City of Santa Barbara

Upper State Street
Traffic, Circulation, and Parking Study

Prepared for the
City of Santa Barbara

February 2007

Prepared by

Meyer, Mohaddes Associates
a business unit of Iteris, Inc.

City of Santa Barbara

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Long Beach, CA

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Executive Summary

ES-I. Introduction

The Upper State Street area is an important part of the City, not only because it is a commercial center, and because State Street provides a transportation linkage to Highway 101, Highway 154, and areas north of the City, but also because the comparatively large parcel sizes in parts of the Upper State Street area provide the opportunities and challenges associated with possible larger scale redevelopments. The Upper State Street corridor has developed in a distinctly different pattern than Downtown Santa Barbara. In this area there is no grid of streets and very few east-west alternate routes. This study examines the possible traffic impacts of evolving land uses in the corridor centered on Upper State Street from the Highway 154 on the west to Calle Laureles on the east. It is intended to identify the following within the corridor and study area:

- Existing traffic, circulation and parking conditions
- Baseline traffic conditions adding potential trips that could occur without further permits in buildings/parcels with lower trip-generating conditions
- Future potential cumulative traffic conditions with pending and approved project traffic
- Remaining traffic capacity considering the City's Level of Service C policy.
- Improvement options for traffic circulation and parking for automobile, transit, pedestrian, and bicycle modes

ES-II. Traffic Circulation and Operations

Data Collection

The physical geometric conditions (number of lanes, location of bus pockets, signals, etc.) and operational information (signal timing, bus routes, etc.) for the study area streets and intersections were documented. Intersection peak-hour turning movement information was collected for 24 analysis intersections. Manual traffic counts were conducted during a typical weekday midday and evening peak period. The issue of potential low trip-generation by some parcels was addressed via empirical field data collection in the form of driveway surveys so that actual trip generation rates could be compared against Institute of Transportation Engineer's average rates for the type of land use.

Traffic Operations Analysis

Additional traffic could be generated within and through the study area in several ways, as described below. The study considered potential added traffic from all of the potential sources:

- Re-use/re-occupancy of parcels that currently do not generate trips or are lower trip-generating uses (such as via tenant remodels and other upgrades by existing or new occupation).
- Redevelopment of parcels with more density or higher intensity uses (reconstruction)
- Changing routes of travel due to congested conditions on parallel routes such as Highway 101 due to non-recurrent incidents

Existing Traffic Conditions

Upper State Street carries between 17,400 vehicles per weekday at the east end of the study area west of Alamar Avenue, to 32,000 vehicles per day east of Las Positas Road. The weekday Average Daily Traffic (ADT) volume on the remaining portions of State Street west of Las Positas Road generally range from 24,400 to 30,800 vehicles per day. Two of the 24 analysis intersections have volume-to-capacity (V/C) ratios that equal or exceed the City's impacted intersection criterion of 0.77 during either the midday or PM peak hours: the intersections of State Street with Las Positas Road/San Roque Road (midday) and Las Positas Road with Calle Real (PM). The remaining intersections fall below (better than) a V/C ratio of 0.77.

Baseline Traffic Conditions

This scenario assumes lower trip-generating parcels change so that they generate trips in accordance with average rates. The intersection of State Street with San Roque/Las Positas is expected to have a V/C level of about 0.79. Also, more intersections would have V/C ratios above 0.70. None of the remaining study locations would exceed the 0.77 V/C thresholds with the addition of potential trips from the lower generating parcels.

Potential Future Cumulative Traffic Conditions

This scenario adds trips due to new development projects in and adjacent to the study area. The results of the traffic analysis indicate that three intersections will experience V/C ratios at or above the 0.77 level, as shown in Figure 8. These are the intersections of State Street with Hitchcock Way (0.77), State Street and Las Positas Road/San Roque Road (0.78), and Calle Real and Las Positas Road (0.83). In addition, 10 other intersections will have V/C ratios equal to or exceeding 0.70.

Traffic Collision Data

Collision data was evaluated for a four-year period from 2002 to 2005.

- The section of State Street with the highest number of collisions is the 3900 block.
- An evaluation of the collision types at this location reveals that 34 of the 42 were broadside. Of those, 28 were broadside collisions associated with northbound vehicles at the Five Points Center.
- The other three blocks along State Street have mostly rear end and broadside collisions.

ES-III. Transit, Bicycle, and Pedestrian Travel

Transit Facilities, Operations, and Usage

Transit service is provided along the Upper State Street Corridor by the Santa Barbara Metropolitan Transit District (MTD). Six fixed-route bus services operate in the study corridor, most with 30-minute headways. The three key issues for transit operations in the study area are improving access and circulation conditions for existing transit vehicles, improving conditions for users, and increasing future ridership to reduce the amount of auto travel in the corridor.

Bicycle Facilities and Usage

On-street (Class II) bicycle lane facilities are present along both sides of the Upper State Street Corridor and several intersecting streets. The bicycle facilities in the area are generally sufficient, but efforts should continue to improve facilities where possible. One significant improvement for

the Upper State Street corridor would be the elimination of some of the driveways along the corridor to reduce the number of bicycle/vehicle conflict points.

Pedestrian Facilities and Activity

Many portions of the Upper State Street corridor are very pedestrian-oriented with wide sidewalks and pedestrian amenities and have a regular flow of pedestrian traffic. Other areas are not as pedestrian-oriented, but still have a steady flow of pedestrian traffic. Primary issues in the corridor for pedestrian facilities are inconsistent sidewalk widths and in some cases inadequate width, encroachment into the pedestrian area by objects, and poor pavement conditions especially in areas where there are large street trees.

ES-IV. Parking

The parking assessment of the Upper State Street corridor included field review of existing on-street and off-street parking facilities, operational conditions, and access restrictions. Detailed parking surveys of the Loreto Plaza, Ontare Plaza, and Five Points Plaza sites indicate that parking is generally not fully utilized even at peak hours; however parking deficiencies are perceived by users due to inefficient usage of parking such as under use of parking to the rear of buildings. On street parking in the study area is heavily utilized, although the presence of on-street parking is limited along and near State Street.

ES-V. Options for Transportation System Improvements

The analysis identified three intersections forecasted to exceed the City LOS C standard of 77% of roadway capacity at afternoon peak traffic hours with cumulative traffic conditions:

- Hitchcock Way at State Street (.77 V/C, LOS C)
- Las Positas Road/San Roque Road at State Street (.78 V/C, LOS C)
- Las Positas Road at Calle Real (.83 V/C, LOS C)

No obvious major capacity improvements (such as widening along State Street for additional lanes or signal modifications) are considered warranted at this time based on traffic levels. Despite this, there are many other opportunities to enhance mobility, reduce delay, improve flow, reduce collisions, and provide multimodal travel choices. Figure E-1 summarizes potential improvement measures for consideration including options for circulation and traffic, alternative modes (bus transit, pedestrian, and bicycle), and parking.

ES-VI. Refinement of Options

The transportation system options were presented to the public through two public workshops and to the City Planning Commission and Transportation and Circulation Committee during a joint meeting. A draft report of Chapters I through V was also posted on the City's web site. Public comments were received on the analysis and options outlined in the draft report.

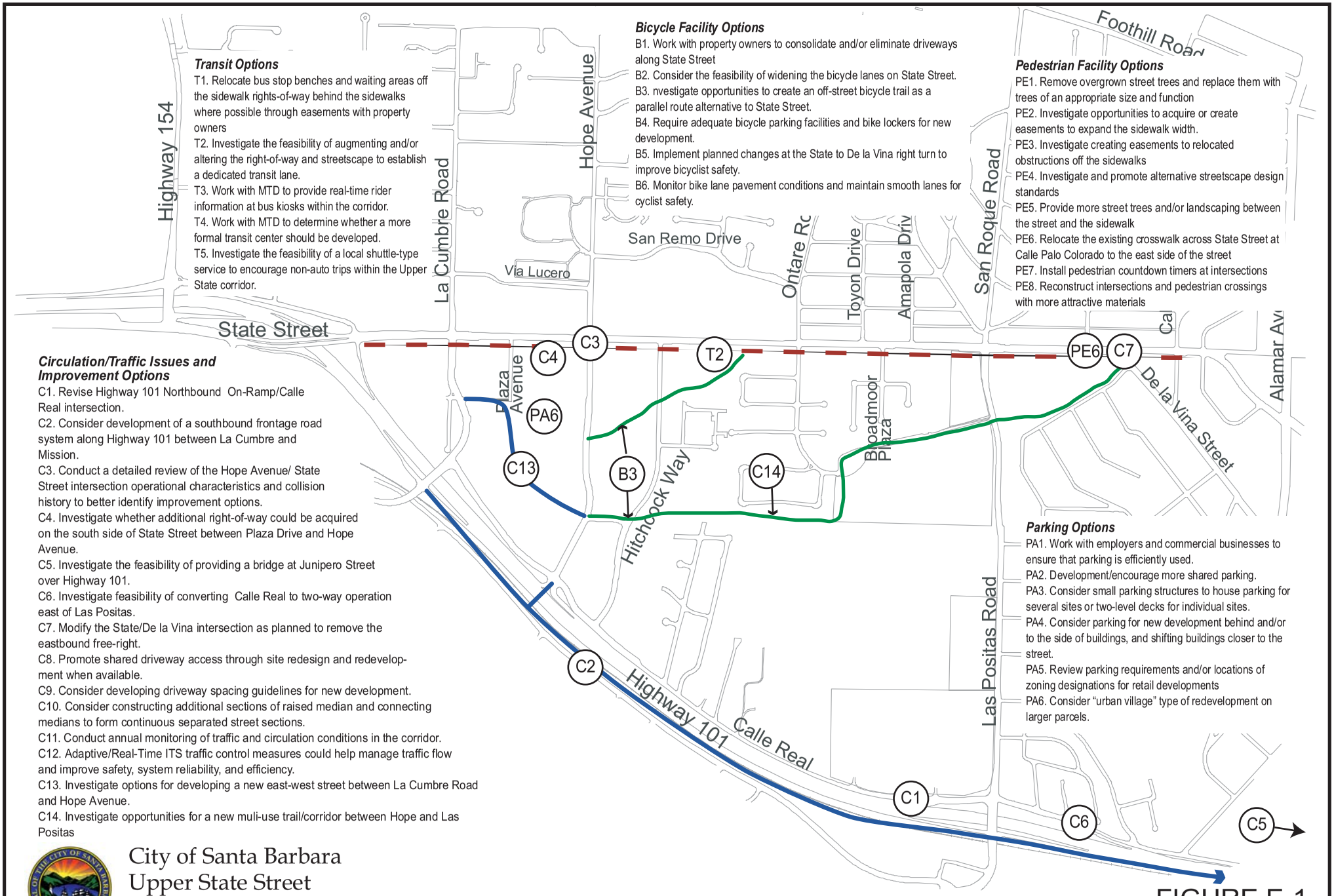

FIGURE E-1

Options for Transportation System Improvements

Following this public review and discussion, City staff reviewed the list of options to identify which options would be analyzed further. During this process, several options not on the original list previously presented were added and a preliminary review of their feasibility was conducted.

Several options identified in Section V are included in the Upper State Circulation Improvements program, but no detailed analysis was conducted by MMA on these options as part of this study report. Each of the options was reviewed by City staff and identified as an item that is or will be addressed through other on-going corridor activities as noted after each item. These include efforts by various City departments (Transportation), other agencies (MTD), or through other planning activities, such as developing urban design guidelines, of the Upper State Street study.

ES-VII. Recommended Improvements

The following projects were analyzed further and developed into near-term physical improvement projects:

- Relocate State Street / Calle Palo Colorado Crosswalks and On-Street Parking
- Relocate State Street / Calle Palo Colorado Bus Stops and Add Bus Pockets
- Bus Pocket at Ontare Road and State Street
- Bus Pocket at Toyon Drive and State Street
- New Traffic Signal at McCaw/Las Positas Intersection
- Additional Raised Median – Route 101 Northbound Ramp / Calle Real to La Cumbre
- Additional Raised Median – Hitchcock Way to Ontare Road
- Additional Raised Median – Ontare Road to Broadmoor Plaza
- New Off-Street Pedestrian/Bike Trail
- Signal Phasing Modifications

In addition several near-term circulation and parking management improvements were also selected for further analysis. These were:

- Shared Access and Driveway Spacing Guidelines
- Improved Pedestrian Connections
- Parking Management Program

Finally, several longer-term projects were identified for limited further analysis. These projects, while seen as important, would be implemented as part of longer-term improvement projects or through other redevelopment plans. The longer-term improvements include:

- Hope Avenue / State Street Intersection Eastbound Right-Turn Lane and Sidewalk
- Two-Way Calle Real/ Junipero Bridge
- Alternative East-West Routes
- Parking Structures and Shuttles

The locations of these projects are illustrated in Figure E-2.

Potential funding option for the improvements and programs were identified and a summary discussion presented for option in the Upper State Street corridor.

Conclusion

An additional traffic level of service analysis was conducted with the near-term physical improvements in place. The conclusion was that with the recommended improvements in place, the analyzed intersections will continue to operate at acceptable levels of service and that mid-block congestion can be reduced to provide improved operations along Upper State Street.

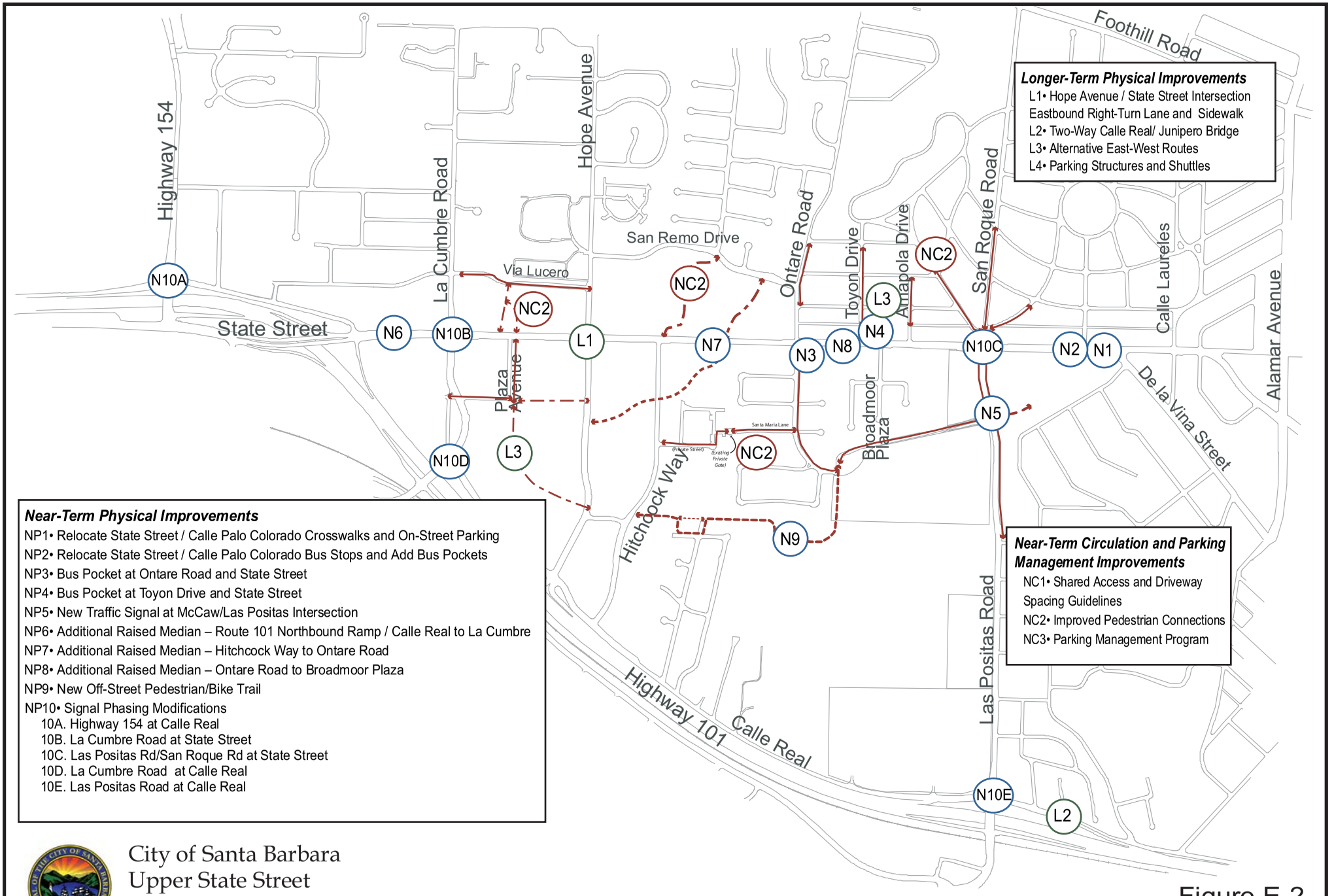

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Figure E-2
Recommended Improvements

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I. Introduction

A. Purpose of the Study

This technical report summarizes the results of the Upper State Street Traffic, Circulation and Parking Study.

The Upper State Street area is an important part of the City of Santa Barbara, and provides a transportation linkage to downtown and to Highway 101, Highway 154, and areas north of the City. The comparatively large parcel sizes in parts of the Upper State Street area provide the opportunities and challenges associated with possible larger scale redevelopments. The area land uses include a mix of commercial uses such as office, bank, retail of various types, hotel/motel, medical office, veterinary office, restaurant, shopping center and mixed-use parcels. Changing of businesses or redevelopment on parcels in this area could result in additional vehicle trips (higher trip-generating land uses replace lower trip-generating land uses), and trips during different time periods (land uses could generate more peak period, mid-day and even Saturday trips).

The Upper State Street Traffic, Circulation and Parking Study is intended to identify the following within the corridor and study area:

- Existing traffic, circulation and parking conditions
- Baseline traffic conditions adding potential trips that could occur without further permits in buildings/parcels with lower trip-generating conditions
- Future potential cumulative traffic conditions with pending and approved project traffic
- Remaining traffic capacity considering the City's Level of Service C policy
- Improvement options for traffic circulation and parking for automobile, transit, pedestrian, and bicycle modes

The City's General Plan establishes the goal for City intersections not to exceed Level of Service (LOS) C. Level of Service is a qualitative method used to describe the operating characteristics and performance of intersections or other transportation facilities. Levels of Service at intersections are based on the volume-to-capacity ratio (V/C), and range from A through F, with A representing the best possible free-flow conditions and F representing forced flow or failing/congested conditions.

The City's project-specific intersection Level of Service (LOS) threshold states that if a project would cause the volume-to-capacity (V/C) ratio at an intersection to exceed 0.77 (LOS C), or if the project would add any traffic to an intersection operating at an unacceptable LOS, the project's impact is considered significant. The City's intersection LOS cumulative impact threshold states that if a project would add traffic to an intersection that is forecast to operate above a V/C ratio of 0.77 with cumulative traffic volumes, the project is considered a significant contributor to the cumulative impact.

Similar to project-specific analyses, this study uses LOS C and V/C of 0.77 to define the threshold of acceptable operating conditions. Thus, the traffic analysis described in this report focuses on the potential for reuse, reoccupancy, and redevelopment in the Upper State Street area that could result in intersection operations over the 0.77 threshold, which could warrant specific circulation improvements.

Additional traffic could be generated within and through the study area in several ways, as follows:

- Re-use/re-occupancy of parcels that currently do not generate trips or are lower trip-generating uses (such as via tenant remodels and other upgrades by existing or new occupation).
- Redevelopment of parcels with more density or higher intensity uses (reconstruction)
- Changing routes of travel due to congested conditions on parallel routes such as Highway 101 due to non-recurrent incidents (e.g. collisions and roadwork)

All of these activities could result in additional traffic in the Upper State Street area, and all are assessed as part of this study.

The analysis includes currently occupied sites that may have lower traffic generation than average for the type of land use (per Institute of Transportation Engineers, (ITE) and San Diego Association of Governments (SANDAG) trip generation rates) and new uses with higher trip generation potential that may re-occupy existing buildings. In this case, redevelopment is not required to generate more trips. Rather, trips may be added when a new business re-occupies an existing property and displaces a formerly lower trip-generating use or when additions are made to existing buildings and uses. An example of this would be when a moderately successful local restaurant could be replaced by a highly successful chain. The same type of land use in the same building could generate many more trips. The potential lower trip-generation of existing parcels is a key issue in the Upper State Street corridor, and it is one of the issues addressed by this study.

In addition trips associated with known (approved and pending) redevelopment projects are included in the analysis. In some cases, the projects involve new uses or more intensive, higher density uses that would generate more vehicle trips than the prior use.

The analysis of existing, baseline and possible future conditions within the study area is accomplished via the use of a computer traffic model developed for the Upper State Street area. The model includes a representation of the study area roadway network, as well as key intersections. For each roadway segment and intersection, a detailed field review was conducted to identify information such as number of lanes, type of lanes, type of traffic control (traffic signal, stop sign, etc.), median type, turn pockets, bus pockets, signage, striping, location of driveways, speed limits, bus routes and stops, bike lanes, sidewalks, and other detailed information. Field observations of general patterns of traffic, locations of back-ups, ease or difficulty of turning in or out of sites, the interaction of vehicles and pedestrians at intersections and driveways, and collision data for the area were also considered in developing the model.

Manual traffic counts were conducted at each study intersection during the midday and PM peak periods to determine the amount of existing traffic. Additionally, driveway counts were conducted at a series of parcels to assist in the identification of parcels generating traffic at a rate lower than those published by the Institute of Transportation Engineers' (ITE) for the land use on those sites.

The results of the field review, computer traffic analysis, traffic counts and other analyses are described in detail in this report. A series of graphics and tables are presented that illustrate the data and results of the analysis.

Intersections operating below the acceptable peak hour LOS standards, (a volume to capacity ratio higher than 0.77) are identified. After identifying impacts, the study includes recommendations of transportation options in the Upper State Street area such as improvements to alternative modes (transit, pedestrian, and bicycle), parking, and physical and operation improvements to the circulation network.

B. Study Area

The traffic study area is illustrated in Figure 1. It generally covers a corridor centered on Upper State Street in the City of Santa Barbara from Highway 154 on the west to Calle Laureles on the east. For the purpose of considering street network improvements, the study area continues south to include a triangular area generally bounded by State Street, Hitchcock Avenue and Highway 101. In addition, the traffic analysis also included the intersection of Alamar Avenue and Foothill Road (Highway 192) thus capturing traffic that uses Foothill Road as an East/West route to and from the rest of the study area.

C. Analysis Roadways and Intersections

The study assessed intersection Levels of Service (LOS) and Volume-to-Capacity (V/C) ratios at the following 24 signalized intersections. These intersections are shown on Figure 1.

1. Highway 154 and Calle Real
2. Highway 154 and Highway 101 SB On-Ramp
3. Highway 101 SB Off-Ramp and State Street
4. Highway154 and State Street
5. Highway 101 NB Off-Ramp and State Street
6. La Cumbre Road and State Street
7. Plaza Avenue and State Street
8. Hope Avenue and State Street
9. Hitchcock Way and State Street
10. Ontare Road and State Street
11. Broadmoor Plaza and State Street
12. Las Positas Road/San Roque Road and State Street
13. De la Vina Street and State Street
14. Calle Laureles and State Street
15. Alamar Ave and State Street
16. Alamar Ave and Foothill Road
17. La Cumbre Road and Plaza Avenue
18. La Cumbre Road and Calle Real
19. La Cumbre Road and Highway 101 SB Ramps
20. Hope Avenue at Calle Real
21. Hitchcock Way and Calle Real
22. Calle Real and Highway 101 NB On-Ramp
23. Las Positas Road and Calle Real
24. Las Positas Road and El Camino (Highway 101) SB ramps

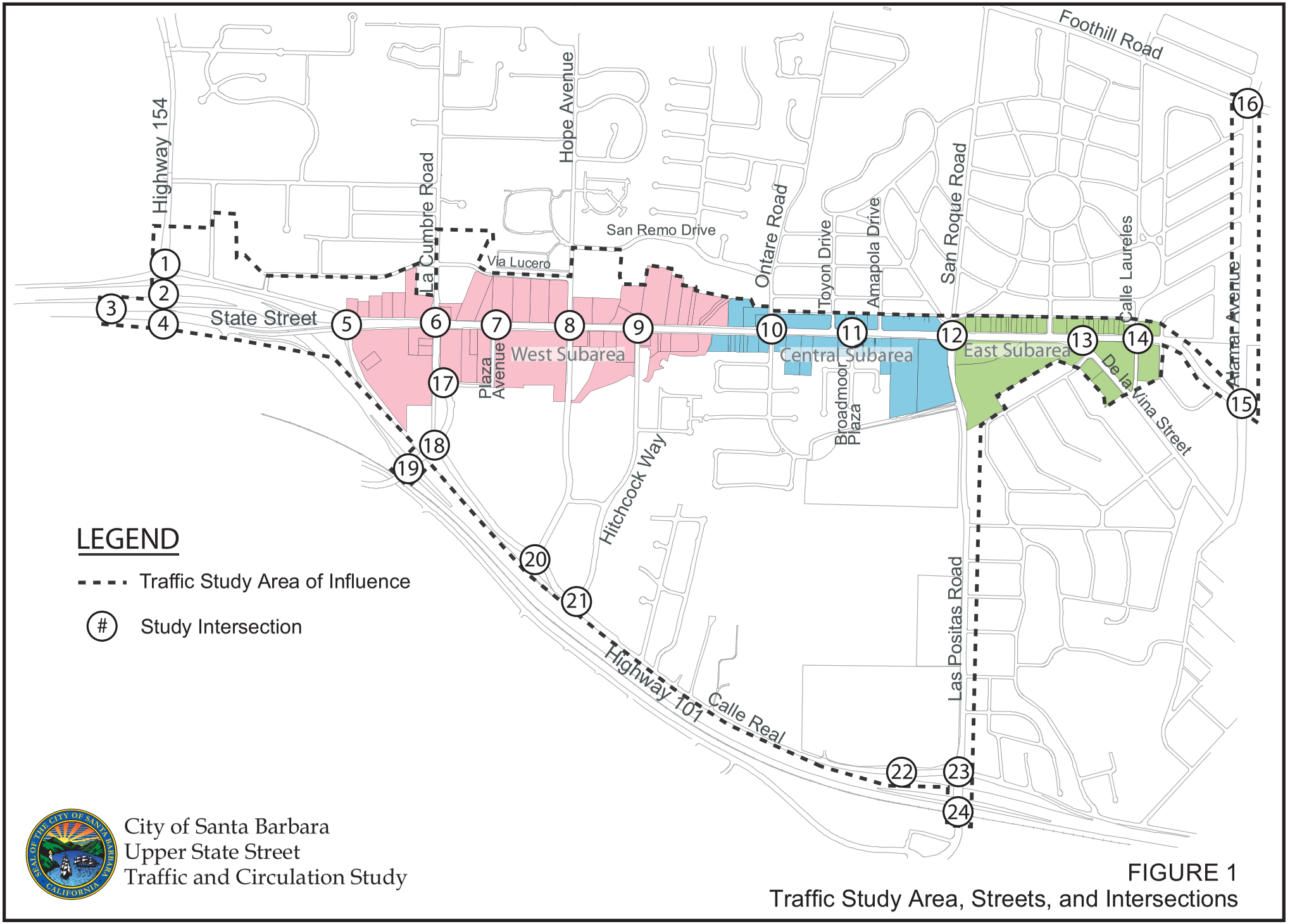

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FIGURE 1
Traffic Study Area, Streets, and Intersections

II. Traffic Circulation and Operations

To evaluate the future traffic conditions in the study area and identify possible measures to improve access, circulation, and capacity we first identify the current physical and operational characteristics of the existing transportation system and what deficiencies and inconsistencies are already present. To develop a database of information on existing conditions extensive field reviews were conducted to identify the physical parameters of the system, the number of people and vehicles that use that system during the day, and the land uses that are located along the streets and generate much of the corridor activity. Approximately 50 pending and approved future development projects in and near the study area were identified by the City to develop an approximate level of possible future land use activity in the vicinity. Using this information, an analysis of future traffic conditions was conducted to identify locations where traffic capacity and/or circulation constraints would likely exist and need to be addressed. Based on those results, possible future transportation improvement projects can be identified that could reduce congestion and/or improve circulation along the study area streets and intersections.

