

### STATE ROUTE 185 TRANSPORTATION CONCEPT REPORT February 2013





The Transportation Concept Report (TCR) is a Caltrans long range planning document that informs the regional transportation planning process. The TCR provides information regarding route segments, including high priority projects for the highway through 2035, and existing and forecasted traffic data. Projects identified in the TCR will require environmental and engineering studies before final approval and are subject to change.

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### Stakeholder Acknowledgement

District 4 is pleased to acknowledge the time and contributions of stakeholders and partner agencies in preparing this TCR. Development of system planning documents such as this one is dependent upon the participation and cooperation of key stakeholders. This TCR represents a cooperative planning effort for SR-185. Representatives of the Alameda County Transportation Commission, A.C. Transit, and the Cities of Hayward, San Leandro and Oakland provided essential information and direction in the preparation of this document.

This TCR will be posted on the Caltrans District 4 System Planning website at: http://www.dot.ca.gov/dist4/systemplanning/

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# **Executive Summary**

### **Purpose of Transportation Concept Report**

The purpose of a Transportation Concept Report (TCR) is to communicate the Department's long range (25-year) vision for a State Route. The concept is based on current and projected operating conditions and acknowledges both programmed and planned transportation improvement projects along a route. A TCR may also recommend basic mobility strategies and conceptual projects which warrant further analysis. The TCR, completed in partnership with local jurisdictions and Congestion Management Agencies (CMA), serves as one source of guidance for future development of a route. The concept aids Caltrans engagement in the regional transportation planning process, early communication with local agencies and CMAs concerning specific issues and route significance, and supports the early stages of the project development process. This TCR provides a long term vision for the State Route 185 (SR-185) Corridor.

## **Corridor Description**

State Route 185 is a 10.5 mile long primary arterial that runs through the Cities of Hayward, San Leandro and the eastern portion of Oakland. It includes sections of Mission Boulevard in Hayward (Segment A), East 14<sup>th</sup> Street in San Leandro (Segment B) and International Boulevard in Oakland (Segment C), shown in Figure S1. A portion of the route (Segment R) is in the process of being relinquished to the City of Hayward. The surrounding area consists of land uses including: retail, commercial, light industrial and multiple and single family residential. It is a densely populated urban area along the entire length of the corridor.

Historically, SR-185 was a main county highway accessing a variety of commercial land uses. However, since the implementation of the regional freeway system in the 1960s, the Corridor's importance as a regional connector has decreased and many of the commercial strip areas and auto-oriented uses are out of date. Much of the existing commercial and residential building stock was built in the 1940s and 1950s.

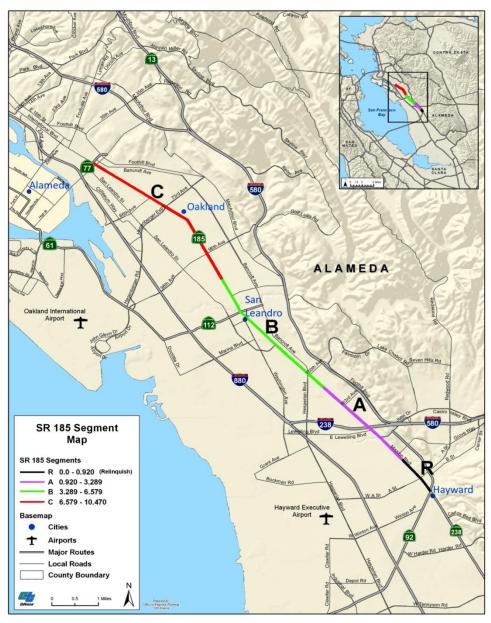


Figure S1. SR-185 Corridor Overview and Segment Map.

## **Corridor Issues**

#### Planned BRT System

AC Transit, along with the Cities of Berkeley, Oakland and San Leandro, and Caltrans is planning a Bus Rapid Transit (BRT) system that will run along a portion of SR-185. The original BRT proposed Locally Preferred Alternative (LPA) would have begun at the San Leandro BART station and terminated at Ashby and Telegraph Avenues in Berkeley. The LPA has been changed and now contains more limited improvements in Berkeley. AC Transit also recommended an additional alternative, known as the Downtown Oakland to San Leandro (DOSL) Alternative for analysis. This shorter alternative was introduced because of funding, community acceptance, and BRT operational issues from downtown

Berkeley to San Leandro. The project will feature dedicated bus travel lanes throughout most of Oakland and in north San Leandro, with level station boarding to reduce transit times along the route. Project planning began in 2002 and is entering its final stages with expected completion of construction and opening in the spring of 2016. The DOSL alternative has been approved by the city councils of both Oakland and San Leandro.

#### **Proposed Corridor TODs**

Transit-Oriented Development (TOD) is town planning for an area where proximity to transit provides convenient access to the goods and services people need on a daily basis, in an environment that is attractive, usable, accessible and enjoyable. Several TODs exist in the Bay Area and some are proposed for SR-185. TODs are discussed further on Page 30 of this document.

#### Complete Streets Program

Complete Streets refers to Caltrans policy to provide adequate facilities that will accommodate all users and modes of travel on the roadway. The analysis of roadways follows:

- 1. Inventory of infrastructure:
  - <u>Bicycle infrastructure</u>—The Alameda County Regional Bicycle Plan does not include any existing Regional Bikeways along SR-185. However, one Regional Bikeway is proposed on the Corridor.
  - <u>Pedestrian infrastructure</u>—There are seven significant intersections on SR-185, defined as streets connecting to I-880 on the west. They are all signalized and the crosswalks are well striped. Only one (98<sup>th</sup> Avenue) has pedestrian countdown signals.
  - <u>Transit facilities</u>--Bay Area Rapid Transit (BART) is present in the corridor and includes the Hayward, San Leandro, Bayfair and Coliseum stations located between SR-185 and I-880. Bus service along the route is provided by AC Transit including Lines 1(Rapid Bus), 93 and 99.
- 2. Operational Analysis: Identifying Deficiencies
  - Lack of Regional Bikeways and striped bicycle lanes on SR-185.
  - Lack of pedestrian countdown signals at six of the seven significant intersections on SR-185 and lack of crossing treatments at other unsignalized locations.
  - Bus Rapid Transit (BRT) service is planned on part of SR-185, but not yet constructed.
- 3. Operational Analysis: Developing Recommendations
  - Continue to work with AC Transit to finalize plans for the Bus Rapid Transit (BRT), enabling construction of the project as soon as possible.
  - Assist in the implementation of the proposed Bikeway 33: East 14th Street bikeway as described in the San Leandro Bicycle and Pedestrian Master Plan.
  - Partner with corridor cities concerning implementation of pedestrian improvements, including sidewalks.
  - While the AC Transit BRT project will provide pedestrian improvements in conjunction with planned dedicated bus lanes, the following treatments should be studied when the opportunity arises to improve pedestrian access and connectivity elsewhere in the corridor:
    - Raised medians and pedestrian refuge islands
    - Corner curb extensions, also known as bulbouts
    - High visibility crosswalks
    - Advance yield markings together with "Yield Here to Pedestrians" signage

## **Corridor Concept**

Segment	City	Segment Description	Existing Facility	25-yr Concept
Relinquished (R1) PM 0.00-0.40	Hayward	SR-92/SR-238 Intersection to A St.	REL	REL
To be Relinquished (R2) PM 0.40-0.92	Hayward	A Street to Rose Street	4C	REL
A PM 0.92-3.29	Hayward	Rose St. to Bayfair Drive	4C	REL
B PM 3.29-6.58	9-6.58 San Leandro Bayfair Drive to Durant Ave		3C, 4C	2C-3C (2 BRT)
C PM 6.58- 10.47	Oakland	and Durant Ave to High Street (SR-77)		2C (2 BRT)

Table S1. SR-185 Corridor Concept Summary.

C= Conventional Lanes PM=Post Mile BRT=Bus Rapid Transit REL=Relinquish

State Route 185 is a conventional surface roadway that will continue to function as an important urban arterial between the SR-92/SR-238 intersection in Hayward and SR-77 in Oakland. According to agreements with the City of Hayward, Segments R2 and A will be relinquished to Hayward when SR-238 corridor improvements are completed. The Bus Rapid Transit (BRT) system will be a defining element to improve multimodal access in the corridor.

The Place Types (terminology from the Caltrans Smart Mobility Framework described in the body of this document) the corridor serves are primarily Close-in Compact Communities and Suburban Communities. Little change in these types is expected over the 25-year planning horizon.

# **I. Corridor Planning Process**

### Introduction

The Transportation Concept Report (TCR) is a Caltrans long range planning document that informs the regional transportation planning process. The TCR provides information regarding route segments, including high priority projects for the highway through 2035, and existing and forecast traffic data. Projects identified in the TCR will require environmental and engineering studies before final approval and are subject to change.

Corridor Plans (CP) or Transportation Concept Reports (TCR) are being developed for all 56 statutorily identified State Routes in District 4. This TCR provides a concept for State Route 185 within Alameda County.

In order to recommend specific corridor improvements, a corridor assessment is performed based on current and forecasted travel demand and growth in the corridor. This assessment considers current and planned land uses, existing operating conditions, and planned and programmed improvements. Long-range performance expectations and potential deficiencies are also identified. Conclusions are reached in conjunction with internal and external partners.

While considering the transportation network of the corridor as a whole, including alternative modes, Caltrans recognizes that its authority generally lies within the State Highway System. The emphasis of this report is on State highway facilities.

### **Purpose and Need for System Planning**

Government Code 65086 states that "the Department of Transportation as owner-operator of the State Highway System (SHS) shall carry out long-term State highway system planning to identify future highway improvement." These reports are currently identified as Transportation Concept Reports, (TCRs). Guided by regional, State, and federal policies and guidelines, this TCR is focused on anticipating improvements needed to address a 25-year horizon of growth in travel demand.

## State's Interregional Responsibility

The SHS serves primarily local, interregional and regional travel demand. While this is not to preclude SHS access to specific destinations such as public facilities or major tourist attractions, development and modification of the SHS is conducted in the context of the mobility of regional and statewide to-and-through movement of people and goods.

California Senate Bill 45 (SB 45) of 1997 stipulates that the State will nominate transportation improvements that facilitate the movement of people and goods between the State's 43 transportation regions as well as to and through the State. The SB 45 legislation divided the State Transportation Improvement Program (STIP) in two sub-programs: the 75 percent Regional Transportation Improvement Program (RTIP) and the 25 percent Interregional Transportation Improvement Program (ITIP). The STIP, which is adopted by the California Transportation Commission (CTC), represents the five-year plan of future allocations of certain State transportation funds for State highway improvements, intercity rail, and regional highway and transit improvements. To this end, the State is responsible for interregional transportation improvement to accommodating interregional travel demand, and specifying corridor facility concepts that improve

interregional travel through the State Highway System. The corridor concepts indicated in these plans reflect the State's determination regarding the system accommodation of interregional, regional, and local travel needs.

### **Corridor Plan Consistency**

Corridor Plan and TCR preparation is guided by several levels of government policy and direction. Applicable Federal and State guidelines, such as the *Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA-LU)*, the *California Transportation Plan 2030 (CTP 2030)*, MTC's *Regional Transportation Plan (RTP) T2035* and the *Interregional Transportation Strategic Plan (ITSP) 1998*, provide the policy foundation for these documents. The current *State Highway Operation and Protection Program (SHOPP)*, a Caltrans program of maintenance, safety, and rehabilitation improvements, and the *State Transportation Improvement Program (STIP)* are also critical in the development of this TCR.

A full discussion of Federal, State, and regional Transportation Planning efforts and policies related to Corridor Plans are included as Appendix B.

# **II. Corridor Information**

## **Corridor Segmentation**

Figure 1 below shows the SR-185 corridor and its four route segments.

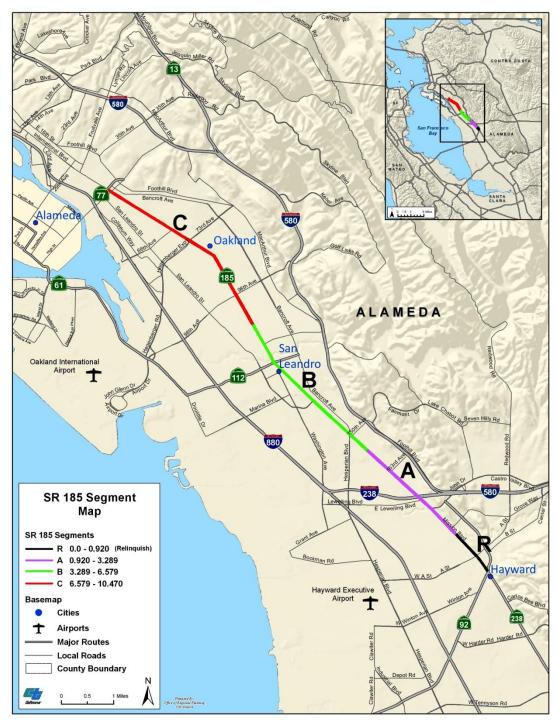


Figure 1: SR-185 Corridor Overview and Segment Map.

## **Alignment and Geometrics**

Segment	City	Approx. Location and Post Mile	Facility Type	Description
R1	Hayward	SR-92/SR-238 Intersection to A St. (PM 0.00-0.40)	4- lane conventional	Flat terrain. Street level retail, commercial and residential (urban setting).
R2	Hayward	A Street to Rose Street (PM 0.40-0.92)	4-lane conventional	Flat terrain. Street level retail, commercial and residential (urban setting).
А	Hayward	Rose St. to Bayfair Dr. (PM 0.92-3.29)	4-lane conventional	Flat terrain. Street level retail, commercial and residential (urban setting).
	San Leandro	Bayfair Dr. to 136 <sup>th</sup> St. (PM 3.29-4.69)	4-lane conventional	Flat terrain. Street level retail, commercial and residential (urban setting).
В	San Leandro	136 <sup>th</sup> St. to Dolores Ave. (PM 4.69 to 5.45)	3-lane conventional	Flat terrain. Street level retail, commercial and residential (urban setting).
	San Leandro	Dolores Ave. to Durant Ave. (PM 5.45 to 6.58)	4-lane conventional	Flat terrain. Street level retail, commercial and residential (urban setting).
С	Oakland	Durant Ave. to High St./SR-77 (PM 6.58 to 10.47)	4-lane conventional	Flat terrain. Street level retail, commercial and residential (urban setting).

Specific alignment and geometric information for the SR-185 corridor is described, by segment, in Table 1 below.

Table 1: SR-185 Alignment and Geometrics

### Land Use

State Route 185 traverses the Cities of Hayward, San Leandro and the eastern portion of Oakland. The topography of this 10.5 mile arterial street is primarily flat. The surrounding area consists of land uses including retail, commercial, light industrial and multiple and single family residential. It is a densely populated urban area along the entire length of the corridor. Much of the existing commercial and residential building stock was built in the 1940s and 1950s.

Historically, SR-185 was an important regional highway lined with many commercial destinations. However, since the implementation of the freeway system in the 1960s, the Corridor's importance as a regional route has decreased.

