Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This chapter explains the impacts that the project would have on the human, physical, and biological environments in the project area. It describes the existing environment that could be affected by the project, potential impacts from each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures. Any indirect impacts are included in the general impacts analysis and discussions that follow.

As part of the scoping and environmental analysis done for the project, the following environmental issues were considered, but no adverse impacts were identified. Consequently, there is no further discussion of these issues in this document.

- Farmlands/Timberlands—Although farmland exists in Santa Barbara County and adjacent to the project, the project itself will not affect farmland. The proposed project would be built mostly within the existing right-of-way and would not acquire private property except for construction and subsurface easements. There would be no easements required on farmland. No timberlands exist in or near the project.

- Energy—Caltrans incorporates energy efficiency, conservation, and climate change measures into transportation planning, project development, design, operations, and maintenance of transportation facilities, fleets, buildings, and equipment to minimize use of fuel supplies and energy sources and reduce greenhouse gas emissions (see Chapter 3). When balancing energy used during construction and operation against energy saved by relieving congestion and other transportation efficiencies, the project would not have substantial energy impacts.

- Wild and Scenic Rivers—There are no federally designated rivers in the project limits.

- Relocations—No businesses or residences would be acquired as part of this project. The proposed project would be built within the existing public right-of-way with the exception of temporary construction easements and several subsurface easements required for footings related to soundwalls and retaining walls.

- Plant Species—According to the Natural Environment Study (January 2012), no special-status plant species were found in the biological study area for the project. No critical habitat for federally or state listed plant species occurs within the project limits.

Since the draft environmental document was prepared and circulated, design plans have been developed at a higher level of detail, partly because information has continued to accumulate on the engineering constraints of the site. This deeper level of detail has enabled environmental technical specialists to update reports (Addendums were prepared for the Community Impact Assessment, Visual Impact Assessment, Location Hydraulic Study, Water Quality, Noise, and Natural Environment Study), so Caltrans can provide that additional information to the public. As a result, many of these changes have been made to the document, with explanations added in response to public comments and questions about the circulated draft environmental document. In this chapter and throughout the final environmental document, a vertical line in the right margin indicates where changes have been made as a result of these updates.

The higher level of design detail did not result in the identification of any new significant impacts nor did it result in the determination that previously identified mitigation measures were infeasible. The new information presented merely clarifies, amplifies, or makes minor changes to the technical study documentation. These clarifications address soundwalls; water quality (expanded discussion) and storm water treatment; cumulative impacts (expanded discussion); floodplain considerations; additional tidewater goby measures contained in the Biological Opinion received from U.S. Fish and Wildlife Service; and additional steelhead trout measures clarified in the Biological Opinion received from NOAA Fisheries.

2.1 Human Environment

2.1.1 Land Use

2.1.1.1 Existing and Future Land Use

Affected Environment

The project area includes more than 10 miles of existing U.S. 101 beginning in Carpinteria and ending in the southern portion of the City of Santa Barbara. The project also goes through the unincorporated area of Toro Canyon and the communities of Summerland and Montecito in Santa Barbara County.

Land use in the project area includes residential, agricultural, commercial, industrial, and open space. These land uses in the various communities are discussed below and shown in Figure 2-1.

City of Carpinteria

Carpinteria encompasses 4,672 acres, of which 3,008 acres are tidelands. Within the city, residential development encompasses most of the land, accounting for 682 acres of land. Many high technology firms, business parks, and industrial uses, including the Venoco Oil and Gas Facility–Carpinteria Plant, are south of U.S. 101. Open space and recreation are also south of U.S. 101, including Carpinteria Beach State Park, Carpinteria Bluffs Nature Preserve, and the Carpinteria Salt Marsh Reserve. Residential uses are south and north of U.S. 101. Some agricultural uses, including Norman's Nursery, are east of the mobile home parks on the north side of U.S. 101. A mix of retail, wholesale, service, and office uses sits along Carpinteria Avenue within the city's business district.

The city and surrounding area include an abundance of natural resources—beaches, coastal bluffs, a salt marsh, several creeks, and a coastal mountain range.

The city has a small downtown area; a variety of community developments; businesses and industries that provide a range of jobs and economic opportunities; and a mixed housing base of single-family residences, multi-family residences, and mobile homes.

Montecito (Unincorporated)

Montecito is unincorporated and is classified as a semi-rural residential area consisting of about 14,258 acres. Some small commercial lots have been developed south of U.S. 101 along the beach front, and a major commercial strip sits along Coast Village Road.

The Montecito Community Plan Area is divided into three subareas: Central Urban, Coastal, and Mountain. The Central Urban Subarea encompasses about 3,984 acres and is characterized as semi-rural, consisting mainly of single-family homes on 1-acre or larger lots containing a variety of residences, as well as a golf course and a private college. The Coastal Subarea encompasses about 290 acres between U.S. 101 and the Pacific Ocean, including a coastal residential community, two major hotel complexes, and several condominium or clustered developments. The Mountain Subarea encompasses 9,984 acres and is bordered by the Los Padres National Forest to the north, west, and east. The existing land use in the subarea is characterized by mountainous terrain and open space.

City of Santa Barbara

About 25 miles long, the City of Santa Barbara is a coastal community with a curving 3-mile-long beach and rolling hills. The highway right-of-way passes through the southeastern portion of the city and goes through commercial, residential, and recreational land uses. Commercial land uses account for 475 acres (4.4 percent) of land in the entire City of Santa Barbara. The Coast Village Circle, which is an area of commercial land uses, lies just north of U.S. 101 in the eastern part of the city. Residential uses, mostly north of U.S. 101, account for 4,118 acres (38.2 percent) of land in the City of Santa Barbara, more than any other land use in the city. Recreational or open space land uses are mostly south of U.S. 101, including the Andrée Clark Bird Refuge, Dwight Murphy Field, Santa Barbara Zoology Garden, East Beach, Cabrillo Pavilion and Arts Center, and Cabrillo Ball Park.

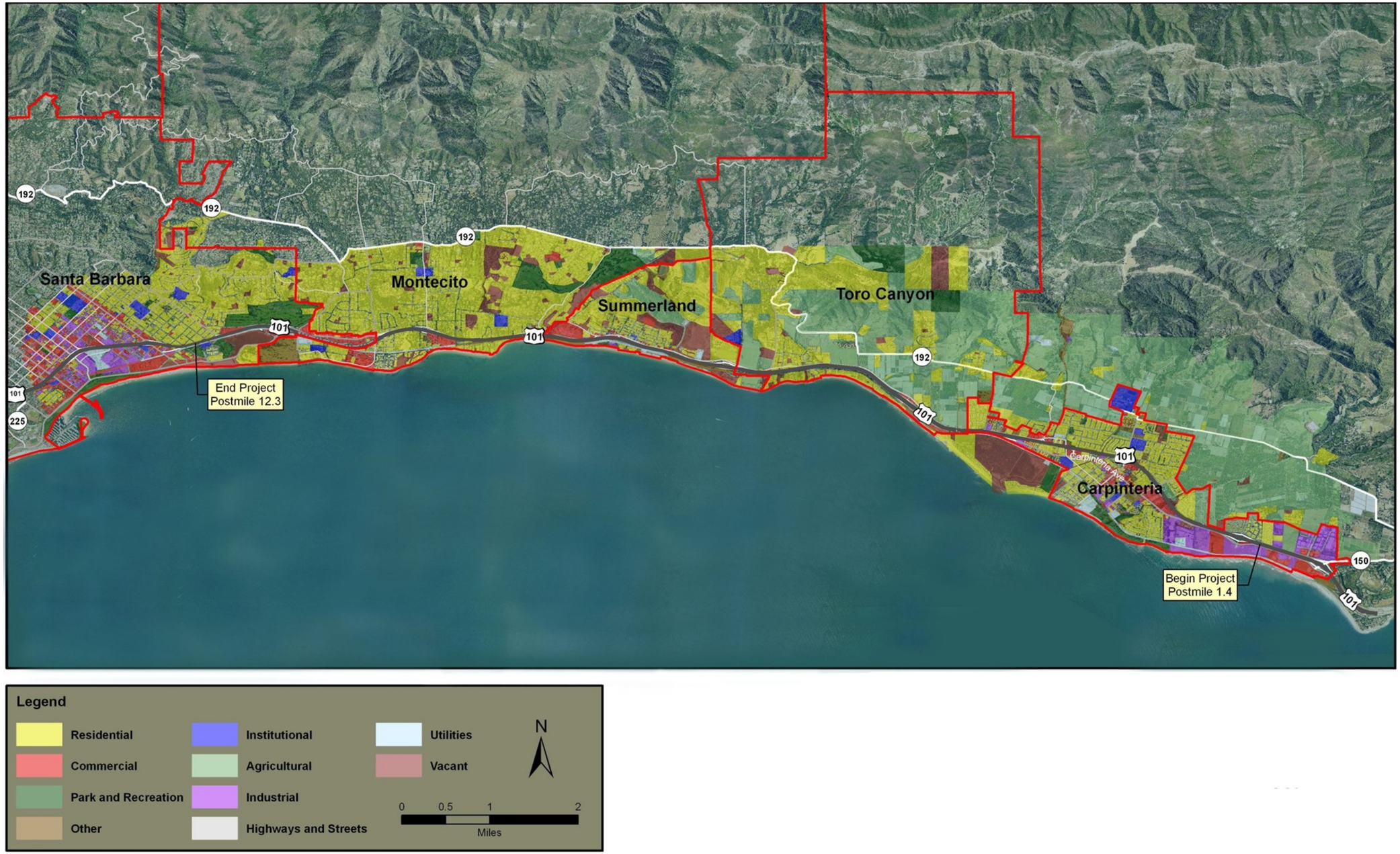


Figure 2-1 Existing Land Uses

This page intentionally left blank

Future Land Uses

Table 2.1 lists the currently proposed projects and recently completed projects in the vicinity of the project area in the cities of Carpinteria and Santa Barbara and in the unincorporated areas of Santa Barbara County. Transportation (including railroad improvements), residential, and commercial development projects in the vicinity of the study area are included.

According to the City of Carpinteria General Plan (2003), Land Use Element, few remaining areas exist in the city where residential development can occur without conflicting with policies aimed at protecting coastal resources. Most new development will occur in commercial and industrial areas where most of the currently undeveloped areas sit. Some additional residential build-out is expected to occur within areas designated for multi-family or mixed uses. The City of Carpinteria General Plan, Community Design Element, notes that the northeast subarea has more opportunities for new development than other areas.

In Santa Barbara County, much of the proposed future development in Toro Canyon is for lot splits or single-family dwellings in highly constrained areas. The Toro Canyon Area Plan recognizes these constraints, and development is limited. In Summerland, commercial areas allow for potential additional development with consideration of communitywide resource constraints. The Summerland Community Plan encourages the development of the maximum number of housing units to meet the needs of the community's low to moderate income households. According to the Montecito Community Plan Update, the community is nearing its ideal maximum build-out potential, with commercial development being limited to the amount needed to serve the greater Montecito community. The County of Santa Barbara Comprehensive Plan encourages infill, prevention of scattered urban development, and a balance between housing and jobs.

The information compiled for the following table was obtained from the City of Carpinteria Community Development Department website and data provided by the City of Santa Barbara Planning Department and Santa Barbara County Planning Department.

Table 2.1 Proposed Development

Project	Jurisdiction	Proposed Use	Address	Project Status*
Bailard Overcrossing	Caltrans/City of Carpinteria	Provide standard clearance at this overcrossing on U.S. 101.	U.S. 101 (PM 1.6)	P
Operational Improvements--Milpas Street to Hot Springs Rd	Caltrans/City of Santa Barbara	Completed in Fall 2012, this project included 2.0 miles of improvements in the City of Santa Barbara. The project included additional northbound and southbound lanes, local road improvements, and bicycle and pedestrian enhancement.	U.S. 101 (PM 10.8 to 12.8)	B
Linden Avenue to Casitas Pass Road Interchanges Project	Caltrans/ City of Carpinteria	This 1.1-mile-long project on U.S. 101 includes reconstruction of interchanges, replacement of Carpinteria Creek Bridge, and new Via Real connection south to Bailard Avenue.	Various roadways between Linden and Bailard avenues	D
U.S. 101 Rehabilitation Project	Caltrans/ Carpinteria and City of Santa Barbara	This recently scoped project proposes to rehabilitate the paved structural section, widen the shoulders, and improve ramps. The project would likely be constructed at the same time as the South Coast 101 HOV Lanes project.	U.S. 101 (PM 2.6 to 11.9)	P
Santa Barbara Curb Ramp Project	Caltrans	Construct and/or improve 43 curb ramps (some with minor sidewalk extensions) at 20 locations along Routes 1, 101, 154, 192 and 246 in Santa Barbara County.	U.S. 101 (PM 2.6 to 11.9)	P
Ventura/Santa Barbara 101 HOV Project	Caltrans/Ventura County and City of Carpinteria	This project consists of adding a high occupancy vehicle (HOV) lane in each direction between the Mobile Pier undercrossing in Ventura and Casitas Pass Road in Santa Barbara COunty. The project began construction in spring 2012 and will finish in 2015.	U.S. 101 (PM 39.8 Ven. Co. to PM 2.2 SB Co)	C
Butterfly Pedestrian Overcrossing ADA	Caltrans/County of Santa Barbara	This project would bring the existing pedestrian overcrossing into compliance with ADA by constructing ramps at each entrance. Some landscaping will be removed, including skyline trees. There is room for some replacement landscaping and perhaps small trees, but unlikely any large varieties would go back at that location.	U.S. 101 (PM 11.0)	P
Santa Claus Lane Streetscape, Beach Access and Parking	Santa Barbara County	Santa Barbara County is proposing to construct parking along Santa Claus Lane and improve access for vehicles and pedestrians.	Santa Claus Lane	P

Project	Jurisdiction	Proposed Use	Address	Project Status*
Santa Claus Lane Bike Path	City of Carpinteria/Santa Barbara County	The Santa Claus Lane Class I bike path project would connect Santa Claus Lane to Carpinteria Avenue on the southbound side of U.S. 101. This project would close the coastal trail gap between Santa Claus Lane and the Carpinteria Marsh.	Between Santa Claus Lane and Carpinteria Marsh (southbound side)	P
Carpinteria Rincon Trail	City of Carpinteria	A paved bicycle/pedestrian trail intended to close the coastal trail gap between Carpinteria Avenue and the new Class I trail along U.S. 101 at Rincon.	Between Carpinteria Avenue and new trail at Rincon	P
LOSSAN North project	California Division of Rail/Federal Railroad Division	The overall project consists of 39 individual rail improvements for a total length of 222 miles.	Between San Luis Obispo train station and the Los Angeles Union Station	P
Rail project - Ortega Siding	California Division of Rail	The south end of Ortega siding has been removed, and the remaining portion is now used as a stub track for maintenance equipment. This project would reconstruct and lengthen this siding to 9,240 feet.	In the vicinity of Padaro Lane	P
San Luis Obispo - Santa Barbara Track Upgrades	California Division of Rail	The railroad project would upgrade 107.36 miles of track from Class 3 to Class 4 track standards (per Federal Railroad Administration).	Various locations	P
Carpinteria Siding	California Division of Rail	The railroad project would construct a new 2,640 foot-long siding at the Carpinteria station. It would include Number 24 power-operated turnouts, as well as a new passenger platform to facilitate use of both tracks.	Mile post 377.25 to Mile post 378.1	P
Dahlia Court Apartments	City of Carpinteria	Construction is underway to add 33 affordable housing units to the existing 54 units.	1305 Dahlia Court	C
Mission Terrace Estates	City of Carpinteria	Construction completed on a 27-unit housing project that includes 24 single-family market rate units and 3 affordable single-family units.	1497 Linden Avenue	B
Miramar Hotel	Santa Barbara County	Renovation of an abandoned resort. The project was reduced over former approval. There would be 186 rooms and no tennis court. The project was delayed as part of the economic downturn.	1555 S. Jameson Way	P
Green Heron Springs	City of Carpinteria	This approved project proposed demolition of the existing building onsite and construction of 30 new condominiums.	1300 and 1326 Cravens Lane	P
Casas de las Flores	City of Carpinteria	Forty-three affordable housing units will be constructed on the former Camper Park site (70-space mobile home park).	4096 Via Real	C

Project	Jurisdiction	Proposed Use	Address	Project Status*
Lagunitas Mixed Use	City of Carpinteria	The proposed mixed-use project consists of 85,000 square feet of office space, as well as 73 residential units.	6380 Via Real	C
Mixed-Use Development	City of Santa Barbara	This project proposes to merge 2 lots and build a 3-story mixed-use building with below-grade parking. The project includes 6 separate commercial spaces and 3 studio apartments.	630 Anacapa Street	P
617 Bradbury Avenue	City of Santa Barbara	This revised project proposes to demolish a single-family residence and build a new 5,978-square-foot mixed-use development that includes 918 square feet of commercial area and about 3,400 square feet of residential area.	617 Bradbury Avenue	P
Mixed- Use Development	City of Santa Barbara	Proposal to subdivide existing 13,500-square-foot lot into 3 lots and build a three-story mixed-use building on each new parcel.	412 Anacapa	D
Mixed-Use Development	City of Santa Barbara	Proposal for a mixed-use project that includes 1,606 square feet of commercial space, a 14,750-square-foot parking lot, and 7 residential condominiums averaging approximately 1,200 square feet each.	825 De La Vina Street	P
McReynolds – City Ventures	City of Santa Barbara	This project proposes to build 48 residential units on 10,285 square feet of land.	535 E. Montecito Street	P
528 Anacapa Street	City of Santa Barbara	This project proposes to demolish an existing 3,300-square-foot commercial building and build a mixed-use building in approximately 20,000 square feet (5,000 commercial/15,000 residential) on a 65,000-square-foot parcel.	528 Anacapa Street	D
1298 Coast Village Road	City of Santa Barbara	Proposal to demolish an existing gas station and build a 16,992-square-foot mixed-use building, including 4,000 square feet of commercial space and 12,192 square feet of residential space.	1298 Coast Village Road	D
718 E. Mason Street	City of Santa Barbara	Proposal to build a new 2,414-square-foot commercial building with office and warehouse space.	718 E. Mason Street	B
1032 E. Mason Street	City of Santa Barbara	This project proposes to build six two-story residential complexes on an existing 24,979-square-foot lot.	1032 E. Mason Street	D
Mixed-Use Development	City of Santa Barbara	This project would build six residential condominiums totaling 10,147 square feet and 2 commercial condominium spaces totaling 2,729 square feet.	517 Chapala	D
Youth Hostel	City of Santa Barbara	Proposal to build an 11,091-square-foot commercial youth hostel.	12 E. Montecito Street	D

Project	Jurisdiction	Proposed Use	Address	Project Status*
406 N. Quarantina Street	City of Santa Barbara	This proposed project would demolish a single-family residence and build a 2,653-square-foot commercial building.	406 N. Quarantina Street	D
408 N. Quarantina Street	City of Santa Barbara	A new 2,717-square-foot commercial building is proposed.	408 N. Quarantina Street	D
Mixed Use Development	City of Santa Barbara	This project consists of demolishing a warehouse/office building to be replaced by a 13,203-square-foot mixed-use building—8,588 square feet: residential and 4,615 square feet: commercial.	116 E. Yanonali	B
Paseo de la Playa	City of Santa Barbara	This project consists of 3 sites: a 45,125-square-foot commercial building on one site and 107 residential units on the remaining sites (affordable and market rate).	101 Garden Street	P
Residential	City of Santa Barbara	This project consists of demolishing a commercial building, merging three lots, and building 57 residential units.	416 E. Cota Street	B
Residential	City of Santa Barbara	This project consists of demolishing an existing building and constructing 8 apartments and a daycare facility.	421 E. Cota Street	B
Cottage Hospital Foundation Workforce Housing	City of Santa Barbara	This project consists of demolishing St. Francis Hospital and building workforce housing—115 residential condominiums on 5.94 acres of a 7.38-acre site.	601 Micheltorena Street	B
Hotel	City of Santa Barbara	The proposed project plans to build or remodel a 150-room, three-story luxury hotel on 3 acres.	433 E. Cabrillo Boulevard	D
Mixed Use Development	City of Santa Barbara	Proposal to demolish an existing 20,125-square-foot commercial building on a 1.4-acre site and build 23,125 square feet of commercial/retail space with 37 residential condominiums.	34 W. Victoria Street	D
900–1100 Las Positas Road	City of Santa Barbara	This project would subdivide a 50-acre parcel into 30 lots; 15 acres will contain 25 single-family homes, while 35 acres will remain open space.	900–1100 Las Positas Road	D

* Status Definitions

PP = Pre-Planning phase: The project is proposed; however, environmental review has not begun.
P = Programmed: Environmental review has begun on the project; not yet approved.
D = Design: Environmental review has been completed; construction has not begun.
C = Construction: As of this document, project is under construction.
B = Build-out: The project is fully constructed to build-out conditions.
-- = Status is currently unknown.