A. Historical Perspective

The Upper State Street corridor has developed in a distinctly different pattern than Downtown Santa Barbara. In this area there is no grid of streets and very few east-west alternate routes. The distances between blocks are sometimes long and are often inconsistent. Examples include the spacing of the intersections of State Street with De la Vina, Calle Polo Colorado, Toyon and Hitchcock.

Unlike the Downtown grid work of streets, Upper State Street is the only arterial in the area running east to west. Therefore, the area has limited options for vehicle route selection, forcing most trips to travel on some portion of this street. By the end of the 1970s, nearly every Upper State intersection had extreme congestion with Level of Service D or E conditions.

In the 1980s, Upper State saw a number of significant improvements that both increased the capacity of the street and reduced demand. Both Hope and Hitchcock were extended between State and Calle Real with the creation of the Hope Avenue/Highway 101 Northbound on ramps. Vehicle turn lanes were added to many of the key State Street intersections including La Cumbre and Las Positas. Most significantly, Highway 101 was widened from Castillo to Fairview Avenue in 1989. Motorists who had been using Upper State Street to avoid Highway 101 congestion moved back to the highway, resulting in an approximate 20 percent reduction of traffic on Upper State Street.

Additional capacity improvements to the area continued throughout the 1990s with expansion of the La Cumbre and Calle Real interchanges and more turn lane additions to the State and La Cumbre intersection. Bike lanes were added to the street in 1996, increasing the bicycle capacity of the street without impacting the vehicle capacity.

B. Field Data Collection

An extensive field survey was conducted to develop a database of the existing physical and operational characteristics of the study area circulation network. The surveys were conducted over several days and included observations of both weekday and weekend traffic conditions and midday and evening operations.

The information on the physical characteristics of the study area included:

- General street network
- Locations of stop signs, traffic signals and other traffic controls
- Location and size of medians and right-turn pockets
- Location of driveways along State Street
- Location and general utilization of bike lanes along State Street
- Location of sidewalks and their general size and condition
- Location of large street trees and other large or prominent items that may obstruct or narrow pedestrian pathways along the State Street sidewalks
- Transit routes, bus stop locations, and bus pocket lanes

In addition to the physical characteristics, the manner in which vehicle, pedestrian and bicycle traffic within the study area operates was also observed. These observations included:

- General patterns of traffic flow—where is traffic coming from and going to and identifying locations with higher turning volumes
- Where vehicle queues were longer or encroached upon adjacent through lanes—while limited along State Street these were at locations with high volumes of conflicting turning and through traffic or large pedestrian crossing volumes
- The ease with which motorists could turn into and out of sites along State Street—many sites are only accessible from driveways along State Street and left turns in must be made from the two-way median left-turn lane and frequent driveway ingress/egress conflicts with pedestrians on the sidewalks
- The interaction of pedestrians and vehicles at intersections and mid-block driveways—segregated turn lanes help in accommodating more vehicles at intersections and provide additional queuing areas for stopped vehicles, but can increase vehicle turning speeds that conflict with pedestrians crossing the street and separate left-turn phasing requires additional signal time, which may reduce time available to other movements
- The utilization of bike lanes, bus stops, and sidewalks—the State Street corridor has facilities for all of these users and their interaction with each other and auto traffic is important to promoting non-auto travel into and through the study area

- The City provided a summary of collision data for the last four years along the State Street corridor and along other major streets in the study area. A summary of that data is provided later in this report.

1. Existing Street Conditions

The physical geometric conditions (number of lanes, location of bus pockets, signals, etc.) and operational information (signal timing, bus routes, etc.) for the study area streets and intersections were documented and are summarized in Figure 2. In addition, other general operational or design issues in each of the corridor's subareas are discussed below for key streets and noted in the figure.

State Street

State Street is a four-lane multi-modal arterial. The street provides service for automobiles, bus transit vehicles, bicycles, and pedestrians for its entire length in the study area. The experience of driving along Upper State Street is one of visual congestion and an abundance of activity. The street carries between 17,400 vehicles per weekday at the east end of the study area west of Alamar Avenue, to 32,000 vehicles per day east of Las Positas Road. The Average Daily Traffic (ADT) on the remaining portions of State Street west of Las Positas Road generally ranges from 24,400 to 30,800 vehicles per day. At the far west end of the study area, to the west of the Highway 101 ramps, the ADT drops to 14,000 vehicles (note that all ADT figures quoted in the study are for a typical weekday unless otherwise stated). There are frequent signalized intersections and crosswalks, and multiple uncoordinated driveways into small buildings and commercial areas. Left turns onto State Street are restricted in areas with raised medians, and where allowed, may be difficult during peak periods of traffic. Some dangerous and illegal maneuvers have been observed and high concentrations of collisions occur at selected driveways. In some locations, there is constrained or less than adequate off-street parking.

The addition of Class 2 on-street bike lanes has increased bike activity as well as potential bike-car conflicts for right turns. For the most part, the pedestrian experience includes multiple driveways, conflicts with cars at large intersections, and the occasional sidewalk obstruction. The median space between the eastbound and westbound travel lanes on State Street has a variety of uses in different blocks of the corridor, including raised medians with landscaping and street trees, signalized turn lanes, and mid block left turns. Via Lucero provides an important secondary access route north and parallel to State Street from Wye Road to Hope Avenue. Traveling along Via Lucero, one experiences the back of commercial State Street properties (usually parking) to the south and a multi-family residential area to the north. Via Lucero provides secondary access (often restricted) to many State Street properties. A public alley runs behind the businesses on the north side of State Street between Ontare and Toyon providing important access, parking and loading/delivery services. Between Toyon and Amapola (7-Eleven store to Mackenzie Market), no such alley exists. The public alley begins again from Amapola to Calle Laureles providing important access, parking, delivery and circulation. On the south side of the street, non-public service alleys are located behind buildings that provide trash / recycling areas and very tight informal and minimal parking. The majority of the land uses along Upper State Street are commercial. Some residential and park land uses are located between Las Positas Road and De La Vina Street.

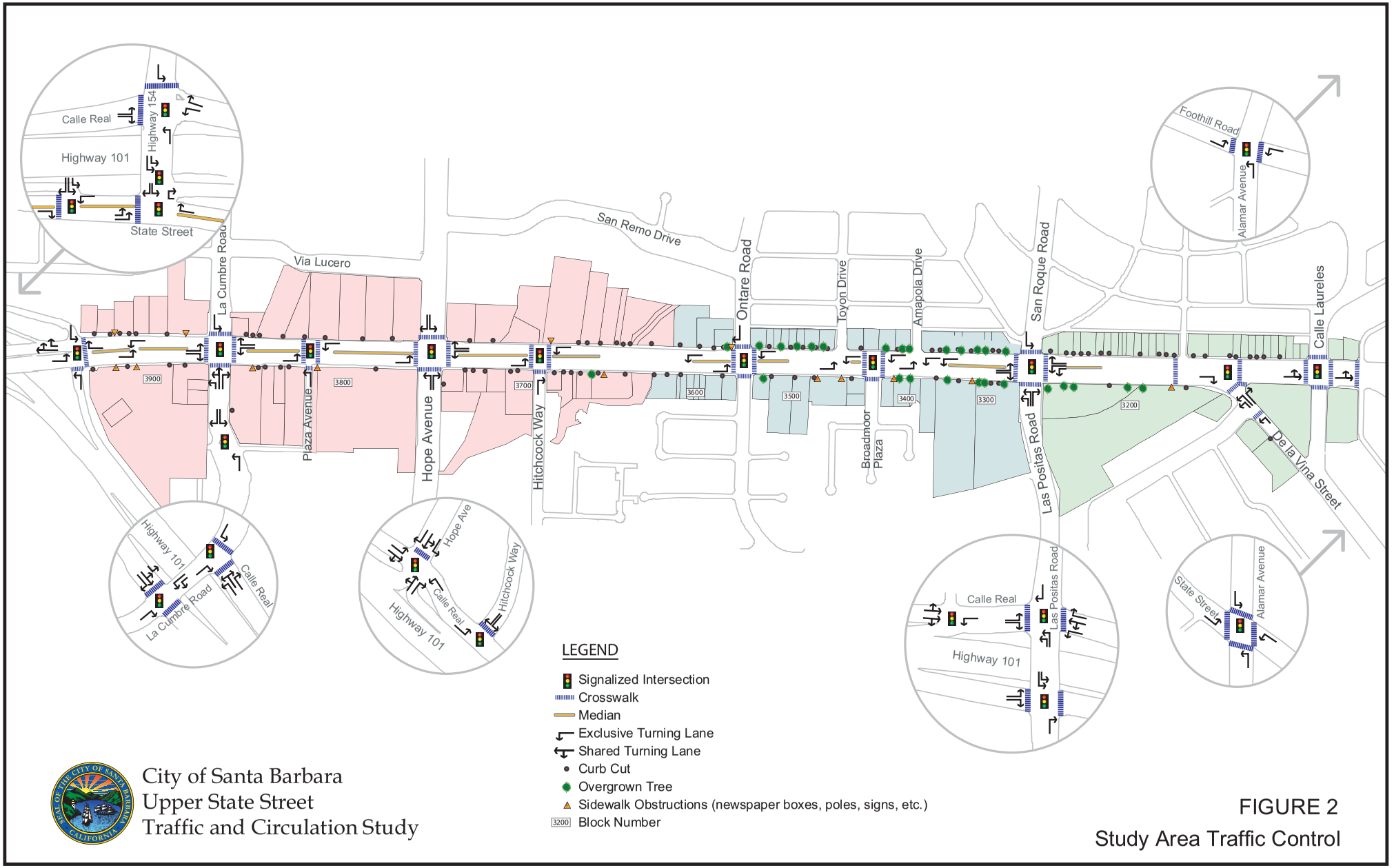

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FIGURE 2
Study Area Traffic Control

Calle Real

Calle Real runs parallel to Highway 101 in the study area. Calle Real is four lanes between Las Positas Road and the northbound Highway 101 on- and off-ramps to the south of the Earl Warren Showground. The ADT on Calle Real within the study area ranges from nearly 17,000 east of the Highway 101 northbound on ramp near Las Positas, dropping to 7,100 vehicles per day west of the on-ramp, and up to 10,200 near La Cumbre Road. The road narrows between the Highway 101 ramps and Hitchcock Way as it passes the Santa Barbara Community Golf Course. Calle Real is discontinuous between La Cumbre Road and State Street. The road becomes three-lanes when it resumes north of State Street, but narrows to two lanes west of Highway 154. Calle Real has bike lanes on both sides of the roadway and a sidewalk on the north side of the roadway northwest of Peach Grove Lane to La Cumbre Road.

Las Positas/Roque Road

Las Positas Road is a North/South road that becomes San Roque Road north of State Street. The ADT on Las Positas within the study area is approximately 22,500 south of State Street, dropping to 4,500 north of State Street. In the study area, Las Positas provides a connection between Highway 101 and State Street along a four-lane roadway with bike lanes and sidewalks on both sides. Some on-street parking is located on the northbound side in front of residences.

La Cumbre Road

Four-lane La Cumbre Road runs from south of Highway 101 to Foothill Road (State Route 192). The ADT on La Cumbre is 15,300 south of State Street and 10,500 north of State Street. La Cumbre has discontinuous sidewalks and bicycle lanes on each side of the roadway.

Hope Avenue

Two-lane Hope Avenue runs from northbound Highway 101 on- and off-ramps at Calle Real to Foothill Road (State Route 192). The ADT on Hope Avenue is 6,800 south of State Street and 9,300 to the north. Sidewalks and bicycle lanes run along both sides of Hope Avenue south of State Street.

Hitchcock Way

Two-lane Hitchcock Way runs from Calle Real to State Street. The ADT on Hitchcock Way south of State Street is 6,200 vehicles. Sidewalks and bicycle lanes are on both sides of Hitchcock Way south of State Street

Ontare Road, Toyon Drive, Broadmoor Plaza, and Amapola Drive

Ontare Road, Toyon Drive, Broadmoor Plaza, and Amapola Drive are two-lane residential streets that cross State Street. The ADT on Ontare north of State Street is 5,600 vehicles, and on Toyon it is only 400 vehicles. Counts are not available on the other residential streets.

De La Vina Street

De La Vina Street is a two-lane southeast spur off of State Street. The free-flow right turn lane and lack of conflicting westbound left turns means many trips to Cottage Hospital and Downtown Santa Barbara turn from State Street three blocks before State Street turns southeast

and parallel to De La Vina Street. The ADT on De La Vina Street east of State Street is 16,100 vehicles. Sidewalks and bicycle lanes are on both sides of De La Vina Street in the study area.

It is also important to note that State Street from De la Vina to Hollister, Las Positas south of State Street and SR-154 are all identified as Congestion Management Program (CMP) routes. State Street is a Principal Arterial under CMP. The Congestion Management Program is a State of California program that is locally implemented by the Santa Barbara County Association of Governments (SBCAG). The CMP includes a land use program to ensure that the impacts of land development on the CMP system are documented, assessed and mitigated. At this time, the Upper State Street study is not expected to directly result in any changes to zoning, density or development intensity in or around the study area. Thus, there is no need to address specific CMP system or land use monitoring requirements at this time. If this process ultimately resulted in any changes to potential development in the area, then the potential impacts on the CMP system would need to be monitored and reported at that time. Also, it is noted that the CMP minimum threshold for level of service in the County is LOS D, or the existing LOS of the facility, whichever is worse. The current City standard for State Street is more conservative (LOS C, 0.77 V/C) than this, thus resulting in no conflicts with the CMP as it is currently implemented.

2. Traffic Counts

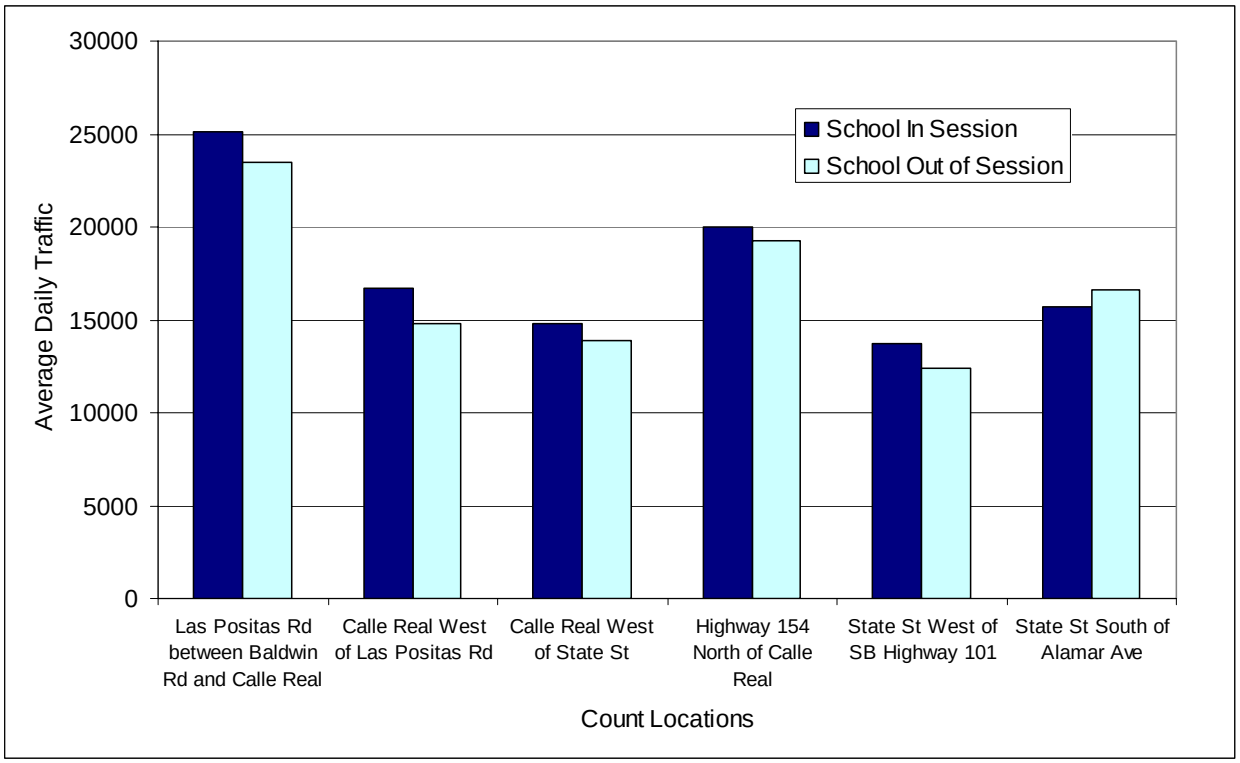
Intersection peak-hour turning movement information was collected for all of the 24 analysis intersections previously listed. Manual traffic counts were conducted during a typical weekday midday and evening peak period. The midday counts were conducted from noon to 2:00 p.m., while the PM counts were conducted between 4:00 p.m. and 6:00 p.m. (See locations in Figure 1.) In addition, mid-block average daily traffic (ADT) counts were conducted along various streets where current traffic count data were not available. ADT traffic data is obtained using machines to measure each vehicle that passed. This data is useful because it provides an hourly summary of vehicle flow, by direction, and for the full 24-hour period. Traffic counts for some of the study intersections controlled by the City were obtained from the City Public Works Department. For other locations, MMA contracted for peak period counts to be conducted.

The goal of the data collection program is to collect traffic data during times of day and days of the week that represent the “worst case” for traffic flow during the hours when the highest level of traffic occurs. The best times and dates to conduct the traffic counts were determined in discussions with City Transportation staff. The traffic counts were conducted over a two week period with ADT data being collected for six control locations during both the periods of June 14 through 17 and June 21 through 24, 2006. The intersection turning movement counts at the non-City controlled intersections were conducted on June 21 and 22, 2006. The City-supplied turning movement counts were collected between June 14 and 27, 2006. In addition, supplemental counts were conducted at some intersections along State Street during November 2006. Traffic counts from other traffic planning efforts were also collected after the draft report review process. Since some of the supplemental data varied substantially from the June count data, all of these additional traffic counts were combined and averaged with the June data to develop the final capacity analysis results. Copies of the traffic count data are available from the City Department of Public Works.

City Transportation staff concluded that the weekday midday period in the corridor was more active than the AM peak hour and therefore the midday period was chosen over the AM peak hours. It was decided that the Wednesday and Thursday would be most representative of a typical weekday, but that mid-block daily counts would also be conducted on a Saturday to compare the activity of the Saturday midday hours with those during the weekday. A review of the comparative traffic counts indicated that while the volumes at each intersection varied, the overall level of congestion in the study area on Saturday was not significantly different to warrant a separate Saturday analysis. In addition, many of the office developments in the area would be closed on Saturday.

Finally, the majority of the traffic counts were conducted after the local schools, including UC Santa Barbara, were out of session. However, again comparison counts were conducted at the six representative mid-block locations to record the difference in traffic levels at those locations with and without the schools in session. The results, as listed in Table 1, showed that along State Street, the variation in traffic volumes between the time periods when the schools were in and out of session was relatively small (within a few percent of each other) and inconsistent to infer that one period is busier than another. As shown in Table 1, the average daily traffic volume collected when the schools were out of session was higher at only one location compared to when the schools were in session and slightly lower at the other five locations. Therefore, either with or without the schools in session, the volumes for the weekday midday and PM peak hours do not vary enough to affect the conclusions of this report, and the mid to late June traffic count data is valid for purposes of this analysis.

TABLE 1: TRAFFIC COUNT COMPARISON



**School in Session ADT is an average of counts from June 15-17. School Out of Session ADT is an average of counts from June 22-24.*

C. Land Use

The City of Santa Barbara staff provided detailed information on existing and proposed future land uses within and adjacent to the Upper State Street Study area. A list was provided by the City including descriptions of the current uses on selected parcels. Detailed data was provided for the parcels that were to be tested to determine if they are currently generating traffic at a rate less than the Institute of Transportation Engineers (ITE) average rate for the type of land use. ITE is the national standard, it is used throughout California, and it is used as a bench mark for measuring trip generation. More detailed information on ITE is provided in this section. In addition, MMA staff conducted field reviews and observed land uses in the area.

1. Existing Uses

The Upper State Street corridor is a mix of land uses and development styles that reflect the changes in the corridor over the years. The eastern end of the corridor has denser small lot, urban-type development with street-front businesses, smaller neighborhood serving uses, often local businesses or small franchises, on-street parking, and access to parking lots from either side streets or alleys. Two recently built mixed-use residential projects and occasional small residential units behind small businesses are the exceptions to the predominantly commercial land uses.

Heading west, the development style becomes more "older suburban" with some front side parking, more curb cuts per site and buildings being set back from the street. The western end of the corridor has a very different feel with larger retail development and vehicle-oriented sites. Large parking lots are located in front, side, and back of the buildings or in parking facilities.

The west end of the study corridor near the Highway 101 Freeway is characterized by larger suburban-style regional retail centers and office buildings. Land uses in this portion of the study area have multiple combined parcels, shared access points, large shared parking lots that serve multiple uses or entire shopping areas, limited street fronting commercial space and a significant amount of street frontage that is parking, and large building setbacks.

There are a wide range of commercial uses in the area that are not easily categorized for distinction and many parcels have a mix of retail, office, restaurant, hotels, and service businesses. Overall, there is an abundance of neighborhood serving service, retail and convenience businesses as well as two regional shopping centers. This is a place where people shop, bank, eat, drink, work, do their dry cleaning, car cleaning and service, take care of their pets, get their hair cut, take care of music and video needs, and access traditional and alternative medical services to name just a few.

D. Trip Generation

1. Driveway Surveys

In order to identify the potential for low trip-generating parcels to result in increased traffic if reoccupied with a new business, empirical field data was first collected. Driveway surveys were conducted so that actual trip generation could be compared against ITE average rates for various types of land uses. A total of 21 sites, with 11 of those sites identified as potentially low trip-generating parcels, were included in the empirical study. The 21 sites were selected based on

transportation personnel field observations and knowledge. The sites included currently empty buildings, sites that appeared to have low traffic activity for the type of use, and sites chosen as representative for comparison of particular land uses with the ITE rates.

At each site, the trips in and out of each driveway serving that site were counted. Two time periods during the day were counted—the midday and typical PM peak periods. The midday counts were conducted from Noon to 2:00 p.m. and the PM peak counts were conducted from 4:00 p.m. to 6:00 p.m., on a typical weekday in June 2006. A field crew observed and counted each vehicle entering and exiting from driveways. For sites with multiple driveways, all of the driveway access points were counted and recorded individually and then summed together. Where non-site traffic also used the driveway for access, the vehicles were observed into the site and only those that stopped at the target land use were counted. The field crew was also trained to observe walk-ins to account for persons who used the site but parked on the street nearby, or in another parking area. An individual or a group that walked in together was counted as one vehicle trip in and one trip out.

Table 2 summarizes the trip generation rates used in the site analysis. Table 3 summarizes the count data for each of the surveyed sites. The driveway trips were surveyed, summed (where there are multiple driveways), and then converted to an equivalent "trip rate". The trip rate describes the number of trips per land use unit of measure. Units of measurement include square footage of commercial building area, by type, number of hotel/motel rooms for that type of use, and number of seats for restaurant uses. The purpose for generating equivalent trip rates is to compare to standard trip rates published by the Institute of Transportation Engineers (ITE) in their publication *Trip Generation, 7th Edition* and the San Diego Association of Governments (SANDAG).

2. Lower Trip Generating Sites

The data collected from the driveway surveys described in Section 2 was compared to the published data from ITE and SANDAG. The ITE and SANDAG data is developed from numerous (in some cases up to hundreds) empirical field surveys of driveway trip generation throughout the country. These rates are considered to be some of the best and most complete sources of trip generation rate data that is available, and it is the standard for use in traffic studies nationwide. However, it is also sometimes appropriate to use locally-generated empirical rates where it is feasible to do so. For purposes of this exercise, the standard rates are compared to the empirically collected rates at the 21 study sites to determine if any of the Upper State Street developments would be considered to be "low generating" or having a lower than expected trip rate.

