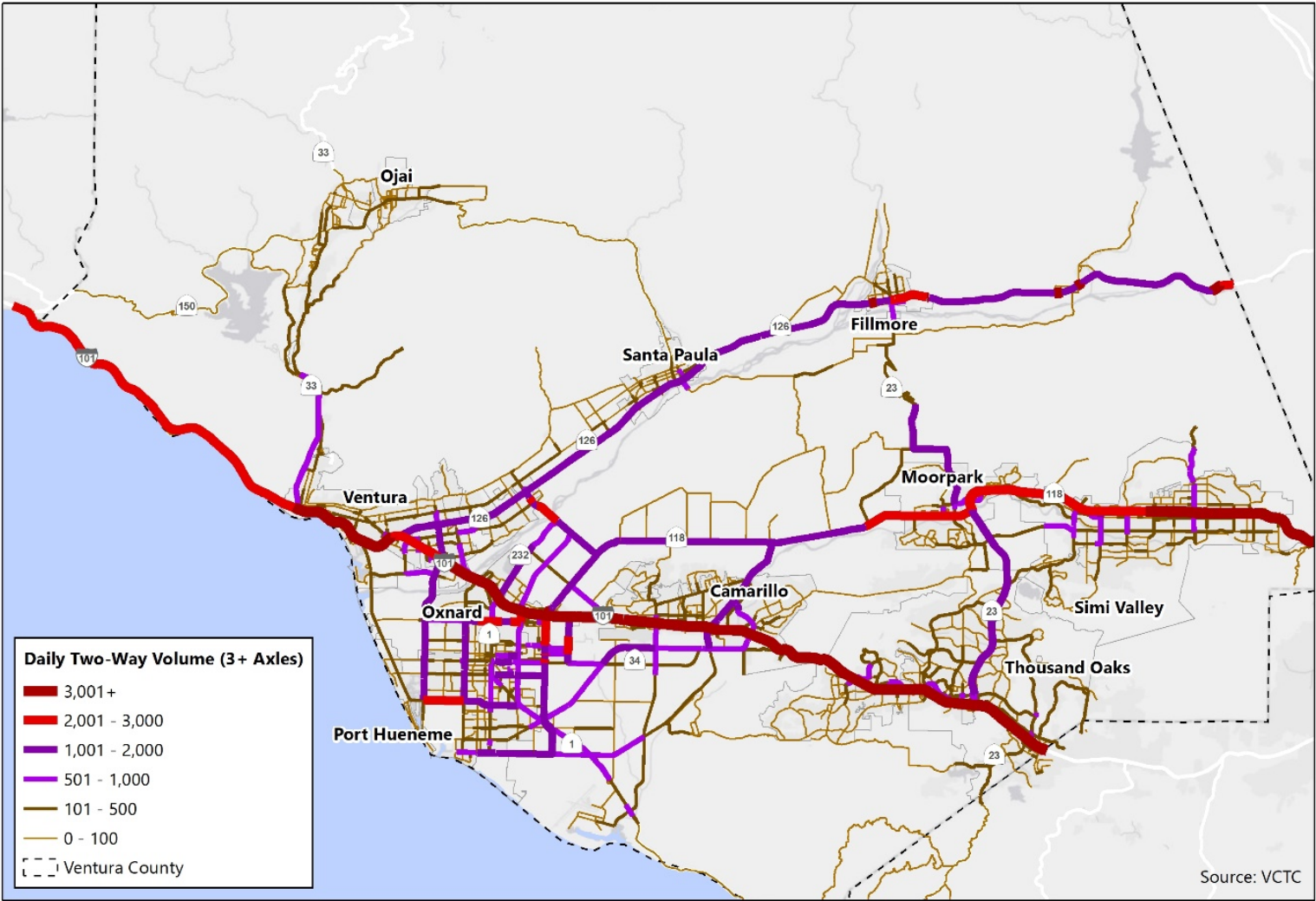
# Freight Corridors

VCTC Comprehensive Transportation Plan





Figure 5.2: Daily Truck Volume (Vehicles with 3 or more Axles)



**VCTC Comprehensive Transportation Plan**  
Daily Truck Volume (Vehicles with 3 or More Axles)



### 5.1.5 SCAG 2020-2045 RTP/SCS Connect SoCal (2020)

SCAG's RTP/SCS, also known as Connect SoCal, was developed to align and better connect transportation investments across the six-county region, including Ventura County. Connect SoCal builds upon and expands land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern to close the gap and reach greenhouse gas reduction goals.

Connect SoCal lays out a path to greater access, mobility, and sustainability. The Plan calls for complete streets, center focused placemaking, active transportation improvements, transportation safety, and connected transportation networks; all of these action categories can utilize improved land use, mobility, transportation, and circulation in part to achieve the desired outcome.

## 5.2 Climate Action Plans

The 2040 County of Ventura General Plan serves as the County's Climate Action Plan (CAP), including both a greenhouse gas (GHG) Strategy and Climate Adaptation Strategy that are integrated throughout the 2040 General Plan. The GHG Strategy identifies policies and implementation programs that establish GHG emissions reduction targets and GHG reduction measures, consistent with state guidance and applicable GHG protocols. The Climate Adaptation Strategy includes analysis of climate change vulnerability and adaptation measures that address unincorporated county vulnerabilities to climate change and increase the County's long-term resilience, per the requirements of Government Code Section 65302(g). The specific goals and policies under both strategies that would otherwise form a "stand-alone" CAP are integrated into the Ventura County 2040 General Plan.

As part of the CAP, the County will facilitate the coordination of its Climate Action Plan implementation and maintenance with the cities in the county, the Air Pollution Control District, and other organizations to promote countywide collaboration on addressing climate change.

The GHG Strategy consists of five elements: baseline GHG emission inventory and forecasts, GHG emission reduction goals and targets, GHG emissions reduction measures, GHG Strategy Implementation and Monitoring, and Environmental Review of the GHG Strategy and General Plan.

### 5.2.1 Baseline GHG Emissions Inventory

The GHG Strategy shows GHG inventory by sector in unincorporated areas, which is just below 2 million metric tons in 2015 of CO<sub>2</sub> equivalent GHG emissions. Among all sectors, transportation accounted for the highest percentage at 36%. Building energy, solid waste, and stationary sources followed the transportation sector at about 17% each. Transportation included VMT calculations of on-road light and heavy-duty vehicles and buses operating on local roadways and passenger rail, including Amtrak and Metrolink lines.

Though the Climate Action Plan measured GHG emissions by unincorporated areas in Ventura County, a countywide assessment may be a stronger indication of GHG emissions. The *Climate on the Move: Ventura County Regional Energy for All* (2015) by the Ventura County Regional Energy Alliance determined the County's GHG emissions in 2012. In this year, Ventura County as a whole had 7.2 million metric tons of CO<sub>2</sub> equivalent GHG emissions, approximately 5.2 million metric tons could be attributed to incorporated regions. Fuel burned in off-road vehicles and on city/county roads contributed 29% or 2.1 million metric tons of GHG emissions, while fuel burned on state highways contributed 25% or 1.8 million metric tons, for a combined 3.9 million tons attributed to transportation in 2012.



### 5.2.2 GHG Emission Forecasts

GHG emission forecasts provide an estimate of future emission levels based on both a continuation of current activities called business-as-usual, and an account for current and future legislative actions from the state and federal governments expected to reduce future emissions. The forecasts provide insight on the scale of reductions needed to achieve GHG emission reduction targets in the future.

In all sectors, with legislative adjustments to the business-as-usual forecast, unincorporated Ventura County expects a 6% decrease in GHG emissions from business-as-usual in 2020, a 17% decrease in 2030, a 24% decrease in 2040, and a 28% decrease in 2050.

A few cities in Ventura County have developed their own Energy Action Plans or Climate Action Plans that contain GHG emissions forecasts. The City of Thousand Oaks recently adopted working GHG reduction targets of 40% below 2010 levels by 2050, to align with the state of California. The City is currently developing a Climate & Environmental Action Plan. Emissions in the City of Ventura are forecasted to decrease by 44% below 2010 levels by 2030 according to the community planning scenario in the City's draft Energy Action Plan. The cities of Moorpark, Oxnard, and Camarillo are in the process of developing or updating plans, which will include updated GHG emissions forecasts. GHG Reduction Goals and Targets.

The State of California aims to reduce annual statewide GHG emission to 1990 levels by 2020, 40% below 1990 levels by 2030, and 80% 1990 levels by 2050. The GHG reduction targets in the General Plan are based on local levels of GHG emissions that would be proportional to the statewide reduction targets. The targets are 2% below 2015 levels by 2020, 41% below 2015 levels by 2030, 61% below 2015 levels by 2040, and 80% below 2015 levels by 2050.

### 5.2.3 GHG Reduction Measures

The following chart is a full list of all Circulation, Transportation, and Mobility Reduction policies and programs to reduce GHG Emissions or promote climate adaptation:

**Table 5.1 GHG Mitigation and Climate Adaptation Measures**

POLICY NUMBER	POLICY	GHG REDUCTION	CLIMATE ADAPTATION
CTM-2.1	Complete Streets	Yes	
CTM-2.2	Functional Classification	Yes	Yes
CTM-2.3	County Road Access		Yes
CTM-2.4	Transportation System Safety		Yes
CTM-2.5	Emergency Services		Yes
CTM-2.6	Regional Transportation Planning	Yes	Yes
CTM-2.7	Congestion Management Program	Yes	
CTM-2.8	Congestion Management Program and County Regional Network Consistency	Yes	
CTM-2.9	State Route 118 Improvement in Saticoy Area		Yes
CTM-2.10	Safe Routes to School	Yes	
CTM-2.11	Efficient Land Use Patterns	Yes	Yes
CTM-2.12	Countywide Bicycle Lane and Trail System	Yes	
CTM-2.13	Transportation System Connectivity	Yes	
CTM-2.14	Bicycle Facility Design	Yes	
CTM-2.15	Bicycle/Pedestrian Design	Yes	
CTM-2.16	Pedestrian Planning	Yes	
CTM-2.17	Support Regional Bicycle Infrastructure	Yes	
CTM-2.18	Complete Streets Standards in Existing Communities	Yes	
CTM-2.19	Safety Metrics	Yes	

POLICY NUMBER	POLICY	GHG REDUCTION	CLIMATE ADAPTATION
CTM-2.20	Safe Pedestrian Crossings	Yes	
CTM-2.21	Pedestrian/Bicycle Conflicts along Overweight Vehicle Corridor and Surface Transportation Assistance Act (STAA) Truck Routes	Yes	
CTM-2.22	Funding and Maintenance for Sidewalks	Yes	
CTM-2.23	Intercommunity and Countywide Public Transportation System	Yes	
CTM-2.24	Non-Drivers Living in Rural Areas	Yes	Yes
CTM-2.25	Amtrak Service Improvements	Yes	
CTM-2.26	Abandoned Railroad Rights-of-Way	Yes	
CTM-2.27	Discretionary Development and Conditions of Approval to Minimize Traffic Impacts	Yes	
CTM-3.1	Bicycle Network Strategy and Prioritization	Yes	
CTM-3.2	Inclusive Bicycle Network	Yes	
CTM-3.3	Regional Destination Focus for Bicycle Network	Yes	
CTM-3.4	Interjurisdictional Bicycle Network Connectivity	Yes	
CTM-3.5	Bicycle Routes in Rural Areas	Yes	
CTM-3.6	Coordination with Bicycle Wayfinding Plan	Yes	
CTM-3.7	Bicycle Trail Along Santa Paula Branch Line	Yes	
CTM-3.8	Bicycle Network Routes and Wayfinding	Yes	
CTM-3.9	Funding for Bicycle Network and Wayfinding Planning and Improvements	Yes	
CTM-3.10	Bicycle Storage Facilities	Yes	
CTM-4.1	Reduce Vehicle Miles Traveled (VMT)	Yes	
CTM-4.2	Alternative Transportation	Yes	
CTM-4.3	Vehicle Occupancy	Yes	
CTM-4.4	Park-and-Ride Facilities	Yes	
CTM-6.1	Routine Use of Alternative Transportation Options	Yes	
CTM-6.3	Permeable Pavement	Yes	Yes
CTM-6.4	Facilities for Emerging Technologies	Yes	
CTM-6.5	Electric Vehicle Charging Stations	Yes	
CTM-6.6	Neighborhood Electric Vehicles	Yes	
CTM-6.7	Shared Mobility Operations	Yes	
CTM-6.8	Micro-Mobility Operations	Yes	
CTM-6.9	Mobility-as-a-Service Enterprises – Vehicle Operations	Yes	
CTM-6.10	Mobility-as-a-Service Enterprises – Support Public Transportation	Yes	

#### 5.2.4 GHG Strategy Implementation and Monitoring

GHG implementation programs provide pathways to attain the specific qualitative and quantitative GHG reductions for policies contained in the County's General Plan. The County will implement these specific programs to ensure that specific components of the GHG strategy are working together to achieve the General Plan's targets, goals, and other beneficial outcomes related to climate change and sustainability.

The following are all circulation, transportation, and mobility related implementation programs:

**Table 5.2 GHG Implementation Program**

TASK 1.2 EXISTING CONDITIONS

Prepared for Ventura County Transportation Commission

PROGRAM NUMBER	PROGRAM	GHG REDUCTION	CLIMATE ADAPTATION
CTM-A	Traffic Impact Mitigation Fee Program	Yes	
CTM-B	Initial Study Assessment Guidelines	Yes	
CTM-C	Vehicle Miles Traveled (VMT) Reduction Program	Yes	
CTM-D	Regional Road Network Coordination	Yes	Yes
CTM-H	Complete Streets Guidelines	Yes	
CTM-I	County Road Standards Update	Yes	
CTM-J	Vision Zero	Yes	
CTM-K	Safe Routes to School	Yes	
CTM-L	Master Bicycle Network Plan	Yes	
CTM-M	Bicycle Wayfinding Plan Participation	Yes	
CTM-N	Storage Facilities for Shared Mobility Enterprises	Yes	
CTM-O	Mobility-as-a-Service Enterprises – Parking	Yes	
CTM-P	Interim VMT CEQA Assessment Criteria	Yes	

## 6 Policy Review

To provide context to the demographic and mobility conditions, the following section presents policy information from General and Area Plans as they relate to land use and transportation in Ventura County.

### 6.1 Ventura County General Plan

The 2040 Ventura County General Plan includes the Land Use and Community Character Element. This element provides guidance for the next 20 years on growth management, land use designations and standards, areas plans, character and design, environmental justice, and implementation programs, among others. To effectively advance successful land use and community character, the 2040 General Plan established a total of 22 goals, of which a select number related to the CTP Update are shown below:

- LU-1: To ensure that the County can accommodate anticipated future growth and development while promoting orderly growth and development that enhances quality of life, maintains a safe and healthful environment, preserves valuable natural resources, and plans for adequate public facilities and services.
- LU-2: To maintain an urban designation that: recognizes areas within the county planned for urban development which are currently incorporated, or which are candidates for future incorporation; direct urban development to existing cities and unincorporated urban centers within their own Area of Interest; and discourage outward expansion of urban development when suitable developable areas exist within cities and unincorporated urban centers.
- LU-4: To ensure that land uses are appropriate and compatible with each other and guide development in a pattern that will minimize land use conflicts between adjacent land uses.
- LU-6: To provide appropriate land use designations that provide for the long-term preservation of the county's rural lifestyle, productive farmland and supporting services, and the vast open space resources that define the county.
- LU-16: To enhance the character and design of unincorporated communities in the county in order to cultivate self-contained communities designed to meet the daily needs of Ventura County residents.
- LU-17: Within designated disadvantaged communities, to plan for and provide public facilities, services, and infrastructure that provide fair treatment and quality of life to all people regardless of race, color, national origin, or income.
- LU-18: To promote meaningful dialogue and collaboration between members of designated disadvantaged communities and decision-makers to advance social and economic equity.

The Ventura County 2040 General Plan also provides long-range guidance on the development and growth of the county's unincorporated areas. The Plan's Circulation, Transportation, and Mobility Element includes policies that encourage the development of a "Complete Streets" strategy for public transportation services, and pedestrian and bicycle facility improvements in areas of the county where they will provide residents a range of options for travel to work, shopping, and leisure destinations. The policies in the element are coordinated to encourage a multi-modal transportation system throughout the county, but also recognizes the rural nature of the area. Ventura County land use planning aspects are unique, in that future development and growth is directed towards urbanization within incorporated cities and their respective urban growth boundaries. The Element's policies related to the CTP preparation include the following:

- CTM-1: To ensure the design, construction, and maintenance of a safe and efficient roadway system for the movement of persons and goods.

- CTM-2: To facilitate the safe, efficient, and cost-effective movement of all users, including bicyclists, pedestrians, public transportation riders, children, older people, and disabled people, as well as motorists through the provision of an integrated multi-modal system.
- CTM-3: To develop an accessible and interconnected bicycle network that addresses resident and visitor needs for commuting, daily activities, and recreation.
- CTM-4: To ensure that land use and transportation planning efforts in the county are cohesive, mutually supportive, and reduce VMT per capita within unincorporated areas of the County.
- CTM-5: To ensure that air transportation systems provide safe, efficient, and reliable movements of people and goods.
- CTM-6: To use emerging technologies and environmentally-sustainable practices to increase transportation system efficiency and resiliency.
- CTM-7: To maintain sufficient funding to provide for existing and future transportation facility and service needs, including the operation and maintenance of the transportation system.
- CTM-2.11 Efficient Land Use Patterns: The County shall establish land use patterns that promote shorter travel distances between residences, employment centers, and retail and service-oriented uses to support the use of public transportation, walking, bicycling, and other forms of transportation that reduce reliance on single-passenger automobile trips.
- CTM-2.26: Abandoned Railroad Rights-of-Way: When railroad rights-of-way are abandoned, the County shall evaluate the feasibility of acquiring the land for public use as public transportation, bicycle, pedestrian, or equestrian paths.
- CTM 2.27: The County shall require that discretionary development be subject to permit conditions of approval, where feasible, to minimize traffic impacts by incorporating pedestrian and bicycle pathways, bicycle racks and lockers, ridesharing programs, transit improvements (bus turnouts, shelters, benches), and/or transit subsidies for employees or residents of the proposed development.

## 6.2 Local City Transportation Policies

Each city in the county has developed their own General Plan with transportation policies that are relevant to their local jurisdiction in their Circulation Elements. Many cities have updates to their General Plan currently underway, such as the Cities of Moorpark, Ojai, Thousand Oaks, and Ventura. Policies related to transportation in each jurisdiction are summarized by their goals below.

### City of Camarillo (2020)

- Promote a well-balanced, connected, and economically feasible and sustainable, multimodal transportation system that provides for safe and efficient movement on well-maintained roads, while meeting the needs of Camarillo residents, businesses, employees, visitors, special needs populations, and the elderly.
- Provide a transportation system that is coordinated with regional agencies and encompasses a variety of transportation modes.
- Provide adequate parking that is attractive, convenient, efficient, and appropriate in capacity without overshadowing the uses which the parking supports.
- Provide a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use.
- Maintain a safe and efficient public transportation network that provides mobility to all City residents and employees as an alternative to automobile travel.
- Maintain and ensure land use compatibility with the Camarillo Airport.
- Provide for the safe and efficient movement of goods.
- Promote railroad safety.
- Provide safe, reliable, and efficient utility service, while minimizing utility impacts and hazards.

### City of Fillmore (2003)

- Provide for the efficient and safe movement of people, goods, and services within and through the City.
- Develop and maintain an interconnected network of roadways, bikeways, pedestrian paths, and rail lines to accommodate the travel, business, and recreation needs of all residents.
- Pursue regional truck routes that provide alternate access around Fillmore.

### City of Moorpark (1992, General Plan update currently underway)

- General: Provide a transportation system that supports the land use plan in the General Plan and provides for the safe and efficient movement of people, goods, and services within, into, out of, and through the City of Moorpark.
- Level of Service: Provide a circulation system which supports existing, approved, and planned land uses throughout the City while maintaining a desired level of service on all streets and at all intersections.
- Roadway Standards: Adopt and maintain a set of roadway standards and transportation system design criteria which supports and maintains the desired character of the City of Moorpark.

- **Transit System:** Provide a public transportation system which serves the needs of persons living and/or working in the City of Moorpark.
- **Bicycle and Pedestrian Facilities:** Provide a citywide system of safe, efficient and attractive bicycle and pedestrian routes for commuter, school, and recreational use.
- **Equestrian Facilities:** Provide equestrian trails for recreational use.
- **Transportation Demand Management:** Develop and encourage a transportation demand management system to assist in mitigating traffic impacts and in maintaining a desired level of service on the circulation system.

#### City of Ojai (1997, General Plan update currently underway)

- Strengthen the link between the community's system and its planned land uses such that traffic flows can be improved while maintaining Ojai's unique community character and livability.
- Ensure that the area's roadway system is reflective of the City's commitment to environmental quality and preservation of its small-town lifestyles.
- Maintain a unified and functional street system.
- Help reduce regional traffic growth.
- Decrease dependence on single occupant automobile travel by provided a high level of pedestrian, bicycle, and public transit opportunities.
- Preserve a sense of comfort and well-being throughout the community by reducing the intrusiveness of commercial, tourist, and regional traffic on residential neighborhoods.
- Make efficient use of existing transportation facilities.

#### City of Oxnard (2016)

- **Circulation and transportation system:** A transportation system that supports existing, approved, and planned land uses throughout the City while maintaining a level of service "C" at designated intersections unless excepted.
- **Level of Service:** Level of service "C" at designated intersections, unless otherwise reduced by City Council direction.
- **Goods Movement:** A functional and balanced goods movement system that provides timely and efficient transport of goods generated by the Port of Hueneme and agricultural, industrial, and commercial areas.
- **Passenger Railroad:** A passenger railroad system that serves the needs of the residents, visitors, and workers.
- **Transit:** Public transit system that serves the needs of the residents and workers of Oxnard.
- **Transportation Demand Management:** Effective Transportation Demand Management (TDM) programs that help achieve air quality goals and minimize congestion.
- **Bicycles and Pedestrian:** Safe bicycle and pedestrian circulation throughout the City.

#### City of Port Hueneme (2020)

- Provide a comprehensive transportation system for the movement of persons and goods with maximum safety, efficiency, and convenience, and with a minimum of delay and cost.



- Provide a balanced roadway system which will provide adequate accessibility to existing and future land uses with minimum impact on residential neighborhoods.
- Encourage the use of alternative transportation modes.
- Improvement of accessibility to the City from regional freeway and highway system.

### City of Santa Paula (2020)

- CM 1: A safe, efficient and well-funded circulation network correlated with existing and future land uses to support the mobility needs of pedestrians, bicyclists, public transportation, motorists, children, seniors, persons with disabilities, movers of commercial goods, and emergency vehicles.
- CM 2: Reduced per capita vehicle miles traveled, air pollutants and greenhouse gas emissions through effective land use planning and the provision of alternatives to single-occupancy motor vehicles including public transit and other alternative modes that are safe, convenient, efficient, and accessible to everyone.

### City of Simi Valley (2012)

- Safe and Efficient Transportation System: The safe and efficient movement of people, goods, and services is provided by encouraging the design, construction, and maintenance of an integrated mobility and circulation system, including roads, transit, bike paths, sidewalks, and commuter rail.
- Regional Facilities: A network of regional facilities and connections to those facilities is provided that ensure the safe and efficient movement of people and goods from within the City to areas outside its boundaries, and minimizes the use of City streets by regional through traffic.
- Roadway Design: A safe and efficient roadway circulation system is provided within the City that minimizes the impact on residential areas, maintains the suburban character of the community, and accommodates conservative growth within the City of Simi Valley.
- Level of Service: Efficient movement of vehicles, people, and other modes of travel along City streets is provided by maintaining acceptable levels of service at intersections.
- Traffic Controls: A high-quality and modern traffic control system is established for the efficient movement of people, goods, and services along City streets.
- Monitoring and Maintenance: Optimal roadway system operation is maintained through monitoring of current traffic conditions, maintaining existing roadways, and making improvements to the circulation and mobility network, when necessary.
- Advanced Technology Systems: An efficient transportation system is established that utilizes Intelligent Transportation Systems (ITS) to improve operations of existing and future facilities through advanced technologies, such as adaptive signal controls, real-time parking availability, and real-time transit information.
- System Improvements: Safe and efficient movement of people and goods is provided within the City through the timely improvement of streets and intersections and the restriction of access along streets according to the City's street standards.
- Neighborhood Traffic Control: Community character and quality of life are maintained in City neighborhoods through the implementation of neighborhood traffic management techniques.
- Parking: An adequate supply of convenient parking is found throughout the City through a parking system that balances the goals of economic development, advanced

Intelligent Transportation Systems (ITS) technologies, reduced travel through Transportation Demand Management (TDM), livable neighborhoods, sustainability, environmental sensitivity, and public safety within the City.

- Transportation Demand: Single-occupant motor vehicle travel in the City and traffic impacts are reduced through Transportation Demand Management (TDM) measures that ensure efficiency of the existing transportation network and promote the movement of people instead of personal automobiles.
- Bicycling as a Travel Mode Option: Develop bicycle facilities and programs in Simi Valley by providing an integrated, complete, and safe bicycle system and encourage bicycling as a viable option to automobile travel.
- Public Transit: A safe, comprehensive, and integrated public transportation system is provided that serves as an essential component of a multi-modal mobility system, provides local and regional mobility for residents, including special transportation needs of the elderly, school children, low income, physically handicapped, and other low mobility groups, and encourages the use of public transportation as an alternative to automobile travel.
- Pedestrian Travel: A safe and comfortable pedestrian environment is provided that results in walking as a desirable travel choice, particularly for short trips, within the City.
- Truck and Rail Routes: The safe and efficient movement of goods is provided to support commerce within the City.

#### City of Thousand Oaks (1997, General Plan update currently underway)

- A "T" shaped highway system--the Highway 101 and Route 23 Freeways--shall continue to provide a primary link with other regional communities and serve as major connectors within the local street and highway system.
- Improvements to local freeways minimizing diversion of through traffic to City streets shall be encouraged.
- A mass transit system to provide City and area-wide circulation and meet community needs should be maintained and enhanced.
- A variety of transportation modes should be encouraged.
- A City-wide system of pedestrian and bicycle facilities that provide safe, continuous accessibility to all residential, commercial and industrial areas, to the trail system and to the scenic bike route system shall be provided and maintained.
- Local traffic should be moved through the City on arterial streets to protect collector and neighborhood streets from traffic impacts.
- Access to industrial areas shall be via major arterials to minimize impacts to residential areas.
- Street improvements should focus on enhancing access to Thousand Oaks Boulevard, Moorpark Road and other major arterials.
- The City shall balance vehicular circulation requirements with aesthetic, pedestrian, bicycle and equestrian needs which affect the quality of life.
- The City shall maintain a Level of Service C on all roads and at all intersections. Lower levels of service may be tolerated to preserve or enhance landscaping and aesthetic integrity.

### City of Ventura (2005, General Plan update currently underway)

- Policy 4A: Ensure that the transportation system is safe and easily accessible to all travelers.
- Policy 4B: Help reduce dependence on the automobile.
- Policy 4C: Increase transit efficiency and options.
- Policy 4D: Protect views along scenic routes.

## 6.3 Local City Land Use Policies

Policies relating to land use provide guidance for development that will impact mobility needs. Land use patterns influence connectivity, mode choice, travel distance and time, and the impacts of transportation on surrounding communities. General Plan policies related to land use planning and its coordination with transportation planning for each of the incorporated cities are summarized below.

### City of Camarillo (2020)

- Residential land uses: Continually improve the areas as places for living by ensuring that those portions of the City, which are best suited for residential uses, will be developed and preserved as healthful, safe, pleasant, and attractive neighborhoods, where all citizens are served by a full range of appropriate community facilities.
- Commercial land uses: The general placement and massing of commercial structures should consider the area and scale of the City and promote quality design in keeping with the community environment. The commercial areas of the City include: The business district along Ventura Boulevard; community shopping centers along Carmen Drive, Las Posas Road, Mission Oaks Boulevard, and Arneill Road; several neighborhood convenience centers; the highway-oriented uses along the freeway; and all other commercial and business areas of the City of Camarillo.
- Industrial land uses: Industrial proposals should be analyzed and based primarily on existing and projected demand for industrial land and environmental considerations.
- Public land uses: Locate facilities where they provide maximum service with the greatest efficiency; utilize public funds with care to assure the maximum service for the tax dollar; welcome cooperation from the private sector in all community enterprises; whenever possible and feasible, attempt to secure state and federal assistance in the development of public uses.

### City of Fillmore (2005)

- Encourage urban development that incorporates elements of traditional town design, emphasizing alternative transportation modes, including walking, bicycling, and transit use.
- Ensure that the City's commercial areas are convenient for pedestrian and vehicular access.

### City of Moorpark (1992, General Plan update currently underway)

- Policy 5.1: Multiple-family dwellings shall be developed in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.
- Policy 7.2: Commercial uses should be located along major roadways in order to consolidate centers and provide pedestrian links to adjacent residential areas.

- Policy 7.3: External cross-connections between commercial uses shall be provided so as to reduce the number of curb cuts and number of vehicle trips on adjacent roadways.
- Policy 7.4: The City shall encourage adjacent commercial developments to coordinate design with regard to access, parking, and architectural features.
- Policy 8.3: Automobile and truck access to commercial properties shall be located so as to minimize impacts to adjacent uses.
- Policy 9.4: A comprehensive plan for the downtown commercial core, shall promote new commercial infill areas, park or recreational opportunities, public parking, and a potential multimodal transportation center.
- Policy 11.3: Agricultural uses in buffer areas between Moorpark and adjacent communities shall be encouraged, and the City shall support the use of Greenbelt Agreements to preserve agricultural land uses.
- Policy 15.4: Development which will not result in a negative impact on air quality shall be encouraged in order to maintain and enhance air quality for the health and well-being of City residents.

#### City of Ojai (1997, General Plan update currently underway)

- LU-2: Preserve a traditional grid street system with limited collector streets and arterial highways, wherein residences front on most streets and there is a noticeable lack of suburban subdivisions bounded by block walls; a traditional small town downtown which is pedestrian friendly, of higher intensity than the balance of the community; and an emphasis on ease of pedestrian and bicycle access and transportation.
- LU-3: Integrate complementary land uses in a manner which minimizes vehicle miles traveled within the community.
- LU-11: Ensure that new development will not exacerbate congestion problems along State Highway 33 between Ojai and Ventura or along local roadways.
- LU-15: Improve traffic flow and eliminate traffic congestion through a combination of limiting land use intensity and expansion of roadway capacity compatible with environmental values

#### City of Oxnard (2016)

- CD-1.4 Transportation Choices: Promote the application of land use and community designs that provide residents with the opportunity for a variety of transportation choices (pedestrian, bicycle, transit, automobile).
- CD-3.4: Neighborhood Quality of Life Program: Develop an ongoing program to assess parking, lighting, traffic safety, use and quality of alleys, public utilities, public and private lighting, housing quality, aesthetics, and related quality of life topics to identify and prioritize opportunities for neighborhood quality of life enhancement activities and sources of funding.
- CD-5.5 "Green" Major Transportation Routes Guide industrial development to locate near transportation facilities capable of handling goods movements in an efficient manner without decreasing the level of service on the transportation network or dividing existing neighborhoods.
- CD-7.5 Pedestrian and Transit Scale: Design urban village areas to be pedestrian-oriented and transit accessible, incorporating block patterns, walking routes and edges, social orientation of buildings, and streetscapes to provide ease of walking and safety.

- CD 7.6 Connectivity: Provide connectivity to other activity nodes in the form of roadways, transit connections, and bicycle and pedestrian linkages that encourages non-vehicular travel modes. Urban villages should be considered major transit transfer points and have amenities oriented towards transit users.
- CD-7.7 Urban Village Streetscapes and Identification: Include streetscape and signage programs in roadway improvements that provide each area a unique identification and enhance the functionality and beauty of entry corridors. Ensure that planned roadway improvements do not conflict with other policies that encourage pedestrian activities and circulation.
- CD 10.1 Human-Scale Development: In the evaluation of development proposals, require urban development on a human scale, by emphasizing the pedestrian experience over the movement and storage of vehicles.
- CD-10.2 Neighborhood Themes: In the evaluation of development proposals, require neighborhood themes and principles of design, such as neotraditional town planning, which include central parks, schools, and community and commercial facilities, strong pedestrian orientation and de-emphasis of automobile related elements in new development projects.
- CD 16.2 Mobility Improvements: Encourage the improvement and enhancement of intermodal freight connections, railways, roadways, and airports to support existing and future economic development opportunities.

#### City of Port Hueneme (2020)

- Creative utilization and responsible conservation of the City's major natural asset - the beach and harbor environment.
- "Fair share" payment for use of City services, roads, and facilities.
- Protect the City's interests by continued participation with adjacent and regional jurisdictions to address common issues; including air quality, transportation, water quality and supply, and solid waste disposal.

#### City of Santa Paula (2020)

- LU 1.6 Grid development pattern: Encourage continued use of the grid pattern in new development to enhance access and walkability.
- LU 1.11 Railroad corridor: Encourage land uses adjacent to the railroad corridor that are compatible with public recreational use of the corridor as well as adjacent established conforming land uses.
- LU 3.9 Mixed uses: Promote a mix of compatible uses at appropriate intensities in the Downtown, Hallock Center, and along busier streets such as the Harvard Boulevard/Peck Road/Telegraph Road corridors.
- LU 4.2 Linkages: Ensure that adequate linkages and transitions are provided between new developments in expansion and planning areas and existing areas of the city, and require the dedication and development of pedestrian/equestrian linkages to open space and trails at the time of annexation.
- LU 5.6 Public signage: Develop and maintain public signs, monuments, and other physical features that announce the entrance to the city and the Downtown. Provide a "wayfinding" system to help orient visitors to Downtown attractions, amenities and public parking locations.
- LU 5.d Downtown parking: Consider strategies to reduce parking demand and manage supply (shared parking, in-lieu fees, commercial parking, etc.) to improve pedestrian,

bicycle and transit mode share, downtown livability, safety, business vitality, vehicle miles traveled (VMT) reduction, and air quality. Implement standards that reduce demand for new parking and private vehicle ownership, and that help maintain optimal parking occupancy and availability.

### City of Simi Valley (2012)

- LU-3.2 Citywide Development Pattern: Provide for an overall pattern of land uses that promotes efficient development; minimizes the impact of traffic congestion; reduces transportation distances, energy consumption, air pollution, and greenhouse gas emissions; ensures compatibility between uses; protects the natural hillsides, major watercourses, and trees; enhances community livability and public health; and sustains economic vitality.
- LU-3.3 Connected Open Space Network: Maintain and, where incomplete, develop a Citywide network of open spaces that is connected to and provides access for all neighborhoods and districts incorporating greenbelts, drainage corridors, parklands, bicycle and pedestrian paths, equestrian trails, and natural open spaces and coordinate with other agencies, such as Rancho Simi Recreation and Park District and Santa Monica Mountains Conservancy.
- LU-3.4 Organization of Places: Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community meeting facilities that are connected with neighborhood-serving businesses. Provide business park/employment uses in centers and along the freeway corridor to minimize traffic congestion.
- LU-10.5 Walkable Neighborhoods: Maintain sidewalks, parkways, street tree canopies, and landscaping throughout the residential neighborhoods to promote walking as an enjoyable and healthy activity and alternative to automobile use.
- LU-10.6 Neighborhood Connectivity: Maintain sidewalks or other means of pedestrian and bicycle connections to neighborhood commercial centers, parks, schools, work places, and other community activity centers.
- LU-10.7 Complete Streets: Provide infrastructure consistent with the “Complete Streets” Program that accommodate multiple modes of transportation including the automobile, bicycle, pedestrian, and where appropriate, public transit.
- LU-11.2 Greenbelts: Promote the use of greenbelts around and within residential projects or between residential and other land uses.
- LU-17.6 Traffic Impacts: Plan commercial development to minimize traffic impacts, encourage pedestrian flow, and increase sales from shared foot traffic.
- LU-18.6 Bicycle Facilities: Encourage developers of commercial centers to incorporate facilities that promote customer and employee access by bicycles, such as secured storage, and showers and lockers for employees.
- LU-20.3 Location: Locate industrial and business park areas near major transportation routes such as freeways, railways, or arterials to reduce traffic on residential streets while providing efficient transportation of supplies and workers.
- LU-27.3 Connectivity to Transit. Promote the development of sidewalks and bikeways connecting and providing direct access between the business park and a potential Metrolink transit station serving the western portion of Simi Valley
- LU-30.1 Business Park Enhancement. Promote the infill and enhancement of properties in Area A for business park development with improved pedestrian access to support the adjacent transit oriented development area.