The City of Santa Barbara General Plan, Land Use Element, identifies most of the undeveloped land to be in low-density residential areas and recognizes a need for development of vacant properties. Growth limitations and the sustainability of the city's

resources are challenges that the city faces for future development. The plan encourages a more efficient use of space, as well as upgrading the quality and mix of uses within existing structures, including remodeling and rehabilitation, and reconstruction of existing structures. Economic vitality, fiscal health, and balanced land uses are issues facing the city's future development.

Environmental Consequences

Build Alternatives

Implementation and construction of any of the build alternatives would occur within the existing state highway right-of-way, with only minimal right-of-way required for temporary construction easements. Construction of soundwalls under all three build alternatives may require construction easements outside of the right-of-way. Walls would stand between the freeway and the frontage roads on either side of the freeway. Acquisition of residential or non-residential properties would not be required, but sub-surface easements for footings associated with retaining walls or soundwalls would likely be required. No changes to existing land uses and/or density would occur as a result of the project. No areas in the project area identified for future development would be made directly more accessible with implementation of the project.

No-Build Alternative

Under the No-Build Alternative, the existing conditions would remain, and no impacts to existing and future land uses would occur. Congestion along U.S. 101 would not be alleviated. Access to existing business centers, recreation areas, and the coast would not be improved if the No-Build Alternative were implemented.

Avoidance, Minimization, and Mitigation Measures

Implementation and construction of the proposed build alternatives or No-Build Alternative would not have long-term effects on land uses in the project area; therefore, no mitigation is required.

2.1.1.2 Consistency with State, Regional and Local Plans

Affected Environment

A policy consistency analysis was done to review the applicable policies from the various agencies having jurisdiction over the region. All applicable policies are summarized and, per the California Environmental Quality Act standards, potential inconsistencies with local plans are discussed. (See also Section 2.1.1.3, Coastal Zone.)

Santa Barbara County Comprehensive Plan (updates to elements were made between 1975 and 2010)

The unincorporated area of Santa Barbara County is governed by the Santa Barbara County Comprehensive Plan in an effort to guide decision-making for the future. The Santa Barbara County Comprehensive Plan is a statement of local policy and contains goals, objectives, and action plans that guide the county's long-term development. Potential expansion of U.S. 101, including an additional lane in each direction, is identified in the plan. The Highway 101 Corridor Design Guidelines, as adopted by the Board of Supervisors in 1999, is a set of design criteria intended to be used in the Coastal Zone through Section 35-102E (HC-Highway 101 Corridor Overlay District) of the Coastal Zoning Ordinance. Consistent with the Land Use Element, Policy #6 of the South Coast Policies, the County encourages all agencies (including Caltrans) working within the Highway 101 corridor to design projects in compliance with the Highway 101 Corridor Design Guidelines. The intent of the Highway 101 Corridor Design Guidelines is to assist communities and public agencies in preserving U.S. 101 in a manner consistent with its historic and scenic character while allowing necessary transportation improvements.

Santa Barbara County Circulation Element (1980–Republished in May 2010)

The Circulation Element is one of seven elements mandated by state law for inclusion in the County's General Plan. This element identifies key roadway links throughout the unincorporated areas of the county and guides decisions on new development. The objective of the Circulation Element is to provide traffic capacity guidelines intended to maintain acceptable levels of service on roadways and intersections in the county while allowing reasonable growth within the communities in the unincorporated areas of the county. Beginning in January 2011, due to Assembly Bill 1358, the California Complete Streets Act, all cities and counties upon the next update of their Circulation Elements must include policies for the development of multi-modal transportation networks.

Santa Barbara County Bicycle Master Plan (Draft prepared in 2012, not yet finalized)[6]

The purpose of the County's plan is to help guide the construction of new bicycle-related infrastructure. In updating the Bicycle Master Plan, County staff reviewed all of the adopted Bikeways Maps contained in the General Plan and each of the Community Plans adopted by the County Board of Supervisors. This plan contains the infrastructure from—and is consistent with—the City of Santa Barbara's Bicycle Master Plan. To view the map of the

[6] The last finalized County Bicycle Master Plan is dated 2005. There are a number of updates in the draft plan. The South Coast 101 HOV Lanes project is consistent with both plans.

County's plan, refer to Figure 2-2. The plan also lists the priorities for implementation, along with a description of future financial needs for the projects.

City of Santa Barbara General Plan (Updated 2011)

In December 2011, the City Council adopted the updated *Plan Santa Barbara* General Plan. This process resulted in a new General Plan Introductory Framework, comprehensively updated Land Use and Housing Elements, and a new set of goals and policies for the remaining elements (Open Space, Parks and Recreation, Historic Resources, Environmental Resources including Noise and Conservation, Circulation, and Safety). The updated plan reorganized the elements and is now consistent with the Introductory Framework for Sustainability (a state law). It also compiled the six previous volumes into one document. The revised Land Use Element includes the following under mobility "One of the tenets of sustainability is to reduce the necessity to drive. Corresponding with that goal, the community has determined that the remaining increment of growth should occur while minimizing congestion."

City of Santa Barbara Circulation Element (partially updated December 2011)

A required element of the City's General Plan, the Circulation Element addresses the requirements of state law which are to evaluate the transportation needs of the community and present a comprehensive plan to meet those needs. The plan complies with the California Complete Streets Act of 2008. The goals, policies and implementation actions were either developed during the *Plan Santa Barbara* General Plan update process in December 2011 or were carried over from the existing Circulation Element or Scenic Highways Elements in effect in 2011. These goals, policies, and implementation actions are intended to further integrate circulation policies with the sustainability focus of new or revised policies in other elements. This is accomplished by emphasizing alternative modes of transportation, maintaining traffic flow for all, and reassessing parking requirements to complement a people-oriented community. The City's Bikeway Master Plan "encourages the safe use of the bicycle as a healthful, non-polluting form of transportation." The master plan proposes approximately 40 miles of bikeways using existing road shoulder areas, and 20 miles of bikeways that are to be located off-street.

City of Santa Barbara Pedestrian Master Plan (Adopted July 2006)

This plan is designed to take Santa Barbara's pedestrian system to the next level: to develop a comprehensive pedestrian system that enhances and increases the city's walkability to the extent that all people will feel safe walking, to increase connections to destinations throughout the city, to enhance the Paseo network, and to increase the number of children who walk and bike to school. Also, a major goal of the enhanced pedestrian system is to

increase the overall health of Santa Barbara's residents by promoting walking as a viable means of transportation.

The goals, policies, and strategies outlined in this plan are provided to turn this vision into a reality. The plan includes phased recommendations that will entice people to walk more for short trips, enhance the environment for people with disabilities and children walking to school, and lead to an overall increase in the number of pedestrian trips. It focuses on enhancing pedestrian safety in crosswalks and along streets. The plan also represents a blueprint for improving residents' quality of life by creating a more sustainable environment and reducing traffic, noise, and energy consumption. It includes innovative and exciting options for safe and convenient pedestrian passage, and will link local bus routes and an emerging network of bicycle routes.

City of Santa Barbara Highway 101 Coastal Parkway Design Guidelines (1996)

The Coastal Parkway Design Guidelines are intended to preserve the historic character and visual quality of the segment of U.S. 101 corridor within the city's Coastal Zone. The Coastal Parkway Design Guidelines help the City, Caltrans and other interested agencies maintain this segment of highway in a manner consistent with its historic character while allowing for necessary traffic and safety improvements. This segment of U.S. 101 is a Special Design District corridor that requires review of aesthetic, design, compatibility, landscaping and historic resource preservation for any proposed development requiring a Coastal Development Permit.

City of Carpinteria General Plan and Local Coastal Land Use (2003)

The City of Carpinteria General Plan contains objectives, policies, and implementation strategies guiding development to preserve Carpinteria as a small, rural Southern California coastal community. In addition to the community's land use plan, noise, safety, and open space elements, the General Plan contains a Circulation Element. The Circulation Element provides linkages between land uses in the city by identifying an efficient system of streets and highways. The plan recognizes that current roadway systems, including U.S. 101, are at or near capacity at selected peak periods and that access will become increasingly inadequate as the population grows as projected. The General Plan also recognizes that potential widening of U.S. 101 through the city could occur to accommodate traffic needs. The Local Coastal Land Use Element included in the city's General Plan, together with implementation programs, make up the city's local coastal program. The General Plan sets forth the community's commitment to maintain its small beach-town lifestyle while accommodating an appropriate balance of economic vibrancy.

City of Carpinteria Creeks Preservation Program

The City of Carpinteria Creeks Preservation Program provides guidance from the City of Carpinteria General Plan/Local Coastal Plan in preservation and restoration of creeks located within the City of Carpinteria. The program focuses on Carpinteria Creek, Franklin Creek, Santa Monica Creek, and Lagunitas Creek and includes restoration efforts, suggested improvements, and regulation requirements to protect and preserve local creeks.

Toro Canyon Plan (County of Santa Barbara, 2004)

The Toro Canyon Plan serves as an update to the 1981 Santa Barbara County Comprehensive Plan and Local Coastal Program for urban, rural, and semi-rural areas and neighborhoods. The plan provides the general public, landowners, and county decision-makers with an outline for planning future development and addresses opportunities and limitations for development. Included within the plan are relevant policies of the County of Santa Barbara's Comprehensive Plan, in addition to specific goals, objectives, policies, actions, and development standards to protect the unique character of the Toro Canyon region. The Circulation Element of the plan includes goals, policies, and actions to provide an efficient and safe circulation system that will accommodate existing and future development and growth in Toro Canyon.

Summerland Community Plan (County of Santa Barbara, 1992)

The Summerland Community Plan serves as a portion of the Santa Barbara County Comprehensive Plan and includes relevant policies included in the Comprehensive Plan and Local Coastal Plan. The Community Plan provides a framework for county decision-makers, the community, and landowners in the Summerland area to plan future development. Designed to address the concerns and needs of the community while preserving the unique qualities of the area, the plan signifies a commitment on the part of the County to Summerland's future growth and improvement plans. The Circulation Element calls for roadway improvements that will ease conditions on the most severely constrained roadways and intersections in the planning area.

Montecito Community Plan Update (County of Santa Barbara, 1995)

The Montecito Community Plan is a component of the Santa Barbara County Comprehensive Plan and includes relevant policies included in the County's Comprehensive Plan and the Local Coastal Plan. The Montecito Community Plan includes specific goals relating to community development, public facilities and services, and resources and constraints with specific policies and actions. The plan provides a blueprint for future land use decisions, allowing for development in a manner consistent with available resources and in keeping with the semi-rural residential quality of life. The Circulation Element of the Community

Plan calls for maintaining adequate services and infrastructure to support development and future growth.

South Coast U.S. 101 Deficiency Plan (2002)

The South Coast U.S. 101 Deficiency Plan was developed by the Santa Barbara County Association of Governments in cooperation with Caltrans, County of Santa Barbara, and the cities of Santa Barbara and Carpinteria, in response to congestion along the South Coast U.S. 101. The plan analyzes the characteristics of travel demand and cause of deficiencies along U.S. 101, lists short-term solutions to relieve congestion, and includes a 5- to 10-year implementation schedule. In terms of a long-term proposal, it was recommended that a comprehensive process involving extensive community outreach be prepared to identify a congestion relief strategy in the corridor. This led to the initiation of the *101 In Motion* effort.

101 In Motion Final Report (2006)

The Santa Barbara County Association of Governments' *101 In Motion* report provides an action plan of short-term and long-term solutions to reduce congestion along U.S. 101 in southern Santa Barbara County using multiple transportation improvements. The *101 In Motion* study process brought together local agencies, Caltrans, and interest groups to develop an approach to relieving current and future traffic congestion on U.S. 101 that would be supported by the South Coast community in Santa Barbara County. The report identifies the addition of HOV lanes between the Ventura/Santa Barbara County line and Milpas Street in the City of Santa Barbara as one congestion reduction measure among a package of solutions that will be implemented to provide long-term congestion relief in the corridor.

2013 Federal Transportation Improvement Program (FTIP)

In accordance with Title 23 of the U.S. Code, the Federal Transportation Improvement Program is a program for the use of anticipated federal transportation funds to maintain, operate, and improve the region's multi-modal circulation system. The Federal Transportation Improvement Program includes all federally funded highways, transit, and other transportation projects in the area that are scheduled for implementation. Projects in the Federal Transportation Improvement Program are also typically identified in Santa Barbara County Association of Governments' Regional Transportation Plan.

State Transportation Improvement Program (STIP)

In accordance with Government Code 14520 et. seq., the State Transportation Improvement Program is a statewide program of transportation projects that governs the expenditures of state revenues for transportation. Included in the State Transportation Improvement Program are projects from regional agencies that are also included in a Regional Transportation

Improvement Program, in addition to projects nominated by Caltrans. For the purpose of programming state funding, U.S. 101 in Santa Barbara County is termed both a High Emphasis and Focus Route in the State Transportation Improvement Program's Interregional Improvement Program.

2040 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SBCAG, 2013)

The 2040 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) plans how the Santa Barbara County region will meet its transportation needs for the 30-year period from 2010 to 2040, considering existing and projected future land use patterns as well as forecast population and job growth. It plans for and programs the approximately $7.4 billion in revenues expected to be available to the region from all transportation funding sources over the course of the planning period. It identifies and prioritizes expenditure of this anticipated funding for transportation projects of all transportation modes: highways, streets and roads, transit, rail, bicycle and pedestrian, as well as transportation demand management measures and intelligent transportation systems.

Projects listed in the Congestion Management Program Capital Improvement Program must also be consistent with those listed in the Regional Transportation Plan and Sustainable Community Strategy. As summarized, there are a number of U.S. 101 congestion relief projects identified in Appendix E of the Regional Transportation Plan and Sustainable Community Strategy that would alleviate congestion on this corridor. These include adding HOV lanes from Mussel Shoals to Carpinteria, currently under construction, along with reconstructing the Linden and Casitas Pass interchanges to accommodate the U.S. 101 widening and improve circulation at ramp intersections, and adding HOV lanes from Sycamore Creek to Carpinteria Creek.

Draft Regional Bicycle Plan (SBCAG, 2012, update still in progress)

SBCAG is currently in the process of updating the draft Regional Bicycle Plan. A draft plan was completed in April 2008, but was never adopted by the SBCAG board. The updated Regional Bicycle Plan will serve to update the regional bicycle network, link to policies in SBCAG's 2040 Regional Transportation Plan and Sustainable Community Strategy, and articulate a vision for enhancing bicycle use in Santa Barbara County. The updated plan will incorporate and reflect locally adopted bicycle transportation plans, including new local plans adopted since the draft was completed. It will also reflect other important changes, such as the passage of Measure A and the updated 2040 Regional Transportation Plan and Sustainable Communities Strategy.

Figure 2-2 County Bicycle Routes

This page intentionally left blank

Environmental Consequences

Build Alternatives

The state, regional, and local plans outlined in this section address relevant planning issues, policies, and goals for development in the proposed project area. The transportation plans, including the *101 In Motion* report, the Federal Transportation Improvement Program, the State Transportation Improvement Program, and Regional Transportation Improvement Program, and the Regional Transportation Plan, support and identify the need for improvements on U.S. 101. Widening U.S. 101 to six lanes by adding one HOV lane in each direction in the project area is specified in these transportation plans and is consistent with the three build alternatives for the proposed project.

The Santa Barbara County Comprehensive Plan along with the general plans for the cities of Santa Barbara and Carpinteria do not include specific policies for widening U.S. 101, but they do contain various recommendations for making improvements to U.S. 101. The Montecito Community Plan Policy CIRC-M-3.8 requires community review for all widening and interchange improvements. The Summerland Community Plan contains Action VIS-S-6.1 that requires the development of design criteria for underpass plans with participation by Caltrans, local agencies, and community groups. Required reviews would occur as part of the Coastal Development Permit process. The project would not conflict with any land use policies in those plans. Furthermore, the project would enhance access to coastal resources by improving vehicular circulation within the U.S. 101 corridor. Under the three build alternatives, no changes to land uses, existing or proposed, would occur. The project would not acquire private property except for some temporary construction easements and permanent subsurface easements required for specific soundwalls and retaining walls.

The project would potentially conflict with wetland setbacks identified in several coastal policies. The policy in the Carpinteria plan that would require amending can be found in the Open Space, Recreation & Conservation element. OSC-3c, Implementation Policy 12, states the following: “Maintain a minimum 100-foot setback/buffer strip in a natural condition along the upland limits of all wetlands. No structures other than those required to support light recreational, scientific and educational uses shall be permitted within the setback, where such structures are consistent with all other wetland development policies and where all feasible measures have been taken to prevent adverse impacts . . . .”

The policy in the Santa Barbara County plan that would require an amendment is in the Coastal Plan 9-9: “A buffer strip, a minimum of 100 feet in width, shall be maintained in natural condition along the periphery of all wetlands. No permanent structures shall be permitted within the wetland or buffer area except structures of a minor nature.” In addition,

the policy in the Toro Canyon Plan states: "Development shall be required to include the following buffer areas from the boundaries of Environmentally Sensitive Habitat: Wetlands – minimum 100 feet."

The project would also potentially conflict with buffer limits set for streams or the top-of-bank in riparian areas identified in several coastal plans. The Summerland Community Plan, Montecito Community Plan, and Santa Barbara Coastal Plan all contain buffer limits of 50 feet in urban areas and 100 feet in rural areas of streams and riparian areas. The project would include work on several bridges within these jurisdictional areas. In all areas where bridge widening is required, the longer bridge spans would create wider natural channels within the state right-of-way (Arroyo Paredon, Romero [Picay], San Ysidro, Toro Canyon, and Oak Creek).

Several coastal policies also include protection and preservation of trees and landscaping as scenic resources. The project would be potentially inconsistent with the Summerland Community Plan; Montecito Community Plan; City of Santa Barbara's Conservation Element and Coastal Parkway Design Guidelines; and Santa Barbara County Highway 101 Corridor Design Guidelines. The project would remove landscaping and about 253 coast live oaks within the corridor. The removal of vegetation and trees within the median and shoulder areas would result in a decrease in landscaping within the highway corridor.

The project would also potentially conflict with the City of Santa Barbara Highway 101 Coastal Parkway Design Guidelines that identify minimum median widths for landscaping. For safety, where standard lane widths are not sufficient within the right-of-way, the median width may potentially be less than 10 feet. The City of Santa Barbara Highway 101 Coastal Parkway Design Guidelines identify this segment of Highway 101 as a special design district corridor that requires review of aesthetic, design, compatibility, landscaping and historic resource preservation for any proposed development requiring a coastal development permit.

The project would also potentially conflict with the City of Santa Barbara Highway 101 Coastal Parkway Design Guidelines that list the Hot Springs/Cabrillo Boulevard interchange as historically significant. The project would result in changes to the appearance, context, and function of the interchange. Local planning documents refer to the Cabrillo Boulevard interchange as historically significant. Caltrans, however, formally evaluated the constituent resources as part of the Historic Bridge Inventory (1986 and 2006 Update) and as part of the 1992 Historic Property Survey Report for the Santa Barbara Six-Lane Project. The Historic Property Survey Report for the current HOV lanes project also reviewed these earlier determinations. The interchange bridges—including the Los Patos Underpass (Bridge No.

51-235) and the Route 225 Underpass (Bridge No. 51-46)—were determined not eligible for listing in the National Register of Historic Places and were also determined to not meet the criteria for eligibility to the California Register of Historical Resources. The bridges are, therefore, not historical resources for the purposes of the California Environmental Quality Act. The State Historic Preservation Officer concurred with this determination on January 25, 1993 and January 26, 2011.

The project would only be partially consistent with the City of Santa Barbara Noise Element due to the fact that there are already areas within the project limits that exceed noise thresholds established by the City of Santa Barbara—the 65 dBA (decibel) thresholds. Policy 6.1 in the Noise Element states the following: "Encourage Caltrans and the County Engineer to incorporate noise reduction methods, such as barrier walls, in new road construction and improvements to existing roadways." The project proposes to install noise-attenuating pavement surface on all mainlines within the project limits. In addition, the project proposes to construct sound barriers as a form of noise abatement—provided the sound barriers are reasonable and feasible and follow noise protocol—where noise levels approach or exceed the Federal Highway Administration's noise abatement criteria. Caltrans would also potentially be in conflict with the local noise policy regarding night work since it is highly likely that night work will occur during the project's construction to take advantage of those times when traffic is lightest (see Section 2.4).