For this study, a site is considered to be a low generator from a trip generation standpoint if it generates trips at a rate ten percent or more below the ITE published rate, with a minimum criterion of ten trips lower. Thus, a site expected to generate 15 trips that generates 10 trips during the survey would not be considered low generating even though its trip generation would be 33 percent lower than the ITE rate, but a parcel expected to generate 100 trips that generates 90 trips would be considered low generating. This methodology accounts for very high variances at sites with very low trip generation, but captures those more significant cases where trip

generation is both low from a percentage basis and generates at least ten trips less than ITE would indicate.

TABLE 2: TRIP GENERATION RATES

Land Use (ITE Land Use Code)	*ITE PM Peak Hour Rate*	*Trips Per*	Passby		*Land Use (ITE Land Use Code)*	*ITE PM Peak Hour Rate*	*Trips Per*	Passby
Condo (230)	0.52	dwelling unit			Convenience Store (852)	34.57	1,000 s.f.	
Motel (320)	0.58	room			Electronic Superstore (863)	4.5	1,000 s.f.	15%[C]
Church (560)	0.66	1,000 s.f.			Furniture Store (890)	0.46	1,000 s.f.	
Day Care (565)	13.18	1,000 s.f.			Walk In Bank (911)	33.15	1,000 s.f.	47%[C]
Medical- Dental Office (720)	3.72	1,000 s.f.			High Quality Restaurant (931)	7.49	1,000 s.f.	
General Office Buliding (710)	0.737Ln(X)+1.831	1,000 s.f.			High Quality Restaurant (931)	0.26	Seats	
Post Office (732)	10.89	1,000 s.f.			Fast Food w/o Drive-Thru (933)	26.15	1,000 s.f.	40%[B]
Specialty Retail (814)	2.71	1,000 s.f.	10%[B]		Fast-Food with Drive-Thru (934)	34.64	1,000 s.f.	40%[B]
Retail Nursery (817)	3.8	1,000 s.f.			Fast-Food with Drive-Thru (934)	0.94	Seats	40%[B]
Shopping Center (820) ITE 5th Edition	0.66Ln(X)+3.40	1,000 s.f.	10%[A]		Car Wash (948)	14.12	1,000 s.f.	
Shopping Center (820) ITE 7th Ed. Avg. Rate	3.75	1,000 s.f.	10%[A]		Gas Station (944)	13.86	Fueling Positions	
Supermarket (850)	10.45	1,000 s.f.	36%[A]		Retail Nursery (817)	3.8	1,000 s.f.	

Sources:

Trip Generation rates are from either Institute of Transportation Engineers' (ITE) publications *Trip Generation*, Fifth and Seventh Editions or from the San Diego Association of Governments' publication *Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region.*

Notes:

A. Pass-by rates from the ITE *Trip Generation Handbook, Second Edition.*

B. Pass-by rates from the SANDAG *Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region.*

C. Pass-by rates based on data ITE and SANDAG and refined based on discussions with City Transportation Department staff.

TABLE 3: DRIVEWAY TRAFFIC SURVEYS AND TRIP GENERATION RATES

Project/Parcel	Location/Address	Land Use	Size	Driveway Count			PM Peak Hour			Low Trip Gen Yes/No	Land Use Distribution Used for Trip Generation
				Midday	PM	PM Driveway Rate	Projected ITE Count	ITE Rate	% Difference		
Currently Occupied Sites											
Chiropractor's Office & Bifano & Co.	3022 State	Mixed Commerical	3,898 SF	15	10	2.57	12	3.08	-17%	No	50% Office, 50% Medical Office
Thomasville Furniture	3042 State	Retail	13,400 SF	10	9	0.67	6	0.46	50%	No	100% Furniture Store
Makenzie Market/Motocycle Shop	3102 State	Commercial	1,781 SF	16	3	1.68	54	30.36	-94%	Yes	50% Convenience Store 50% Fast Food w/o DT
Maytag, Animal vet, and property management	3230 State	Mixed Commerical	3,841 SF	39	52	13.54	35	9.11	49%	No	50% Day Care. 30% Medical Office, 20% Shopping Center
Loreto plaza with supermarket (24,000 SF), nursery (13,000 SF), and other stores	3303-3311 State	Mixed Commerical	94,000 SF	780	754	8.02	489	5.20	54%	No	14% Retail Nursery, 60% Shopping Center, 26% Supermarket
San Roque Offices (converted motel to retail, office, medical)	3324 State	Office	10,029 SF	26	29	2.89	40	3.99	-28%	No*	27% Office, 55% Medical Office, 18% Shopping Center
Post office, retail, restaurants	3343-3419 State	Mixed Commerical	30,477 SF	261	216	7.09	213	7.00	1%	No	33% Post Office, 34% Specialty Retail, 33% High Quality Sit-Down Restaurant
Sunset Motel	3504 State	Lodging	6,581 SF 13 rooms	14	17	1.31	8	0.58	113%	No	100% Motel
Tee-off Shopping Center, restaurants, US Marines, 3-day Blinds, 31 Flavors, check cashing	3609-3643 State	Mixed Commerical	24,258 SF	225	169	6.97	249	10.26	-32%	No	65% Shopping Center, 35% High Quality Sit-Down Restaurant
AG Edwards	3660 State	Office	11,374 SF	49	17	1.49	37	3.29	-54%	No*	100% Office
Burger King, Fast-Food Restaurant with Drive-Thru	3707 State	Restaurant	3,830 SF	211	73	19.06	133	34.64	-45%	Yes, in PM	100% Fast Food w/ DT
Jack in Box	3747 State	Restaurant	1,410 SF	131	84	59.57	49	34.64	71%	No	100% Fast Food w/ DT
Whole Foods Site (Circuit City, Citibank)	3763, 3759, 3771 (3757) State	Mixed Commerical	56,720 SF	244	196	3.46	380	6.70	-48%	Yes	24% Office, 22% Specialty Retail, 41% Elec. Superstore, 13% Walk In Bank
Whole Foods Site (Taco Bell)	3763, 3759, 3771 (3757) State	Fast Food	2,040 SF/ 72 Seats	107	36	0.50	153	2.13	-76%	Yes	100% Fast Food w/o DT
Whole Fodds/Circuit City Total	3763, 3759, 3771 (3757) State	Mixed Use	58,760 SF	351	232	3.95	533	6.82	-56%	Yes	

TABLE 3 *(CONTINUED)*: DRIVEWAY TRAFFIC SURVEYS AND TRIP GENERATION RATES

Project/Parcel	Location/Address	Land Use	Size	Driveway Count			PM Peak Hour			Low Trip Gen Yes/No	Land Use Distribution Used for Trip Generation
				Midday	PM	PM Driveway Rate	Projected ITE Count	ITE Rate	% Difference		
Sandman Motel	3714, 3744 State	Lodging	52,815 SF, 113-rm hotel				66	0.58			100% Motel
Sandman Restaurant	3714, 3744 State	Restaurant	196 Seats				51	0.26			100% High Quality Sit-Down Restaurant
Sandman Total	3714, 3744 State	Restaurant and Lodging		54	54		117		-54%	Yes	
Fidelity Investments	3793 State	Office	4,477 SF			0.00	19	4.21			100% Office
Condominiums	3793 State	Residential	6 Condos				3	0.52			100% Condominium
Fidelity / Condo Site Total	3793 State	Mixed Use		14	6		22		-73%	No	
Lutheran Church	3869 State	Church	13,699 SF	4	3	0.22	9	0.66	-67%	No	100% Church
Berkus Lofts Office	3887 State	Office	22,035 SF office			0.00	61	2.77			100% Office
SRO Motel	3887 State	Lodging	4,990 SF Motel				8	0.58			100% Motel
Berkus Lofts Site Total	3887 State	Mixed Use		16	52		69		-25%	No*	
Rug Shop	15 S. Hope	Retail Speciality	8,288 SF	2	2	0.24	22	2.71	-91%	Yes	100% Specialty Retail
Currently Vacant Sites											
Educated Car Wash (Currently Vacant)	3735 State	Car Service	2,135 SF	0	0		30	14.12		N/A	100% Car Wash
20,000 sf office for lease, Office (non-Institutional - Currently Vacant) - Business, Professional, Research	3760 State	Office	19,961 SF	0	0		57	2.84		N/A	100% Office
La Sumida Nursery (vacant), Not in survey database	3880 State	Commercial	1,432 SF	0	0		5	3.80		N/A	100% Retail Nursery

Source: Land use data - City of Santa Barbara Community Development Department; Trip rates - Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, D.C.

** Site contains small office space that tends to generate traffic at a lower rate than larger office sites, therefore site is not considered to be a low trip generator.*

Based on the above criterion, eight sites were identified as low-trip generators. Five of these sites are currently occupied buildings and three are sites that have unoccupied buildings. Table 4 lists the nine sites along with the weekday midday and PM peak hour driveway vehicles count, the expected number of vehicles using the appropriate ITE trip rate, and the difference between the actual PM vehicle count and the ITE estimate. ITE does not provide trip rates for midday hours so no comparison could be made for that period. The low generation ranges from 45 percent up to 94 percent below the expected ITE generation. The number of trips at these parcels range from 20 trips to 202 trips below what would be predicted by the ITE rates. It should be noted that some of the sites with lower trip generation during the PM peak hour do not appear to have low trip generation during the midday period based on the driveway counts. For example, the Burger King site, which generated 60 trips below the projected ITE PM peak hour rate, appears to be generating equal to or above the ITE peak rate (peak rate of the generator) for that land use during the midday. It is noted that for the Circuit City / Whole Foods site, a 10 percent internal capture reduction was used in calculating the ITE trip estimate.

For assignment of site traffic onto the area streets, the trips expected to be generated by each site were reduced by the pass-by rates previously listed in Table 2. Pass-by traffic is that which is attracted by a particular development from the existing traffic volumes along the site's frontages or traffic that is already "passing by". The amount of traffic that is expected to be attracted by each site varies by land use type.

3. Pending Projects

The other component of future traffic growth is approved and pending development projects. The City and County of Santa Barbara Planning and Development Department staffs provided a comprehensive list of almost 50 projects in and adjacent to the study area. Some of the projects are located directly along Upper State Street, and they would replace the existing uses. Others are nearby the study area, but would have the potential to add trips within the study area roadway system. Table 5 lists the 50 cumulative projects that were reviewed for this analysis. Because of their small size or lack of net additional trip generating land uses, some of the smaller projects were not carried forward to the next phase of the analysis.

Per standard City practice, the projects that were identified as being of a scale or type large enough to generate more than a nominal number of trips within the study area had their trips assigned to the traffic network. These projects included those that were located in the study area and those that would generate enough traffic to affect the V/C ratios at the analysis intersections.

Typically, additional traffic generated by projects located in the region but not close to the study area, including small projects and small increases in occupancy of existing buildings, is accounted for through the use of an ambient or background growth rate applied to the existing traffic volumes. For this analysis, a background growth rate of 0.25 percent per year was used over a 10 year period to account for these other projects. This totaled a 2.5 percent increase in all of the existing traffic volumes. This ambient growth factor was only applied to the future year scenario.

TABLE 4: EXISTING LOW TRIP-GENERATING SITES

Project	Address	Driveway Counts	Projected ITE Trip Count	Difference		Net New Trips
		PM Peak	PM Peak	PM Peak	Pass-By %	
Makenzie Market/Motocycle Shop	3102 State	3	52	51	40%	31
Burger King, Fast-Food Restaurant with Drive-Thru	3707 State	73	133	60	40%	36
Whole Foods Site (Circuit City, Citibank, Taco Bell) *(a)*	3763, 3759, 3771 (3757) State	232	533	301	33%	202
Sandman	3714, 3744 State	54	117	63		63
Educated Car Wash (vacant) *(b)*	3735 State	0	30	30		30
Office Building (vacant)	3760 State	0	81	81		81
3880 La Sumida Nursery (vacant)	3880 State	0	5	5		5
Rug Shop	15 S. Hope	2	22	20		20
				Baseline Additional PM Peak-Hour Project Traffic		468

(a) - Pass-by percentage is weighted average for the proposed uses.
(b) - Projected trips based on proposed future use.

Of the full list of projects, 17 were selected as large enough to create measurable increases or decreases in trips in the study area. The assigned added trips were used to identify where impacts from these cumulative projects may have a significant impact or cause an intersection's V/C ratio to exceed the allowable 0.77. Table 6 summarizes these pending projects and the associated future trip generation. Trip generation forecasts are based on the corresponding ITE average trip rate for each land use. These data were used in the development of the future traffic forecasts using the computer traffic model. As shown, the cumulative projects could generate a total of 545 added PM peak hour trips. All of the trips for these selected projects within the study area were added to the study area streets and intersections, while a portion of the trips generated by parcels outside the study area would travel on other non-study street and intersections.

TABLE 5: CUMULATIVE LAND USE PROJECTS

1	Building permit issued	2032 Modoc Rd	043-091-011	remove the existing 420 sf garage, add 860 sf two story (427 sf garage, 433 sf residence), 60 sf addition on one story residence
2	Pending	1235 Veronica Springs Rd	047-010-039	demolish the existing 28,700 sf Hillside House facility and construct 127 new dwelling units, admin office, community center, leasing office, non-profit space, and therapy pool
3	Pending	1298 Las Positas Rd	047-010-034	Rezone the 94 acres one family residence to parks and recreation zone and develop an additional 23 vacant land (total is 117 acres)
4	Pending	900-1100 Las Positas Rd	047-010-016	15 residential lots, occupy 15 acres
5	Pending	401 Las Positas Rd	047-093-004	3,341 sf SFH and 507 sf garage
6	Pending	3139 Sea Cliff	047-091-014	propose three-lot subdivision, one SFH will remain and four existing greenhouses will be removed
7	Pending	15S Hope Ave	051-040-058	remove an existing commercial structure and construct 16 units condo and 360 sf commercial and 10,780 sf garage.
8	Pending	3885 State St	051-022-012	demolish the existing motel and office buildings. The new construction inclues three commercial spaces, 34 market rate one bedroom lofts, 10 affordable one bedroom lofts
9	Pending	2912 De La Vina St	051-180-029	1,164 sf commercial addition to the existing commercial (total is 2452 sf)
10	Building permit issued	3475 Marina Dra	047-022-003	1 SFH, 5,520 sf
11	Pending	3305 State St	051-100-001	add 1,638 sf to Gelson's Market
12	Pending	240 W Alamar Ave	051-283-001	demolish the existing SFH and attached garage and construct 4 condo (3 3-bedroom units, 1 2-bedroom units)
13	Pending	301 S Hope Ave	051-240-019	add 466 sf (4 service bays), relocate existing wash bay, add 1 wash bay and convert existing 408 sf storage to training room
14	Pending	401 S Hope Ave	051-240-018	close 1,142 sf existing display area and add 2 special display areas and 5 parking spaces
15	Pending	3500 Mccaw Ave	051-230-005	add 1,905 sf to existing Butler building
16	Pending	222 W Alamar Ave	051-213-008	demolish existing SFH and garage and construct a new three units (two two-bedroom units and one two-bedroom unit)
17	Building permit issued	3235 Campanil Dr	047-104-011	4,610 sf two-story residence
18	Pending	3714 State St	053-300-023	demolish existing hotel and construct a 63,166 sf hotel with 112 rooms and 77 residence condos
19	Pending	3112 State St	053-332-015	demolish existing commercial building and construct 668 sf commercial building and 3,481 sf residence (three apartments)
20	Building permit issued	3325 Madrona Dr	053-324-002	convert the existing second-floor space over the garage into a secondary dwelling unit
21	Pending	1318 N Ontare Rd	055-160-046	split existing 8 acres land into two lots (one is 3.96 acres, the other is 4.05 acres)
22	Pending	1156 N Ontare Rd	055-160-028	subdivide 14.77 acres into 9 lots
23	Pending	104 Via Tusa	055-240-005	subdivide 9.42 acres into two lots (one is 5.71 acres and the other is 3.71 acres)
24	Approved	100 Via Tusa	055-240-004	construct a 3,533 sf residence
25	Building permit issued	288 Schulte Ln	055-230-003	2,988 sf residence
26	Pending	560 N La Cumbre	057-143-002	add 10,600 sf (the sanctuary building and five residences) to an existing church
27	Building permit issued	3965 Via Lucero	057-233-027	construct three condos
28	Pending	85 N La Cumbre Rd	057-233-010	demolish existing 10 units and construct 9 new condos
29	Building permit issued	4004 Via Lucero	057-210-023	demolish existing residential and commercial, construct 13 new condos (10 two-bedroom units and 3 three-bedroom units)
30	Pending	2215 De La Vina St	025-181-013	change 2 residential units at the Encina Lodge Hotel to hotel units
31	Pending	427 W Pueblo St	025-171-040	add 2,497 sf to the existing medical office (total is 7,422 sf) and demolish an existing 976 sf residence
32	Pending	222 E Junipero St	025-132-019	revised design for a SFH
33	Approved	2113 Castillo St	025-221-011	demolish existing 3 dwelling units, construct 6 new one-bedroom condos
34	Building permit issued	116 W Los Olivos St	025-183-013	demolish the existing SFH and construct two SFH
35	Building permit issued	1919 Castillo St	025-351-006	demolish the existing 4 car garages and construct a 2,485 sf detached duplex. The existing 2,078 sf duplex is to remain
36	Pending	2559 Puesta Del Sol	023-271-003	propose for Mission Creek Restoration plan and five-year plan for Museum of Natural History for small additions/relocations
37	Approved	2410 Fletcher Ave	025-052-022	construct an attached 1,250 sf addition to the first floor of the existing building
38	Building permit issued	2528 Orella St	025-022-022	demolish 314 sf garage and construct a 1,271 sf residential unit and a 744 sf residential unit. Existing 892 sf residential unit is kept
39	Pending	2515 Orella St	025-021-007	conversion of an existing 7 units of multi-family residential to 7 condos
40	Approved	320 W Pueblo St	025-102-001	demolition of existing 280,090 sf hospital building and construct 434,955 sf hospital building including two parking structures
41	Approved	510 W Pueblo St	025-090-020	demolish the existing 976 sf SFH and 324 sf garage to a commercial office
42	Pending	2028 Castillo St	025-292-028	demolish the existing 1,991 sf duplex and 461 sf garage and construct 4 condos (two 1,565 sf two-bedroom units and two 1,839 sf one-bedroom units)
43	Pending	4151 Foothill	Unknown	annexation and construction of 60,000 sf office building
44	Building permit issued	4200 Calle Real	059-240-020	75 affordable rental units and 95 affordable senior units
45	Unknown	101 S La Cumbre Rd	N/A	Demolish 1,656 sq ft gas station and add 6,745 sq ft commercial building
46	Unknown	319 W Alamar	N/A	Merge four parcels, demolish 4 SFR and construct 7 new condos
47	Pending	3757 State St	051-040-046	63,400 sf commercial/retail, 15 residential units, 281 parking spaces, remove the existing commercial 56,545 sf
48	Unknown	3880 State Street	N/A	Demolish vacant nursery buildings, add mixed-use building with 4,916 new new commercial sq ft and 7 new condos

**Table 5 indicates projects used in study analysis*

TABLE 6: CUMULATIVE LAND USE TRIP GENERATION

Project No.	Project Status	Address	Planning Case No.		Existing		Proposed	Net PM Peak-Hour Trips	
					Existing Land Use	Size	Description	In	Out
2	Pending	1235 Veronica Spring	047-010-039	MST2003-00793	Residence	28,700 sf	Demolish the existing 28,700 sf Hillside House facility and construct 127 new dwelling units, admin office, community center, leasing office, non-profit space, and therapy pool	51	28
7	Pending	15S Hope Ave	051-040-058	MST2004-00594		8,288 sf	Remove an existing commercial structure and construct 16 units condo and 360 sf commercial and 10,780 sf garage.	-9	-13
11	Pending	3305 State St	051-100-001	MST2004-00408	Commercial		Add 1,638 sf to Gelson's Market	9	8
13	Pending	301 S Hope Ave	051-240-019	MST2003-00135	Auto service	25,207 sf and 60 parking spaces	Add 466 sf (4 service bays), relocate existing wash bay, add 1 wash bay and convert existing 408 sf storage to training room	1	1
18	Pending	3714 State St	053-300-023	MST2003-00286	Hotel	52,815 sf, 113 rooms	Demolish existing hotel and construct a 63,166 sf hotel with 112 rooms and 77 residence condos	-8	-4
22	Pending	1156 N Ontare Rd	055-160-028	MST2006-00360		14.77 acres	Subdivide 14.77 acres into 9 SFR lots	6	3
26	Pending	560 N La Cumbre	057-143-002	MST2005-00688	Church		Add 10,600 sf (the sanctuary building and five residences) to an existing church	4	3
29	Building permit issued	4004 Via Lucero	057-210-023	MST2003-00084	Mix-used		Demolish existing residential and commercial, construct 13 new condos (10 two-bedroom units and 3 three-bedroom units)	5	2
31	Pending	427 W Pueblo St	025-171-040	MST2003-00751	Mix-used	4,925 sf medical office and 976 sf residence	Add 2,497 sf to the existing medical office (total is 7,422 sf) and demolish an existing 976 sf residence	2	6
37	Approved	2410 Fletcher Ave	025-052-022	MST2004-00872		12,136 sf three-story building	Construct an attached 1,250 sf addition to the first floor of the existing building (Medical Building)	1	3
40	Approved	320 W Pueblo St	025-102-001	MST2003-00152	Hospital	280,090 sf	Demolition of existing 280,090 sf hospital building and construct 434,955 sf hospital building including two parking structures	60	122
43	Pending	4151 Foothill	Unknown	Unknown			Annexation and construction of 60,000 sf office building	15	74
44	Building permit issued	4200 Calle Real	059-240-020	MST1998-00749	Vacant	17 acres	75 affordable rental units and 95 affordable senior units	45	26
45	Unknown	101 S La Cumbre	Unknown	Unknown	Gas Station	8 Fueling Stations (1,656 sf)	Demolition of a 1,656 sf gas station (8 fueling stations) and add a 6,745 sf commercial building (Vacant Site)	9	10
46	Unknown	319 W Alamar Ave	Unknown	Unknown	4 SFR	NA	Merge four parcels, demo 4 SFRs, and construct 7 condos	0	0
47	Pending	3757 State St	051-040-046	MST2005-00156	Commercial	56,545 sf	63,400 sf commercial/retail, 15 residential units, 281 parking spaces, remove the existing commercial 56,545 sf	34	34
48	Unknown	3880 State Street	Unknown	Unknown	Vacant Nursery Buildings	Unknown	Demolition of vacant nursery buildings, add mixed-use building with 4,916 net new commercial sf and 7 new condos	9	8
Note: Net trips are the difference between the "baseline" trip generation using ITE trips rates and the projected trip generation for the proposed project. If Baseline exeeds projected, net trips would be negative.							Net Total Trip	234	311

E. Traffic Operations

Surface street traffic conditions are characterized using Level of Service (LOS) ratings of A through F at signalized intersections. LOS ratings are based on V/C ratios. Volume (V) is the amount of traffic at the intersection compared to Capacity (C), the maximum amount of traffic the intersection is physically designed to accommodate. LOS A (0.00 to 0.60 V/C, up to 60% of capacity) represents the best possible free-flow traffic conditions, and LOS F (1.01+ V/C, or more than 100% of capacity) represents very congested or stopped conditions. Typically, at LOS A the motorist does not experience any delay at intersections, while at LOS E and F the motorist will experience substantial delay and may be forced to wait through multiple signal cycles to get through an intersection.

At intersections where there are a significant number of vehicles that turn right while the red light is on (right turn on red or RTOR) the effective right-turn volume used for the V/C analysis can be reduced. For intersections where the right-turn volume is used in determining V/C ratio (referred to as being one of the critical movements) the V/C ratio has been calculated using both the with- and without-RTOR volumes. In the following LOS summary table these intersections are listed twice showing the without-RTOR V/C and LOS on the first line and the with-RTOR results on the second. The calculation for both volume sets is shown to illustrate the importance that RTOR has at those intersections in providing acceptable operating conditions.

The City General Plan establishes LOS C as its goal and standard for the maximum acceptable peak-hour intersection congestion level during the heaviest daily travel times. LOS C has a range of 71-80% of capacity (0.71 - 0.80 V/C). At LOS C, progression slows, and motorists often must stop at red lights, and possibly a second red light for some turning movements, before getting through the intersection. In evaluating development proposals for traffic effects, the City uses 0.77 V/C as a standard level for identifying intersections that are close to exceeding the LOS C range during peak travel times, and are therefore considered "impacted" intersections.

Traffic operations analysis for the 24 study area intersections included the following three traffic scenarios:

- "*Existing Traffic Conditions"* at area intersections during the PM peak-hour traffic period based on the existing traffic counts.
- "*Potential Baseline Traffic Conditions"* which includes Existing Traffic Conditions plus potential additional traffic trips that could be generated within existing buildings if low trip-generating land uses intensified up to ITE trip-generating levels.
- "*Potential Future Cumulative Traffic Conditions*" which includes Potential Baseline Traffic Conditions plus potential additional traffic trips through the year 2016 from Approved and Pending development projects in the surrounding City and County areas that would intensify land uses and send additional traffic to area intersections and a 0.25 percent ambient annual background traffic growth rate (2.5% total ambient growth).

For existing conditions, the analysis reviewed both the weekday midday and PM peak hours. For the Baseline and Plus-Cumulative scenarios, only the PM peak hour was evaluated as the analysis of the existing conditions indicated that the two time periods have very similar traffic operations.

Using the results of the "cumulative" analysis, the remaining traffic capacity at the analyzed intersections was calculated. The "remaining traffic capacity" is the difference between the V/C values for the intersections from the cumulative analysis and the City policy goal LOS C range. The remaining capacity, or reserve capacity, was calculated using both the City's LOS C policy goal limit of 0.80 and the "impacted" condition limit of 0.77.

1. Existing Traffic Conditions

The existing conditions analysis was based on the traffic count data and the existing land uses in the corridor. Table 7 summarizes the Level-of-Service analysis for the Upper State Street area intersections. A summary of the traffic count data collected for the study area intersections is presented in Figure 3. The results of the capacity analyses show that most of the intersections in the corridor operate at an acceptable LOS based on the City's standards and that vehicle delays in the corridor are relatively low as illustrated in Figure 4. However, two intersections have V/C ratios that equal or exceed the City's impacted intersection criterion of 0.77 during either the midday or PM peak hours, but are still within the City's LOS C limit of 0.80. The two locations that have V/C's at or above 0.77 are the intersections of State Street with Las Positas Road/San Roque Road (midday) and Las Positas Road with Calle Real (PM). Based on the configuration of the area street system and the development in the corridor these intersections would be expected to have higher V/C ratios as the streets provide regional access and/or access for several large-scale developments.