- LU-30.2 Mixed-Use Development and Transit-Oriented Uses. Promote the development of a mix of business park, commercial, and multi-family residential uses in proximity to the Metrolink Station.

#### City of Thousand Oaks (1997, General Plan update currently underway)

- The City's unique natural setting will be a guide to its future physical shape. In general, development will occur in the low-lying areas with the natural hills and mountains being preserved in open space. A ring of natural open space will be created around the City. The City will support and encourage open space/greenbelt buffers around it, separating the City from adjoining communities.
- Through good design and the implementation of appropriate development tools, a freeway corridor image will be created making Thousand Oaks visually distinct from surrounding communities, retaining the special qualities of the landscape, viewshed and open space which originally attracted people to the area.
- Major City gateways, where the Highway 101 and Route 23 Freeways enter the City and streets interchange with the freeways, shall receive special aesthetic enhancement.
- Highly intensive land uses--major industrial and commercial centers--should be located in proximity to or within easy access of the Ventura Freeway corridor.
- Neighborhood parks and open spaces should be located within walking distance of residential areas.
- A multi-use system of equestrian, biking and hiking trails should be implemented to provide access between and within open space reserves.

#### City of Ventura (2005, General Plan update currently underway)

- Policy 3B: Integrate uses in building forms that increase choice and encourage community vitality.
- Policy 3D: Continue to preserve agricultural and other open space lands within the City's Planning Area.
- Policy 6A: Expand the park and trail network to link shoreline, hillside, and watershed areas.
- Policy 7D: Minimize exposure to air pollution and hazardous substances.

### 6.4 Unincorporated Area Plans

The County's General Plan includes nine Area Plans for specific areas in unincorporated Ventura County. These plans provide long range planning for future land use development in these unincorporated areas. Each Area Plan contains detailed goals, policies, and programs that are specific to each region. The nine area plans include:

- Coastal Area Plan & Local Coastal Plan
- El Rio/ Del Norte
- North Ventura Avenue
- Oak Park
- Ojai Valley
- Piru
- Saticoy
- Thousand Oaks
- Lake Sherwood/Hidden Valley

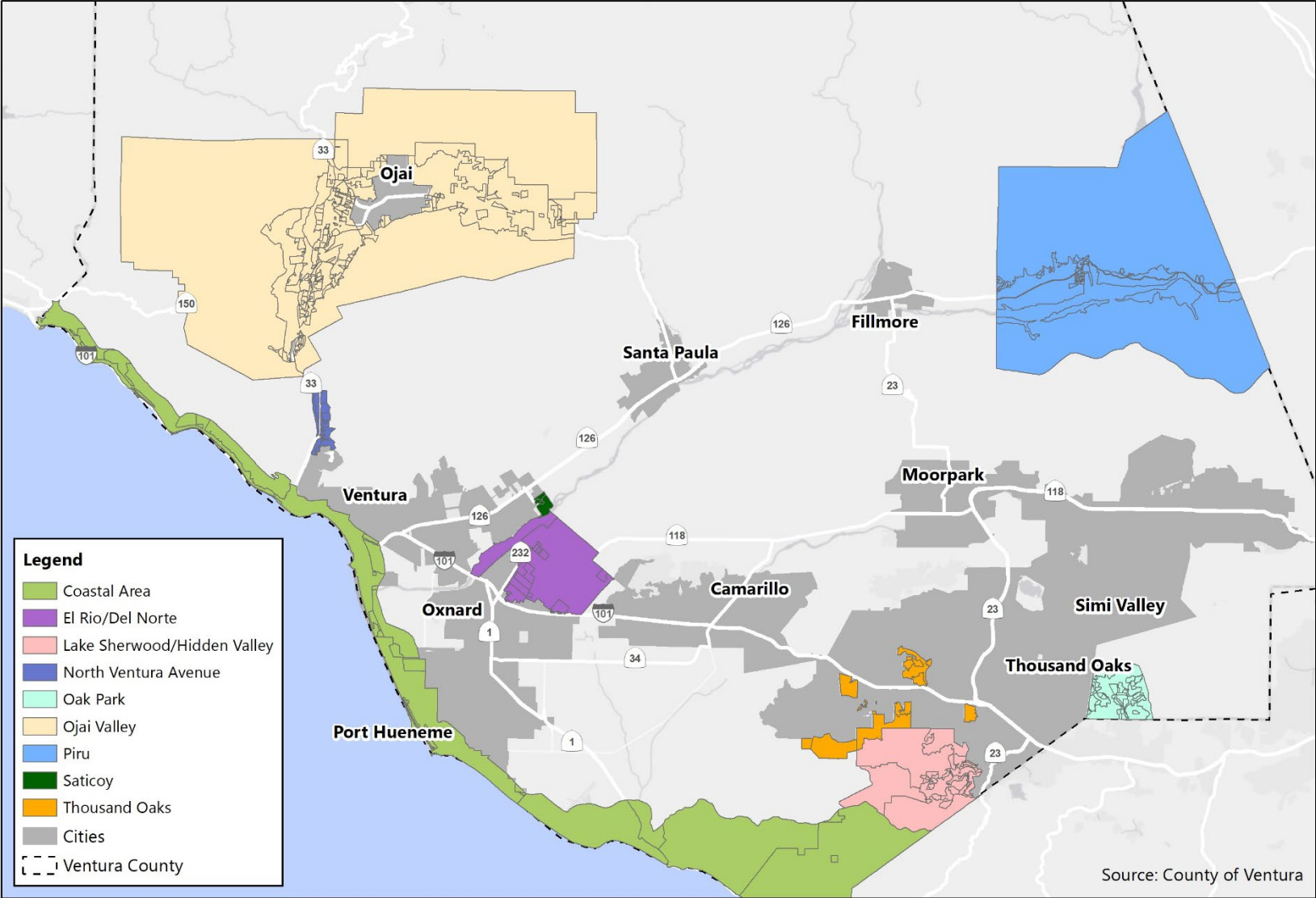


**TASK 1.2 EXISTING CONDITIONS**

Prepared for Ventura County Transportation Commission

The locations of the areas are shown in the figure below.

Figure 6.1 Area Plans



**Area Plans**  
VCTC Comprehensive Transportation Plan

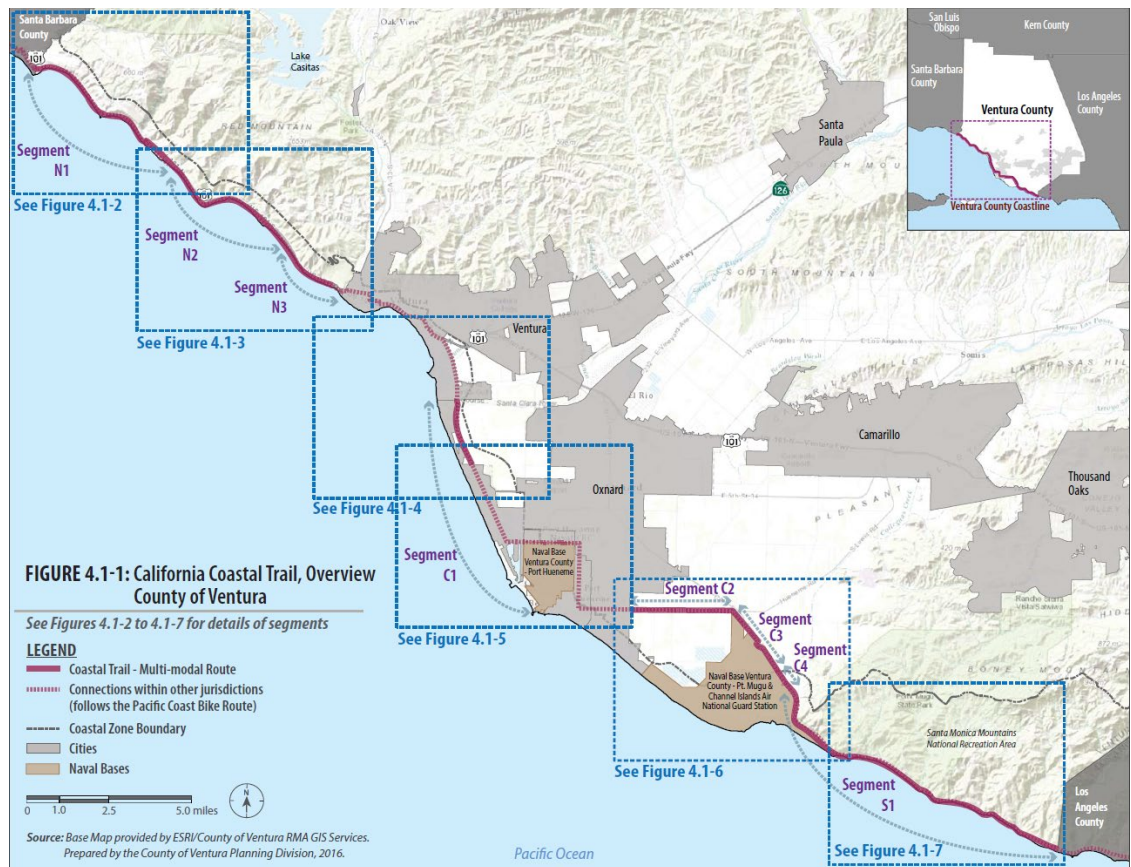


### 6.4.1 Coastal Area Plan & Local Coastal Program (2017)

The Coastal Area Plan and Local Coastal Program is the land use plan for the unincorporated portions of the coastal areas of Ventura County. The Coastal Zone comprises of 39 square miles with goals and policies divided among three subareas, North Coast, Central Coast, and South Coast. The plan evaluates specific issues to the area including environmentally sensitive habitats, recreation and access, agriculture, hazards, beach erosion, energy and industrial facilities, public works, and new development.

One of the main programs of the Coast Area Plan is the development of the California Coastal Trail for pedestrians, bicyclists and a variety of other coastal users which allows for direct access to the Ventura County coastline. The figure below provides an overview of the California Coastal Trail.

Figure 6.2 California Coastal Trail



Source: Coastal Area Plan & Local Coastal Program

### 6.4.2 El Rio/Del Norte Area Plan (2020)

The El Rio/Del Norte Area Plan is the land use plan for approximately 6,984 acres of unincorporated land adjacent to the City of Oxnard. The plan provides designations and standards for the area's land use and community character, circulation, transportation, and mobility, public facilities, services, and infrastructure, conservation and open space, hazards and safety, and economic vitality. The specific goals related to roadways and the regional multimodal system are shown below:

- ED-18: To ensure an adequate circulation and transportation system to serve the needs of the existing and future residents of the El Rio/Del Norte area.
- ED-19: To plan for safe pedestrian and bicycle pathways throughout the El Rio/Del Norte area.
- ED-20: To encourage the expansion of bus service to serve the El Rio/Del Norte area.

#### 6.4.3 North Ventura Avenue Area Plan (2020)

The North Ventura Avenue Area Plan is the land use plan for the North Ventura Area in the Ventura River Valley. The plan provides designations and standards for the area's land use and community character, circulation, transportation, and mobility, public facilities, services, and infrastructure, conservation and open space, hazards and safety, and economic vitality. Some key transportation related elements are as follows:

- Ventura Avenue will remain a collector street in the planning area. Crooked Palm Road's alignment should be classified as a collector, improved, and widened to meeting City standards.
- A future collector street extending from Floral Drive to Shell Road should be considered.
- A Class II bikeway along Ventura Road, a Class III bikeway along Crooked Palm Road, and the Ojai/Ventura Class I Bike Path should be established.

#### 6.4.4 Oak Park Area Plan (2020)

The Oak Park Area Plan is the land use plan for the Oak Park Community north of Agoura Hills. The plan provides designations and standards for the area's land use and community character, circulation, transportation, and mobility, public facilities, services, and infrastructure, conservation and open space, hazards and safety, and economic vitality. The specific goals related to roadways and the regional multimodal system are shown below:

- OP-20: To ensure an adequate circulation and transportation system to serve the needs of the existing and future residents of Oak Park.
- OP-21: To ensure that new development ties into the existing primary circulation system by an adequate collector street network.
- OP-22: To ensure that new development ties into the existing primary circulation system by an adequate collector street network.
- OP-23: To encourage the provisions of public and private bus service to and from Oak Park.

#### 6.4.5 Ojai Valley Area Plan (2020)

The Ojai Valley Area Plan is the land use plan for approximately 74,000 acres of the Ojai and Ventura River Valley areas. The plan provides designations and standards for the area's land use and community character, circulation, transportation and mobility, public facilities, services, and infrastructure, conservation and open space, hazards and safety, and economic vitality. The specific goals related to roadways and the regional multimodal system are shown below:

- OV-22: To promote a safe road system throughout the Ojai Valley without encouraging population growth and development.
- OV-23: To encourage alternatives to single occupancy motor vehicle trips by promoting carpools, vanpools and expanded bus service.

#### 6.4.6 Piru Area Plan (2020)

The Piru Area Plan is the land use plan for the Piru area straddling Highway 126 between Fillmore and the Los Angeles County line. The plan provides designations and standards for the

area's land use and community character, circulation, transportation, and mobility, public facilities, services, and infrastructure, conservation and open space, hazards and safety, and economic vitality. The specific goals related to roadways, the regional multimodal system, and funding are shown below:

- P-21: To ensure an adequate circulation and transportation system to serve the needs of the existing and future residents of, and visitors to, Piru.
- P-22: To ensure that new development ties into the existing circulation system by an adequate street network.
- P-23: To provide safe pedestrian and bicycle pathways throughout the Community.
- P-24: To encourage expanded commercial bus and rail service to and from Piru.
- P-25: To distribute the cost of circulation improvements equitably among benefitting property owners and users.

#### 6.4.7 Saticoy Area Plan (2015)

The Saticoy Area Plan, a component of the Ventura County General Plan, provides goals, policies, and programs for the 240 acres of the Saticoy area within the Santa Clara River Valley. The Plan includes discussion of principles and objectives for the area in general, land use, mobility, resources, public facilities, and hazards. The mobility goals include:

- MOB Goal 1: An adequate, safe, and inter-connected mobility network to serve Saticoy residents, visitors and businesses.
- MOB Goal 2: A local mobility network that supports existing and future development, planned land use, and economic revitalization within Saticoy.
- MOB Goal 3: A multimodal network that provides alternate modes of transportation for pedestrians, bicyclists and transit users.

The Saticoy Area Plan also lists Mobility Programs which highlight the following objectives:

- Prioritize Mobility Improvements
- Reclassify a portion of SR 118
- Implement new road Connections, pedestrian amenities, a linear park, and a Transportation Impact Mitigation Fee (TIMF)
- Upgrade existing roadways and the bicycle network
- Other smaller mobility related improvements

#### 6.4.8 Thousand Oaks Area Plan (2020)

The Thousand Oaks Area plan is the land use plan for approximately 3,767 acres of unincorporated land adjacent to the City of Thousand Oaks. The plan provides designations and standards for the area's land use and community character, circulation, transportation, and mobility, public facilities, services, and infrastructure, conservation and open space, hazards and safety, and economic vitality. The specific goals related to roadways, and the regional multimodal system are shown below:

- TO-13: To ensure an adequate circulation and transportation system to serve the needs of the existing and future residents of the Thousand Oaks Area of Interest.
- TO-14: To ensure a Level of Service "C" or better on all streets and intersections.
- TO-15: To ensure that new development ties into the existing primary circulation system by an adequate collector street network.



- TO-16: To provide safe pedestrian and bicycle pathways throughout the unincorporated Thousand Oaks area.
- TO-17: To ensure that road improvements are compatible with existing and planned equestrian trails and bicycle pathways.
- TO-18: To encourage the expansion of public and private bus service to serve the Thousand Oaks Area of Interest.

#### 6.4.9 Lake Sherwood/Hidden Valley Area Plan (2020)

The Lake Sherwood/Hidden Valley Area plan is the land use plan for approximately 8,252 acres of unincorporated land in the Lake Sherwood drainage basin. The plan provides designations and standards for the area's land use and community character, circulation, transportation, and mobility, public facilities, services, and infrastructure, conservation and open space, hazards and safety, and economic vitality. The specific goals related to roadways, the regional multimodal system, and funding are shown below:

- LS-16: To ensure an adequate circulation and transportation system to serve the needs of the existing and future residents of the Lake Sherwood/Hidden Valley area and meet regional circulation goals and objectives in the Lake Sherwood and Thousand Oaks areas.
- LS-17: To ensure that new development ties into the existing primary circulation system by an adequate collector street network.
- LS-18: To ensure that the proposed realignment and widening of Potrero Road is minimally disruptive to the majority of the area's residents.
- LS-19: To provide safe pedestrian and bicycle pathways throughout the Lake Sherwood Community.
- LS-20: To distribute the cost of circulation improvements equitably among benefitting property owners and users.

### 6.5 State Policy

#### 6.5.1 Senate Bill 743

Senate Bill (SB) 743 is an amendment to the California Environmental Quality Act (CEQA) adopted by the State of California which attempts to balance the needs of congestion management to reduce greenhouse gas emissions, promote infill development, and improve public health through active transportation. SB 743 requires an adoption of vehicle miles travelled (VMT) as the most appropriate measure of transportation impacts, a departure from using vehicle delay or level-of-service (LOS) to determine transportation impact. LOS focuses on maintaining traffic speeds, which often results in adding supply, making it difficult to build infill housing and other land uses in denser areas. Using VMT addresses induced travel and is better suited to reduce the amount of vehicle traffic. As of July 1, 2020, CEQA Guidelines Section 15064.3 requires that VMT is utilized during the preparation of CEQA documents to demonstrate the holistic impact of a project on factors associated with vehicle miles, such as emission of air quality and greenhouse gases.

In conjunction with State mandates, Ventura County has adopted strategies to utilize VMT as its leading tool to measure transportation impact. Local agencies have discretion to develop and adopt their own thresholds or rely on thresholds recommended by other agencies, such as the Governor's Office of Planning and Research (OPR) Technical Advisory for VMT thresholds, or use the County's guidance. As of May 2020, the City of Camarillo adopted updates to the City's CEQA Guidelines and Thresholds of Significance as they pertain to the Camarillo. The City of Simi Valley also released draft local VMT-based guidelines in June 2020.

**TASK 1.2 EXISTING CONDITIONS**

Prepared for Ventura County Transportation Commission



## 7 Mobility Conditions

The mobility conditions section outlines the movement of people by mode, including by vehicle, transit, or active transportation. Vehicular movement is the most common method for commute and non-commute trips in Ventura County mostly due to factors such as convenience, distance, time-constraints, and accessibility. Although transit is prevalent in Ventura County, it is fairly disjointed as nine bus transit operators and two rail operators provide service in various parts of south Ventura County. Active transportation is a focal point of Ventura County, as recreation and active lifestyles are prominent choices for residents.

### 7.1 Vehicular Movement

#### 7.1.1 Roadway Network

The roadway network in Ventura County is mostly developed in the southern portion of the County. According to the California Department of Transportation (Caltrans) Federal Highway Classifications, there is a significant network of freeways and principal arterials in Ventura, Oxnard, and the greater Thousand Oaks area. There are a substantial number of minor arterials in the cities of Simi Valley and Camarillo. Most major roads in unincorporated Ventura County are classified as principal arterials or major collectors. Figure 7.1 below highlights Federal Highway Classifications for the major roadway network in Ventura County.

Ventura County features one U.S. freeway and eight State Routes:

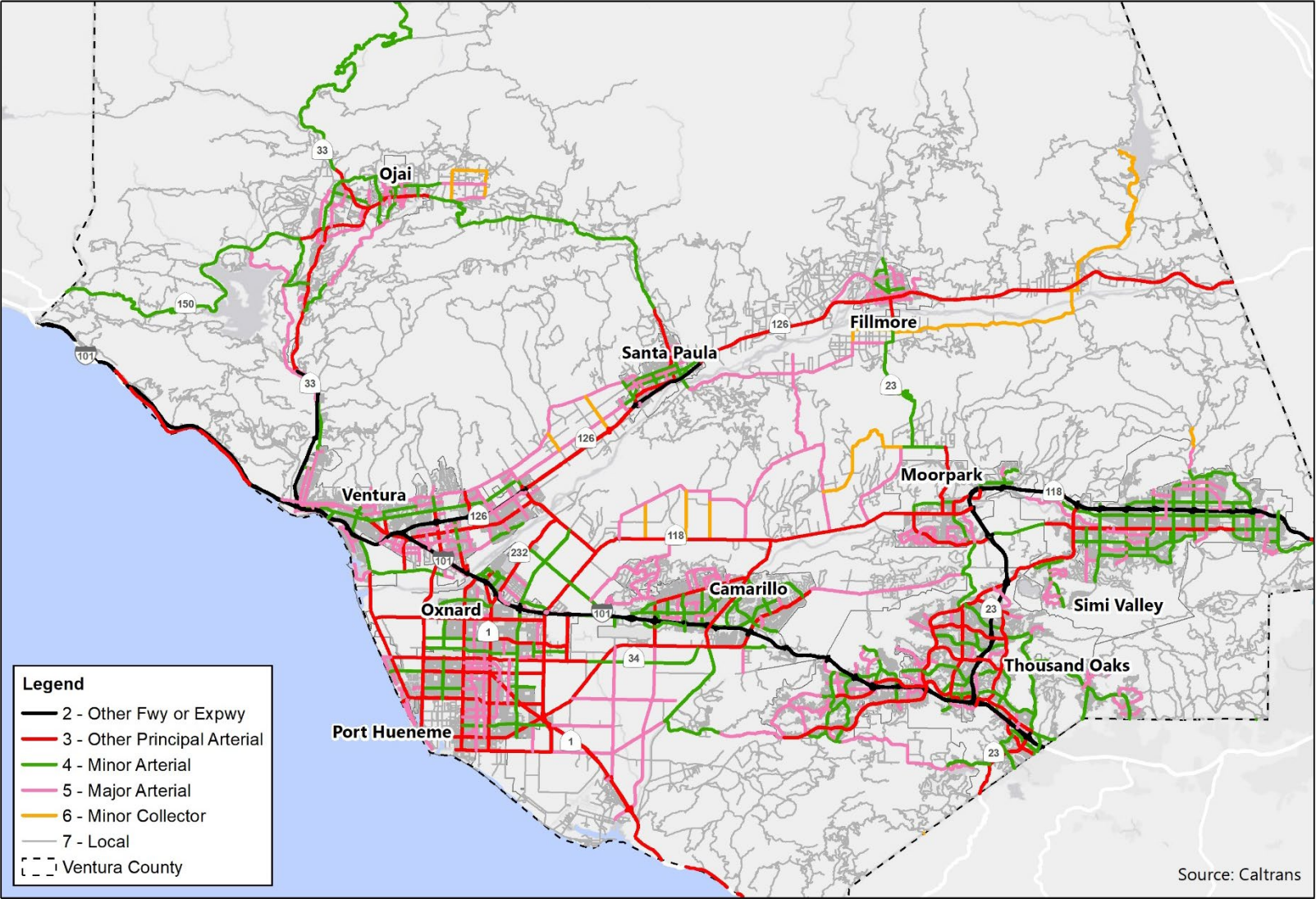
- **U.S. Highway 101**, which traverses in an east (southbound) – west (northbound) direction in Ventura County connecting Thousand Oaks, Camarillo, Oxnard, Ventura, before heading to Carpinteria (Santa Barbara County) to the northwest and Westlake Village (Los Angeles County) to the southeast.
- **State Route 1**, a coastal route connecting Malibu (Los Angeles County) to the eastern edge of Oxnard before connecting to US Highway 101. The route continues north of Ventura and runs parallel to US 101 adjacent to the coast.
- **SR 23**, a north-south route connecting Thousand Oaks and Moorpark, and connecting to SR 118 in the north and US 101 in the south.
- **SR 33**, a north-south route connecting Ventura to Oak View, Mira Monte and Ojai before continuing throughout mountainous northwest Ventura County, connecting to US 101 in the south.
- **SR 34**, a north-south route connecting Camarillo to unincorporated Somis, and connecting to US 101 and SR 1 near Oxnard in the south and SR 118 in the north.
- **SR 118**, a major east-west route in south Ventura County connecting Simi Valley, Moorpark, unincorporated Somis and Saticoy, before connecting to SR 126 in the west and the San Fernando Valley (Los Angeles County) to the east.
- **SR 126**, an east-west route in central Ventura County connecting Piru, Fillmore, Santa Paula, and Ventura before connecting to US 101 in the west and the Castaic Junction (I-5) in the east.
- **SR 150**, a mountainous east-west route connecting Santa Paula, Ojai, Mira Monte, before heading to Carpinteria (Santa Barbara County) to the west and SR 126 to the east.

- **SR 232**, a short north-south route connecting the US 101 and SR 118 between unincorporated Saticoy in the north and north Oxnard in the south.

The arterials in urban Ventura County are typically laid out in a grid-like pattern, but often follow the geography of mountain ranges in central locations of south Ventura County as you move away from the coast. Secondary and local streets have no particular pattern, especially within residential areas. Major roadways that intersect U.S. Highway 101 include:

- Seaward Avenue
- Main Street
- Telephone Road
- Victoria Avenue
- Johnson Drive
- Oxnard Boulevard
- Vineyard Avenue
- Rose Avenue,
- Las Posas Road
- Carmen Drive
- Lewis Road
- Santa Rosa Road
- Wendy Drive
- Borchard Road
- Ventu Park Road
- Lynn Road
- Moorpark Road
- Hampshire Road
- Westlake Boulevard

Figure 7.1 Federal Highway Classifications



## Federal Highway Classifications

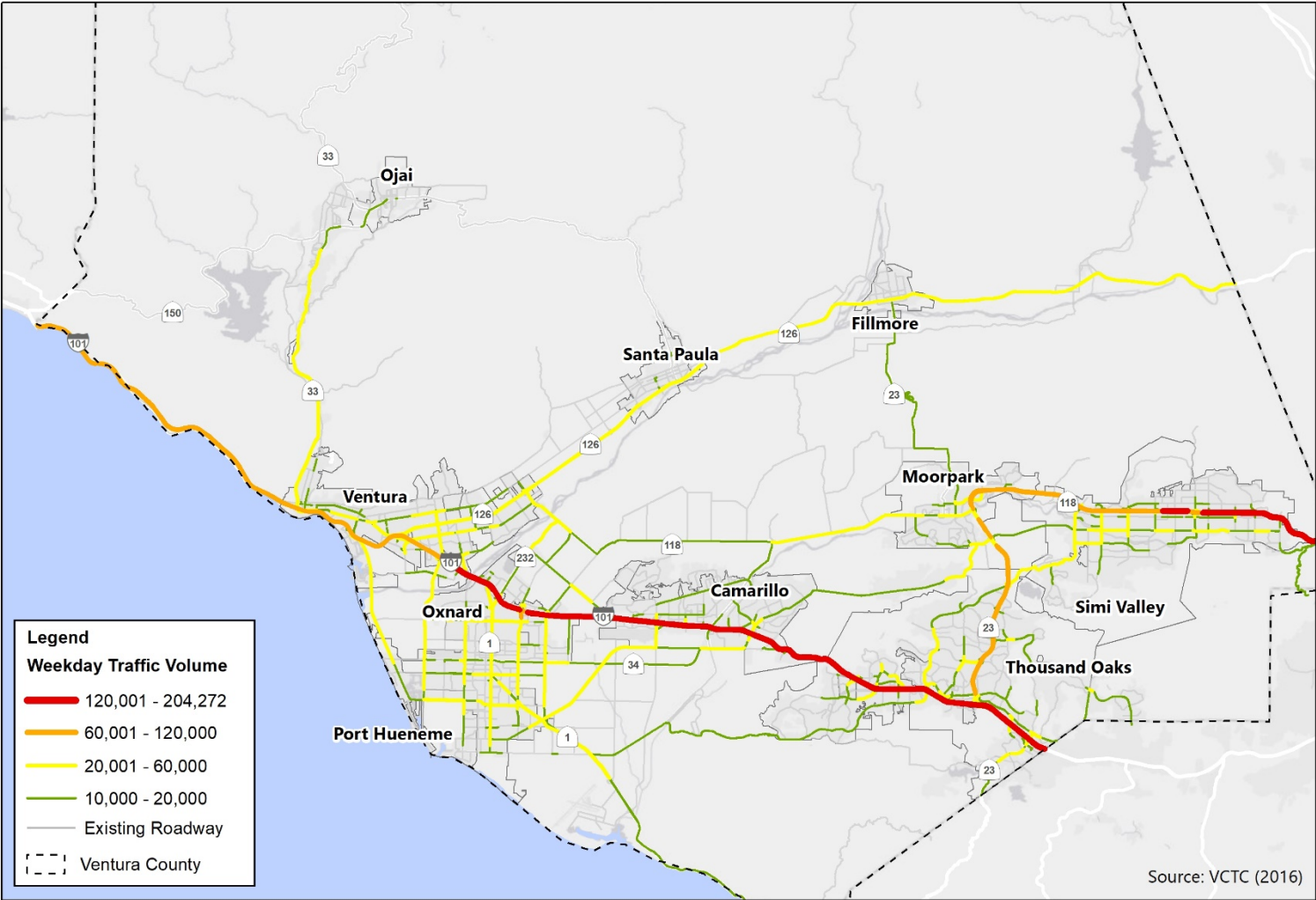
VCTC Comprehensive Transportation Plan



### 7.1.2 Average Weekday Traffic Volumes and Volume to Capacity Ratios

Average Weekday Traffic Volumes measures the average traffic flow of a road or freeway segment on a typical weekday, Monday through Friday. In Ventura County, the greatest average weekday vehicle traffic measures at over 102,000 vehicles per day in one direction, located on U.S. Highway 101 in Thousand Oaks (2016) and at the Ventura County – Los Angeles County Line. In general, the greatest traveled segments on weekdays are on portions of U.S. Highway 101, and portions of SR 118 in Simi Valley. Other segments with high average weekday volumes include U.S. Highway 101 within and north of the City of Ventura, SR 118 west of Simi Valley, and the entire segment of SR 23. Moderate volume segments include the length of SR 126 through Santa Paula, Fillmore, and Piru, SR 33 from Ventura to Mira Monte, and major arterials in Oxnard, Ventura, Newbury Park, and Simi Valley. Figure 7.2 below details average weekday volumes on major arterials and freeways in Ventura County.

Figure 7.2 Average Weekday Traffic Volume



**Existing Weekday Traffic Volume**  
VCTC Comprehensive Transportation Plan



Existing and future travel patterns help determine corridors that are heavily in demand or may become in demand in the future. This information is beneficial to determine what corridors may benefit from measures to prevent or reduce congestion issues now and in the future. Existing travel pattern data is shown via 2016 AM and PM Volume/Capacity. Future travel pattern data is shown via 2040 AM and PM Volume/Capacity. Volume/Capacity (V/C) is a metric to show how existing and future traffic volume compares to the maximum amount of volume a corridor can handle for a given period of time. When existing or future volume meets or exceeds capacity, V/C is over 1.00, meaning the corridor is failing. Letter grades are assigned to V/C to show the level of service. Corridors that are rated D, E, or F should consider remedies to improve V/C, typically with demand reduction strategies.

V/C at or greater than 1.00 is F

V/C greater than 0.9 to 1.00 is E

V/C greater than 0.8 to 0.9 is D

V/C greater than 0.7 to 0.8 is C

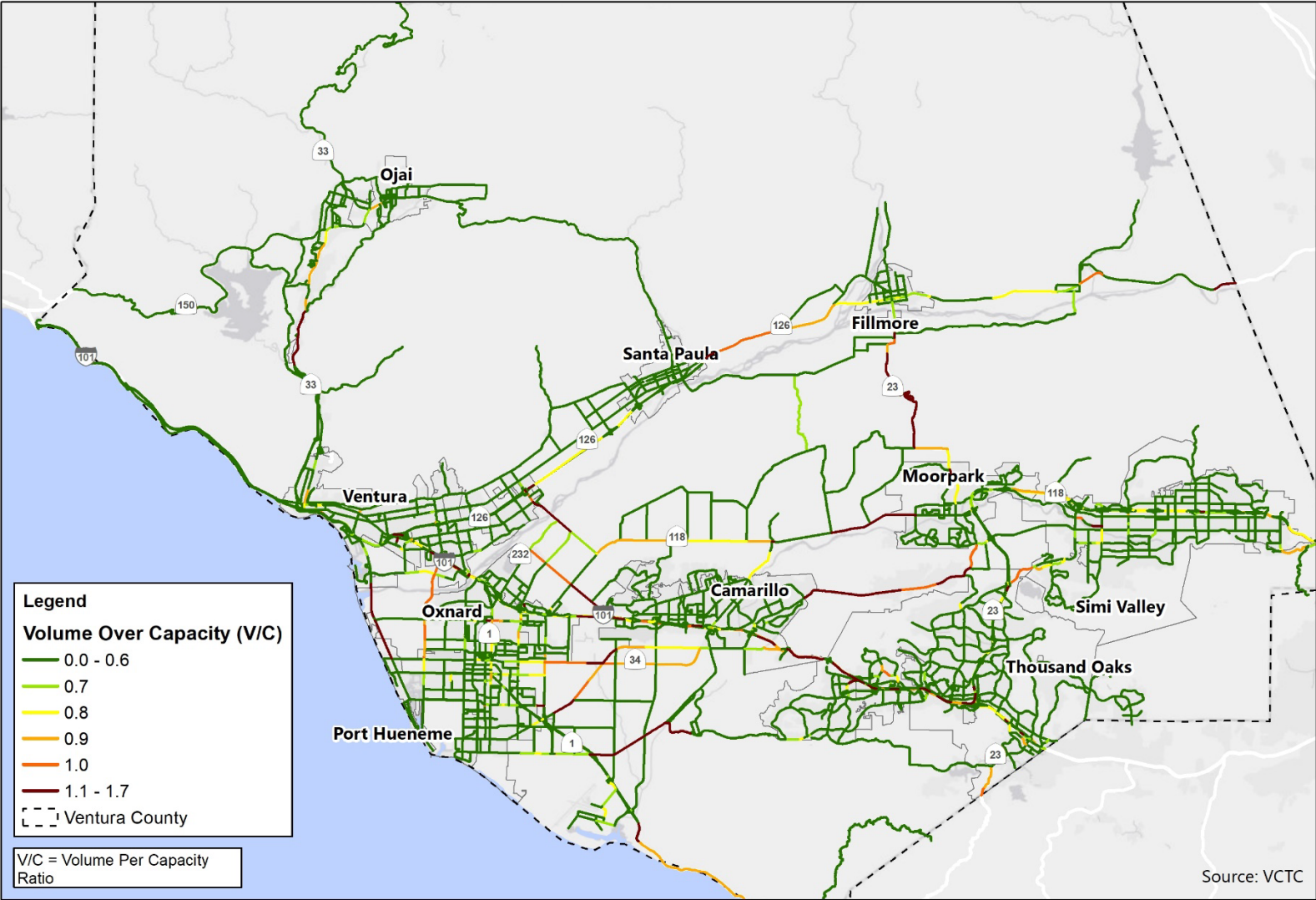
V/C greater than 0.6 to 0.7 is B

V/C greater than 0.0 to 0.6 is A

The figures below show the V/C for each major Ventura County corridor by AM and PM peak in baseline year 2016 and projection year 2040. The volume/capacity data highlights the connection between land use patterns across Ventura County and transportation planning policy. Based upon the figures below, there is notable high demand on the few corridors that link separated cities throughout Ventura County. The Cities are separated in part due to land use policy of Guidelines for Orderly Development, first adopted in 1969 and revised in 1996, which states that urban development in unincorporated centers should only be allowed when an Area Plan has been adopted by the County. Land use patterns and transportation policy have contributed to cross suburban commuting and a jobs-housing imbalance, which places high demand on the few corridors that connect the cities, most notably US Highway 101. Section 7.1.5 Existing and Future Travel Patterns highlights the countywide behavior of internal vs external trips among the County's spheres of influence.