A Coastal Development Permit would be required for the proposed project improvements from each of the following jurisdictions: the County of Santa Barbara, City of Santa Barbara, and the City of Carpinteria. In addition, a Conditional Use Permit is also required for the City of Carpinteria. Before issuance of a Coastal Development Permit can occur, an amendment to the Local Coastal Plans for the City of Carpinteria and Santa Barbara County would be required. As currently proposed, the project is not consistent with the wetland setback policies in the County of Santa Barbara's or the City of Carpinteria's Local Coastal Plans. The proposed amendments would need to narrowly define the wetlands affected by the project; only those wetlands would be included in the amendment. Therefore, no impacts other than those already identified in this document would occur unless written into the amendment language.

Table 2.2 lists and describes potential inconsistencies with local policies.

Table 2.2 Potential Policy Inconsistencies

Subject of Policy	Local Policies	Assessment
Scenic and Visual Resources	City of Santa Barbara - Conservation Element - 4.0 City of Santa Barbara - LCP – 9.13 and 9.14 City of Santa Barbara – U.S. 101 Coastal Parkway Design Guidelines Summerland Community Plan – VIS-S-2, S-4 Santa Barbara County Highway 101 Corridor Design Guidelines – L-3, L1, S16 California Coastal Act - Section 30251	The project would preserve and restore the existing landscape character of the U.S. 101 corridor to the greatest extent possible. However, the project would be inconsistent with these policies due to removal of trees and existing landscaping within the median and outside shoulder areas. The loss of vegetation would result in an unavoidable increase of the urban character within the corridor. In addition, where the total highway right-of-way width is not sufficient, the median planting area would be less than 10 feet (U.S. 101 Coastal Parkway Design Guidelines). The project would change the visual character of the U.S. 101 corridor due to vegetation removal and the introduction of soundwalls up and down the 10-mile stretch of highway. Measures to help offset these impacts include aesthetic treatment; eliminate soundwalls that block prime ocean views; design visible features (i.e., retaining walls, bridges, radar facilities, etc.) to blend into setting; and use existing/new plantings to help offset impacts.
Wetland and Creek Protection	Summerland Community Plan – BIO-S-7.1 Montecito Community Plan – BIO-M-1.3.1 and 1.8 Carpinteria - LCP – Open Space OSC-3c and Implementation Policy 12 County of SB - CP – 9-9, 9-35, and 9-37 Toro Canyon Plan – BIO-TC-1.4	The project would not achieve the minimum buffer distance from wetlands, streams, and riparian areas and is potentially inconsistent with policies that relate to wetland and riparian setbacks. The project would remove approximately 253 coast live oak trees and some existing landscaping within the project corridor. Permanent impacts to wetlands would be compensated at a 3:1 ratio. Any temporary impacts to plants/trees in riparian areas would be offset by replanting/restoration efforts using between a 1:1 to 3:1.
Historical Resources	City of Santa Barbara – LCP – 10.3	Local planning documents refer to the Cabrillo Boulevard interchange as historically significant. Caltrans, however, formally evaluated the constituent resources as part of the Historic Bridge Inventory (in 1986 and in the 2006 update), and as part of the 1992 Historic Property Survey Report prepared for the Santa Barbara Six-Lane Project. The Historic Property Survey Report for the current project also reviewed these earlier findings. The interchange is not eligible for the National Register of Historic Places nor is it a historical resource for the purposes of CEQA (State Historic Preservation Officer concurred in January 25, 1993, and January 26, 2011).

Source: Local Coastal Policies within the project area.

No-Build Alternative

Under the No-Build Alternative, the existing conditions would remain. Congestion along South Coast U.S. 101 would not be eased, and growth projected for the study area would not be accommodated. This would not be consistent with the existing transportation plans, which call for improvements to U.S. 101. In addition, the No-Build Alternative would not fulfill goals set in several Circulation Elements, components of *101 In Motion,* and the Regional Transportation Plan that refer to widening U.S. 101 to relieve congestion.

Avoidance, Minimization, and/or Mitigation Measures

For the preferred alternative (Alternative 1) and the two other build alternatives (Alternatives 2 and 3), conflicts with local and coastal policies are expected to occur for visual resources, biological resources, wetland buffers, and landscaping. Avoidance and/or mitigation measures to minimize impacts would be required for visual resources (see Section 2.1.6), wetlands (see Section 2.3.2), and landscaping impacts (see Section 2.1.6) to comply with study area planning documents that call for the retention of vegetative character and wetland setbacks. Because the project cannot meet the wetland buffer limits established by the local coastal plans for the City of Carpinteria and County of Santa Barbara, a local coastal plan amendment would be required for each of these jurisdictions prior to issuing the Coastal Development Permits. Additional measures may be requested as part of the Coastal Development Permit process.

The No-Build Alternative would be inconsistent with local transportation plans that call for widening U.S. 101.

2.1.1.3 Coastal Zone

Regulatory Setting

The Coastal Zone Management Act of 1972 is the main federal law that preserves and protects coastal resources. This act sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal zone management plan can review federal permits and activities to determine if they are consistent with the state's management plan.

Federal consistency is the Coastal Zone Management Act requirement where federal agency activities that have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone must be consistent to the maximum extent practicable with the enforceable policies of a coastal state's federally approved coastal management program.

California has developed a coastal zone management plan and has enacted its own law—the California Coastal Act of 1976—to protect the coastline. The policies established by the California Coastal Act are similar to those for the Coastal Zone Management Act; they include the protection and expansion of public access and recreation, protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, protection of scenic beauty, and protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal Coastal Zone Management Act delegates power to coastal states to develop their own coastal zone management plans, the California Coastal Act delegates power to local governments (15 coastal counties and 58 cities) to enact their own local coastal programs. Local coastal programs determine the short- and long-term use of coastal resources in their jurisdictions consistent with the California Coastal Act goals. A federal consistency determination may be needed as well.

Affected Environment

A policy consistency analysis was done to review the applicable policies from the various agencies having jurisdiction over the region. All applicable policies are summarized and, per the California Environmental Quality Act standards, potential inconsistencies with local plans are discussed (also see Section 2.1.1.2, Consistency with State, Regional and Local Plans).

The South Coast 101 HOV Lanes project falls within three local coastal plans: the Santa Barbara County Local Coastal Plan, the City of Santa Barbara Local Coastal Plan, and the City of Carpinteria Local Coastal Plan. The county adopted a separate coastal land use plan in 1982 (updated and republished in June 2009) and the City of Santa Barbara adopted a separate local coastal plan in 1981 (amended in 1994 and 2004). The City of Carpinteria adopted a local coastal plan in combination with their general plan. All three plans were certified by the California Coastal Commission per the California Coastal Act of 1976 §§ 30108.6, 30500.

Santa Barbara County Coastal Land Use Plan (1982–Republished June 2009)

The Santa Barbara County Coastal Land Use Plan is a separate element of the County's Comprehensive Plan pursuant to Public Resources Code Section 30500 of the California Coastal Act of 1976. The purpose of the Coastal Land Use Plan is to protect coastal resources and provide greater access and recreational opportunity for the public, while allowing orderly and well-planned urban development of coastal-dependent and coastal-related industry. The

plan proposes that urban-rural boundaries be established to redirect growth from an outward expansion to one of infilling. A Coastal Development Permit is required for projects within the coastal zone to ensure compliance with this plan and the California Coastal Act.

City of Santa Barbara Local Coastal Plan (1981, amended 1994 and 2004)

The City of Santa Barbara Local Coastal Plan is pursuant to Public Resources Code Section §§30500 of the California Coastal Act of 1976. The plan addresses the city's significant coastal issues with a combination of land use designations, resource protection, and development objectives and policies. A Coastal Development Permit is required for projects within the coastal zone to ensure compliance with this plan and the California Coastal Act.

City of Carpinteria General Plan and Local Coastal Land Use Plan (2003)

The City's General Plan is designed to be consistent with the Californina Coastal Act and provides the Land Use Plan and related policies for the various implementation programs such as the zoning ordinance. The Land Use Plan establishes the type and intensity of land uses and guides growth and development. The Land Use Element is the heart of the Land Use Plan of the city's Local Coastal Program (California Coastal Act of 1976, 30108.5) and, together with the implementation programs, makes up the City's Local Coastal Program. The General Plan sets forth the community's commitment to maintain its small beach-town lifestyle while accommodating an appropriate balance of economic vibrancy.

This General Plan is designed to be consistent with the California Coastal Act and provides the Land Use Plan and related policies for the various implementation programs such as the zoning ordinance. This Land Use Plan, together with the implementation programs, makes up the City's Local Coastal Program (California Coastal Act of 1976 §§ 30108.6, 30500). All objectives, policies, implementation policies, and map language identified within [the plan] are intended to address Coastal Act issues, unless identified with the"GP" symbol. Policies and language identified with the "GP" symbol are excluded from the Land Use Plan, but are included in the General Plan.

Environmental Consequences

Build Alternatives

The project would potentially conflict with wetland setbacks identified in several coastal policies. The policy in the Carpinteria plan that would require amending can be found in the Open Space, Recreation & Conservation element. OSC-3c, Implementation Policy 12, states the following: "Maintain a minimum 100-foot setback/buffer strip in a natural condition along the upland limits of all wetlands. No structures other than those required to support light recreational, scientific and educational uses shall be permitted within the setback, where

such structures are consistent with all other wetland development policies and where all feasible measures have been taken to prevent adverse impacts . . . ."

Coordination with regard to the Local Coastal Amendment process has already begun with the City of Carpinteria in an effort to facilitate two Caltrans projects proposed within the city limits. The proposed project would encroach into existing wetland buffers (as defined using the Coastal Commission single criterion definition). The project team worked diligently to refine the alignment of proposed elements in order to avoid wetland resources, but total avoidance is not possible. As a result of ongoing discussions with the City of Carpinteria regarding the conditions of the amendment, the Santa Barbara County Association of Governments has agreed to take the lead on two separate coastal trail projects that are identified as priority improvements in the City of Carpinteria. The coastal trail tied to the South Coast 101 HOV Lanes project is identified as the Santa Claus Lane Bike Path that will extend from Santa Claus Lane to Carpinteria Avenue. This Class I path will close the coastal trail gap in this area.

The policy in the Santa Barbara County plan that would require amending is identified in Coastal Plan 9-9: "A buffer strip, a minimum of 100 feet in width, shall be maintained in natural condition along the periphery of all wetlands. No permanent structures shall be permitted within the wetland or buffer area except structures of a minor nature." In addition, the policy in the Toro Canyon Plan states: "Development shall be required to include the following buffer areas from the boundaries of Environmentally Sensitive Habitat: Wetlands – minimum 100 feet."

The project would also potentially conflict with buffer limits set for streams or the top-of-bank in riparian areas identified in several coastal plans. The Summerland Community Plan, Montecito Community Plan, and Santa Barbara Coastal Plan all contain buffer limits of 50 feet in urban areas and 100 feet in rural areas of streams and riparian areas. The project would include work on several bridges within these jurisdictional areas. In all areas where bridge widening is required, the longer bridge spans would create wider natural channels within the state right-of-way (Arroyo Paredon, Romero [Picay], San Ysidro, Toro Canyon, and Oak Creek).

The project is also potentially inconsistent with Coastal Act policy 30251: "The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore

and enhance visual quality in visually degraded areas . . . .” A Coastal Development Permit application to ensure compliance with the relevant coastal plans and the California Coastal Act would be required.

The project would enhance access to coastal resources by improving vehicular circulation within the U.S. 101 corridor. In Santa Barbara County, U.S. 101 is the main route for interregional traffic in the Coastal Zone. The preferred alternative enhances coastal access by reducing congestion and travel time on the highway for drivers attempting to reach coastal resources, a substantial enhancement from a regional perspective. The Forecast Operations Report in the Traffic Study notes that building the project would reduce vehicular delay on a daily basis by 11,435 hours (62 percent) in 2040.

No-Build Alternative

Under the No-Build Alternative, existing conditions would remain and no impacts to the coastal zone would occur. However, existing congestion along U.S. 101 would not be alleviated, and planned growth in the area would not be accommodated. Access to the coast would continue to be impeded.

Avoidance, Minimization, and/or Mitigation Measures

Because the proposed project is located within several coastal jurisdictions, Coastal Development Permits are required from the Cities of Carpinteria and Santa Barbara along with the County of Santa Barbara. Prior to applying for the Coastal Development Permits, amendments to the Local Coastal Plans prepared for the City of Carpinteria and County of Santa Barbara are required due to policy inconsistencies between the proposed project and their local coastal plans. In addition to the Coastal Development Permit, the City of Carpinteria requires a Conditional Use Permit. Additional measures to minimize impacts may be required for visual resources, wetlands, and landscaping as conditions of the Coastal Development Permits.

2.1.1.4 Parks and Recreation

Affected Environment

Parks and recreational facilities within the South Coast 101 HOV Lanes project area include neighborhood and community parks, regional parks, state parks, open spaces, and trails. Parks and recreational areas are listed in Table 2.3 and shown in Figure 2-3.

Recreational facilities in Carpinteria include the Carpinteria Salt Marsh Reserve and Nature Park; Carpinteria Bluffs Nature Preserve and nearby Viola Fields; Carpinteria Beach State Park; Carpinteria Creek Park; Farmer’s Parcel Open Space; and Carpinteria City Beach. The

Carpinteria Salt Marsh Reserve and Nature Park are both on Ash Avenue in Carpinteria. Facilities include an interpretative area with a teaching amphitheater and a nature trail.

Table 2.3 Park and Recreational Facilities

Map ID No. on Figure 2-3	Park	Location
State of California		
1	Carpinteria State Beach	End of Palm Avenue
2	Carpinteria Salt Marsh Reserve (UCSB)	Ash Avenue
Santa Barbara County		
4	Lookout Park	End of Lookout Park Road
19	Loon Point	Immediately west of Toro Canyon
20	Santa Claus Lane (proposed official beach access)	Santa Claus Lane
24	Oceanview Park	Corner of Via Real and Greenwell Avenue
City of Carpinteria		
3	Carpinteria Salt Marsh Nature Park	Ash Avenue
5	Tar Pits Park	5663 Carpinteria Avenue
6	El Carro Park	Namouna Street and El Carro Lane
7	Memorial Park	Santa Ynez Avenue and Aragon Drive
8	Heath Ranch Park	Eucalyptus Street
9	Franklin Creek Park	End of Sterling Avenue
10	Carpinteria City Beach	Sandyland Road
11	Carpinteria Creek Park	5600 Via Real
21	Farmer's Parcel Open Space	Bailard Avenue
22/23	Bluffs Nature Preserve and Viola Fields	Bailard Avenue/Carpinteria Avenue
City of Santa Barbara		
12	Cabrillo Ball Park	Milpas Street and Cabrillo Boulevard
13	East Beach	1118 E. Cabrillo Boulevard
14	Dwight Murphy Field	501 Niños Drive
15	Santa Barbara Zoo/Zoological Gardens	1300 E. Cabrillo Boulevard
16	Andrée Clark Bird Refuge	1400 E. Cabrillo Boulevard
17	Sunflower Park	1124 E. Mason Street
18	Municipal Tennis Stadium	1414 Park Place

Figure 2-3 Parks and Recreation Facilities

This page intentionally left blank

Five community-based parks provide open space, picnic areas, fields, playgrounds, bicycle trails, walking trails, and beach access. Lookout Park in Summerland is a community-based park and recreational facility serving Santa Barbara County. A neighborhood park known as Oceanview Park, established in 2001 about the same time the Summerland Cottages and Villas were constructed, sits on the corner of Greenwell and Via Real. Loon Point has a parking lot on the north side of Padaro Lane with trail access to the beach. Santa Claus Lane, part of the County's long-term plan, is an area used extensively by the public despite the fact that it is not yet designated as an official beach access. Wallace Avenue and Padaro Lane also provide beach access in Summerland.

In the City of Santa Barbara, several parks provide recreational opportunities for community residents and visitors. The Santa Barbara Zoo, the Andrée Clark Bird Refuge, and city beaches including East Beach, offer recreational activities within the project area. The Santa Barbara Zoo sits on 30 acres of botanical gardens within the City of Santa Barbara. The zoo is dedicated to the preservation, conservation, and enhancement of the natural world through education, research, and recreation, and it overlooks the Pacific Ocean, Andrée Clark Bird Refuge, and the Santa Ynez Mountains. The Andrée Clark Bird Refuge is across from East Beach and has a bikeway and walking path with interpretive environmental self-guided tours.

Environmental Consequences

Most of the work associated with the project would occur within the existing right-of-way and not require the use of property from any park or recreational facility. Exceptions to working within the right-of-way occur only in those areas where temporary and permanent subsurface easements are required for constructing retaining walls and soundwalls. No temporary or permanent easements are necessary for any property associated with parks or recreational areas. Therefore, the project would not result in any direct long-term effects on parks, beach access, or recreational facilities (see Appendix B, *Resources Evaluated Relative to the Requirements of Section 4(f)*). Building the preferred alternative or other build alternatives (Alternatives 2 or 3) would reduce congestion on U.S. 101, thereby improving access to parks and recreational facilities within the project area.

Avoidance, Minimization, and/or Mitigation Measures

During construction, at least two lanes in each direction would remain open for peak-period travel. U.S. 101 mainline lane closures would occur mainly during off-peak hours to minimize construction-related travel impacts within the corridor. Construction of the build alternatives would be done with measures taken to avoid public access impacts to park and recreational facilities, with alternate routes made available for use during construction.

Construction-related disruptions would be minimized through development and implementation of a Traffic Management Plan.

2.1.2 Growth

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act of 1969, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The Council on Environmental Quality regulations (40 Code of Federal Regulations 1508.8) refer to these consequences as secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act also requires the analysis of a project's potential to induce growth. California Environmental Quality Act guidelines, Section 15126.2(d), require that environmental documents ". . . discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment . . . ."

Affected Environment

A Growth-Related Impact Analysis was completed for this project in June 2010. An addendum to this study was prepared in January 2014. A model was included in this study that looked at employment and residential centroids (focal points that represent the center of activity).

The South Coast U.S. 101 corridor, a major transportation route and an important link in the regional transportation system, is experiencing increased congestion. Traffic volumes along the U.S. 101 corridor are projected to increase substantially over the next 30 years, largely as a result of the increased residential and commercial development anticipated in specific areas of Santa Barbara County and Ventura County. Commuter traffic contributes to vehicle volumes exceeding capacity, resulting in severe congestion and increased travel times along U.S. 101 through the project area, mostly during peak hours.

The main factors that affect the population growth pressures in residential locations like those considered in the study are housing prices in the area, local land use plans for the area, and commute times to major employment centers. Due to implementation of the South Coast

101 HOV Lanes project and with help from the growth model analysis, the effects of changes in commute times were reviewed.

Main factors that influence growth in a suburban community are housing prices, local plans, and commute times to employment areas. Of the three, commute time is the factor most directly affected by transportation projects. Future traffic speeds in the corridor presented in the South Coast 101 HOV Traffic Study and Forecast Operations Report (October 2009; revised in December 2011) were used for this study. A model was developed to analyze commute times between jobs within and outside the region (represented by the employment centroids) and eight selected residential zones (represented by the residential centroids).

This study defines an employment centroid as a focal point that represents the center of activity of an employment zone. For the purposes of this study, zones and centroids have the same representation. For example, R-1 would represent both the first residential zone and its centroid.