#### **Priority Development Areas**

In the San Francisco Bay Area, the FOCUS program, sponsored by the Association of Bay Area Governments (ABAG), works with local governments and others in the Bay Area to collaboratively address issues such as high housing costs, traffic congestion, and protection of natural resources. The primary goal of FOCUS is to encourage future growth near transit and in the existing communities that surround San Francisco Bay. Another goal is to enhance existing neighborhoods and provide housing and transportation choices for all residents. As part of the FOCUS program in 2007, local governments in the Bay Area were invited to apply for regional designation of an area within their community as a Priority Development Area (PDA). PDAs are infill development opportunities within existing communities. They are committed to creating more housing choices in locations easily accessible to transit, jobs, shopping and services. To be eligible to become a PDA, an area had to be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. An *approved area* is part of an existing plan that is more specific than a general plan, such as a specific plan or an area plan. A *potential area* may be envisioned as a potential planning area that is not currently identified in a plan or may be part of an existing plan that needs changes. All BART stations located on the corridor are listed in Table 22, page 43.

The following planned PDAs are adjacent to, or near, the SR-185 corridor:

City of Hayward:

• Downtown

City of San Leandro:

- Bayfair BART Station
- Downtown
- East 14<sup>th</sup> Street South Area

City of Oakland:

• Corridors and Transit Station Areas

These PDAs, along with Growth Opportunity Areas (GOA), are shown on the map in Figure 2. Growth Opportunity Areas are locations in the region identified by local jurisdictions as having potential for growth. These areas may be in the process of becoming PDAs or have different criteria to pursue sustainability focused on employment or rural characteristics.

#### Sustainable Communities Strategy (SB 375)

Senate Bill 375 requires each region to meet State-established greenhouse gas emission targets for automobiles and light trucks for 2020 and 2035. MPO's must accurately account for the environmental benefits of more compact development and reduced vehicle miles traveled. If regions develop integrated land use, housing and transportation plans that meet the SB 375 targets, new projects in these regions can be relieved of certain review requirements of the California Environmental Quality Act (CEQA). The targets apply to the regions in the State covered by the 18 metropolitan planning organizations (MPOs).

The current update of the Regional Transportation Plan (2013) by MTC (Plan Bay Area) will include a Sustainable Community Strategy (SCS) as required by SB 375. The bill synchronizes the Regional Housing Needs Assessment (RHNA) process with the RTP process, requires local governments to rezone their general plans consistent with the updated housing element within three years of adoption and provides that RHNA allocations must be consistent with the development pattern in the SCS. The SCS will address how greenhouse gas (GHG) emissions reduction targets will be met for cars and light trucks. The plan will impact land use and travel patterns in the long-range planning horizon.

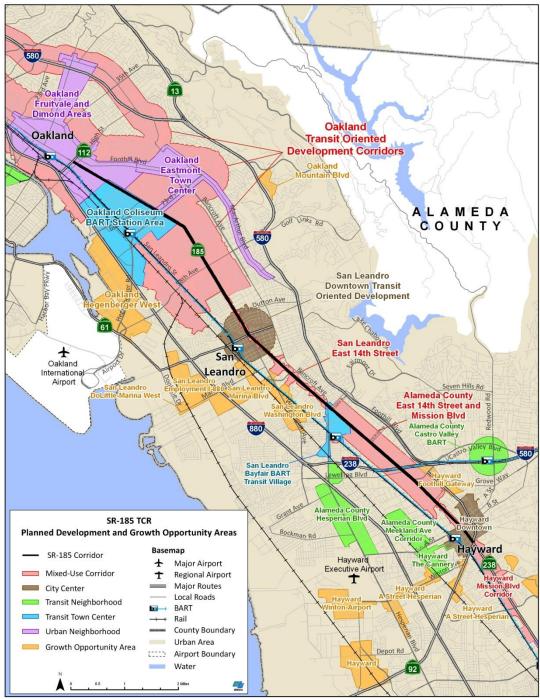


Figure 2: SR-185 Priority Development Areas

## **Place Types**

Place types and place-based approaches are increasingly being used in formulating strategies for transportation and land use planning, transit oriented development and context sensitive design. This technique is outlined in a 2010 Caltrans planning document titled "Smart Mobility, A Call to Action for

the New Decade."<sup>1</sup> This document, also known as the Smart Mobility Framework (SMF), provides a framework that offers concepts, resources, strategies and performance measures that may be implemented by any interested agency or organization.

This report introduces seven place types specifically designed as tools for planning and programming that implement Smart Mobility.<sup>2</sup> The place types are:

- 1. Urban Centers
- 2. Close-in Compact Communities
- 3. Compact Communities
- 4. Suburban Communities
- 5. Rural and Agricultural Lands
- 6. Protected Lands
- 7. Special Use Areas

The SMF place types are necessarily broad. Detailed mapping shows that types often co-exist in small areas. The place types are intended to be applied at a generalized level of detail, with the understanding that detailed planning for specific places will provide greater differentiation of locations. In fact, within any large area designated as one of the place types, there will typically be subareas with the character of other places.

Close-in Compact Communities and Suburban Communities are the predominant place types along the SR-185 corridor. The Smart Mobility Place Types subareas comprising the SR-185 corridor are described in Table  $2^3$  and depicted in Figure 3.

Subarea Place Types	Summary Description
2A. Close-in Centers	Small and medium sized downtowns. Transit Oriented Developments,
	institutions, lifestyle centers, and other centers of activity.
2B. Close-in Corridors	Arterial streets with a variety of fronting development types, with
	frequent transit service and transfer opportunities.
2C. Close-in Neighborhoods	Walkable neighborhoods with housing in close proximity to shops,
	services and public facilities, as well as good multi-modal connections to
	urban centers. Housing density varies from medium to high. Fine-
	grained circulation network of streets for pedestrians and bicyclists.
4B. Corridors	Arterial streets with a variety of fronting development types, frequently
	characterized by inadequate walk and bike environments, low land use
	efficiency and poor aesthetics.
4C. Dedicated Use Areas	Large tracts of land used for commercial purposes such as business or
	industrial parks or warehousing, or for recreational purposes such as golf
	courses.
4D. Neighborhoods	Residential subdivisions and complexes including housing, public
	facilities and local-serving commercial uses, typically separated by
	arterial corridors.

Table 2: SR-185 Smart Mobility Place Types.

<sup>&</sup>lt;sup>1</sup> http://www.dot.ca.gov/hq/tpp/offices/ocp/smf\_files/SMF\_handbook\_062210.pdf

<sup>&</sup>lt;sup>2</sup> While similar in concept, these Place Types are not the same as those developed by MTC and ABAG for use in TOD planning and analysis.

<sup>&</sup>lt;sup>3</sup> <u>http://www.dot.ca.gov/hq/tpp/offices/ocp/smf\_files/SMF\_handbook\_062210.pdf</u>, p. 27-28

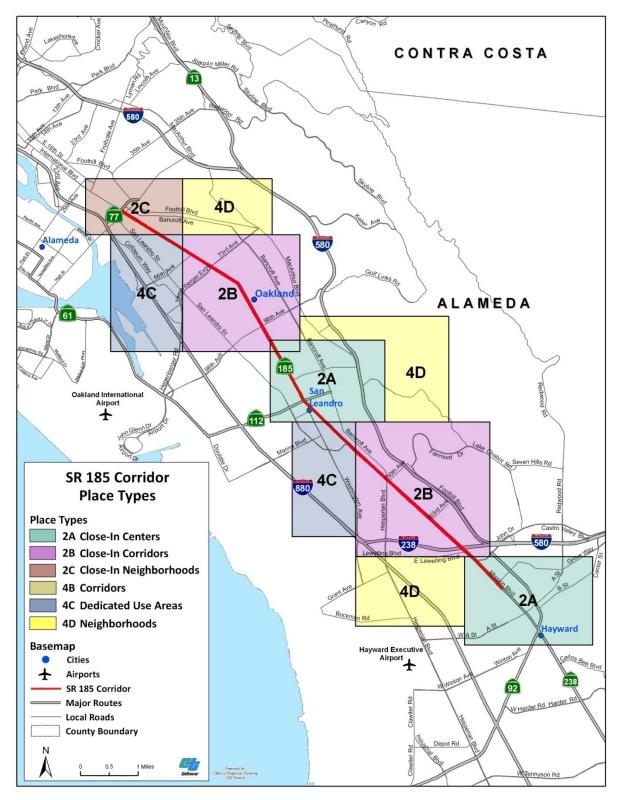


Figure 3: SR-185 Corridor Place Types.

An important step in the application of the Smart Mobility Framework to SR-185 is determining the appropriate fit of the transportation system facilities and the characteristics of the corridor. The study corridor, SR-185, is an arterial roadway travelling through Close-in Compact Communities (Downtowns of San Leandro and Hayward) and Suburban Communities (Planned Transit Oriented Developments, Neighborhoods and Dedicated Use Areas). SR-185 has a high level of transit service from AC Transit and BART. The development characteristics along the corridor show a strong presence of community based design and regional accessibility factors, which correspondingly indicates a high potential to achieve the principle of Location Efficiency and Smart Mobility outcomes.

### **Demographics**

Alameda County is the second most populous county in the Bay Area. Households are expected to increase by more than 30% by 2035, while jobs are forecast to grow by more than 42% in the same period. Much of this growth is expected to occur in the eastern portion of the county. Oakland is the largest city in Alameda County as well as the county seat. The population of Oakland is estimated at 420,900 (ABAG Projections 2009). Oakland will continue to be a major job center in the county, along with Berkeley, San Leandro, Hayward, Fremont and Pleasanton. Table 3 below contains Alameda County Population, Housing and Jobs data for 2005 (base year) and 2035 (future year projections).

COUNTY	POPULATION		# HOUSEHOLDS		#JOBS	
	2005	2035	2005	2035	2005	2035
Alameda	1,505,300	1,966,300	543,790	707,960	730,270	1,039,680
Contra Costa	1,023,400	1,322,900	368,310	480,480	379,030	555,650
Marin	252,600	274,300	103,180	112,170	135,370	158,280
Napa	133,700	148,800	49,270	54,640	70,690	91,480
San Francisco	795,800	969,000	338,920	415,000	553,090	806,830
San Mateo	721,900	893,000	260,070	322,620	337,350	505,860
Santa Clara	1,763,000	2,431,400	595,700	827,330	872,860	1,412,620
Solano	421,600	506,500	142,040	171,290	150,520	211,880
Sonoma	478,800	561,500	181,800	211,290	220,460	325,110
Total	7,096,500	9,073,700	2,583,080	3,302,780	3,449,740	5,107,390

 Table 3: Bay Area Population, Housing and Jobs Projections (ABAG 2009).

### Oakland

The Oakland TOD Report indicates the drive-alone mode share is lower in census tracts bordering International Boulevard than citywide, rates of carpooling are significantly higher, and overall auto share is about the same (72.9 percent along International, compared to 72 percent citywide). Despite relatively high bus ridership and the presence of a BART station, transit mode share in census tracts bordering International Boulevard is nearly equivalent to the citywide average. However, of those who take transit, residents of census tracts bordering International Boulevard are more likely than residents of Oakland as a whole to take the bus (12.1 percent of all trips vs. 9 percent) and less likely to use BART (4.8 percent vs. 7.6 percent).

According to Claritas<sup>4</sup> (a census-based commercial demographics data provider), the Central and East Oakland area, which encompasses the southeastern portion of International Boulevard, had an estimated

<sup>&</sup>lt;sup>4</sup> http://www.claritas.com/sitereports/Default.jsp

population of just under 215,000 persons in 2009 (nearly 51% of the city's total population). The population of East Oakland is younger than Oakland as a whole. It includes 61% of the city's children under 18 and almost 64% of the children aged 5 and younger. Just over 40% of East Oakland households include children, compared to only 35% for the city and 40% of households in the state of California. East Oakland households are larger than the city average, with 3.30 persons per household, compared to an average of only 2.65 persons per household for the city. The number of large households in the area is particularly notable; over 24% of households include more than four persons, as compared to less than 14% for the city and 16.7% for the State of California in 2008. The median age of Oakland residents is 36.2 years and their age distribution follows in Table 4:

Age Group	Population	% of Total
Under 5 years	26,099	6.7
5 to 17 years	57,021	14.6
18 to 64 years	264,045	67.6
65 years and older	43,559	11.1
Total	390,724	100.0

Table 4: Oakland Population by Age Group, Source: bayareacensus.ca.gov/cities/Oakland

#### San Leandro

The 2010 United States Census reported that San Leandro had a population of 84,950, a growth rate of 6.9 % since 2000. The age distribution of the population follows in Table 5:

Age Group	Population	% of Total
Under the age of 18	18,975	22.3
18 to 24	7,044	8.3
25 to 44	23,469	27.6
45 to 64	23,779	28.0
65 and older	11,683	13.8
Total	84,950	100.0

 Table 5: San Leandro Population by Age Group, Source: bayareacensus.ca.gov/cities/San Leandro

The median age was 39.3 years, indicating a more middle-age population. The number of households were 30,717, out of which 10,503 (34.2 %) had children under the age of 18 living in them. The average household size was 2.74 persons. There were 20,514 families (66.8% of all households) and the average family size was 3.36 persons. San Leandro's estimated 2009 median household income was \$58,346, very close to California's median household income of \$58,931.

#### Hayward

Hayward is third largest city in Alameda County and the sixth largest in the San Francisco Bay Area. According to the 2010 U. S. Census, Hayward's population was 144,186, resulting from a growth rate of 3.0% since 2000. The age distribution of Hayward's population follows in Table 6:

Age Group	Population	% of Total
Under the age of 18	35,379	24.5
18 to 24	16,064	11.1
25 to 44	44,005	30.5
45 to 64	34,096	23.7
65 and older	14,642	10.2
Total	144,186	100.0

Table 6: Hayward Population by Age Group, Source: bayareacensus.ca.gov/cities/Hayward

The median age in Hayward was 33.5 years, indicating a relatively young population compared to California's median age of 45.6 years. The population is more racially and ethnically diverse than its neighbors to the north. The number of households were 45,365, out of which 18,284 (40.3 %) had children under the age of 18 living in them. The average household size was 3.12 persons. There were 32,559 families (71.8% of all households) and the average family size was 3.60 persons. Estimated 2009 median household income in Hayward is \$61,752 compared with California's 2009 median household income of \$58,931.

The demographic data provided above for the three cities along the SR-185 Corridor indicate that increasing transit ridership through the addition of Bus Rapid Transit (BRT) and Transit Oriented Developments (TOD) as well as enhancement of bus service capabilities to improve travel times, reliability, and connectivity to BART will all aid in increasing accessibility and mobility for residents and businesses along the route. The high population density, higher than average people per household ratio, and significant younger (under18) age group will help assure a successful transit strategy for the corridor. Additional issues and strategies to be discussed in this report can also be supported by the demographic information provided in this section.

### **Environmental Factors**

The environmental factors and constraints map (Figure 3, following page) identifies environmentally sensitive areas including hazardous waste sites, species of concern, wetlands and Priority Conservation Areas located in and around the SR-185 corridor. The federal species of concern include the California Red-legged Frog, the Western Snowy Plover and the Pallid Manzanita (type of flower). This information needs to be taken into consideration when proposing any improvements or modifications to state facilities within the SR-185 corridor.

SR-185 is characterized by a large number of hazardous waste sites (underground tanks) on both sides of the corridor. These are the result of many gas stations, other automotive related shops and light manufacturing sites being located along the route over time. Any planned improvements in the corridor should be preceded by remediation of these sites by parties responsible for the contamination.

#### **Priority Conservation Areas**

As part of the FOCUS program, Priority Conservation Areas (PCAs) are areas of regional significance that have broad community support and need to be protected. These areas provide important agricultural, natural resource, historical, scenic, cultural, recreational, and/or ecological values. The purpose of designating PCAs through the FOCUS Program is to accelerate protection of key natural lands. Regional agencies are working with state agencies and funding entities to encourage protection of these important natural resources.