Figure 7.3 AM Peak Period V/C 2016



**AM Peak Period V/C 2016 (6 AM - 9 AM)**  
VCTC Comprehensive Transportation Plan

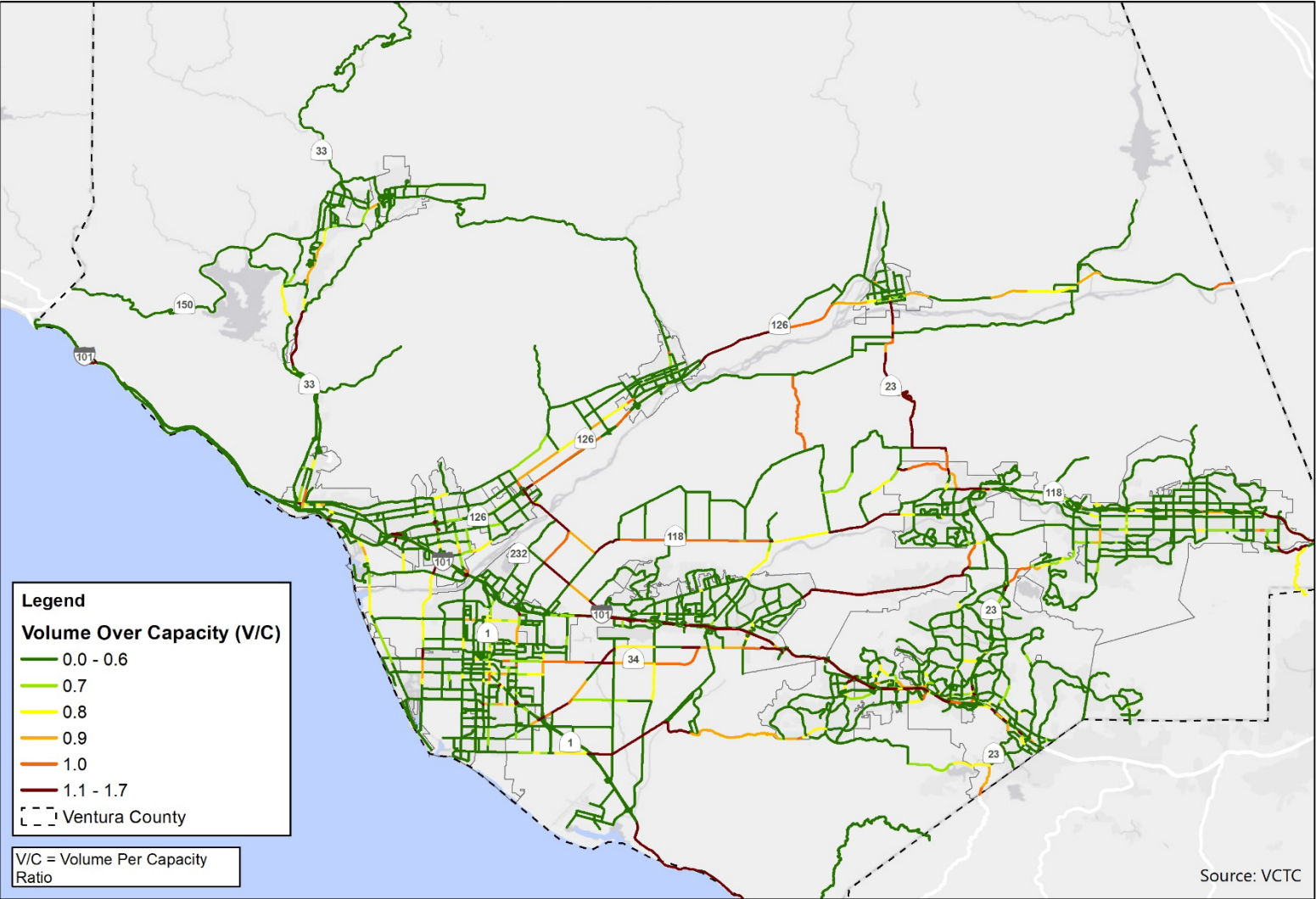




Notable Streets with High Volume/Capacity in the AM Peak Period for 2016:

- US 101 from Ventura to Ventura-LA County Border
- SR 118 from Moorpark to Ventura-LA County Border and SR 126 intersection to Moorpark
- SR 23 from Fillmore to Moorpark and Olsen Road to US 101
- SR 34 from Pleasant Valley Road to Downtown Oxnard and Somis to Upland Road
- SR 1 from Ventura-LA County Border to Las Posas Road
- SR 126 in Piru, Fillmore, and west of Santa Paula
- SR 33 from Casitas Vista Road to Canada Street
- Santa Rosa Road/ Moorpark Road from Upland Road to Tierra Rejada Road
- Pleasant Valley Road from Rose Ave to Lewis Road
- Hueneme Road from Saviers Road to Potrero Road
- Most arterials in Downtown Oxnard
- Santa Susana Pass Road from Katherine Road to Rocky Peak Road
- Victoria Avenue from US 101 to Wooley Road
- Harbor Boulevard from Olivas Park Road to 5<sup>th</sup> Street

Figure 7.4 AM Peak Period V/C 2040



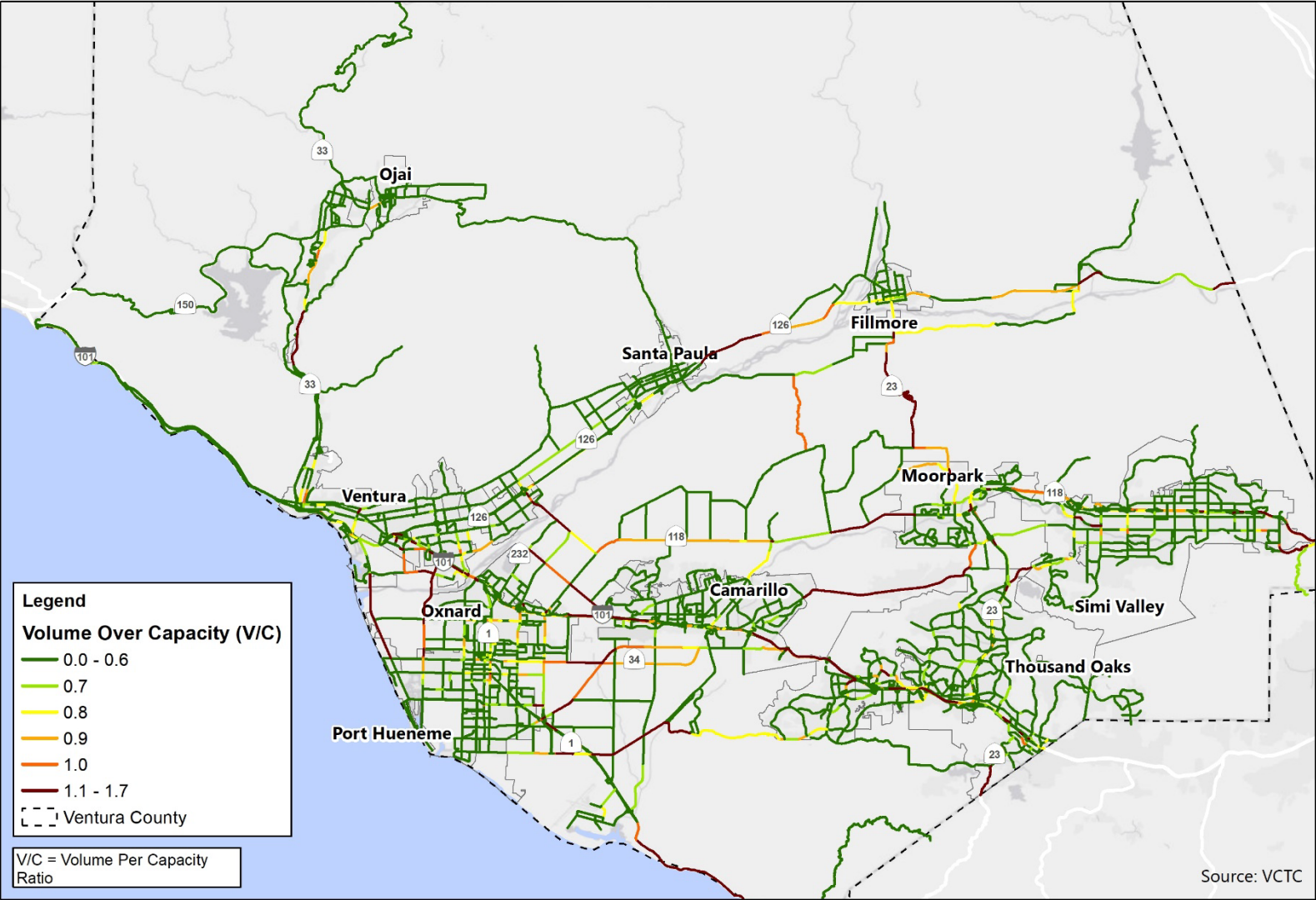
**AM Peak Period V/C 2040 (6 AM - 9 AM)**  
VCTC Comprehensive Transportation Plan



Notable Streets with High Volume/Capacity in the AM Peak Period for 2040:

- US 101 from Ventura to Ventura-LA County Border
- SR 118 throughout corridor except Moorpark
- SR 23 from Fillmore to Moorpark and from US 101 through Olsen Road/ Madera Road to Royal Ave
- SR 34 from Pleasant Valley Road to Downtown Oxnard and Somis to Upland Road
- SR 1 from Ventura-LA County Border to Las Posas Road
- SR 126 in Piru, Fillmore, and Santa Paula
- SR 33 from Casitas Vista Road to Canada Street
- Santa Rosa Road/ Moorpark Road from Upland Road to Tierra Rejada Road
- Pleasant Valley Road from Rose Ave to Lewis Road
- Hueneme Road from Saviers Road to Potrero Road
- Most arterials in Downtown Oxnard
- Santa Susana Pass Road from Katherine Road to Rocky Peak Road
- Victoria Avenue from US 101 to Wooley Road
- Harbor Boulevard from Olivas Park Road to 5<sup>th</sup> Street
- Los Angeles Avenue from Tapo Canyon Road to Kuehner Drive

Figure 7.5 PM Peak Period V/C 2016



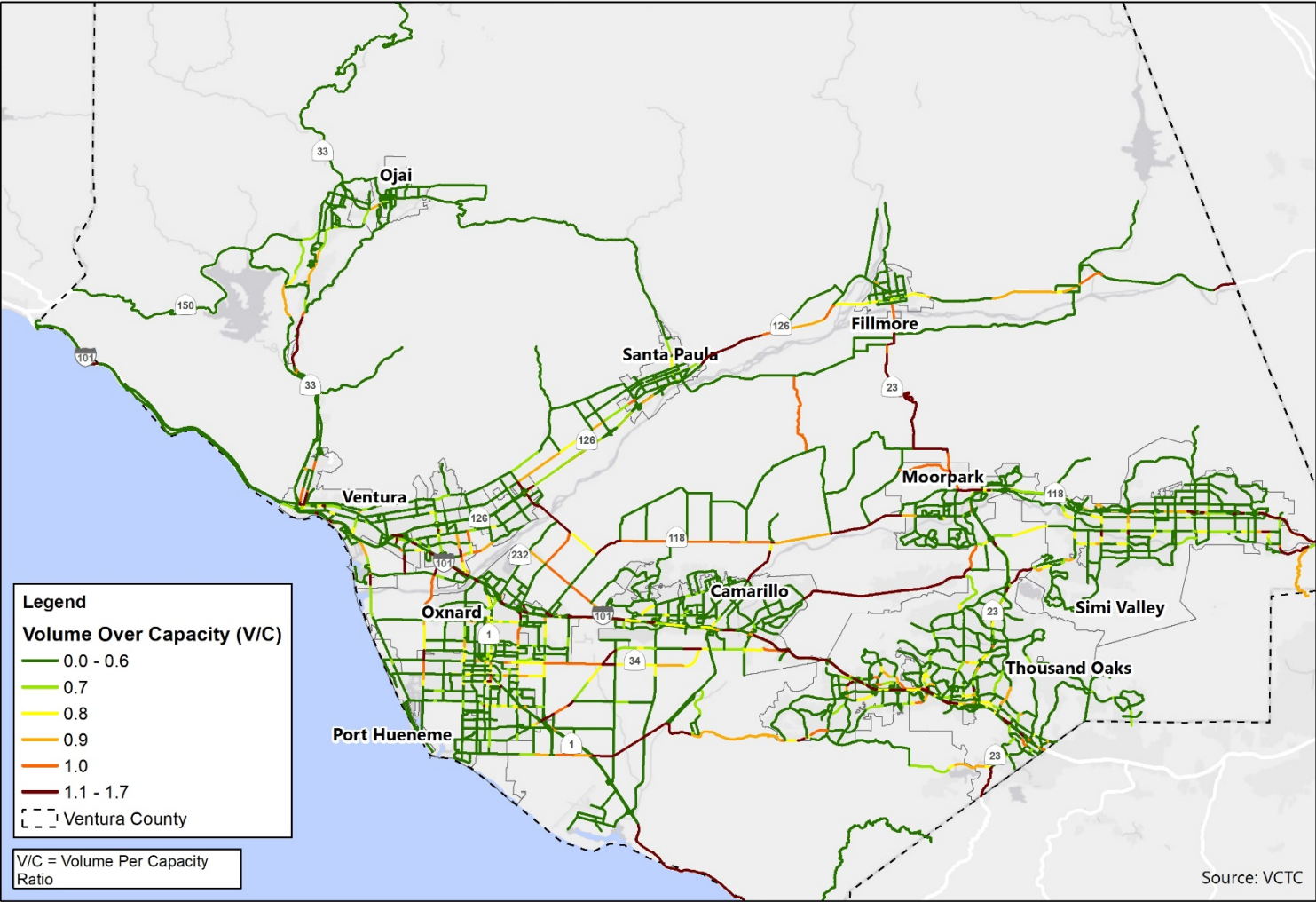
**PM Peak Period V/C 2016 (3 PM - 7 PM)**  
VCTC Comprehensive Transportation Plan



Notable Streets with High Volume/Capacity in the PM Peak Period for 2016:

- US 101 from Ventura to Ventura-LA County Border
- SR 118 throughout corridor except Moorpark
- SR 23 from Fillmore to Thousand Oaks
- SR 34 from Pleasant Valley Road to Downtown Oxnard and Somis to Upland Road
- SR 1 from Ventura-LA County Border to Las Posas Road
- SR 126 in Piru, Fillmore, and Santa Paula
- SR 33 from Casitas Vista Road to Canada Street
- Santa Rosa Road/ Moorpark Road from Upland Road to Tierra Rejada Road
- Pleasant Valley Road from Rose Ave to Lewis Road
- Hueneme Road from Saviers Road to Potrero Road
- Potrero Road/ Lynn Road from Lewis Road to Reino Road
- Westlake Boulevard from US 101 to Potrero Road
- Most arterials in Downtown Oxnard
- Santa Susana Pass Road from Katherine Road to Rocky Peak Road
- Victoria Avenue from US 101 to Wooley Road
- Harbor Boulevard from Olivas Park Road to 5<sup>th</sup> Street
- Olsen Road/ Madera Road from SR 23 to Royal Ave
- Tierra Rejada Road from Moorpark Road to Madera Road

Figure 7.6 PM Peak Period V/C 2040



**PM Peak Period V/C 2040 (3 PM - 7 PM)**  
VCTC Comprehensive Transportation Plan





#### Notable Streets with High Volume/Capacity in the PM Peak Period for 2040:

- US 101 from Ventura to Ventura-LA County Border
- SR 118 throughout corridor except Moorpark
- SR 23 from Fillmore to Thousand Oaks
- SR 34 from Pleasant Valley Road to Downtown Oxnard and Somis to Upland Road
- SR 1 from Ventura-LA County Border to Las Posas Road
- SR 126 in Piru, Fillmore, and Santa Paula
- SR 33 from Casitas Vista Road to Canada Street
- Santa Rosa Road/ Moorpark Road from Upland Road to Tierra Rejada Road
- Pleasant Valley Road from Rose Ave to Lewis Road
- Hueneme Road from Saviers Road to Potrero Road
- Potrero Road/ Lynn Road from Lewis Road to Reino Road
- Most arterials in Downtown Oxnard
- Santa Susana Pass Road from Katherine Road to Rocky Peak Road
- Victoria Avenue from US 101 to Wooley Road
- Harbor Boulevard from Olivas Park Road to 5<sup>th</sup> Street
- Olsen Road/ Madera Road from SR 23 to Royal Ave
- Tierra Rejada Road from Moorpark Road to Madera Road
- Los Angeles Avenue from Tapo Canyon Road to Kuehner Drive
- Burnham Road/ Santa Ana Road from SR 150 to Hollingsworth Ranch Road
- Central Avenue from US 101 to Rose Ave

### 7.1.3 Vehicle Miles Traveled

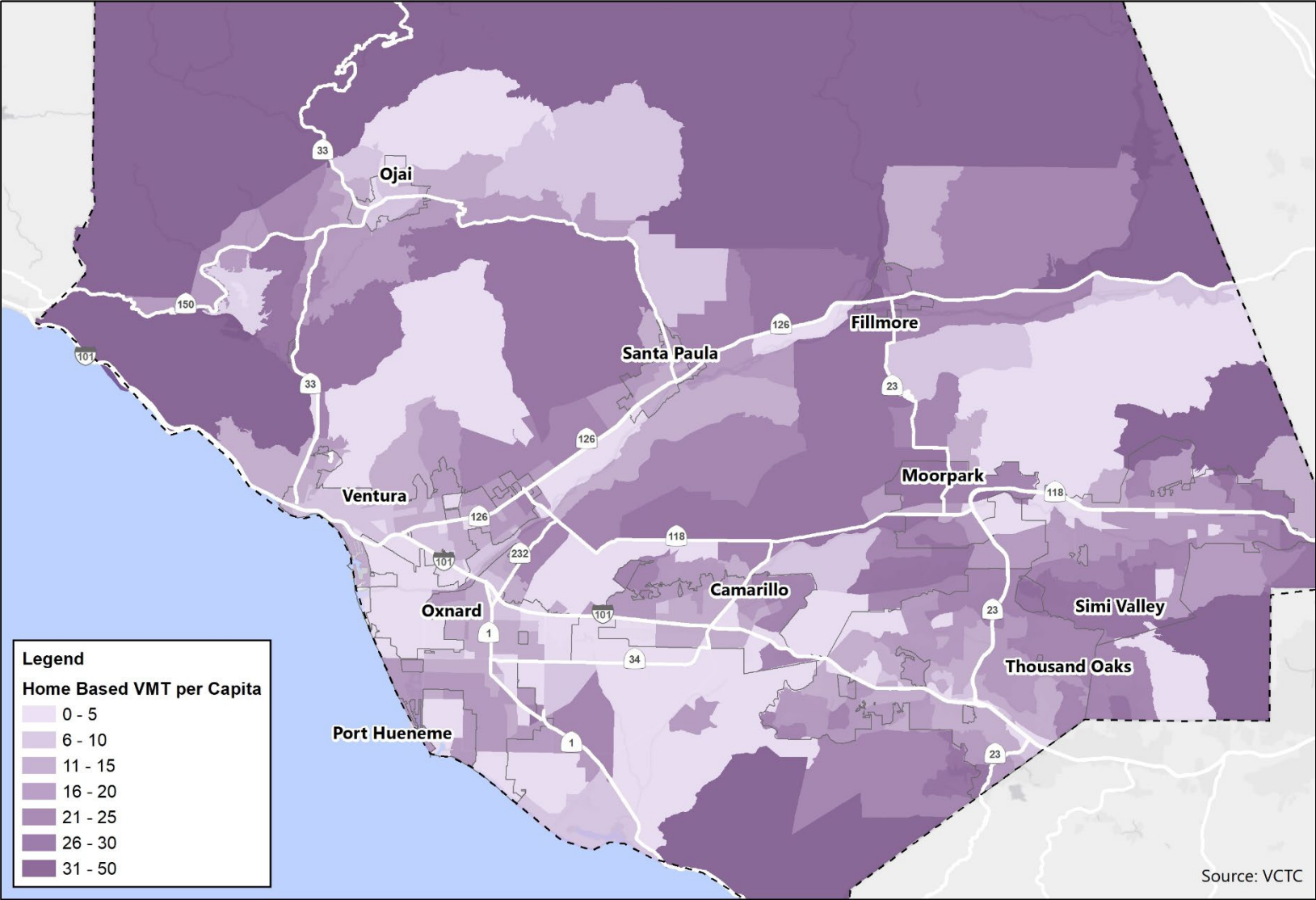
Vehicle Miles Traveled (VMT) is an important metric to determine the amount of travel for all vehicles in a geographic region for a given period of time. It provides a measure of total distance traveled. The calculation for VMT is total daily miles driven within a given area. Data collected for VMT in Ventura County is categorized by transportation analysis zone (TAZ) for both home-based trips per capita and work-based trips per employee in the year 2016. A home-based trip is a trip which starts or originates from home. A work-based trip is a trip that starts or originates from an employee's place of work.

VMT highlights in the connection between Ventura County land uses and transportation. Mobility determines how far a vehicle can travel in a given time, while accessibility determines how much a vehicle can get to in a given time. A mismatch between jobs and housing in areas with strong mobility can lead to increased VMT. Areas that have more concentrated development and multifamily residential with strong accessibility have lower VMT per capital or per employee.

The figures below document the home-based VMT per capita and work-based VMT per employee by TAZ. The VMT in the figures below document Production – Attraction VMT, where VMT is attributed to zones producing and attracting the trip.



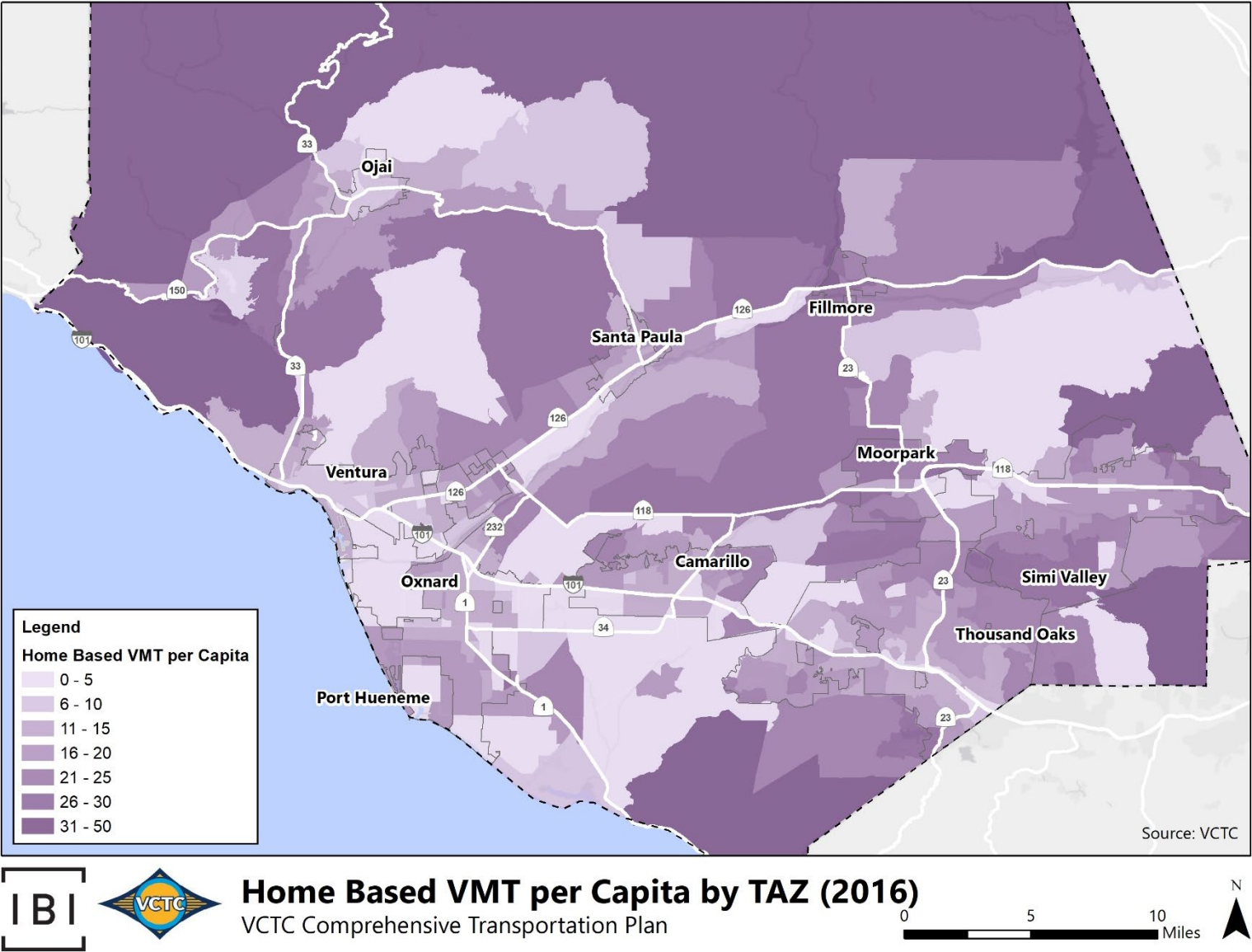
Figure 7.7 Home-Based VMT per Capita by TAZ (2016)



**Home Based VMT per Capita by TAZ (2016)**  
VCTC Comprehensive Transportation Plan



Figure 7.8 Work-Based VMT per Employee by TAZ (2016)



#### 7.1.4 Peak Hour Traffic Volumes

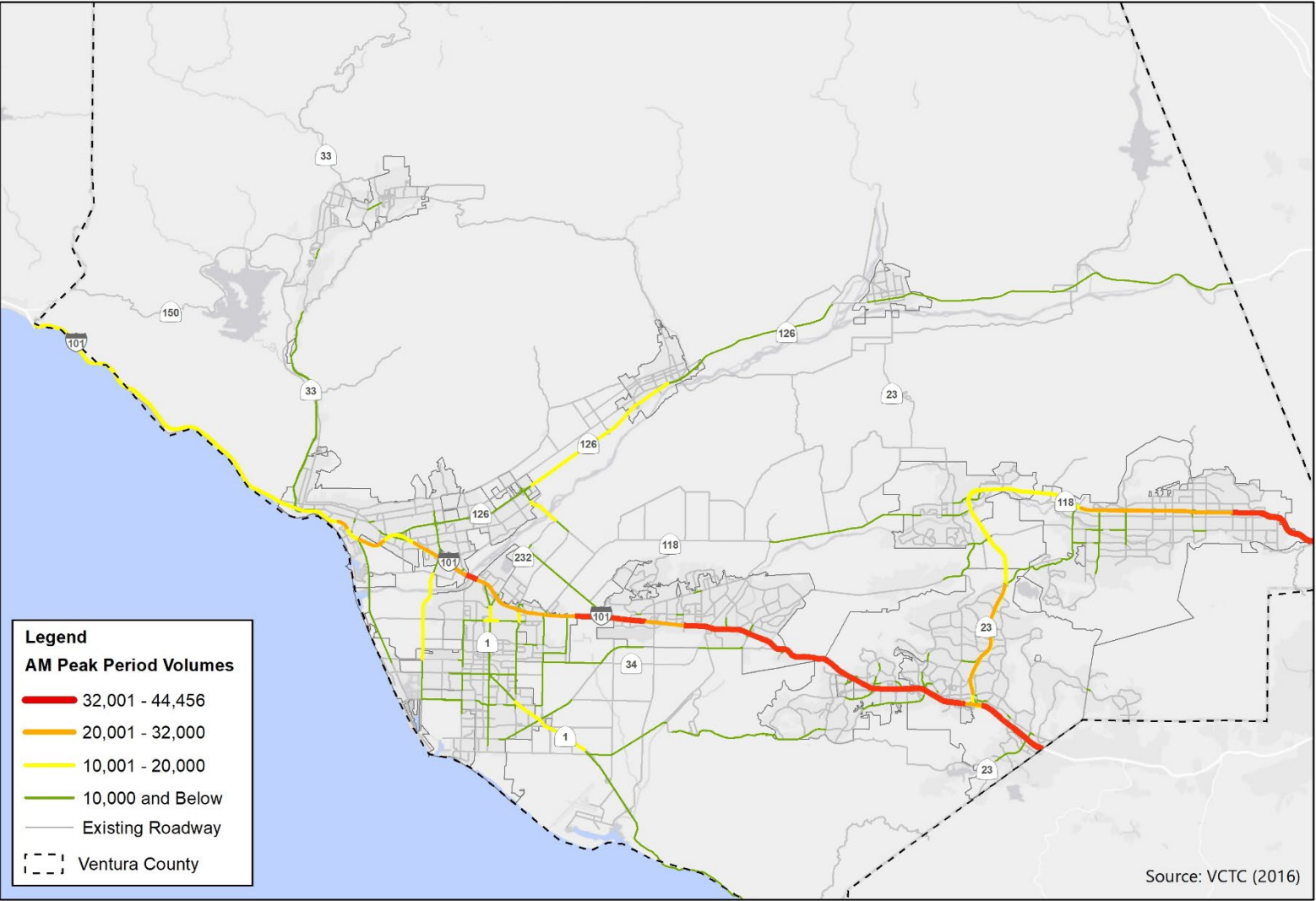
Peak hour traffic volumes show total traffic flow at peak commute times, typically from 6 A.M. to 9 A.M. for the A.M. peak period, and 3 P.M. to 7 P.M. as the P.M. peak period. Peak hour traffic volumes show which freeway and arterial segments are heavy commuter segments and have high volumes during the peak driving times of the day. A.M. peak periods can be compared to P.M. peak periods to determine which segments receive higher volumes per the time of day. In Ventura County, generally the P.M. peak period sees higher traffic volumes than in the AM period.

In the A.M., U.S. Highway 101 between Camarillo and Thousand Oaks has the highest traffic volume for the peak period (over 22,000), followed by SR 118 from Simi Valley to the Ventura County-LA County border. Other notable segments with high A.M. peak period volumes include SR 118 from Simi Valley to SR 23, the entirety of SR 23, U.S. Highway 101 from Camarillo to Ventura, and SR 126 from Ventura to Santa Paula.

In the P.M., peak period traffic volumes follow a similar trend but to a greater extent compared to the A.M. peak period. U.S. Highway 101 in from Ventura to Thousand Oaks has a high P.M. peak period traffic volume, measured at over 31,000 vehicles for a maximum segment located in Thousand Oaks. Other notable segments with high P.M. peak period volumes include SR 118 throughout Simi Valley, SR 23, the entire segment of SR 126, and U.S. Highway 101 through Ventura and to the north.

Figure 7.9 and 7.10 below detail A.M and P.M. peak traffic volumes in Ventura County. The scales for both maps are the same for comparative purposes.

Figure 7.9 Ventura County AM Peak Period Traffic Volume



**Existing AM Peak Period Traffic Volumes (6 AM - 9 AM)**  
VCTC Comprehensive Transportation Plan



Notable Corridors with High AM Peak Period Volume:

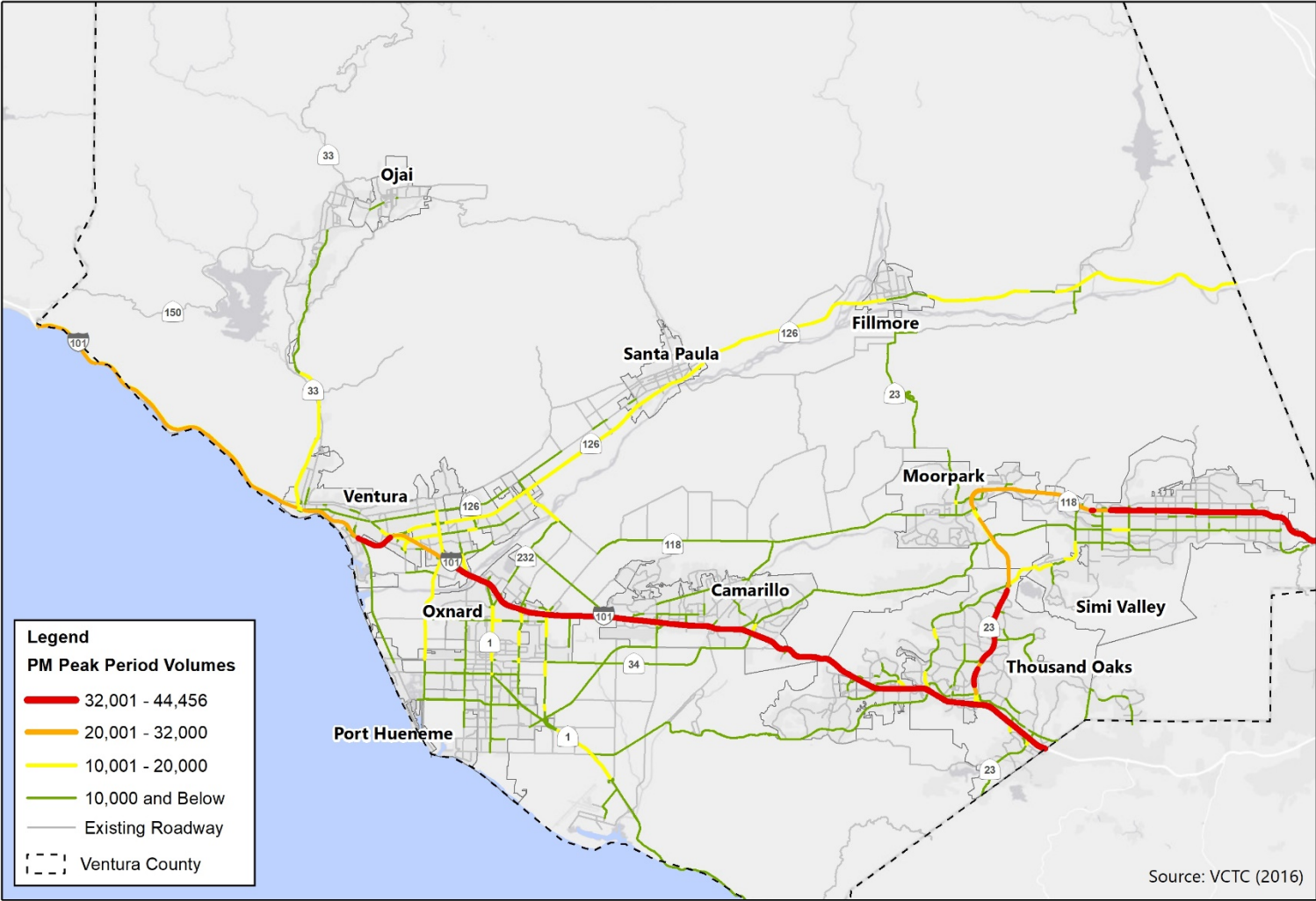
- US 101 from Ventura-Santa Barbara Border to Ventura-LA County Border
- SR 118 from SR 23 to Ventura-LA County Border and Telephone Road to SR 232
- SR 126 from Saticoy to Santa Paula
- SR 23 from Moorpark to Thousand Oaks
- SR 1 from Pleasant Valley Road to Hueneme Road
- Victoria Avenue from Olivas Park Road to 5<sup>th</sup> Street
- Select locations around the Gonzalez Road/ Oxnard Boulevard intersection

Notable Corridors with High PM Peak Period Volume:

- US 101 from Ventura-Santa Barbara Border to Ventura-LA County Border
- SR 118 from SR 23 to Ventura-LA County Border and SR 126 to SR 232
- SR 126 from Ventura to Ventura-LA County Border
- SR 23 from Moorpark to Thousand Oaks
- SR 1 from Pleasant Valley Road to Wood Road
- SR 33 from US 101 to Casitas Vista Road
- Victoria Avenue from US 101 to 5<sup>th</sup> Street
- Select locations in Downtown Oxnard
- Select locations in Thousand Oaks
- Olsen Road/ Madera Road from SR 23 to Royal Avenue

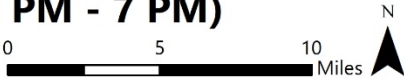


Figure 7.10: Ventura County P.M. Peak Period Traffic Volume



**Existing PM Peak Period Traffic Volumes (3 PM - 7 PM)**

VCTC Comprehensive Transportation Plan



### 7.1.5 Existing and Future Travel Patterns

Existing and future travel patterns can be seen through the analysis of origin-destination (OD) data. VCTC has 2016 OD data showing the approximate number of daily vehicle trips originating and concluding in each city in Ventura County. Data for Ventura County trip origin and destination has also been taken from the Central Coast Origin-Destination Survey, the 101 Communities Connected Study, the 2013 Ventura County Comprehensive Transportation Plan, and the VCTC Commission Workshop Presentation held in May 2019.