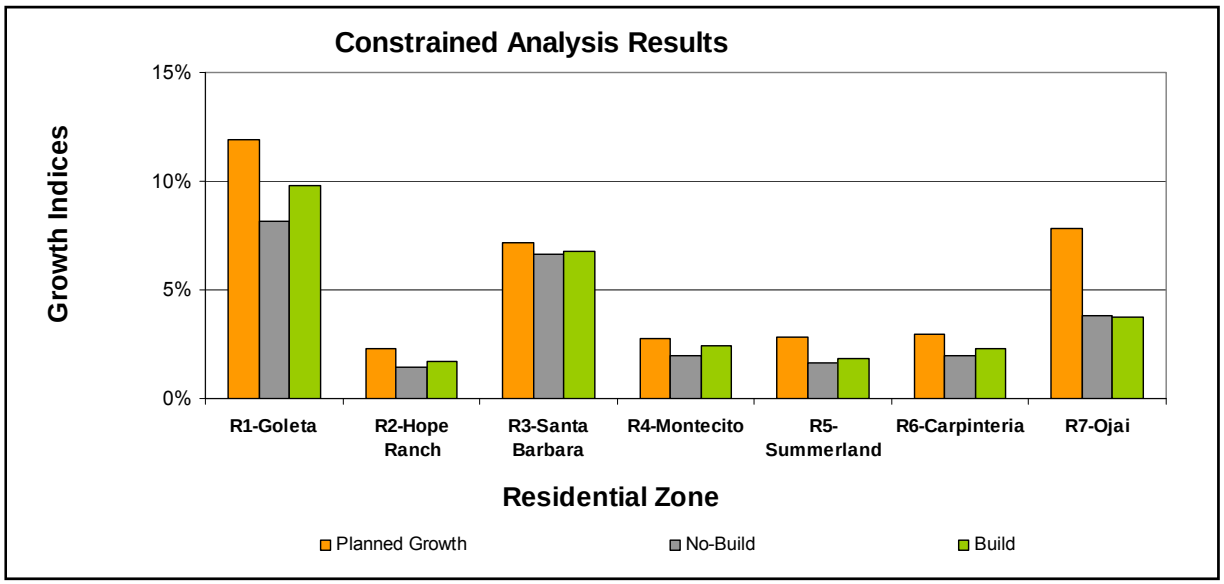
Eight residential locations, shown in Figure 2-4, were selected for testing the growth-related effects of the project. These residential locations include the communities of Goleta, Hope Ranch, Montecito, Summerland/Toro Canyon, City of Santa Barbara, City of Carpinteria, Ojai (City of Ojai and Ojai Valley), and City of Ventura. These communities are planning for varying increases in growth rates by 2040—from less than a 4 percent growth rate (Hope Ranch, Montecito, Summerland and Carpinteria) to a growth rate of 12 percent (City of Goleta). Twelve employment zones were chosen to reflect all jobs accessible from the selected residential zones and are described in each of the related general plans. The 12 employment zones are the following: Toro Canyon/Carpinteria; City of Santa Barbara; Goleta; Santa Ynez/Solvang; Lompoc; Santa Maria; San Luis Obispo; Ventura/Oxnard; Simi Valley/Thousand Oaks; Lancaster/Palmdale; West Los Angeles County; and East Los Angeles County (see Figure 2-6).

Environmental Consequences

The constrained growth indices reflect the improved access to jobs and the planned growth capacities in the analysis areas (see Figure 2-4). These indices show the combined effect of land use plans and access on relative growth pressure. Potential growth within the South Coast area is constrained by the amount and intensity of actual growth planned for in the residential zones. Figure 2-4 shows the model results without the City of Ventura (R-8) because the model results for that city eclipse the model results for the other residential areas.

Even without the project, the no-build constrained growth index for residential centroids within Santa Barbara County (R-1 through R-6) and Ojai (R-7) is projected to be lower than the planned growth in these areas.

The City of Ventura (R-8) reflects the highest share of planned residential growth among the growth areas considered. The model also suggests that with the No-Build Alternative, the City of Ventura (R-8) would have no-build growth pressures that exceed the planned growth for the area.



Source: *Growth Study Prepared for South Coast 101 Lane Project* (2010)

Figure 2-4 Constrained Analysis Results for 2040

Under the build alternatives, all residential areas in the Santa Barbara County area (R-1 through R-6) would have a slight increase in relative growth pressures compared to the No-Build Alternative; however, as shown in Figure 2-5, planned growth for these areas is still expected to be higher than the growth indices. Compared to the No-Build Alternative, the build alternatives would increase relative growth pressures slightly for all residential zones in Santa Barbara County, but the magnitude of these increases in growth pressures is minimal, with the maximum increase occurring in the City of Goleta (R-1) at an increase of 1.65 percent. Other zones in Santa Barbara County would have increases in growth pressures that are less than 1 percent for each residential area considered.

The constrained analysis shows that the travel time savings under the build alternatives would produce minimal growth pressure increases in all of the Santa Barbara County

residential study zones. These minimal increases in growth pressure are unlikely to cause growth-related impacts given the land use controls and the existing level of growth pressures in these areas.

In addition, it is anticipated that growth-related impacts will be limited in Santa Barbara County study areas; these limitations include the supply of developable land, restrictive growth policies, and a lack of affordable housing. Most residential study zones in Santa Barbara County are largely built out, have existing constraints on growth, or are planning to direct future growth to certain locations. For example, the City of Goleta plans infill developments only, especially the revitalization of its Old Town area.

Montecito has an annual permit allocation for new dwelling units of not more than one-half percent of the currently existing permitted units. The amount of available public services and facilities, such as sewage systems, water, and schools, would constrain additional growth in areas such as Summerland and the City of Carpinteria. Other residential zones, such as the Goleta Valley and Mission Canyon areas, aim to limit growth so that any future developments would be adequately served by existing services and infrastructures.

In summary, considering all growth-related factors discussed, analysis concludes that the proposed South Coast 101 HOV Lanes project is not expected to stimulate residential or related commercial growth in the region. Commuting time savings would support planned growth in the Goleta area and in other urban communities of Santa Barbara County. As growth caused by the South Coast 101 HOV Lanes project is not reasonably foreseeable, no impacts are anticipated on resources of concern.

Avoidance, Minimization, and/or Mitigation Measures

The project is not expected to stimulate residential or related commercial growth in the region. Therefore, no growth-inducing impacts would occur as a result of implementation of any of the three build alternatives. No avoidance or minimization measures are necessary.

This page intentionally left blank

Figure 2-5 Residential Analysis Zones

This page intentionally left blank

Figure 2-6 Employment Analysis Zones/Centroids

This page intentionally left blank

2.1.3 Community Impacts

2.1.3.1 Community Character and Cohesion

Regulatory Setting

The National Environmental Policy Act of 1969 as amended established that the federal government use all practicable means to ensure that all Americans have safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S. Code 4331[b][2]). The Federal Highway Administration in its implementation of the National Environmental Policy Act (23 U.S. Code 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

A Community Impact Assessment was completed for the project in June 2010. For this study, most of the demographic characteristics of the region and within the project limits were collected from 2000 Census data. Since the time the draft environmental document was released, 2010 Census data has steadily been made available. The updated information was incorporated into the Addendum to the Community Impact Assessment, completed in April 2014.

Figure 2-7 shows the 45 census-tract block groups that were used as the study area for demographic characterization. These tracts are next to the South Coast U.S. 101 alignment.

Regional Population Characteristics

Table 2.4 shows existing and projected population, housing, and employment growth trends within Santa Barbara County, the South Coast region (City of Carpinteria, City of Santa Barbara, City of Goleta, and unincorporated areas between Santa Barbara and Carpinteria) and the Cities of Carpinteria and Santa Barbara.

The more recently available 2010 U.S. Census data for Santa Barbara County has been updated. As a result, population projections for the county are higher than what were shown in the draft environmental document.

Figure 2-7 Socioeconomic Study Area

This page intentionally left blank

Table 2.4 Population, Employment, and Housing Forecast Santa Barbara County, 2010–2040

	Population Forecast					
	2010	2020	2030	2035	2040	Percent Change 2010–2040
Santa Barbara County	423,800	445,891	495,000	507,482	519,965	23.0
South Coast Region	202,100	205,800	211,300	215,700	216,900	7.3
City of Santa Barbara	88,410	88,600	91,000	94,876	96,000	10.0
Carpinteria	13,040	13,284	13,600	13,825	13,893	7.0
	Employment (Jobs)					
	2010	2020	2030	2035	2040	Percent Change 2010–2040
Santa Barbara County	197,400	229,000	241,300	250,000	257,600	30.0
South Coast Region	93,500	97,223	101,730	104,979	107,004	14.0
City of Santa Barbara	62,912	64,597	*65,525	66,449	66,667	6.0
Carpinteria	6,075	6,666	6,680	6,693	6,693	18.0
	Household (Dwelling Units)					
	2010	2020	2030	2035	2040	Percent Change 2010–2040
Santa Barbara County	142,100	149,900	170,200	177,400	183,600	29.2
South Coast Region	75,500	76,611	79,079	80,620	80,959	7.3
City of Santa Barbara	35,000	35,120	36,200	37,578	37,976	8.5
Carpinteria	4,760	4,841	4,950	5,030	5,054	6.2

Source: Santa Barbara County Association of Governments, Regional Growth Forecast 2010-2040, December 2012.

Population

According to the Santa Barbara County Association of Governments projections listed in Table 2.4, the Santa Barbara County population is expected to grow from 423,800 to close to 520,000, an increase of 96,200 people or 23 percent over the course of the forecast period for 2010–2040. The county's population increased from 399,347 in 2000 to 423,800 in 2010, a 6 percent increase. Growth rates were greater in the north county, especially in the City of Santa Maria, which grew at a rate of 29 percent.

The Santa Barbara County Association of Governments (SBCAG) projections indicate that the South Coast region population is expected to grow from the current estimation of 202,700 to 216,900 in 2040, which is an increase of 7.3 percent. While several cities and

unincorporated areas in the north county experienced population increases between 2000 and 2010, the cities (Carpinteria and Santa Barbara) and unincorporated areas within the project limits (Montecito, Summerland, and Toro Canyon) experienced slight declines. The City of Santa Barbara population dropped from 92,325 in 2000 to 88,410 in 2010, a decrease of roughly 4 percent. See Table 2.5 for updated 2010 census data.

Population growth in the South Coast region has slowed. Continued school enrollment declines in the South Coast region school districts suggest that young families may be migrating out of the area. This trend is likely due to high housing costs.

Employment

Employment in Santa Barbara County and the cities of Carpinteria and Santa Barbara is expected to increase at a much faster rate than the corresponding population in these areas between 2010 and 2040. The total number of jobs in Santa Barbara County, Carpinteria, the South Coast region, and the City of Santa Barbara is likely to grow by 30, 14, 6, and 10 percent, respectively.

Housing

The total number of households in Carpinteria, the South Coast region, and Santa Barbara is expected to increase about 6, 7, and 8 percent, respectively, between 2010 and 2040. And a considerable increase in the number of households—29 percent—is expected in the County of Santa Barbara.

Age Breakdown

According to the updated 2010 U.S. Census data, the study area is composed mostly (about 67 percent) of people between the ages of 18 and 64. The median age of the residents in the study area is 38. Compared to the individual jurisdictions, the study area has a relatively high percentage (about 20 percent) of residents under the age of 18.

As shown in Table 2.5, the median age in Santa Barbara County is 34 and about 64 percent of the population is made up of people between 18 and 64 years old. Compared to the neighboring jurisdictions and the study area, Santa Barbara County and the City of Carpinteria have the highest percentages of children under the age of 18. The unincorporated areas of Montecito and Toro Canyon both have relatively higher populations of people who are 65 years old or older.

Table 2.5 Age Breakdown in the Study Area

Study Area	Total Population	Under 18 Years Old	%	18 to 64 Years Old	%	65 Years Old and Older	%	Median Age
Total Study Area	59,332	11,908	20	39,684	67	7,740	13	38
Santa Barbara County	423,895	98,047	23	271,450	64	54,398	13	34
City of Carpinteria	13,040	2,618	21	8,623	64	1,799	15	39
City of Santa Barbara	88,410	16,468	19	59,369	67	12,573	14	37
Montecito CDP[7]	8,965	1,515	17	5119	57	2,331	26	50
Summerland CDP	1,448	211	14	980	68	257	18	49
Toro Canyon CDP	1,508	253	17	922	61	333	22	50

Source: 2010 U.S. Census

Ethnic Composition

Ethnicity information for the study area came from the 2010 U.S. Census data. The racial categories used were White, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian or other Pacific Islander, and Some Other Race/Two or More Races. Because persons of Hispanic origin are not classified as a racial category, their numbers are noted separately as an ethnic category but are also categorized in their appropriate racial category.

While both the project's study area and Santa Barbara County are socially and culturally diverse, the main difference between the two is the number of people who identify themselves as Hispanic or Latino—47 percent in the study area and 43 percent in Santa Barbara County (see Table 2.6). In certain areas of the county such as Guadalupe, Hispanic or Latino populations are not the minority. The Asian population represents about 3 percent of the study area compared to 5 percent for Santa Barbara County.

[7] A census-designated place (CDP) is an area identified by the U.S. Census Bureau for statistical reporting. CDPs are communities that lack separate municipal government, but which otherwise resemble incorporated places, such as cities or villages.

The unincorporated areas of Montecito, Summerland, and Toro Canyon are predominantly White, with this ethnic group accounting for 93, 89, and 92 percent of the total populations, respectively, in those areas.

Figure 2-7 shows densities where minority populations are greater than 50 percent in census block groups. The figure also displays populations where minority populations are greater than 50 percent of the total ethnic population.

Table 2.6 Ethnic Composition in the Study Area

Study Area	Total Persons	White	%	Black or African American	%	American Indian/ Alaskan Native	%	Asian	%	Native Hawaiian/ Other Pacific Islander	%	Some Other Race/Two or More	%	Hispanic ethnicity	%
Total Study Area	59,332	42,773	72	907	1.5	689	1.2	1,607	3	68	0.1	2,209	3.7	28,092	47
Santa Barbara County	423,895	295,124	70	8,513	2.0	5,485	1.3	20,665	5	806	0.2	93,302	22	181,687	43
Carpinteria	13,040	9,348	72	109	0.8	144	1.1	296	2	15	0.1	3,078	24	6,351	49
Montecito CDP	8,965	8,267	93	55	0.6	38	0.4	218	2	6	.01	381	4.2	605	7
City of Santa Barbara	88,965	66,411	75	1,420	1.6	892	1.0	3,062	3	116	0.1	16,509	18	33,591	38
Summerland CDP	1,448	1,295	89	3	0.2	7	0.5	41	3	6	0.4	96	6.7	192	13
Toro Canyon CDP	1,508	1,388	92	7	0.5	7	0.5	14	1	1	0.1	91	6.0	293	19
Source: 2010 Census Data															

This page intentionally left blank

Income

According to the 2007-2011 American Community Survey data, the median household income for the study area was $67,662 with 11.4 percent of individuals living below the poverty level. As shown in Table 2.7, the unincorporated areas of Montecito and Toro Canyon had the two highest median household incomes, with $113,558 and $108,438, respectively. The median household income in Santa Barbara County was lower than that of the study area. In Santa Barbara County, the percentage of indicviduals living below poverty level was slightly higher than the study area at about 15 percent. Household poverty assumes all household members (related and unrelated) combine resources to meet basic needs, whereas the 2010 Federal poverty level for a family size of four is $22,050.

Table 2.7 Median Household Income and Households Below Poverty Level

Income	Study Area	Santa Barbara County	Carpinteria	Montecito CDP*	City of Santa Barbara	Summerland CDP*	Toro Canyon CDP*
Median Household Income	$67,662	$62,723	$70,113	$113,558	$63,758	$78,750	$108,438
Households Below Poverty Level	2,840	22,597	401	145	5,219	43	40
% Individuals Below Poverty Level	11.4	15.3	8.1	8.7	14.7	6.4	4.1

Source: 2010 U.S. Census

** CDP —A census-designated place (CDP) is an area identified by the U.S. Census Bureau for statistical reporting. CDPs are communities that lack separate municipal government, but which otherwise resemble incorporated places, such as cities or villages.*

*** 2008-2012 American Community Survey 5 year estimates*
2007-2011 American Community Survey 5-year estimates (for Summerland and Toro Canyon)

Housing Needs and Trends

This section covers housing needs and characteristics in the South Coast region, which encompasses the study area. Included are key trends that will affect housing growth and development in the future as derived from the 2010 U.S. Census Population and Housing, Santa Barbara County Association of Governments Regional Growth Forecast, the Santa Barbara Association of Realtors, and the University of California at Santa Barbara Economic Forecast.

Vacancy Rates

According to the 2007-2011 American Community Survey, a little over 10 percent of the housing units in the study area were vacant. This rate was higher than the 7 percent vacancy rate in Santa Barbara County and 6.3 percent vacancy rate in the City of Santa Barbara. The City of Goleta, Mission Canyon, and the County of Ventura had the lowest vacancy rate compared to that of neighboring cities and towns. Toro Canyon, Montecito, and Summerland, have a small number of housing units yet are the more affluent areas to live with the highest vacancy rates. Toro Canyon has a vacancy rate of 22.9 percent, Montecito with 19 percent, and Summerland with a 16.5 percent vacancy rate. This may be partially attributed to new residential development, as well as seasonal, recreational, and occasional use.

Vacancy rate is defined as the percentage of total unoccupied housing units that are either for sale or for rent. The California Department of Housing and Community Development finds that a vacancy rate of 5 percent is needed to allow adequate mobility within the housing market. Furthermore, an overall vacancy rate of 4 or 5 percent indicates a healthy balance of supply and demand in the housing market. As shown in Table 2.8, a vacancy rate of 7 percent in the study area suggests a slight imbalance in supply and demand. A higher vacancy rate indicates more supply and less demand.

Table 2.8 Vacancy Rates in the Study Area

City/County	Housing Units and Occupancy Status		
	Housing Units	Vacant Units	% Vacant
Total Study Area	24,846	2,647	10.7
Santa Barbara County	152,834	10,730	7
City of Goleta	11,473	570	5.7
City of Carpinteria*	5,429	670	12.3
Montecito*	4,238	806	19.0
Toro Canyon*	804	184	22.9
City of Santa Barbara	37,820	2,371	6.3
Summerland*	823	136	16.5
Mission Canyon*	1,075	55	5.2
Ventura County	281,695	14,775	5.2
City of Ventura	42,827	2,389	6.8
City of Ojai*	3,382	271	8.0

2007-2011 and 2008-2012 American Community Survey, U.S. Census Bureau (2010), available at http://factfinder.census.gov

Household Size

According to 2010 U.S. Census data, the countywide household size was estimated to be about 2.86 persons per household. Carpinteria has a household size of 2.74 persons per household, which is the highest compared to the other study area jurisdictions. The unincorporated communities of Montecito, Summerland, and Toro Canyon have the lowest household sizes of 2.34, 2.11, and 2.43 respectively.

Housing Costs

Housing prices in California are higher than the national averages according to the 2007-2011 American Community Survey. The median value for owner-occupied homes in the U.S. was $192,400, versus California's median value of $410,200. Housing prices are higher in Santa Barbara County, with the median home value at $523,800. Housing prices tend to be much greater in the South Coast region of the county than the north region.

Housing costs play a major role in a person's choice of residential location. A lack of affordable housing opportunities can influence the need for commuters to travel long distances to work. Table 2.9 shows the median prices for single-family homes, condominiums, and town houses in the region, which is based on 2007-2011 American Community Survey data.

Rentals

There are a total of 152,834 home in Santa Barbara County in which 67,277 are occupied by individuals who rent. Within the study area, a large majority of the homes are occupied by renters. There are a total of 24,846 housing units in the study area, 13,796 or 56 percent of which are renter occupied homes. Owner occupied homes in the study area account for only 8,403 of the homes. In other words, owners reside in only 34 percent of the homes within the study area.

Median Home Values

The median home value in Santa Barbara County is $523,800 according to the U.S. Census 5-year average. However, using the median average between 2004-2010, the County median home value is $849,063 (SBCAG 2013). The discrepancy in median home values is due to the extended time period in which 2004-2010 factored-in values from the height of the housing bubble, whereas U.S. Census data calculated median home value averages at the onset of the 2007 recession.

Montecito, Summerland, and Toro Canyon have the highest median home prices within the County of Santa Barbara. Since the project travels near these three townships, it is assumed the study area's median home value is upwards of $1,000,000.

The County's median gross rent is $1,303 which is less compared to the Total Study Area's rent median of $1,489.

Table 2.9 Median Home Values

Geographic Area	Median Household Value	Median Gross Rent	Owner Occupied	Renter Occupied
Total Study Area	842,866	1,489	8,403	13,796
Santa Barbara County	523,800 849,063*	1,303	74,827	67,277
City of Carpenteria	607,300	1,385	2,347	2,412
Montecito CDP	1,000,000 +	2,000 +	2,522	910
Toro Canyon CDP	1,000,000 +	1,031	440	180
City of Santa Barbara	926,100	1,424	13,784	21,665
Summerland CDP	1,000,000 +	1,385	362	325
City of Ventura	580,565	1,306	22,408	17,532

U.S. Census Bureau: 2007-2011 American Community Survey
2010 U.S. Census: *Table DP-1: Profile of General Demographics Characteristics*
**2013 SBCAG, 2040 Regional Transportation Plan's Figure 5, Santa Barbra Median Home value between 2004-2010*
Median Home Value for Study Area was average of median home values within project limits.

Housing Characteristics

Housing characteristics, including housing types, costs, and occupancy rates in the study area, are shown in Tables 2.10 and 2.11. About half of the housing units in the study area are single-family residences, which is lower than Santa Barbara County as a whole. Multi-family residential units make up about 44 percent of the housing units in the study area and about 29 percent of the housing units in the county. The cities of Carpinteria and Santa Barbara have the smallest proportion of detached single-family housing as well as smaller household sizes.