It should be noted that drivers may perceive traffic operating conditions during peak periods to be worse than the LOS C conditions at the intersections. This is likely due to other conditions in the corridor such as numerous driveways in mid-blocks that create turns on and off of State Street at multiple locations and conflicts with bicyclists, pedestrians, and buses. These conditions slow traffic and create delay; however they are not reflected in the intersection LOS analysis results.

2. Potential Baseline Traffic Conditions

The driveway traffic surveys identified eight sites that generated fewer trips than the ITE average trip generation rates for the land use(s) during the PM peak hour. If these sites were more active they could generate additional trips within the corridor without any discretionary permits or redevelopment of the sites. To identify what traffic conditions would be if these sites were generating trips at a rate equal to the ITE average rates, the additional trips previously identified in Table 4 were assigned to the area streets and intersections based on traffic distribution percentages published in other area traffic studies and on existing traffic patterns. This land use and trip scenario is called the potential baseline scenario. The resulting intersection volumes are illustrated in Figure 5. The potential baseline intersection Levels of Service rating and volume-to-capacity ratios are illustrated in Figure 6.

TABLE 7: SUMMARY OF INTERSECTION PEAK-HOUR VOLUME-TO-CAPACITY RATIOS AND LOS

	Intersection	Existing				Potential Baseline PM Peak Hour			Future Cumulative Year 2016 PM Peak Hour			Remaining Capacity to Threshold / Limit			
		Midday		PM											
		V/C	LOS	V/C	LOS	V/C	LOS	V/C Change	V/C	LOS	V/C Change	CEQA Threshold Level	Remaining V/C to Threshold (0.77)	Full LOS C Range	Remaining V/C to LOS C Limit (0.80)
1	Highway 154 at Calle Real	0.51	A	0.60	A	0.60	A	0.00	0.65	B	0.05	0.77	0.12	0.80	0.15
2	Highway 154 at Highway 101 SB On-Ramp	0.38	A	0.46	A	0.46	A	0.00	0.49	A	0.03	0.77	0.28	0.80	0.31
3	Highway 101 Off-Ramp at State Street	0.56	A	0.68	B	0.68	B	0.00	0.72	C	0.04	0.77	0.05	0.80	0.08
4	Highway 154 at State Street	0.44	A	0.52	A	0.52	A	0.00	0.54	A	0.02	0.77	0.23	0.80	0.26
5	Highway 101 NB Off-Ramp at State Street	0.57	A	0.64	B	0.64	B	0.00	0.67	B	0.03	0.77	0.10	0.80	0.13
6	La Cumbre Road at State Street	0.62	B	0.70	B	0.73	C	0.03	0.75	C	0.02	0.77	0.02	0.80	0.05
	La Cumbre Road at State Street - With RTOR			0.68	B	0.71	C	0.03	0.73	C	0.02	0.77	0.04	0.80	0.07
7	Plaza Avenue at State Street	0.63	B	0.63	B	0.63	B	0.00	0.66	B	0.03	0.77	0.11	0.80	0.14
8	Hope Avenue at State Street	0.76	C	0.72	C	0.72	C	0.00	0.76	C	0.04	0.77	0.01	0.80	0.04
9	**Hitchcock Way at State Street**	0.67	B	0.71	C	0.71	C	0.00	0.77	C	0.06	0.77	**0.00**	0.80	0.03
10	Ontare Road at State Street	0.66	B	0.61	B	0.61	B	0.00	0.64	B	0.03	0.77	0.13	0.80	0.16
11	Broadmoor Plaza at State Street	0.62	B	0.66	B	0.66	B	0.00	0.69	B	0.03	0.77	0.08	0.80	0.11
12	**Las Positas Rd./San Roque Rd. at State St.**	**0.78**	C	0.75	C	0.75	C	0.00	**0.78**	C	0.03	0.77	**-0.01**	0.80	0.02
	Las Positas/San Roque at State - With RTOR			0.69	B	0.70	B	0.01	0.72	C	0.02	0.77	0.05	0.80	0.08
13	De la Vina Street at State Street	0.48	A	0.50	A	0.50	A	0.00	0.52	A	0.02	0.77	0.25	0.80	0.28
14	Calle Laureles at State Street	0.52	A	0.49	A	0.49	A	0.00	0.52	A	0.03	0.77	0.25	0.80	0.28
15	Alamar Avenue at State Street	0.58	A	0.58	A	0.58	A	0.00	0.62	B	0.04	0.77	0.15	0.80	0.18
16	Alamar Avenue at Foothill Road	0.45	A	0.61	B	0.61	B	0.00	0.65	B	0.04	0.77	0.12	0.80	0.15
17	La Cumbre Road at Plaza Ave	0.60	A	0.69	B	0.69	B	0.00	0.72	C	0.03	0.77	0.05	0.80	0.08
18	La Cumbre Road at Calle Real	0.57	A	0.65	B	0.65	B	0.00	0.69	B	0.04	0.77	0.08	0.80	0.11
19	La Cumbre Road at Highway 101 SB ramps	0.47	A	0.52	A	0.52	A	0.00	0.56	A	0.04	0.77	0.21	0.80	0.24
20	Hope Avenue at Calle Real	0.58	A	0.65	B	0.65	B	0.00	0.70	B	0.05	0.77	0.07	0.80	0.10
21	Hitchcock Way at Calle Real	0.40	A	0.46	A	0.46	A	0.00	0.53	A	0.07	0.77	0.24	0.80	0.27
22	Calle Real at Highway 101 NB On-Ramp	0.67	B	0.74	C	0.74	C	0.00	0.76	C	0.02	0.77	0.01	0.80	0.04
23	**Las Positas Road at Calle Real**	0.73	C	**0.79**	C	**0.79**	C	0.00	**0.83**	D	0.04	0.77	**-0.06**	0.80	**-0.03**
	Las Positas Road at Calle Real - With RTOR			0.70	B	0.70	B	0.00	0.73	C	0.03	0.77	0.04	0.80	0.07
24	Las Positas Road at Highway 101 SB Ramps	0.68	B	0.70	B	0.70	B	0.00	0.73	C	0.03	0.77	0.04	0.80	0.07

Notes: V/C - Volume-to-Capacity ratio; RTOR = Right turn on red (calculation reflects reduction in delay from some vehicles turning while the red light is displayed to that intersection approach - see text for further description)

Locations with RTOR results are those intersections where RTOR volumes are critical to calculating the intersection V/C ratios and level of service and data was available.

LOS = Level of Service (A = 0.00 to 0.60, B = 0.61 to 0.70, C = 0.71 to 0.80, D = 0.81 to 0.90, E = 0.90 to 1.00, F > 1.00)

Intersections 12 and 14 are locations where the V/C ratio was determined to be higher for the midday than the PM peak hour for existing conditions. In both locations the difference was 3 percent (0.03).

No physical or operational improvements have been included in the calculation of the future year V/C values.

Intersections in bold print have V/C ratios equal to or higher than the CEQA threshold of 0.77

The intersection of Las Positas/San Roque/Sate Street may have a V/C ratio that exceeds LOS C limit (0.80) for the midday peak hour depending on future development.

City of Santa Barbara acceptable V/C limit is LOS C or 0.80.

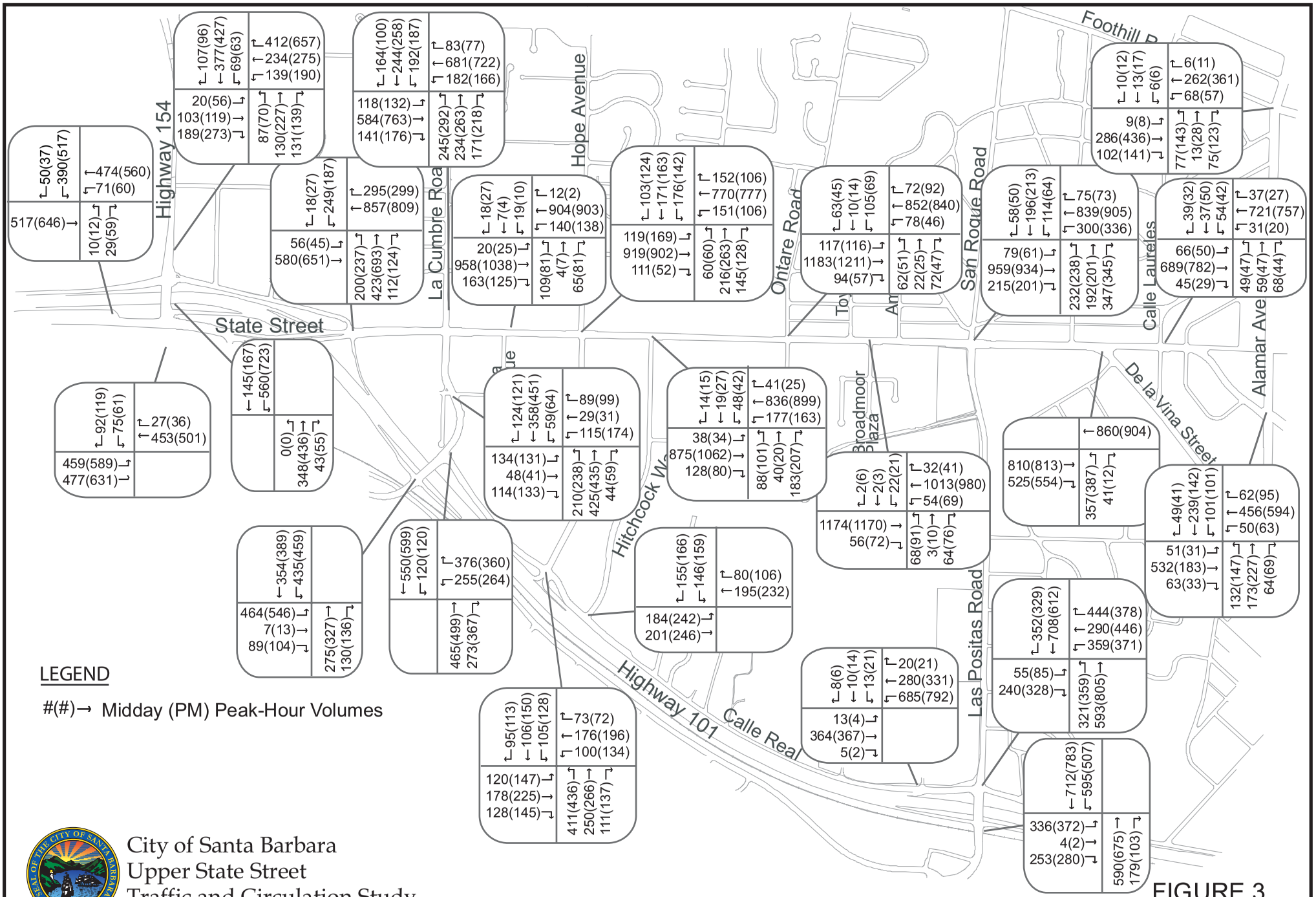


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FIGURE 3
Existing Weekday Midday and PM Peak-Hour Traffic Volumes

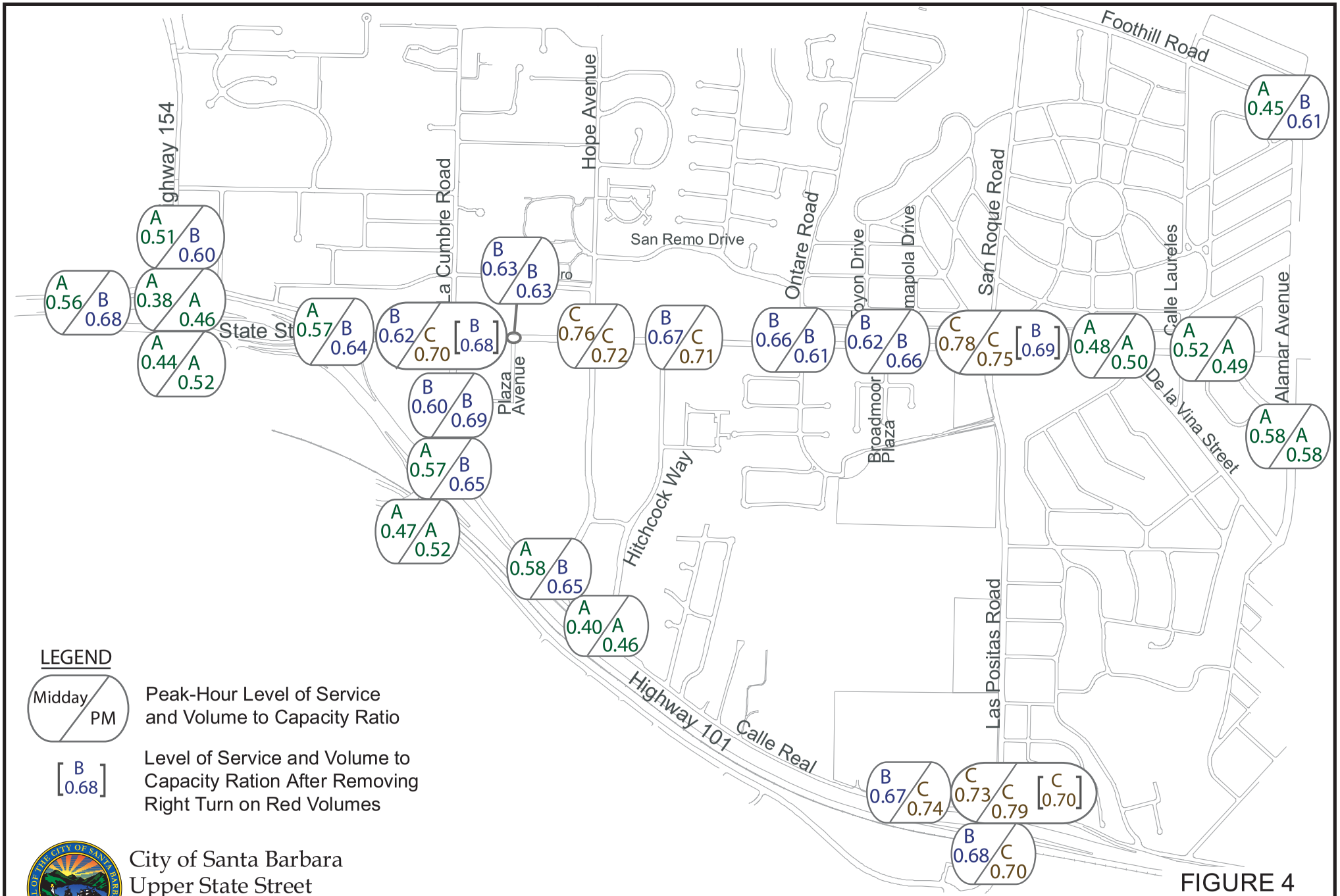

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FIGURE 4
Existing Weekday Midday and PM Peak-Hour Levels of Service and Volume-to-Capacity Ratios

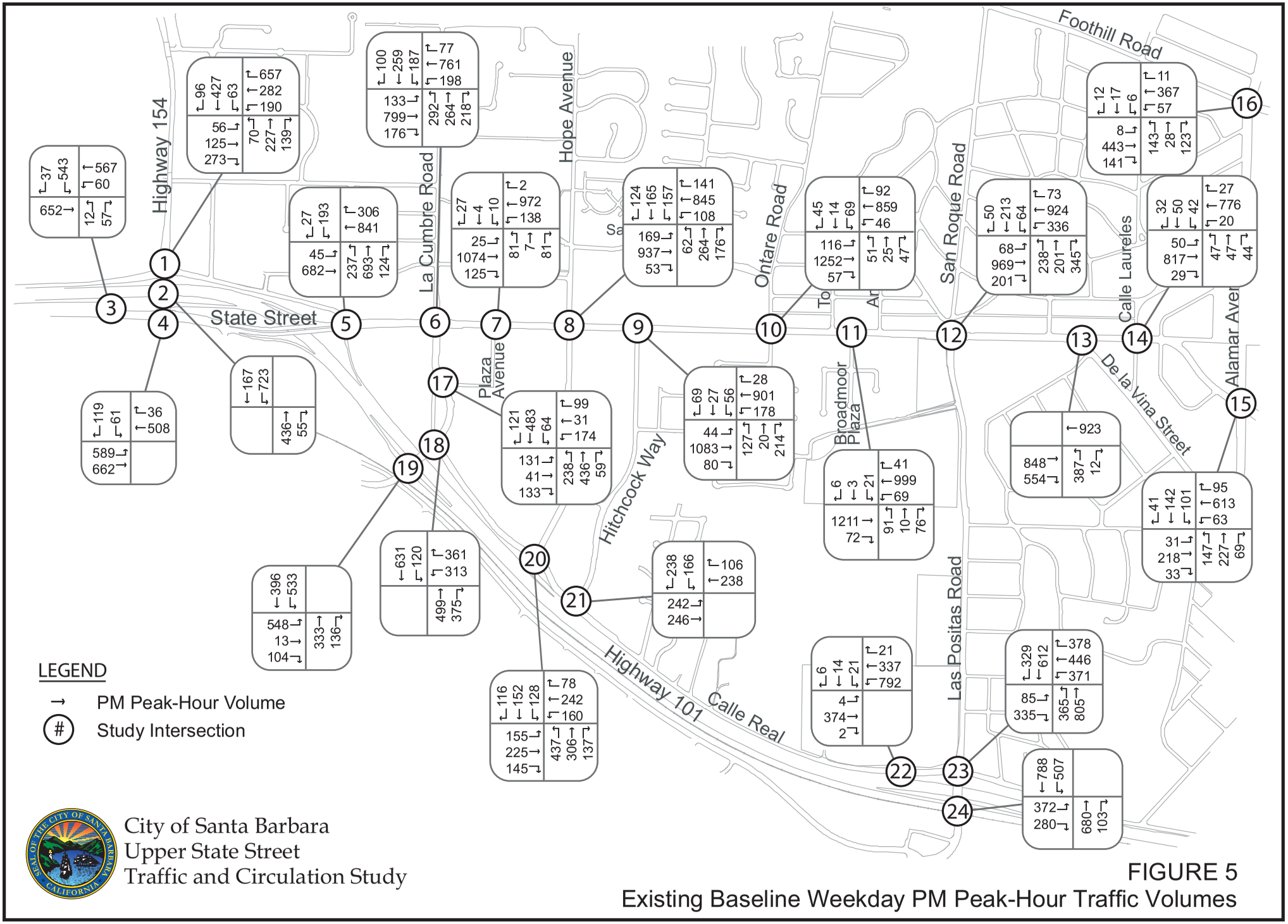

FIGURE 5
Existing Baseline Weekday PM Peak-Hour Traffic Volumes

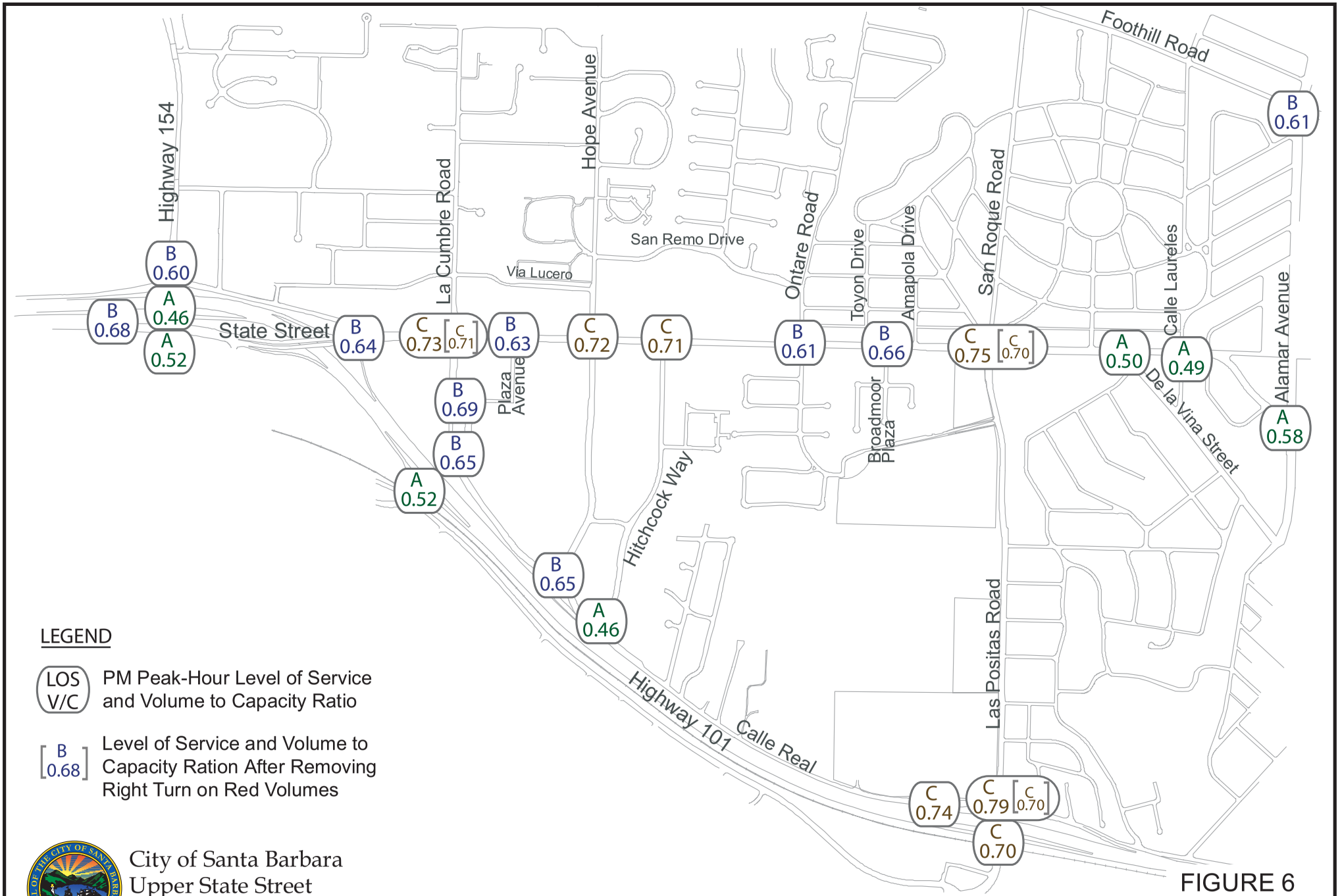

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FIGURE 6
Existing Baseline PM Peak-Hour Levels of Service and Volume-to-Capacity Ratios

The results indicate that the same intersections that were operating with V/C ratios equal to or above 0.77 in the existing condition would continue to do so with these trips added. The intersection of State Street with San Roque/Las Positas is expected to have a V/C level of about 0.79. Also, more intersections would have V/C ratios above 0.70. None of the remaining study locations would exceed the 0.77 V/C thresholds with the addition of potential trips from the lower generating parcels.

Because there are no ITE approved rates for many land uses during the midday peak period and the midday and PM peak hour operations are not significantly different, the remaining land use trip generation and traffic analysis focuses on the PM peak hour.

3. Potential Future Cumulative Traffic Conditions

The next step is to assess possible future conditions by adding potential additional trips from the approved and pending project proposals to the potential baseline condition. The trips generated by the previously discussed cumulative projects were added and assigned to the area streets and intersections. The result is the Potential Future Cumulative scenario. The total assigned traffic volumes for this scenario are presented in Figure 7. The results of the traffic analysis indicate that three intersections will experience V/C ratios at or above the 0.77 level, as shown in Figure 8. These are the intersections of State Street with Hitchcock Way (0.77), State Street and Las Positas Road/San Roque Road (0.78), and Calle Real and Las Positas Road (0.83). In addition, 10 other intersections will have V/C ratios equal to or exceeding 0.70. The results of the V/C analysis for this scenario are summarized in Table 7.

4. Projected Remaining Intersection Capacity

Using the results from the potential future cumulative traffic conditions analysis, the amount of remaining capacity remaining at each intersection up to the City's impacted intersection criteria of 0.77 and target LOS C limit of 0.80 were tabulated. Table 7 summarizes the result of that analysis.