OD data is helpful in determining where drivers are coming from and going to in an effort to approximate which freeway and arterial segments they use to reach their destinations. For 2016, there are approximately 2.1 million trips in total that originate or end daily in Ventura County. Of these trips, 1.85 million daily trips (86%) are internal trips, meaning they start and end in Ventura County, but do not leave the County. The remaining approximate 260,000 daily trips (14%) are cross-border trips, or trips that cross the Ventura County border but originate or end inside Ventura County. A breakdown of the location of inbound or outbound trips originating or ending in Ventura County is shown in Table 7.1 below.

Due to the geography of the county and existing freeway network, Ventura County is susceptible to pass-through traffic, or trips that originate and end outside of the County but also enter and exit the County at some point. According to the 101 Communities Connected Study there are approximately 18,000 daily trips pass-through on the 101 Corridor between Los Angeles and Santa Barbara County. In 2019, for the 376,849 commuters in Ventura County only, 296,273 (79%) live and work within the county boundaries, while 68,409 (18%) commute to Los Angeles County, and the remaining 12,167 (3%) commute to Santa Barbara County.

**Table 7.1: Daily Inbound or Outbound Trips to/from Ventura County**

ADJACENT LOCATION	INBOUND/OUTBOUND TRIPS
Downtown & Central Los Angeles Area	28,500
Northern Los Angeles County Area	4,100
San Fernando Valley Area	89,900
Santa Clarita Area	13,500
Westlake - Santa Monica Mountain Area	62,000
South-East Los Angeles County Area	21,900
Santa Barbara County	27,700
Other External	12,200
<b>Total</b>	<b>259,800</b>

The following table highlights existing and projected total, internal, and external trips for all cities and the combined unincorporated area in Ventura County. The table shows the top three external destinations for each city and the incorporated community based upon VCTM 2016 and 2040 OD data. Due to the slight difference in inbound-to-outbound and outbound-to-inbound data, trips are approximated. Cities with the highest rates of internal trips in 2016 are Ventura (62%), Simi Valley (61%), Thousand Oaks (60%), and Oxnard (60%). Cities projected with the highest rates of internal trips in 2040 will be Simi Valley (65%), Ventura (62%), and Thousand Oaks (62%). Cities/communities with the greatest trip growth percentage in Ventura County are Santa Paula (47%), Fillmore (39%), and Port Hueneme (26%).



**Table 7.2: 2016 City and Unincorporated Community Internal and External Daily Trips**

CITY	TOTAL TRIPS	INTERNAL TRIPS	TOP EXTERNAL DESTINATION	2 <sup>ND</sup> EXTERNAL DESTINATION	3 <sup>RD</sup> EXTERNAL DESTINATION	TO LA COUNTY	TO SB COUNTY
Camarillo	179,400	89,900 (50%)	Oxnard (22,300)	Thousand Oaks (17,700)	Unincorporated (14,800)	10,300	2,000
Fillmore	28,800	15,100 (52%)	Santa Clarita Area (1,500)	Santa Paula (1,400)	Ventura (1,400)	3,900	100
Moorpark	83,000	34,600 (42%)	Simi Valley (12,400)	Thousand Oaks (10,300)	San Fernando Valley (4,500)	10,100	200
Ojai	30,400	16,200 (53%)	Unincorporated (9,400)	Ventura (1,700)	Oxnard (900)	700	500
Oxnard	441,400	265,300 (60%)	Ventura (55,900)	Camarillo (22,500)	Port Hueneme (18,500)	15,000	4,100
Port Hueneme	40,700	8,900 (21%)	Oxnard (18,800)	Ventura (4,500)	Camarillo (1,700)	1,600	500
Ventura	340,000	209,300 (62%)	Oxnard (56,000)	Unincorporated (21,900)	Camarillo (9,300)	9,100	9,600
Santa Paula	55,000	32,500 (59%)	Ventura (5,900)	Unincorporated (3,400)	Oxnard (3,000)	2,600	2,100
Simi Valley	324,600	199,200 (61%)	San Fernando Valley (40,900)	Thousand Oaks (21,000)	Moorpark (13,400)	69,400	800
Thousand Oaks	396,600	238,600 (60%)	Westlake-Santa Monica (30,400)	Simi Valley (21,000)	San Fernando Valley (18,800)	64,300	1,300
Unincorporated Ventura County	189,400	36,300 (19%)	Oxnard (31,100)	Ventura (22,200)	Thousand Oaks (17,400)	30,100	5,900

**Table 7.3: 2040 Projected City and Unincorporated Community Internal and External Daily Trips**

CITY	TOTAL TRIPS	INTERNAL TRIPS	TOP EXTERNAL DESTINATION	2 <sup>ND</sup> EXTERNAL DESTINATION	3 <sup>RD</sup> EXTERNAL DESTINATION	TO LA COUNTY	TO SB COUNTY
Camarillo	212,900 (+18%)	109,200 (51%)	Oxnard (26,600)	Unincorporated (20,000)	Thousand Oaks (19,400)	10,700	2,200
Fillmore	40,100 (+39%)	20,800 (52%)	Santa Paula (2,200)	Ventura (1,900)	Simi Valley (1,700)	5,400	200
Moorpark	94,200 (+13%)	40,400 (43%)	Simi Valley (14,300)	Thousand Oaks (12,100)	San Fernando Valley (4,500)	10,300	200
Ojai	34,400 (+13%)	19,100 (56%)	Unincorporated (10,400)	Ventura (1,700)	Oxnard (900)	600	500
Oxnard	486,200 (+10%)	284,500 (59%)	Ventura (61,200)	Camarillo (26,300)	Port Hueneme (23,700)	16,200	5,100
Port Hueneme	51,100 (+26%)	12,100 (24%)	Oxnard (23,900)	Ventura (5,000)	Camarillo (2,200)	1,600	700
Ventura	387,000 (+14%)	241,400 (62%)	Oxnard (62,900)	Unincorporated (25,500)	Camarillo (9,900)	8,900	9,500
Santa Paula	80,700 (+47%)	49,400 (61%)	Ventura (8,600)	Unincorporated (4,900)	Oxnard (3,600)	3,700	2,600
Simi Valley	371,500 (+14%)	242,700 (65%)	San Fernando Valley (36,400)	Thousand Oaks (23,600)	Moorpark (15,500)	66,100	900
Thousand Oaks	452,100 (+14%)	280,600 (62%)	Westlake-Santa Monica (28,600)	Simi Valley (23,800)	Camarillo (19,700)	63,900	1,400
Unincorporated Ventura County	224,400 (+18%)	45,900 (20%)	Oxnard (36,400)	Ventura (25,800)	Thousand Oaks (20,700)	31,800	6,900

## 7.2 Transit

### 7.2.1 Existing Transit Services

Eleven transit operators provide transit service within Ventura County. These operators include Amtrak, Metrolink, VCTC Intercity, Gold Coast Transit District, Camarillo Area Transit (CAT), Kanan Shuttle, Ojai Trolley, Moorpark City Transit, Simi Valley Transit, Thousand Oaks Transit, and Valley Express (Figure 7.11).

#### ***Amtrak & Metrolink***

Amtrak and Metrolink provide intercity and commuter rail service between Los Angeles County and Ventura County. Amtrak operates intercity rail between San Luis Obispo, Los Angeles, and San Diego on its Pacific Surfliner line and between Seattle, Portland, Sacramento and Los Angeles via the Coast Starlight. Amtrak serves stations in Ventura, Oxnard, Camarillo, Moorpark and Simi Valley in Ventura County. Six northbound trains and six southbound trains operate daily on the Pacific Surfliner service.

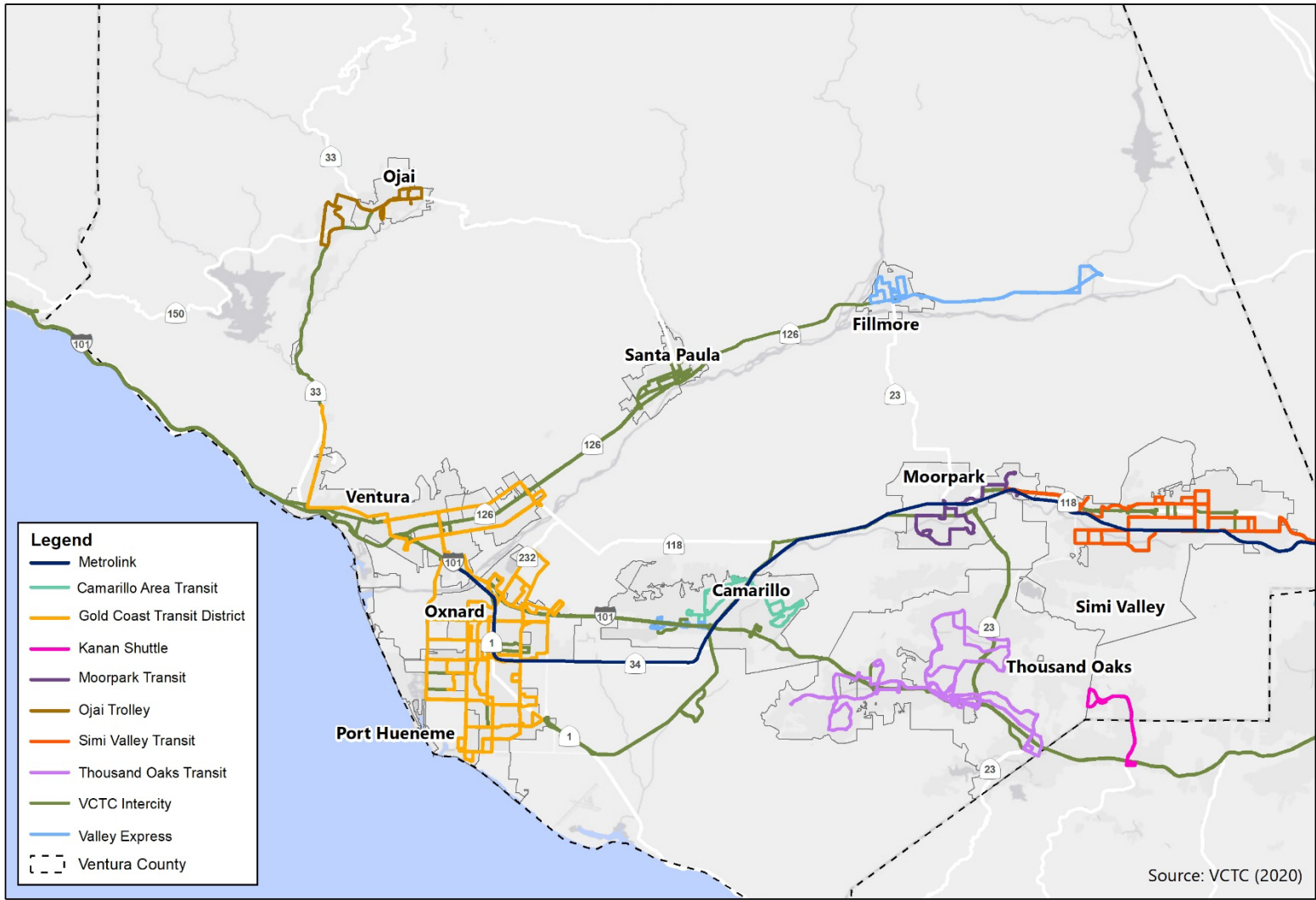
Metrolink operates seven lines of commuter rail service in the Los Angeles region, with the Ventura County Line stopping at five locations in Ventura County including East Ventura, Oxnard, Camarillo, Moorpark, and Simi Valley. Seven northbound trains and seven southbound trains operate Monday through Friday, of which five operate southbound in the morning, and five operate northbound in the evening. There is one AM southbound train and one PM northbound train on Saturdays.

#### ***VCTC Intercity***

VCTC Intercity bus service is operated by the Ventura County Transportation Commission. VCTC Intercity is a fixed route inter-city bus network that operates primarily within Ventura County, but also provides service between Los Angeles, Thousand Oaks, Simi Valley, Moorpark, Santa Paula, Ventura, Fillmore, Piru, Carpinteria, Santa Barbara, and Goleta.

VCTC Intercity offers six fixed route transit connections throughout its service area, including the Highway 101 Routes (Routes 50-52X), the Highway 126 Routes (Routes 60-62), the East County Routes (Routes 70-73X), the Cross-County Limited (Route 77), the Coastal Express (Routes 80-89), and the Channel Islands Route (Routes 90-99). The VCTC Intercity routes are included in Figure 7.11 and Table 7.4 provides additional details on the geographic extents, key stops made along the way, and the hours of operation for each of the VCTC Intercity routes.

Figure 7.11 Ventura County Existing Transit Network



## Existing Transit Network

VCTC Comprehensive Transportation Plan



**Table 7.4 VCTC Intercity Route Descriptions**

ROUTE ID	ROUTE #	SERVICE TO	KEY STOPS ALONG THE WAY	HOURS OF OPERATION	
				MONDAY – FRIDAY	SATURDAY – SUNDAY
Coastal Express	Routes 50-52	Oxnard – Santa Barbara County	<ul style="list-style-type: none"> <li>• Oxnard</li> <li>• Ventura</li> <li>• Carpinteria</li> <li>• Santa Barbara</li> <li>• Goleta</li> <li>• UC Santa Barbara</li> </ul>	5 A.M. – 9 P.M.	7:30 A.M. – 8 P.M.
Cross County Limited	Routes 80-89	Ventura – Simi Valley	<ul style="list-style-type: none"> <li>• Ventura</li> <li>• Oxnard</li> <li>• Camarillo</li> <li>• Moorpark</li> <li>• Simi Valley</li> </ul>	6 A.M. – 9:30 P.M.	No weekend service offered
Highway 101/ Conejo	Routes 50-55	Ventura – Warner Center	<ul style="list-style-type: none"> <li>• Ventura</li> <li>• Oxnard</li> <li>• Camarillo</li> <li>• Newbury Park</li> <li>• Thousand Oaks</li> <li>• Warner Center</li> </ul>	7 A.M. – 7 P.M.	7 A.M. – 7 P.M. <i>*No Sunday service offered</i>
East County	Routes 70-73X	Simi Valley – Thousand Oaks	<ul style="list-style-type: none"> <li>• Simi Valley</li> <li>• Moorpark</li> <li>• Thousand Oaks</li> </ul>	9 A.M. – 5 P.M.	No weekend service offered
Channel Islands	Routes 90-99	Oxnard – Camarillo	<ul style="list-style-type: none"> <li>• Oxnard</li> <li>• Cal State Channel Islands (CSUCI)</li> <li>• Camarillo</li> </ul>	7 A.M. – 6:20 P.M.	No weekend service offered
Highway 126	Routes 60-62	Fillmore – Ventura	<ul style="list-style-type: none"> <li>• Fillmore</li> <li>• Santa Paula</li> <li>• Saticoy</li> <li>• Ventura</li> </ul>	7 A.M. – 7:30 P.M.	8 A.M. – 6 P.M.

**Gold Coast Transit District**

The Gold Coast Transit District (GCTD) operates 18 fixed-route lines in Ojai, Oxnard, Port Hueneme, Ventura, and in the unincorporated area between these cities. Major transfer points offered along these routes include the Oxnard Transit Center, Ventura Transfer Center, the Esplanade, the “C” Street Transfer Center, St. John’s Regional Medical Center, the Ventura County Government Center, and the Wells Center. Figure 7.11 provides a summary of locations for each of the routes and Table 7.5 provides additional details on the geographic extents, key stops along the routes, and the hours of operation for each of the Gold Coast Transit District routes. In addition to transit operations, GCTD recently developed the Building Transit Supportive Communities Plan, which identified 14 “transit focus areas” to support GCTD’s future long range planning efforts. These focus areas are intended to be used to facilitate quality public transportation, active transportation and connectivity to transit, and improve air quality in GCTD communities. A Bus Stop Improvement Plan is also in progress to enhance the transit services listed below.

**Table 7.5 Gold Coast Transit District Route Descriptions**

ROUTE ID	ROUTE #	KEY STOPS ALONG THE WAY	HOURS OF OPERATION	
			MONDAY – FRIDAY	SATURDAY – SUNDAY
Port Hueneme – OTC	1	<ul style="list-style-type: none"> <li>Oxnard Transit Center</li> <li>C Street Transit Center</li> <li>Port Hueneme City Hall</li> </ul>	4:45 A.M. – 10 P.M.	6 A.M. – 10 P.M.
Colonia – Downtown Oxnard	2	<ul style="list-style-type: none"> <li>Oxnard Transit Center</li> <li>Multi-Service Center</li> <li>St. Lucia Ave</li> </ul>	5:20 A.M. – 7:40 P.M.	5:20 A.M. – 7:40 P.M.
J Street – Centerpoint Mall – Lemonwood	3	<ul style="list-style-type: none"> <li>Oxnard Transit Center</li> <li>C Street Transfer Center</li> <li>Channel Islands High School</li> </ul>	5:35 A.M. – 8:11 P.M.	5:35 A.M. – 8:11 P.M.
North Oxnard	4	<ul style="list-style-type: none"> <li>Oxnard Transit Center</li> <li>Sycamore Senior Apartments</li> <li>St. John’s Regional Medical Center</li> </ul>	6:10 A.M. – 8:00 P.M.	6:10 A.M. – 8:00 P.M.
Hemlock – Seabridge – Wooley	5	<ul style="list-style-type: none"> <li>Oxnard Transit Center</li> <li>Marina West School</li> </ul>	6:50 A.M. – 8:00 P.M.	6:50 A.M. – 8:00 P.M.
Oxnard – Ventura – Main St	6	<ul style="list-style-type: none"> <li>Oxnard Transit Center</li> <li>Esplanade Shopping Center</li> </ul>	4:50 A.M. – 10:15 P.M.	5:20 A.M. – 9:20 P.M.

ROUTE ID	ROUTE #	KEY STOPS ALONG THE WAY	HOURS OF OPERATION	
			MONDAY – FRIDAY	SATURDAY – SUNDAY
		<ul style="list-style-type: none"> <li>Veterans Services</li> <li>County Government Center</li> <li>Ventura College</li> <li>Ventura Transit Center</li> <li>Pacific View Mall</li> <li>Ventura High School</li> <li>Ventura City Hall</li> <li>San Buenaventura Mission</li> </ul>		
Oxnard College – Centerpoint Mall	7	<ul style="list-style-type: none"> <li>C Street Transfer Center</li> <li>Hueneme High School</li> <li>Pleasant Valley Shopping Center</li> <li>Oxnard College</li> </ul>	6:50 A.M. – 7:40 P.M.	6:50 A.M. – 7:40 P.M.
OTC – Oxnard College – Centerpoint Mall	8	<ul style="list-style-type: none"> <li>Oxnard Transit Center</li> <li>Veteran Affairs</li> <li>Channel Islands High School</li> <li>Oxnard College</li> <li>C Street Transfer Center</li> </ul>	6:35 A.M. – 7:45 P.M.	6:35 A.M. – 7:45 P.M.
Pacific View Mall – Telephone – Saticoy	10	<ul style="list-style-type: none"> <li>Ventura Transit Center</li> <li>Ventura College</li> <li>Wells Center</li> </ul>	6:10 A.M. – 8:30 P.M.	6:10 A.M. – 8:30 P.M.
Pacific View Mall – Telephone – Wells Center	11	<ul style="list-style-type: none"> <li>Wells Center</li> <li>County Government Center</li> <li>Ventura Transit Center</li> </ul>	6:00 A.M. – 8:40 P.M.	6:00 A.M. – 8:40 P.M.
Esplanade – El Rio – St. John's	15	<ul style="list-style-type: none"> <li>Esplanade</li> <li>Rio Vista Middle School</li> <li>St. John's Regional Medical Center</li> </ul>	8:18 A.M. – 6:33 P.M.	8:18 A.M. – 6:33 P.M.



ROUTE ID	ROUTE #	KEY STOPS ALONG THE WAY	HOURS OF OPERATION	
			MONDAY – FRIDAY	SATURDAY – SUNDAY
		<ul style="list-style-type: none"> <li>Gold Coast Transit District Office</li> </ul>		
Downtown Ojai – Pacific View Mall	16	<ul style="list-style-type: none"> <li>Ventura Transit Center</li> <li>Community Memorial Hospital</li> <li>San Buenaventura Mission</li> <li>Ojai Valley Community Hospital</li> </ul>	6:00 A.M. – 7:53 P.M.	6:00 A.M. – 7:53 P.M.
Esplanade – St. John's – Oxnard College	17	<ul style="list-style-type: none"> <li>St. John's Regional Medical Center</li> <li>Oxnard College</li> </ul>	7:15 A.M. – 8:30 P.M.	7:15 A.M. – 8:30 P.M.
Pacific View Mall – Victoria Ave – C Street Transfer Center	21	<ul style="list-style-type: none"> <li>C Street Transit Center</li> <li>Sheabridge Shopping Center</li> <li>Veterans Services</li> <li>County Government Center</li> <li>Ventura College</li> <li>Pacific View Mall</li> </ul>	6:15 A.M. – 8:40 P.M.	6:15 A.M. – 8:40 P.M.
Oxnard College – Naval Base - Esplanade	23	<ul style="list-style-type: none"> <li>Esplanade</li> <li>Fremont Square</li> <li>Hueneme Bay Shopping Center</li> <li>Port Hueneme City Hall</li> <li>Oxnard College</li> <li>Naval Base Ventura County-Port Hueneme</li> <li>Port of Hueneme?</li> </ul>	6:40 A.M. – 8:15 P.M.	6:40 A.M. – 8:15 P.M.

### ***Camarillo Area Transit***

The CAT operates one fixed route and one trolley within the City of Camarillo. The fixed route operates Monday through Friday from 8 A.M. until 4:30 P.M. The trolley operates seven days a week from 10 A.M. until 6 P.M., with extended Friday and Saturday service until 10 P.M. The CAT stops at the Camarillo Metrolink Station, where travelers can catch a connection to Metrolink and select VCTC Intercity routes including Highway 101/ Conejo and the CSUCI Camarillo routes. Major destinations along the CAT fixed route and Trolley route include the St.

John's Hospital Camarillo, Community Center, Ponderosa Plaza, Village Square, Mission Oaks Plaza, and Santa Rosa Plaza. The two CAT routes are included in Figure 7.11.

### ***Kanan Shuttle***

The Kanan Shuttle is a fixed-route service that provides free connections to neighborhood schools and residential areas near Kanan Road in Oak Park. The shuttle operates Monday through Friday from 6:40 A.M. to 6:30 P.M. Destinations served include Oak Park High School, Medea Creek Middle School, and Thousand Oaks Boulevard & Kanan Road. Travelers can also make connections to Metro Route 161 and LADOT Commuter Express buses at the Thousand Oaks Boulevard, Canwood Road, and Roadside Drive bus stops along the route. The Kanan Shuttle route is reflected in Figure 7.11.

### ***Ojai Trolley***

The City of Ojai offers two fixed-route trolley lines through the City of Ojai. Trolley line A operates Monday through Friday from 5:30 A.M. to 9:30 P.M. and trolley line B operates on Saturdays from 6 A.M. until 8:30 P.M. and on Sundays from 7 A.M. until 8:30 P.M. Destinations served include Vons Shopping Center and the Ojai Park-and-Ride. Travelers can also make connections to Gold Coast Transit District route 16. The two Ojai Trolley routes are reflected in Figure 7.11.

### ***Moorpark City Transit***

Moorpark City Transit operates two fixed routes through the City of Moorpark on Monday through Friday from 5 A.M. until 8 P.M., with one route operating on Saturday from 8 A.M. until 5 P.M. Major destinations along the fixed routes include Moorpark College, City Hall, Moorpark Town Center, Moorpark Marketplace, Moorpark Plaza, Moorpark Village Center, and Mission Bell Plaza. In addition, travelers can connect to Metrolink, Amtrak, VCTC Intercity East County route, and the Metrolink Commuter Shuttle at the Moorpark Metrolink Station. The two Moorpark City Transit routes are reflected in Figure 7.11.

### ***Simi Valley Transit***

Simi Valley Transit operates four fixed routes primarily through the City of Simi Valley on Monday through Saturday from 5 A.M. to 8 P.M. Simi Valley Transit also operates a commuter route to the San Fernando Valley community of Chatsworth. Connections are provided to LA Metro at the Simi Valley and Chatsworth Metrolink Stations. Riders can also connect to the VCTC Intercity East County route at the Simi Valley Town Center Mall. Along with these transfer centers, other destinations served include the Simi Valley Senior Citizens center and the Ronald Reagan Presidential Library. The four Simi Valley Transit routes are included in Figure 7.11 and Table 7.6 provides additional details on the geographic extents and the hours of operation for each of the Simi Valley Transit routes.

**Table 7.6 Simi Valley Transit Route Descriptions**

ROUTE ID	HOURS OF OPERATION
	Monday - Saturday
Route A	5:20 A.M. – 7:35 P.M.
Route B	5:15 A.M. – 7:15 P.M.
Route C	5:50 A.M. – 7 P.M.
Route D	5:17 A.M. – 7:45 P.M.

***Thousand Oaks Transit***

Thousand Oaks Transit operates five fixed routes that operate primarily within the City of Thousand Oaks, with an extension to the City of Moorpark via the Metrolink Commuter Shuttle (Monday through Friday, 5:15 A.M. – 8:30 P.M.). Major transfer points along the four fixed routes include the Thousand Oaks Transit Center and the Oaks Mall. The five Thousand Oaks transit routes are reflected in Figure 7.11 and Table 7.7 provides additional details on the geographic extents and the hours of operation for each of the Gold Coast Transit District routes.

**Table 7.7 Thousand Oaks Transit Route Descriptions**

ROUTE ID	ROUTE #	HOURS OF OPERATION	
		MONDAY – FRIDAY	SATURDAY – SUNDAY
Newbury Park	40	6 A.M. – 7:50 P.M.	8 A.M. – 6:50 P.M.
Midtown A	41	6 A.M. – 7:50 P.M.	8 A.M. – 6:45 P.M.
Midtown B	42	6 A.M. – 7:50 P.M.	8 A.M. – 6:50 P.M.
TOB Express	43	6 A.M. – 7:50 P.M.	8 A.M. – 6:50 P.M.
Crosstown	44	6:10 A.M. – 8 P.M.	8:10 A.M. – 6:50 P.M.

***Valley Express***

Valley Express operates fixed route, ADA-paratransit, and general public dial-a-ride service throughout the Heritage Valley in Ventura County. The Valley Express consists of six service routes operating within the cities of Santa Paula, Fillmore, and the community of Piru. During the school year, Valley Express also operates additional tripper service. The Valley Express fixed route service was implemented in March 2015, with the intention to reduce the level of Dial-A-Ride service by providing improved coverage and regular 30-minute service on weekdays and weekends. Each Valley Express route is scheduled to make timed connections with VCTC Intercity Route 126. The Valley Express routes are reflected in Figure 7.11 and Table 7.8 provides additional details on the geographic extents and the hours of operation for each of the Valley Express routes.

**Table 7.8 Valley Express Route Descriptions**

ROUTE ID	HOURS OF OPERATION	
	MONDAY – FRIDAY	SATURDAY – SUNDAY
Santa Paula Route A	7:50 A.M. – 3:00 P.M.	10:30 A.M. – 4:15 P.M.
Santa Paula Route B	6:30 A.M. – 10:52 P.M.	9:50 A.M. – 11:45 P.M.
Santa Paul Tripper	<i>Temporarily Closed</i>	
Fillmore Route	7:00 A.M. – 4:30 P.M.	No Weekend Service
Fillmore Rio Vista Tripper	<i>Temporarily Closed</i>	
Piru Route	6:15 A.M. – 7:45 P.M.	8 A.M. – 5:45 P.M.

## 7.2.2 Ridership/Performance Metrics

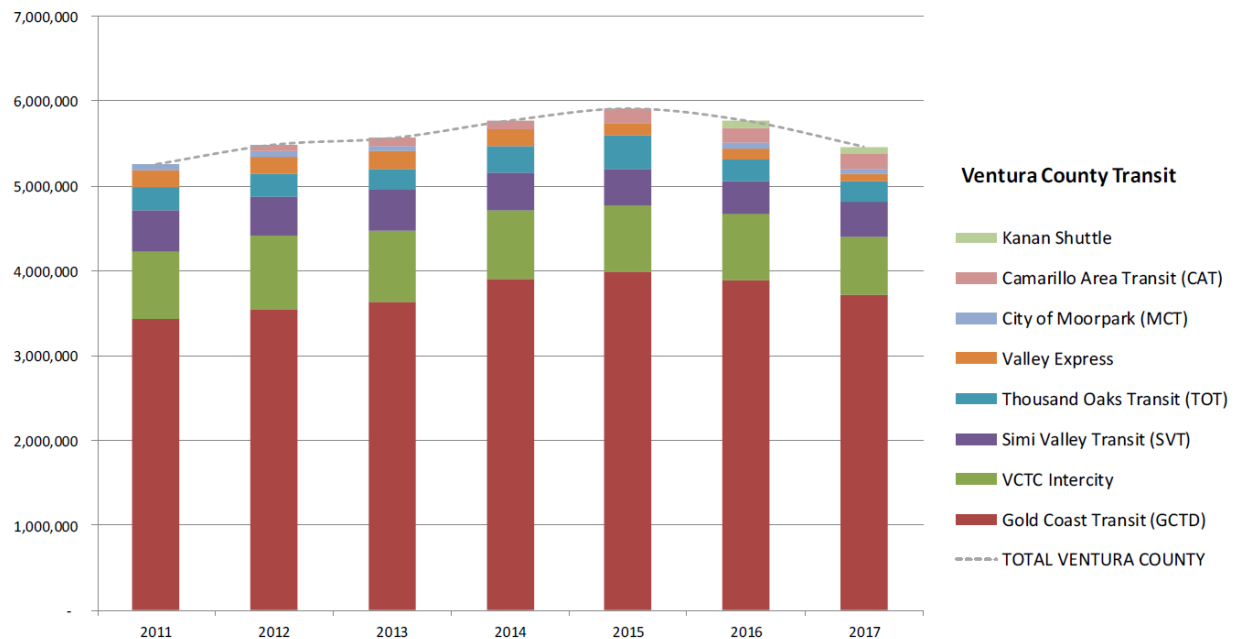
VCTC publishes a quarterly ridership and performance measures quarterly report. The report provides performance measure data to evaluate key elements regarding planning transit service as an objective basis for sound decision making. VCTC's key performance indicators include ridership, passengers per service hour, service cost per passenger, farebox recovery ratio, customer satisfaction, and road calls per 200,000 revenue miles. Data shown in this report is from fiscal year 2018/2019.

### Ridership

Ventura County transit use peaked in 2015, with steady decline through 2017 (Figure 7.12). Ventura County transit is driven primarily by GCTD and VCTC intercity services, followed by Simi Valley Transit and Thousand Oaks Transit. Gold Coast Transit accounts for the highest share of ridership in the county, at approximately 75% of all trips. In 2015, Ventura County ridership peaked at just under 6 million transit trips, with almost 800,000 as VCTC Intercity trips. The most recent recorded year saw less than 5.5 million transit trips, and VCTC Intercity trips accounting for just over 700,000.

Annual declines are not unique to VCTC, but followed a general trend experienced nationwide in transit ridership. The decline in public transit use has been largely attributed in increased rates of car ownership and lower gas prices before 2020, and the pandemic and subsequent California stay-at-home orders at the beginning of 2020.