Table 2.10 Housing Characteristics

Housing Breakdown	Total Study Area	%	Santa Barbara County	%	Carpinteria	%	Montecito CDP	%	City of Santa Barbara	%	Summerland CDP
Total Housing Units	24,846	--	152,839	--	5,429	--	4,238	--	37,820	--	823
Single-Family	12,003	50.2	92,522	64.7	2,577	47.1	3,531	84.7	19,971	53.7	498
Multi-Family	10,551	44.1	41,764	29.2	1,954	35.7	633	15.2	16,687	44.9	264
Mobile Home	1,253	5.2	8,246	5.8	908	16.6	7	0.2	402	1.1	38
Other	114	0.5	369	0.3	34	0.6	0	0.0	117	0.3	0

Source: 2000 U.S. Census Bureau (note: the 2010 Census information is only available for the total number of housing units, but not the breakdown)
U.S. Census 2010 for total housing units only

Table 2.11 Housing Occupancy

Occupancy Breakdown	Total Study Area	%	Santa Barbara County	%	Carpinteria	%	Montecito CDP	%	City of Santa Barbara	%	Summerland CDP	%	Toro Canyon CDP	%
Owner Occupied	8,403	33.8	74,827	49.0	2,347	43.2	2,522	60	13,784	36.4	362	44	440	55.0
Renter Occupied	13,796	55.5	67,277	44.0	2,412	44.4	910	21.0	21,665	57.3	325	39.5	180	22.4
Total Vacant	2,647	10.7	10,730	7.0	670	12.4	806	19	2,371	6.3	136	16.5	184	22.9
Median Household Income (in 2010 dollars)	$67,662	--	$61,896	--	68,498	--	$112,656	--	$63,401	--	$78,750	--	108,438	
Median Gross Rent	$1,489	--	$1,303	--	$1,385	--	$2001+	--	$1,424	--	$1,385	--	$1,031	

Source: 2010 U.S. Census Bureau

Housing Stock Projections

According to the Santa Barbara County Association of Governments Regional Growth Forecast 2010-2040, the excess residential capacity at the end of the 2040 forecast period is 2,443 housing units in the South Coast region and 6,335 housing units in the county. This forecast compares the year 2005-2040 average construction rate and the maximum residential capacity in the sub-regions and the county as a whole.

The total number of housing units in Santa Barbara County and the cities of Carpinteria and Santa Barbara are expected to increase by about 17, 10, and 5 percent, respectively, between 2005 and 2040.

Environmental Consequences

Build Alternative

Under all build alternatives, area residents would benefit from corridor congestion relief and enhanced public access. No regional or community-level impacts are expected to occur with implementation of the alternatives. No displacement of residents or populations would occur. Population characteristics and distribution within the project area would not change. No residences or businesses would be displaced as a result of the proposed project. No neighborhoods would be divided or separated from existing community facilities. In addition, the proposed build alternatives would not result in any residential acquisition or relocation and would not cause any impacts to community character.

No-Build Alternative

Under the No-Build Alternative, existing conditions would remain. There would be no displacement of residents or populations.

Avoidance, Minimization, and/or Mitigation Measures

The build alternatives and No-Build Alternative would not affect existing communities; therefore, no additional minimization or mitigation measures are proposed.

2.1.3.2 Environmental Justice

Regulatory Setting

All projects involving a federal action (funding, permit or land) must comply with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President Bill Clinton on February 11, 1994. This order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2010, this was $22,050 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to upholding the mandates of Title VI is evidenced by its Title VI policy statement, signed by the Director, which can be found in Appendix C of this document.

Affected Environment

The project area as a whole consists of a variety of socioeconomic neighborhoods. Lower-income populations, ethnic minorities, and higher-income populations live within and close to the project area. The ethnic composition of the project area, as summarized in Table 2.12, is comparable to the County of Santa Barbara. The block groups located in the cities of Carpinteria and Santa Barbara have substantially higher minority populations than Toro Canyon, Summerland, and Montecito. Santa Barbara County has a minority population of about 43 percent. There is greater ethnic diversity in Carpinteria and the project area as a whole, with minority populations of about 49 and 52 percent, respectively.

The median household income of the census block groups in the project area in 1999 ranged from $46,677 to $110,669. As shown earlier in Table 2.11, the overall percentage of households in the project area below the federal poverty level was 12.4 percent in 1999. Census data shows that in 1999, about 11.6 percent of households in Santa Barbara County as a whole were below the poverty level, while 12.5 and 10.9 percent of households below the poverty level were in Summerland and the City of Santa Barbara, respectively.

Table 2.12 Minority and Low-Income Populations

	Project Area	Santa Barbara County	Carpinteria	Montecito CDP*	City of Santa Barbara	Summerland CDP*	Toro Canyon CDP*
Total Population	59,332	423,895	13,040	8,965	88,410	1,448	1,508
Total White	42,773	295,124	9,348	8,267	66,411	1,295	1,388
Total Minority**	16,559	128,771	5,692	698	11,999	143	120
% Minority**	47	43	49	7	40	13	19
Below Poverty Level	8,897	55,086	1,480	343	11,846	141	123
% Below Poverty Level	11.4	15.3	8.1	8.7	14.7	6.4	4.1

Source: U.S. Census Bureau, 2010

** CDP —A census-designated place (CDP) is an area identified by the U.S. Census Bureau for statistical reporting. CDPs are communities that lack separate municipal government, but which otherwise resemble incorporated places, such as cities or villages.*

***Minority population includes Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Hispanic, and Other Races (not White).*

Environmental Consequences

The main purpose of the South Coast 101 HOV Lanes project is to improve traffic flow on U.S. 101. The congestion relief and enhanced accessibility would benefit area residents and other users of this segment U.S. 101. The project would also benefit low-income and minority communities in the area by reducing traffic delays, particularly during peak commute hours, in the project area.

All work would be done within the existing right-of-way, except for temporary construction easements for soundwalls. Temporary construction easements would not have a disproportionate effect on minority or low-income populations. No residential or non-residential temporary relocations are expected to occur. The project would not cause high or adverse impacts to minority populations within the project limits because similar impacts would occur proportionally throughout the project limits.

Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, the build alternatives would not cause disproportionately high and adverse effects on any minority or low-income populations as per Executive Order 12898 regarding environmental justice.

2.1.4 Utilities/Emergency Services

Affected Environment

Police protection and traffic enforcement in the study area are provided by the cities of Carpinteria and Santa Barbara, the County of Santa Barbara Sheriff's Department, and the California Highway Patrol. No police or sheriff's facilities are near the project area.

Fire protection within the project area is provided by the Carpinteria-Summerland Fire Protection District, the Montecito Fire Protection District, the City of Santa Barbara Fire Department, and the County of Santa Barbara Fire Department. Two fire stations sit within the project area.

Domestic water services in the study area are provided by the Carpinteria Valley Water District, Montecito and Summerland Water District, and Santa Barbara County Water Agency. Wastewater collection and treatment services are provided by the Carpinteria Sanitary District, Summerland Sanitary District, Montecito Sanitary District, El Estero Wastewater Treatment Plant in the City of Santa Barbara and through septic systems in portions of the unincorporated areas of Santa Barbara County.

Natural gas services in the project area are provided by the Southern California Gas Company; electricity is provided by Southern California Edison. Other utility services in the area include telephone and cable or satellite television services.

Flood control is provided and maintained by the Santa Barbara County Flood Control District.

Refer to Section 2.2.2 for discussion related to drainage and storm water treatment facilities.

The Union Pacific Railroad runs directly adjacent to the southbound lanes of U.S. 101 throughout much of the project length. The single track is used by both freight trains and Amtrak passenger trains.

Environmental Consequences

As a result of reduced congestion, improved access for emergency facilities would occur under all three build alternatives. Emergency access would be provided during construction; therefore, no temporary or long-term impacts to emergency services are expected from the proposed project.

The build alternatives could affect utilities, including domestic water service, wastewater collection and treatment, natural gas service, electric service, and telephone and television utilities.

Construction of the HOV lanes south of the Cabrillo Boulevard interchange would be accomplished without affecting the railroad right-of-way, other than temporary construction easements. Alternatives 1, 2 and 3 would each require a temporary construction easement to replace the Arroyo Parida Bridge (at Arroyo Paredon Creek). However, the proposed work to rebuild the Cabrillo Boulevard interchange would have varying railroad construction impacts that depend on which design configuration is selected. Three of the five Cabrillo Boulevard interchange configurations (J, M and M Modified) propose a full reconstruction and the need for raising the rail line profile (about 4 feet) for half a mile. They would also replace existing structures to provide hook ramps under the tracks with standard vertical clearances. Approvals and easements required from the railroad would require an additional 12 months of lead time for interchange configuration J, M or M Modified. Costs associated with railroad improvements have been estimated at approximately $50 million for interchange concepts J, M and M Modified.

Avoidance, Minimization, and/or Mitigation Measures

As indicated in Section 2.4, coordination between Caltrans and service providers would strive to ensure that utility and services are not disrupted. Pre-construction utility location would be required in conjunction with service providers to avoid disruption of any utility service. Before and during construction, all utilities in conflict with the proposed project would be relocated, avoided, or protected in place.

With the F Modified configuration for the Cabrillo Boulevard/Hot Springs Road interchange, only temporary and minor permanent easements are needed from Union Pacific Railroad.

2.1.5 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

Caltrans, as assigned by the Federal Highway Administration, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When

current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

Caltrans is committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

Affected Environment

U.S. 101 is the most heavily traveled facility in the county and serves as a vital north-south connection between Northern California and Southern California. The highway also plays a vital role in enabling motorists to access local communities (Ventura, Carpinteria, Summerland, Montecito, Santa Barbara, and Goleta) and coastal areas near the project area. Recognition of this corridor's important role was the basis for preparing a comprehensive set of traffic studies for the proposed South Coast 101 HOV Lanes project.

Traffic data collected in April 2008 along a 27.5-mile section of U.S. 101 were used as a baseline for the following reports: Existing Conditions Operational Analysis (December 15, 2008, Amended December 9, 2011); Travel Forecast Report (February 9, 2009); Forecast Operations Report (October 19, 2009, amended December 9, 2011); and Cabrillo-Hot Springs Interchange Configuration Analysis Technical Memoranda (March 21, 2011 and July 19, 2011).

The traffic studies analyzed 27.5 miles of U.S. 101 from south of Rincon Point/Bates Road interchange to north of the Hollister interchange in Goleta. The extended study limits were necessary to gain a better understanding of how the proposed project would affect the entire South County section of U.S. 101. Within the traffic study area, U.S. 101 varies between four and six lanes wide, with auxiliary lanes in some segments. With the completion of the Ventura/Santa Barbara HOV project in 2015, three lanes in each direction will exist to the south of the project on U.S. 101 from the City of Ventura in Ventura County to the Carpinteria Creek Bridge (post mile 2.0). North of the project limits U.S. 101 has three lanes in each direction from Cabrillo Boulevard (post mile 11.5) to Fairview Avenue (post mile 22.5). The traffic analysis studied the existing operating characteristics of U.S. 101 as well as the interchanges on U.S. 101 that provide access to and from the local street network.

In this corridor, travel patterns show that most commuters travel from the cities of Ventura and Carpinteria into Santa Barbara in the morning and then travel the reverse commute in the evening. The morning peak commute period is generally 7:00 a.m. to 9:00 a.m., and the afternoon peak commute period is 3:30 p.m. to 6:30 p.m. This commuter trend is expected to continue based on existing and predicted housing and job patterns. In addition to daily commuter travel, the afternoon travel period tends to have a greater diversity in trip types, which is reflected by the higher numbers seen during the northbound afternoon peak hours of delay (see Table 2.15). Other trip types in this corridor include interregional travel, goods movement, tourist travel as well as more localized travel for activities such as shopping, recreation, and coastal access.

According to the *Multimodal Corridor System Management – Incorporating Analysis of Transit, Demand Management Programs and Operational Strategies* report, prepared in 2010 for Santa Barbara County Association of Governments, in addition to its regional value, the U.S. 101 serves an even larger role.

U.S. 101 is on the Interregional Road System and the National Truck network. It is designated as a High Emphasis Route and Focus Route in the 2013 Caltrans Interregional Transportation Strategic Plan. U.S. 101 is a Strategic Highway Corridor Network (STRAHNET) route, meaning it is part of a network of linked highways essential to national defense (facilitates the movement of troops and equipment to airports, ports, rail lines, and military bases). This makes this route a high priority for programming to address increased interregional travel demand with an emphasis towards goods movement, recreational, and lifeline needs. Although U.S. 101 is important for interregional traffic, it also serves commute traffic within and from outside of Santa Barbara County and can be used as an evacuation route. It is designated for use by rural areas to growing urban centers and is critical for moving people, goods, services, and technology. U.S. 101 also plays a larger role in the state economy by serving as a secondary route to Interstate 5, by connecting the Los Angeles Basin to Northern California. About 6.7 percent of the traffic along this corridor is attributed to trucks.

In terms of goods movement, there is a great deal of activity along the South Coast and between the cities of Los Angeles and San Francisco. The fresh-packed produce grown in the area, including products related to the wine industry in Santa Barbara and San Luis Obispo counties, is moved by truck or train to the two cities before being shipped out of the region. Interregional travel is also common between Los Angeles and San Francisco and points between.

Collision Rates

Collision rates were evaluated for the three-year period from October 1, 2006 through September 30, 2009 within the project limits for U.S. 101. (Three years of accident data are not yet available following completion of the Milpas Street to Hot Springs Road Operational Improvement project.) During this reporting period, there were 539 total collisions northbound and 361 collisions southbound for a total of 900 accidents on U.S. 101 within the project limits. There was one fatality and 283 accidents involving injuries for both southbound and northbound traffic. The total collision rate for the three-year period is higher than the statewide average for similar facilities (1.02 vs. 0.83). The higher total collision rate can be attributed to unstable traffic flow caused by congestion. The northbound accident rate within the project limits was 1.22 accidents per million vehicle miles. This is 47 percent higher than the statewide average of 0.83 accidents per million vehicle miles for similar four-lane urban freeways. On southbound U.S. 101, the data indicate that the total actual collision rate per million vehicle miles was less than the average rate for similar highway segments.

Of the 900-accident total, 594 collisions (66 percent) were rear-end collisions; 77 accidents (9 percent) were sideswipe collisions; and 192 accidents (21 percent) were hit-object collisions. Most of the accidents (96 percent), therefore, were congestion-related collisions. Because the purpose of the project is to reduce congestion, these accident rates on the freeway mainline are expected to drop.

Collision rates for the northbound Hermosillo Road off-ramp, northbound Cabrillo Boulevard left off-ramp, southbound Cabrillo Boulevard left off-ramp, and the southbound Los Patos Way off-ramp are all above the statewide averages for each ramp (see Table 2.13). The Hermosillo off-ramp averages one non-injury collision per year, which is too small a sample to determine if the collision rate is significant. Analysis of the collisions for the other Cabrillo Boulevard ramps noted above indicate excessive speed to be the common factor. The project proposes to close some ramps, relocate ramps with standard geometry, or improve the geometry of existing ramps. Based on these improvements, the collision rates are expected to drop for the interchange ramps.

Table 2.13 U.S. 101 and Ramp Collision Data from October 1, 2006 to September 30, 2009

Location Limits (post miles 1.4 to 12.3)	Number of Collisions			Actual Rates (*accidents per million vehicle miles traveled*)			Average Rates (*accidents per million vehicle miles traveled*)		
	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
Northbound U.S. 101	1	162	539	0.002	0.37	1.22	0.010	0.27	0.83
Southbound U.S. 101	0	122	361	0.000	0.28	0.82	0.010	0.27	0.83
Ramps within the Project Limits									
Southbound Sheffield left on-ramp	0	0	0	0.000	0.00	0.00	0.002	0.26	0.75
Southbound Sheffield left off-ramp	0	1	2	0.000	0.45	0.91	0.004	0.42	1.20
Northbound Hermosillo off-ramp	0	0	3	0.000	0.00	2.70	0.004	0.28	0.95
Northbound Cabrillo left off-ramp	0	1	4	0.000	0.34	1.35	0.002	0.31	1.00
Northbound Cabrillo on-ramp	0	0	2	0.000	0.00	0.22	0.002	0.26	0.75
Southbound Cabrillo left off-ramp	0	4	8	0.000	0.75	1.50	0.002	0.31	1.00
Southbound Los Patos off-ramp	0	1	3	0.000	1.75	5.25	0.005	0.15	0.45

Source: Caltrans Traffic Accident Surveillance and Analysis System - represents 3 years of continuous data that were not affected by periods of highway construction on the Milpas to Hot Springs Improvement Project, which would have skewed the results.

Transit

According to the Transit Needs Assessment prepared for Santa Barbara County Association of Governments in 2013, the transit providers and systems that transport commuters from outlying cities into Santa Barbara include: Santa Barbara Metropolitan Transit District (SBMTD), Ventura County Transportation Commission (VISTA), Coastal Express Limited, Clean Air Express, and City of Lompoc Transit (COLT).

SBMTD is the largest transit service provider in Santa Barbara County with a total annual ridership over 7 million (7,948,409 in fiscal year 2011/2012). This service includes bus routes throughout the area and shuttle operations serving downtown, the

waterfront, commuter lots, and the zoo. It serves Carpinteria, Summerland, Santa Barbara, and Goleta. SBMTD also operates commuter express bus service between Solvang and Buellton and the Hollister corridor in Goleta and downtown Santa Barbara. SBMTD operates 51 transit routes on the South Coast that include 28 regular routes and 23 school booster routes.

VISTA provides intercommunity bus service that operates between Ventura County and Santa Barbara, including service to University of California Santa Barbara, the Hollister corridor in Goleta, downtown Santa Barbara, and downtown Carpinteria. VISTA operates 53 weekday drips and 20 daily weekend trips between Ventura and the South Coast. VISTA, which is a joint program administered between SBCAG and the Ventura County Transportation Commission (VCTC), had a ridership of 311,827 in fiscal year 2011/2012.

The Coastal Express Limited is a pilot commuter bus service for the U.S. 101 Mussel Shoals\Carpinteria HOV Widening project and began operations in August 2011. This weekday-only commuter bus service provides two round-trips to Goleta and two to Santa Barbara from Ventura County. The Clean Air Express is a commuter bus program that currently provides service to residents of northern Santa Barbara County who commute to jobs in Santa Barbara and Goleta, with 13 round-trips each weekday from North Santa Barbara County to the South Coast. In fiscal year 2011/2012, the Clean Air Express had 222,432 boardings. On Tuesdays and Thursdays, the City of Lompoc Transit (COLT) also provides one round-trip shuttle service to Santa Barbara from Lompoc.

Bicycle and Pedestrian Routes

About 299.7 miles of bikeways run through Santa Barbara County, and about 163.1 miles of bikeways are in the South Coast region. Most of the designated bikeways in the county are Class II and Class III. One recently constructed section of Class I bikeway is adjacent to U.S. 101 along Ortega Hill between Summerland and Sheffield Drive. When bicycles share a local road with vehicles and there is no bikeway designation, it is simply known as a local road. Bikeway classifications are defined in Table 2.14.

Table 2.14 Bikeway Classifications

Bikeway Class	Definition
Class I Bikeway (Bike Path)	Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross-flow by motorists minimized.
Class II Bikeway (Bike Lane)	Provides a striped lane for one-way bike travel on a street or highway.
Class III Bikeway (Bike Route)	Provides for shared use with pedestrian or motor vehicle traffic.
Source: Caltrans Highway Design Manual, September 2006.	

The county also contains multipurpose recreational trails used by bicyclists, hikers, joggers, in-line skaters, skateboarders, and equestrians. A portion of the Pacific Coast Bike Route is located in the project area. The Pacific Coast Bike Route provides a north-south connection between Vancouver, British Columbia, Canada, and Imperial Beach in San Diego, California. Cyclists use the existing route mainly for recreation and local commuting. The Pacific Coast Bike Route through the project limits is a combination of Class I, II, and III bikeways and local roads. Due to safety reasons, bicyclists are not allowed on this stretch of U.S. 101 with the exception of the Class I bike path that parallels the highway on Caltrans right-of-way over Ortega Hill.

Several Class II bikeways are in the project area, including those on Carpinteria Avenue, Via Real, Jameson Road, San Ysidro Road, Olive Mill Road, Coast Village Road, Hot Springs Road, and Olive Mill Road. The project area also contains a few shorter segments of Class I and Class III bikeways, including the previously mentioned Class I path over Ortega Hill built in 2006 as part of the auxiliary lane project that connected the Evans Avenue on-ramp to the northbound Sheffield Drive off-ramp.