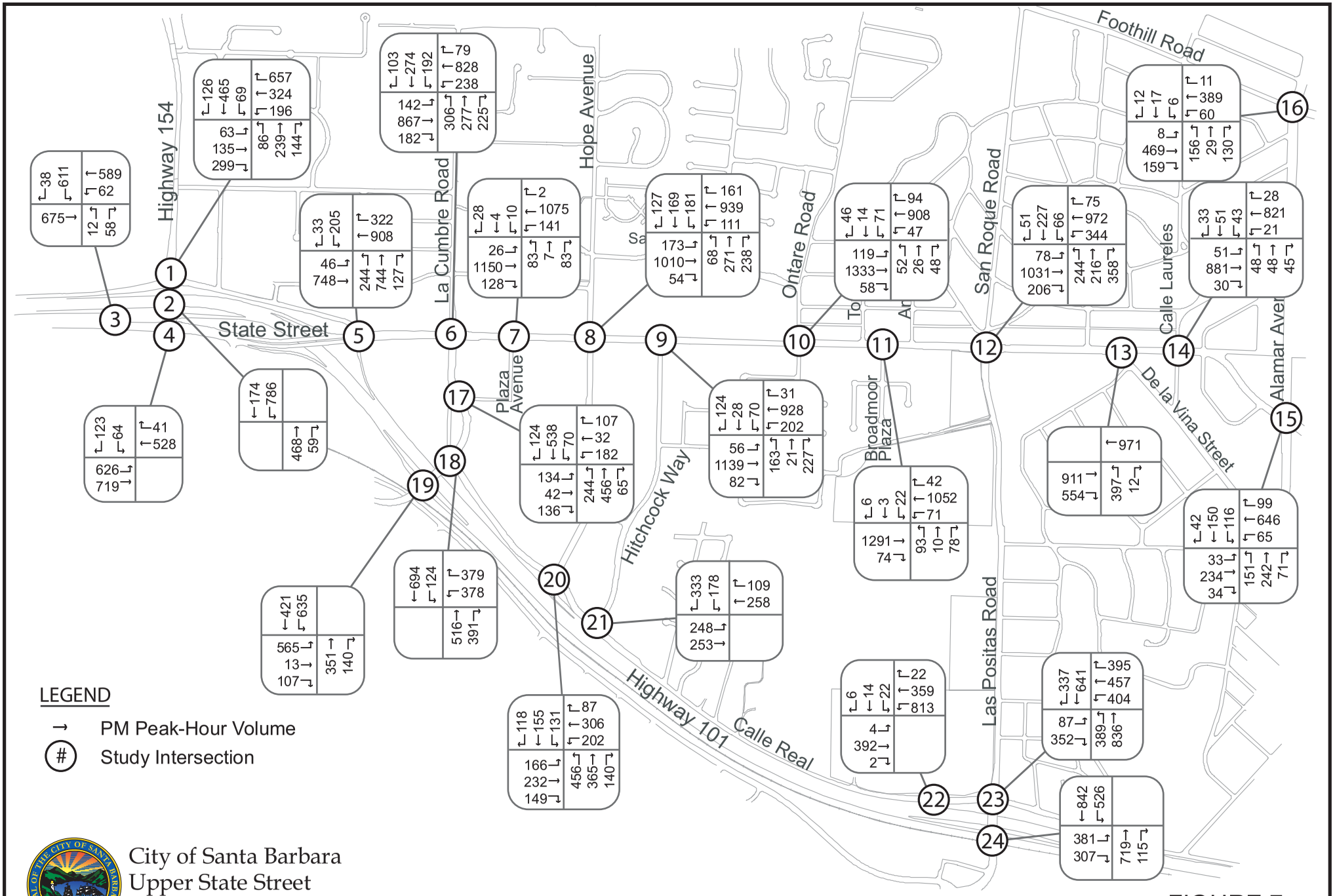

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FIGURE 7
Potential Future Cumulative Weekday PM Peak-Hour Traffic Volumes

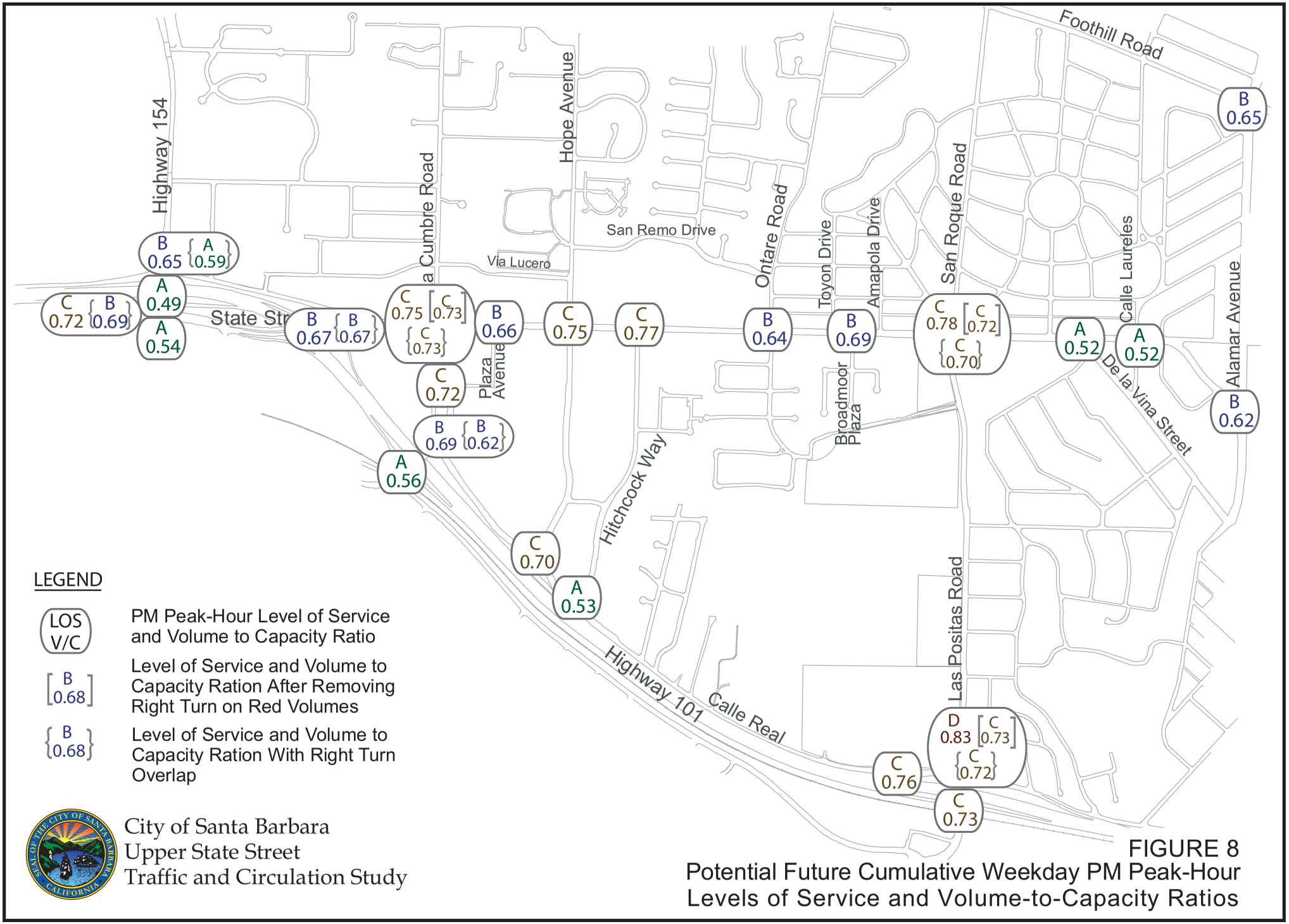

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FIGURE 8
Potential Future Cumulative Weekday PM Peak-Hour Levels of Service and Volume-to-Capacity Ratios

F. Mid-Block Congestion

In addition to congestion at the intersections along Upper State Street, congestion is also experienced by people along the mid-block sections. This was observed during the field reviews and expressed by several people during the public review process. This congestion is caused by conflicts at the many driveways along State Street (vehicle, bicycle, and pedestrian), driveway geometries that do allow for faster turns from the street, and turning vehicles at median openings.

As experienced along Upper State Street, one of the important understandings of traffic congestion and increased collision rates has been the acknowledgment that the frequency of access points and the type of access is the single most important roadway element generating these problems. Studies and research projects by the Federal Highway Administration (FHWA), the National Cooperative Highway Research Program (NCHRP), and sponsored by the American Association of State Highway and Transportation Officials (AASHTO) - all have concluded that access connections, as roadway design elements, create conflicts for motorists as vehicles enter, maneuver and exit the roadway. In an urban environment like Upper State Street, these conflicts also include pedestrians and bicyclists as they cross these access points. As access frequency increases, travel delay and collisions increase; and as access proliferates, the functional performance of the roadway will decline.

Traffic signals and access maneuvers contribute to travel delays, congestion and loss of capacity. Traffic controls and operations are made more complicated by the need to accommodate frequent access locations. This is obvious along Upper State Street where there are frequent signalized intersections and crosswalks, multiple uncoordinated driveways into small buildings and commercial areas, and long median breaks that allow left-turn access into these small driveways. Left turns onto State Street are restricted in areas with raised medians, and where allowed, may be difficult during periods of traffic. Some dangerous and illegal maneuvers have also been observed; and high concentrations of collisions occur at select driveways. In some locations, there is constrained or less than adequate off-street parking.

The minimum driveway and median opening spacing and clearances would be even larger for entirely new parcels in a newly developing area. However, in a location such as Upper State Street these access points and median openings developed over time given the development patterns, lot frontage sizes, and other characteristics of the study area. Incremental changes, such as access guidelines and physical design changes that would eliminate driveways over time, create more uniform spacing, eliminate direct conflicts, move driveways away from intersections and consolidate parcels are presented later. These guidelines and geometric changes would be highly beneficial to improving traffic flow, reducing delay, and reducing certain types of collisions over time.

G. Traffic Collision Data

Figure 9 illustrates the collision totals and collision patterns for study intersections and key blocks along State Street and in the study area. Collision data was evaluated for a four-year period from 2002 to 2005. During that period, there were a total of 386 reported collisions, with 179 at intersections, 125 reported collisions mid-block along State Street, and 82 reported collisions mid-block along other streets besides State Street in the study area. In general, the locations with the highest number of collisions occur at the locations with the highest traffic volumes, as expected. It is important to note that these data represent reported collisions and that minor collisions are sometimes unreported. Also, it is important to note that collisions at intersections or major mid-block driveways are often analyzed in terms of the collision "rate." The rate helps us to understand the number of collisions based on the entering volume of vehicles. Locations with higher rates than the average may indicate the need for some type of remediation. This study does not consider collision rates and focuses on total collisions at a location and the patterns of those collisions. In many cases, where the number of collisions is low and there is no pattern, the collisions may be solely due to driver inattention or other driver error and are not correctable through roadway or traffic control modifications.

As shown in the figure, all of the analyzed intersections have at least one collision. The numbers of collisions and type of collision at each intersection have been categorized. Four of the study intersections have over 15 collisions in the four year period. Three of those are along State Street (at Hope Avenue, Ontare Road and San Roque Road), and the fourth is Las Positas at Highway 101 ramps. The intersection with the highest number of collisions during the four-year period is State Street and Hope Avenue, with a total of 22 collisions.

The collision data have been reviewed to determine if there are any obvious patterns that can be identified in terms of the collision factor, severity, direction, time of day, or other pattern. Identification of patterns is important to determine if there are appropriate traffic engineering solutions that may be applied to attempt to reduce the number or severity of collisions. At locations where there are very few collisions, or where the types of collisions vary widely, a discernible pattern may not emerge.

It is very important to note that a preliminary planning-level review of collision patterns such as conducted for this study is only one of the measures that should be taken to evaluate collisions and cannot by itself be used to determine remedial measures. Other detailed engineering data including traffic volumes, existing regulations and controls, lane configurations, slopes/grades, existing pavement markings and other factors must be considered by a professional traffic engineer. Thus, this review of collisions is conducted on the planning level only, and (where warranted based on the number and type of collisions) must be followed-up by a more detailed engineering review prior to the installation of any changes to roadway geometric conditions, traffic control or other conditions in the field. In addition, traffic safety improvements at particular locations may involve a series of successive steps to determine the best solution.

Evaluating the four intersections with the highest number of collisions indicates the following:

- State Street and Hope Avenue – Although a majority of the collisions at this location are rear end, the involved vehicles are from multiple directions. Similarly, the broadside collision data show that there are multiple collision factors such as driving under the influence (DUI), red light running and unsafe turns. Overall, the patterns at this intersection do not lead to a single physical or operational improvement recommendation that would reduce the number of collisions or severity. In general, however, rear end collisions at intersections, which is the predominate type at this location, would warrant review of day and nighttime visibility of the traffic signal indications, verify pavement conditions if a number of the collisions occurred during wet conditions, verify and provide proper yellow clearance interval for vehicles, provide the best possible signal progression to eliminate stops and verify visibility of all traffic signal heads.
- State Street and Las Positas Road/San Roque Road – Eight of the 17 collisions are broadside, and all but one of those involved a northbound vehicle. Based on this pattern it is recommended that the following factors be reviewed at this location: overall visibility, sight distance, lighting, visibility and placement of traffic signal indications, yellow signal clearance interval and other conditions as determined by the lead traffic engineer (City, County, Caltrans, or all, as appropriate).
- Las Positas Road and Highway 101 – Nine of the 16 collisions are broadside and all are related to unsafe turns of southbound left turning vehicles onto Highway 101. For this type of collision it is recommended that similar factors be reviewed as noted above such as sight distance, lighting, visibility and placement of traffic signal indications, yellow signal clearance interval and other related conditions.
- State Street and Ontare Road – Seven of the 17 collisions at this location are rear end/inattentive driver. Five are broadside due to red light running or unsafe turn. Similar to above, a review of visibility and sight distance may be appropriate depending on the resultant collision rate.

The evaluation of mid-block collision patterns indicates the following:

- As shown on Figure 9, the section of State Street with the highest number of collisions is the 3900 block. This section has 42 reported collisions and the next highest block has 16 reported collisions. Four other blocks have at least ten collisions, as illustrated.
- An evaluation of the collision types at this location reveals that 34 of the 42 were broadside. Of those, 28 were broadside collisions associated with westbound vehicles at or exiting the Five Points Center. Most of the other broadside collisions involved vehicles at the McDonalds driveway. This pattern indicates review of factors such as visibility of northbound and southbound vehicles to eastbound and westbound vehicles, speeds of eastbound and westbound vehicles on State Street, measurement of gaps in traffic for northbound and southbound vehicles exiting the driveways, sight distance/obstructions for northbound exiting vehicles, the potential to close the median at the Five Points entrance and reallocate traffic to other entrance/exit points (requires review of traffic implications of diversion), review of and possible improvements to signage and pavement markings, review of lighting and other appropriate factors.
- The other four blocks along State Street with ten or more reported collisions experience mostly rear end and broadside collisions. On those blocks, only five or six of one type of collision occurred, an average of just over one per year of each type. Given this limited

collision history (with only one of each type per year per block), it is not necessary to identify a physical or operational improvement that would address the collisions. However, as noted above, a pattern of rear end collisions would indicate a review of traffic signal progression, visibility of traffic signal heads and review of yellow clearance intervals.

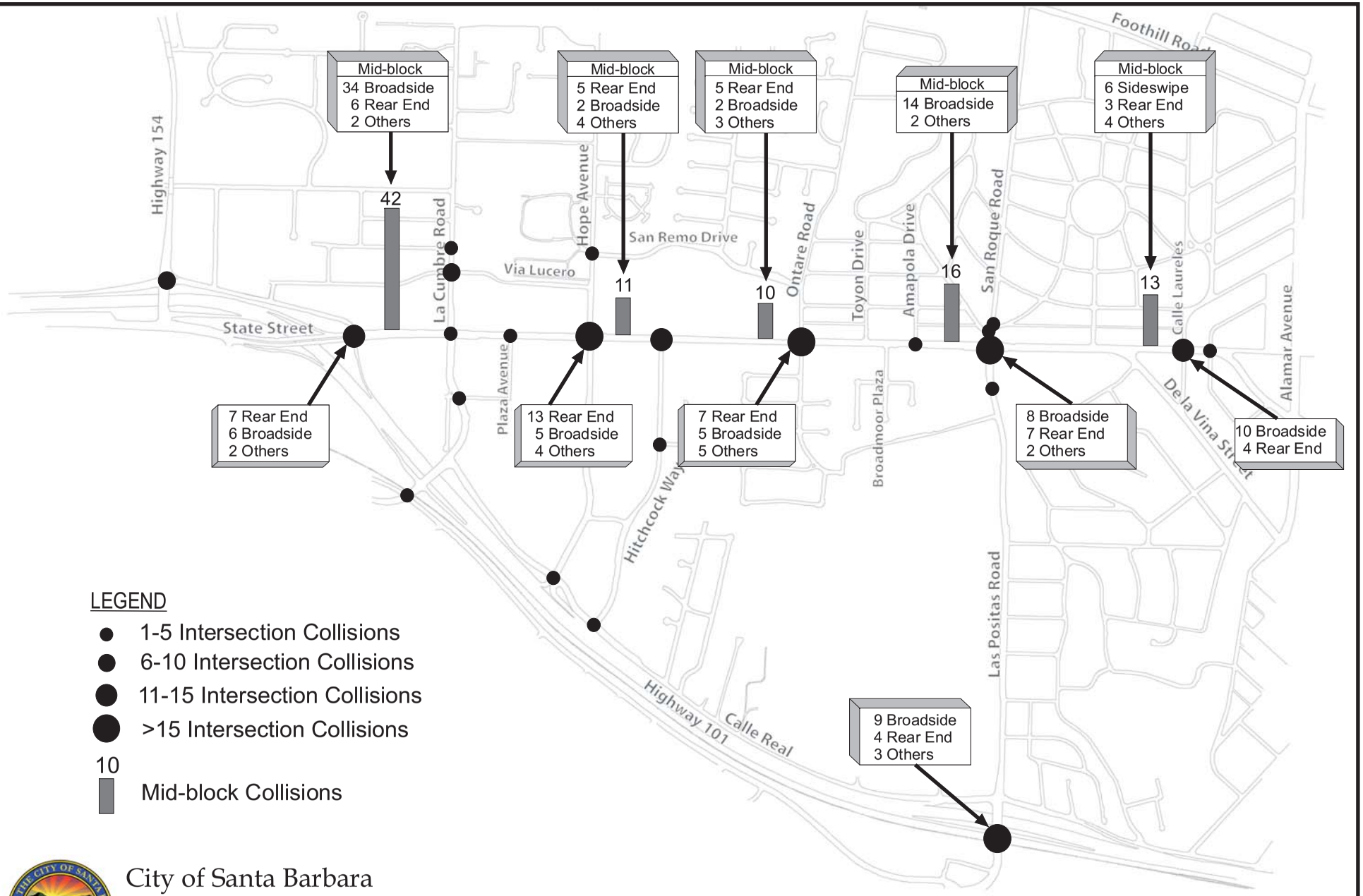

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FIGURE 9
Corridor Traffic Collision Summary (2002 - 2005)

III. Transit, Bicycle, and Pedestrian Travel

A. Transit Facilities, Operations, and Usage

1. Existing Conditions

Transit service is provided along the Upper State Street Corridor by the Santa Barbara Metropolitan Transit District (MTD). Six fixed-route bus services operate in the study corridor. The cost of a regular one-way fare is $1.25, the fare for seniors and persons with disabilities is 60 cents. Lines 6 (State/Hollister/Goleta) and 11 (State/Hollister/UCSB) traverse the corridor along Upper State Street providing service between the downtown Transit Center and Goleta and Camino Real Marketplace (Line 6) and the University of California at Santa Barbara (Line 11). Line 3 (Oak Park); via Las Positas, Hitchcock, and Calle Real; and Line 5 (Mesa/La Cumbre); via Cliff, Calle de los Amigos and Modoc; provide service between the Transit Center and La Cumbre Plaza. Line 8 (Calle Real) provides service from the Transit Center to Goleta via Calle Real, La Cumbre and Highway 101 (between Hope and Carrillo). Route 10 (Cathedral Oaks) provides service from La Cumbre Plaza and Camino Real Marketplace via La Cumbre and Cathedral Oaks. Table 8 summarizes existing transit services. Table 9 summarizes annual ridership levels for each line. The location of the bus routes and transit facilities in study area are illustrated in Figure 10.

TABLE 8: EXISTING STUDY AREA TRANSIT SERVICE

Line	Terminus	Terminus	Via	Peak Headway	Service Begins*	Service Ends*	Weekend Service
3 - Oak Park	Transit Center	La Cumbre Plaza	Las Positas/ State	30 Min	5:50 AM	7:30 PM	Yes
5 - Mesa/La Cumbre	Transit Center	La Cumbre Plaza	Cliff	30 Min	6:25 AM	10:00 PM	Yes
6 - State/ Hollister/Goleta	Transit Center	Camino Real Marketplace	State	30 Min	6:15 AM	6:15 PM	Yes
8 - Calle Real	Transit Center	Goleta	Calle Real	45 Min	6:00 AM	7:15 PM	Yes
10 – Cathedral Oaks	La Cumbre Plaza	Camino Real Marketplace	Cathedral Oaks	1 Hour	6:55 AM	4:55 PM	No
11- State/ Hollister/UCSB	Transit Center	UCSB	State	30 Min	6:00 AM	11:15 PM	Yes

** from downtown Santa Barbara Transit Center*

TABLE 9: ANNUAL MTD ROUTE RIDERSHIP

Route	Annual Ridership
3 (Oak Park)	262,137
5 (Mesa/La Cumbre)	272,430
6 (State/Hollister/Goleta)	703,258
8 (Calle Real)	297,923
10 (Cathedral Oaks)	37,340
11 (State/ Hollister/UCSB)	875,380

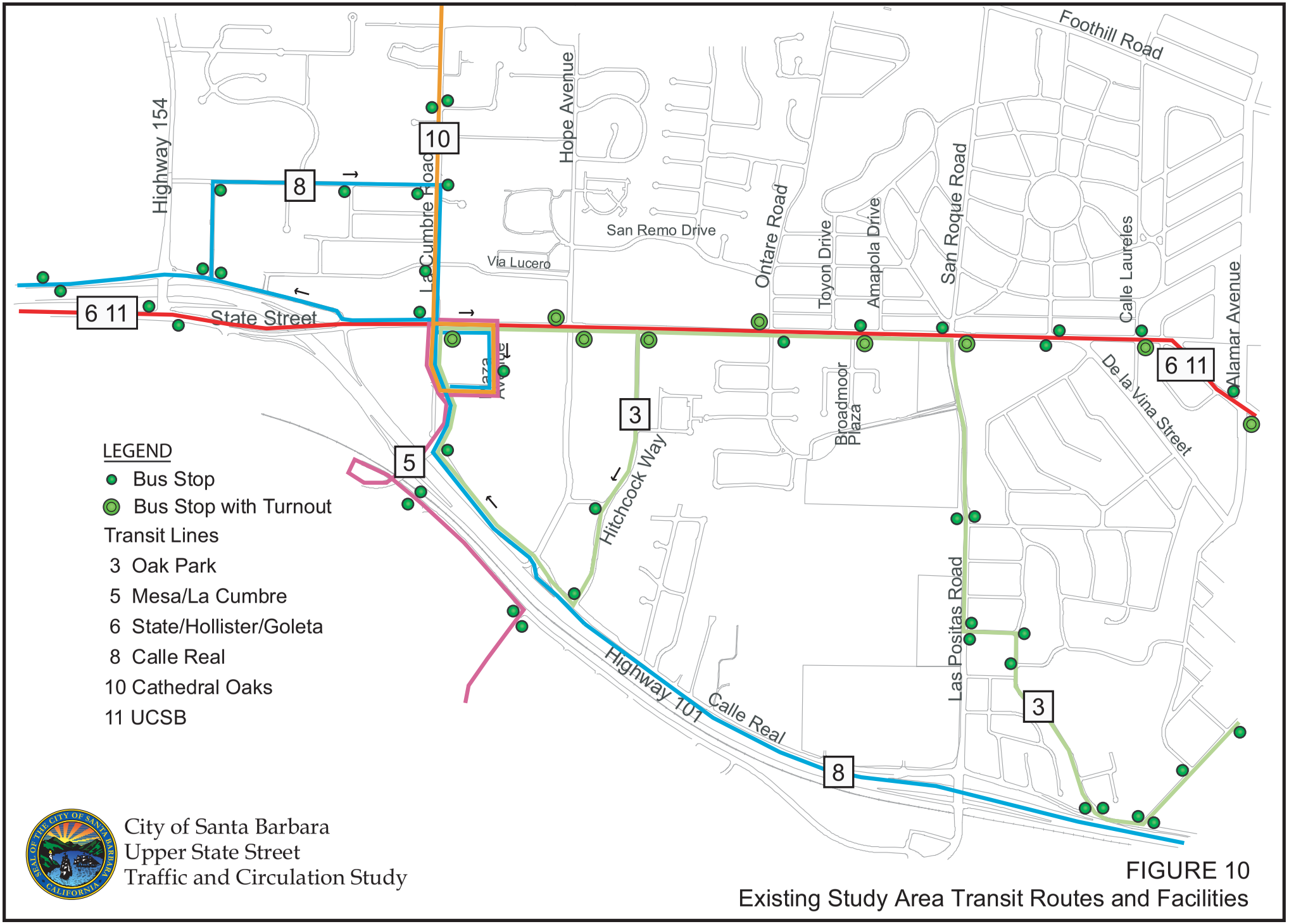

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FIGURE 10
Existing Study Area Transit Routes and Facilities

There are several bus bays (6 along eastbound and 2 along westbound State Street) that allow the buses to pull over for boarding and alighting. Striped on-street bicycle lanes with frequent bicyclist activity and many pedestrian crossings provide conflicts with the bus operations along State Street. Bus stops without bus pockets can delay travel in the curbside travel lane during boarding. Bus pockets are located at the following stops:

- Eastbound State Street at: La Cumbre, Hope, Hitchcock, Broadmoor, Las Positas, and Calle Laureles
- Westbound State Street at: Ontare and Hope

Although the headways for each line are 30 minutes, two of the lines (6 and 11) run in series along State Street and Hollister, meaning a bus arrival on average every 15 minutes. These two lines are going to 20 minute headways in January 2007, which means a bus every 10 minutes on average. The other lines also join State Street at various locations, so beginning in January one might see a bus every five to seven minutes along some blocks. The section of State Street with the highest concentration of buses is the block between La Cumbre Road and Plaza Avenue.

2. Existing Transit Facility Issues

The three key issues for transit operations in the study area are improving access and circulation conditions for existing transit vehicles, improving conditions for users, and increasing future ridership to reduce the amount of auto travel in the corridor.

As noted the study area is served by six MTD transit lines. However, several of these only stop in a small portion of the State Street corridor. Field observations and discussions with the transit district indicate that the bus routes in the study area are well used. Transit stops are located along many of the blocks in the corridor. Bus pocket lanes are located on the far side of several intersections along State Street. These assist the buses with being able to stop and board and/or alight passengers without impeding auto traffic on State Street. Currently, congestion along State Street is not high as V/C ratios are projected to be less than 80 percent at all but one or two intersections in the next 10 years. However, consideration could be given to the option for transit dedicated lanes in some portions of the study area. It is not recommended to remove any of the existing mixed flow travel lanes to accommodate buses because the existing and projected future traffic volumes along State Street suggest that the four through lanes along State Street will be required to accommodate auto traffic in the corridor. If additional transit capacity is desired along State Street to address future and periodic congestion related to spillover from Highway 101, the feasibility of augmenting and/or altering the right-of-way and streetscape to establish a dedicated transit lane could be investigated.

Providing riders with accurate and “real-time” information and convenience are ways of maintaining and improving ridership. The stops also reduce the amount of space available on already crowded sidewalks. The location of the fixtures at several stops are periodically a problem as their furniture is located within the right-of-way for the sidewalks and could be relocated to be less obtrusive to pedestrians. These relocated stops would also provide opportunities to provide riders with enhanced services such as real-time rider information (such as the number of minutes until the next bus arrives), schedule and service information, and shelters from the weather. At locations where several bus lines intersect, ridership levels may

warrant the development of a Transit Center to provide various rider services at a centralized location.