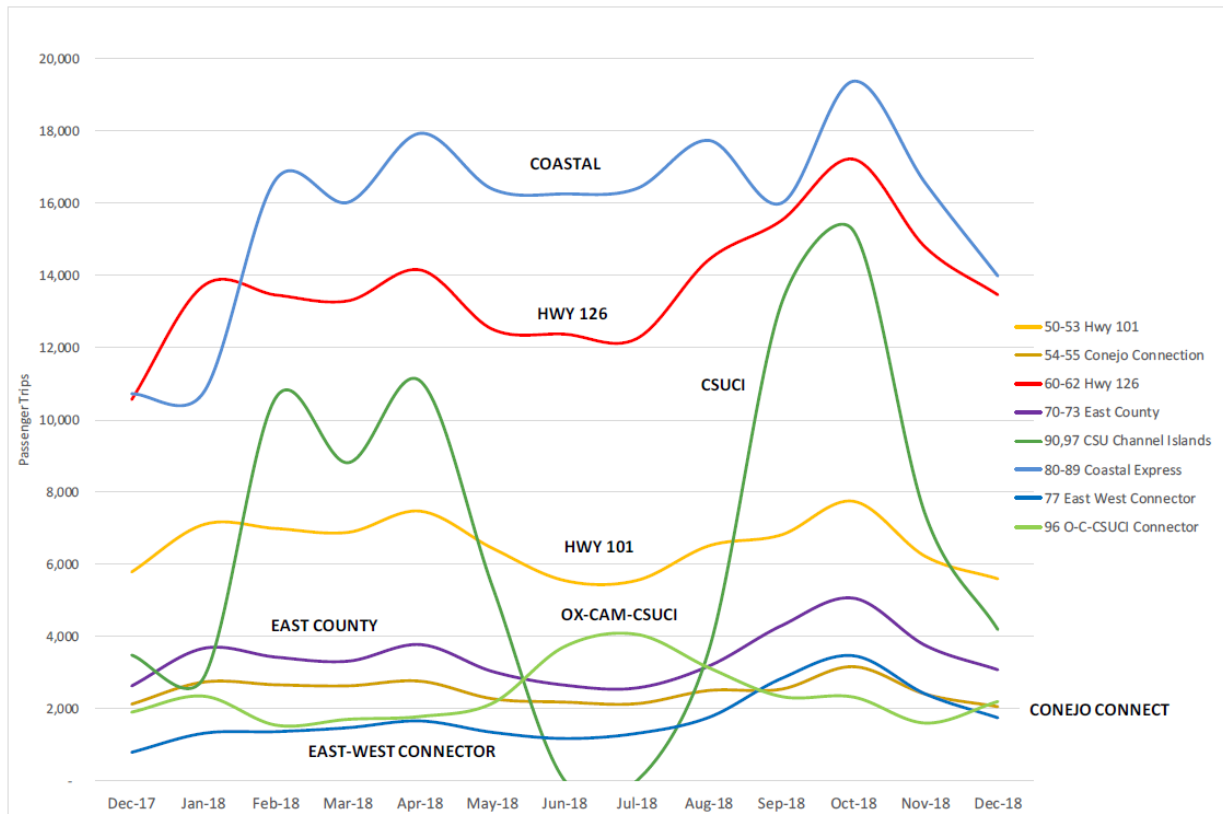
**Figure 7.12 Ventura County Transit Ridership (2011-2017)**



Source: VCTC Transit Ridership and Performance Measures Quarterly Report, FY18/19 Q2

VCTC's intercity line ridership varies per service routes, with Coastal Express Routes 80-89 performing the best, followed by Hwy 126 Routes 60-62. The following figure shows VCTC ridership by service route for a twelve-month period in 2018. The notable drop in ridership in the summer of 2018 is attributed to wildfire and mudslides in the region that occurred in January 2018. The notable drop during the summer months for the 90, 97 CSU Channel Island Routes among other routes is attributed to school being out of session.

**Figure 7.13 VCTC Intercity Service Ridership**



Source: VCTC Transit Ridership and Performance Measures Quarterly Report, FY18/19 Q2

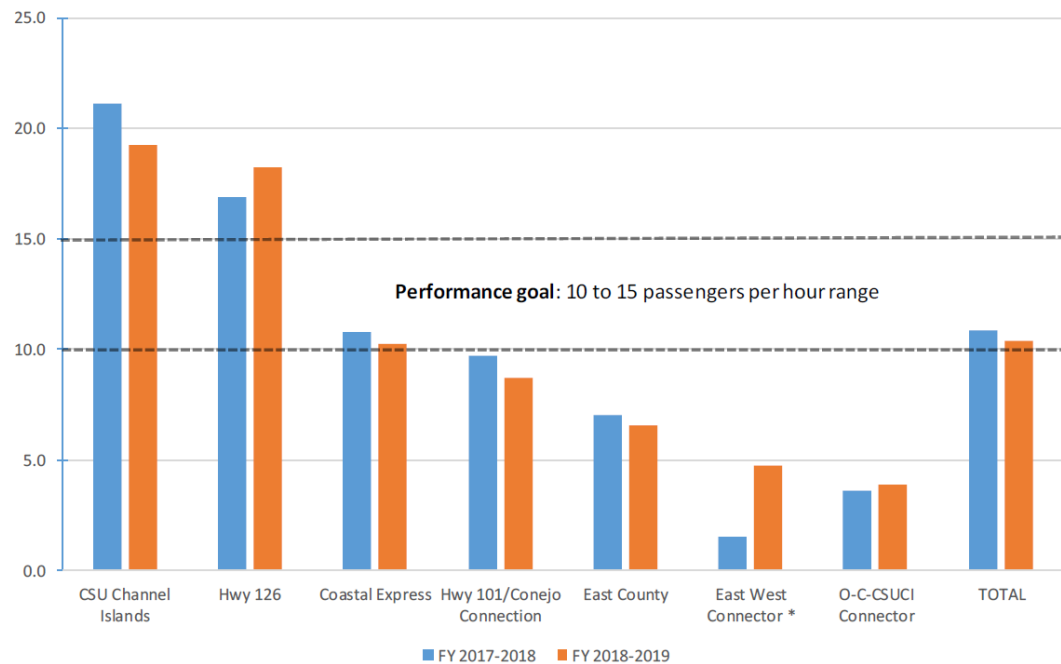
The performance metric for daily ridership has the standard/goal for increased passengers quarter over quarter.

### Passengers per Service Hour

The standard/goal for passengers per service hour is 10 passengers per hour for 'trunk' routes and 15 passengers per hour for 'commuter routes'. Trunk routes are designed to connect cities via freeways and arterials with few stops. Commuter routes are peak period services connecting to employment centers with few stops and longer distances.

Figure 7.14 shows passengers per service hour for VCTC intercity service routes.

**Figure 7.14 Passengers Per Service Hour**

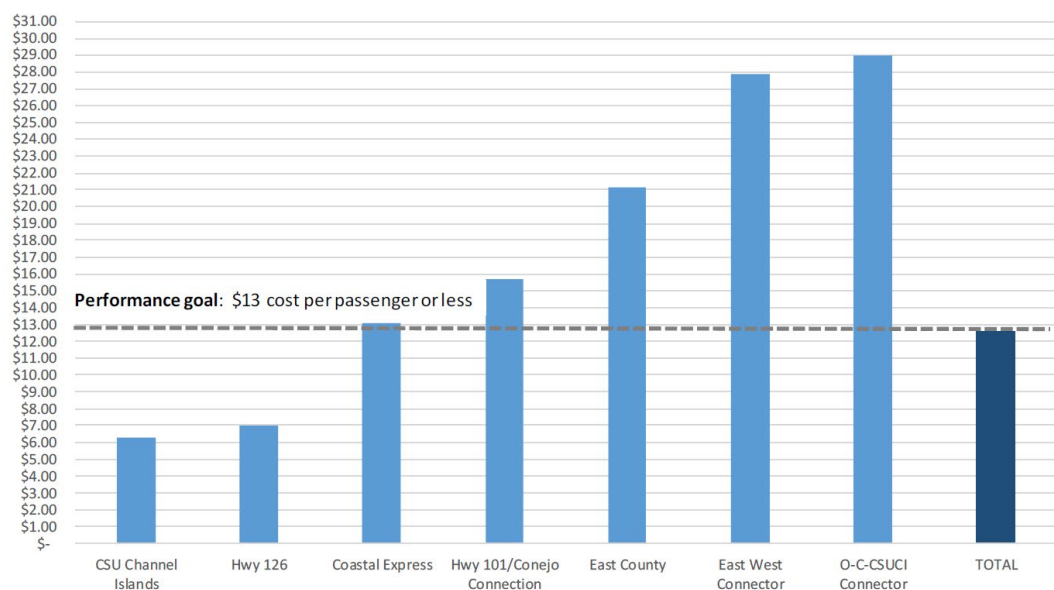


Source: VCTC Transit Ridership and Performance Measures Quarterly Report, FY18/19 Q2

### Service Cost per Passenger

The standard/goal for service cost per passenger for 2018 is less than \$13.00. This figure is adjusted annually according to CPI. Figure 7.15 shows service cost per passenger for VCTC intercity service routes for 2018.

**Figure 7.15 Service Cost Per Passenger**



Source: VCTC Transit Ridership and Performance Measures Quarterly Report, FY18/19 Q2



***Farebox Recovery Ratio***

Farebox recovery ratio is a ratio of passenger fares and other locally generated revenues divided by operating costs. Revenue typically includes passenger fares but may also include sale tax revenues, assessment fees, bond proceeds, and other sources. A minimum 20% farebox recovery ratio is required by the Transportation Development Act (TDA) for designated 'urban' transit agencies, such as VCTC.

VCTC's standard/goals for farebox recovery ratio is 25%. For the 2<sup>nd</sup> Quarter of the 2018/2019 fiscal year, VCTC has a farebox recovery ratio of 27% including route guarantees of \$350,750 in locally generated fees from SBCAG and CSUCI but excluding Ox-Cam-CSUCI and East West demo routes.

***Customer Satisfaction***

The standard/goal for customer satisfaction is not to exceed 10 valid complaints per 100,000 boarded passengers. FY2018/2019 totaled 10.66 complaints per 100,000 passengers. 41% of the 17 total valid complaints in the fiscal year second quarter were driver complaint related. Other complaints related to scheduling and routing (29%), vehicle complaint (18%), and equipment (12%).

***Maintenance Reliability and Safety***

The standard/goal for maintenance reliability is not to exceed 10 road calls per 200,000 revenue miles. FY2018/2019 totaled six road calls per 200,000 revenue miles. Calls related to mechanical failures, flat tires, and wheelchair lift malfunctions.

The standard/goal for safety is one or less injury/preventable accidents per 100,000 miles. In the second quarter of fiscal year 2018/2019, VCTC recorded two preventable accidents per 100,000 revenue miles.

**7.2.3 High-Demand Routes and Stops**

Transit Station data is presented for four of the service providers in Ventura County, including VCTC Intercity, Camarillo Area Transit (CAT), Thousand Oaks Transit (TOT), and the Gold Coast Transit District (GCTC).

***VCTC Intercity***

VCTC Intercity offers seven fixed route transit connections throughout its service area. The highest ridership was observed along the Channel Islands Route (Route 97), with the Camarillo Metrolink Station and the CSU Channel Islands stops receiving the highest number of daily weekday boardings. The Camarillo Metrolink Station receives a total of 178 daily boardings, while the CSU Channel Islands stop receives a total of 165 daily boardings. The Highway 126 Route (Route 60) also receives significant ridership, with the Fillmore Active Adult Center and Santa Paula City Hall stops receiving the highest number of daily weekday boardings. The Fillmore Active Adult Center stop, located near the intersection of Santa Clara Street and Central Avenue, receives a total of 96 daily boardings and the Santa Paula City Hall stop receives a total of 92 daily boardings.

The Camarillo Metrolink Station receives significant ridership, as it services VCTC Intercity routes 50, 51, 52, 53, 54, 55, 77, 82, 86, 96, and 97. Cumulatively, this transit stop receives a total of 753 daily weekday boardings from all routes that stop here. The Ventura County Government Center also receives a high level of ridership, as this stop services nearly all VCTC

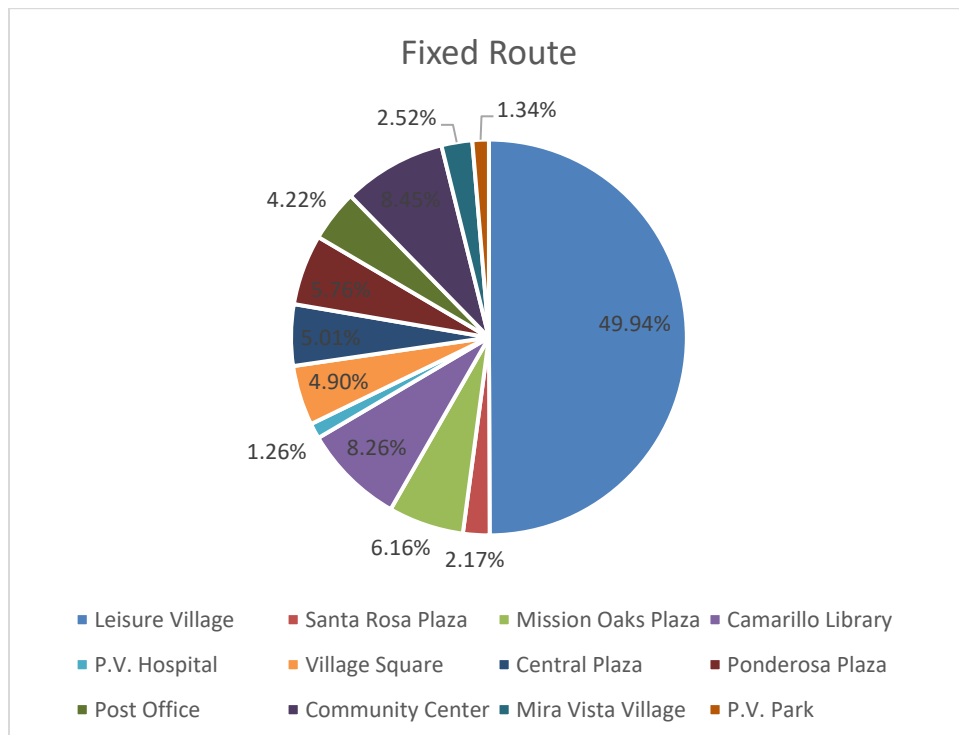
Intercity Routes. This stop receives a cumulative total of 234 daily weekday boardings from all transit routes.

### ***Camarillo Area Transit (CAT)***

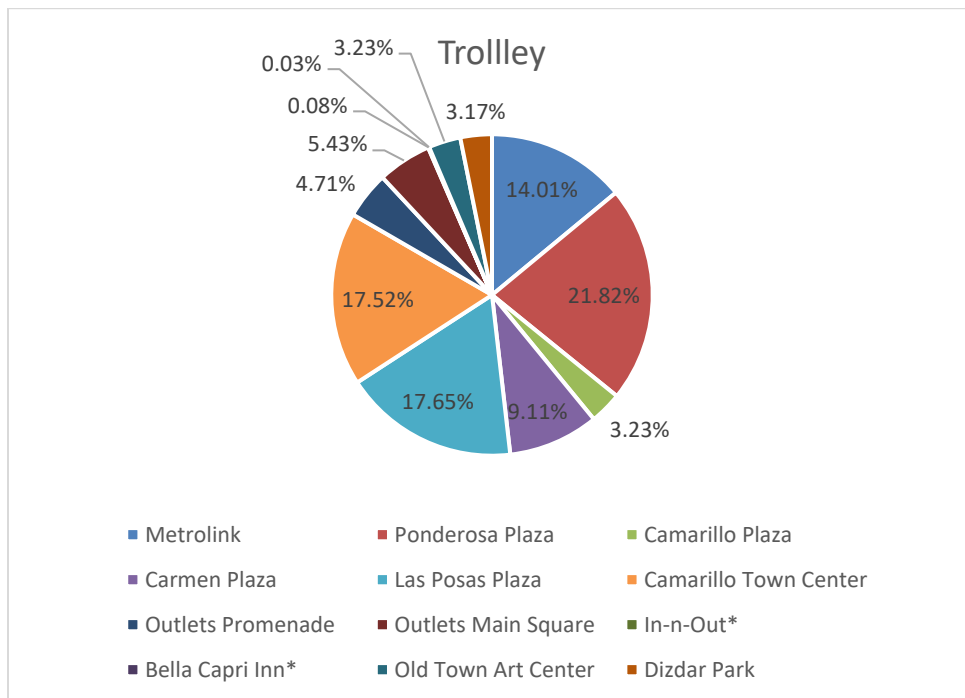
The CAT operates two transit routes, one fixed route and a trolley route. The Leisure Village stop, near the Highway 101 and SR 34 interchange, along the CAT fixed route received the highest number of boardings. Between October 2018 and October of 2019, this stop received 6,168 boardings or approximately 17 daily boardings. This stop accounts for approximately 50 percent of the CAT's fixed route ridership. The Community Center stop, located northeast of the Camarillo Outlets, also receives significant ridership, with 1,044 passengers boarding at this location during the 2018 to 2019 time frame, or approximately 3 boardings per day. This stop accounts for nearly 9 percent of the CAT's fixed route ridership. The P.V. Hospital stop receives the lowest ridership, with only 1.26 percent of passengers boarding the CAT fixed route at this location.

The Trolley route experiences higher ridership than the fixed route network. The Ponderosa Plaza stop, located off of Ponderosa Drive, receives the highest ridership, with 15,476 boardings between October 2018 and October of 2019 or approximately 43 daily boardings. This stop accounts for 22 percent of trips made via the trolley route. The Las Posas Plaza and Camarillo Town Center stops also indicate a high level of ridership, with approximately 18 percent of travelers boarding the trolley at these locations. Figures 7.16 and 7.17 reflect ridership per stop for the fixed route and trolley route between October 2018 and October 2019.

**Figure 7.16 CAT Fixed Route Ridership (October 2018-2019)**



**Figure 7.17 CAT Trolley Ridership (October 2018-2019)**



***Thousand Oaks Transit***

Thousand Oaks Transit operates five fixed routes that operate primarily within the City of Thousand Oaks. Ridership data from 2019 notes that “The Oaks” transit stop, located at the Oaks shopping mall, received the highest ridership with 1,112 daily weekday boardings. The City Transportation Center stop, located at the intersection of Haaland Drive and Rimrock Road received the second greatest number of transit boardings, with 48 passengers boarding a transit route daily. The lowest transit ridership was observed at the stop located at the intersection of Wilbur Road and Warwick Avenue. This transit stop received a total of two daily boardings.

***Gold Coast Transit District***

The Gold Coast Transit District operates 18 fixed-route lines in Ojai, Oxnard, Port Hueneme, Ventura, and in the unincorporated area between these Cities. For the month of October in 2019, the Oxnard Transit Center (OTC) stop, located at the intersection of 3<sup>rd</sup> Street and S Oxnard Boulevard, received the highest number of weekday boardings, with a total of 1,151 daily boardings. Similarly, the Ventura Transit Center (VTC) at Pacific View Mall receives the second highest weekday ridership, with a total of 1,004 boardings. These two stations combined accounted for over 16% of the transit district's 683 stations. Other stops with a high number of boardings are: C St Transfer Center, 4<sup>th</sup> Street and B Street, Main and Catalina, Rose and Bard, and Wells Center.

## 7.3 Active Transportation

### 7.3.1 Existing Infrastructure/Plans

The Ventura Countywide Bicycle Master Plan was developed in 2008 by VCTC and provided a blueprint for bicycle transportation and recreation in Ventura County. The Master Plan's intent was to maximize funding sources for the implementation of bicycle improvement projects, improve safety and encourage cycling, expand the network and support facilities, and enhance the quality of life in Ventura County. The Plan resulted in Caltrans-compliant bicycle transportation plan documents for all of the county's ten incorporated cities and unincorporated areas, qualifying each jurisdiction for bicycle transportation funding in order to implement projects.

At the time of the Plan, there were a total of 56.3 miles of Class I shared use paths, 250.8 miles of Class II bike lanes, and 55.6 miles of Class III bike routes countywide. Table 7.9 below breaks down the total mileage by bikeway type for each jurisdiction in the county. The Plan details a suitability analysis and needs analysis to connect gaps in the bikeway network, and recommends various programs and improvements, regarding bicycle parking and end-of-trip facilities, maintenance and construction, Safe Routes to School (SRTS) programs, and educational efforts to improve safety for bicyclists. The current bicycle network is presented in Figure 7.18. Class II bike lanes make up the majority of the bikeways in the county, especially in the more densely populated cities. The current bicycle network is fragmented and often concentrated within local jurisdictions with limited connections between different jurisdictions. There is an opportunity to extend these local bikeways regionally to provide a more complete and connected network for bicycle travel.

**Table 7.9 Total Bikeway Mileage by Jurisdiction**

JURISDICTION	CLASS I	CLASS II	CLASS III
Camarillo	0.9	22.7	10.9
Fillmore	3.9	0.7	0
Moorpark	1.6	19.5	0.6
Ojai	2.3	0	0
Oxnard	3.7	49.2	1
Port Hueneme	0	3	0
Ventura	20.7	46.9	16.6
Santa Paula	0.3	2.7	0
Simi Valley	8.4	32.9	8.8
Thousand Oaks	1.4	46.4	14.7
Unincorporated Areas	13.1	26.9	2.9
<b>Total Mileage</b>	<b>56.3</b>	<b>250.8</b>	<b>55.5</b>

Source: Ventura Countywide Bicycle Master Plan (2008)

Additionally, Ventura County Regional Bikeway Wayfinding Plan, developed by VCTC in 2017, identified 17 regional bicycle routes that provide regional connectivity in the county. It also prioritized locations for bicycle infrastructure improvements and developed a family of bicycle wayfinding signs and implementation plans to provide a consistent wayfinding experience for

bicyclists across the county. Figure 7.19 presents the proposed regional bikeway routes identified in the plan.

Various jurisdictions in the county have also developed their own active transportation plans. Table 7.10 presents the existing or current active transportation plans by jurisdiction.

**Table 7.10 Active Transportation Plans by Jurisdiction**

JURISDICTION	ACTIVE TRANSPORTATION PLAN STATUS
Camarillo	City of Camarillo Bikeway Master Plan (2017)
Fillmore	N/A
Moorpark	City of Moorpark Bicycle Transportation Plan (2008)
Ojai	Ojai Complete Streets Master Plan (2017)
Oxnard	City of Oxnard Bicycle & Pedestrian Facilities Master Plan (2011)
Port Hueneme	N/A
Ventura	City of Ventura Bicycle Master Plan (2011) Ventura Active Transportation Plan (in development as part of General Plan update)
Santa Paula	"Bicycle Mobility" Plan part of Santa Paula 2040 General Plan (2020)
Simi Valley	Simi Valley Bicycle Master Plan (2009)
Thousand Oaks	City of Thousand Oaks Active Transportation Plan (2019)

### 7.3.2 Collision and Safety Analysis

In addition to the provision of additional bicycle infrastructure, facilities must be safe and provide bicyclists protection from vehicle traffic. To provide an overview of existing and proposed active transportation in Ventura County, Figures 7.20 and 7.21 present the locations of pedestrian and bicycle collisions reported to the Statewide Integrated Traffic Records System (SWITRS) over the five-year period between 2014 and 2018. A high concentration of bicycle collisions appear in the cities of Ventura, Oxnard, Port Hueneme, Camarillo, Simi Valley, and Thousand Oaks. Additionally, instances of bicycle collisions line Pacific Coast Highway south of Point Mugu, as well as US 101 north of Port Hueneme and SR 33, and along Potrero Road. Pedestrian-involved collisions follow a similar pattern, with the highest numbers of collisions appearing in the gridded networks in Ventura and Oxnard. For comparison, auto collisions are highest along Pacific Coast Highway in Oxnard (Figure 7.22), followed by the US 101 corridor in Ventura, and the major corridors in Thousand Oaks and Simi Valley. Auto collision density is less prominent in the cities of Santa Paula, Fillmore, Ojai, and Moorpark.



Figure 7.18 Existing Bike Infrastructure

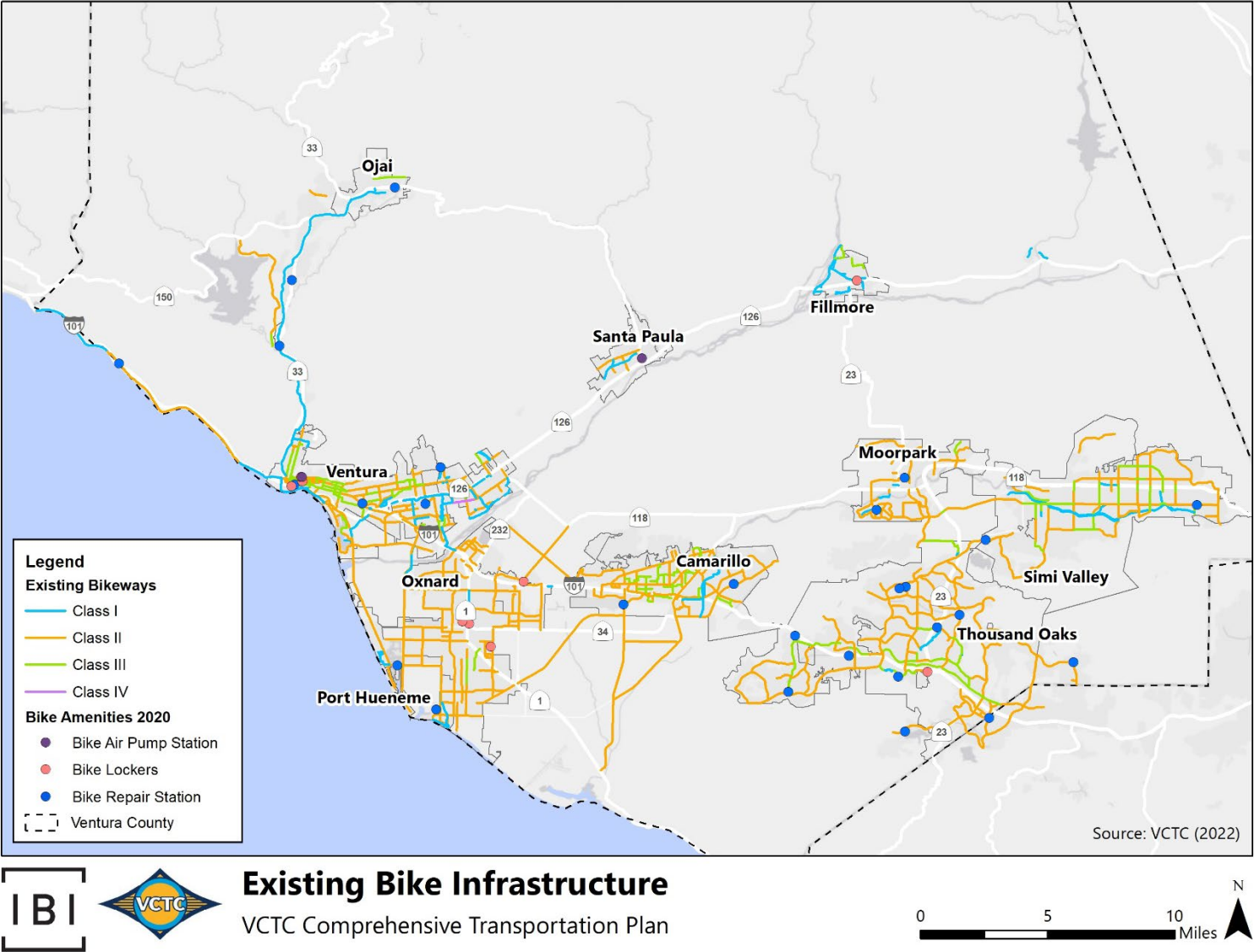
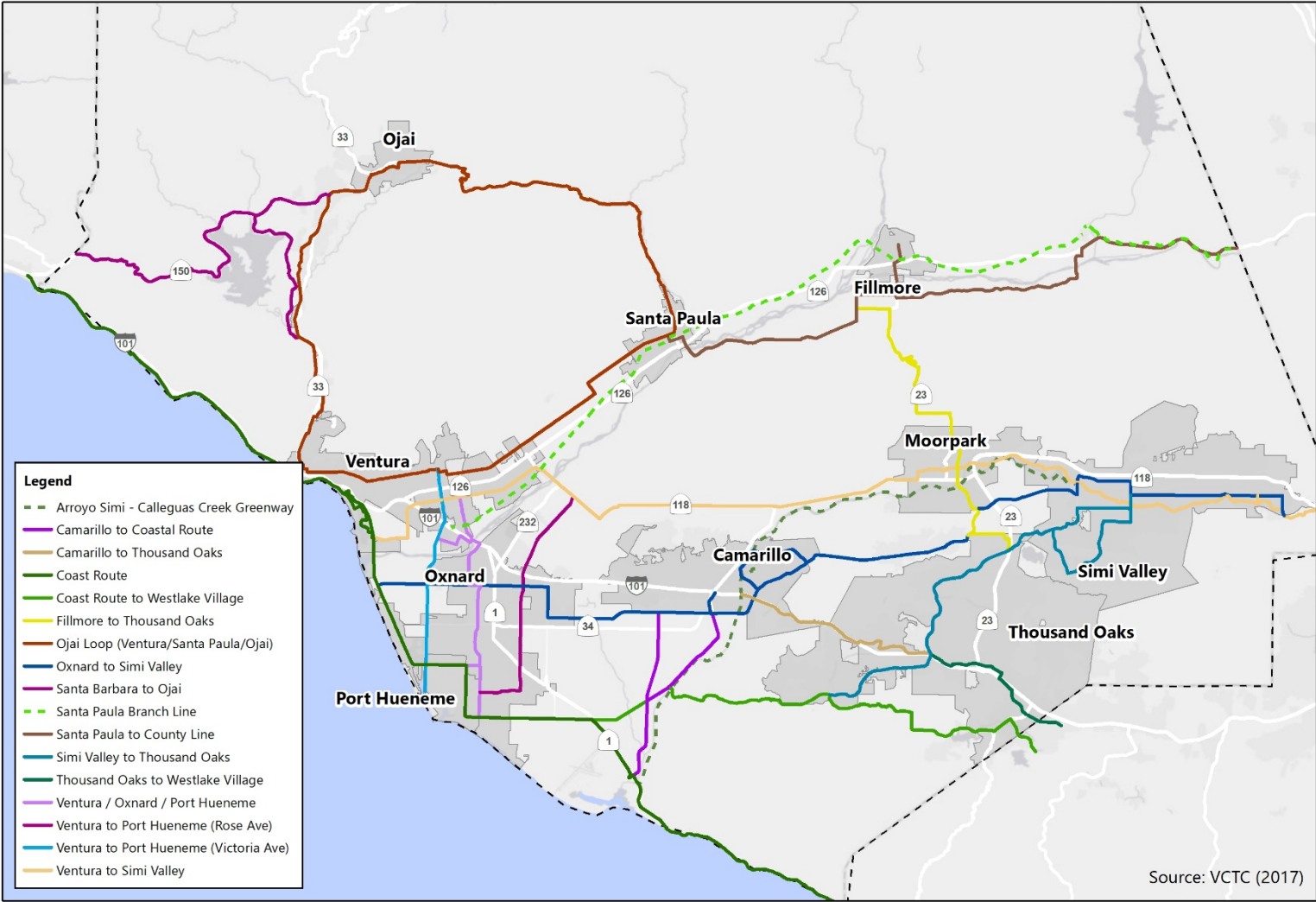


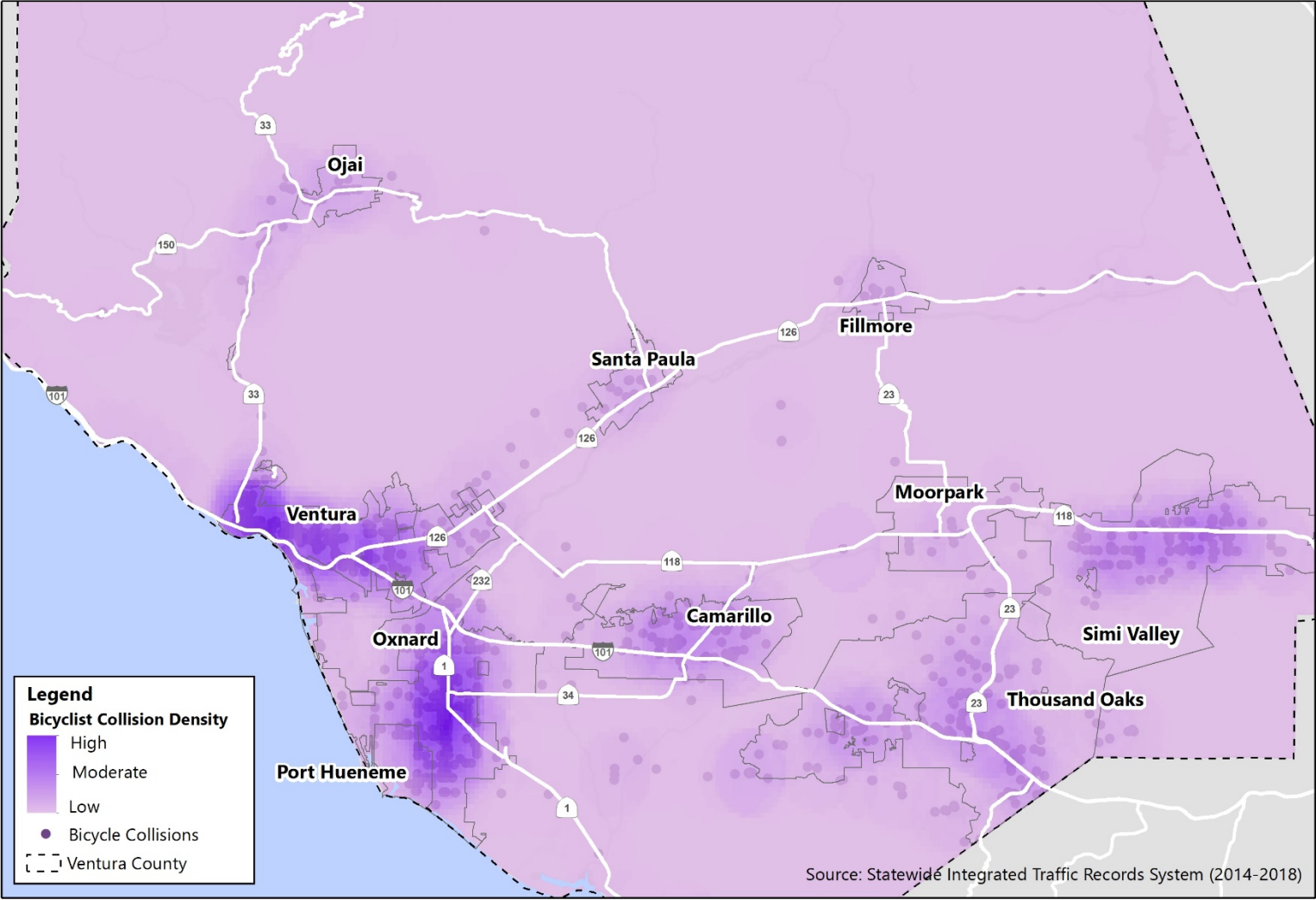
Figure 7.19 Proposed Regional Wayfinding Routes