The SR-185 corridor contains a long and relatively narrow PCA within and adjacent to its boundaries. Its name is the Oakland Gateway Area Priority Conservation Area (PCA). It runs from just north of Davis Street to SR-77. Its west boundary is the Union Pacific Railroad track running parallel to SR-185 and its eastern boundary parallels SR-185 roughly one half mile from the roadway. (See Figure 4).



Figure 4: SR-185 Environmental Constraints.

## **Transportation Network**

Freeway & Expressway System (F&E)	No
Functional Classification	Conventional
Trucking Designations	Terminal Access (STAA) <sup>5</sup>
Trucking Facilities	Yes
National Highway System (NHS)	No
Scenic Highway	No
Lifeline Corridor	No
Interregional Road System (IRRS)	No
MPO/RTPA/CMA	MPO : Metropolitan Transportation Commission (MTC) CMA : Alameda County Transportation Commission (AlaCTC)

### SR 185 Corridor Route Designations

 Table 7: SR-185 Corridor Route Designations.

#### SMART Corridor Program

SR-185 is part of the East Bay SMART Corridors Program. This is an advanced transportation management system that also provides traffic management capability to system operators and traffic conditions to the public. The East Bay SMART Program consists of two major arterial corridors in the East Bay, one of which is the Hesperian/International Boulevard/East 14<sup>th</sup> Street corridor on SR-185. Caltrans owns, operates and coordinates the traffic signals in this SMART corridor. Figure 5 shows the area where Caltrans operated traffic signals are located on, or near, SR-185. There are no Caltrans owned, operated or maintained TOS (Traffic Operating System) elements anywhere along the SR-185 corridor.

<sup>&</sup>lt;sup>5</sup> Surface Transportation Assistance Act, 1982

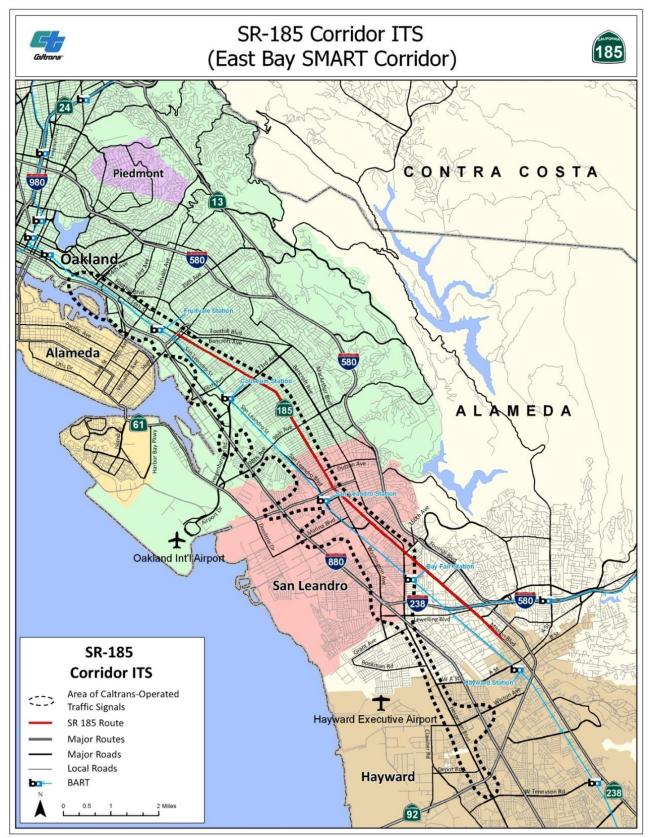


Figure 5: SR-185 Corridor ITS Map

#### **Trip Information**

SR-185 is a major arterial from Hayward in the south to SR-77 in the north. Population of the communities in the corridor (Hayward, San Leandro and Oakland) has been quite stable in recent years.<sup>6</sup> Consequently, auto traffic has increased only slightly. The SR-185 corridor has a relatively low average truck volume of 1.95% of total vehicles, compared to other urban corridors. SR-185 is used for commuting purposes as well as local trips. Complete traffic volume data, by segment, is presented in Section IV of this report.

#### **Transit Services**

The corridor is well served by the Bay Area Rapid Transit (BART) system. It includes the Hayward, San Leandro, and Bayfair stations located on the western side of the corridor. The Coliseum station is also near the corridor. Average weekday station usage (reported as exiting passengers)<sup>7</sup> for these stations is:

Hayward	4,451
Bayfair (San Leandro)	5,154
San Leandro	5,124
Coliseum	<u>6,564</u>
Total	21,923

AC Transit provides bus service along SR-185. Table 8 shows current weekday ridership<sup>8</sup> by line and segment in the corridor. Segment C has the highest ridership, at 11,349 riders, on an average weekday.

Line	SR-185 AC Transit Weekday Ridership by Segment					
	Α		В		С	
	On	Off	On	Off	On	Off
1 NB	-	-	1,261	375	1,766	1,024
1 SB	-	-	450	1,591	1,017	1,674
Total	-	-	1,711	1,966	2,783	2,698
1R NB	-	-	1,359	185	2,062	977
1R SB	-	-	321	1,956	1,006	1,670
Total	-	-	1,680	2,141	3,068	2,647
801 NB	26	8	16	5	44	32
801 SB	4	6	18	30	33	44
Total	30	14	34	35	77	76
Segment Totals	30	14	3,425	4,142	5,928	5,421

 Table 8: SR-185 AC Transit Ridership

In addition to the lines listed in Table 5, Lines 93 and 99 operate between corridor BART stations. Lines 40 and 840 also operate on a short section of East 14<sup>th</sup> Street north of the Bayfair BART station, while Line 32 operates on a short section of East 14<sup>th</sup> Street south of the Bayfair Station. Figure 6 depicts the transit services on and around the SR-185 corridor. BART and AC Transit are the primary transit providers in Alameda County, having almost 95% of average weekday ridership.

<sup>&</sup>lt;sup>6</sup> Source: U.S. Census 2010

<sup>&</sup>lt;sup>7</sup> BART Ridership Report Fiscal Year 2011: Weekday Average Exits by Station

<sup>&</sup>lt;sup>8</sup> Source: AC Transit, 2010 Report



Figure 6: SR-185 Transit Services

#### Planned Bus Rapid Transit (BRT) System

AC Transit, along with the Cities of Oakland and San Leandro and Caltrans is planning a Bus Rapid Transit (BRT) system that will run along a portion of SR-185. Table 9 lists the proposed BRT stations in the Oakland and San Leandro segments of SR-185. Also shown are planned pedestrian improvements at each of these intersections.

Oakland SR-185	BRT Station	Pedestrian Countdown	Crosswalks	Bulb outs
High St.	Y	Y	Y *	Ν
48th Ave	Y	Y	Y	Ν
54th Ave	Y	Y	Y	Y
Seminary Ave	Y	Y	Y	Ν
66th Ave	Y	Y	Y	Ν
73rd Av/Hegenberger Rd	Y	Y	Y	Y
77th Ave	Y	Y	Y *	Ν
82nd Ave	Y	Y	Y	Ν
87th Ave	Y	Y	Y	Ν
94th Ave	Y	Y	Y	Ν
98th Ave	Y	Y	Y	Ν
104th Ave	Y	Y	Y	N
San Leandro SR-185				
Durant Ave	Y	Y	Y	Ν
Georgia Way	Y	Y	Y	Y
Begier Ave	Y	Y	Y	Y
Downtown San Leandro	Y	Y	Y	Ν
San Leandro BART	Y	n/a	n/a	Ν

\*Crosswalks are set back from the corner at these intersections

**Table 9: BRT Stations and Planned Pedestrian Improvements** 

Project planning is entering its final stages of development and the project is expected to be completed in 2016. This project will be described in more detail in the Key Corridor Issues of this report.

### **Bicycle and Pedestrian Network**

#### **Bicycle Facilities**

There are no existing Regional Bikeways anywhere along SR-185 in the Alameda County Regional Bicycle Plan. Some segments of the street have bike lanes, however, and more are planned as part of the AC Transit BRT project. The San Leandro Bicycle and Pedestrian Master Plan does include bikeways that (roughly) parallel, or are proposed on East 14<sup>th</sup> Street.

#### Existing Bikeways:

### Bikeway 35: Bancroft Avenue—East 14<sup>th</sup> Street (parallel, existing)

This bikeway provides a major north-south connection between Oakland to the north and San Lorenzo to the south. It runs through primarily residential and commercial development and is designated on both the MTC Regional Bikeway network and the Alameda Countywide network. The existing segments having Class II bike lanes and Class III bike routes from north to south include:

- a. <u>Bancroft Avenue—Durant Avenue (Oakland city limits) to Blossom Way</u>: Bike lanes in this segment are located on a residential arterial with one travel lane in each direction. This segment also connects with existing bike lanes in the city of Oakland.
- b. <u>Bancroft Avenue</u>—Blossom Way to 136<sup>th</sup> Avenue: This is a signed Class III bike route past San Leandro High School. This residential arterial has one travel lane in each direction.
- c. <u>Bancroft Avenue–136<sup>th</sup> Avenue to 138<sup>th</sup> Avenue</u>: There are bike lanes striped along this twoblock segment of Bancroft adjacent to the new 9<sup>th</sup> Grade Campus.
- d. <u>Bancroft Avenue—138<sup>th</sup> Avenue to 142<sup>nd</sup> Avenue</u>: A signed Class III bike route exists along this segment of Bancroft Avenue. There is one lane in each direction with parking on both sides of the street.
- e. <u>Bancroft Avenue—142<sup>nd</sup> Avenue to 146<sup>th</sup> Avenue</u>: This segment of Bancroft has one travel lane and bike lanes in each direction, with parking on both sides of the street.
- f. <u>Bancroft Avenue—146<sup>th</sup> Avenue to East 14<sup>th</sup> Street</u>: A signed Class III bike route exists along Bancroft Avenue in this segment. There is one lane in each direction with parking on both sides of the street.

#### Proposed Bikeways:

#### Bikeway 33: East 14<sup>th</sup> Street (proposed)

This facility was added to the bikeway network to provide continuity to proposed networks in Oakland and unincorporated Alameda County. The roadway varies greatly as it passes through San Leandro but generally has one or two travel lanes in each direction with parking on both sides of the street. This bikeway traverses commercial, office and retail development. Proposed segments are:

- a. <u>East 14<sup>th</sup> Street—Bristol Avenue (northern city limits) to Broadmoor Boulevard</u>: There is a raised center median and one travel lane in each direction. A signed bike route is proposed. Where feasible, bike lanes should be considered.
- b. <u>East 14<sup>th</sup> Street—Broadmoor Boulevard to Toler Avenue</u>: This segment is under study by the City to be striped with bike lanes including 6-foot bike lanes from Broadmoor to Georgia Way and 4.5-foot bike lanes from Georgia Way to Toler Avenue.
- **c.** <u>East 14<sup>th</sup> Street—Toler Avenue to southern city limits</u>: The segment varies in width and geometry with one to two travel lanes. A signed bike route is proposed. Bike lanes should be considered where feasible.

#### The East Bay Greenway Trail (proposed)

A new proposed trail envisioned to extend from Albany to Fremont, roughly following the BART line and the Union Pacific Railroad right of way. As such, it will be approximately parallel to Segments C, B and A of SR-185.

#### **Pedestrian Facilities**

#### Oakland

Some existing pedestrian facilities along SR-185 in Oakland do not meet current design standards. The eight to ten foot wide sidewalk is uninviting; there are no corner bulb outs; there is minimal landscaping, and the environment affords little comfort or protection to cross the street.

However, the proposed Bus Rapid Transit (BRT) project plans include BRT stations constructed in the medians, and improvements to the pedestrian environment by installing the following features on SR-185 in Oakland:

- Corner bulb outs
- Landscaped medians
- Additional marked, and high visibility crosswalks
- Pedestrian countdown signals
- ADA compliant curb ramps

As currently proposed, the BRT project will address the major pedestrian deficiencies for the portion of the corridor in the City of Oakland.

#### San Leandro

The BRT segment on SR-185 in San Leandro will have curbside bus stops on the sidewalk. While this may be beneficial for passengers who travel the same direction on the near-side bus stop, they will need to cross three to four lanes of traffic if they desire to travel in the opposite direction. There are also intersections where pedestrians will have to take a longer detour path to access the far-side bus stop because there is not a direct crosswalk to it. This segment will be missing raised medians to provide a pedestrian refuge and break up the pedestrian crossing distance exposed to traffic.

The intersections listed below in Table 10 need improvements to make the environment safer and more comfortable for pedestrians:

SR-185 Intersections	Signalized Y/N	High Visibility Crosswalks	Corner Curb Extensions	Median Pedestrian Refuge Islands	Advance Yield Markings	Other Issues
Hays St. / Chumalia St	Y	Ν	Ν	N	N	Lacks crosswalk treatment, missing 4 <sup>th</sup> crosswalk
W. Broadmoor Blvd	Ν	N	Ν	N	Ν	missing 4 <sup>th</sup> crosswalk
*Georgia Way	N	N	Ν	N	Ν	missing 4 <sup>th</sup> crosswalk
*Cherrywood Ave / Euclid Ave	N	N	N	N	N	missing direct crosswalk to the bus stop
Peralta Blvd / Oakes Blvd	N	N	N	N	N	missing 4 <sup>th</sup> crosswalk
*Lorraine Blvd	N	N	N	N	N	missing direct crosswalk to the bus stop
*Haas Ave	Ν	N	Ν	N	N	missing direct crosswalk to the bus stop
Toler Ave	Ν	Ν	Ν	Ν	Ν	missing 4 <sup>th</sup> crosswalk
Clarke St	Ν	Ν	Ν	Ν	N	missing 4 <sup>th</sup> crosswalk

Table 10: San Leandro Signalized and Unsignalized Intersections

\* denotes a BRT station to be located nearby

The above-listed items will improve pedestrian visibility and safety. Pedestrian refuge islands have a proven safety benefit at uncontrolled crossing locations and are included on FHWA's list of nine proven safety countermeasures. The advance yield markings will help prevent the multiple-threat collision type, in which the motorist in the right-most turn lane yields to the pedestrian attempting to cross, but that person's vehicle is blocking the view of the pedestrian for the motorist in the second lane from the right. This is the most common collision type at uncontrolled pedestrian crossings.

When planning pedestrian improvements, a recent (issued on March 20, 2012) Traffic Operations Policy Directive No. 21-01 should be implemented. This directive reads as follows:

"Change the Pedestrian Clearance Time to a maximum walking speed of 3.5 feet per second and

install Accessible Pedestrian Signal (APS) System and Pedestrian Countdown Timers at Signalized Intersections and Signalized Pedestrian Crossings on the State Highway System."

#### San Leandro Bicycle and Pedestrian Master Plan

The San Leandro Bicycle and Pedestrian Master Plan includes the East 14<sup>th</sup> Street Pedestrian Improvement Area. This area encompasses the nearly three miles of East 14<sup>th</sup> Street within the City limits. The corridor was identified in the City's General Plan as a priority for improving pedestrian safety and walkability. Because East 14<sup>th</sup> Street is State Route (SR-185), coordination with Caltrans is necessary for any modifications to the street's right of way.