As noted above, the study area is served by several transit lines, but most serve only a portion of the corridor and each line has a relatively long headway. One option to provide more frequent service along a selected route or to an area is through a local shuttle. For this corridor, a system could connect to existing fixed bus routes, and could provide shoppers, residents, and employees the ability to get around within the corridor through the day efficiently at a low cost.

Increasing transit ridership in the corridor will ultimately go hand-in-hand with the amount and types of uses in the area that generate the riders. Today there does not appear to be a large unmet demand for additional transit services, and the relatively low amount of congestion in the study area would suggest that drivers are not being enticed from their vehicles to other modes by local congestion. However, longer-term regional congestion may encourage more transit use, but only if transit is provided as a viable option with good travel times and quality rider facilities.

B. Bicycle Facilities and Usage

1. Existing Conditions

On-street (Class II) bicycle lane facilities are present along both sides of the Upper State Street Corridor. Class II bicycle lanes, such as on State Street, are bike lanes which are striped on the roadway to provide a portion of the right-of-way for bicycle travel. Class I routes are physically separated from the roadway and Class III are not striped but are marked by signs only. Several cross streets also have Class II bicycle facilities including La Cumbre Road, Hope Avenue, Las Positas Road, Calle Real, De La Vina Street and Alamar Avenue.

The State Street Route connects to other Class II bicycle routes including the North Goleta Route at the intersection of Highway 154 and Calle Real; the Foothill Route via Las Positas Road, Hope Avenue, and La Cumbre Road; the Coast Route via Modoc Road and La Cumbre Road; and the Crosstown Route via La Cumbre Road.

Bicycle users are presented with several conflicts along the Upper State Street Corridor that are typical of a densely developed, multimodal corridor. Driveways with frequently turning vehicles and bus stops are conflict points between bicycles, cars, and buses. Intersections, right turning bays, and bus stop bays cause discontinuities and sharing conflicts with other modes.

Field observations of the bike lanes along State Street indicated that the lanes are regularly used by bicyclists and that groups riding along the corridor are not uncommon. This non-single file riding does not fit well into the narrow bike lanes along the corridor and several instances of riders two abreast with one or more riders traveling in the through lane were noted during field observations. Bicycle parking facilities for employees and customers exist at some businesses and not others.

2. Existing Bicycle Facility Issues

The bicycle facilities in the area are generally sufficient, but efforts should continue to improve facilities where possible. One significant improvement for the Upper State Street corridor would

be the elimination of some of the driveways along the corridor to reduce the number of potential bicycle/vehicle conflict points. The pavement condition should also be monitored along sections where on-street bike lanes are located to make sure bicyclists have clear smooth pavement allowing them to stay within the bike lane when they travel. The free eastbound-to-southbound right turn at the De La Vina/State intersection should be removed to eliminate a significant hazard for bicyclists wanting to continue east on State Street. Currently bikes musts cross the path of traffic in the right lane to continue east through the intersection. The City has plans to make this change to the intersection in the future. Businesses and employers should continue to provide amenities for bicyclists including adequate parking with bicycle racks, storage lockers for employees, and other facilities as outlined in the City's Bicycle Master Plan.

Increased bicycle use as a percentage of overall travel could help in reducing future congestion by reducing the number of autos. Conversely depending on the type of riders that are attracted to riding bikes instead of driving and the routes they use could reduce the overall capacity of the corridor by forcing motorists to slow where bikes are in travel lanes. Historically, bicycle ridership has never been consistently high enough to significantly reduce congestion along any corridor. As traffic levels increase along those streets that have on-street bike lanes or routes, conditions should be reviewed to determine if future traffic levels and existing bicycle facilities are compatible or whether alternative bike corridors need to be developed.

C. Pedestrian Facilities and Activity

Many portions of the Upper State Street corridor are very pedestrian-oriented with wide sidewalks and pedestrian amenities and have a regular flow of pedestrian traffic. Other areas are not as pedestrian-oriented, but still have a steady flow of pedestrian traffic. Based on field observations, the frequency of pedestrian activity seems to be based more on the land uses and the availability of transit than physical pedestrian facilities being provided. The highest concentration of pedestrian activity was observed near the La Cumbre/State Street intersection.

1. Existing Conditions

The corridor is accommodating to pedestrians with sidewalks along most of the major streets and pedestrian signals at all of the signalized intersections. Sidewalks are located on both sides of State Street with sidewalk provided along all of the side streets. Some local residential side streets do not have sidewalks, including Ampola Drive, Toyon Drive to the north, and Las Positas south of State Street.

Crosswalks are provided at all of the signalized intersections; however, countdown timer heads to assist the pedestrian in knowing how much crossing time is left are not present. Crosswalks are also provided at several unsignalized intersections including Calle Palo Colorado and across some of the approaches to the intersections of De La Vina with State and Samarkand. As discussed above, the City has plans to address the current design of the De La Vina and State Street intersection.

The sidewalks along State Street vary in width and composition. Some are as narrow as about 3 feet while others have over 10 feet of pavement. Many are likely not up to current ADA standards for accessibility and in sections where there are large street trees the condition of the pavement is patched and in many cases not matching other surrounding pavement materials. It

should be noted that the City is testing different sidewalk materials along the corridor. In addition to the overall narrow pavement in areas where there is restricted right-of-way, a significant problem in the corridor is street appurtenances (poles and control/utility boxes), street furniture (paper boxes, benches, etc.), and landscaping encroaching on the travel way and limiting the available sidewalk width.

In addition to the problem of the physical width of the sidewalk is the functional width. Many of the sidewalks along the south side of the corridor have medium height landscape walls adjacent to the sidewalk. However, many of the sidewalks along the north side do not. The effect of these walls is to visually narrow the sidewalks and direct pedestrians towards the street. With the presence of the street trees, the sidewalk appears to be even narrower than it is to the pedestrian. In other areas small curbing protrudes up to the edge of the sidewalk creating a tripping hazard for unobservant walkers.

2. Existing Pedestrian Facility Issues

Primary issues in the corridor for pedestrian facilities are inconsistent sidewalk widths and in some cases inadequate width, encroachment into the pedestrian area by objects, and poor pavement conditions especially in areas where there are large street trees. Table 10 summarizes sidewalk conditions and obstructions, based on field observations. Figures 11 through 13 illustrate some of these conditions for the State Street subareas of the corridor. In addition to the specific issues related to the pedestrian facilities, addressing deficiencies in the sidewalks and pedestrian facilities must be done in conjunction with a review of the street front landscaping guidelines for the corridor.

Pedestrian activity is related to the size, type, and location of land uses in the area and their compatibility with a pedestrian-oriented environment. Ultimately the need for pedestrian facilities is dependent on development decisions for the area. For this analysis, we have assumed that future land uses will be retained and developed in the area that would be supportive of a pedestrian-friendly environment and improved future facilities will be needed and should be accommodated.

TABLE 10: STATE STREET SIDEWALK CONDITIONS AND OBSTRUCTIONS

From	To	Signs	Trees / Landscaping	Sidewalk Width	Furniture	Street Encroachment	Utilities	Alternate Paving Materials
Calle Real	La Cumbre Road	Parking and misc. signs	Trees		Newspaper boxes	Right-Turn Lane		
La Cumbre Road	Plaza Avenue					Right-Turn Lane		
Plaza Avenue	Hope Avenue					Bus Stop Turnout		
Hope Avenue	Hitchcock Way					Right-Turn Lane		
Hitchcock Way	Ontare Road	Parking signs				Bus Stop Turnout		
Ontare Road	Toyon Drive	Parking signs	Large Trees					Sidewalk surface- brick pavers
Toyon Drive	Broadmoor Plaza		Large Trees				Traffic Signal Poles	
Broadmoor Plaza	Amapola Drive							
Amapola Drive	San Roque Road /Las Positas Road	Parking signs	Large Trees	Narrow sidewalk			Traffix signal poles	
San Roque Road /Las Positas Road	Calle Palo Colorado	Parking signs		Wide Sidewalk		Right-Turn Lane		
Calle Palo Colorado	De La Vina Street	Parking signs		Wide Sidewalk				
De La Vina Street	Calle Laureles	Parking signs		Wide Sidewalk				
SOUTH SIDE								
From	**To**	**Signs**	**Trees / Landscaping**	**Sidewalk Width**	**Furniture**	**Street Encroachment**	**Utilities**	**Alternate Paving Materials**
Calle Real	La Cumbre Road	Parking and speed limit signs		Narrow sidewalk		Right-Turn Lane	Light Poles	
La Cumbre Road	Plaza Avenue	Parking signs			Newspaper boxes	Bus Stop Turnout	Signal Box	
Plaza Avenue	Hope Avenue	Parking signs					Traffic Signal and Signal Box	
Hope Avenue	Hitchcock Way	Parking signs		Narrow sidewalk	Trash can at bus stop	Bus Stop Turnout		
Hitchcock Way	Ontare Road	Parking signs	Overgrown Bush			Bus Stop Turnout		
Ontare Road	Toyon Drive	Parking and speed limit signs	Large Trees				Light poles next to trees	
Toyon Drive	Broadmoor Plaza							
Broadmoor Plaza	Amapola Drive	Parking signs	Large Trees	Varying /narrow sidewalk	Newspaper boxes	Bus Stop Turnout and Right-Turn Lane		
Amapola Drive	San Roque Road /Las Positas Road							
San Roque Road /Las Positas Road	Calle Palo Colorado	Parking signs	Large Trees			Bus Stop Turnout		
Calle Palo Colorado	De La Vina Street							Tree root mats
De La Vina Street	Calle Laureles	Parking signs						

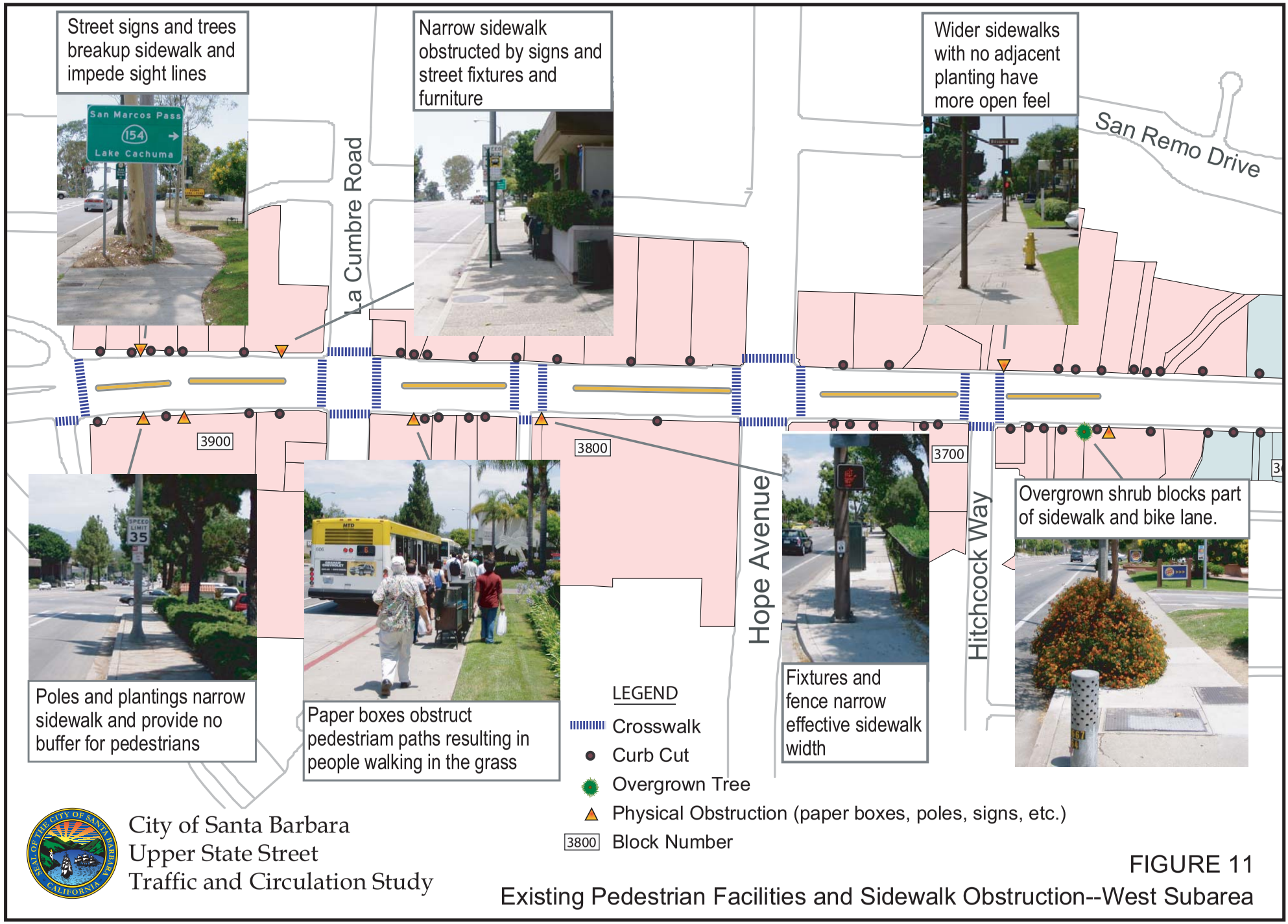

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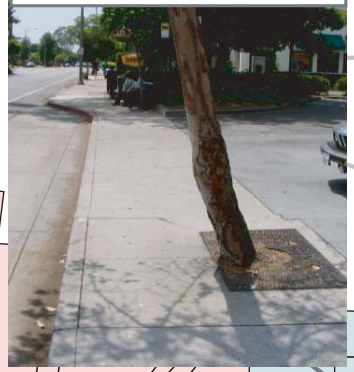
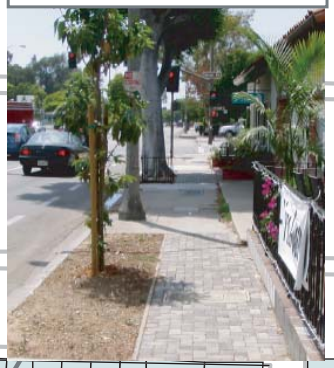
FIGURE 11

Existing Pedestrian Facilities and Sidewalk Obstruction--West Subarea

Leaning tree directs pedestrians towards the street



Soft paving material and fencing limit useable sidewalk width

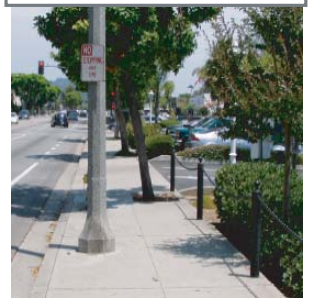


Overgrown trees and landscaping narrows sidewalk and limits view at driveway.

Sidewalk paving pattern and soft ground material limits useable width

Overgrown tree narrows sidewalk and limits sight line for bus stop

Poles and trees block pedestrian pathways



Overgrown tree blocks half the sidewalk width.

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FIGURE 12

Existing Pedestrian Facilities and Sidewalk Obstructions--Central Subarea

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FIGURE 13

Existing Pedestrian Facilities and Sidewalk Obstructions--East Subarea

IV. Parking

A parking assessment of the Upper State Street corridor was also conducted as part of this study. This included field review of existing on-street and off-street parking facilities, operational conditions, and access restrictions. A parking assessment, including parking demand surveys, has been conducted at three key prototypical/representative sites to provide an understanding of typical parking demand in the corridor. The three sites that were surveyed and discussed in this section are Loreto Plaza, Ontare Plaza and Five Points Shopping Center.

A. Existing Parking Facilities

The type of off-street parking that is provided in the corridor varies throughout the corridor. On the west end of the corridor, the parking tends to be shared among multiple businesses in typical shopping center configurations. Large open parking areas serve multiple businesses, and on-street parking is generally less important due to the distance from the curb parking spaces to the building entrances. As the corridor proceeds to the east, more of the parking is oriented to a single business or a smaller group of businesses rather than an entire shopping center. In the central portion of the corridor, parking is provided to the side of and behind many of the buildings. The north side in particular is characterized by smaller lots that are located aside the buildings, and serve one or a handful of businesses, and alley access is provided, thus allowing the buildings to be built up to the public right-of-way. On-street parking is located along State Street east of Calle Palo Colorado along the north side of the street and along both sides of State Street and De La Vina Street east of the State Street/De La Vina Avenue intersection.

Most of the Upper State Street commercial land-uses rely on off-street surface parking lots. There are a few parking structures associated with office and retail structures, no underground parking, and limited on-street parking. The parking analysis concludes that overall, the State Street corridor has adequate parking for existing land uses, with pockets of constrained parking during peak hours. Parking field surveys were conducted at representative parking lots on a Friday from noon to 7:00 p.m. and a Saturday 11:00 a.m. to 6:00 p.m. in July 2006, to assist in characterizing parking conditions within the corridor. Typically, parking occupancy of 85-90 percent is the maximum level of use before parking is considered constrained.

Shopping Centers

On the west end of the State Street corridor, and in Loreto Plaza on the east end, shopping centers provide large open parking lots shared by multiple businesses. The parking survey of the Five Points Shopping Center (3900 block of State Street between La Cumbre and Calle Real) identified overall peak parking occupancy of 82 percent at 2:00 p.m. on both Friday and Saturday. The more convenient sections of the parking lot immediately east of the buildings had more than 90 percent occupancy between 1:00 and 3:00 on Friday, and near 100 percent occupancy between noon and 4:00 p.m. on Saturday, however parking was available in the western and far northern sections.

The parking survey of Loreto Plaza Shopping Center (3300 block of State Street) identified overall peak parking occupancy of 72 percent at noon on Friday and 61percent at 1:00 p.m. on Saturday. The convenient main central parking section immediately east of the buildings reached

90 percent occupancy on Friday at noon to 2:00 p.m., and the strip parking adjacent to the building reached 95 percent occupancy on Saturday at noon, however outlying spaces were available.

Smaller Parking Lots

As the State Street corridor proceeds to the east, more of the parking is oriented to smaller groups of businesses or individual businesses. On the south side of State Street, the 3300 to 3600 blocks are characterized by strip commercial development with narrow strip parking lots in front parallel to State Street.

The parking survey of Ontare Plaza (3300 block of State Street between Hitchcock and Ontare) identified overall peak parking occupancy of 68 percent on Friday at 1:00 p.m., and 73 percent on Saturday at 1:00 p.m. On Friday, the eastern and central sections of the parking lot were at 90 percent or more occupancy from noon to 2:00 p.m., and on Saturday the eastern section reached 90 percent at 11:00 a.m., and the central section reached 100 percent at 1:00 p.m., however parking remained available in the western section of the lot.

On the north side of State Street, parking is characterized by smaller lots located to the sides of buildings and serving one or a few businesses, often with alley access. Field observations of office sites indicated most were adequately parked.

On-Street Parking:

On-street parking on State Street is limited to the eastern end of the study area between San Roque and Calle Laureles. Most cross streets throughout the study area have on-street parking on both sides of the street. On-street parking is heavily used where it exists in the corridor.

B. Parking Survey Methodology

As noted, three key representative sites were chosen to conduct parking utilization surveys for purposes of understanding the parking demand on weekdays and weekends, by time of day. The three sties are Loreto Plaza, Ontare Plaza, and Five Points Shopping Center. The parking utilization surveys were conducted on a typical Friday and Saturday to determine peak weekday and weekend demand patterns. Friday is often considered the peak weekday for commercial parking demand in most areas as more people choose to shop or dine out on Fridays compared to other weekdays. Similarly, Saturday is typically the peak of the two weekend days, with the most shopping and other related activities occurring on Saturday as compared to Sunday.

The surveys were conducted by first observing and cataloging the number of parking spaces in the respective lots, the parking configuration, any special conditions such as parking restrictions, and access points. Field review staff then conducted walking surveys and noted the number of spaces used in each of the three lots on Friday from Noon to 7:00 p.m. (last survey starting at 6:00 p.m.) and Saturday from 11:00 a.m. to 6:00 p.m. (last survey stating at 5:00 pm.). The parking utilization observations are made once per hour at each site, and then the number of spaces used is compared to the parking capacity to determine typical utilization, peak utilization and time that the peak parking demand occurs. Figures 14, 15 and 16 illustrate the locations of the three representative sites and their parking lot layouts along with the results of the surveys.

C. Existing Parking Surveys and Deficiency Analysis

Based on the parking utilization counts, parking deficiencies can be summarized for each of the three representative sites. Typically, parking utilization of 85% to 90% is considered to be the "effective" maximum utilization before parking is considered to be constrained. Clearly, at 100 percent utilization there is a parking deficiency as there is no remaining parking and parkers must seek off-site parking. At 85% to 90%, parkers are forced to circle in the aisles and levels for the few remaining spaces and they may perceive the parking to be fully occupied even though a few spaces are available (and they tend to be the least desirable and most inconvenient spaces). A summary of the detailed parking surveys for the three sites follows.

Loreto Plaza (417 parking spaces) – The parking surveys were conducted at Loreto Plaza in nine sections, located around the plaza to the south, east and north (there is no parking for this site to the west). The result of the parking surveys, as shown in Figure 14, indicate the total parking demand reaches a peak of 72 percent at Noon on Friday and 61 percent at 1 p.m. on Saturday, both well below the threshold to be considered parking deficient. As with the Ontare Plaza, subsections of the parking area were noted as near capacity at various times throughout the day. On Friday the main central parking area located immediately east of the buildings reached 90 percent occupied at Noon to 2 p.m., and on Saturday the strip parking adjacent to the building reached 95 percent occupied at Noon. None of the other parking sections reached 90 percent occupied at other times during the survey periods. In summary, parking is available for the plaza during peak times, but parking tends to be in the outlying parking spaces that are farthest from the entrances and least desirable and convenient for access.

Ontare Plaza (97 parking spaces) – The parking surveys were conducted in three zones or subsections: the eastern portion located east of the buildings along Ontare Road, the central portion located north of the buildings along State Street and the western portion located to the west of the buildings, as shown in Figure 15. The results of the parking surveys indicate an interesting pattern at this site. At no time during either the Friday or Saturday survey did the center reach 90 percent utilization, however, the east and center sections did reach 90 percent or more during several hours on both Friday and Saturday. On the weekday, the east and center sections were 90 percent or more utilized from Noon to 2:00 p.m., and on Saturday the east section reaches 90 percent at 11:00 a.m. and the center section reached 100 percent at 1:00 p.m. Overall, the parking occupancy of the plaza only reaches a peak of 68 percent on Friday (1:00 p.m.) and 73 percent on Saturday (1 p.m.). In summary, parking is available during peak times, primarily in the west section parking area. This indicates that improved signage and parking information may be required for the center to inform patrons of available parking on the west side during peak hours.

Five Points Plaza (549 parking spaces) – The parking surveys at this site were conduced in eight sections, one north of the building area, two south, one to the west and the remainder to the east of the buildings, as shown in Figure 16. The results of the surveys indicate that the peak occupancy on both Friday and Saturday reached 82 percent, with both occurring at 2:00 p.m. This falls below the threshold of 90 percent and indicates that adequate parking is generally available somewhere in the shopping area. On Friday, the parking areas immediately east of the buildings had the highest occupancy, with over 90 percent occupancy between 1 and 3 p.m. Since these are the largest parking areas, patrons may perceive the plaza to be under parked,

however, there is remaining parking available on the other side of the building and to the north. On Saturday, the main parking area was very parking constrained, with near 100 percent occupancy between Noon and 4:00 p.m. Thus, although there was still parking available (100 available spaces during the peak hour), all of the most desirable and convenient parking was used and only the most outlying or inconvenient parking (to the west and far north) was not fully used. This indicates the need for a parking management plan and information/signage for customers to better manage parking demand. Modifications to circulation and access patterns may also be required to better balance the parking demand during peak times.

Summary

The parking surveys of the three commercial sites indicate that parking is generally not fully utilized even at peak hours, with some remaining parking available. However due to several factors, including the age of the centers, poor circulation and access designs, poor signage and inadequate parking information, there are sections of the parking lots that do reach full occupancy and would clearly be perceived by users as having parking deficiencies. This indicates that the land uses themselves do not generate excess parking compared to supply, but that the centers are not designed to properly accommodate the amount of parking demand they receive in certain areas. This conclusion cannot be extrapolated to the full Upper State Street Corridor, however it can be stated that the typical land use patterns in the corridor are not extremely high parking generators and parking issues can likely be resolved through improved parking management. For the smaller lots and buildings throughout the corridor, other patterns may be noted on a case-by-case basis depending on type of use, location of parking, sharing of parking with adjacent businesses and other issues.

Typical improvements to parking, particularly at Five Points, would include modifying access to make the west side parking more accessible and friendly to parkers, improved signage to let patrons know of parking "behind" the building, participation of all businesses to ensure that employees park in the least desirable areas for patrons including the west and north sections, and review of internal building circulation to determine if there are impediments to pedestrian circulation that could be improved to better reallocate the parking demand. For this center it will mean review of improving pedestrian access and circulation through the buildings to make it easier for patrons to park in the west side and still access the east side of the businesses.

D. On-street Parking

On street parking in the study area is heavily utilized, although it is limited along and near State Street. As noted, on street parking on State Street is only allowed at the eastern end of the study area between De La Vina and Calle Laureles.