According to the Santa Barbara County Association of Governments' Regional Bicycle Plan, on a countywide basis, bicycle use for commuting purposes ranges from 2 to 4 percent of total commute trips. Similarly, according to the Santa Barbara County Association of Governments' *2007 Commute Profile for Santa Barbara, San Luis Obispo and Ventura Counties*, the percentage of Santa Barbara County commuters who bike to work is 2.8 percent, and the percentage of commuters who walk or jog to work is 2.7 percent. Between 2000 and 2011, bicycle commuting grew 47 percent nationwide, with most of the growth occurring in the larger cities: Portland, San Francisco, Seattle,

Boston, New York City and Washington D.C. Santa Barbara County ranks high for the number of bicycle commuters.

Pedestrian facilities near the project area consist of sidewalks and pedestrian trails. Main sidewalks near the project area include those along Carpinteria Avenue and Via Real in Carpinteria; Lillie Avenue in Summerland; and those along Calle Real and Coast Village Road in Santa Barbara. Sidewalks and cross-paths are provided on many streets near the interchanges, but those facilities are not continuous on all streets.

Environmental Consequences

U.S. 101 Mainline Analysis

The three build alternatives would have similar effects on U.S. 101 traffic flow because their differences are strictly focused on whether the widening is proposed to the inside median or outside shoulder. The project's performance measures associated with U.S. 101 mainline patterns were analyzed based on the following three measures of effectiveness:

- Peak period delay (vehicle hours and person hours)

  Vehicle delay is calculated based on the length of time it takes for a vehicle to complete a travel trip. Person hours are based on average vehicle occupancy multiplied by peak period vehicle hours of delay. Delay occurs on U.S. 101 when vehicles travel at speeds below 55 miles per hour. Peak period delay is the sum of all vehicle delay that occurs within a given peak period, or on a typical day, within the designated traffic study area.

- Peak hour trip time

  The length of time it takes to travel during the peak periods (morning and afternoon) between the Ventura County line and North Goleta.

- Peak hour average speed

  The average speed that occurs during a specific hour of highest travel demand (one hour in the morning and one hour in the evening).

Because of the heavily congested conditions already occurring several hours each day, the identified measures of effectiveness were selected instead of the level of service measurement typically used for Caltrans projects. Peak commute periods currently occur from about 7:00 a.m. to 9:00 a.m. and 3:30 p.m. to 6:00 p.m. The peak analysis period is from 6:00 a.m. to 10:00 a.m. and 3:00 p.m. to 7:00 p.m. The measures were

quantified using FREQ macro-simulation software that was developed by the Institute for Transportation Studies at the University of California at Berkeley.[8]

Peak hour intersection analysis was also conducted at U.S. 101 interchange locations within the traffic study limits. Intersection Level of Service, delay, and 95th Percentile Queue were used as the main measures of effectiveness for the intersection analysis.

Table 2.15 provides data for existing (2008) mainline operating conditions and anticipated mainline operating conditions in the design year (2040) based on the three measures of effectiveness noted above.

[8] The FREQ modeling software, developed by the Institute for Transportation Studies at the University of California at Berkeley, was used to simulate peak period freeway operations on U.S. 101 within the study area. The software was selected because it can quickly produce traffic operations results using planning model inputs.

Table 2.15 U.S. 101 Peak Direction Measure of Effectiveness Summary**

Measures of Effectiveness	Existing 2008	No-Build 2040	Build 2040
Northbound morning peak hour average speed (mph) ~^	44.9	26.2	40.5
Southbound afternoon peak hour average speed (mph) ~^	49.3	39.8	52.2
Northbound morning peak hour travel time (minutes) ~*	22.3	48.5	29.3
Southbound Afternoon peak hour travel time (minutes) ~*	23.0	34.7	24.5
Northbound morning peak period hours of delay (vehicle hours) ^	937	9,258	1,492
Southbound morning peak period hours of delay (vehicle hours)	154	1,507	786
Southbound afternoon peak period hours of delay (vehicle hours) ^	871	3,383	1,122
Northbound afternoon peak period hours of delay (vehicle hours)	324	4,261	3,574
Vehicle Occupancy AM	1.27	1.38	1.65
Vehicle Occupancy PM	1.40	1.42	1.70
Northbound morning peak period hours of delay (person hours) ^	1,190	12,776	2,462
Southbound morning peak period hours of delay (person hours) ^	196	2,080	1,297
Southbound afternoon peak period hours of delay (person hours) ^	1,219	4,804	1,907
Northbound afternoon peak period hours of delay (person hours) ^	454	6,051	6,076

Data from "SC 101 HOV Traffic Study forecast Operations Report" dated October 19, 2009 and errata sheet dated March 16, 2011

~ = Peak hour refers to the "worst hour" in a given peak period when travel through the corridor takes the longest

**= for a trip traveling on U.S. 101 between Linden Avenue and Los Carneros (about 20 miles)*

^ = for trips traveling within the traffic study limits (post miles 0.0/27.5)

***Using FREQ Modeling Software*

Peak Hour Speed

Within the traffic study area (U.S. 101 mainline between the Ventura and Santa Barbara county line and North Goleta), the current average speed northbound during the morning peak hour is 44.9 miles per hour. Without the project in 2040, the average speed for the same time and direction of travel would decrease to 26.2 miles per hour. Similarly, the southbound afternoon peak hour average speed is currently 49.3 miles per hour; without the project in 2040, average speeds would decrease to 39.8 miles per hour. With the project in 2040, the average speed would increase to 40.5 miles per hour northbound during the morning peak hour while the average speed would increase to 52.2 miles per hour southbound during the afternoon peak hour (see Table 2.16).

Table 2.16 Peak Hour Travel Speed (2040)

	Northbound Morning	Southbound Afternoon
Travel Speed without Project	26.2 mph	39.8 mph
Travel Speed with Project	40.5 mph	52.2 mph
Travel Speed Improvements with Project	14.3 mph	12.4 mph
Percent Improvement	54.6%	31.1%

Data from "SC 101 HOV Traffic Study forecast Operations Report" dated October 19, 2009 and errata sheet dated March 16, 2011
**Average travel speed shown for a vehicle traveling within the traffic study limits, between the Ventura County line and Winchester Canyon (approximately 27.5 miles).*

Peak Hour Travel Time

Currently, it takes about 22.3 minutes to reach Los Carneros (Goleta) from Linden Avenue (Carpinteria) during the morning peak hour traffic. Without the project in 2040, it is projected to take 48.5 minutes to travel the same distance during the northbound morning peak hour. With the project in 2040, it would take 29.3 minutes to travel the same distance and direction. When heading southbound in the afternoon peak hour period, it currently takes approximately 23 minutes. Without the project in 2040, the southbound afternoon peak hour trip is projected to take 34.7 minutes. With the project in 2040, the southbound afternoon peak hour trip would be approximately 24.5 minutes.

Table 2.17 highlights the savings in peak hour trip times expected with the project.

Table 2.17 Peak Hour Travel Time* (2040)

	Northbound Morning	Southbound Afternoon
Travel Time without Project	48.5 minutes	34.7 minutes
Travel Time with Project	29.3 minutes	24.5 minutes
Travel Time Savings with Project	19.2 minutes	10.2 minutes
Percent Reduction	39.6%	29.3%

Data from "SC 101 HOV Traffic Study forecast Operations Report" dated October 19, 2009 and errata sheet dated March 16, 2011
**Travel times shown for a roughly 20-mile trip (northbound or southbound) traveling on U.S. 101 between Linden Avenue and Los Carneros Road*

The peak hour peak-direction travel time for carpoolers and express bus riders in the HOV lanes is assumed to be equal to or better than the average travel time of others in the mixed-flow lanes.

Peak Period Vehicle Delay

Currently, there are 937 vehicle hours of delay during northbound peak period morning traffic and 871 vehicle hours of delay southbound during the afternoon peak period.

When adding the 154 vehicle hours of delay that occur during the southbound morning peak period to the 937 vehicle hours of delay that occur in the northbound direction, the total delay for the morning peak period amounts to 1,091 vehicle hours of delay. Conversely, when adding the 324 vehicle hours of delay that occur during the northbound afternoon peak period to the 871 vehicle hours of delay that occur in the southbound afternoon peak period, the total delay for the afternoon peak period amounts to 1,195 vehicle hours of delay. For both directions combined, there are currently (as of 2008) 2,286 total daily vehicle hours of delay.

In 2040, without the project, the expected delay for the northbound morning peak period would be 9,258 hours, and the expected delay for afternoon southbound peak period would be 3,383 hours. When adding the 1,507 vehicle hours of delay that occur during the southbound morning peak period to the 9,258 vehicle hours of delay in the northbound direction, the total morning peak period delay amounts to 10,765 vehicle hours. Conversely, when adding the 4,261 vehicle hours of delay for the northbound afternoon peak period to the 3,383 vehicle hours of delay in the southbound direction, the total amounts to 7,644 vehicle hours of delay for afternoon peak period. For both directions combined, there is an expected total of 18,409 daily vehicle hours of delay.

In 2040, with the project, the expected delay for northbound morning peak period travel would be 1,492 hours and the expected delay for southbound afternoon peak period travel would be 1,122 hours. When adding the 786 vehicle hours of delay for the southbound morning peak period to the 1,492 hours in the northbound direction, the total morning peak period delay amounts to 2,278 vehicle hours. Conversely, when adding the 3,574 vehicle hours of delay for the northbound afternoon peak period to the 1,122 vehicle hours of delay in the southbound direction, there is a total afternoon peak period delay of 4,696 vehicle hours. For both directions combined, there is an expected total of 6,974 daily vehicle hours of delay.

Table 2.18 highlights the savings in vehicle hours of delay expected with the project.

Table 2.18 Peak Period Vehicle Hours of Delay (2040)

	Northbound Morning	Southbound Morning	Southbound Afternoon	Northbound Afternoon	Total
Vehicle hours of delay without the project	9,258	1,507	3,383	4,261	18,409
Vehicle hours of delay with the project	1,492	786	1,122	3,574	6,974
Vehicle hours of delay reduction with the project	7,766	721	2,261	687	11,435
Percent reduction	83.9%	47.8%	66.8%	16.1%	62.1%

Data from "SC 101 HOV Traffic Study forecast Operations Report" dated October 19, 2009 and errata sheet dated March 16, 2011

Peak Period Person Hours of Delay

To determine person hours of delay, vehicle hours of delay are multiplied by the number of people in each vehicle. The traffic studies prepared for the South Coast 101 HOV project determined that currently there is an average of 1.27 persons per vehicle in the northbound and southbound morning peak period and 1.40 persons per vehicle during the northbound and southbound afternoon peak period.

With the project in 2040, it is estimated there would be an average of 1.65 persons per vehicle in the northbound/southbound morning peak period and 1.7 persons per vehicle during the southbound/northbound afternoon peak period. These slightly higher vehicle

occupancy numbers reflect the traffic studies assumption of an increase in carpoolers and transit riders.

In 2040, without the project, the South Coast 101 HOV traffic studies estimate an average of 1.38 persons per vehicle during the northbound and southbound morning peak period and 1.42 persons per vehicle during the northbound and southbound afternoon peak period.

Rather than show calculations for determining person hours of delay for each situation, an example is provided that shows how this information was calculated for the peak period travel conditions without the project in 2040. The calculation results are shown in Table 2.19.

The 1.38 persons per vehicle during the northbound morning peak period is multiplied by 9,258 (vehicle hours of delay) to get a total of 12,776 person hours of delay. For the southbound morning peak period, the 1.38 person per vehicle is multiplied by 1507 (vehicle hours of delay) to get a total of 2,080 person hours of delay during the southbound morning peak period. The 1.42 persons per vehicle in the southbound afternoon peak period is multiplied by 3,383 (vehicle hours of delay) to get a total of 4,804 person hours of delay during the southbound afternoon peak period. Conversely, for the northbound afternoon peak period, the 1.42 persons per vehicle is multiplied by 4,261 to get a total of 6,051 person hours of delay during the northbound afternoon peak period.

Comparing time savings of the build condition versus the no-build condition in 2040, the build condition would result in a person-hour savings of approximately 13,969 person hours. This number is the difference in the delay reduction with and without the project and represents an approximate 54 percent reduction in person hours of delay with the project.

Table 2.19 Person Hours of Delay during Peak Hour Travel Time (2040)

	Northbound Morning	Southbound Morning	Northbound Afternoon	Southbound Afternoon	Total
Person hours of delay without the project	12,776	2,080	6,051	4,804	25,711
Person hours of delay with the project	2,462	1,297	6,076	1,907	11,742
Person hours of delay savings with the project	10,314	783	-25	2,897	13,969
Percent reduction	80.7%	37.6%	-0.4%	60.3%	54.3%

Data from "SC 101 HOV Traffic Study forecast Operations Report" dated October 19, 2009 and errata sheet dated March 16, 2011

Intersection Analysis

Peak hour intersection analysis was also conducted at U.S. 101 interchange locations within the traffic study limits. A total of 104 intersections were analyzed within the 27.5-mile traffic study area. These intersections generally included ramp-junction intersections as well as adjacent intersections near the end of the ramp within the traffic study area. This analysis was completed to ensure that the project would not result in substantial changes to traffic levels at ramp junctions and local intersections. Many of the intersections in the study were outside of the project limits. The purpose of an expanded study was to determine the current conditions and to anticipate changes that could be brought about by the project as a result of traffic diversion and shifting traffic patterns. Peak hour intersection Delay, Level of Service, and 95th Percentile Queue were used as the main measures of effectiveness for intersection analysis.

The traffic studies show that, due to redistribution of traffic, the project would result in some changes to local traffic patterns at several ramp junctions off of the highway system.

Because this project would bring overall congestion relief to the corridor, the secondary impacts are not considered individually, but are part of the whole picture. Caltrans evaluated the overall delay in terms of context and intensity and found the impacts not significant. The overall regional traffic benefits would outweigh any minor intersection degradation. Except for modifications proposed at the Cabrillo Boulevard/Hot Springs Road interchange (discussed separately in the next section), no additional improvements

are proposed as part of this project to address the minor delay changes associated with future traffic redistribution within or outside the project limits.

During public review of the draft environmental document, several comments asked that additional details on the intersection analysis be included in this document. Previously, the information was available in the Forecast Operations Report, one of the traffic studies prepared for the project. The report was available online and at several local libraries along with all of the other technical studies prepared for the project. Figure 2-8 has been added to show the future level of service conditions for the evaluated intersections (information is from the Forecast Operations report). The figure has been divided into four sheets for the purposes of showing the entire traffic study limits, which are from south of Rincon Point/Bates Road interchange to north of the Hollister interchange in Goleta.

Of the 104 intersections evaluated in the Forecast Operations Report, nine intersections would be adversely affected by the project. However, it should be noted that these would not be considered significant under Caltrans standards. Caltrans evaluates delay in terms of context and intensity. Constructing the project would result in an overall reduction in delay to the U.S. 101 corridor. Small increases in delay at several intersections would not result from added traffic via new development, but instead would be the result of traffic moving more efficiently through the corridor and accumulating at some intersections faster than prior to the project. Because traffic forecasting relies on anticipating future local development many years out (2040), this is not easy to predict. For further discussion on evaluating the project's long-term impacts on intersections when considering local development, refer to Section 2.5, Cumulative Impacts.

Sheffield Interchange

It should also be noted that the level of service for the no-build scenario at Sheffield shows a shift of traffic onto North Jameson Lane when the parallel local street system is used during peak hours to avoid congestion on U.S. 101. Under the build scenario, traffic would use the Sheffield southbound ramps. Build-scenario delays increase by 9.4 seconds at the southbound ramp-junction intersection (#33) in the 2040 morning peak hours at LOS D. For all other peak hours in 2020 and 2040, delays increase at this intersection by less than 2 seconds at LOS C or better.