#### Downtown San Leandro

Recent streetscape improvements along the East 14<sup>th</sup> Street corridor in downtown San Leandro include upgraded sidewalks in front of City Hall, new street tree grates, decorative paving, pedestrian furniture, and ADA improvements. Between Davis Street and West Juana Avenue the west side of East 14<sup>th</sup> Street has been improved with decorative paving, pedestrian scaled lighting, landscaping, pedestrian furniture, way finding, and ADA improvements. These improvements are all of a consistent streetscape palette, which includes similar paving colors and consistent pedestrian lighting and furniture.

#### North of Downtown San Leandro

The cross section of East 14<sup>th</sup> Street north of Davis Street is one vehicle lane in each direction, a center two-way left turn lane, and two parking lanes, within the 65-foot width of the street. The crosswalks in this segment of East 14<sup>th</sup> Street are spaced between 300 and 400 feet apart, which is an acceptable distance for pedestrians. A number of crosswalks located at unsignalized intersections are faded and should be repainted for improved visibility. The configuration and performance of this segment may improve with the construction of the BRT project.

#### South of Downtown San Leandro

South of Dolores Avenue, the cross section of East 14<sup>th</sup> Street includes two vehicle lanes in each direction, a center two-way left-turn lane and on-street parking on both sides within an 80 foot roadway width. The wide street presents challenges for pedestrians to cross the street within the timing of traffic signals. Pedestrian crossings are especially difficult at unsignalized intersections. In addition, there are a limited number of crosswalks in this segment of the corridor, with 1,000 to 1,700 feet between crosswalks. The configuration and performance of this segment may also improve with the construction of the BRT project.

### **Significant Intersections**

San Leandro Blvd.

Hegenberger Rd.

Davis Street

98<sup>th</sup>. Avenue

66<sup>th</sup> Avenue

High Street

Number of Number of Pedestrian SR-185 Signalized Raised Marked Lanes Countdown Intersections Median Y/N Y/N Crossings Crossed Y/N Lewelling Blvd. Y 2 Y 5 Ν

Y

Ν

Y

Y

Ν

Y

5

5

5

5

4,5

5

4

4

4

4

4

4

Table 11 details the characteristics of the significant intersections on SR-185, defined as streets that connect to I-880 on the west.

 Table 11: SR-185 Significant Intersection Features

Y

Y

Y

Y

Y

Y

Ν

Ν

Y

Ν

Ν

Ν

There are seven major roadways that intersect SR-185. They are also listed below with a description of pedestrian access along the street at these intersections.

Lewelling Boulevard

- Intersection is configured with only two marked crossings.
- Pedestrians must walk over five lanes to cross Mission Boulevard (SR-185, and the number crossing Lewelling is three--two through lanes and a right turn lane onto SR-185. Medians are raised on SR-185.
- A stand-alone right lane from SR-185 onto Lewelling also exists on the north end of the intersections.
- Crossing striping is in good condition.
- No striped bike lanes.

San Leandro Boulevard

- This is an offset intersection, with San Leandro Boulevard on the west side of East 14<sup>th</sup> Street (SR-185) and 136<sup>th</sup> Street on the east side, about 100 feet to the south.
- This intersection has four marked crossings. Pedestrians must cross four lanes to traverse East 14<sup>th</sup> Street plus a right turn lane onto San Leandro Boulevard. Medians are raised on this street.
- Five lanes cross San Leandro Boulevard, including one left turn and two right turn lanes onto SR-185. Three lanes cross 136<sup>th</sup> Street.
- Crossing striping is in good condition.
- No striped bike lanes.

Davis Street

- There are four marked crossings at this intersection, with no raised medians.
- A pedestrian must cross five lanes to traverse East 14<sup>th</sup> Street (SR-185), including left turn pockets in both directions.
- Davis Street is crossed by five lanes, including a left turn lane onto East 14<sup>th</sup> Street.
- Road striping is in very good condition.
- No striped bike lanes.

98<sup>th</sup> Avenue

- There are four marked crossings at this intersection, with raised medians on International Blvd. (SR-185). Pedestrian countdown signals are on each of these crossings, the only intersection to have them.
- A pedestrian must cross five lanes to walk over SR-185, including one right turn lane in both directions.
- 98<sup>th</sup> Avenue also has five lanes to cross to get to the other side of the street.
- Pedestrian crossing striping is in very poor condition, barely visible in some places.
- No striped bike lanes.

Hegenberger Road

- This is a major intersection having four marked pedestrian crossings, with landscaped raised medians in all four directions.
- To walk across International Blvd. (SR-185) five lanes must be crossed, including left turn pockets northbound and southbound.
- Pedestrians must walk across seven lanes to cross Hegenberger at this intersection. Signal actuators are located on raised medians, as well as on all four corners.
- Road striping is in very good condition
- There is enough space for a bike lane westbound on Hegenberger approaching the intersection, but is not striped as such.

#### 66<sup>th</sup> Avenue

- This is an offset intersection, with 66<sup>th</sup> Avenue on the west side of International Blvd. (SR-185) and Havenscourt Blvd. on the east side, approximately 50 feet to the south.
- There are four marked crossings at this intersection, with no raised medians.
- To cross SR-185, a pedestrian must traverse four lanes at 66<sup>th</sup> Street and five lanes at Havenscourt Blvd.
- Pedestrians must walk across three travel lanes plus a right lane to cross 66<sup>th</sup> Avenue and three lanes to cross Havenscourt Blvd.
- Crossing striping is in good condition.
- No striped bike lanes.

#### High Street

- There are four marked crossings at this intersection, with raised medians on International Blvd. (SR-185)
- Pedestrians must traverse five lanes to cross SR-185 at this point, including left turn pockets in each direction.
- To walk across High Street, pedestrians must cross four lanes of traffic.
- Crosswalk striping is in good condition.
- No striped bike lanes.

### Maintenance

Pavement and roadside maintenance are critical components of protecting and preserving the investment in the State Highway System. A map of pavement conditions in Appendix C indicates that there is distressed pavement on SR-185 at the following locations:

#### SR-185 Major Pavement Distress (Between)

- Mattox Rd. and 166<sup>th</sup> Ave., Northbound
- 166<sup>th</sup> Ave and Fairmont Dr., Southbound
- 159<sup>th</sup> Ave. and Fairmont Dr., Northbound
- Blossom Way and Williams St., Northbound
- Davis St. and Durant Ave., Both directions

#### SR-185 Minor Pavement Distress (Between)

- Blossom Way and Davis St., Southbound
- Williams St. and Davis St., Northbound

Caltrans' annual State of the Pavement Report describes more detailed pavement condition by postmile. The primary pavement project planned for 2012 in the SR-185 corridor is a resurfacing project: EA 26880K, from PM 0.0 to PM 5.70. This project is included in the 2011 Ten Year SHOPP Plan.

# **III. Key Corridor Issues**

### **Planned BRT System**

AC Transit, along with the Cities of Oakland and San Leandro, and Caltrans is planning a Bus Rapid Transit (BRT) system that will run along a portion of SR-185. The BRT section of the corridor begins at the San Leandro BART station and extends north through San Leandro and Oakland past where SR-185 ends at High Street and International Boulevard. Project planning is entering its final stages and the construction of the project is expected to be completed in 2016. The DOSL (Downtown Oakland San Leandro) alternative has been approved by the city councils of both Oakland and San Leandro.

Final implementation of the BRT will use bus-only lanes on the roadway along with some mixed flow lanes having special pavement delineation and mountable curbs. No grade separations are planned. Stations will be located approximately 0.5 mile apart. Fare collection will be a proof-of-payment concept with a flat fare structure, using cash, cards, or passes. Headways will be at five minute intervals. There will be a green extension signal system with real-time, next-bus-arrival passenger information at kiosks and shelters. Dedicated vehicles will be committed to this system and in many cases the inside travel lane will be utilized, resulting in potential highway capacity and circulation challenges for auto drivers. A travel-time reduction of 35 per cent is expected when compared with existing/prior bus operations in the corridor.

## **Proposed Corridor TODs**

Transit-Oriented Development (TOD) is planning for an area where proximity to transit provides convenient access to the goods and services people need on a daily basis, provided in an environment that is attractive, usable, accessible and enjoyable.

Several new TODs have been proposed for SR-185. The City of Oakland is evaluating the following locations (nodes) for TODs on the SR-185 portion of International Boulevard:<sup>9</sup>

- *Hegenberger/73<sup>rd</sup> node*—International Blvd. between 71<sup>st</sup> and 77<sup>th</sup> Avenues
- *Elmhurst node*—International Blvd. between 89<sup>th</sup> and 101<sup>st</sup> Avenues
- *Elmhurst South node*—International Blvd. between 102<sup>nd</sup> and Durant Avenues

The City of San Leandro has developed the Downtown San Leandro Transit- Oriented Development Strategy, in cooperation with the Metropolitan Transportation Commission. Its primary goals are to:

- Increase transit ridership
- Enhance downtown San Leandro

The TOD strategy study area is defined by a half-mile radius circle around the intersection of East 14<sup>th</sup> and Davis Streets. This intersection was chosen because it is the downtown core of San Leandro, closest to the San Leandro BART station, and is also the location of one of AC Transit's proposed BRT stations. Three locations within, or adjacent to, the study area are being considered for TODs:

- *East 14<sup>th</sup> and Davis Street*—Downtown core intersection.
- *East 14<sup>th</sup> and Dolores Street*—South downtown gateway
- San Leandro BART Area—San Leandro Boulevard between Davis Street and Williams Street

<sup>&</sup>lt;sup>9</sup> International Boulevard TOD Plan, City of Oakland, January 2011

### **Complete Streets Issues**

The Complete Streets initiative refers to Caltrans policy to provide adequate facilities that will accommodate all users and modes of travel on the roadway. A Complete Street is defined as a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Complete Street concepts apply to rural, suburban, and urban areas. Providing Complete Streets increases travel options which, in turn, reduce congestion, increase system efficiency, and enable environmentally sustainable alternatives to single driver automotive trips. Implementing Complete Streets and other multi-modal concepts supports the California Complete Streets Act of 2008 (AB 1358), as well as the California Global Warming Solutions Act of 2006 (AB 32) and SB 375, which outline the State's goals of reducing greenhouse gas emissions. With AB 1358 and DD-64-R1, both Caltrans and local agencies are working to address common goals.

A District assessment of Complete Street issues revealed the following:

- 1. Inventory of infrastructure:
  - <u>Bicycle infrastructure</u>— There are no existing Regional Bikeways anywhere along SR-185 in the Alameda County Regional Bicycle Plan. One Regional Bikeway is proposed on the corridor, however. It is *Bikeway 33*: running along East 14<sup>th</sup> Street in San Leandro from Bristol Avenue at the northern city limits to the south city limits.
  - <u>Pedestrian infrastructure</u>—there are seven significant intersections on SR-185, defined as streets that connect to I-880 on the west. They are all signalized and the crosswalks are well striped. Only one, 98<sup>th</sup> Avenue, has pedestrian countdown signals however.
  - <u>Transit facilities</u>--Bay Area Rapid Transit (BART) is present in the corridor and includes the Hayward, San Leandro, Bayfair and Coliseum stations located on the western side of the corridor. Bus service along the route is provided by AC Transit including Lines 1,1R, 93 and 99. Lines 40 and 840 also operate on a short section of East 14<sup>th</sup> Street north of the Bayfair BART station, while Line 32 operates on a short section of East 14<sup>th</sup> Street south of the Bayfair Station.
- 2. Operational Analysis: Identifying Deficiencies
  - Lack of Regional Bikeways and striped bicycle lanes on SR-185.
  - Lack of pedestrian countdown signals at six of the seven significant intersections on SR-185.
  - BRT service is promised, but not yet constructed.
  - A large number of driveway ramps and extensive parking areas adjacent to the right of way contribute negatively to the pedestrian environment along the corridor.
- 3. Operational Analysis: Developing Recommendations
  - Continue to work with AC Transit to finalize plans for the Bus Rapid Transit (BRT) and begin construction of the project as soon as possible.
  - Implement Traffic Operations Policy Directive 21-01 which mandates a change in Pedestrian Walking Speed to 3.5 feet per second and installation of APS Systems and Pedestrian Countdown Timers at signalized intersections and signalized pedestrian crossings on the state highway system.
  - Work with partners to develop sidewalks consistent with Complete Street standards along the entire length of the corridor.

Through Deputy Directive 64-Revision #1, Caltrans provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and

products on the State Highway System (SHS). The Department views all transportation improvements (new and retrofit) as opportunities to improve safety, access, and mobility for all travelers and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Throughout the SR-185 corridor there are many auto-oriented land uses that have extensive parking areas adjacent to the right of way which negatively contribute to the pedestrian environment. As a result of these uses, a large number of driveway ramps exist on the corridor. Driveway ramps reduce pedestrian safety because they are potential vehicle accident points. Sidewalks are consistent along both sides of East 14<sup>th</sup> Street and range between eight and fourteen feet in width.

## **Possible Relinquishment**

The current Legislative Description of SR-185 discusses the possible relinquishment of the Hayward portion of the roadway to the City of Hayward. Section (b) (1) of Section 485 of the Streets and Highway Code reads as follows:

"The commission may relinquish to the City of Hayward the portion of Route 185 within the city limits of that city, upon terms and conditions the commission find to be in the best interests of the state, if the department and the city enter into an agreement providing for that relinquishment."

Two segments, (Segment R2: PM 0.40-0.92 and Segment A: PM 0.92-3.29) are scheduled to be relinquished to the City of Hayward upon completion of the SR-238 road rehabilitation project. The City of Hayward is preparing for further discussions with the state regarding this relinquishment of the remaining portion of the route within its city limits. A copy of the complete Section 485 is contained in Appendix D.

# **IV. Corridor Performance**

## **Existing Conditions**

In 2005 SR-185 had Average Annual Daily Traffic (AADT) ranging from 4,126 - 6,220 vehicles per day (northbound and southbound), with truck volumes ranging from 1.62 - 2.44 percent of the total. The Volume/Capacity ratio (V/C) is also shown. Table 12 below contains these data by segment.<sup>10</sup>

2005											
	Directional										
Segment	NB AM pk hr	SB AM pk hr	NB PM pk hr	SB PM pk hr	NB AADT	SB AADT	NB AM V/C	SB AM V/C	NB PM V/C	SB PM V/C	Truck %
А	1,015	338	1,388	1,008	5,350	6,220	0.51	0.48	0.62	0.69	2.20%
В	733	272	479	677	5,384	5,611	0.47	0.45	0.59	0.64	1.62%
С	436	498	556	453	4,226	4,126	0.45	0.44	0.52	0.66	2.44%

Table 12: SR-185 2005 Traffic Data

Source: Alameda CTC Countywide Travel Demand Model, August 2011

## **Future Conditions**

Future V/C ratios are from MTC's Travel Demand Model. A V/C ratio exceeding 1.0 is equivalent to LOS F suggesting travel demand for auto traffic will exceed available capacity. SR-185 is anticipated to experience a significant increase in traffic volumes during the peak hours by 2035. Average traffic volume to capacity ratios for Segments B and C are expected to exceed 1.0. Complete segment traffic forecasts are shown in Table 13. Higher forecasted V/Cs may be related to the loss of one lane due to the planned BRT project.

2035											
	Directional										
Sogmont	NB	SB	NB	SB		CD	NB	SB	NB	SB	
Segment	AM pk hr	AM pk hr	PM pk hr	PM pk hr	NB AADT	SB AADT	AM V/C	AM V/C	PM V/C	PM V/C	
А	1,793	1,556	1,922	1,822	16,146	15,806	0.89	0.86	0.93	0.96	
В	1,723	1,149	1,828	1,765	17,268	17,833	1.13	1.05	1.18	1.19	
С	1,796	1,505	2,007	1,849	17,215	13,568	0.92	0.89	1.03	1.04	

 Table 13: SR-185 Future Traffic Projections.