FRIDAY

	Number of Available Spaces	12:00 pm - 1:00 pm	Percent Occupied (12-1 pm)	1:00 pm - 2:00 pm	Percent Occupied (1-2 pm)	2:00 pm - 3:00 pm	Percent Occupied (2-3 pm)	3:00 pm - 4:00 pm	Percent Occupied (3-4 pm)	4:00 pm - 5:00 pm	Percent Occupied (4-5 pm)	5:00 pm - 6:00 pm	Percent Occupied (5-6 pm)	6:00 pm - 7:00 pm	Percent Occupied (6-7 pm)
Zone 1	18	16	89%	15	83%	13	72%	14	78%	10	56%	9	50%	6	33%
Zone 2	98	76	78%	74	76%	65	66%	54	55%	53	54%	52	53%	32	33%
Zone 3	21	19	90%	18	86%	19	90%	18	86%	17	81%	21	100%	19	90%
Zone 4	120	108	90%	112	93%	100	83%	84	70%	95	79%	103	86%	102	85%
Zone 5	26	20	77%	21	81%	20	77%	20	77%	15	58%	16	62%	15	58%
Zone 6	8	0	0%	0	0%	1	13%	2	25%	3	38%	2	25%	1	13%
Zone 7	50	33	66%	33	66%	35	70%	32	64%	28	56%	27	54%	26	52%
Zone 8	65	27	42%	24	37%	25	38%	26	40%	26	40%	24	37%	24	37%
Zone 9	11	1	9%	0	0%	0	0%	0	0%	2	18%	3	27%	0	0%
TOTAL	**417**	**300**	**72%**	**297**	**71%**	**278**	**67%**	**250**	**60%**	**249**	**60%**	**257**	**62%**	**225**	**54%**

SATURDAY

	Number of Available Spaces	11:00 am - 12:00 pm	Percent Occupied (11 am-12 pm)	12:00 pm - 1:00 pm	Percent Occupied (12-1 pm)	1:00 pm - 2:00 pm	Percent Occupied (1-2 pm)	2:00 pm - 3:00 pm	Percent Occupied (2-3 pm)	3:00 pm - 4:00 pm	Percent Occupied (3-4 pm)	4:00 pm - 5:00 pm	Percent Occupied (4-5 pm)	5:00 pm - 6:00 pm	Percent Occupied (5-6 pm)
Zone 1	18	13	72%	14	78%	9	50%	13	72%	14	78%	6	33%	7	39%
Zone 2	98	39	40%	46	47%	59	60%	39	40%	40	41%	39	40%	31	32%
Zone 3	21	14	67%	20	95%	20	95%	16	76%	17	81%	15	71%	12	57%
Zone 4	120	82	68%	95	79%	95	79%	91	76%	81	68%	85	71%	67	56%
Zone 5	26	18	69%	17	65%	22	85%	23	88%	17	65%	12	46%	10	38%
Zone 6	8	0	0%	0	0%	1	13%	2	25%	3	38%	2	25%	3	38%
Zone 7	50	29	58%	24	48%	25	50%	26	52%	27	54%	22	44%	23	46%
Zone 8	65	19	29%	24	37%	23	35%	23	35%	19	29%	22	34%	18	28%
Zone 9	11	3	27%	4	36%	1	9%	4	36%	2	18%	1	9%	2	18%
TOTAL	**417**	**217**	**52%**	**244**	**59%**	**255**	**61%**	**237**	**57%**	**220**	**53%**	**204**	**49%**	**173**	**41%**

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FIGURE 14
Parking Survey- Loreto Plaza

FRIDAY

	Number of Available Spaces	12:00 pm - 1:00 pm	Percent Occupied (12-1 pm)	1:00 pm - 2:00 pm	Percent Occupied (1-2 pm)	2:00 pm - 3:00 pm	Percent Occupied (2-3 pm)	3:00 pm - 4:00 pm	Percent Occupied (3-4 pm)	4:00 pm - 5:00 pm	Percent Occupied (4-5 pm)	5:00 pm - 6:00 pm	Percent Occupied (5-6 pm)	6:00 pm - 7:00 pm	Percent Occupied (6-7 pm)
EAST	21	20	95%	20	95%	11	52%	10	48%	14	67%	9	43%	12	57%
CENTER	40	36	90%	36	90%	36	90%	31	78%	29	73%	35	88%	34	85%
WEST	36	8	22%	10	28%	9	25%	10	28%	10	28%	11	31%	11	31%
TOTAL	**97**	**64**	**66%**	**66**	**68%**	**56**	**58%**	**51**	**53%**	**53**	**55%**	**55**	**57%**	**57**	**59%**

SATURDAY

	Number of Available Spaces	11:00 am - 12:00 pm	Percent Occupied (11 am-12 pm)	12:00 pm - 1:00 pm	Percent Occupied (12-1 pm)	1:00 pm - 2:00 pm	Percent Occupied (1-2 pm)	2:00 pm - 3:00 pm	Percent Occupied (2-3 pm)	3:00 pm - 4:00 pm	Percent Occupied (3-4 pm)	4:00 pm - 5:00 pm	Percent Occupied (4-5 pm)	5:00 pm - 6:00 pm	Percent Occupied (5-6 pm)
EAST	21	19	90%	18	86%	12	57%	10	48%	5	24%	2	10%	3	14%
CENTER	40	30	75%	25	63%	40	100%	30	75%	31	78%	31	78%	23	58%
WEST	36	12	33%	12	33%	19	53%	17	47%	13	36%	12	33%	17	47%
TOTAL	**97**	**61**	**63%**	**55**	**57%**	**71**	**73%**	**57**	**59%**	**49**	**51%**	**45**	**46%**	**43**	**44%**

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FIGURE 15
Parking Survey- Ontare Plaza

FRIDAY

	Number of Available Spaces	12:00 pm - 1:00 pm	Percent Occupied (12-1 pm)	1:00 pm - 2:00 pm	Percent Occupied (1-2 pm)	2:00 pm - 3:00 pm	Percent Occupied (2-3 pm)	3:00 pm - 4:00 pm	Percent Occupied (3-4 pm)	4:00 pm - 5:00 pm	Percent Occupied (4-5 pm)	5:00 pm - 6:00 pm	Percent Occupied (5-6 pm)	6:00 pm - 7:00 pm	Percent Occupied (6-7 pm)
Zone 1	64	41	64%	52	81%	57	89%	50	78%	42	66%	46	72%	36	56%
Zone 2	43	36	84%	36	84%	33	77%	23	53%	11	26%	10	23%	12	28%
Zone 3	130	78	60%	88	68%	94	72%	105	81%	110	85%	113	87%	117	90%
Zone 4	160	133	83%	149	93%	152	95%	124	78%	122	76%	119	74%	147	92%
Zone 5	36	21	58%	33	92%	30	83%	32	89%	33	92%	25	69%	31	86%
Zone 6	26	16	62%	17	65%	14	54%	18	69%	15	58%	10	38%	7	27%
Zone 7	74	67	91%	56	76%	60	81%	43	58%	48	65%	34	46%	26	35%
Zone 8	16	9	56%	9	56%	11	69%	5	31%	6	38%	3	19%	1	6%
TOTAL	**549**	**401**	**73%**	**440**	**80%**	**451**	**82%**	**400**	**73%**	**387**	**70%**	**360**	**66%**	**377**	**69%**

SATURDAY

	Number of Available Spaces	11:00 am - 12:00 pm	Percent Occupied (11 am-12 pm)	12:00 pm - 1:00 pm	Percent Occupied (12-1 pm)	1:00 pm - 2:00 pm	Percent Occupied (1-2 pm)	2:00 pm - 3:00 pm	Percent Occupied (2-3 pm)	3:00 pm - 4:00 pm	Percent Occupied (3-4 pm)	4:00 pm - 5:00 pm	Percent Occupied (4-5 pm)	5:00 pm - 6:00 pm	Percent Occupied (5-6 pm)
Zone 1	64	36	56%	45	70%	52	81%	49	77%	42	66%	49	77%	44	69%
Zone 2	43	21	49%	25	58%	29	67%	27	63%	26	60%	26	60%	16	37%
Zone 3	130	125	96%	126	97%	127	98%	126	97%	125	96%	121	93%	113	87%
Zone 4	160	135	84%	159	99%	156	98%	158	99%	160	100%	152	95%	150	94%
Zone 5	36	32	89%	34	94%	31	86%	33	92%	30	83%	32	89%	28	78%
Zone 6	26	6	23%	7	27%	7	27%	6	23%	6	23%	5	19%	6	23%
Zone 7	74	24	32%	30	41%	35	47%	44	59%	36	49%	21	28%	19	26%
Zone 8	16	4	25%	7	44%	6	38%	6	38%	6	38%	9	56%	9	56%
TOTAL	**549**	**383**	**70%**	**433**	**79%**	**443**	**81%**	**449**	**82%**	**431**	**79%**	**415**	**76%**	**385**	**70%**

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FIGURE 16
Parking Survey- Five Points Shopping Center

E. Existing Parking Deficiencies

The results of the parking surveys and the field observations indicate that several of the retail sites have portions of their parking facilities that operate near capacity during their peak business hours. Field observations of several of the office sites indicated that most were adequately parked and did not have any significant parking shortages during the observed weekday afternoon hours. The sites that appeared to be most under parked were mixed use sites that contained busy restaurants. This would indicate that when restaurants are included in mixed-retail sites the parking requirements should be increased for those sites or management plans implemented to direct employee parking to lesser used areas in the site.

Most locations where parking could potentially be a problem are small sites with private lots and limited space to provide additional parking. These are located mostly on the eastern end of the study area. Solutions to this situation, such as the development of shared parking facilities, would likely come through site redevelopment, but could also include cooperation among existing business to better share their available parking.

On-street parking is heavily used in the study area where it is available. Unless significant conflicts occur between through traffic or buses and parking vehicles, this parking supply should be retained.

V. Options for Transportation System Improvements

This section describes some potential transportation improvement strategies and system improvements to address identified and possible future deficiencies related to vehicle, pedestrian and bicycle circulation and parking in the Upper State Street study area. Some of the strategies are at the concept level and can be further refined and detailed following further review of the technical data contained in the study. Conceptual improvement options fall under the following categories:

- Physical and operational improvements to the roadway system including lanes, traffic control and capacity
- Technological enhancements to increase the efficiency of the transportation system
- Pedestrian related enhancements
- Bicycle related enhancements
- Access control
- Parking

At this time, general concepts are proposed for consideration and discussion. After review, MMA will refine and provide additional detail options selected by the city within a draft Circulation Improvement Plan. Figure 17 illustrates locations of transportation systems improvement options, which are described below.

A. Circulation/Traffic Issues and Improvement Options

The analysis identified three intersections forecasted to be at or near the City's LOS C standard of 77% of roadway capacity during the PM peak hour in the cumulative traffic scenario:

- Hope Avenue at State Street (.76 V/C, LOS C)
- Hitchcock Way at State Street (.77 V/C, LOS C)
- Calle Real at Route 101 Northbound On-Ramp (.76 V/C, LOS C)

Two intersections rely on the volume of vehicles making right turns on the red light to operate with acceptable levels of service in the cumulative scenario:

- Las Positas Road/San Roque Road at State Street (.78 V/C, LOS C {0.72, LOS C with right turns on red})
- Las Positas Road at Calle Real (.83 V/C, LOS D {0.73, LOS C with right turns on red})

Traffic volumes on Upper State Street are typical for a suburban mixed commercial corridor. No major capacity improvements (such as widening State Street for additional lanes) are considered warranted at this time based on traffic levels. Some potential improvement measures for consideration are listed below under several improvement categories. The numbers on the left (such as C1) refer to the corresponding location on Figure 17.

Highway 101 Ramps: Periods of high traffic volumes and congestion occur on Highway 101 throughout the week. The on- and off-ramps have periodic backups during these same periods.

C1 *Intersection Configuration Option:* Revise Highway 101 Northbound On-Ramp/Calle Real intersection design to reduce "shortcutting" of the intersection by westbound vehicles accessing the ramp.

C2 *Frontage Road Option:* Consider development of a southbound frontage road system between La Cumbre Road and Mission Street to provide access options to and from the study area on the south side of Highway 101. The frontage road would be located adjacent to Highway 101 and would provide access to the on/off ramps and would intersect the north-south streets where the highway ramps currently intersect. This could help disperse traffic to other intersections and ramps along the Highway 101 corridor to reduce traffic at high volume locations. If a new bridge were developed over Highway 101 at Junipero Street, it could connect to Calle Real and the frontage road. The frontage road would provide an alternative east-west corridor, when linked with Calle Real, to using State Street or Highway 101.

Hope Avenue/State Street: This intersection is one of the busiest on State Street. Adding more travel lanes may not be feasible. If a Hope Avenue bridge is constructed over Highway 101 (identified as a improvement need in *Santa Barbara 2030: Conditions, Trends and Issues Report*), it could reduce traffic volumes at other streets with Highway 101 access, but additional traffic would be attracted to the Hope/State intersection.

C3 *Study Intersection Option:* Conduct a detailed review of the Hope Avenue/ State Street intersection operational characteristics, geometric details and collision history to better identify improvement options at this location. The analysis of the projected future traffic conditions indicates that shared through/right-turn lanes would need to be added for both directions of State Street to keep the intersection operating within the City's LOS C criteria. This would require significant right-of-way acquisition and some building removal. It should be determined if a higher LOS standard would be acceptable for this and other corridor intersections in lieu of providing other improvements such as transit access or added turn lanes.

C4 *Intersection Improvement Option:* Investigate whether additional right-of-way could be acquired on the south side of State Street between Plaza Drive and Hope Avenue by moving pedestrian facilities to a structure on or over the La Cumbre Plaza parking area. This would allow for a wider pedestrian facility and provide an eastbound right-turn lane at Hope Avenue. The addition of an eastbound right-turn lane at the Hope/State intersection would improve conditions for turning traffic at the intersection, but would not affect the intersection LOS as the eastbound right-turn is not a critical movement in the evening peak hour.

Las Positas Road Intersections: As a major connecting route between the study area and Highway 101, this street has higher traffic volumes than most other streets in the area, and impacted intersections at State Street and at Calle Real. The street has few driveways, which limits mid-block traffic conflicts, but Las Positas intersections have higher collision rates. Additional travel lanes do not appear feasible here. Changes at other locations to divert traffic away from this intersection could help, as could adaptive signal controls. Other area

improvements that may help to divert some traffic currently using Las Positas to other adjacent routes thereby reducing the demand on this regionally significant street include:

C5 *Junipero Bridge Option:* Investigate the feasibility of providing a bridge at Junipero Street over Highway 101 to provide an additional connection to and across Highway 101 as an alternative for some traffic using the Las Positas Road interchange to access the highway.

C6 *Convert Calle Real East of Las Positas to Two Way:* Investigate the feasibility of converting Calle Real back to two-way operation between Las Positas Road and Treasure Drive. To convert the street to two-way traffic, the westbound Highway 101 offramp at Las Positas would need to be moved to intersect Calle Real at a 90-degree angle either east or west of Las Positas. One option would be to realign Calle Real west of Las Positas and connect the off-ramp to Calle Real where the WB on-ramp intersects opposite the EWSG driveway.

De la Vina/State Streets: De la Vina Street provides a route to and from the downtown area. The current intersection configuration results in conflicts in the eastbound direction with pedestrians and bicycles crossing the street and on-street activity at the northern end of De la Vina Street.

C7 *Intersection Improvement Option:* Modify the intersection as planned to remove the eastbound free-right turn and provide positive signal control for all of the crosswalks at the intersection. Make sure there are adequate sight lines between motorists and pedestrians. The intersection change will improve safety for pedestrians at the intersection and will not significantly affect intersection operations. Based on the future conditions capacity analysis, the evening peak hour V/C will increase by only about five percent with removal of the free right-turn movement, with a remaining LOS no worse than B.

Driveways, Alleys and Side Streets: Driving "friction" occurs along the corridor due to multiple driveways, bike lanes, bus stops, and frequent spacing of traffic signals and intersections. Stopping, starting, and slowing of traffic along the State Street corridor limits speeds and contributes to a feeling of congestion. Local streets and alleys provide alternative routes versus using the major streets. Such existing local streets and alleys are a few blocks long at most, which limits their use to local traffic and not regional through-traffic.

C8 *Shared Access and Use of Alleys and Side Streets Options:* Promote shared driveway access through site redesign and redevelopment (when available), alley or rear side access, and easements to reduce the number of driveways on State Street. This may require a City ordinance to require reciprocal access.

C9 *Driveway Spacing Option:* Consider developing driveway spacing guidelines for new development within the corridor that would identify the maximum number of driveways per mile on specific blocks. Right-turn-only restrictions would be required, and appropriate distance from a signal and other criteria would apply.

C10 *Medians Option:* Consider constructing additional sections of raised median and connecting medians to form continuous separated street sections. Where driveways remain, ensure appropriate design of curb radii to maximize flow and reduce delay.

Traffic Operations Control Options:

C11 *Monitoring Option:* Conduct annual monitoring of traffic and circulation conditions in the corridor. While the City regularly conducts traffic counts throughout the City and in the Corridor, extra traffic monitoring in the study corridor may be warranted to ensure that any increases in traffic are understood before they result in deterioration to Levels of Service.

C12 *Intelligent Transportation System Option:* ITS traffic control measures (such as electronic message signs, signal timing that adapt to traffic levels, connecting to Caltrans regional monitoring) could better manage traffic flow and improve safety, system reliability, and efficiency.

Longer-Term Issues: If there is substantial additional local and/or regional growth in the future, more activity would be attracted to the State Street corridor. Alternatives to traveling along State Street could include alternate routes for motorists, trip reduction measures, and corridor enhancements to improve capacity and safety. Options may require substantial change to the area:

C13 *Alternative East-West Route Option:* Investigate options for developing a new east-west street between La Cumbre Road and Hope Avenue through the existing La Cumbre Plaza site. This would entail substantial modification to existing development as part of major site redevelopment. This potential new route could also be used for bus transit routing in this area of Upper State Street where several current bus routes converge.

C14 *New Bike Trail Option:* Investigate opportunities for a new multi-use trail/corridor between Hope Avenue and Las Positas, through areas such as watershed corridors, local streets, acquired easements, and/or a portion of the golf course, to provide a bicycle facility alternative to State Street.

B. Alternative Modes

As noted, given the City's threshold of 0.77 and LOS C, it is appropriate to investigate other methods to achieve improved circulation besides only roadway capacity enhancements. The movement of people on transit and non-motorized modes is also very important in the corridor. The following conceptual options for study area transit services are recommended for consideration.

1. Bus Transit Issues and Improvement Options

Bus Stops and Dedicated Transit Lanes: Some bus stops are within the sidewalk rights-of-way, and obstruct pedestrian travel. Pocket lanes reduce impediments to auto traffic, but also reduce the amount of space available on crowded sidewalks, and in some locations may contribute to potential conflicts with pedestrians, bicycles, and autos at nearby driveways.

T1 *Bus Stops Option:* Develop a program to relocate bus stop benches and waiting areas off the sidewalk right-of-way to behind the sidewalks where possible through easements with property owners to remove sidewalk impediments.

T2 *Dedicated Transit Lane:* To address longer range regional growth and Highway 101 traffic congestion, investigate the feasibility of augmenting and/or altering the right-of-

way and streetscape on State Street to establish a dedicated transit lane. Removal of existing lanes to create a dedicated transit lane is not recommended

Transit Use: Bus transit service is not extensive (half-hour headways on individual routes) within the Upper State Street area, however field observations, ridership levels, and transit district information indicate that buses are well used. Increased transit use would lessen vehicle traffic congestion. Options include:

T3 *Rider Information Option:* Work with MTD to provide real-time rider information at bus kiosks within the corridor, especially at stops where multiple buses arrive at the same time and there are more passengers boarding and alighting.

T4 *Transit Center Option:* Work with MTD to review ridership patterns in the Upper State corridor to determine whether a more formal transit center should be developed. Such a center could be part of a redevelopment project with buses traveling off of State Street or could be in an existing ground-floor space adjacent to an existing stop.

T5 *Shuttle Service Option:* Investigate the feasibility of a local shuttle-type service to encourage non-auto trips within the Upper State commercial corridor. MTD operates four shuttle services: the Seaside Shuttle, the Downtown-Waterfront Shuttle, the Crosstown Shuttle, and the Calle Real/Old Town Shuttle. Typically, such shuttle systems operate on reduced headways rather than the typical headways for suburban fixed-route systems. They are typically shorter routes that focus on specific destinations within the corridor, providing peak-hour, mid-day, and even weekend and special event services, at a low cost. For this corridor, a shuttle system could connect to existing fixed bus routes, and could provide shoppers, residents, and employees the ability to get around within the corridor through the day efficiently at a low cost. Less costly smaller buses are used because loads typically do not warrant the standard coaches used on fixed routes. This option must be weighed against the planned reduction of headways for the existing fixed routes along State Street.

2. Pedestrian Facility Issues and Improvement Options

Sidewalks: Issues with sidewalks in the State Street corridor include inconsistent or inadequate widths; inconsistent material composition; poor pavement and maintenance conditions in some areas; possible deficiencies for ADA standards; and sidewalk obstructions such as poles, utility boxes, trees, and benches, that limit sidewalk width and functionality. Improvements to pedestrian facilities may lead to increased pedestrian travel and reduced vehicle congestion.

PE1 *Tree Replacement Option:* Remove overgrown street trees and replace them with trees of a size and function more appropriate to the corridor setting, with slender trunks, reasonable shade canopies, and root systems that will limit the amount of sidewalk damage as the tree matures. Trees should be placed in tree grates to allow for future growth without significant damage to the pavement.

PE2 *Sidewalk Expansion Option:* Investigate opportunities with adjacent property owners to acquire or create easements to expand the sidewalk width in areas where at least five feet of clear pavement is not currently provided.

PE3 *Sidewalk Obstructions Option:* Investigate creating easements with adjacent property owners to relocate benches and other obstructions off the sidewalks.

PE4 *Development Design Standards Option:* Investigate and promote alternative streetscape design standards to provide less obstructive fixtures within the sidewalk corridor, including utility poles and equipment boxes, newspaper racks, street signs, furniture, street trees, landscaping, and landscape walls.

PE5 *Sidewalk Buffer Option:* Provide more street trees and/or landscaping between the street and sidewalk to provide a buffer for pedestrians.

Crosswalks: As some streets in the corridor are relatively wide, the pedestrian signal time provided to cross the streets may be inadequate for some people. Increasing pedestrian cross times would assist pedestrian crossing the street but would increase vehicle delays. The State/De la Vina free right turn presents difficulties for pedestrians that must cross the path of vehicle traffic to continue east on State.

PE6 *State/Calle Palo Colorado Option:* Relocate the existing crosswalk across State Street at the Calle Palo Colorado intersection to the east side of the street out of the eastbound left-turn lane, and provide a median refuge island for pedestrians with pedestrian crossing signs, and a pedestrian activated traffic signal.

PE7 *Crossing Timers:* Install pedestrian countdown timers at intersections to provide additional information to pedestrians about remaining time to cross, especially at busy intersections (such as Hope, La Cumbre, and Las Positas), and consider increasing time to cross.

PE8 *Pedestrian attractive design:* Reconstruct intersections and pedestrian crossings with materials that make the intersection more visually attractive as has been done for the Downtown State Street area.

3. Bicycle Facility Issues and Improvement Options

Bicycle Use and Safety: Bicycle riders are presented with conflicts along the Upper State Street corridor that are typical of a commercial street with multiple transportation modes. Driveways with frequent turns, intersections, right-turn bays, crosswalks, bus stops and bus stop pockets are all possible friction and conflict points between bicycles, cars, buses, and pedestrians. Bicycle parking facilities are not provided consistently along the corridor. Improved bicycle facilities could lead to increased bicycle use and possibly reduced vehicle congestion.

B1 *Reduce Number of Driveways Option:* Actively work with property owners to consolidate and/or eliminate driveways along State Street to reduce the number of conflict points between vehicles and bicyclists.

B2 *Widen Bicycle Lanes Option:* As part of streetscape design guidelines, consider the feasibility of widening the bicycle lanes on State Street, given that it is a heavily-traveled primary route.

B3 *Off-Street Bicycle Trail Option:* Investigate opportunities to create an off-street bicycle trail as a parallel route alternative to State Street for riders who wish to travel by bike in the area but do not want to use the bike lanes on the heavily traveled street. A multi-use trail could connect parks and the channels to area businesses and residential areas.

B4 *Bicycle Parking Option:* Require adequate bicycle parking facilities, including bike racks for customers and bike lockers for employees, as part of new development.

De la Vina/State: The free eastbound-to-southbound right turn from State Street onto De la Vina creates difficulty for bicyclists who must cross the path of vehicle traffic in the right lane to continue east on State.

B5 *Intersection Improvement Option:* Implement planned changes at the State to De la Vina right turn to improve bicyclist safety.

Pavement Condition: The pavement condition along on-street bike lanes needs to be clear and smooth to allow bicyclists to stay within the bike lane.

B6 *Monitoring and Maintenance Option*: Monitor bike lane pavement conditions and maintain smooth lanes for cyclist safety.

C. Parking Issues and Improvement Options

Off-Street Parking Lots: Parking surveys of commercial shopping centers indicate that parking in these locations is generally underutilized even at peak hours. However, the most desirable and convenient sections of the parking lots do reach full occupancy, and may be perceived by users as deficient. The survey results indicate that these land uses are not generating a parking demand that exceeds supply, but that the access, circulation, and signage of the parking lots are not designed to properly accommodate demand.

Based on field observations, the sites that appear to be most under parked are mixed commercial sites with busy restaurants (such as the current centers with Rudy's, Tee-Off, and Jeannine's). Most locations where parking is constrained are small sites with private parking lots and limited space to provide additional parking, primarily on the eastern end of the State Street corridor.

PA1 *Parking Management Options:* Work with employers and commercial businesses to ensure that parking is efficiently used, by measures such as:

- Employee Parking Option: Encourage employee use of the most remote areas or off-site parking.
- Signs and Circulation Option: Signage, access, and circulation made as appropriate as possible to show the users where all parking is located. Especially lesser-used parking to the side and rear.
- ITS Option: The use of "intelligent transportation system" measures could be considered at bigger centers, such as real time indicators showing locations of and number available spaces in the lots.

PA2 *Shared Parking Option*: Consider development of shared parking for more efficient use.

PA3 *Parking Structures Option:* Consider small parking structures to house parking for several sites or two-level decks for individual sites.

PA4 *Site Layout for Parking Option:* Consider parking for new development behind and/or to the side of buildings, and shift buildings closer to the street. Parking in the rear of buildings can be more easily accessed from alleys and driveways on side streets, and could also reduce the number of curb cuts along State Street.

PA5 Retail and Restaurant Parking Requirements Option: Review parking requirements and/or locations of zoning designations for retail developments to assure adequate parking is being provided. Consider increasing parking requirements for retail developments with restaurant uses.

PA6 Mixed Use Commercial and Residential Developments Option: Consider "urban village" type of redevelopment on larger parcels to promote live-work opportunities and walking or other non-auto trips between sites to reduce parking needs.