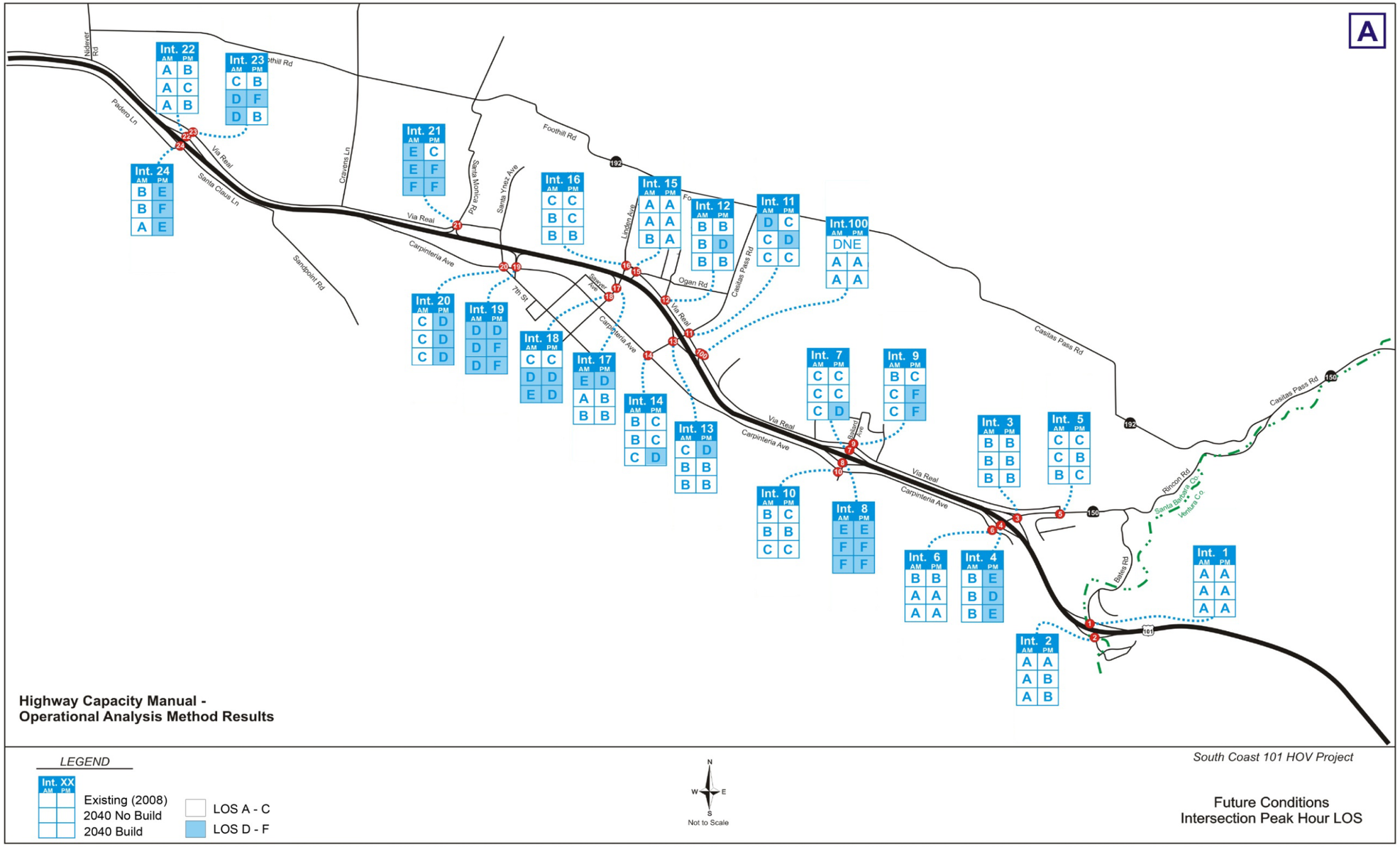
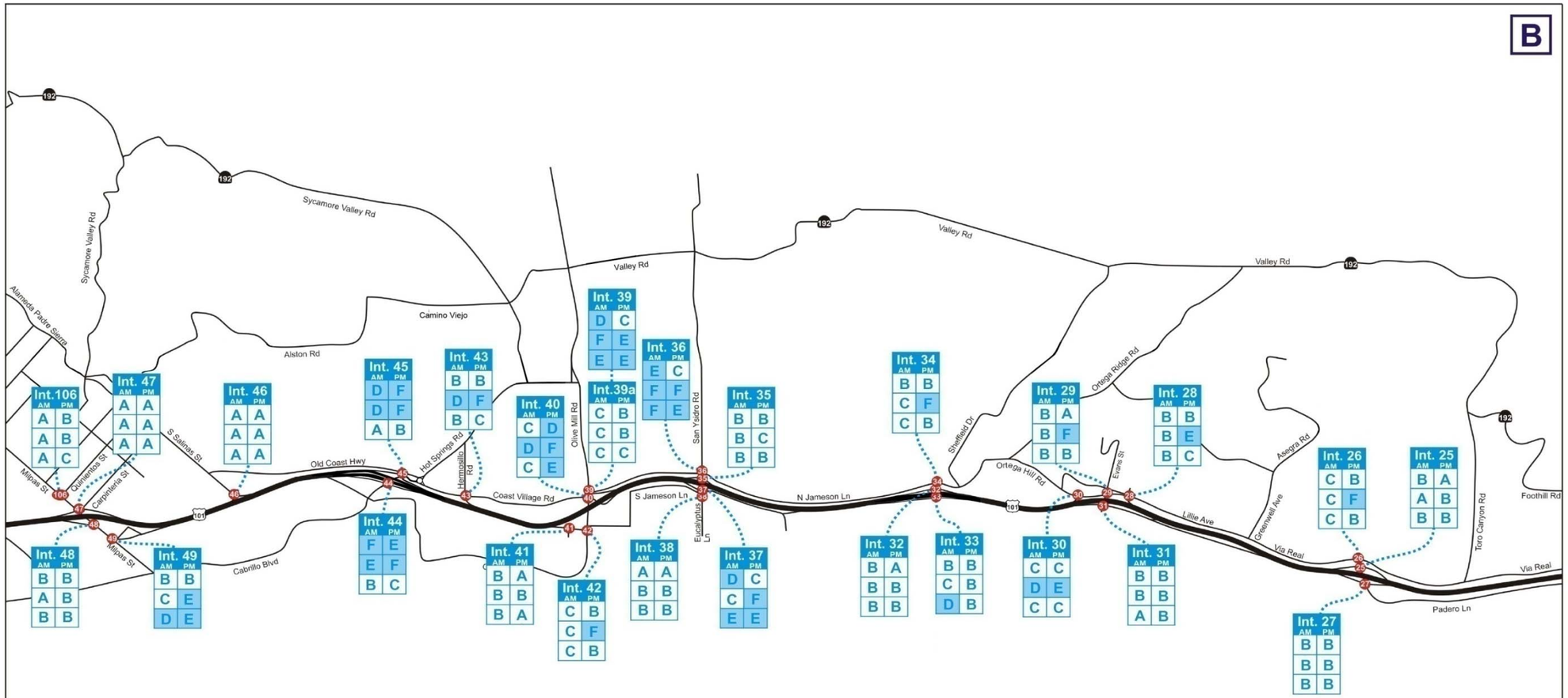
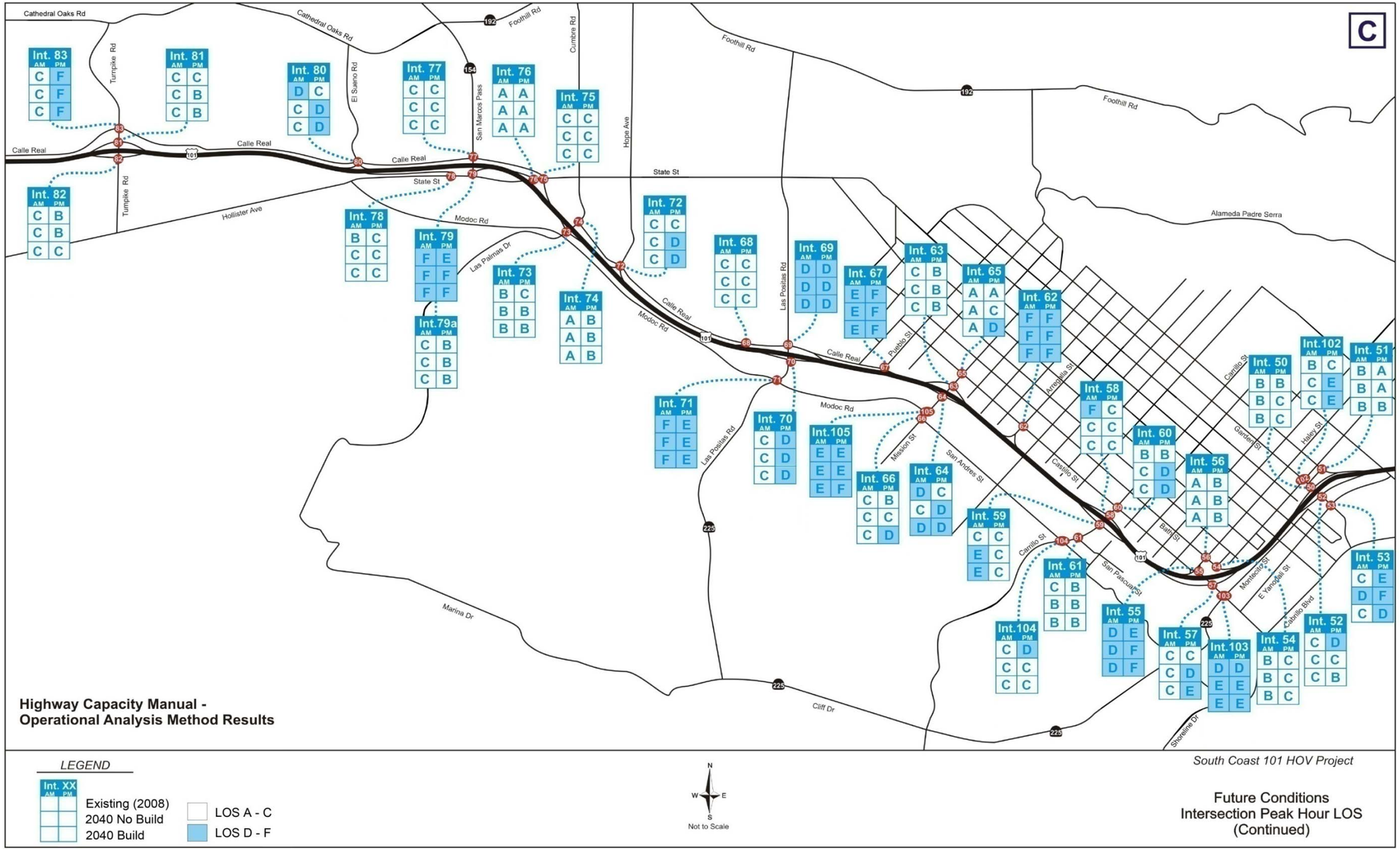


Figure 2-8 Future Conditions for Evaluated Intersections – Peak Hour Level of Service

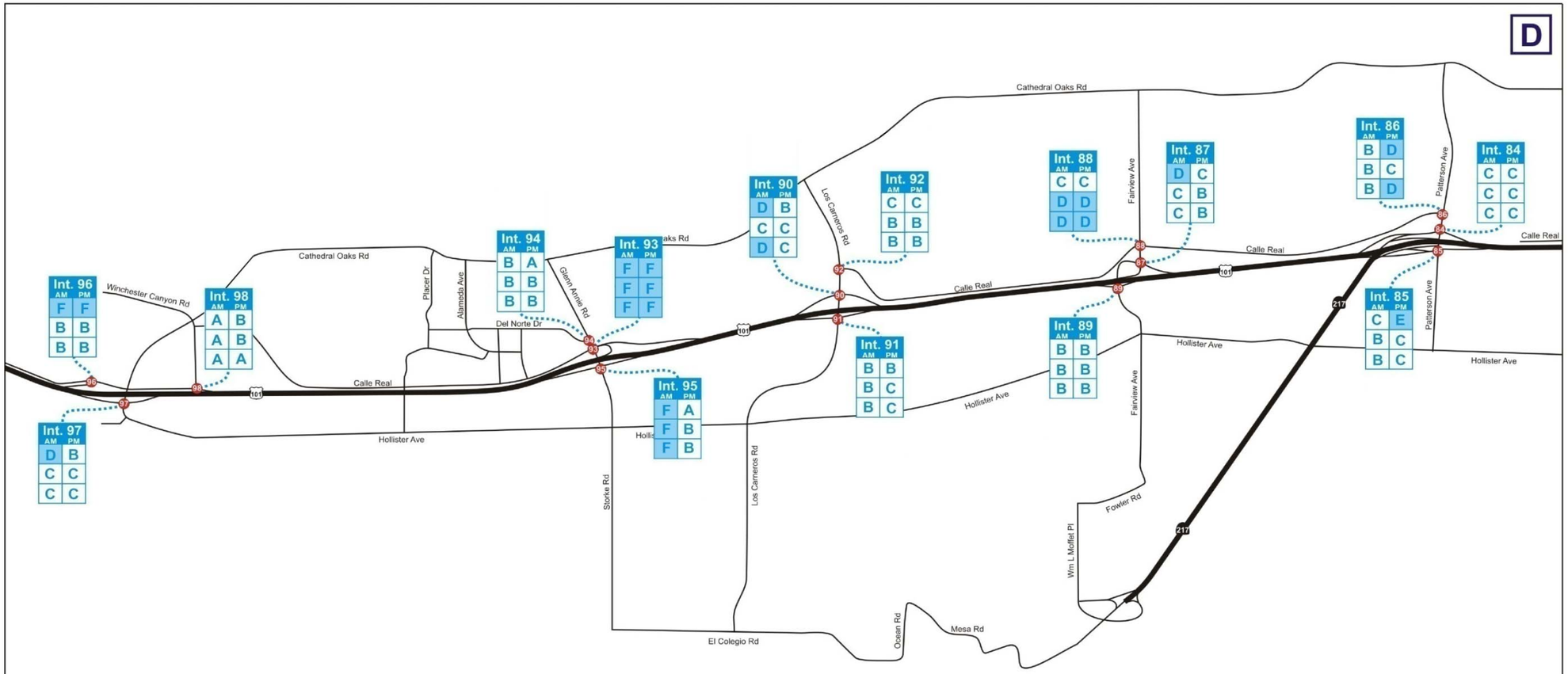
This page intentionally left blank


B
Sycamore Valley Rd
Alameda Padre Serra
Camino Viejo
Alston Rd
Valley Rd
Old Coast Hwy
S Salinas St
Quintana St
Carpinteria St
Milpas St
Hot Springs Rd
Hermosillo Rd
Coast Village Rd
Olive Mill Rd
San Ysidro Rd
S Jameson Ln
N Jameson Ln
Eucalyptus Ln
Sheffield Dr
Ortega Ridge Rd
Ortega Hill Rd
Evans St
Lillie Ave
Greenwell Ave
Asegra Rd
Via Real
Toro Canyon Rd
Foothill Rd
Padero Ln
Cabrillo Blvd
Int. 106 AM A A A PM B B C
Int. 47 AM A A A PM A A A
Int. 46 AM A A A PM A A A
Int. 45 AM D D A PM F F B
Int. 43 AM B D B PM B F C
Int. 40 AM C D C PM D F E
Int. 39 AM D F E PM C E E
Int. 39a AM C C C PM B B C
Int. 36 AM E F F PM C F E
Int. 35 AM B B B PM B C B
Int. 34 AM B C C PM B F B
Int. 29 AM B B B PM A F B
Int. 28 AM B B B PM B E C
Int. 26 AM C C C PM B F B
Int. 25 AM B A B PM A B B
Int. 48 AM B A B PM B B B
Int. 49 AM B C D PM B E E
Int. 44 AM F E B PM E F C
Int. 41 AM B B B PM A B A
Int. 42 AM C C C PM B F B
Int. 38 AM A B B PM A B B
Int. 37 AM D C E PM C F E
Int. 32 AM B B B PM A B B
Int. 33 AM B C D PM B B B
Int. 30 AM C D C PM C E C
Int. 31 AM B B A PM B B B
Int. 27 AM B B B PM B B B
Highway Capacity Manual -
Operational Analysis Method Results
LEGEND
Int. XX AM PM
Existing (2008)
2040 No Build
2040 Build
LOS A - C
LOS D - F
N
W
E
S
Not to Scale
South Coast 101 HOV Project
Future Conditions
Intersection Peak Hour LOS
(Continued)

This page intentionally left blank


C
Int. 83 AM PM C F C F C F
Int. 81 AM PM C C C B C B
Int. 80 AM PM D C C D C D
Int. 77 AM PM C C C C C C
Int. 76 AM PM A A A A A A
Int. 75 AM PM C C C C C C
Int. 82 AM PM C B C B C C
Int. 78 AM PM B C C C C C
Int. 79 AM PM F E F F F F
Int.79a AM PM C B C B C B
Int. 73 AM PM B C B B B B
Int. 74 AM PM A B A B A B
Int. 72 AM PM C C C D C D
Int. 68 AM PM C C C C C C
Int. 69 AM PM D D D D D D
Int. 67 AM PM E F E F E F
Int. 63 AM PM C B C B C B
Int. 65 AM PM A A A C A D
Int. 62 AM PM F F F F F F
Int. 71 AM PM F E F E F E
Int. 70 AM PM C D C D C D
Int.105 AM PM E E E E E F
Int. 66 AM PM C B C C C D
Int. 64 AM PM D C C D D D
Int. 59 AM PM C C E C E C
Int. 58 AM PM F C C C C C
Int. 60 AM PM B B C D C D
Int. 56 AM PM A B A B A B
Int. 61 AM PM C B B B B B
Int. 55 AM PM D E D F D F
Int.104 AM PM C D C C C C
Int. 57 AM PM C C C D C E
Int.103 AM PM D D E E E E
Int. 54 AM PM B C B C B C
Int. 52 AM PM C D C C C B
Int. 53 AM PM C E D F C D
Int. 50 AM PM B B B C B C
Int.102 AM PM B C C E C E
Int. 51 AM PM B A B A B B
Cathedral Oaks Rd
Turnpike Rd
El Sueño Rd
San Marcos Pass
Foothill Rd
Cumbre Rd
Hope Ave
Calle Real
State St
Hollister Ave
Modoc Rd
Las Palmas Dr
Las Positas Rd
Pueblo St
Arrellaga St
Castillo St
Mission St
San Andres St
Bath St
San Pascual St
Montecito St
E Yanonali St
Cabrillo Blvd
Garden St
Haley St
Alameda Padre Serra
Marina Dr
Cliff Dr
Shoreline Dr
Highway Capacity Manual - Operational Analysis Method Results
LEGEND
Existing (2008)
2040 No Build
2040 Build
LOS A - C
LOS D - F
N
W
E
S
Not to Scale
South Coast 101 HOV Project
Future Conditions
Intersection Peak Hour LOS
(Continued)

This page intentionally left blank



Highway Capacity Manual - Operational Analysis Method Results

LEGEND

Int. XX AM PM
Existing (2008)
2040 No Build
2040 Build

LOS A - C
LOS D - F

N W E S
Not to Scale

South Coast 101 HOV Project

Future Conditions
Intersection Peak Hour LOS
(Continued)

This page intentionally left blank

Cabrillo Boulevard/Hot Springs Interchange

The five configurations that were considered for the proposed interchange each vary in terms of traffic redistribution. Refer to Section 1.3.1 for descriptions of each configuration. As mentioned earlier in the document, the F Modified configuration was recommended by the Project Development Team as the preferred configuration. Based on public feedback, F Modified also received major support from the public (see Appendix M).

A subset of intersections was chosen based on the overall number of interchange configurations considered for Cabrillo Boulevard. For the Hot Springs/Cabrillo interchange intersection analysis, primary and secondary intersections were identified. Projected turn volumes generated by the Santa Barbara County Association of Governments' travel demand morning/afternoon peak hour models were used to estimate intersection level of service relative to state and local operational criteria.

Primary locations were defined as being intersections physically altered by an interchange concept (design changes that are essential for putting an HOV lane on the mainline). Secondary locations were defined as intersections not physically altered but potentially affected by diverted traffic from primary intersection locations.

Based on the five configurations currently under consideration, three primary intersections and 11 secondary intersections were included in the study.

The following are the three primary intersections:

- Coast Village Road and Hermosillo Road: the northbound off-ramp
- Cabrillo Boulevard and the southbound off-ramp and northbound off-ramp
- Cabrillo Boulevard and the northbound on-ramp

The following are the 11 secondary intersections:

- Olive Mill Road and the northbound off- ramp
- North Jameson Lane and Olive Mill Road
- Olive Mill Road and the southbound on-ramp
- Milpas Street and the northbound on-ramp and off-ramp
- Milpas Street and the southbound off-ramp
- Milpas Street and the southbound on-ramp and off-ramp

- Garden Street and the northbound on-ramp and off-ramp
- Garden Street and the southbound on-ramp and off-ramp
- Garden Street and Yanonali Street
- Cabrillo Boulevard and Los Patos Way
- Cabrillo Boulevard/Hot Springs Road and Coast Village Road

Note that the intersections of Coast Village and the Hermosillo Road and northbound off-ramp were considered as a primary intersection under configurations F, J, and M. Under the modified configurations F and M, however, these intersections were redefined as secondary, given that they would remain physically unchanged relative to their baseline conditions.

Table 2.20 indicates level of service information for the primary intersections that would be rebuilt as part of this project. Level of service is a measurement similar to a report card that is used to evaluate how well intersections and roadways operate. This information covers the morning and afternoon peak hours for the No-Build Alternative and the build alternatives for the 2040 design year.

Three reconstructed ramp intersections (primary intersections) that may warrant traffic signals due to increased traffic as a result of the project are: the northbound ramp(s) at Cabrillo Boulevard, the southbound ramps at Cabrillo Boulevard, and the northbound off-ramp at Hermosillo Road and Coast Village Road. Configuration F Modified and configuration M Modified do not reconstruct the intersection of Hermosillo Road at Coast Village Road; therefore, this location is not considered a primary intersection for these two interchange configurations. The primary intersections for each of the interchange configurations that may warrant traffic signals are as follows:

- Configuration F
    - Hermosillo Road at Coast Village Road
    - Cabrillo Boulevard at the southbound ramps
- Configuration F Modified
    - Cabrillo Boulevard at the northbound ramps
    - Cabrillo Boulevard at the southbound ramps

- Configuration J
    - Hermosillo Road at Coast Village Road
- Configurations M and M Modified
    - Cabrillo Boulevard at the northbound ramps

As previously discussed, maintaining continuity of existing and future bike and/or pedestrian paths will be provided as a part of all interchange configurations.

One primary intersection—Coast Village Road and Hermosillo Road northbound off-ramp— is projected to exceed the Caltrans level of service threshold criteria during one or both peak hours for Cabrillo interchange configurations F and J in the year 2040.

The following secondary intersections are projected to exceed the Caltrans level of service threshold criteria for one or both peak hours:

- Southbound off-ramp and Olive Mill Road
- Southbound on-ramp and Olive Mill Road
- Southbound off-ramp and Milpas Street
- Southbound on-ramp and off-ramp and Milpas Street

For all the above intersections except for Cabrillo Boulevard and Los Patos Way, it was determined that no work would occur at any of these locations as part of the project due to the relatively minor increases in traffic and the uncertainty in predicting traffic redistribution patterns.

The intersection of Los Patos Way and Cabrillo Boulevard is projected to operate at level of service F during peak hours in 2040. No work is being shown at this location because the City of Santa Barbara has already included an intersection improvement project at this location in the 2014-2018 Capital Improvement Program. Caltrans would work with the City to ensure this improvement is completed before constructing the ramp changes for the proposed South Coast 101 HOV Lanes project.

Based on the Highway Capacity Manual (HCM) Two-Way Stop Controlled (TWSC) methodology, the intersection of Los Patos Way and Cabrillo Boulevard is projected to operate at level of service F during peak hours in 2040[9]. This methodology does not

[9]*Note:* Two-way stop control (TWSC) intersection level of service (LOS) is based on worst approach control delay per vehicle, using the 2000 Highway Capacity Manual methodology and therefore provides a single output that does not represent travel conditions for other intersection users. Conversely, all-way

effectively reflect the anticipated conditions for travelers on Cabrillo Boulevard, as most users of this intersection would experience little to no delay. Using a weighted average control delay methodology, similar to an approach used for traffic signals, this would instead represent a 2040 LOS value of "A" in the morning peak hour and LOS "B" in the afternoon peak hour. The northbound and southbound ramp junction intersection improvements associated with the preferred interchange configuration is also anticipated to reduce queuing that would otherwise extend back into the Los Patos/ Cabrillo intersection during peak times under the 2040 no-build condition.

The City of Santa Barbara has an intersection improvement project at this location in their 2014-2018 Capital Improvement Program. The area between the southbound ramp intersection (for the preferred F Modified configuration) at Cabrillo and the Los Patos/Cabrillo intersection is also the subject of bicycle and pedestrian improvements led by Santa Barbara County Association of Governments and the City of Santa Barbara. These improvements would improve bicycle and pedestrian connectivity along Cabrillo Boulevard by replacing the Union Pacific Railroad structure over Cabrillo Boulevard, providing bike and pedestrian facilities on both sides of Cabrillo Boulevard and controlled pedestrian crossing opportunities at the Los Patos/Cabrillo Boulevard intersection. A consultant that has experience working with Union Pacific Railroad has been hired by the City of Santa Barbara to complete this work, and the SBCAG board has identified this project as a priority improvement for regional funding.