**Proposed Regional Wayfinding Routes**  
VCTC Comprehensive Transportation Plan



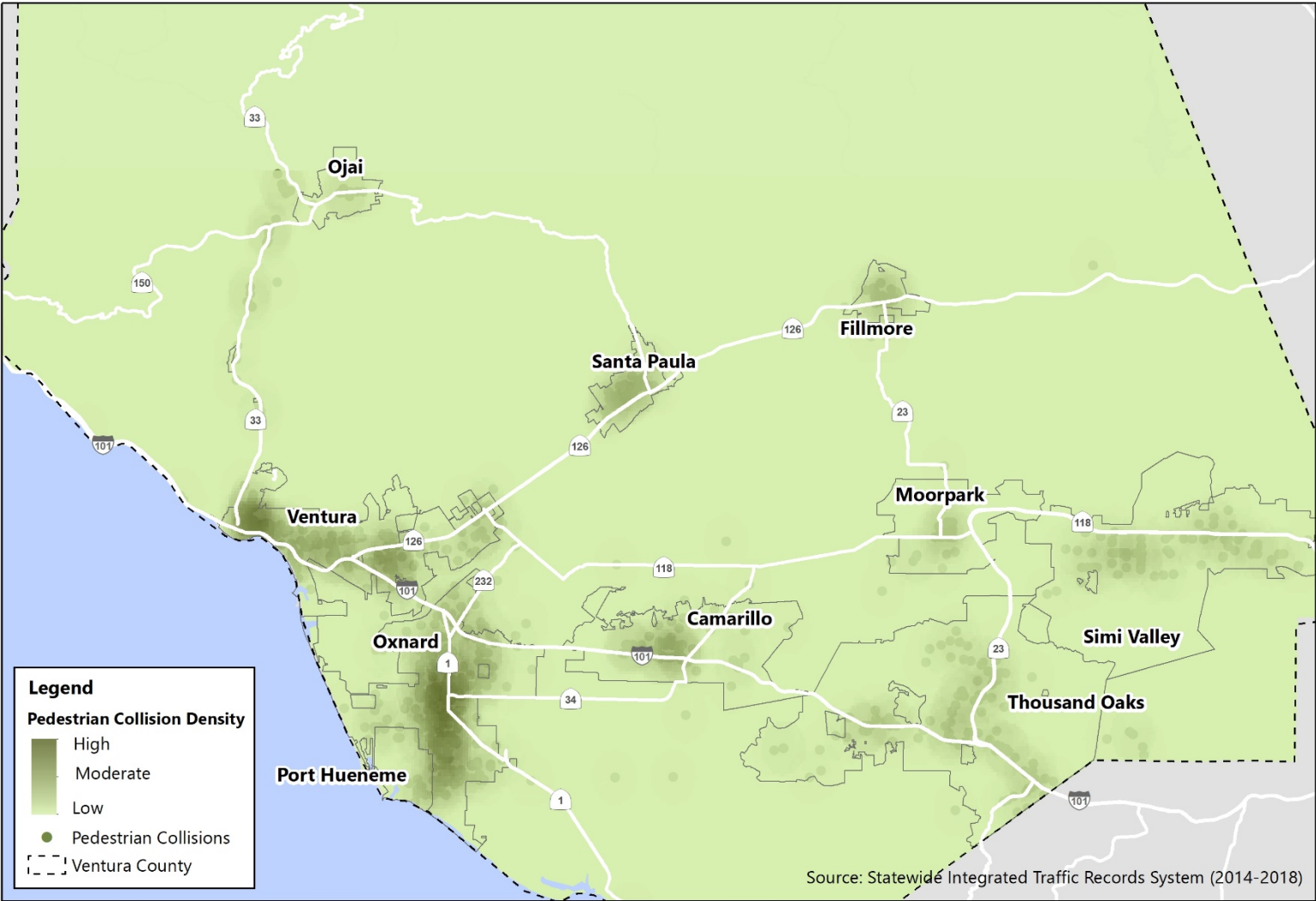
Figure 7.20 Bicycle Collision Locations



**Bicyclist Collision Density**  
VCTC Comprehensive Transportation Plan



Figure 7.21 Pedestrian Collision Locations

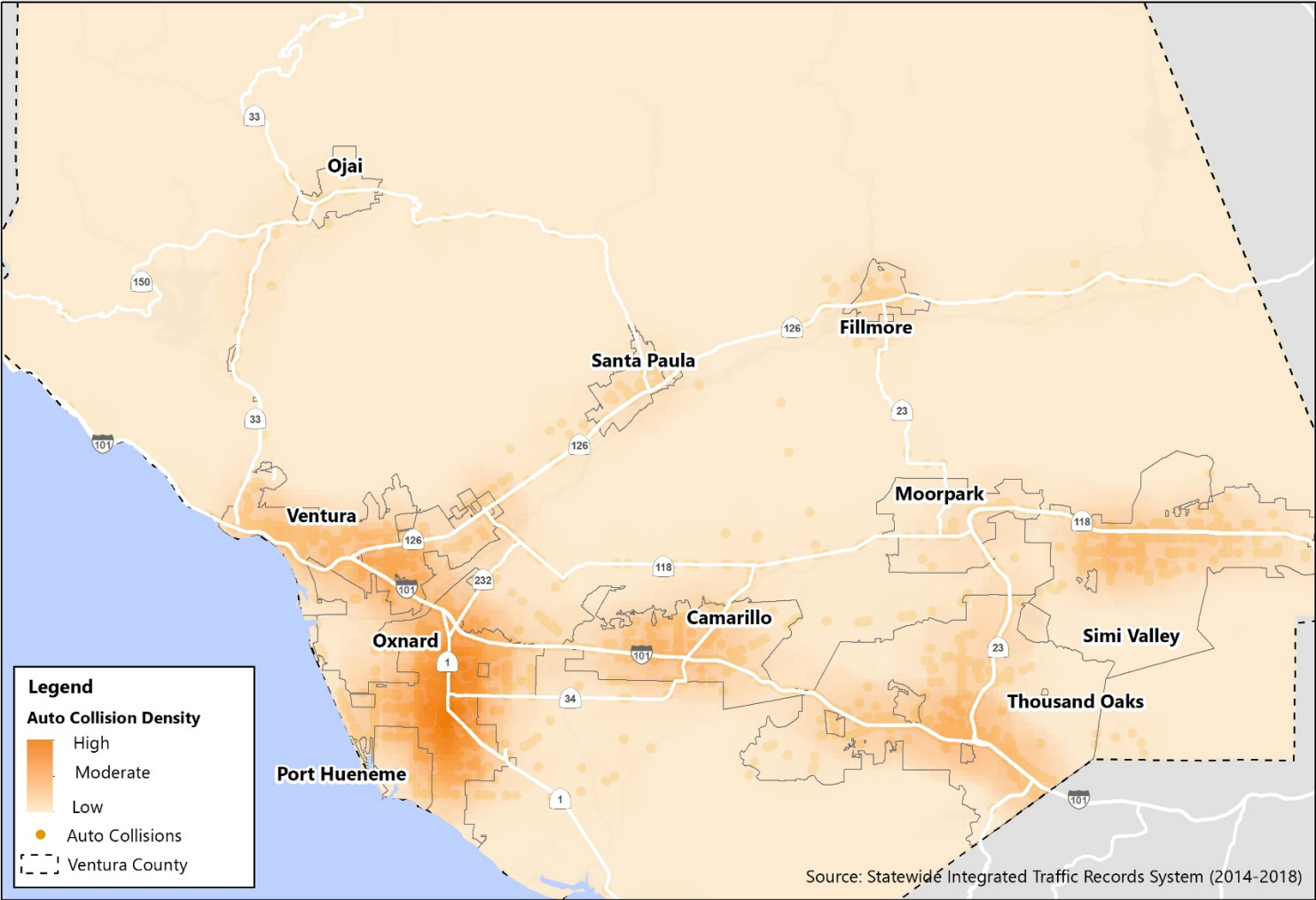


**Pedestrian Collision Density**  
VCTC Comprehensive Transportation Plan

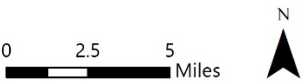




Figure 7.22 Auto Collision Density



**Auto Collision Density**  
VCTC Comprehensive Transportation Plan



### 7.3.3 Bicycle-Pedestrian Propensity Analysis

To help define focus or priority areas, a Geographic Information Systems (GIS) model was created to reveal relationships between the many factors analyzed. A Bicycle-Pedestrian Propensity Model (BPPM) was developed, considering all previously discussed analysis inputs, to establish where bicyclists and pedestrians are most likely to be, either currently or if improvements were to be made. The BPPM is composed of three sub-models: Attractor, Generator, and Barrier Models. These three sub-models are then combined to create the composite BPPM.

Attractors are essentially activity centers known to attract bicyclists and pedestrians. Examples are schools, parks, transit stops, and shopping centers. Generators are developed from demographic data and estimate potential pedestrian and bicyclist volume based on how many people live and work within the study area. Examples of generators are population density, employment density, primary mode of transportation to work and vehicle ownership. Barriers are features likely to discourage or detract people from bicycling or walking. These are generally physical limitations, such as areas with high numbers of bicycle-related collisions.

This initial composite map is a first take on a propensity model to highlight the densities of attractors, prioritizing populations that use non-motorized modes of transportation and have high rates of bicycle and pedestrian collisions. The intent of this exercise is to provide a tool to begin conversations for the community engagement phases to prioritize resident needs and to further refine the model for upcoming active transportation recommendations.

#### Summary of Results

The Bicycle and Pedestrian Propensity Model Analysis resulted in three high propensity regions around the cities of Ventura, Oxnard, and Port Hueneme. The City of Ventura resulted in two high propensity areas, one in western Ventura particularly in the downtown area and another in central Ventura between US 101 and SR 126. The City of Oxnard resulted in the second highest propensity area north of the intersection of SR 1 and SR 34. Port Hueneme resulted in the third highest propensity area near the neighborhoods of Hueneme Road and Ventura Road.



Figure 7.23 Bicycle and Pedestrian Propensity Model Analysis Results

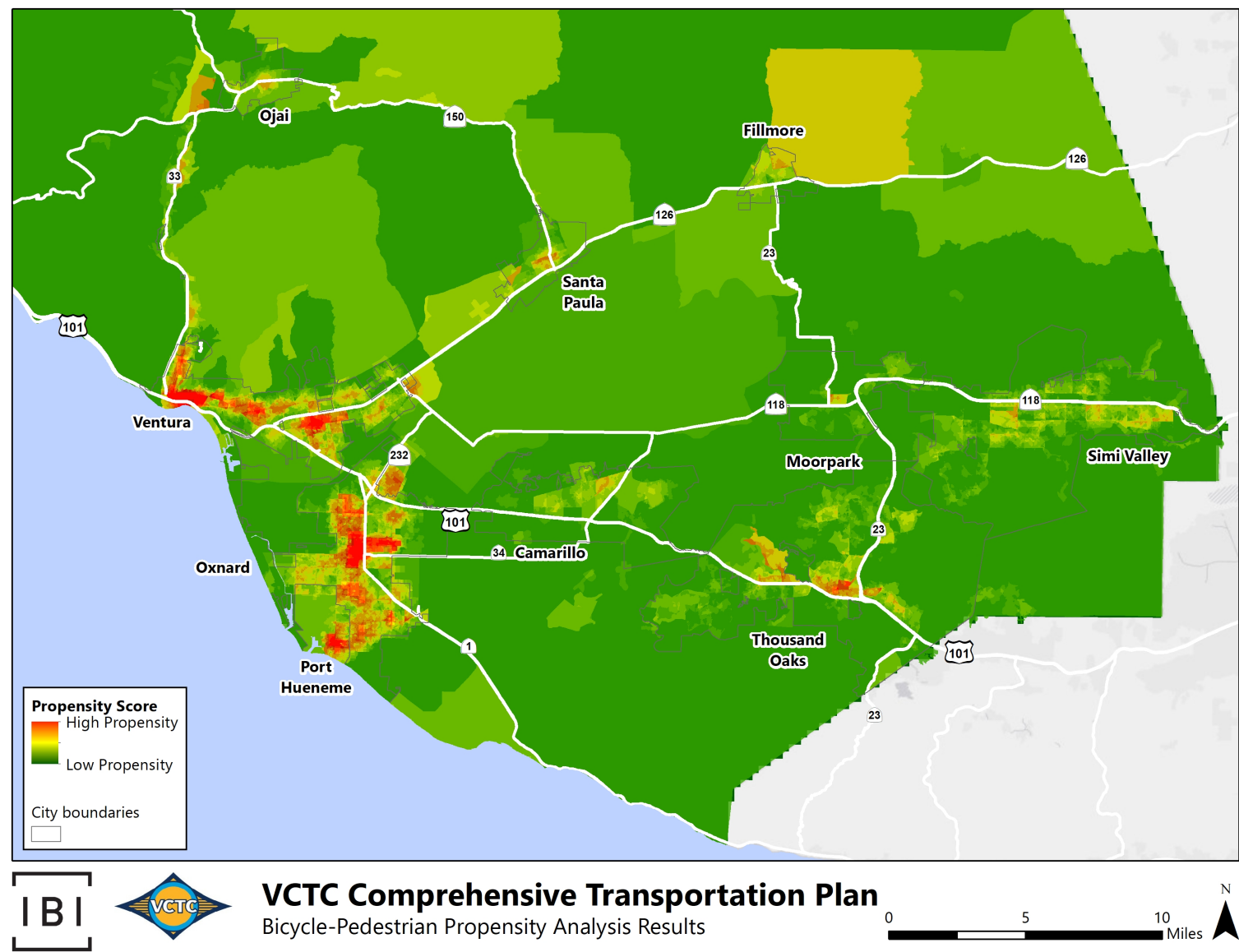
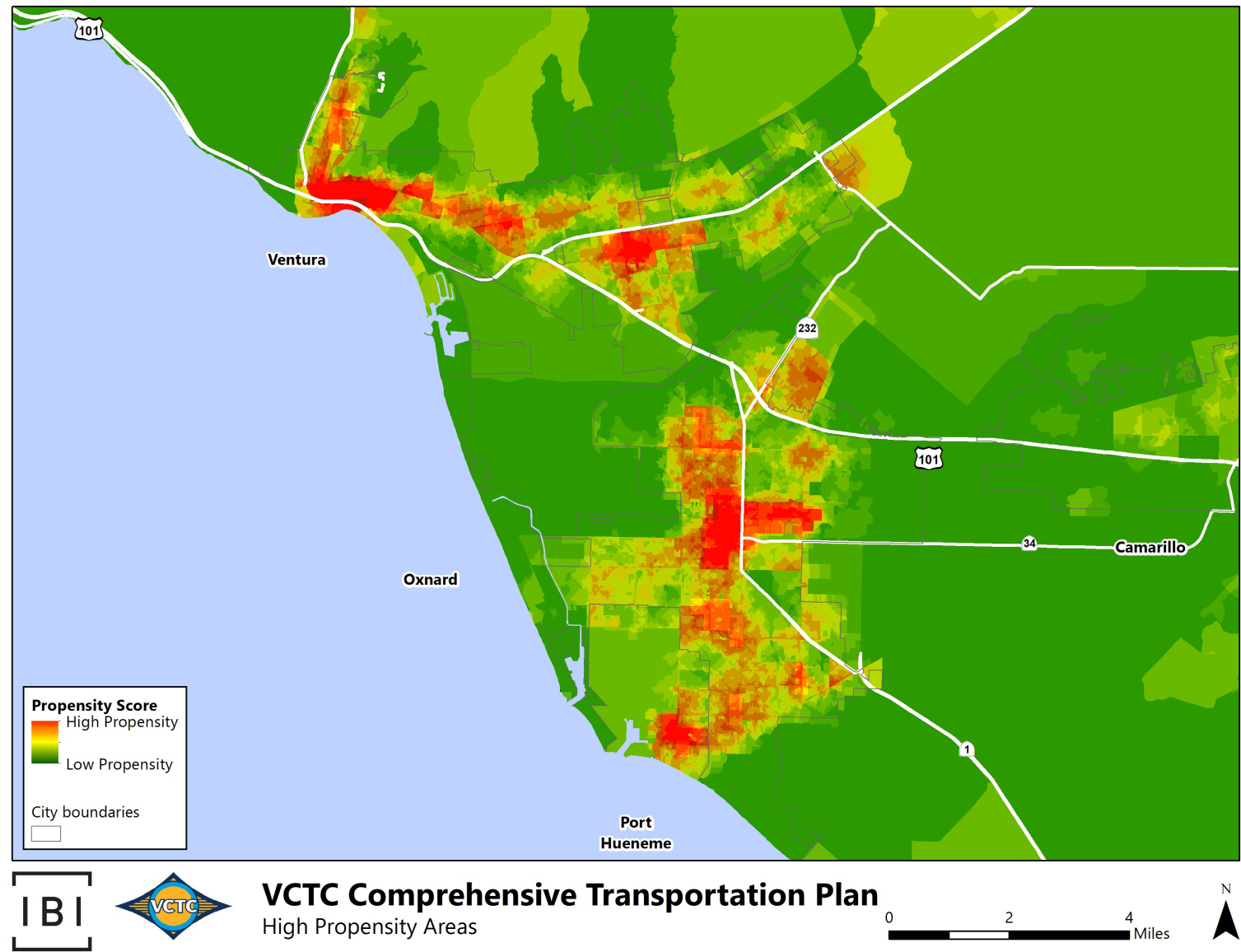


Figure 7.24 High Propensity Areas



### 7.3.4 Commute Characteristics

The following commute mode and time statistics are indicative of the current and potential use of active transportation modes in Ventura County. All statistics and mapped data come from the 2019 American Community Survey 5-year estimates (ACS 2019), based on block group data.

No systematic survey exists for recreational use of active modes; commute mode is a standard practice proxy variable for all use of active modes even though commutes represent only a fraction of all travel.

A high percentage of walk or bike commuters may indicate:

1. Current active transportation facilities support or encourage active travel to daily destinations.
2. Individual socioeconomic necessities necessitate active travel.

High percentages of transit commuters may indicate:

1. Current active transportation facilities support or encourage travel to nearby high-quality transit stations (those stations with reliable and frequent service)
2. Commuters who drive to a park-and-ride lot to board transit (who may be able to be converted to active travel with improved active transportation facilities).

Areas with a high percentage of commuters coupled with a short work trip (commute less than 10 minutes) may indicate that there is potential to convert vehicular work trips to active travel if facilities are improved to a certain level of safety and comfort.

Commute mode data from the ACS indicates that a smaller percentage of residents in Ventura County take non-vehicular modes (walk, bike, or transit) to work, than the percentage of residents who do so in nearby Santa Barbara and Los Angeles Counties, as well as California as a whole. However, a larger percentage of Ventura County residents have a short work trip as compared to Los Angeles County residents and California residents overall (Table 7.11). ACS data indicates that Ventura County residents rely on vehicular travel for commutes to work at a higher rate than residents in Santa Barbara and Los Angeles counties, as well as when compared to California residents overall. This indicates that there may be barriers preventing travelers from using transit or an active mode for daily commutes, therefore forcing residents to rely on vehicular travel instead. It should also be noted that a relatively high percentage of Ventura County residents work from home and thus have differing travel patterns to traditional workers. It is also likely that an even greater number of Ventura County residents will work from home in the future, as the COVID-19 pandemic shifted work-place dynamics. Therefore, transportation network improvements should be made to benefit all commute types and consider evolving work-related travel needs.

When analyzed by jurisdiction, a higher percentage of residents bike to work in Ojai, take transit in Ventura, and walk in Port Hueneme and Fillmore, as compared to other jurisdictions (Table 7.12). The percentage of residents who bike or take transit to work is less than 1% in most jurisdictions in the county. The figures that follow present the distribution of these non-vehicular modes of travel across Ventura County geographically.

**Table 7.11 Commute Mode Share Summary**

COMMUTE MODE	VENTURA COUNTY	SANTA BARBARA COUNTY	LOS ANGELES COUNTY	KERN COUNTY	CALIFORNIA
Walk	1.8%	3.5%	2.6%	0.6%	2.6%
Bike	0.5%	3.1%	0.7%	0.2%	0.9%
Transit	1.3%	3.4%	5.7%	1.0%	5.2%
Car	89.5%	82.9%	83.2%	93.7%	83.3%
Taxicab, motorcycle, or other means	0.7%	0.7%	1.9%	1.0%	1.7%
Work from home	6.2%	6.4%	5.9%	3.5%	6.3%
Commute Time (less than 10-minutes)	9.4%	17.3%	6.1%	11.3%	8.8%

Source: American Community Survey (2019)

**Table 7.12 Commute Mode Share by Jurisdiction**

JURISDICTION	WALK	BIKE	TRANSIT	COMMUTE TIME LESS THAN 10 MINUTES
Ojai	1.7%	3.7%	0.2%	< 0.1%
Moorpark	1.1%	0.4%	0.7%	0.1%
Port Hueneme	3.3%	1.3%	0.7%	1.1%
Camarillo	2.0%	0.8%	0.8%	0.6%
Thousand Oaks	1.7%	0.3%	0.8%	1.2%
Santa Paula	3.0%	0.5%	0.8%	1.6%
Fillmore	3.2%	0%	0.9%	1.8%
Oxnard	1.2%	0.4%	1.0%	0.3%
Simi Valley	0.9%	0.3%	1.0%	1.3%
Ventura	2.0%	0.9%	2.1%	2.7%
Unincorporated Areas	1.3%	0.5%	1.3%	2.1%

Source: American Community Survey (2019)

To provide further context to commute mode share, approximately 95% of households in Ventura County have access to an automobile, according to the Healthy Places Index.

Compared to the rest of the state, Ventura County has a higher percentage of households with access to an automobile than 78.6% of other California counties.

Table 7.13 presents the percentage of households with access to an automobile by jurisdiction, along with the percentile within which each city falls, as compared to all other cities in California. According to these aggregate percentages, approximately 90% or more of households in each of the county's incorporated cities has access to an automobile. In Moorpark, Simi Valley, Thousand Oaks, and Camarillo, over 95% of households have access to an automobile. These cities are in the 50<sup>th</sup> percentile or above, as compared to other cities in California.

**Table 7.13 Automobile Access**

JURISDICTION	PERCENTAGE OF HOUSEHOLDS WITH ACCESS TO AN AUTOMOBILE	STATEWIDE PERCENTILE
Ojai	90.8%	13.6
Moorpark	97.4%	79.5
Port Hueneme	94.6%	42.6
Camarillo	95.4%	51.9
Thousand Oaks	95.8%	57.1
Santa Paula	89.6%	8.6
Fillmore	94.9%	46.9
Oxnard	94.6%	42.8
Simi Valley	96.2%	63.1
Ventura	93.3%	30.2
Ventura County	95.4%	78.6

Source: *Healthy Places Index (2017)*

Figure 7.25 Commute Less Than 10 Minutes

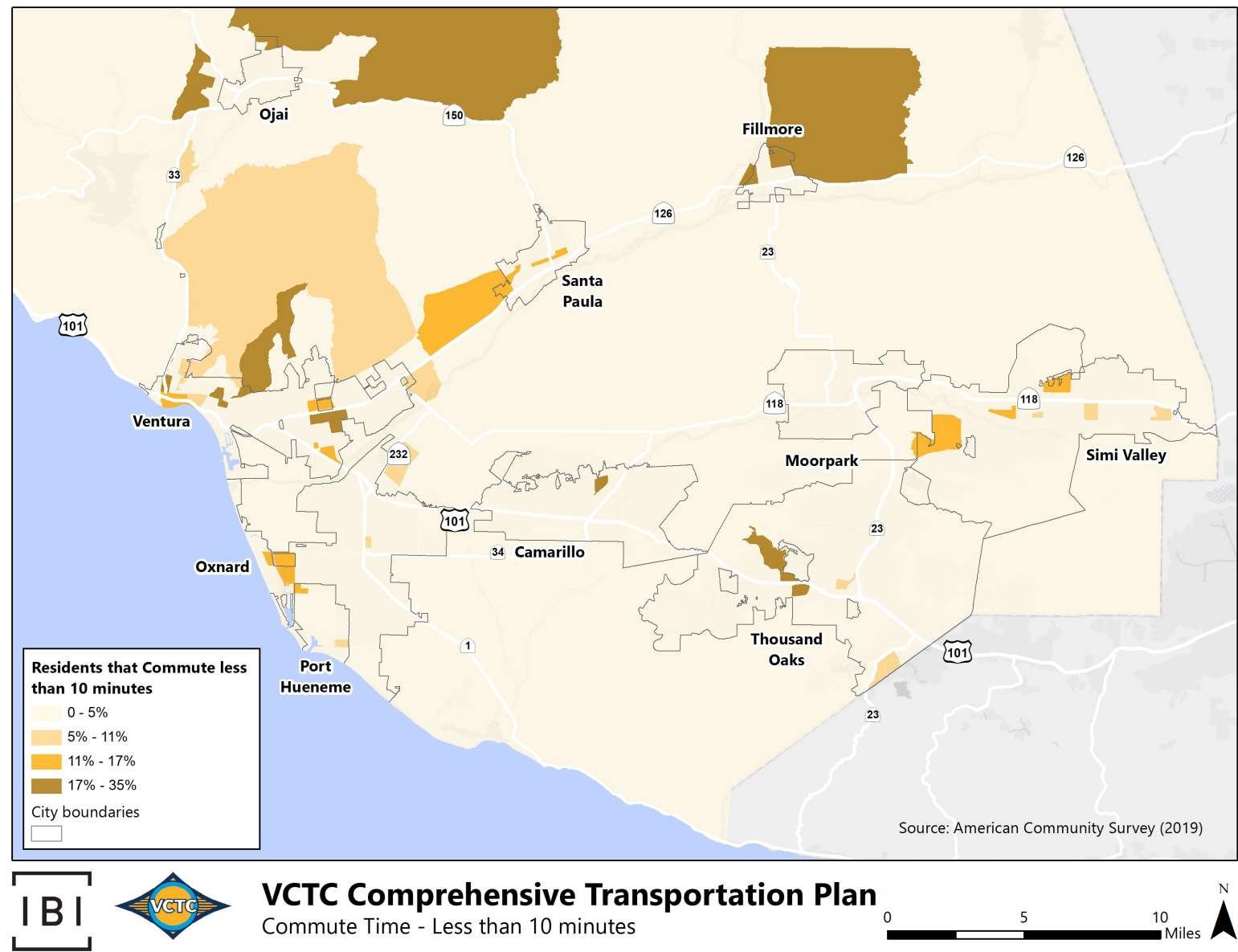


Figure 7.26 Commute Mode to Work: Public Transit

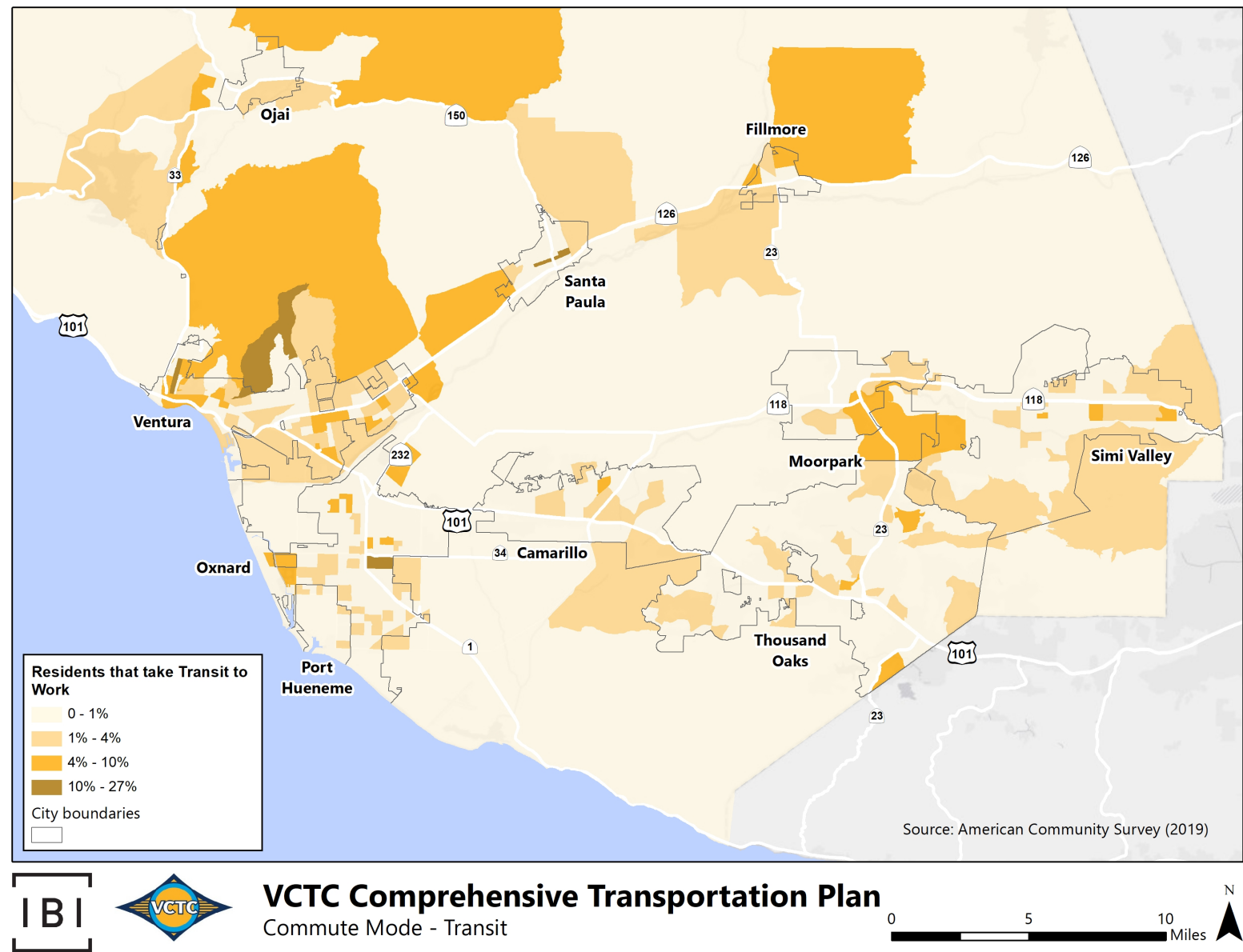




Figure 7.27 Commute Mode to Work: Bike

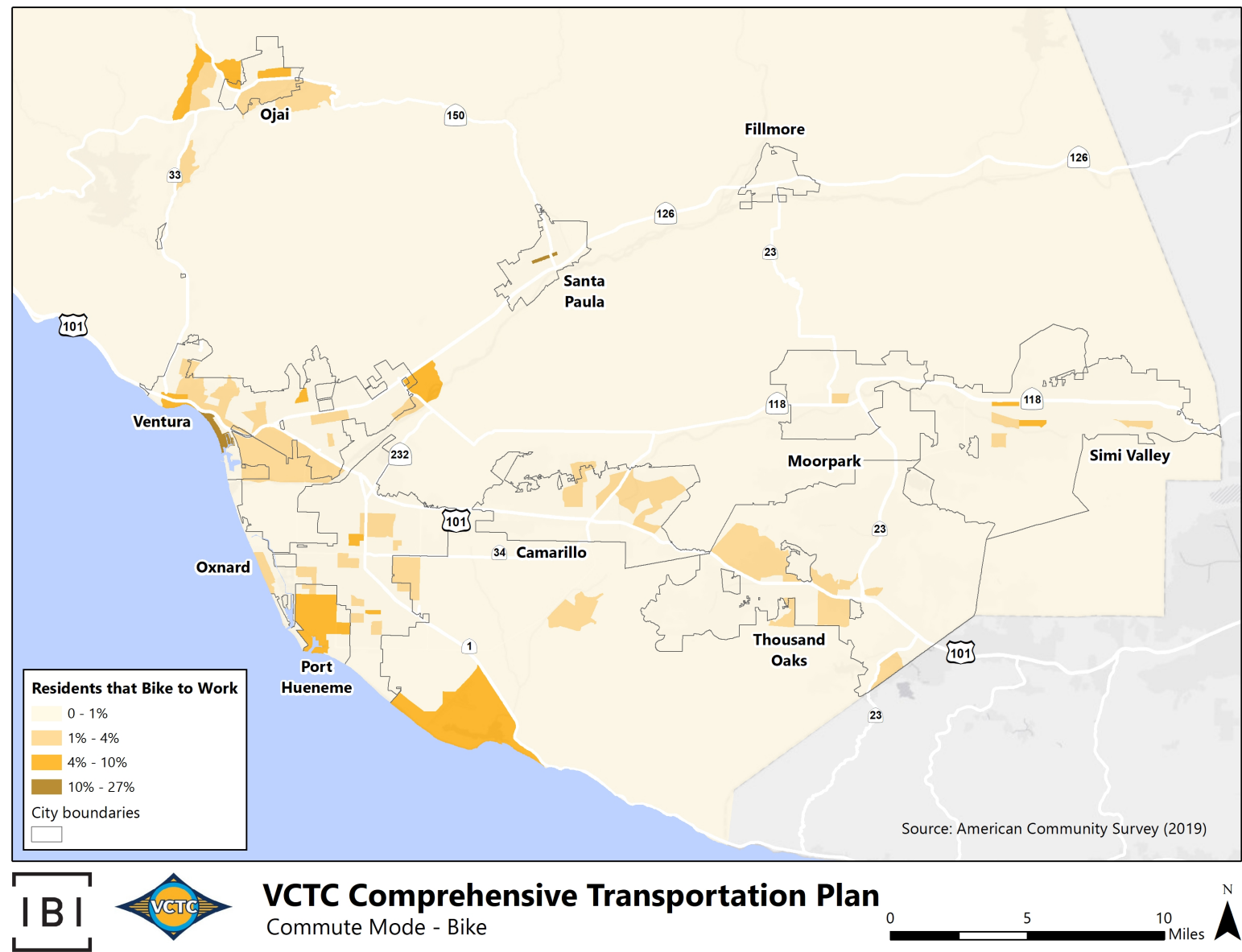
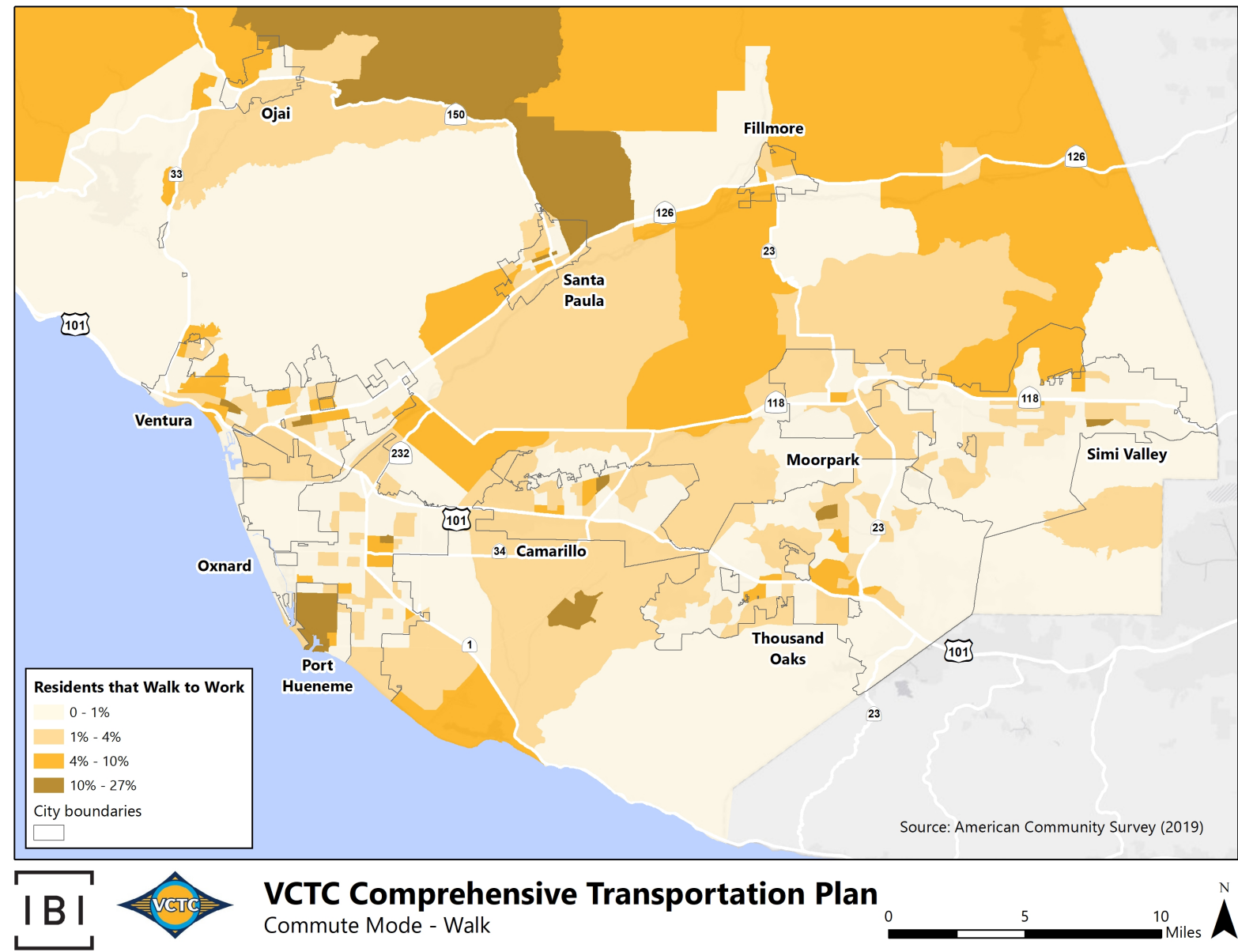


Figure 7.28 Commute Mode to Work: Walk



## 8 Equity Analysis

### 8.1 Disadvantaged Communities

In addition to understanding the demographic make-up of the region, developing an understanding of the disadvantaged community status in the region is crucial to develop transportation and mobility strategies that include equitable consideration of the several communities in the study area with differing socioeconomic and environmental needs. Additionally, this analysis would help with prioritizing implementation actions and allocation of resources.