Source: Alameda CTC Countywide Travel Demand Model, August 2011

Additional corridor traffic data is available in Appendix A.

<sup>&</sup>lt;sup>10</sup> SR-185 segments are defined as sections of Mission Boulevard in Hayward (Segment A), East 14<sup>th</sup> Street in San Leandro (Segment B) and International Boulevard in Oakland (Segment C). See map on Page 6 of this report.

### **Smart Mobility Performance Measures**

The Caltrans Smart Mobility Framework, described earlier in this report, responds to today's transportation challenges with new concepts and tools, and also includes a program for putting them into action. The priorities and values of Smart Mobility are expressed in the principles of Location Efficiency, Reliable Mobility, Health and Safety, Environmental Stewardship, Social Equity, and Robust Environment.

Six recent studies related to the SR-185 corridor provide information on existing performance, along with strategies for improved future performance. A review of these reports indicates that proposed strategies are consistent with, and will enhance, the elements of community design and regional accessibility. These reports are listed as follows:

- 1. Alameda County Transportation Commission (ACTC) 2010 Level of Service (LOS) Monitoring
- 2. Alameda-Contra Costa County Transit BRT Project Final EIS/EIR, January, 2012
- 3. International Boulevard TOD Plan, City of Oakland, January 2011
- 4. Downtown San Leandro Transit-Oriented Development Strategy Final Report, September 4, 2007
- 5. Alameda Countywide Strategic Pedestrian Plan, ACCMA, Adopted on October 26, 2006
- 6. Alameda County Public Works Union Pacific Railroad (UPRR) Oakland Subdivision Corridor Improvement Study, November 2009

There are seventeen Smart Mobility Performance Measures (SMPM) associated with the Smart Mobility Framework. These are listed in Appendix E. The characteristics of the SR-185 Corridor relate well to these Measures. This section discusses SR-185 in terms of applicable Smart Mobility Performance Measures which are Transit Mode Share, Multi-modal Service Quality, Multi-Modal Travel Mobility, Multi-Modal Safety, Pedestrian and Bicycle Mode Share and Equitable Distribution of Impacts. Each measure is discussed under the reports cited for information.

#### Transit Mode Share

#### BRT Final EIR/EIS Report

The planned BRT System on a portion of SR-185 will have a significant impact on transit mode share. Table 14 summarizes the changes in selected patronage and quality of transit service parameters under the No-Build Alternative and Local Preferred Alternative (LPA) in 2015 and 2035. Table 15 summarizes the changes between the No-Build Alternative and Downtown Oakland-San Leandro (DOSL) Alternative in the same timeframes. In both Tables 10 and 11, BART boardings include only those riders going to/from /through Alameda County stations, while the AC Transit boardings shown are systemwide.

Implementing the Eastbay BRT Project will increase route corridor boardings, AC Transit systemwide boardings, and region wide transit trips as compared to future No-Build conditions.

There would be approximately 61,800 average weekday BRT boardings in 2035 under the LPA, an increase of 82 percent over the No-Build Alternative. AC Transit systemwide average weekday boardings will be approximately 338,100, an increase of 4 percent compared to the No-Build. Although a substantial portion of the ridership increase on BRT would be due to riders shifting from other AC routes, approximately 9,000 new riders would use BRT and/or possibly other transit services in 2035. Most of these new users will switch from automobiles, thus reducing green house gases and other negative impacts.

Average Weekday Transit Patronage: Existing Conditions, 2015 and 2035 No Build Alternative and 2015 and 2035 LPA

	2015			2035		
	No-	2015		No-	2035	
Final EIS/EIR Ridership Results	Build	LPA	Increase	Build	LPA	Increase
BRT Alignment Average Weekday Boardings	24,600	41,700	17,100	34,000	61,800	27,800
AC Transit Average Weekday Boardings	244,000	251,100	7,100	324,400	338,100	13,700
BART Average Weekday Boardings 1	269,600	266,700	-2,900	340,300	337,900	-2,400
Average Weekday Linked Transit Trips (New						
Riders)			3,700			9,000
Notes:						
BART boardings include only those riders goin	ig to/from/	/thru Ala	meda Co	ountv Sta	tions. Th	he LPA's

I BART boardings include only those riders going to/from/thru Alameda County Stations. The LPA's net effect on BART ridership will be a relatively small, reflecting less than one percent of future riders.

Source: Cambridge Systematics, October 2010 Travel Forecasts

Table 14: SR-185 BRT-LPA Build vs. No-Build

Average Weekday Transit Patronage: Existing Conditions, 2015 and 2035 No Build Alternative and										
2015 and 2035 DOSL Alternative										
		2015 No-	2015		2035 No-	2035				
Final EIS/EIR	Ridership Results	Build		Increase			Increase			
BRT Alignment Average Weekday Boardings			36,000	11,400	34,000	53,300	19,300			
AC Transit Average W	eekday Boardings	244,000	249,800	5,800	324,400	336,900	12,500			
	÷ ÷									
BART Average Week	day Boardings 1	269,600	268,800	-800	340,300	340,200	-100			
Average Weekday Lin	ked Transit Trips (New									
Riders)	······································			2,500			6,700			
		•	•							

Notes:

1 BART boardings include only those riders going to/from/thru Alameda County Stations. The LPA's net effect on BART ridership will be relatively small, representing less than one percent of future riders.

Source: Cambridge Systematics, November 2010 Travel Forecasts

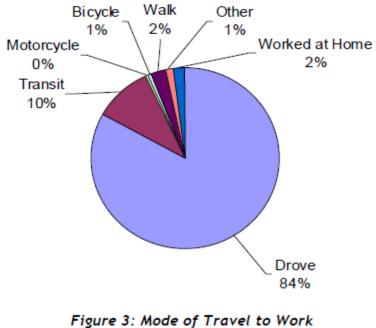
Table 15: SR-185 BRT-DOSL Build vs. No-Build

AC Transit systemwide average weekday boardings will be approximately 249,800 in 2015 and 336,900 in 2035 with implementation of the DOSL Alternative. These totals are slightly less than the total forecast system boardings under the LPA.

#### Downtown San Leandro TOD

Approximately 406<sup>11</sup> BART trains service the downtown San Leandro station daily and BART data indicates that in the October-December 2005 quarter there were 4,900 average weekday passengers exiting the station.

<u>Alameda County Public Works-Union Pacific Railroad (UPRR) Oakland Subdivision Corridor Study</u> SR-185 runs within the UPRR study corridor, which extends from the Fruitvale BART Station in the north to the Union City BART Station in the south. The UPRR report includes Figure 3 showing travel modes within a half mile of the corridor.



Within One-Half Mile of Study Corridor<sup>5</sup>

While many communities have little access to vehicles, the mode share of those who drive to work is significant. As shown in the figure, 84% of those who live within a half mile of the Study Corridor drive to work.

#### Multi-Modal Service Quality

#### Alameda CTC 2010 LOS (Level of Service) Monitoring Report

A frequently used measure for auto travel efficiency on arterial streets is LOS (Level of Service). The Alameda CTC 2010 LOS Monitoring Report contains LOS for various segments of SR-185. The segment from 42<sup>nd</sup> Street to 46<sup>th</sup> Street has LOS F during both the PM and AM peak periods. The segment from Seminary Ave to 73<sup>rd</sup> Avenue has LOS E in the northbound direction during both the PM and AM peak periods, and in the southbound direction has LOS E in the PM peak and LOS D in the AM peak periods. All other segments are at LOS D or better. These data are shown in Table 16.

<sup>&</sup>lt;sup>11</sup> Source: San Leandro BART Station schedule

	Segm	ient		2010 L		nitoring S terials	tudy	
Direction	Ũ		Length (miles)	0		AM Peak Period		Jurisdiction
	From	То		Speed (mph)	LOS	Speed (mph)	LOS	
	42nd	46th St	0.26	16.8	D	16.7	D	Oakland
	46th St	Seminary	0.79	23.8	С	25.4	В	Oakland
	Seminary	73rd	0.8	13.2	Е	15.5	D	Oakland
	73rd Ave	98th Ave	1.39	20.4	С	21.1	С	Oakland
	98th Ave	Broadmoor	0.74	18.7	С	25.9	В	San Leandro
	Broadmoor	Davis	0.73	15.9	D	22.4	С	San Leandro
	Davis	San Leandro	1.04	17.2	C	20.2	В	San Leandro
SB	San Leandro Blvd	Hesperian	0.94	22.4	C	23.1	С	San Leandro
	Hesperian	Bayfair	0.46	16.5	D	22.2	С	Alameda County
	Bayfair	170th	1.24	19.8	C	24.8	В	Alameda County
	170th	Lewelling	0.21	27.3	В	21.2	С	Alameda County
	Lewelling	Sunset	1.02	27.3	В	22.7	C	Hayward
	Sunset	SR 92/238	0.84	11.4	D	17.3	С	Hayward
	SR 92/238	Sunset	0.84	17	С	20.2	В	Alameda County
	Sunset	Lewelling	1.11	26.3	В	24.8	В	Alameda County
	Lewelling	170th	0.21	31.5	А	29.7	В	Alameda County
	170th	Bayfair	1.24	25.3	В	26.3	В	San Leandro
	Bayfair	Hesperian	0.47	23.5	С	29.5	В	San Leandro
NB	Hesperian	San Leandro	0.94	22.8	С	22.4	С	San Leandro
	San Leandro	Davis	1.02	15.6	С	13.5	C	San Leandro
	Davis	Broadmoor	0.72	21.5	С	23.4	C	Oakland
	Broadmoor	98th Ave	0.74	16.2	D	20.7	C	Oakland
	98th Ave	73rd	1.37	18.2	С	19.4	C	Oakland
	73rd	Seminary	0.6	13.1	Е	13.6	Е	Oakland
	Seminary	46th St	0.79	25.9	В	24.2	В	Oakland
	46th St -185 2010 Level	42nd	0.26	7.3	F	7.2	F	Oakland

Table 16: SR-185 2010 Level of Service (LOS).



The 2010 Level of Service (LOS) on SR-185 is also depicted in Figure 7 (AM Peak Period) and Figure 8 (PM Peak Period).<sup>12</sup>

Figure 7: SR-185 LOS by Segment, AM Peak Period.

<sup>&</sup>lt;sup>12</sup> Source: 2010 Level of Service Monitoring Report, Alameda County Transportation Commission



Figure 8: SR-185 LOS by Segment, PM Peak Period.

### Multi-Modal Travel Mobility

### BRT EIR/EIS

Table 17 provides intersection delay and 2015 and 2035 LOS at the SR185 signalized intersections within the corridor under BRT operation.

	A	M	AN	1	PN	A	PN	1
Intersection		BRT	2035 1	BRT	2015	BRT	2035 1	BRT
	Delay	SOT	Delay	SOT	Delay	SOT	Delay	ros
91: 42nd Ave & International	36.8	D	43.3	D	34.5	С	35.5	D
93: High St & International	28.4	С	27.4	С	20.2	С	27.4	С
95: 46th Ave & International	9.1	А	9.3	А	9.5	А	13.1	В
96: Seminary Ave & International	30.8	С	31.2	С	31.4	С	45.3	D
97: 66th Ave & International	26.1	С	26.4	С	25.5	С	25.4	С
99: Hegenberger & International	41.5	D	53.9	D	42.7	D	49.6	D
101: 81st Ave. & International	31.1	С	30.5	С	25.2	С	20.1	С
102: 82nd Ave & International	21.8	С	18.9	В	15.1	В	15.3	В
103: 85th Ave. & International	16.8	В	16.0	В	16.3	В	15.1	В
104: 90th Ave. & International	20.8	С	23.4	С	27.0	С	25.5	С
106: 98th Ave & International	41.8	D	50.8	D	47.2	D	55.7	Е
108: 105th Ave & International	21.3	С	22.9	С	35.0	С	41.3	D
109: Durant & E 14th Ave.	21.3	С	22.0	С	30.4	С	52.4	D
111: Broadmoor & E 14th Ave.	12.2	В	18.4	В	11.5	В	15.6	В
112: Dutton Ave. & E 14th	20.2	С	22.4	С	21.4	С	33.5	С
	2.1	A /	29.3	D /	3.8	A /	>300	F / F
114: Haas Ave. & E 14th	(41)	E	(>300)	F	(98.2)	F	(>300)	0
119: Hays St. & E 14th	11.5	B	15.0	B	14.4	B	23.9	C
120: Davis St. & E 14th	27.3	С	48.0	D	27.2	С	32.8	С

Table 17: SR-185 BRT Delay and LOS Results, 2015 and 2035

The Downtown Oakland to San Leandro (DOSL) Alternative will substantially improve bus travel time and speed along the BRT alignment between Downtown Oakland and San Leandro BART. The average bus travel speeds would improve by 20 to 25 percent and travel times by 17 to 20 percent throughout the day compared to the No-Build for Year 2015. The speeds shown in Table 18 are the average for BRT buses only. Larger improvements in average speed and travel time are shown for Year 2035 as congestion in mixed flow lanes along the corridor increases.

-	Average Bus Speeds in Corridor, No-Build Conditions and DOSL Alternative for 2015 and 2035						
Time Period	Average Speed (mph)	Travel Time (minutes)	Average Speed (mph)	% Increase over No- Build	Travel Time (minutes)	% Decrease from No- Build	
No-Build Conditions (2015)				DOSL Al	ternative (20	)15)	
AM							
Peak	11.6	49	14	20.70%	40.7	16.90%	
Midday	11.3	50.4	13.8	22.10%	41.2	18.30%	
PM							
Peak	10.9	52.4	13.6	24.80%	42	19.80%	
		Build ons (2035)		DOSL Al	ternative (20	)35)	
AM							
Peak	10.6	53.9	14	32.10%	40.7	24.50%	
Midday	10.3	55.4	13.8	34.00%	41.2	25.60%	
PM							
Peak	9.9	57.6	13.6	37.40%	42	27.10%	

Notes:

All times include station/stop dwells.

Corridor extends from Uptown Transit Center in Downtown Oakland. In the No-Build Alternative numbers presented are a weighted average of Route 1R and Route 1.

Source: Kimley-Horn and Associates, October 2011.

 Table 18: Average Bus Speeds in Corridor, No-Build Conditions and DOSL Alternative for 2015 and 2035

### Multi-Modal Safety

#### Oakland TOD Report

Between 2007 and 2009, the intersection at High Street and International Boulevard has had the highest number of reported automobile collisions (28 total), but none involved cyclists or pedestrians. During the same period, two or more bicycle-automobile collisions occurred at several study area intersections, including at Seminary, 50th, 45th, and 22<sup>nd</sup> Avenues. Among all Oakland corridors, International Boulevard exhibits the third highest rate (8.4 per year) of bicycle collisions in the City.

#### AlaCTC Countywide Pedestrian Plan

As shown in Table 19, between 2000 and 2004 there was no discernible trend in the number of pedestrians injured or killed in automobile accidents in Alameda County. The Pedestrian Plan has not been updated recently to show more current data.

Planning Area	City	2000	2001	2002	2003	2004	Total	Annual Avg.	% of Total County Collisions	Collisions Per 1000 Pop.	Collisions Per Ped
North	Oakland	345	335	384	355	348	1767	353	44%	0.88	0.06
Central	Alameda County	43	48	42	43	37	213	43	5%	0.74	0.09
Planning	Hayward	80	69	78	65	65	357	71	9%	0.51	0.05
Area	San Leandro	46	37	37	20	33	173	35	4%	0.44	0.05

Table 19: Pedestrian/Automobile Collisions in SR-185 Corridor Cities.