The Caltrans team has coordinated with City and SBCAG staff to ensure that F Modified can be designed in a manner that provides for bicycle, pedestrian, and vehicular connectivity and consistency with the SBCAG/City improvement project. Caltrans will coordinate closely with the City and SBCAG on these improvements during the design and permitting phase of the HOV project and options for shared funding and/or concurrent construction efforts will be further discussed at that time.

---

stop and signal controlled intersection LOS in the 2000 Highway Capacity Manual is based on weighted average control delay per vehicle. At the Los Patos/Cabrillo intersection, the low LOS value indicated by the TWSC methodology is based on a limited number of vehicles making left turns that would experience a 95th percentile queue of 2-4 vehicles in 2040 from the side streets. Vehicles traveling through the intersection on Cabrillo Boulevard, however, would experience little to no control delay. Under F Modified, if no further improvements were made at this intersection apart from this project, the average vehicle control delay in 2040 for vehicles that travel through this intersection would be 3.1 seconds/vehicle in the morning peak hour and 12.1 seconds/vehicle in the afternoon peak hour. Using a weighted average control delay methodology, this would represent a 2040 LOS value of "A" in the morning peak hour and LOS "B" in the afternoon peak hour.

Table 2.20 Primary Intersection Level of Service Summary

Location and Intersection Number	Existing		No-Build		Cabrillo Interchange F		Cabrillo Interchange F Modified		Cabrillo Interchange J		Cabrillo Interchange M		Cabrillo Interchange M Modified	
	2008		2040		2040		2040		2040		2040		2040	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Southbound and northbound off-ramps (left) #44 at Cabrillo Blvd.	F	E	D	C	-	-	- -	- -	- -	- -	- -	- -	- -	- -
Southbound on- and off-ramps (right) #44 at Cabrillo Blvd.	B	D	- -	- -	C	C	B	C	- -	- -	- -	- -	- -	- -
Northbound on-ramp #45 at Cabrillo Blvd.	D	F	A	C	B	D	- -	- -	B	D	- -	- -	- -	- -
Northbound on- and off-ramps #45 at Cabrillo Blvd.	-	-	- -	- -	- -	- -	A	B	- -	- -	B	B	B	B
Northbound off-ramp (right) #43 at Hermosillo Road	C	F	C	F	B	C	*	*	B	C	- -	- -	*	*

Data from "Cabrillo/Hot Springs Interchange Configuration Traffic Analysis," March 21, 2011, and "Memorandum Cabrillo Boulevard I/C Modified Configuration Analysis" dated July 19, 2011, "South Coast 101 HOV Lanes Existing Conditions Operations Analysis" (December 15, 2008; amended December 9, 2011, and "South Coast 101 HOV Lanes Forecast Operations Report of October 19, 2009" (amended December 9, 2011). Addendum to July 19, 2011Cabrillo/Hot Spring Interchange Configuration Analysis Technical Memorandum –I/C Modified Configuration Analysis (March 14, 2014)

Table amended since release of draft environmental document to remove 2020 data based on decision that the project would not be fully constructed by that date.

*Notes: * Not a primary intersection*
Proposed intersection location and/or lane configurations vary by interchange concept for intersections #44, #45, and #107

This page intentionally left blank

Bicycle and Pedestrian Routes

None of the three build alternatives would permanently affect parking, bicycle, or pedestrian facilities, including the Pacific Coast Bike Route. Where the project is proposing local-street changes, all modified pedestrian facilities would comply with the Americans with Disabilities Act. The project would facilitate pedestrian and bicycle access by ensuring all existing bicycle and pedestrian facilities are retained or replaced as needed. Building the six-lane highway would reduce through-trips by vehicular traffic on the local street system by those seeking to avoid U.S.101 congestion. In areas where traffic trips onto the local streets are reduced, there would be added benefits for bicycle, pedestrian and local transit users that depend on the local street system for travel.

In several locations within the project limits, bicycle and pedestrian improvements are desired by the local agencies and have been included as part of circulation plans. Desired improvements include access structures to cross over or under the freeway. Although the South Coast 101 HOV Lanes project would not construct those new facilities as part of its project or scope, it would not preclude the facilities from being constructed as planned.

As a result of the recent Local Coastal Plan Amendment process with the City of Carpinteria, two additional projects have been identified in the Carpinteria area that would provide greater connectivity in the city for the Coastal Route Bike Path. The first project proposes to extend the bike path adjacent to the Salt Marsh from Santa Claus Lane to Carpinteria Avenue. This Class I path proposes to close the coastal trail gap. The second project is the Rincon Coast Trail that would extend from Carpinteria Avenue to Rincon County Park. The proposed improvement will close the coastal trail gap between Carpinteria Avenue and the new Class I trail along U.S. 101 at Rincon. Currently, the Santa Barbara County Association of Governments has been identified as the lead agency for both projects. Both trails are expected to be built before completion of the South Coast 101 HOV Lanes project.

During construction of the Cabrillo Boulevard/Hot Springs interchange, consideration would be given to bicyclists, pedestrians, and persons with disabilities who need access through construction areas. Nearby is the existing Butterfly pedestrian undercrossing. Entrance points to the pedestrian undercrossing were improved as part of the Milpas Street/Hot Springs Road project. Further improvements to provide full Americans with Disabilities Act accessibility are also being considered as part of a Caltrans candidate SHOPP funded project. With Cabrillo Boulevard interchange configurations F

Modified, M, and M Modified, access or use of this facility would not be diminished, however, the existing light well in the center would be closed. For interchange configurations F and J, in addition to the closure of the light well, the Hermosillo ramp would be widened in this location, requiring a change to the eastern approach of the undercrossing structure. Provisions would be made to keep the overcrossing open for use during construction.

As noted earlier, the area between the Proposed F Modified southbound ramp intersection at Cabrillo and the Los Patos/Cabrillo Boulevard intersection is also the subject of bicycle and pedestrian improvements being completed by SBCAG and the City of Santa Barbara. The SBCAG/City of Santa Barbara projects propose to improve bicycle and pedestrian connectivity along Cabrillo Boulevard by replacing the Union Pacific Railroad structure over Cabrillo Boulevard, providing bike and pedestrian facilities on both sides of Cabrillo Boulevard and controlled pedestrian crossing opportunities at the Los Patos/Cabrillo Boulevard intersection. The Caltrans team has coordinated with the City of Santa Barbara and SBCAG staff to ensure that F Modified can be designed in a manner that provides for bicycle, pedestrian, and vehicular connectivity when the SBCAG/City of Santa Barbara improvement project is completed.

Avoidance, Minimization, and/or Mitigation Measures

- Coordinate with local jurisdictions as needed to minimize disruptions to traffic, pedestrians, and bicyclists associated with local and state road construction projects in the corridor. Refer to Construction Impacts under Traffic Circulation (including pedestrian and bicycle) for further details regarding a required Transportation Congestion Management Plan.
- Where the project proposes local street changes, all modified pedestrian facilities would comply with the Americans with Disabilities Act.
- All existing bike or pedestrian facilities would be retained or replaced as needed.

2.1.6 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act of 1969 as amended establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S. Code 4331[b][2]). To further emphasize this point, the Federal Highway Administration in its

implementation of the National Environmental Policy Act (23 U.S. Code 109[h]) directs that final decisions about projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California Public Resources Code Section 21001[b]).

Affected Environment

This section is based on the Visual Impact Assessment (November 2011) and the Addendum to the Visual Impact Assessment (March 2014), completed as technical studies for this project.

U.S. 101 through coastal Santa Barbara County has long been recognized for its scenic qualities. Local coastal planning policies emphasize the protection of visual resources along U.S. 101 and note the concern and sensitivity to aesthetic issues along this route.

Public opinion and policy on the established visual character of the regional landscape are important factors in assessing the baseline values of the setting. These policies and community-based goals can be used to predict the likely reaction that changes resulting from the proposed project would evoke from the viewing public.

The project passes through three local jurisdictions—Santa Barbara County, the City of Carpinteria, and the City of Santa Barbara—as well as the unincorporated communities of Summerland, Toro Canyon and Montecito. The entire project sits within the Coastal Zone. The project is subject to Coastal Zone policies and the issuance of Coastal Development Permits, so many aspects of the project would be regulated by the applicable local coastal plans and the Coastal Commission policies.

Existing Visual Setting

The regional topography is characterized by coastal bluffs and plains flowing into the rolling foothills of the Santa Ynez Mountains. The terrain is mostly flat near the coastal edge, with slopes becoming as steep as 30 percent near the hills. The form and ridgeline of the mountains about 1 to 5 miles to the northeast create a dominant element in the landscape, providing a clearly defined visual limit for the region.

Surface water plays an important role in establishing the visual character of the region. The Pacific Ocean is visible from many parts of the study area and, where seen, provides dramatic contrast in terms of color and form to the surrounding landscape. Several seasonal creeks cross the project area as they flow from the foothills to the sea. Water in these creeks is not always visible; the creeks' presence in the landscape is mostly seen as narrow corridors of riparian vegetation.

Wetlands are present in the region. The two largest are the 230-acre Carpinteria Salt Marsh and the 29-acre Andrée Clark Bird Refuge in Santa Barbara.

Vegetation throughout most of the region is varied. Much of the area has been greatly influenced by development of some sort. The typical skyline vegetation along the highway and developed areas consists of mature cypress, pine, eucalyptus and palms. Native vegetation is seen mainly on hillsides and consists of coast live oak woodland, coastal sage scrub, chaparral and riparian plant communities. Orchards occur in scattered spots, particularly in the foothills near Summerland and Carpinteria.

A wide range of development is found throughout the region. Each community has some commercial development, much of it in the vicinity of U.S. 101, with many residential areas on the inland side of the highway. Much of the commercial development is tourism oriented. The western end of the study area in Santa Barbara is the most densely developed part of the region. There is commercial development along Santa Claus Lane and at the eastern Padaro Lane/U.S. 101 interchange, both of which are visible from U.S. 101. Some light industry and greenhouses are found near the east end of the study area near Carpinteria. In the region are several recreational facilities that have tennis courts, a golf course, a county park, and beach access areas. Highway roadsides are generally well landscaped, effectively screening much of the built character of the adjacent community.

Methodology

When analyzing visual resource changes, one must look at how these attributes relate to one another and their setting. This is done by using Federal Highway Administration methodology guidance, which includes three visual rating criteria described as follows:

1. Vividness is the visual power or memorability of the landscape components as they combine in striking and distinctive visual patterns.

2. Intactness is the visual integrity of the landscape and its freedom from non-typical encroaching elements. If all of the various elements of a landscape seem to "belong" together, there will be a high level of intactness.

3. Unity is the visual harmony of the landscape considered as a whole. Unity represents the degree to which potentially diverse visual elements maintain a coherent visual pattern.

To provide a clear description of the existing visual setting and to define anticipated impacts, the project area was divided into six landscape units. Landscape Assessment Units or "Units" divide the project into manageable segments that may share visual attributes, potential project effects, and if necessary, impact reduction strategies.

The project corridor was divided into the following six Landscape Assessment Units. The units are defined along the highway corridor from the western end of the project to the east.

Carpinteria City Unit (post miles 1.4 to 4.1)—From 0.22 mile east of Bailard Avenue to 0.2 mile west of Santa Monica Road

This unit is defined by its proximity to the community center of Carpinteria. As part of the eastern section of the project corridor, views to the Santa Ynez Mountains and agriculture are important visual elements. The Carpinteria City Unit is also influenced by views of the central business district, and residential and visitor-serving commercial development along the highway. This unit is generally well landscaped and has limited or no views of the Pacific Ocean from U.S. 101, except for a brief segment near Bailard Avenue across the Bluffs Nature Preserve and Viola Fields open space areas.

Carpinteria Salt Marsh Unit (post miles 4.1 to 5.6)—From 0.2 mile west of Santa Monica Road to the Arroyo Parida (Paredon) Creek Bridge

This unit is another part of the eastern section of the project corridor, where views to the Santa Ynez Mountains and agriculture are important visual elements. The visual identity of this unit, however, is also greatly influenced by its proximity to the Carpinteria Salt Marsh. Although partially screened by roadside and median vegetation, views of the Pacific Ocean are available from this unit. As seen from U.S. 101, views of the tourist-oriented businesses along Santa Claus Lane are also available. This landscape assessment unit includes views of some of the lesser-developed areas along the project corridor.

Padaro Unit (post miles 5.6 to 7.1)—From Arroyo Parida (Paredon) Creek Bridge to the North Padaro Lane overcrossing

This unit includes the unincorporated Toro Canyon area between the City of Carpinteria and the unincorporated community of Summerland. The visual environment through this unit is defined to a great extent by mature trees and landscaping along and next to the highway corridor. A group of trees known as the Memorial Oaks line a portion of U.S. 101 within this unit. These oaks were planted to honor Santa Barbara County soldiers who died in World War I and, although not a historical resource, are considered of local interest. The oaks contribute to the vegetative character of the Padaro Unit, although their commemorative value is likely not apparent to the casual highway traveler. Further discussion of the Memorial Oaks is provided below. A low to moderate amount of development is seen in this area, mostly residences—from medium-density north of the highway to large estates along the ocean bluff. A limited amount of commercial development is visible at the eastern Padaro undercrossing. Long distance ocean views exist from the eastern and westernmost portions of this assessment unit.

Summerland Unit (post miles 7.1 to 9.2)—From the North Padaro Lane overcrossing to 0.2 mile west of the Sheffield undercrossing

This unit is composed of the Summerland community and its vicinity. This visually distinctive unit includes dramatic ocean and coastline vistas as well as views of the Summerland commercial area and residential community extending uphill from U.S. 101. A moderate amount of landscaping is found along and next to the highway corridor throughout this assessment unit.

Montecito Unit (post miles 9.2 to 11.1)—From 0.2 mile west of the Sheffield undercrossing to Hermosillo Road

This unit includes the highway corridor and vicinity from just west of Ortega Hill to the Los Patos Way off-ramp. This unit is characterized to a great degree by its abundance of mature highway and neighborhood landscaping, along with a somewhat more curvilinear highway alignment. Several large median trees are found in this assessment unit. Few if any ocean views are available from the highway through the Montecito unit.

Santa Barbara City Unit (post miles 11.1 to 12.3)—From Hermosillo Road to Sycamore Creek

This unit represents the westernmost segment of the project corridor study area. This assessment includes the Cabrillo Boulevard Interchanges as well as the Andrée Clark Bird Refuge. Although mature landscaping is an important component in the area, this

unit is also partially influenced by the more urban visual character of Santa Barbara City. Ocean views are not available from this assessment unit.

Memorial Oaks

Apart from the Landscape Assessment Units described above, the Memorial Oaks area along U.S. 101 in the Serena Park area west of Carpinteria was identified as an area of special community interest. Although the Memorial Oaks are not eligible as a historical resource, they do contribute to the vegetative character of the corridor. As a result, they are being addressed here under Visual/Aesthetics.

In the aftermath of World War I, countless memorials were erected across the United States to honor the nation's war dead. One particular form of memorial, the planting of living trees, was promoted as being an especially fitting way of perpetuating the memory of fallen troops. In addition to memorializing a community's loss, memorial trees were also seen as an effective way of greening the landscape, replanting a stock of trees to replace those that had been harvested for wartime purposes, and beautifying the county's streetscapes and open highways, dovetailing in some respects with civic improvement and the "Good Roads" movement. State highway departments also embraced the idea as part of the general highway beautification trend and as a practical solution to help prolong the life of road pavement surfaces by keeping them shaded.

A decade after the end of World War I, Santa Barbara County planted 71 Memorial Oaks in the Serena Park area between Carpinteria and Summerland alongside what was, at the time, a narrow rural two-lane highway. The trees were planted about 50 feet apart in a quarter-mile-long row on both the north and south shoulders of the highway, and each tree reportedly had a wooden marker inscribed with the name of a local soldier who had died in service. Under the direction of Santa Barbara's American Legion Post 49, whose idea it had been to plant the trees, the Memorial Oaks were officially dedicated on Mother's Day, May 13, 1928, in a ceremony attended by more than 150 former soldiers, their families and friends, and the State Highway arboriculturist. Local Boy Scouts planted flowers and placed small flags around the trees, and the ceremonies concluded with a volley fired by the American Legion drill team, and the playing of taps.

In the mid-1950s, the California Division of Highways (later the California Department of Transportation, or Caltrans) converted the two-lane highway to full freeway status by adding two lanes to the north of the existing lanes and limiting access from side roads. As a result of these changes, the Memorial Oaks that formerly had been located on the

north side of the two-lane highway were now in the median of the four-lane freeway. Over the years, some of the original oaks died and acorns sprouted and matured in between the original plantings.

The Memorial Oaks were evaluated for National Register eligibility in 1991 in connection with the Santa Barbara Six-Lane project. In 2009, Caltrans retained JRP Historical Consulting to do research and evaluate historic-period built-environment resources in the current project's area of potential effects, including the Memorial Oaks. JRP revisited the resources and again evaluated the significance and integrity of the trees. JRP documented that, during the nearly 20-year interval since the first evaluation, the Memorial Oaks had continued to dwindle in number, with fewer than half of the original 71 still standing based on an estimate of 16 in the median and 16 along the southbound shoulder of U.S. 101. The JRP studies confirmed Caltrans' earlier evaluation that the original roadway appearance, with 71 oak trees spaced at regular intervals along the rural two-lane highway, was a landscape that no longer existed, and that the oaks were not eligible for listing in the National Register of Historic Places. The State Historic Preservation Officer concurred with this determination on January 26, 2011 (see Appendix D). However, while the oaks do not meet the criteria for the National Register of Historic Places or as historical resources under the California Environmental Quality Act, they are of local interest and are discussed in Sections 2.3 Biological Environment and 3.3 Mitigation Measures for Unavoidable Impacts under the California Environmental Quality Act.

As part of the process of gathering information about historic-period resources in the project area of potential effects, Caltrans formed a Memorial Oaks Focus Review Group to learn community opinions and hear community concerns about the oak trees. Caltrans recognized that, although the Memorial Oaks are not officially designated as a local historical resource, the trees are mentioned in the *101 In Motion Final Report* (2006) and the *Toro Canyon Plan (*Santa Barbara County, 2004*),* and would be directly affected by the project. The Focus Review Group met five times between April 7, 2009, and May 5, 2010, with the following participants:

Vera Bensen, Carpinteria Valley Association
Bob Duncan, Santa Barbara County Historic Landmarks Advisory Commission
David Griggs, Carpinteria Valley Historical Society and Museum of History
Gretchen Johnson, Carpinteria Citizen
Roxie Lapidus, Carpinteria Valley Association
William Stewart, Vietnam Veterans of America

Staff from the Santa Barbara County Planning and Public Works Department, the Santa Barbara County Association of Governments, JRP Historical Consulting, and Caltrans also participated in the meetings.

During the course of these meetings, JRP staff presented the results of the studies and their conclusion that, given that the trees in their present setting lack sufficient integrity to be able to convey their significance as a World War I memorial, they are not eligible for listing in the National Register and do not constitute historical resources for the purposes of the California Environmental Quality Act. Caltrans presented information on design scenarios for adding the new HOV lanes and how these might variously affect the Memorial Oaks. Caltrans staff also reported that, today, there are only approximately 32 trees believed to be from the original planting, that these trees are now intermixed with younger volunteer oaks and other vegetation, and that there is a wide variation in the health and appearance of these trees. Ongoing maintenance of the mature oaks, especially in the median, often requires severe pruning that interferes with the oaks' natural wide-spreading habit of growth. Trees damaged by roadway collisions or toppled by storms have also been removed.

The Focus Review Group developed and considered a number of recommendations to minimize project impacts to the Memorial Oaks and potentially revive their commemorative aspects. The group noted that as highway and freeway speeds have increased, the opportunity to park alongside the roadway, walk under the trees, and read the names is now long gone, making it more difficult to observe and appreciate the Memorial Oaks for what they are. The Focus Review Group gave considerable attention to a number of factors when developing recommendations: specific engineering constraints; impacts to other resources; the health and viability of the trees at their present location; options available for signage and other treatments on U.S. 101 to make drivers aware of the Memorial Oaks; potential for moving trees; and the possibility of developing a nearby offsite location to serve as a fitting focal point for a memorial. These efforts resulted in several formal recommendations being made to the Project Development Team. It was acknowledged, however, that certain elements were beyond the scope of the project.

Observer Viewpoints

Within the Landscape Assessment Units described above, 27 critical viewing locations were identified to best reveal the project features and any potential visual character change. The total number of potential viewpoints associated with this approximately 11-mile project is infinite, and it would not be possible to attempt to show every possible