The Office of Environmental Health Hazard Assessment's online tool, CalEnviroScreen, uses several indicators to determine a community's status as disadvantaged, pursuant to Senate Bill 535, which was passed in April 2017. This report utilizes CalEnviroScreen 4.0 data, which was adopted in October 2021.

The indicators are organized into four categories per census tract:

- Exposure Indicators – indicators based on measurements of different types of pollution that people may come into contact with.
- Environmental Effect Indicators – indicators based on the locations of toxic chemicals in or near communities.
- Sensitive Population Indicators – indicators that measure the number of people in community who may be more severely affected by pollution because of their health or age.
- Socioeconomic Factor Indicators – conditions that may increase people's stress or make healthy living difficult and cause them to be more sensitive to pollution's effects.

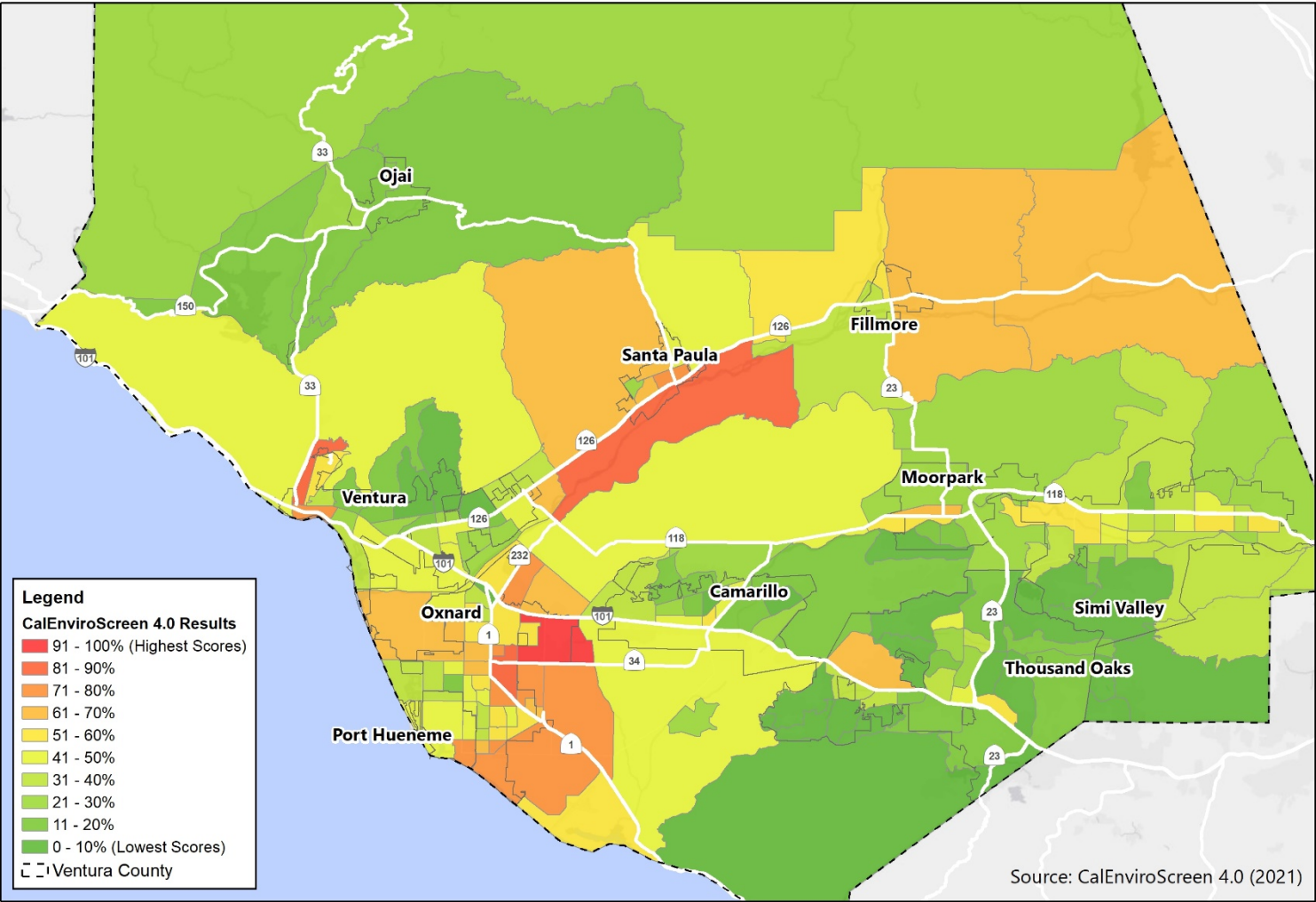
Data for exposure and environmental indicators are sourced from a variety of statewide organizations, including the California Air Resources Board. Data for demographic-related indicators are sourced from the American Community Survey through the U.S. Census Bureau and the California Department of Public Health. Each census tract is then given an overall score based on these indicators. Figure 8.1 presents the CalEnviroScreen scores for the census tracts in the study area.

Census tracts scoring in the highest percentiles (the top 25%) relative to the rest of California are designated as the most disadvantaged communities. Figure 8.2 presents the location of the census tracts in the region that are designated as disadvantaged according to the CalEnviroScreen 4.0 results. Of the 173 census tracts in the study area, a total of 8 census tracts scored are designated as disadvantaged. The census tracts are located near Port Hueneme, the Oxnard and Camarillo Airports, and in Ventura along SR 33.

#### 8.1.1 Environmental Justice Areas

In addition to identifying disadvantaged communities, SCAG has identified Environmental Justice Areas (EJA). These are defined as Transportation Analysis Zones that have a higher concentration of minority population or low-income households than in seen in the region as a whole (Figure 8.3). The areas that were identified as disadvantaged by CalEnviroScreen were also identified as Environmental Justice Areas by the tool. Additionally, the tool identifies communities along SR 126 and almost the entirety of the northern half of the county as Environmental Justice Areas.

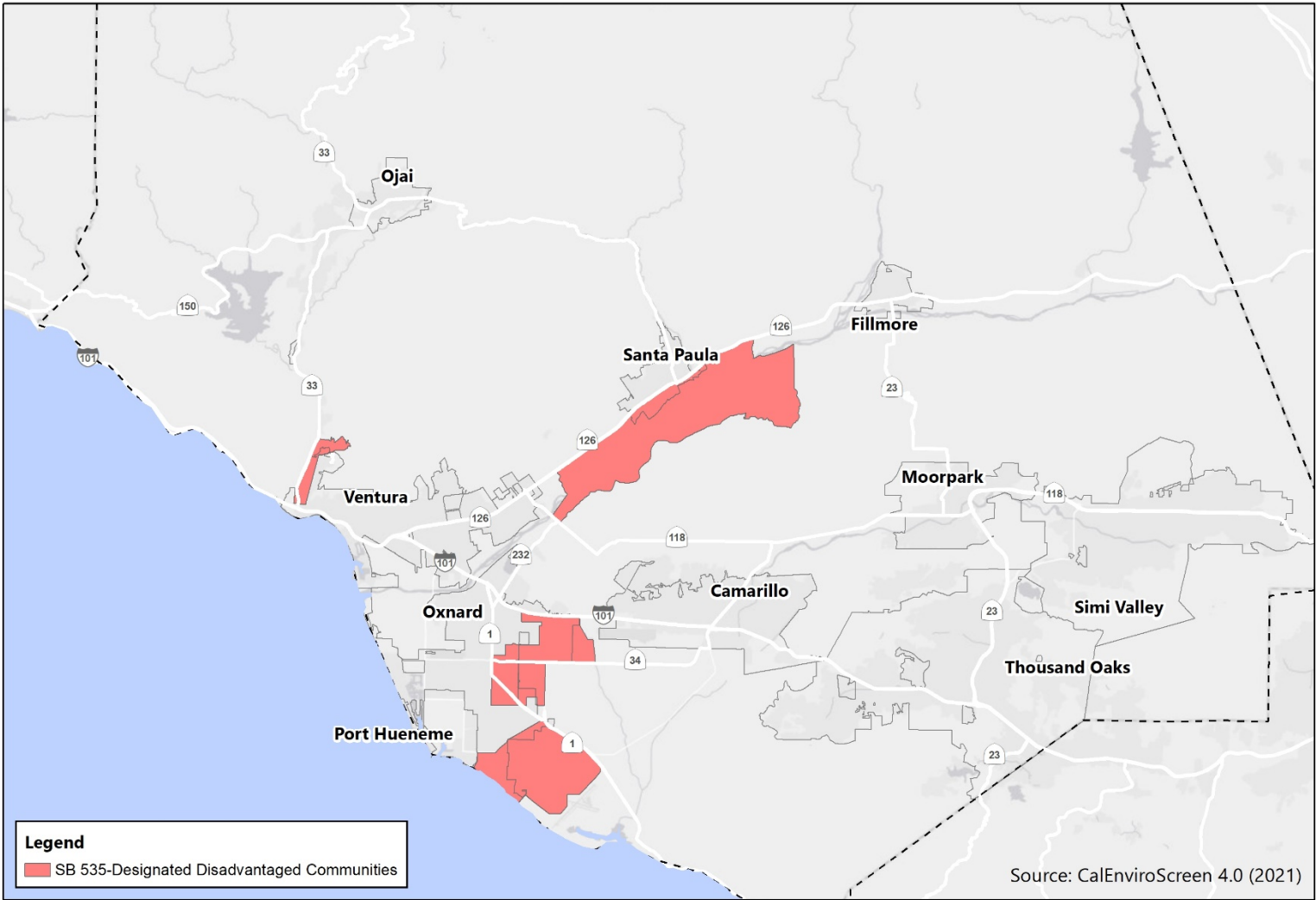
Figure 8.1 CalEnviroScreen 4.0 Scores



**CalEnviroScreen 4.0 Results**  
VCTC Comprehensive Transportation Plan



Figure 8.2 Disadvantaged Communities

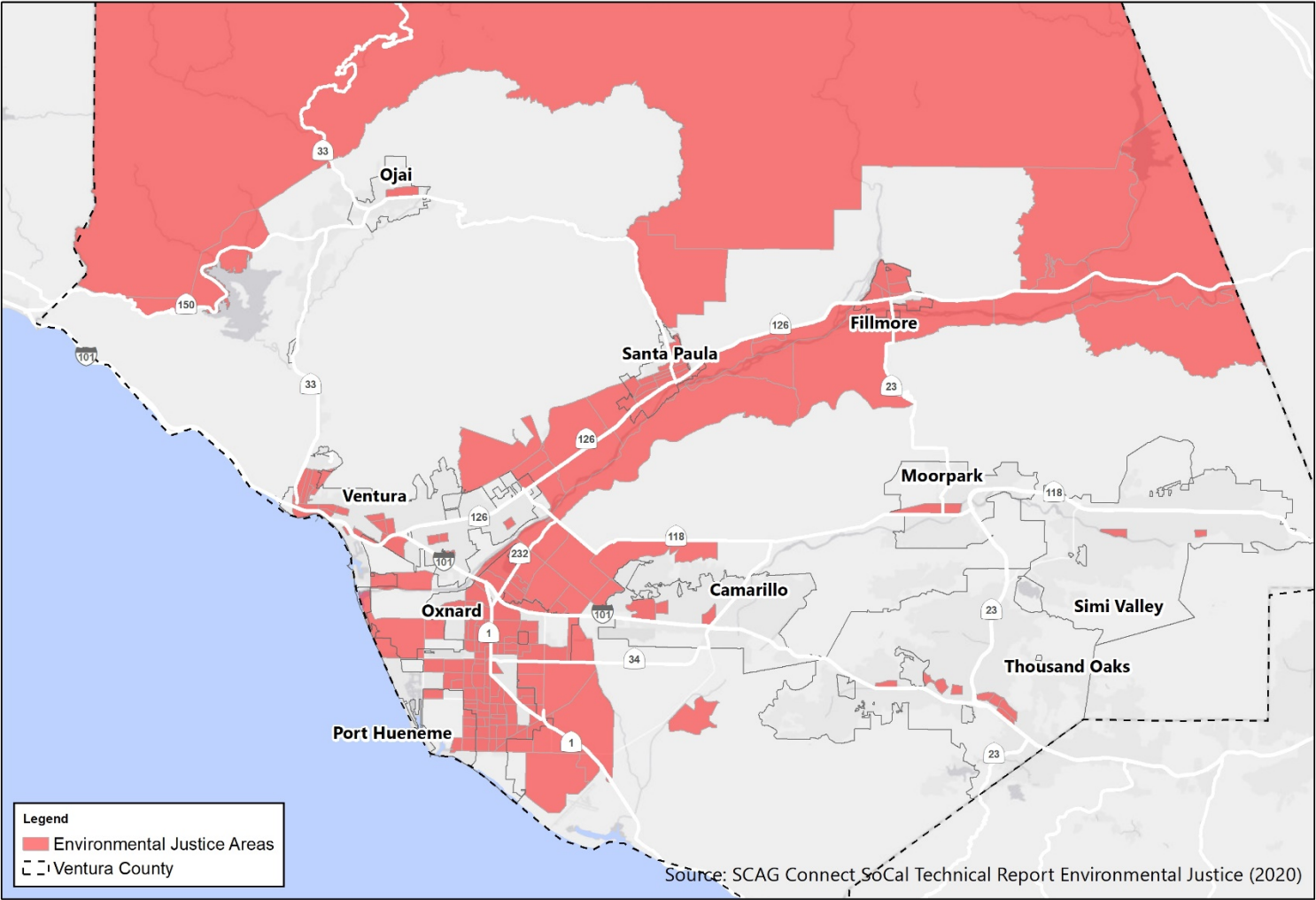


**Disadvantaged Communities**  
VCTC Comprehensive Transportation Plan





Figure 8.3 Environmental Justice Areas



**Environmental Justice Areas**  
VCTC Comprehensive Transportation Plan



### Minority Communities

To provide further context regarding the population characteristics of these environmental justice areas in comparison with the rest of the county, the American Community Survey (ACS) indicates the percentage of minority population by the total population within each census tract. Within the study area, the percent of non-white population reaches above 50% of the total population in census blocks along the coast in the Cities of Ventura, Oxnard, Port Hueneme, and in the southern portion of Thousand Oaks along US 101. The presence of minority communities is also dominant in eastern Simi Valley along the Ventura County line, and in the Cities of Santa Paula, Fillmore, Ojai, and in Camarillo south SR 118.

Although the county has an overall minority population of under 20%, minority communities must be considered throughout the planning process as they have historically been underserved by transportation infrastructure. In addition, these communities oftentimes overlap with the presence of low-income communities whom are also more dependent on public transit and active transportation. Therefore, sustainable, safe, and efficient multi-modal transportation connections should be prioritized in these communities. The distribution of these communities is presented below in Figure 8.4.

### Low-Income Communities

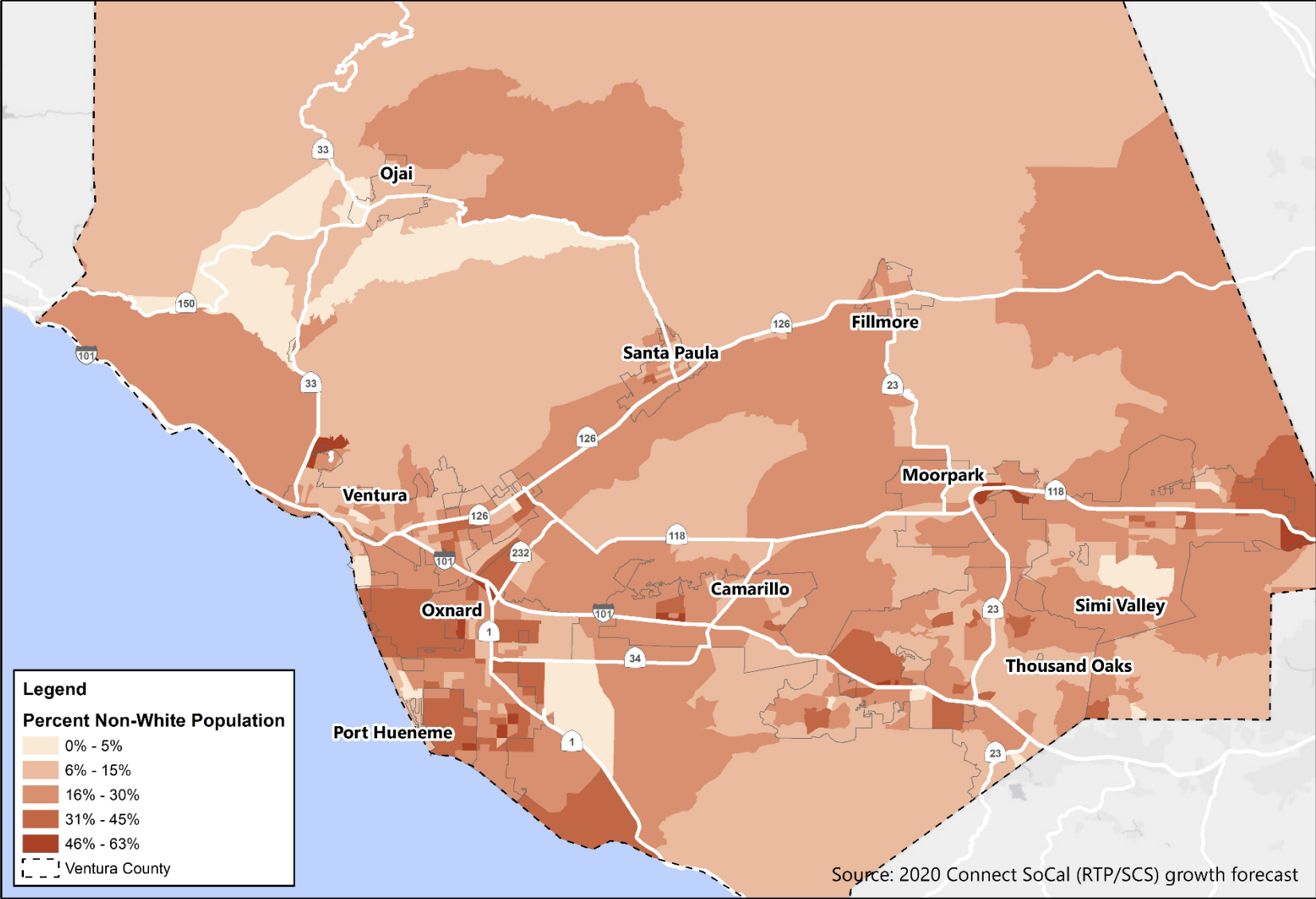
The distribution of low-income communities within Ventura County was derived from Connect SoCal to provide further insight on the low-income households in comparison to the rest of the county. The density of low-income households is defined by the total number of low-income households per the total number of households. Figure 8.5 presents the percentage of low-income households in the study area as compared to the rest of the SCAG region, defined by SCAG as households with an annual income of less than \$35,000. It should be noted that the median household income in Ventura County is \$88,131, according to the 2019 American Community Survey 5-Year Estimates. The Department of Housing and Urban Development currently defines low income for a 1-person household in Ventura County as \$62,800 or less, very low income as \$39,250 or less, and extremely low income as \$23,600 or less. Households that fall into these income categories are eligible for Public Housing and Section 8 Programs.

Areas with particularly high percentages (over 50%) of SCAG-defined low-income households include the census tracts in Northern Ventura County, the Port Hueneme community along Highway 1, along SR 126 through Santa Paula, Fillmore, and the Community of Piru, and along Highway 1 near Naval Base Ventura County - Point Mugu. It should also be noted that although the northern portion of Ventura County also appears to have a significant number of low-income households, the areas has extremely low population density, as noted in Section 3.1. Similarly, the census tract just north of the Naval Base has a low density of residents, as most of the land is either agricultural or part of the Point Mugu Game Preserve.

Low-income communities historically have a higher dependence on public transportation or active transportation connections, as access to a personal vehicle is often not available or reliable. The locations of these communities must be considered when proposing future transportation solutions, to ensure that proposed improvements are distributed equitably and placed in the communities that will benefit from them most directly



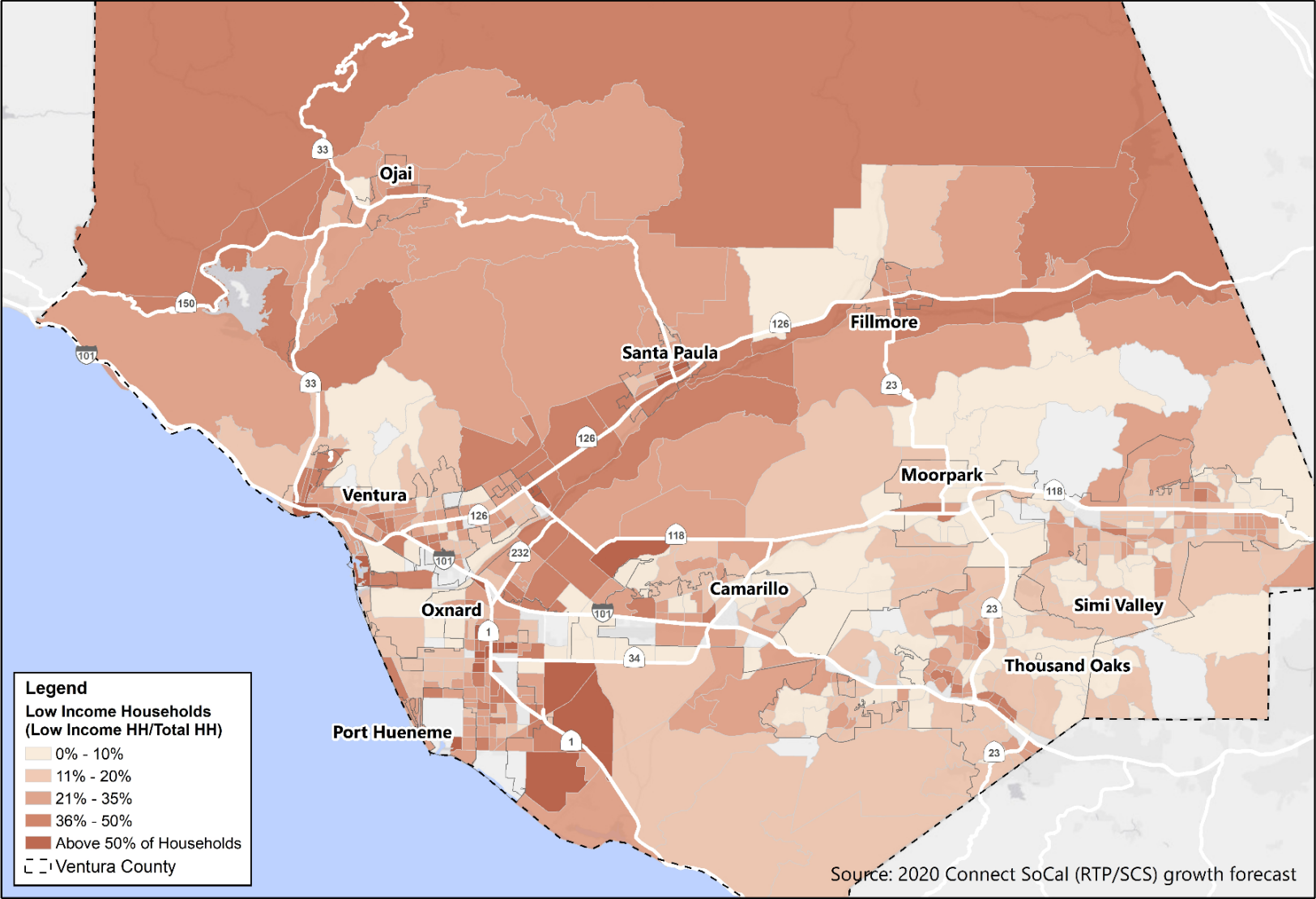
Figure 8.4 Minority Population



**VCTC Comprehensive Transportation Plan**  
Minority Population



Figure 8.5 Low-Income Households



## 8.2 Public Health Metrics/Conditions

The data associated with CalEnviroScreen has been broken down by some of the health and pollution-related health metrics associated with the model. Although there are numerous other factors that are included in the CalEnviroScreen model, the following are the most relevant indicators for health-related topics, followed by summary tables and figures that show the instances of each indicator countywide. It is important to evaluate the county as a whole to identify these disadvantaged areas, but also to see where the various other factors are occurring to make sound recommendations.

### 8.2.1 Health Trends

#### **Asthma**

Asthma is a disease that affects the lungs and makes it hard to breathe and symptoms include breathlessness, wheezing, coughing, and chest tightness. Five million Californians have been diagnosed with asthma at some point in their lives is the most common long-term disease in children. Outdoor air pollution can trigger asthma attacks or make asthma worse. People with asthma can be especially susceptible to pneumonia, flu and other illnesses.

The indicator for Ventura County was a spatially modeled, age-adjusted rate of emergency department visits for asthma per 10,000 (averaged over 2011-2013). Northern Ventura County and parts of Thousand Oaks, and Simi Valley were in the lowest percentile, while the cities of Ventura, Oxnard, and Santa Paula were in the highest percentiles.

#### **Low Birth Weight**

Babies who weigh less than about five and a half pounds at birth are considered low birth weight. Many factors, including poor nutrition, lack of prenatal care, stress and smoking by the mother, or regular exposure to second-hand smoke, can increase the risk of having a low birth-weight baby. Living in a neighborhood where there is violence or poverty, or where health care and healthy food are not available, can increase the chance of low birth weight. Mothers who are exposed to pollution from traffic, industry or agriculture are more likely to bear low weight babies. Low birth weight babies may develop asthma or other chronic diseases later in life, and they are more likely to die as infants than babies who weigh more.

Averaged over 2006-2012, percent low birth weight is the indicator used through the California Department of Public Health (CDPH). Northern Ventura County and parts of Moorpark and Simi Valley, while parts of the cities of Thousand Oaks, Oxnard, and Fillmore had the highest percentiles in the county.

#### **Cardiovascular disease**

Cardiovascular disease refers to conditions that involve blocked or narrowed blood vessels that can lead to a heart attack or other heart problems. Although many people survive and return to normal life after a heart attack, quality of life and long-term survival may be reduced, and those affected are more prone to future cardiovascular events. There are many risk factors for developing cardiovascular disease including diet, lack of exercise, smoking and exposure to air pollution. People with preexisting heart disease or a previous heart attack may respond differently to the effects of pollution than people without heart disease. Short-term and long-term exposure to outdoor air pollution following a heart attack has been shown to increase the risk of death. The effects of air pollution may also be greater in the elderly and people with other preexisting health conditions.

The indicator for Ventura County was spatially modeled, age-adjusted rate of emergency department visits per 10,000, for Acute Myocardial Infarction (AMI) and was averaged over

2011-2013. Most of Ventura County is in the lowest to mid-range state percentile, while the highest percentiles were concentrated in areas near Simi Valley, Moorpark, and Oxnard.

**Table 8.1 Summary of Health Trend Indicators**

INDICATOR	CITIES WITH LOWEST PERCENTILES	CITIES WITH HIGHEST PERCENTILES
Asthma	Thousand Oaks	Ventura
	Simi Valley	Oxnard
		Santa Paula
Low Birth Weight	Moorpark	Thousand Oaks
	Simi Valley	Oxnard
		Fillmore
Cardiovascular Disease	Unincorporated Areas	Simi Valley
	Thousand Oaks	Moorpark
	Ojai	Oxnard

Figure 8.6 Asthma

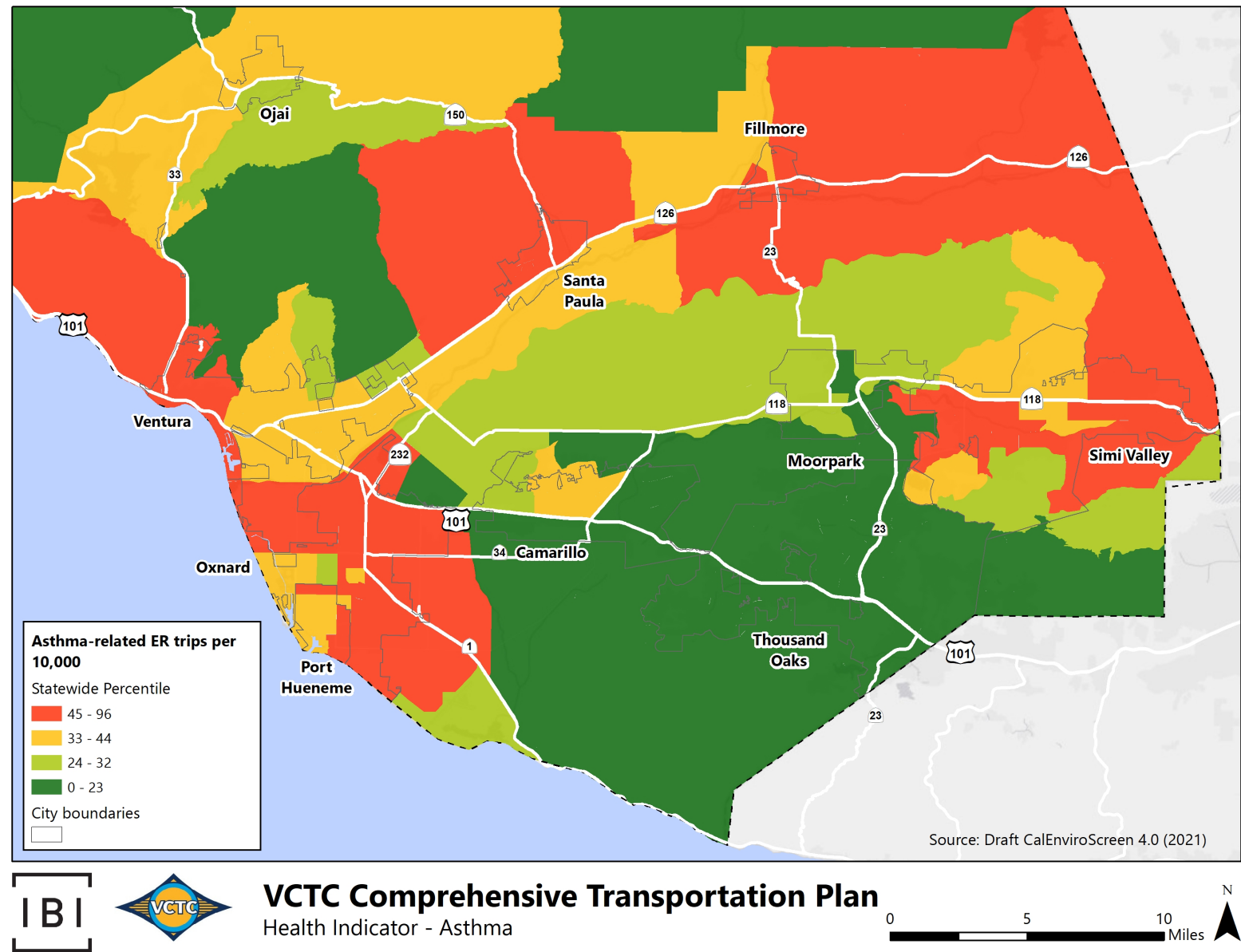


Figure 8.7 Low Birth Weight

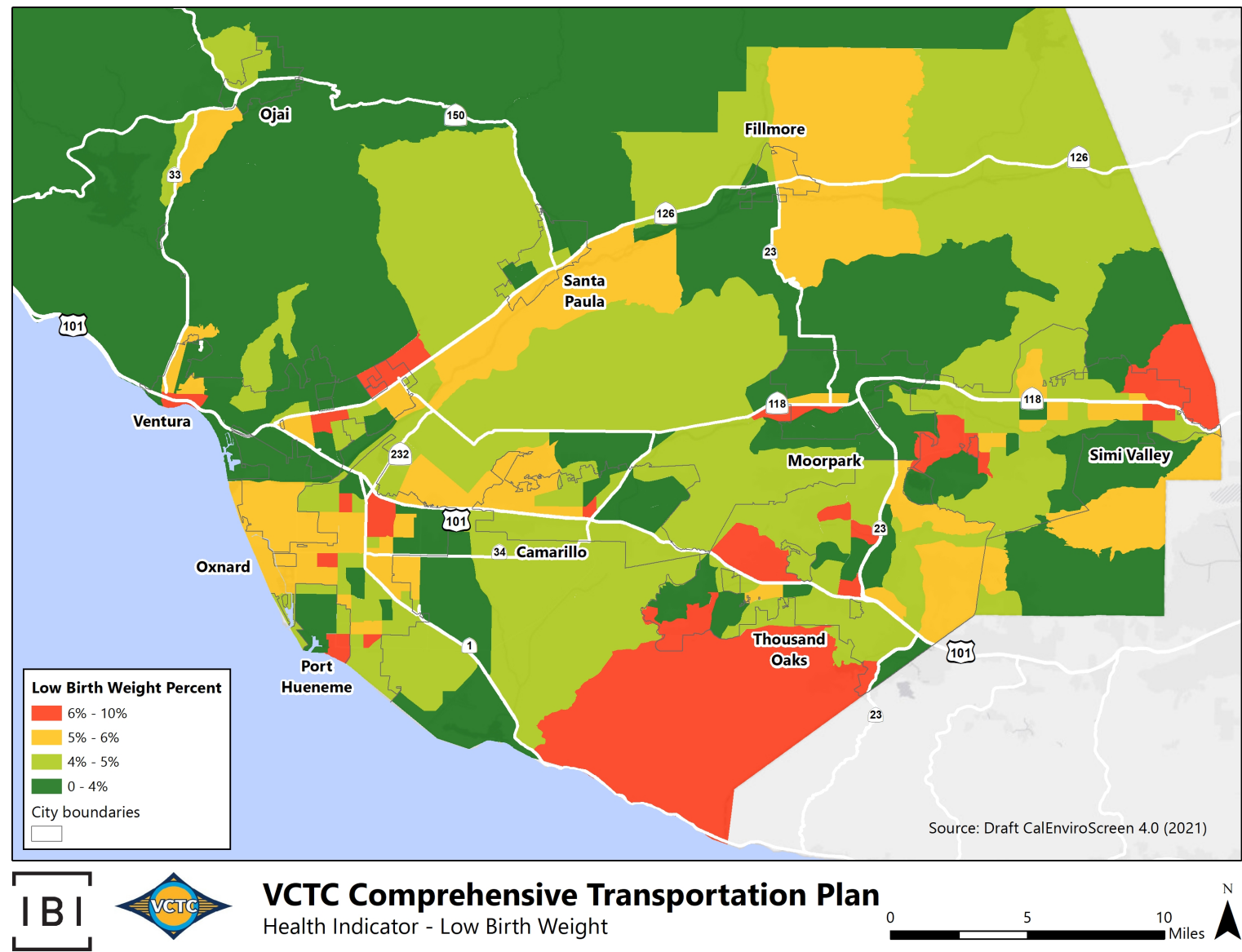
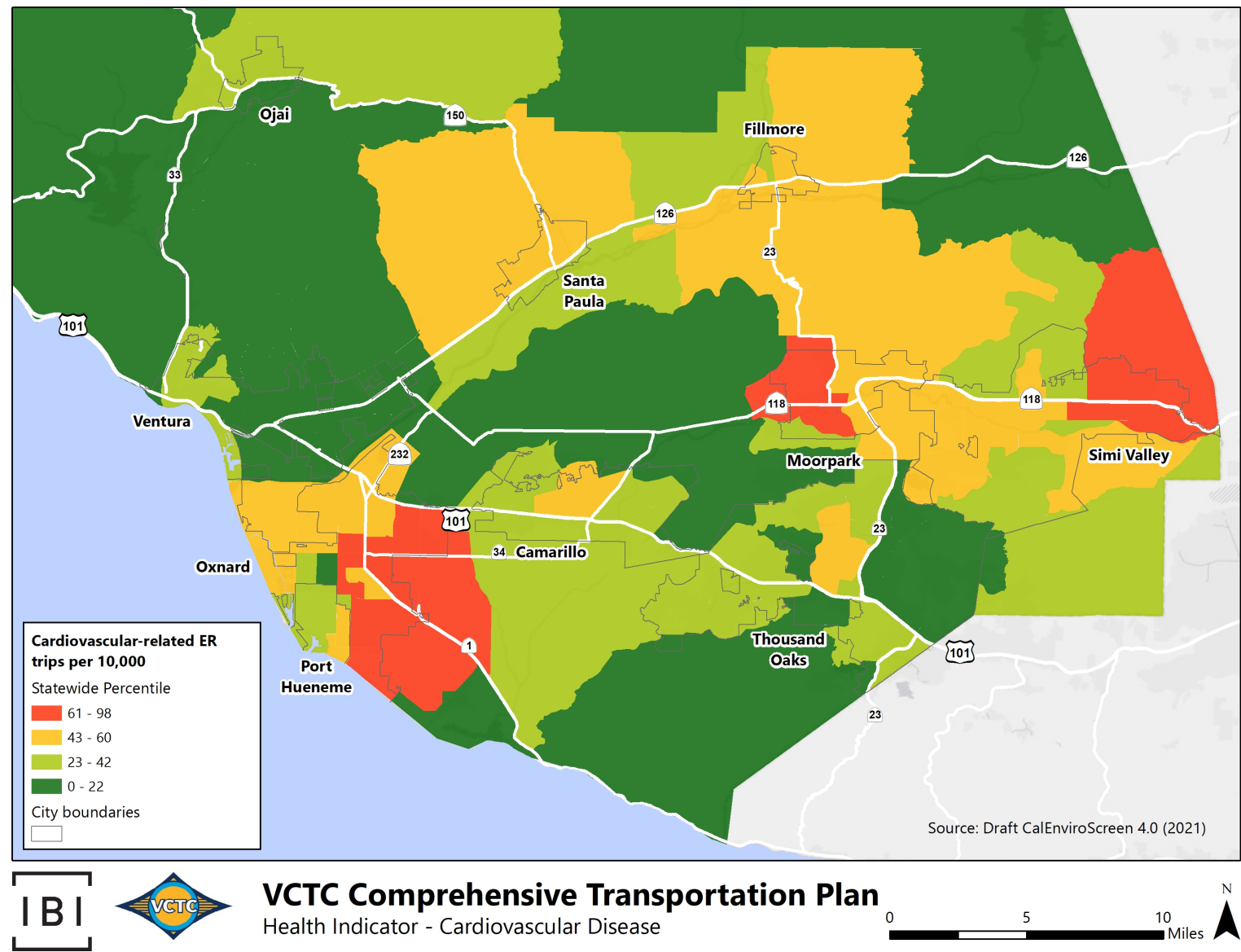




Figure 8.8 Cardiovascular Disease



## 8.2.2 Socioeconomic Trends

### Education

Educational attainment is the highest level of education a person has completed. In California, 19% of adults over 25 do not have a high school degree, compared to 14% for the United States. Studies have found that communities with more educated people are less polluted and adults with less education have more pollution-related health problems. People in these communities are more likely to have adverse health effects from air pollution.