### **Emissions Reduction**

Emissions Reduction is a Smart Mobility Performance Measure (SMPM) under the SMF goal of Environmental Stewardship. As shown in Table 20, the AC Transit BRT Project has a minimal but overall positive impact on reducing emissions.

Criteria Pollutant Emissions Comparison									
Scenario	Criteria Pollutant Emissions (pounds per day)								
Sechario	СО	ROG	NOX	SOX	PM10	PM2.5			
		20	015						
No-Build	22,817	896	5,134	44	492	306			
BRT - LPA	22,765	894	5,122	44	490	305			
Build vs. No- Build	-52	-2	-12	0	-1	-1			
		20	035						
No-Build	1,954	433	1,797	51	535	331			
BRT - LPA	1,940	430	1,784	51	531	329			
Build vs. No- Build	-78	-3	-13	0	-4	-2			
Source: Alameda	-Contra Costa	a Transit	District, 20	10.					

Source: Alameda-Contra Costa Transit District, 2010.

### **Table 20: Criteria Pollutant Emissions Comparison**

### Pedestrian and Bicycle Mode Share

### ACTC Countywide Pedestrian Plan

After driving, walking is the second most popular mode for weekday trips in Alameda County. Of 4.4 million average daily trips in the County in 2000 (the most recent year for which data is available), twelve percent or 520,000 are on foot, higher than either regional (ten percent) or national (less than nine percent) averages.

SR-185 falls primarily within the Central Planning Area of Alameda County, but also includes Oakland which is within the North Planning Area. SR-185 rates are likely higher than the Central average because of the higher concentration of walking destinations, resulting in shorter walks. The walking trips, by purpose, within the North and Central Planning Areas are in Table 21.

Planning Area/ Location	Work	Shopping	Social/ Rec.	Grade School	High School	College	Non- Home- Based	Total Walk Trips
North	24,669	72,805	64,929	41,710	11,655	15,423	95,389	326,580
Planning Area	6%	18%	20%	27%	20%	20%	21%	17%
Central	2,902	31,148	20,814	11,570	3,031	1,433	14,161	85,059
Planning Area	1%	11%	13%	16%	20%	6%	8%	9%
Alameda	31,619	133,987	102,763	88,829	20,030	21,138	122,150	520,516
County	3%	12%	14%	25%	18%	15%	13%	12%
Descharge	152,253	565,719	373,407	297,500	75,871	57,566	572,592	2,094,818
Bay Area	3%	11%	11%	20%	16%	11%	13%	10%
National Average	12%							23%

Table 21: SR-185 Walking Trips by Purpose.

Source: Alameda County Transportation Commission Countywide Pedestrian Plan

There are four BART Stations in proximity to the SR-185 corridor: Coliseum, San Leandro, Bay Fair, and Hayward BART. On average, 14 percent of BART passengers walk to access these stations. These data are shown by BART station in Table 22.

BART Station	Total Home Based Trips	Percent Who Walked	Number Who Walked
Coliseum	2,576	7%	180
San Leandro	3,177	18%	572
Bay Fair	3,393	14%	475
Hayward	2,656	15%	398

 Table 22: SR-185 Pedestrian Trips to BART Stations.

### Equitable Distribution of Impacts

### BRT EIR/EIS

Equitable Distribution of Impacts is a Smart Mobility Performance Measure (SMPM) under the Smart Mobility Framework (SMF) goal of Social Equity. The recommended metric is the impacts of investments on low-income, minority, disabled, disabled, youth and the elderly populations. The following quote is from Section 4.18.2 of the AC Transit BRT Final EIR/EIS:

"The corridor is home to a large population of minority and low income residents. The proposed project is expected to result in substantial benefits to these populations by providing higher quality transit service measured in travel time and service frequency. Service reliability, convenience and safety will improve substantially under the LPA and DOSL Alternative compared to the No-Build condition. Transit capacity will be expanded for all potential users. The major adverse effects of the project are temporary and will occur during construction, when traffic and, to some extent, bus service would be disrupted by transitway, BRT station, and roadway construction. Local access to businesses along the project alignment will also be temporarily disrupted although detours and reroutes would be designated. In the long-term the mobility benefits from higher bus frequencies, shorter transit travel times, and increased transit capacity, among other benefits such as landscaping, lighting and pedestrian improvements; are considerable. Transportation benefits of the proposed project will accrue to all area residents, regardless of socioeconomic status."

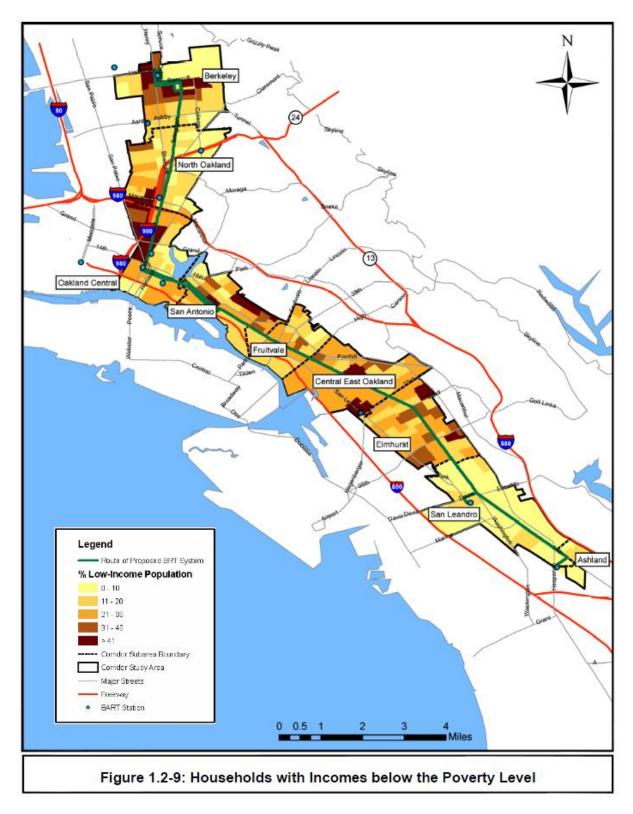
#### Additionally, the BRT effects on Economics and Business are:

"At some locations, both the LPA and DOSL Alternative will require the removal of convenient on-street parking and will affect local traffic circulation due to lane reductions and turning restrictions. These types of traffic and parking impacts will adversely affect overall auto accessibility to commercial areas and the convenience of access to specific businesses and could deter people from shopping at and visiting the affected commercial areas. The large population of minority and low income residents in the corridor would indicate that some of these businesses are minority-owned and/or operated, and/or minorities or those with lower incomes rely on these businesses for employment. However, the impacts of the project are not disproportionately borne by these populations; non-environmental justice populations and businesses are affected by the project in the same way. Negative impacts to businesses would also be tempered by improved transit service and higher transit ridership with the LPA or DOSL Alternative, either of which will provide greater support for increased businesses activity. There will be benefits to corridor retail, service, restaurant, and entertainment businesses due to larger numbers of people using transit to access commercial areas and entertainment facilities, as well as from larger numbers of people moving through the area and becoming familiar with the shopping, service, and entertainment opportunities available along the BRT route."

A map depicting the locations of low income households is shown in Figure 9.

#### Oakland TOD Report

East Oakland is less affluent than the city as a whole; the area's median household income is \$41,000 compared to the citywide median income of \$49,500. As would be expected where more households include children, per capita income for East Oakland (at \$16,000) is much lower than for the city (at \$27,000). As a whole, the city of Oakland's population is one of the most diverse in the United States, with an estimated current ethnic distribution of 33% White, 29% African American, 17% Asian, and Latinos representing 27% of people of all other races. East Oakland is even more diverse than the city, with a population that is estimated as 23% White, 27% African American, 20% Asian, and 43% Latinos of all races. Despite the city's overall diversity, there is significant racial concentration within neighborhoods.



**Figure 9: Percentage of Households with Incomes Below the Poverty Level.** *Source: AC Transit Berkeley/Oakland/San Leandro Corridor MIS* 

# V. Corridor Concept

The Corridor Concept conveys Caltrans vision for a state route with respect to corridor capacity and operations for a 25-year planning horizon. The concept takes into account factors that affect interregional, regional, and local travel demand, including commuting, goods movement, recreation and land use.

The corridor concept is informed by:

- Current Caltrans statutes, policies and directives
- Local, regional partnership input and corridor analyses
- California Transportation Plan, Regional Transportation Plan, Interregional Transportation Strategic Plan and other approved transportation plans
- Alameda County Transportation Commission (AlaCTC) Countywide Transportation Plan, June 2009.
- Legacy route and corridor concepts developed by Caltrans System Planning
- Information from Caltrans Traffic Operations plans developed for system-wide strategies
- Caltrans Freeway Agreements

State Route 185 is a conventional surface street that functions as an important urban arterial between the SR-92/SR-238 intersection in Hayward and SR-77 in Oakland. Segments R and A are likely to be relinquished to the City of Hayward in the next few years. The AC Transit Bus Rapid Transit (BRT) system will be a defining element to improve multimodal access in the corridor. Table 23 is a summary of the SR-185 Corridor Concept Summary.

Segment	City	Segment Description	Existing Facility	25-yr Concept
Relinquished (R1) PM 0.00-0.40	Hayward	SR-92/SR-238 Intersection to A St.	REL	REL
To be Relinquished (R2) PM 0.40-0.92	Hayward	A Street to Rose Street	4C	REL
A PM 0.92-3.29	Hayward	Rose St. to Bayfair Drive	4C	REL
B PM 3.29-6.58	San Leandro	Bayfair Drive to Durant Ave.	3C, 4C	2C-3C (2 BRT)
C PM 6.58- 10.47	Oakland	Durant Ave to High Street/SR-77	4C	2C (2 BRT)

Table 23: SR-185 Corridor Concept Summary.

C = Conventional PM=Post Mile BRT=Bus Rapid Transit REL=Relinquish

### **Concept Rationale**

The primary changes on State Route 185 over the 25-year planning horizon are expected to be the relinquishment of the route in Hayward and the completion of the AC Transit BRT system in San

Leandro and Oakland. Relinquishment will shorten the route by 3.3 miles. The BRT will alter the type and nature of transit demand and have a significant impact on the 25 year Concept.

### **Corridor Management Strategies**

Planned management strategies are an important part of the Corridor Concept. The strategies to be implemented on SR-185 are discussed in the following sections.

### **Operational Strategy**

SR-185 Corridor Place Types information shows that the immediate area around SR-185 consists primarily of Close-in Compact Communities while the outlying areas may be considered as Suburban Communities place types. Caltrans should repair and activate all components not currently operational (coordinated traffic signals, Closed Circuit Television (CCTV), traffic signal priority and midblock detection) of the SMART corridor along SR-185 to ensure its maximum performance as an important corridor connecting these neighborhoods. Caltrans will continue to work with AC Transit to finalize plans for the Bus Rapid Transit (BRT) and construction of the project will begin as soon as possible.

### Freight Mobility Strategy

SR-185 has historically been an important arterial for the movement of goods and services necessary for supporting businesses and residents in the area. Trucking handles the widest range of commodities for delivery and distribution, serves all freight markets, and should therefore be a key factor in future planning for freight mobility along the corridor. Some existing auto-oriented land uses along the corridor should be considered for truck parking.

### Transit Strategy

Increase transit ridership through the addition of Bus Rapid Transit and Transit Oriented Developments (TOD) on the corridor. Enhance bus service capabilities to improve travel times, reliability, and connectivity to BART.

### Land Use Strategy

Encourage infill development and continued TODs where feasible per region's Sustainable Communities Strategy.

Caltrans supports focused growth solutions at the regional and local level through Regional Blueprint Planning. In the Bay Area the Regional Blueprint Planning program is operated by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) as part of the FOCUS program. The primary goal is to encourage future growth near transit and existing communities. Growth should be monitored both quantitatively and qualitatively by these agencies in order for the State Highway System (SHS) to respond to this complex and dynamic growth.

### **Bicycle and Pedestrian Facilities**

The Complete Streets Act of 2008 provides for the needs of travelers of all ages and abilities in the planning and design of traffic improvements. A Complete Street is defined as a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers and motorists. Future improvements on SR-185 will conform to Complete Streets standards as part of developing bicycle and pedestrian strategies.

### **Bicycle Strategy**

In San Leandro, the primary near-term bicycle strategy is to implement the proposed Bikeway 33: East 14<sup>th</sup> Street bikeway described in the San Leandro Bicycle and Pedestrian Master Plan. Although there are existing bikeways that parallel East 14<sup>th</sup> Street (SR-185), this would be the first one to actually run along the roadway.

### **Pedestrian Strategy**

The BRT project will bring new transit service and investment opportunities to communities along SR-185. While the BRT project includes plans to make significant improvements to pedestrian facilities in the Oakland segment, the following treatments should be studied when the opportunity arises to improve pedestrian access and connectivity in the San Leandro portion:

#### Signalized intersections:

- Raised medians
- Corner curb extensions, also known as bulbouts

### Unsignalized intersections:

- High visibility crosswalks
- Corner curb extensions, also known as bulbouts
- Median pedestrian refuge islands
- Advance yield markings together with "Yield Here to Pedestrians" signage

Implementation of Alameda CTC's Countywide Bicycle and Pedestrian Plan will also improve access and increase safety for all users. Suggested improvements to study related to the East 14<sup>th</sup> Street pedestrian facilities in San Leandro include:

#### Corridor-wide improvements:

There is great potential to improve the width and surface of the sidewalks in order to establish consistent and ADA accessible pathways.

#### Downtown San Leandro

Recent streetscape improvements along the East 14<sup>th</sup> Street corridor in downtown San Leandro include upgraded sidewalks in front of City Hall, new street tree grates, decorative paving, pedestrian furniture, and ADA improvements. However, the width and surface of the sidewalks in this area should be upgraded to establish consistency with other sections of East 14<sup>th</sup> Street sidewalks.

#### North of Downtown San Leandro

At the north end of the city on the border with Oakland, East 14<sup>th</sup> Street transitions to two vehicle lanes in each direction with a center landscaped median. The median improves the aesthetics of the area, but should be better coordinated with existing crosswalks to help improve pedestrian safety in crossing the street.

#### South of Downtown San Leandro

Additional crosswalks are needed in this area. The current scarcity of crosswalks does not promote pedestrian connectivity, especially because the roadway is so wide that many pedestrians are unlikely to cross at locations not having a crosswalk.

### **Planned/Programmed Projects**

Table 24 is a list of planned or programmed projects for implementation on or near SR-185. These projects are listed by source (plan), post mile segment, and EA or RTP number identification.

County	Begin PM	End PM	Source	EA/RTP ID
			MTC's RTP 2035:	
ALA	NA	NA	Implement bicycle and pedestrian projects/programs in Alameda County	22007
ALA	5.728	10.558	Implement Bus Rapid Transit service on International Blvd./Ea. 14 <sup>th</sup> St. corridor	22455
ALA	31.68	22.84	Implement I-880 Integrated Corridor Management Plan	04-3G960
			Alameda County Countywide Transportation Plan:	
ALA	3.289	6.579	San Leandro East 14 <sup>th</sup> Streetscape Improvements	240270
ALA	3.691	3.691	Intersection improvement at SR-185 & 150 <sup>th</sup> Avenue, San Leandro	04-2G000
			2011 Ten Year STIP:	
ALA	5.728	10.558	SR-185 Bus Rapid Transit	2A4000
ALA	NA	NA	SR-185 Beautification	278300
			2011 Ten year SHOPP:	
ALA	0.00	5.70	SR-185 Pavement Resurfacing	26880K

Table 24: SR-185 Planned/Programmed Projects.

### **Projects Recommended for Further Study**

In addition to the planned projects noted in Table 24, the potential projects listed in Table 25 are recommended for further study to inform the Corridor Concept.

County	Location	Description
ALA	Along SR-185 SMART Corridor	Repair and activate all non-operational components (coordinated traffic signals, Closed Circuit Television (CCTV), traffic signal priority and midblock detection) in the SMART corridor.
ALA	East 14 <sup>th</sup> Street in San Leandro	Extend the AC Transit BRT service from San Leandro BART to Bayfair BART.
ALA	Full length of SR-185	Implement the Complete Streets program, (defined on P. 31), on the entire length of the SR-185 Corridor.

Table 25: SR-185 Additional Projects Recommended for Further Study.

# **VI. Appendices**

### Appendix A Corridor Segment Data / Additional Corridor Data

The transportation corridor, for purposes of the Transportation Concept Report, is divided into segments based on a range of criteria that are listed below.

- District boundaries
- County boundaries
- City boundaries
- Urban/Rural boundaries
- Major changes in traffic volumes
- Changes in the number of lanes
- Significant changes in grade/terrain
- Changes in route function including recreational, trucking, commuting, etc.
- Freeway Agreements

The SR-185 corridor consists of four segments (one recently relinquished), as shown in Figure A1. Additional corridor segment data are shown in the attached segment data sheets as well as Table A1.

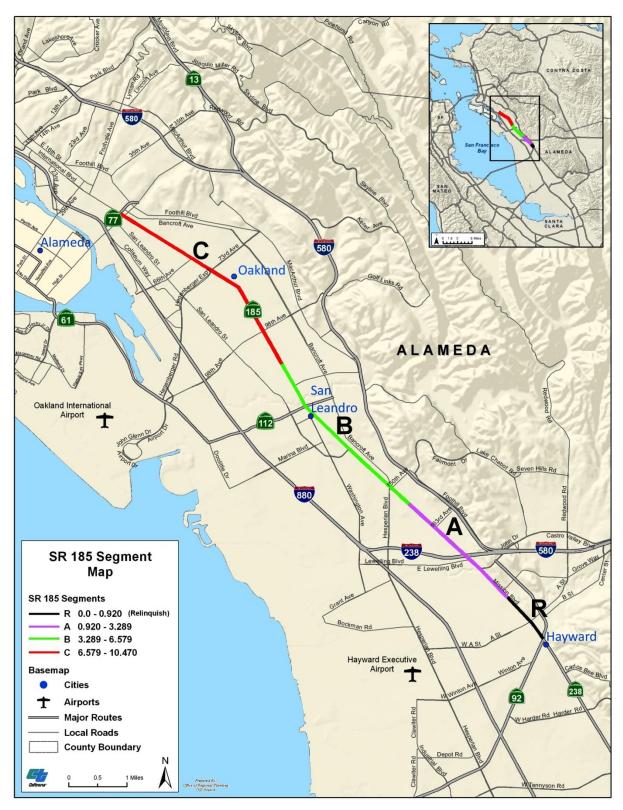
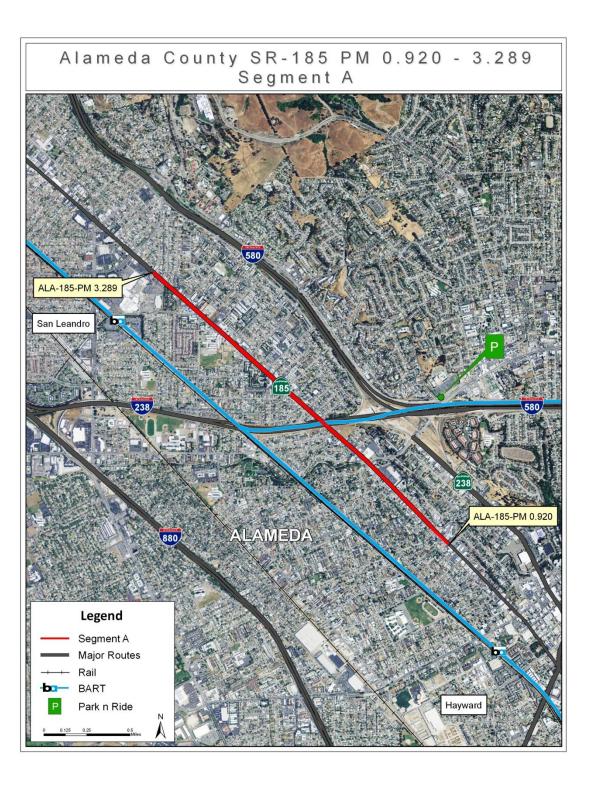


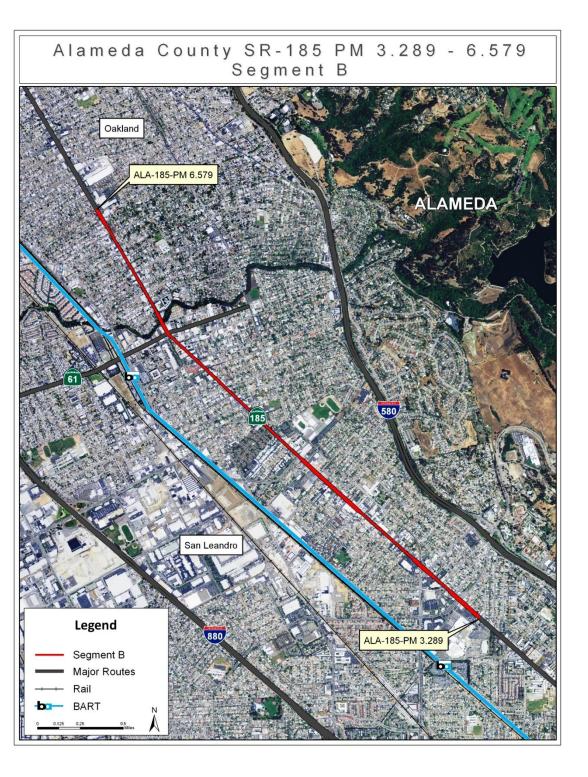
Figure A1. SR-185 Corridor Segments.

SR-185 S	EGMENT A DATA
Features	Data
County, City	Alameda County, City of Hayward
Facility Type	Conventional
Existing Facility	4C
25- Year Concept	REL
Segment Characteristics	
Segment Limits	Rose Street to Bayfair Drive
Begin/ End Post Mile	0.92-3.29
Length	2.37
Terrain	Flat
HOV Lanes (PM to PM)	NA
Percent Grade (PM to PM)	Negligible
Truck Weigh Station	No
Truck Parking	No
TOS Element	Conventional traffic signals at major intersections
Multi Modal	
Bicycle Facilities	None
Priority Development Areas	Downtown Hayward Development Area
Park and Ride	Yes (near I-580/SR-238)
Traffic Data	
AADT 2005 (Average Annual Daily Traffic)	NB:5,350 SB:6,220
AADT 2035	NB:16,146 SB:15,806
Peak Hour Volumes 2005 (AM/PM)	(NB) AM:1,015 PM:1,388 (SB) AM:338 PM:1,008
Peak Hour Volumes 2035 (AM/PM)	(NB) AM:1,793 PM:1,922 (SB) AM:1,556 PM:1,822
V/C Ratio 2005	(NB) AM: 0.51 PM: 0.62 (SB) AM: 0.48 PM: 0.69
V/C Ratio 2035	(NB) AM: 0.89 PM: 0.93 (SB) AM: 0.86 PM: 0.96
LOS 2009 (Level of Service)*	AM Peak NB: B SB: C PM Peak NB: B SB: B
Truck Volumes 2008	486
Truck Percentage	2.20%
Accident Data**	
Actual Fatality + Injury Rate	1.62
Average Statewide Fatality + Injury Rate	0.65
Actual Total Accident Rate	4.26
Average Statewide Total Accident Rate	1.64



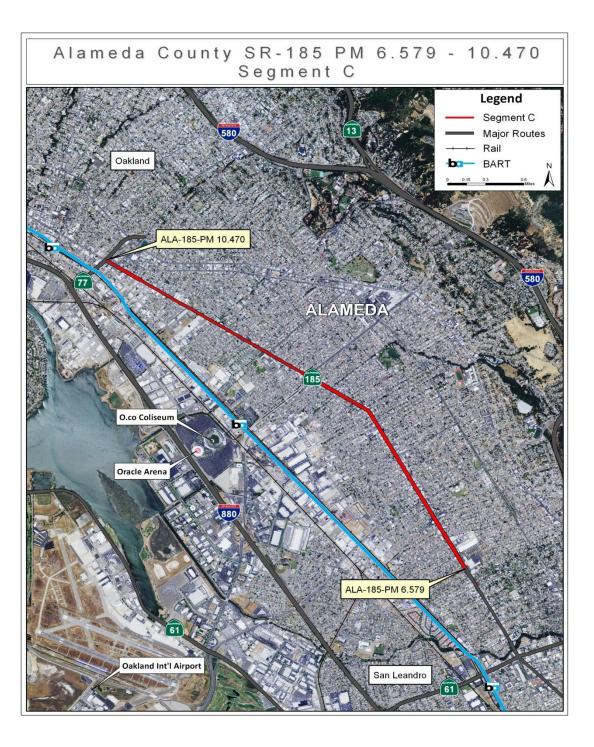
\*2009 LOS Monitoring Program (AlaCTC) \*\*Per Million Vehicle Miles

SR-185 SEGMENT B DATA					
Features	Data				
County, City	Alameda County, City of San Leandro				
Facility Type	Conventional				
Existing Facility	3C,4C				
25- Year Concept	3C-4C (1-2 BRT)				
Segment Characteristics					
Segment Limits	Bayfair Drive to Durant Ave.				
Begin/ End Post Mile	3.29-6.58				
Length	3.29				
Terrain	Flat				
HOV Lanes (PM to PM)	NA				
Percent Grade (PM to PM)	Negligible				
Truck Weigh Station	No				
Truck Parking	No				
TOS Element	Conventional traffic signals at major intersections				
Multi Modal					
Bicycle Facilities	None				
Priority Development Areas	Bayfair BART Station, Downtown and East 14 <sup>th</sup> Street Development Areas				
Park and Ride	No				
Traffic Data					
AADT 2005 (Average Annual Daily Traffic)	NB:5,384 SB:5,611				
AADT 2035	NB:17,268 SB:17,833				
Peak Hour Volumes 2005 (AM/PM)	(NB) AM:733 PM:479 (SB) AM:272 PM:677				
Peak Hour Volumes 2035 (AM/PM)	(NB) AM:1,723 PM:1,828 (SB) AM:1,149 PM:1,765				
V/C Ratio 2005	(NB) AM: 0.47 PM: 0.59 (SB) AM: 0.45 PM: 0.64				
V/C Ratio 2035	(NB) AM: 1.13 PM: 1.18 (SB) AM: 1.05 PM: 1.19				
LOS 2009 (Level of Service)*	AM Peak NB: B SB: C PM Peak NB: B SB: C				
Truck Volumes 2008	337				
Truck Percentage	1.62%				
Accident Data**					
Actual Fatality + Injury Rate	1.57				
Average Statewide Fatality + Injury Rate	0.79				
Actual Total Accident Rate	3.82				
Average Statewide Total Accident Rate	1.96				



\*2009 LOS Monitoring Program (AlaCTC) \*\*Per Million Vehicle Miles

SR-185 SEGMENT C DATA		
Features	Data	
County, City	Alameda County, City of Oakland	
Facility Type	Conventional	
Existing Facility	4C	
25- Year Concept	4C (1-2 BRT)	
Segment Characteristics		
Segment Limits	Durant Ave. to High Street/SR-77	
Begin/ End Post Mile	6.58-10.47	
Length	3.89	
Terrain	Flat	
HOV Lanes (PM to PM)	NA	
Percent Grade (PM to PM)	Negligible	
Truck Weigh Station	No	
Truck Parking	No	
TOS Element	Conventional traffic signals at major intersections	
Multi Modal		
Bicycle Facilities	None	
Priority Development Areas	Corridors and Station Areas	
Park and Ride	No	
Traffic Data		
AADT 2005	NB:4,226 SB:4,126	
AADT 2035	NB:17,215 SB:13,568	
Peak Hour Volumes 2005 (AM/PM)	(NB) AM:436 PM:556 (SB) AM:498 PM:453	
Peak Hour Volumes 2035 (AM/PM)	(NB) AM: 1,796 PM:2,007 (SB) AM:1,505 PM:1,849	
V/C Ratio 2005	(NB) AM: 0.45 PM: 0.52 (SB) AM: 0.44 PM: 0.66	
V/C Ratio 2035	(NB) AM: 0.92 PM: 1.03 (SB) AM: 0.89 PM: 1.04	
LOS 2009 (Level of Service)*	AM Peak NB: F SB: D PM Peak NB: F SB: D	
Truck Volumes 2008	456	
Truck Percentage	2.44%	
Accident Data**		
Actual Fatality + Injury Rate	0.28	
Average Statewide Fatality + Injury Rate	0.72	
Actual Total Accident Rate	0.85	
Average Statewide Total Accident Rate	1.76	



\*2009 LOS Monitoring Program (AlaCTC) \*\*Per Million Vehicle Miles

## **Additional Corridor Data**

SR-185 is a four-lane conventional urban roadway. The land adjacent to the facility ranges from residential housing to commercial, retail and light industrial place types.

Additional Corridor Data for SR-185		
Route Characteristics		
State Route and Major Intersections	Lewelling Blvd., San Leandro St., Davis Street, 98 <sup>th</sup> Avenue, Hegenberger Rd., 66 <sup>th</sup> Avenue, High Street	
Cities Traversed	Hayward, San Leandro and Oakland	
Parallel Arterials	Foothill Blvd., Bancroft Avenue, San Leandro Blvd.	
Existing Roadway Congestion	Top AM Peak Period Congestion: LOS-E (73 <sup>rd</sup> to Seminary Ave.)	
	Top PM Peak Period Congestion: LOS-E (Seminary Ave. to 73 <sup>rd</sup> )	
Environmental		
Air Quality Basin	San Francisco Bay Area Air Basin	
Air Quality District	Bay Area Air Quality Management District	
NAAQS Attainment Area	PM10, NO2, SO2, Sulfates, Lead	
NAAQS Maintenance Area	СО	
NAAQS Non-Attainment Area	Ozone, PM2.5	
Intermodal		
Park 'n Ride lots	One: Near I-580/SR-238	
Priority Development Areas	City of Hayward: Downtown, South Hayward BART Station, The Cannery City of San Leandro: Bayfair BART Station, Downtown, East 14 <sup>th</sup> Street City of Oakland: Corridors and Station Areas	
Modal Split :		
Drive (includes carpool)	84.0%	
Public Transit	10.0%	
Walk	2.0%	
Work at Home	2.0%	
Other (including bicycle)	2.0%	

Table A-1. Additional Corridor Data for SR-185

### Appendix B Pertinent Federal, State, Regional and Local Transportation Plans, Programs and Directives

### Federal:

### <u>Safe, Accountable, Flexible, Efficient Transportation Equity Act, A Legacy for Users</u> (SAFETEA-LU)

This federal law authorizes transportation funding through 2009 and established new requirements for statewide and metropolitan transportation planning. The act authorizes all federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. Current bill has been extended by Congress until December 31, 2010.