The education factor is the percentage of the population over age 25 with less than a high school education (5-year estimate, 2011-2015). The population in the County in the lowest cohort, or group with the highest education, was mostly located in the southeastern part of the County near Thousand Oaks, Simi Valley, Camarillo, and Moorpark. Ojai and Ventura also have a population with higher education. The population in the County in the highest cohort, or had the lowest percentage of adults with a high school diploma is located in Fillmore, Santa Paula, and southeast Oxnard.

### Linguistic Isolation

Linguistic isolation is a term used by the US Census Bureau for limited English speaking households. More than 40% of Californians speak a language other than English at home. About half of those do not speak English well or at all. Adults who are not able to speak English well often have trouble talking to the people who provide social services and medical care. As a result, they might not get the health care and information they need.

The percentage of limited English-speaking households, the American Community Survey and US Census Bureau (2011-2015), is the primary indicator for linguistic isolation. The population in the County in the lowest cohort, or population that predominantly speaks English, was northern Ventura County and areas in Thousand Oaks, Simi Valley, and Camarillo. The population in the County with the highest populations of non-English speaking, or English as a second language, is located in Fillmore, Santa Paula, and southeast Oxnard.

### Poverty

The US Census Bureau determines the Federal Poverty Level each year and is based on the size of the household and the ages of family members. According to the US Department of Health and Human Services, the 2021 poverty level for a family of four with a median income of \$26,500 meets the poverty threshold. The guidance will vary depending on how many people are in the household. Members of poorer communities are more likely to be exposed to pollution and to suffer from health effects as a result of pollution exposure than residents of higher income communities. Income can affect health when people cannot afford healthy living and working conditions, nutritious food and necessary medical care. Poor communities are often located in areas with high levels of pollution and can cause stress that weakens the immune system and causes people to become ill from pollution.

The indicator for Ventura County is the percentage of the population living below two times the federal poverty level (5-year estimate, 2011-2015), through the American Community Survey and US Census Bureau. The population in the County with the highest median income are areas in Thousand Oaks, Simi Valley, Moorpark, and Camarillo. Fillmore, Santa Paula, Oxnard and Port Hueneme have the lowest median household income. This geographic pattern is very similar to educational attainment, and linguistic isolation showing correlation between these three indicators.

### Unemployment

The US Census Bureau counts people who are over 16 years old, out of work and able to work as unemployed. It does not include students, active duty military, retired people or people who have stopped looking for work. People who are unemployed may have no health insurance or

## TASK 1.2 EXISTING CONDITIONS

Prepared for Ventura County Transportation Commission

medical care and poor health can make it hard for someone to find work or to retain a job. Stress from long-term unemployment can lead to chronic illnesses, such as heart disease, and can shorten a person's life. The percentage of the population over the age of 16 that is unemployed and eligible for the labor force is the indicator for unemployment. This excludes retirees, students, homemakers, institutionalized persons except prisoners, those not looking for work, and military personnel on active duty.

The population in the County with the highest unemployment are in the more undeveloped areas of the County with pockets of moderate to high unemployment throughout various neighborhoods within every City in the County.

**Table 8.2 Summary of Socioeconomic Trend Indicators**

INDICATOR	CITIES WITH LOWEST PERCENTILES	CITIES WITH HIGHEST PERCENTILES
Educational Attainment (Population with Less than a High School Education)	Thousand Oaks	Fillmore
	Simi Valley	Santa Paula
	Camarillo	Oxnard
	Moorpark	
Linguistic Isolation (Limited English-Speaking Households)	Ojai	Fillmore
	Thousand Oaks	Santa Paula
	Simi Valley	Oxnard
	Camarillo	
Poverty (Population Living Below the Poverty Line)	Thousand Oaks	Fillmore
	Simi Valley	Santa Paula
	Moorpark	Oxnard
	Camarillo	
Unemployment	Santa Paula	Ojai
	Oxnard	Simi Valley
		Moorpark

Figure 8.9 Educational Attainment

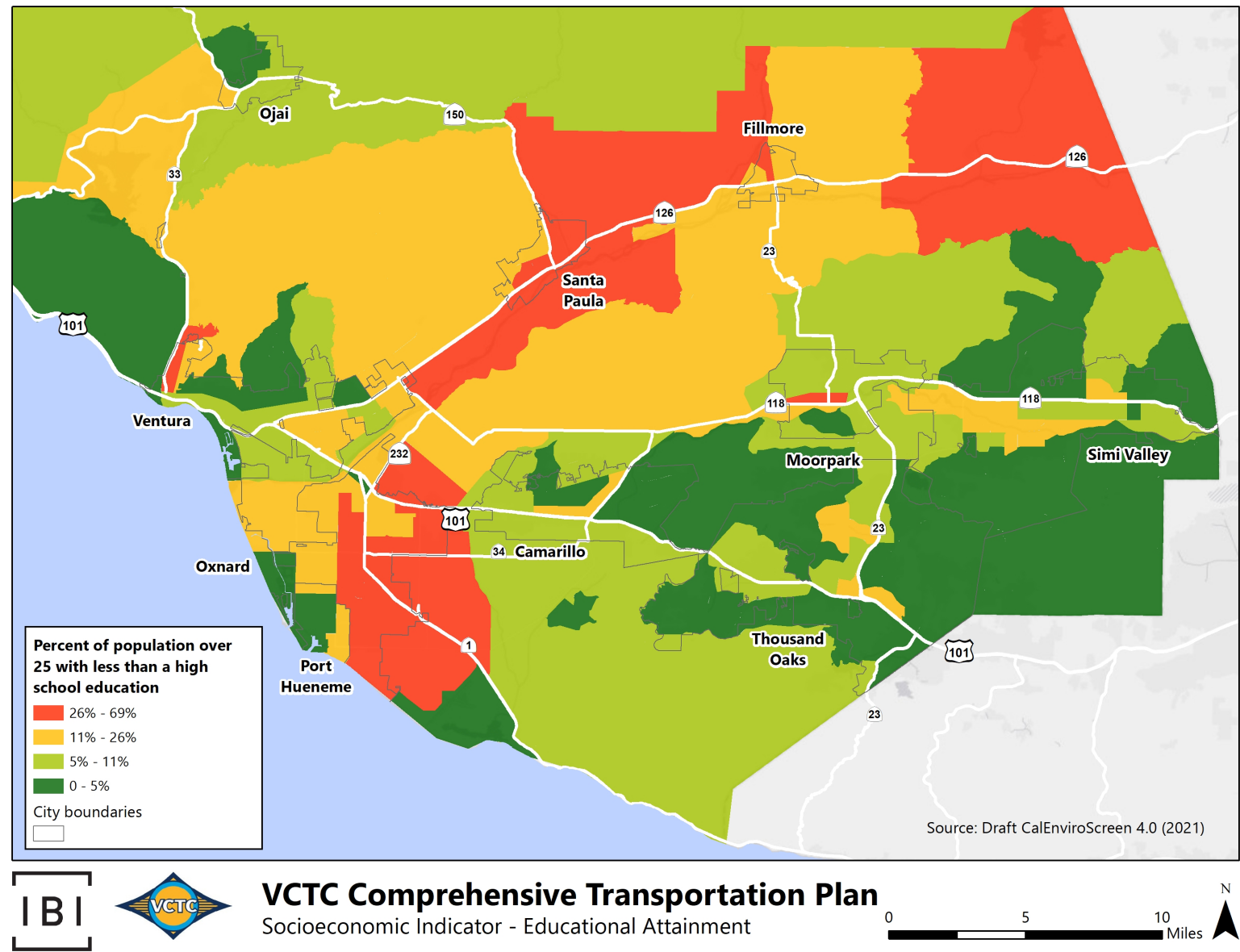


Figure 8.10 Linguistic Isolation

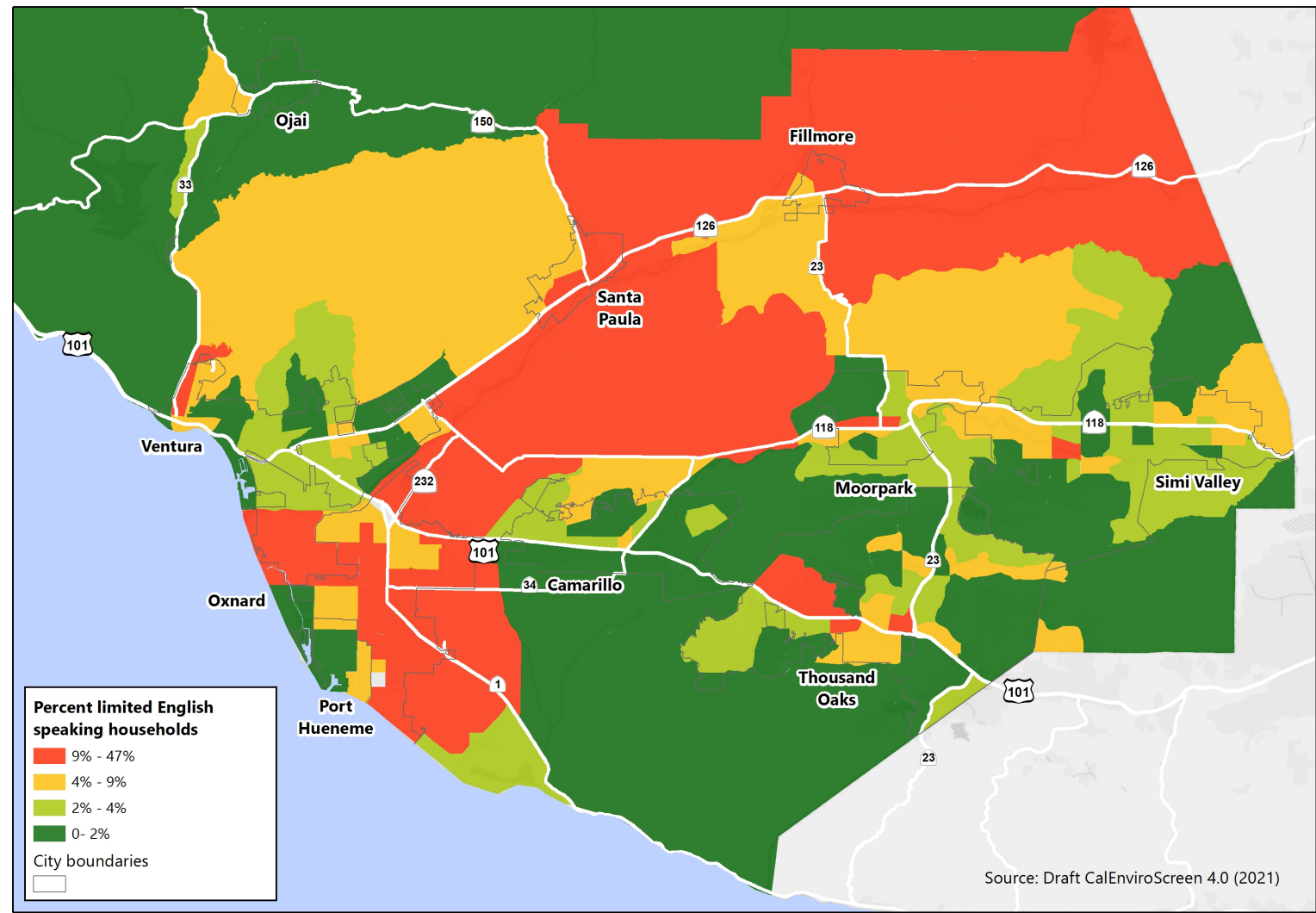


Figure 8.11 Poverty

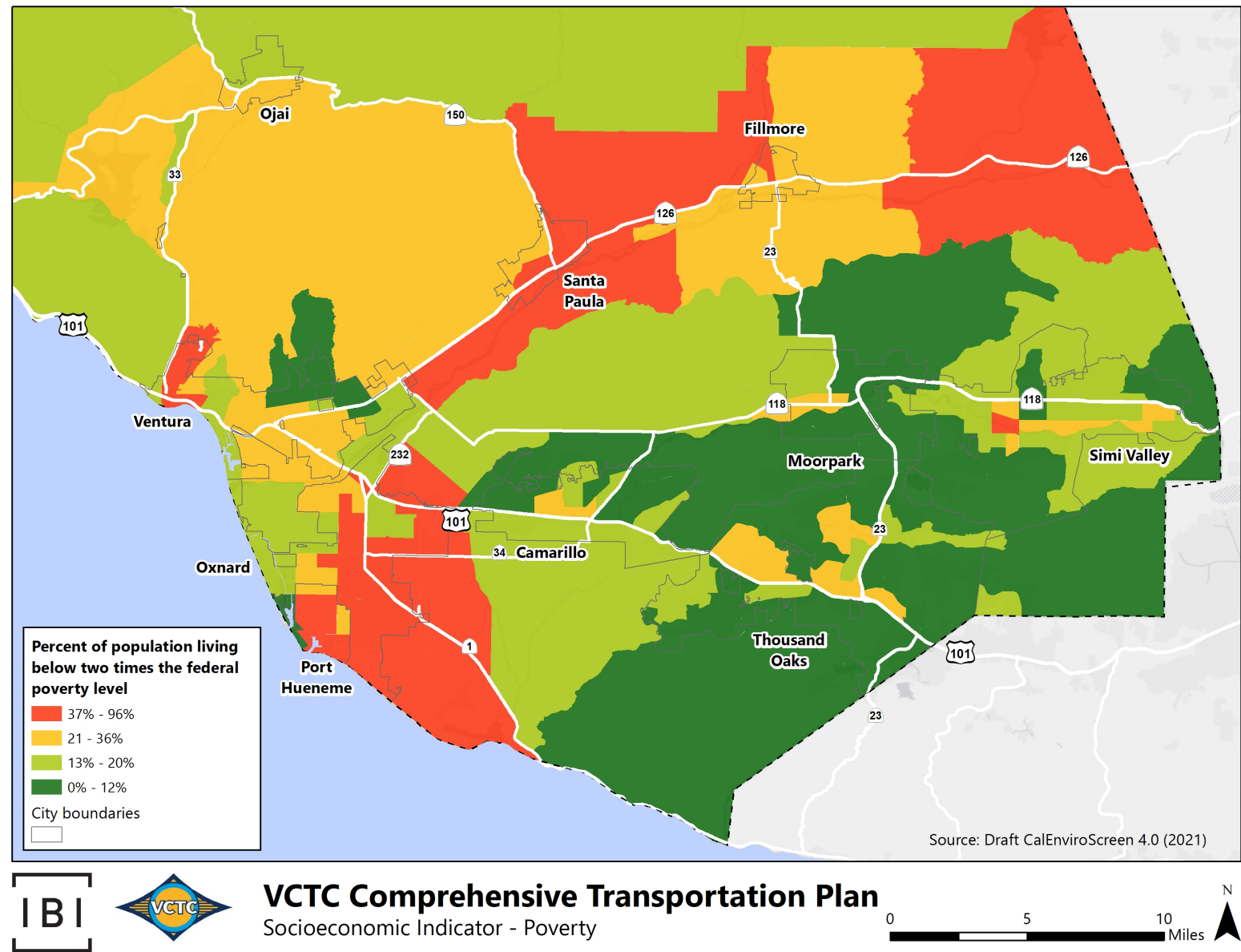
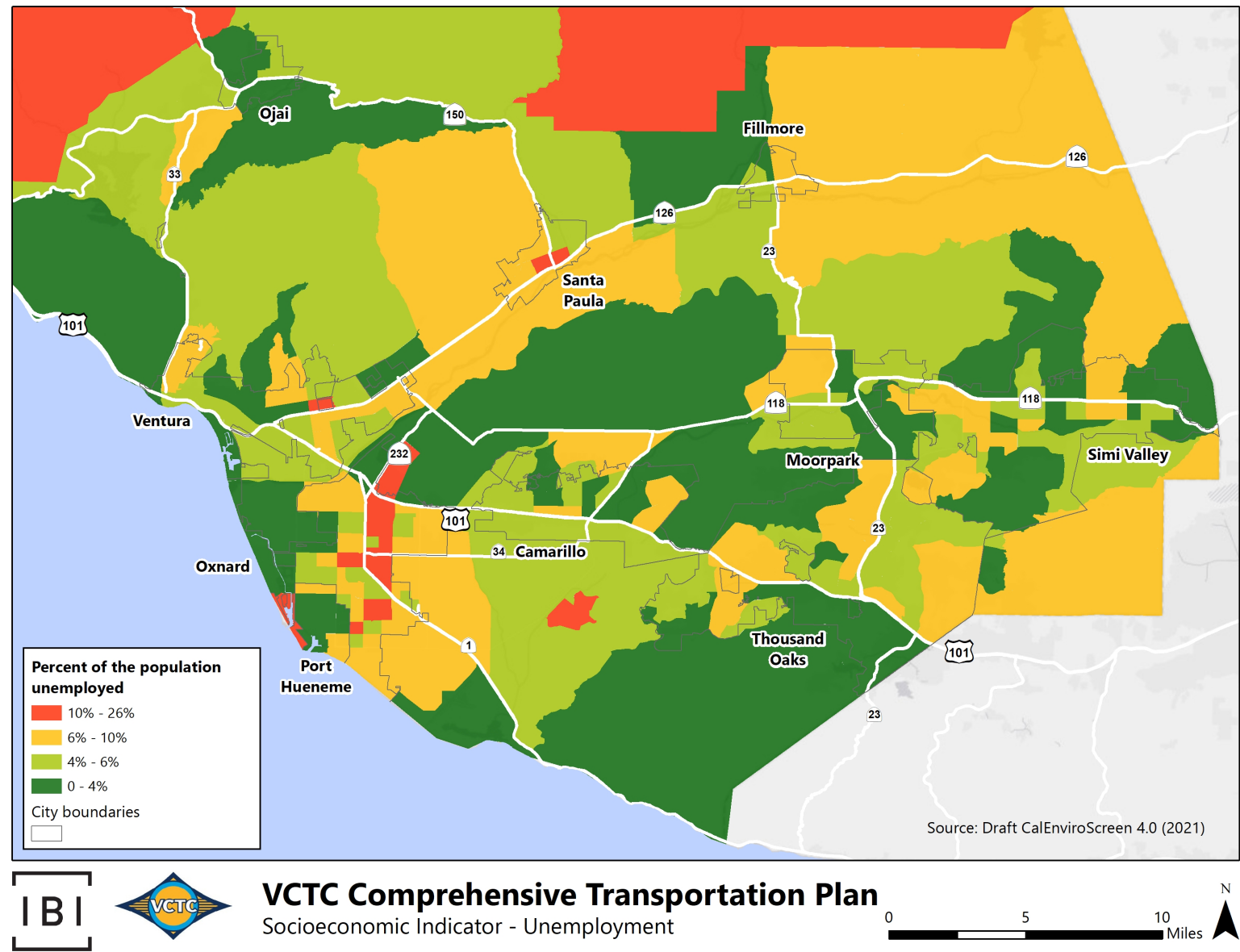




Figure 8.12 Unemployment



### 8.2.3 Health Exposures

#### Ozone

Ozone is the main ingredient of smog and at the ground level, is formed when pollutants chemically react in the presence of sunlight. The main sources of ozone are trucks, cars, planes, trains, factories, farms, and construction. Ozone can cause lung irritation, inflammation, and worsening of existing chronic health conditions, even at low levels of exposure. Children and elderly people are most sensitive to the effects of ozone exposure. Studies have shown that ozone can increase asthma emergency room visits among children and can increase mortality, especially in the elderly, women, and African Americans. Ozone levels are typically highest in the afternoon and on hot days.

The mean of summer months between (May-October) of the daily maximum 8-hour ozone concentration (parts per million/PPM), averaged over three years (2012 to 2014), is the indicator used for determining ozone according to the Air Monitoring Network and California Air Resources Board (CARB). The locations in the County with the lowest levels of ozone are concentrated in the cities of Ventura, Oxnard, Port Hueneme, and Camarillo. The locations in the County with the highest concentration of ozone are in Ojai, and east County which is adjacent to the San Fernando Valley.

#### Particulate Matter

Exhaust from trucks, buses, trains, ships, and other equipment with diesel engines contains a mixture of gases and solid particles and are known as diesel particulate matter (diesel PM). Diesel PM contains hundreds of different chemicals which many are harmful to human health. The highest levels of diesel PM are near ports, rail yards and freeways. The very small particles of diesel PM can reach deep into the lung, where they can contribute to a range of health problems. These include irritation to the eyes, throat and nose, heart and lung disease, and lung cancer. Children and the elderly are especially vulnerable to the effects of diesel PM.

The indicator for particulate matter uses the annual mean concentration of PM<sub>2.5</sub> (average of quarterly means), over three years (2012 to 2014), from Air Monitoring Network and California Air Resources Board (CARB) data. The locations in the County gradually increase in particulate matter concentration from low levels of concentration in the north County to higher levels of concentration in the south County.

**Table 8.3 Summary of Health Exposure Indicators**

INDICATOR	CITIES WITH LOWEST PERCENTILES	CITIES WITH HIGHEST PERCENTILES
Ozone	Ventura	Ojai
	Oxnard	East Ventura County
	Port Hueneme	
	Camarillo	
Particulate Matter	Ojai	Simi Valley
	Fillmore	Thousand Oaks
	Oxnard	Moorpark
	Port Hueneme	Camarillo

Figure 8.13 Ozone

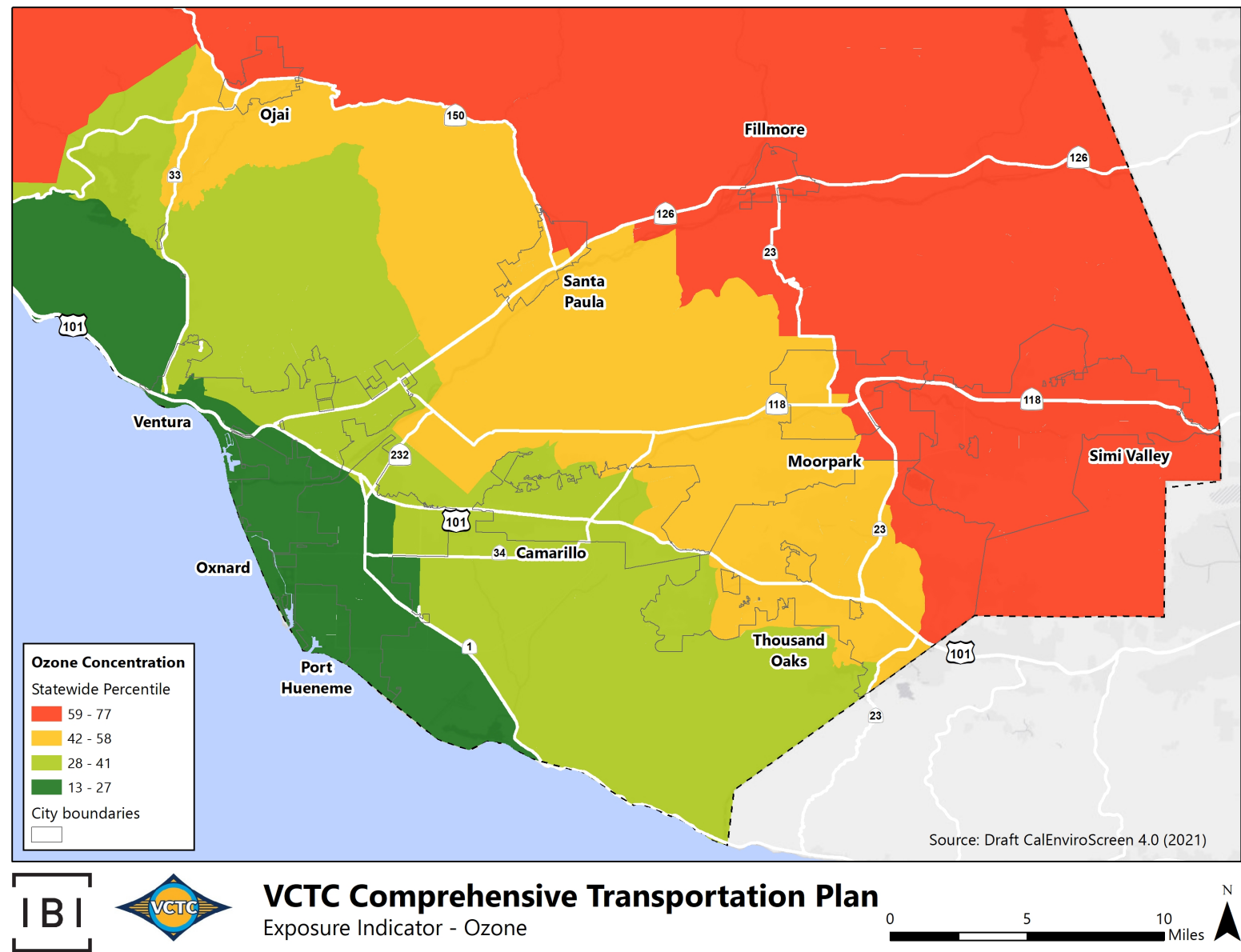
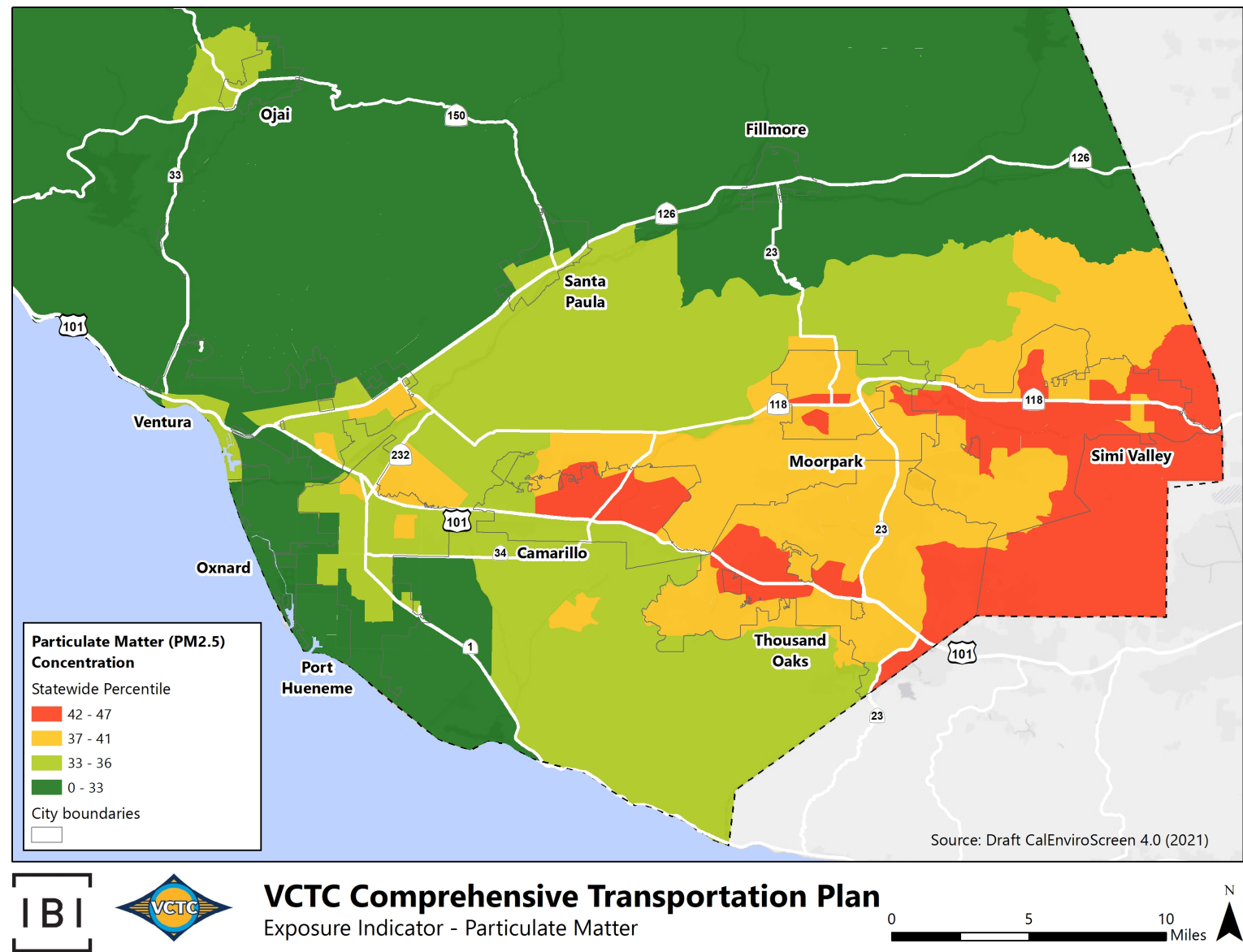


Figure 8.14 Particulate Matter



## 9 Conclusion

This report provides a thorough review of Ventura County's existing demographics, as they relate to population density, employment density, socioeconomics, vulnerable populations, and health and environmental indicators, as well as transportation conditions for the existing condition. Population and employment density are largely concentrated in the incorporated cities in the county, due to policies that protect agriculture and open space between more urbanized areas since the adoption of the Guidelines for Orderly Development in 1969 and the Save Open Space and Agricultural Resources (SOAR) initiatives. Population is expected to grow by 17.5% while employment is expected to grow by 18.3% from 2016 to 2045. Areas of population and employment growth, along with housing availability and affordability are important to consider in the context of mobility needs, as commute patterns can contribute to patterns of congestion and emissions that affect quality of life in Ventura County.

This information is provided in the context of previous and ongoing plans for the county at the local, county, and regional levels. These include land use and circulation plans for the county, as well as each of the county's jurisdictions. It also includes a discussion of regional plans and climate action plans, which affect greenhouse gas emission reduction strategies.

The document also includes a discussion of various existing mobility conditions, as they relate to vehicular movement, commute mode share, transit service and ridership, and active transportation. The majority of commuters travel to work by vehicle, with a smaller portion of the population traveling by transit, bicycle, or walking. Transit ridership in the county has generally declined, and the county is making significant effort in improving bicycle and walking infrastructure throughout the county. Generally, 95% of the Ventura County has access to an automobile. There is an opportunity to improve transit service and connections and to improve active transportation infrastructure and reduce VMT.

The equity analysis highlights areas with disadvantaged populations and communities defined as environmental justice areas, which include the census tracts located near Port Hueneme, the Oxnard and Camarillo Airports, and in Ventura along SR 33. These areas are also vulnerable to health issues related to transportation emissions, such as asthma, low birth weight, and cardiovascular disease. The cities of Fillmore, Santa Paula, and Oxnard tend to have higher percentage of population with less educational attainment, more limited English-speaking households, and more low-income households as well. Generally, cities along the coastal areas of the county tend to be exposed to lower levels of particulate matter, as compared to inland areas. These are important considerations for the prioritization of need for mobility improvement, reduction of VMT and congestion, and provision of alternative mobility solutions.

The findings in this report will be used to inform the Needs Assessment task for the CTP update, as well as the extensive public outreach activities being conducted to gather comprehensive feedback from the community.