### Federal Transportation Improvement Program (FTIP)

All federally funded projects, and regionally significant projects (regardless of funding), must be listed in the FTIP per federal law. A project is not eligible to be programmed in the FTIP until it is programmed in the *State Transportation Improvement Program* (STIP) or in the *State Highway Operations and Protection Program* (SHOPP). Other types of funding (Federal Demonstration, Congestion Mitigation and Air Quality (CMAQ), Transportation Enhancement Activities (TEA), and Surface Transportation Program (STP) must be officially approved before the projects can be included in the FTIP.

#### The American Recovery and Reinvestment Act of 2009 (ARRA)

On Feb. 13, 2009, Congress passed the American Recovery and Reinvestment Act of 2009 at the urging of President Obama, who signed it into law four days later. A direct response to the economic crisis, the Recovery Act has three immediate goals:

- Create new jobs and save existing ones
- Spur economic activity and invest in long-term growth
- Foster unprecedented levels of accountability and transparency in government spending

The Recovery Act intends to achieve those goals by:

- Providing \$288 billion in tax cuts and benefits for millions of working families and businesses
- Increasing federal funds for education and health care as well as entitlement programs (such as extending unemployment benefits) by \$224 billion
- Making \$275 billion available for federal contracts, grants and loans
- Requiring recipients of Recovery funds to report quarterly on how they are using the money. All the data is posted on Recovery.gov so the public can track the Recovery funds.

### State:

### California Transportation Plan (CTP), April 2006

The "CTP 2030" is a statewide, long-range transportation policy plan that provides for the movement of people, goods, services, and information. The CTP offers a blueprint to guide future transportation decisions and investments that will ensure California's ability to compete globally, provide safe and effective mobility for all persons, better link transportation and land use decisions, improve air quality, and reduce petroleum energy consumption.

### Interregional Transportation Strategic Plan (ITSP)

Caltrans prepared the 1998 ITSP to consolidate and communicate key elements of its ongoing longand short-range planning. It serves as a counterpart to the Regional Transportation Plans prepared by the 43 Regional Transportation Planning Agencies in California. Caltrans addresses the State Highway system in detail, with special emphasis on the statutorily-identified Interregional Road System (IRRS). The IRRS serves interregional movement of people and goods. There are currently 87 IRRS routes.

### State Transportation Improvement Program (STIP)

The STIP is a listing of all capital improvement projects that are expected to receive an allocation of state transportation funds. The California Transportation Commission (CTC) biennially adopts and submits the STIP to the Legislature and Governor. The STIP is a resource management document to assist state and local entities to plan and implement transportation improvements and to utilize available resources in a cost-effective manner.

### **Regional Transportation Improvement Program (RTIP)**

The Regional Transportation Improvement Program is a sub-element of the State Transportation Improvement Program (STIP). The Metropolitan Transportation Commission is responsible for developing regional project priorities for the RTIP for the nine counties of the Bay Area. The biennial RTIP is then submitted to the California Transportation Commission for inclusion in the STIP.

### Interregional Transportation Improvement Program (ITIP)

The ITIP is a sub-element of the State Transportation Improvement Program. The statutes of 1997, Chapter 622-Senate Bill (SB) 45- established the Interregional Improvement Program (IIP) which includes projects to improve State highways, intercity passenger rail system, and projects to improve interregional movement of people and goods.

### State Highway Operation and Protection Program (SHOPP)

Caltrans prepares the SHOPP for the expenditure of transportation funds for major capital improvements necessary to preserve and protect the State Highway System. The SHOPP is a four-year funding program. SHOPP projects include capital improvements for maintenance, safety, and rehabilitation of State highways and bridges. The 10-Year SHOPP anticipates long-term projected expansion and maintenance needs.

#### Senate Bill 45 (SB 45)

SB 45 establishes guidelines for the California Transportation Commission to administer the allocation of funds appropriated from the Public Transportation Account for capital transportation projects designed to improve transportation facilities.

#### California Strategic Growth Plan, January 2007

The Governor and Legislature have initiated the first phase of a comprehensive Strategic Growth Plan to address California's critical infrastructure needs over the next 20 years. California faces over \$500 billion in infrastructure needs to meet the demands of a population expected to increase by 23 percent over the next two decades. In November 2006, the voters approved the first installment of that 20-year vision to rebuild California by authorizing a series of general obligation bonds totaling \$42.7 billion.

### Transportation System Development Plan (TSDP)

The TSDP is a listing of Caltrans recommended capacity- increasing improvements on State Highways. The purpose of the TSDP is to identify a comprehensive, reasonable and effective range of transportation improvements in modal categories to improve interregional and regional mobility and intermodal transfer of people and goods on State Highways and major travel corridors.

### District System Management Plan (DSMP)

The DSMP provides a plan for the development of multi-modal and multi-jurisdictional transportation strategies. These strategies must be based on an analysis that is developed in partnership with regional and local agencies. The DSMP is the State's counterpart to the Regional Transportation Plan (RTP) for the region.

### Goods Movement Action Plan (GMAP), January 2007

The Goods movement Action Plan is a key component of California's Strategic Growth Plan and will guide allocation of \$3.1 billion of the \$19.9 billion approved by voters in the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 (Proposition 1B). The GMAP identifies projects for consideration in the California Transportation Commission's allocation of \$2 billion for infrastructure investment. The Air Resources Board will allocate the remaining \$1 billion for emission reduction projects related to Goods movement.

### California State Rail Plan, March 2008

*California's Vision for Intercity Passenger Rail Transportation in California* is guided by the Governor's *Strategic Growth Plan, The Global Warming Solutions Act*, Assembly Bill (AB)32, the California Transportation Plan (2025), and the Department of Transportation's Mission/Vision and Strategic Goals. Caltrans prepares a ten-year Rail Plan that includes both passenger and freight rail elements.

### <u>Caltrans Deputy Directive 64-R1</u> - Complete Streets - Integrating the Transportation System

Caltrans fully considers the needs of non-motorized travelers including pedestrians, bicyclists and persons with disabilities in all programming, planning, maintenance, construction, operations, and project development activities and products.

### State Assembly Bill 32 (AB 32) - Global Warming Solutions Act, September 2006

This bill requires the State's greenhouse gas emissions to be reduced to 1990 levels by the year 2020. Caltrans' strategy to reduce global warming emissions has two elements. The first is to make transportation systems more efficient through operational improvements. The second is to integrate emission reduction measures into the planning, development, operations and maintenance of transportation elements.

# <u>Senate Bill 375 (SB-375) -</u> Addressing Greenhouse Gas Emissions from the Transportation Sector

SB 375 provides a means for achieving AB 32 goals from cars and light trucks. The transportation sector contributes over 40 percent of the GHGs throughout the state. Automobiles and light trucks alone contribute almost 30 percent. SB-375requires the California Air Resources Board (ARB) to develop regional greenhouse gas (GHG) emission reduction targets for cars and light trucks for each of the 18 Metropolitan Planning Organizations (MPOs). Through their planning processes, each of the MPOs are required to develop plans to meet their regional GHG reduction target. This is accomplished through either the financially constrained "Sustainable Community Strategy" as part of their Regional Transportation Plan (RTP), or an unconstrained alternative planning strategy. SB-375 also provides streamlining of California Environmental Quality Act (CEQA) requirements for specific residential and mixed-use developments.

### **Caltrans - Climate Action Plan**

Greenhouse gas (GHG) emissions and the related subject of global climate change are emerging as critical issues for the transportation community. The California Department of Transportation (Caltrans) recognizes the significance of cleaner, more energy efficient transportation. On June 1, 2005 the State established climate change emissions reduction targets for California which lead to development of the Climate Action Program. This program highlights reducing congestion and improving efficiency of transportation systems through smart land use, operational improvements, and

Intelligent Transportation Systems (objectives of the State's Strategic Growth Plan). The Climate Action Plan approach also includes institutionalizing energy efficiency and GHG emission reduction measures and technology into planning, project development, operations, and maintenance of transportation facilities, fleets, buildings, and equipment.

### **Region:**

### **Regional Transportation Plan (RTP)**

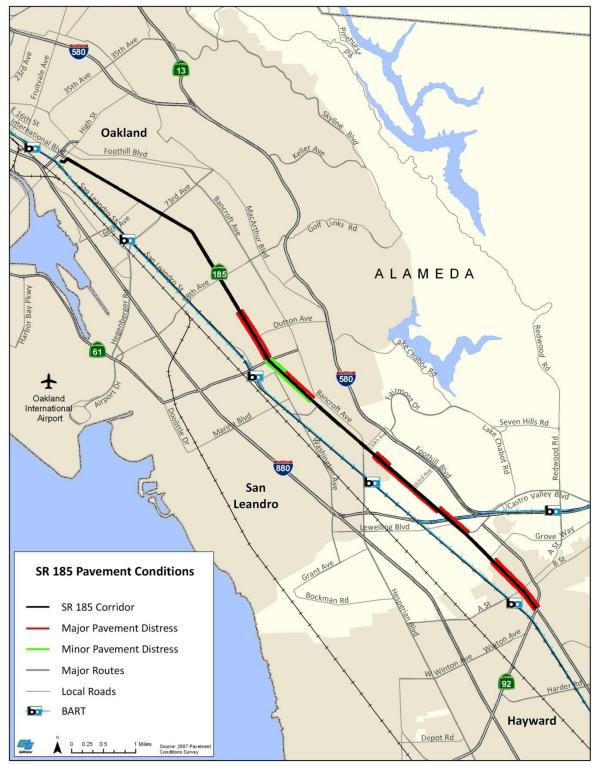
The Metropolitan Transportation Commission is responsible for adopting the RTP for the nine-county San Francisco Bay Area. The RTP defines a 25 year vision for the region's transportation network. The RTP is updated every four years. The most recently approved RTP is the T2035 Plan approved in 2009. Work is in progress developing the 2013 RTP called Plan Bay Area (which will include the SB-375 required Sustainable Community Strategy).

### **County:**

- The Alameda County Transportation Commission (AlaCTC) Countywide Transportation Plan, June 2009.
- The Alameda County Regional Bicycle Plan, April 2008
- Alameda County Transportation Commission (Ala CTC) 2010 Level of Service (LOS) Monitoring
- Alameda-Contra Costa County Transit East BAY BRT Project FEIS/FEIR, 2012
- Alameda Countywide Strategic Pedestrian Plan, ACCMA, October 2006
- Alameda County Public Works Union Pacific Railroad (UPRR) Oakland Subdivision Corridor Improvement Study, November 2009

### Local:

- The San Leandro Bicycle and Pedestrian Master Plan, December 2010
- City of Oakland Bicycle Master Plan, December 2007
- City of Hayward Bicycle Master Plan, October 2007
- International Boulevard TOD Plan, Public Review Draft, City of Oakland, CA, January 2011
- Downtown San Leandro Transit-Oriented Development Strategy Final Report, September 2007



Appendix C SR 185 Pavement Conditions Map

Figure C-1: SR-185 Pavement Conditions Map

### Appendix D Legislative Description of SR-185

485. (a) Route 185 is from Route 92 in Hayward to Route 77 in Oakland.

(b) (1) The commission may relinquish to the City of Hayward the portion of Route 185 located within the city limits of that city, upon terms and conditions the commission finds to be in the best interests of the state, if the department and the city enter into an agreement providing for that relinquishment.

(2) A relinquishment under this subdivision shall become effective immediately after the county recorder's recordation of the relinquishment resolution containing the commission's approval of the terms and conditions of the relinquishment.

(3) On and after the effective date of the relinquishment, both of the following shall occur:

(A) The portion of Route 185 relinquished shall cease to be a state highway.

(B) The portion of Route 185 relinquished shall be ineligible for future adoption under Section 81.

(4) For relinquished portions of Route 185, the City of Hayward shall maintain signs within its jurisdiction directing motorists to the continuation of Route 185 or to the state highway system, as applicable.

### Appendix E Smart Mobility Performance Measures

### **Exhibit 11: Smart Mobility Performance Measures**

Goal	Performance Measure	Recommended Metrics
Location Efficiency	1. Support for Sustainable Growth	Consistency with regional Sustainable Communities Strategy or Alternative Planning Strategy meeting regional performance standards. Comparison of alternatives based on acres of land consumed, and relative reductions in induced VMT through: compact land use strategies, demand management, and network management.
	2. Transit Mode Share	Percentage of trips within a corridor or region occurring by bus, rail or by other form of high-occupancy-vehicle.
	3. Accessibility and Connectivity	Number of households within 30 minute transit ride of major employment center, within 20 minute auto ride of employment, within walking distance of schools. Weighted regional travel time and cost among trip producers and trip attractors.
Reliable Mobility	4. Multi-Modal Travel Mobility	Travel times and costs by mode between representative origins and destinations, aggregated over corridor or region.
	5. Multi-Modal Travel Reliability	Day-to-day variability of travel times between representative origins and destinations by mode, aggregated over corridor or region.
	6. Multi-Modal Service Quality (Level of Service: LOS)	Mode-specific and blended LOS measures of pedestrian and bicycle accommodation and comfort, transit availability and reliability, and auto travel efficiency. <sup>(1)</sup>
Health and Safety	7. Multi-Modal Safety	Collision rate and severity by travel mode and facility, compared to statewide averages for each user group and facility type.
	8. Design and Speed Suitability	Conformance with guidance identifying suitable design elements and traffic speed with respect to mix of modes and adjoining land uses and area character. <sup>(2)</sup>
	9. Pedestrian & Bicycle Mode Share	Percentage of trips within a corridor or region occurring by walking or cycling.
Environmental Stewardship	10. Climate and Energy Conservation	VMT per capita by speed range relative to State and regional targets. <sup>(3)</sup>
	11. Emissions Reduction	Quantities of criteria pollutants and GHGs
Social Equity	12. Equitable Distribution of Impacts	Impact of investments on low-income, minority, disabled, youth and elderly populations relative to impacts on population as a whole.
	13. Equitable Distribution of Access and Mobility	Comparative travel times and costs by income groups and by minority and non-minority groups for work/school and other trips.
Robust Economy	14. Congestion effects on Productivity	Time lost to congestion by trips that are economically productive and/or sustaining of essential mobility, measured as vehicle hours of delay (VHD).
	15. Efficient Use of System Resources	Additional VMT that are associated with economic productivity and/or sustaining of essential mobility compared with system expansion cost and impact.
	16. Network Performance Optimization	VHD per capita, per lane mile, per private vehicle mile, per freight vehicle mile, per transit revenue mile, and in total.
	17. Return on Investment	Person miles and revenue per lane mile of road, per transit revenue mile and per dollar invested (from all public and private funding sources). Comparison of alternatives based on benefits per dollar invested relative to: a) system user benefits (time and expense), and b) other Smart Mobility Performance Measures.

(1) Typical resource: Transportation Research Board 2010 Highway Capacity Manual.

<sup>(2)</sup> Typical resources: Caltrans DD64 Complete Streets guidelines; ITE practices on Context Sensitive Solutions.

(3) Targets set by California Air Resources Board under SB375. Rates of GHG emissions and fuel consumption both vary by speed range or "bin."

#### Table E-1: Smart Mobility Performance Measures

Source: "Smart Mobility 2010, a Call to Action for the New Decade," Caltrans, February 2010, P. 55