PA7 Parking Demand Reduction: Increase use of alternative modes of travel: promote transit and bike use by developing improvements and designing transit oriented development.

On-Street Parking: On-street parking is heavily used where it is available, but in a few locations there are conflicts with through traffic or buses (e.g., along north side of State Street east of Calle Palo Colorado, and along both sides of State Street and De la Vina Street east of the State/De la Vina intersection).

PA8 Retain Existing Parking Option: Retain current on-street parking, which provides a needed parking supply and helps to buffer pedestrians from vehicle through traffic.

D. Review of Collision Patterns

The analysis of collision history revealed a few locations with specific patterns of collision types and/or directionality. This finding by itself does not necessarily indicate a problem or need for improvement; the collision rates must also be compared to Citywide and countywide rates for similar facilities. If determined appropriate based on a review of collisions rates, then detailed engineering data including traffic volumes, existing traffic regulations and controls, lane configurations, slopes/grades, existing pavement markings and other factors must be considered and evaluated by a professional traffic engineer. Some of the collision types may be due to driver inattention or other driver error and are not correctable through roadway or traffic control modifications. However, due to the fact that some of the collisions fall into discernible patterns, there are specific areas that may be further investigated by a traffic engineer to determine if there are any possible remedial measures. Those areas are described below.

- State Street and Hope Avenue – Rear end collisions at intersections, which is the predominate type at this location, would warrant review of day and nighttime visibility of the traffic signal indications, verify pavement conditions if a number of the collisions occurred during wet conditions, verify and provide proper yellow clearance interval for vehicles, provide the best possible signal progression to eliminate stops and verify visibility of all traffic signal heads.

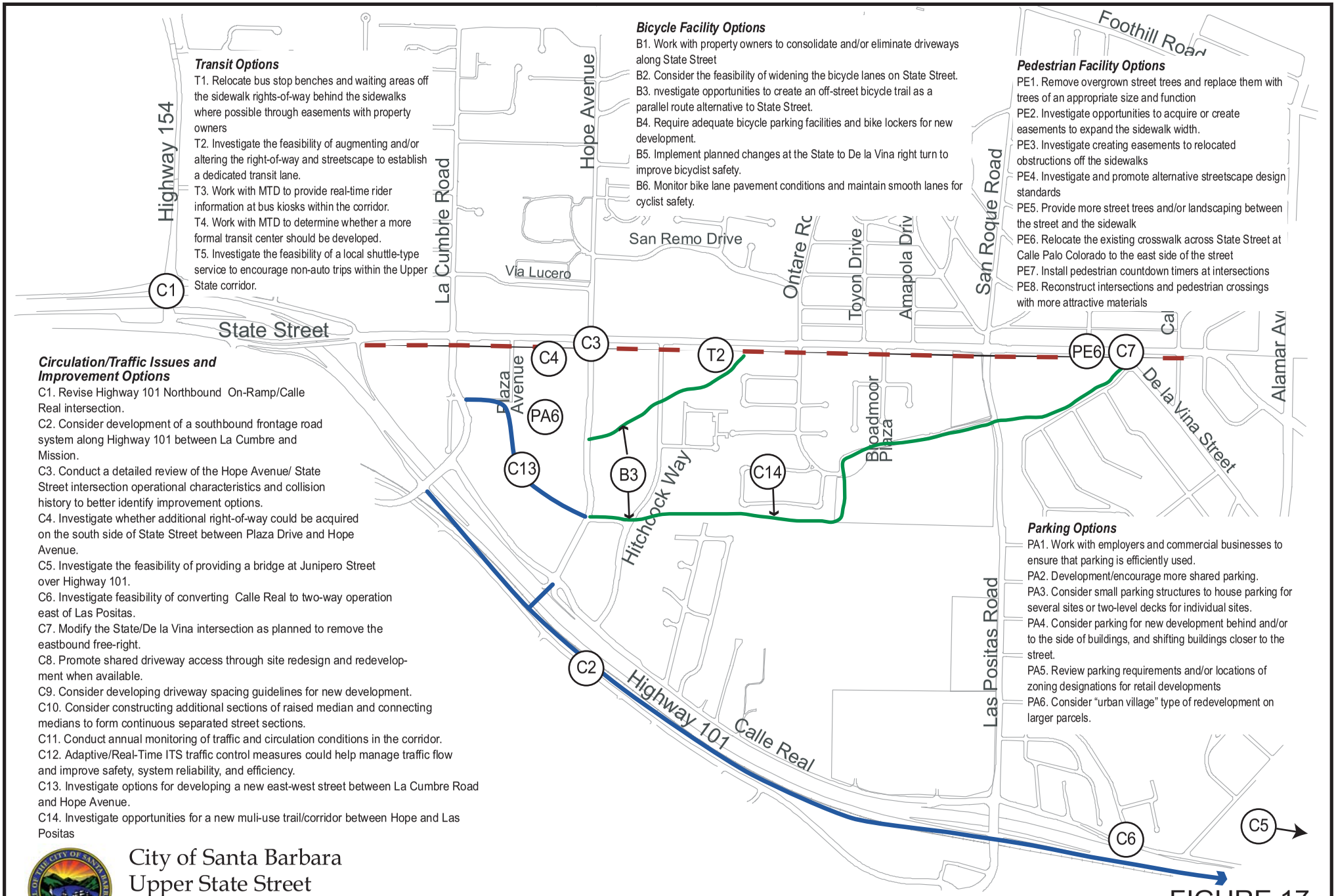
- State Street and Las Positas Road/San Roque Road – Based on the collision pattern at this location it is recommended that the following factors be reviewed: overall visibility, sight distance, lighting, visibility and placement of traffic signal indications and yellow signal clearance interval.

- Las Positas Road and Highway 101 – For the type of collision pattern at this intersection it is recommended that similar factors be reviewed as noted above such as sight distance, lighting, visibility and placement of traffic signal indications, yellow signal clearance interval and other related conditions.

- State Street and Ontare Road – A review of visibility and sight distance may be appropriate depending on the resultant collision rate.

- 3900 block of State Street – The collision pattern on this block indicates review of factors such as visibility of northbound and southbound vehicles to eastbound and westbound vehicles, speeds of eastbound and westbound vehicles on State Street, measurement of gaps in traffic for northbound and southbound vehicles exiting the driveways, sight distance/obstructions for northbound exiting vehicles, the potential to close the median at the Five Points entrance and reallocate traffic to other entrance/exit points (requires review of traffic implications of diversion), review of and possible improvements to signage and pavement markings, review of lighting and other appropriate factors.

In general, it should also be noted that several of the other improvement options listed in this report may help to remediate some of the collisions along Upper State Street. For example, removal of mid-block conflicts such as driveways and median openings would help to eliminate some types of collisions, improved signal progression may help to mitigate some collisions, and improvements that would result in the reduction in the delay and the general level of congestion would also help to eliminate some types of collisions. Thus, the overall improvement package, in addition to site-specific modifications, would help to remediate some of the collisions that are susceptible to mitigation.



Transit Options

T1. Relocate bus stop benches and waiting areas off the sidewalk rights-of-way behind the sidewalks where possible through easements with property owners

T2. Investigate the feasibility of augmenting and/or altering the right-of-way and streetscape to establish a dedicated transit lane.

T3. Work with MTD to provide real-time rider information at bus kiosks within the corridor.

T4. Work with MTD to determine whether a more formal transit center should be developed.

T5. Investigate the feasibility of a local shuttle-type service to encourage non-auto trips within the Upper State corridor.

Bicycle Facility Options

B1. Work with property owners to consolidate and/or eliminate driveways along State Street

B2. Consider the feasibility of widening the bicycle lanes on State Street.

B3. nvestigate opportunities to create an off-street bicycle trail as a parallel route alternative to State Street.

B4. Require adequate bicycle parking facilities and bike lockers for new development.

B5. Implement planned changes at the State to De la Vina right turn to improve bicyclist safety.

B6. Monitor bike lane pavement conditions and maintain smooth lanes for cyclist safety.

Pedestrian Facility Options

PE1. Remove overgrown street trees and replace them with trees of an appropriate size and function

PE2. Investigate opportunities to acquire or create easements to expand the sidewalk width.

PE3. Investigate creating easements to relocated obstructions off the sidewalks

PE4. Investigate and promote alternative streetscape design standards

PE5. Provide more street trees and/or landscaping between the street and the sidewalk

PE6. Relocate the existing crosswalk across State Street at Calle Palo Colorado to the east side of the street

PE7. Install pedestrian countdown timers at intersections

PE8. Reconstruct intersections and pedestrian crossings with more attractive materials

Circulation/Traffic Issues and Improvement Options

C1. Revise Highway 101 Northbound On-Ramp/Calle Real intersection.

C2. Consider development of a southbound frontage road system along Highway 101 between La Cumbre and Mission.

C3. Conduct a detailed review of the Hope Avenue/ State Street intersection operational characteristics and collision history to better identify improvement options.

C4. Investigate whether additional right-of-way could be acquired on the south side of State Street between Plaza Drive and Hope Avenue.

C5. Investigate the feasibility of providing a bridge at Junipero Street over Highway 101.

C6. Investigate feasibility of converting Calle Real to two-way operation east of Las Positas.

C7. Modify the State/De la Vina intersection as planned to remove the eastbound free-right.

C8. Promote shared driveway access through site redesign and redevelop-ment when available.

C9. Consider developing driveway spacing guidelines for new development.

C10. Consider constructing additional sections of raised median and connecting medians to form continuous separated street sections.

C11. Conduct annual monitoring of traffic and circulation conditions in the corridor.

C12. Adaptive/Real-Time ITS traffic control measures could help manage traffic flow and improve safety, system reliability, and efficiency.

C13. Investigate options for developing a new east-west street between La Cumbre Road and Hope Avenue.

C14. Investigate opportunities for a new muli-use trail/corridor between Hope and Las Positas

Parking Options

PA1. Work with employers and commercial businesses to ensure that parking is efficiently used.

PA2. Development/encourage more shared parking.

PA3. Consider small parking structures to house parking for several sites or two-level decks for individual sites.

PA4. Consider parking for new development behind and/or to the side of buildings, and shifting buildings closer to the street.

PA5. Review parking requirements and/or locations of zoning designations for retail developments

PA6. Consider “urban village” type of redevelopment on larger parcels.

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FIGURE 17
Options for Transportation System Improvements

VI. Refinement of Recommended Options

The transportation system options summarized in the previous chapter were presented to the public through two public workshops and to the City of Santa Barbara Planning Commission and Transportation and Circulation Committee during a joint meeting of these bodies. A draft report of Chapters I through V was also posted on the City's web site. Public comments were received on the analysis and options outlined in the draft report through late November 2006.

A. Public Review and Comment

Public Workshops and General Comments

Two public workshops were conducted by the City on Saturday, October 14 and Thursday, October 19, 2006. During these workshops, attendees were split into breakout groups to solicit discussion and feedback from the public on their view of the issues and needs in the Upper State Street corridor and suggestions for changes they would like to see in the area, including issues on transportation and circulation.

Comments were also collected through telephone messages, emails, and mail-in comment cards.

Joint Meeting of the Planning Commission and Transportation and Circulation Committee

The draft report through the development of options chapter was presented during a joint meeting of the Planning Commission and the Transportation and Circulation Committee that was held on Thursday, November 9, 2006. Comments were received from Commission and Committee members along with comments from the general public in attendance.

B. Refinement of the Options

Following this public review and discussion, City staff reviewed the list of options to identify which options would be analyzed further. During this process, several options not on the original list presented in Chapter V were added and a preliminary review of their feasibility was conducted to determine if they should be included on the projects list. These additional options are identified below. Several options were not included in the final list as they were deemed to be either not feasible or ineffective, or will already be addressed and analyzed as part of other on-going City efforts. Options identified for further analysis beyond the initial report are presented in the following chapter.

Improvement Option Included for Additional Analysis

Of the improvement options listed in Chapter V, the following 10 were analyzed further and developed into near-term physical improvement projects:

- Relocate State / Calle Palo Colorado Crosswalk
- New Traffic Signal at McCaw/Las Positas Intersection
- Additional Raised Median – Route 101 Northbound Ramp / Calle Real to La Cumbre Road
- Additional Raised Median – Hitchcock Way to Ontare Road

- Additional Raised Median – Ontare Road to Broadmoor Plaza
- Relocate State Street / Calle Palo Colorado Bus Stops and Add Bus Pockets
- Bus Pocket at Ontare Road and State Street
- Bus Pocket at Toyon Drive and State Street
- New Off-Street Pedestrian/Bike Trail
- Signal Phasing Modifications

In addition to the near-term physical improvements, several near-term circulation and parking management improvements were also selected for further analysis. These include:

- Shared Access and Driveway Spacing Guidelines
- Improved Pedestrian Connections
- Parking Management Program

Finally, several longer-term projects were identified for limited further analysis. These projects, while seen as important, would be implemented as part of longer-term improvement projects or through other redevelopment plans. The longer-term improvements include:

- Hope Avenue / State Street Intersection Eastbound Right-Turn Lane and Sidewalk
- Two-Way Calle Real/ Junipero Bridge
- Alternative East-West Routes
- Parking Structures and Shuttles

C. Other Improvement Options

The options listed below are included in the Upper State Circulation Improvements program, but no detailed analysis was conducted by MMA on these options as part of this study report. Each of the options was reviewed by City staff and identified as an item that is or will be addressed through other on-going corridor activities as noted after each item. These include efforts by various City departments (Transportation), other agencies (MTD), or through other planning activities, such as developing urban design guidelines, of the Upper State Street study:

- C7 - Reconfigure De la Vina Intersection (City Program -Transportation Division)
- C11 - Monitoring (City Program - Transportation Division)
- C12 - ITS (City Program – Transportation Division)
- T2 - Transit Lane (Bus or light rail, bicycles, emergency vehicles) (City Transportation)
- T2 - Rider Information (City, MTD program)
- T6 - Operational Changes (Extend Signals for buses; Bus pull out ROW) (City, MTD)
- PE1 - Tree Replacement (City-Urban Design Guidelines)
- PE2 - Sidewalk Expansion (City - Urban Design Guidelines)
- PE3 - Sidewalk Obstructions (City - Urban Design Guidelines)
- PE4 - Streetscape Standards (City - Urban Design Guidelines)

- PE5 - Sidewalk Buffer (City – Urban Design Guidelines)
- PE7 - Pedestrian Crossing Timers (City Transportation)
- PE8 - Pedestrian-Attractive Intersections/Crosswalks (City – Urban Design Guidelines)
- B2 - Widen Bike Lanes (City – Urban Design Guidelines)
- PA4 - Site Lay-Out for Parking (City – Urban Design Guidelines)
- PA5 - Retail/Restaurant Parking Requirements (City)
- PA6 - Mixed Use Development (City)
- PA7 - Parking Demand Reduction (City)
- PA8 - Retain On-Street Parking (City)

Other Options Analyzed But Not Included

Relocate NB Route 101 On-Ramp from State Street to Calle Real west of Highway 154

An improvement option that was identified during the public review process was the possible relocation of the existing NB Route 101 On-Ramp from State Street to Calle Real west of Highway 154. The existing on ramp from westbound State Street to northbound Route 101 was identified as difficult to traverse for bicycles and pedestrians because of the large open area caused by the skew of the ramp. This limits pedestrian crossings along the north side of State Street and creates a hazard for westbound bicycles. The option that was reviewed considered relocating the northbound ramp to west of the Highway 154 overpass along Calle Real.

The existing Route 101 on ramp has two lanes from State Street and handles over 500 vehicles per hour during the weekday peak hours. The option would have moved the ramp to a location along Calle Real west of the Highway 154 bridge. The relocation would have required adding capacity to the Calle Real and Highway 154 intersection and shifting the existing Calle Real alignment to the north to provide two on-ramp lanes. Steep slope and drainage structures along the north side of the road will likely require the need for modified utilities and retaining walls.

A significant amount of additional right-of-way would need to be acquired to accommodate the new ramp. The projected cost of this project is estimated to be a minimum of $5,000,000 not including the retaining walls, right-of-way acquisition, and utility modifications at the ramp and capacity enhancements along Calle Real. Based on these findings the option was deemed as not feasible at this time.

VII. Recommended Improvements

The improvement projects and programs analyzed in more detail here are grouped into three categories: Near-Term Physical Improvements, Near-Term Circulation and Parking Management Improvements, and Longer-Term Physical Improvements. The analysis looks at these options in more detail including conceptual locations and designs, circulation and traffic benefits, and potential implementation and funding approaches.

The near-term physical improvements options include alterations to crosswalks, bus pockets, traffic signals, medians, and a pedestrian/bicycle trail that could improve safety and/or traffic flow.

The near-term management programs include projects and programs to improve parking and access management, pedestrian connections and circulation facilities, and reducing demand for auto use in the corridor.

Longer-term physical improvements include projects aimed at improving access, circulation, and parking in the corridor, but will require either larger funding source to implement and/or would be tied to future redevelopment projects.

The analysis also includes a discussion of the applicability of various financing sources and programs that could be available for projects in the area and provides a summary of the expected operating conditions with the inclusion of the near-term physical improvements.

As previously noted, several options listed in Section V are included in the Upper State Circulation Improvements program, but no detailed analysis was conducted by MMA on these options as part of this study report. Each of the options was reviewed by City staff and identified as an item that is or will be addressed through other on-going corridor activities as noted after each item. These include efforts by various City departments (Transportation), other agencies (MTD), or through other planning activities, such as developing urban design guidelines, of the Upper State Street study.

A. Near-Term Physical Improvements

The near term physical improvements project "worksheets" summarize each project's description, purpose, benefit, design features, costs, and funding sources. Worksheets are included for each of the following projects:

- Relocate State Street / Calle Palo Colorado Crosswalks
- Relocate State Street / Calle Palo Colorado Bus Stops and Add Bus Pockets
- Bus Pocket at Ontare Road and State Street
- Bus Pocket at Toyon Drive and State Street
- New Traffic Signal at McCaw/Las Positas Intersection
- Additional Raised Median – Route 101 Northbound Ramp / Calle Real to La Cumbre
- Additional Raised Median – Hitchcock Way to Ontare Road
- Additional Raised Median – Ontare Road to Broadmoor Plaza
- New Off-Street Pedestrian/Bike Trail
- Signal Phasing Modifications

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Project: Relocate State / Calle Palo Colorado Crosswalk

Description: Relocate the existing north-south crosswalk to the east side of the intersection and move the southside on-street parking from the east to the west side of the intersection.

General Benefit: Pedestrian Safety Enhancement, non-LOS circulation Improvement

Estimated Cost: $99,300 *(See Appendix for details)*

Analysis:
The existing north-south crosswalk at the Calle Palo Colorado intersection requires pedestrians to cross traffic both at an uncontrolled location and across five moving lanes of traffic. The proposed change to the crosswalk is to shift it to the east side of the intersection to take advantage of the unused center portion of the street and to install pedestrian-actuated flashers to alert motorists to the presence of a crossing pedestrian. The project would also include a larger pedestrian landing area on the southside of the street that would be combined with an expanded park access to allow for easier movement between the crosswalk and MacKenzie Park. In addition to relocating the crosswalk, the existing on-street parking along the south side of State Street to the east of the intersection would be shifted to the west to provide better sight lines between pedestrians and motorists at the intersection. This project could also be combined with other project, such as relocating the bus stops at this intersection to the far sides of the intersection and providing bus pockets.

The project, illustrated in Figure 18, relocates the crosswalk to the east approach and includes modified access ramps. The relocated crosswalk would take advantage of the existing striped median to create a pedestrian refuge area. The access ramps to the crosswalk would be relocated and modified to provide ADA compatible access. Visibility for pedestrians would be increased by locating the crosswalk in a more visible location, providing upgraded lighting and signage, and including pedestrian activated flashers. Pedestrian safety is improved by not requiring pedestrians to cross the eastbound left-turn lane and providing the center lane refuge if eastbound or westbound traffic does not stop for the crosswalk. Traffic circulation is improved by providing better visibility at the crosswalk and advanced warning of pedestrians crossing (flashing lights) and reducing the number of abrupt stops by drivers who didn't see pedestrians until they were in the street. This will reduce the friction felt by many drivers in this section of State Street. No LOS improvement would be created by the project.

On-street parking along the south side of State Street would be shifted from the east side to the west side of the intersection. The planned modification of the State Street and de la Vina Street intersection to remove the existing free right-turn lane will allow some additional on-street parking to be developed farther east of this intersection. If the de la Vina Street intersection modification is not completed, then some on-street parking in this area may be lost.

Some additional right-of-way or easement may be needed on the south side of State Street to provide the widened sidewalk and expanded park entrance. Since the park is owned by the City this would require no private property acquisition.

Potential Funding Sources:
- Transportation Enhancement Activities
- Section 5309 Bus & Equipment
- Safe Route to School Program
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
- Public/Private Partnership

(See Chapter VII - Section D for a full description funding sources.)

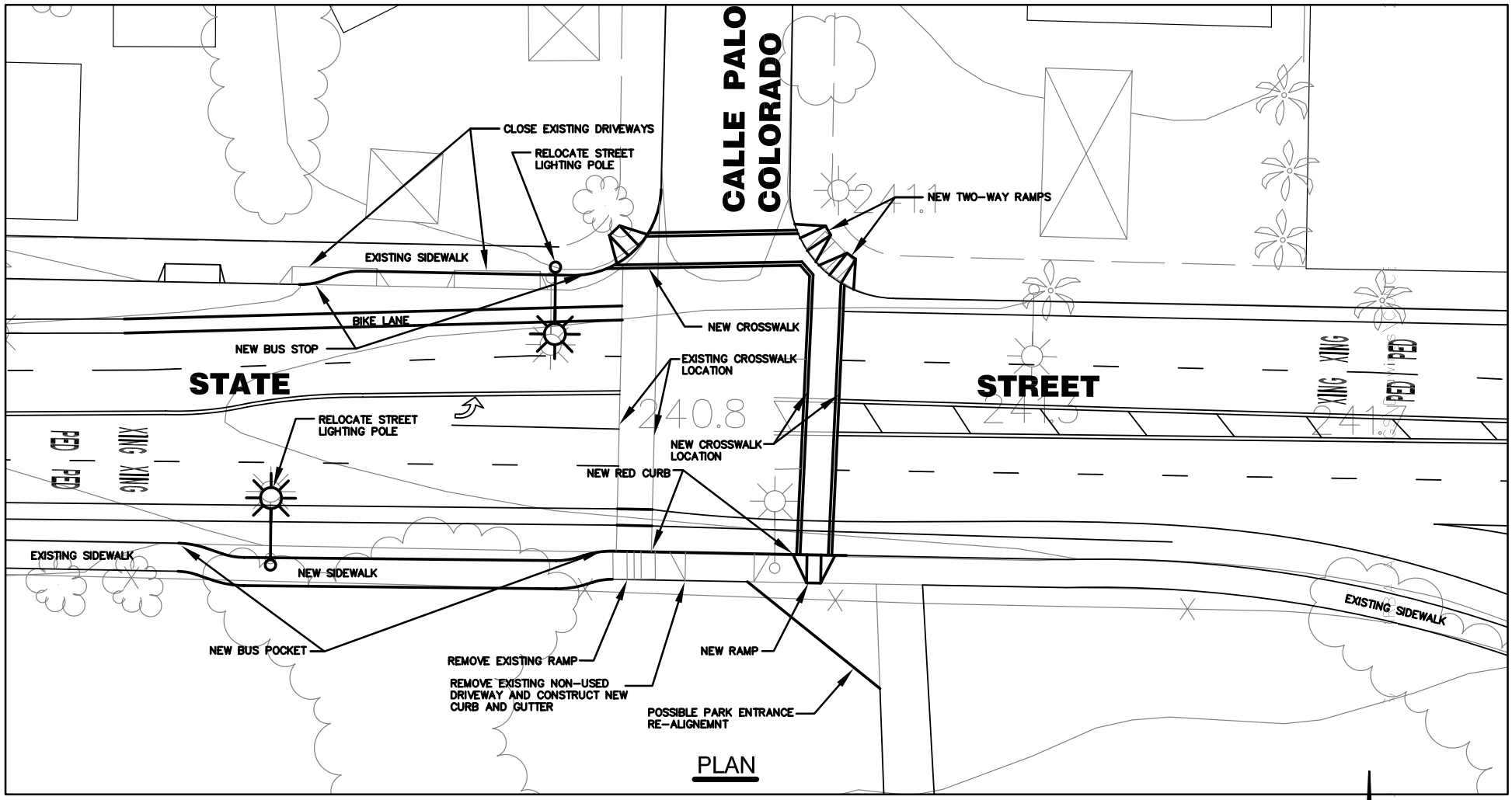

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FIGURE 19
Relocate State / Calle Palo Colorado
Bus Stops and Add Bus Pockets

Project: Relocate State Street / Calle Palo Colorado Bus Stops and Add Bus Pockets

Description: Relocate the existing near-side bus MTD stops on both the north and south sides of State Street to the far side of the intersection and create new bus pockets.

General Benefit: Circulation Improvement (*non-LOS improvement*), Safety Enhancement

Estimated Cost: $109,100 *(See Appendix for details)*

Analysis:
Both of the existing State Street bus stops at the Calle Palo Colorado intersection are located on the approaching or near side of the intersection. The preferred location for stops in this corridor is on the departure or far side of the intersection. In addition, both of the stops require buses to dwell in the parking and bicycle lanes—blocking them while loading. This project includes the relocation of the north side bus stop to the far side of the intersection and the creation of bus pockets at both stops.

The bus pockets will allow buses to move fully out of the traffic and bicycle lanes. This reduces friction between the eastbound and westbound through traffic and the stopped buses thereby improving the flow of traffic, especially for bicyclists. The pockets also reduce the risk of inattentive drivers running into the back of a stopped bus and drivers who are leaving parking spaces being obscured from view by the buses.

The bus pocket on the south side of State Street, as illustrated in Figure 19, is created by reconfiguring the existing stop and sidewalk area to create the pocket. A portion of the sidewalk will need to be relocated to the south into the park with acquisition of some right-of-way or creation of an easement. The width of the widening is minimized by using part of the parking lane width. To provide adequate space for pedestrians walking and bus passenger staging, a larger staging area and sidewalk would be created. This could also be integrated into a modified park entrance and possible relocated crosswalk. Space to accommodate the additional waiting area could require additional right-of-way. On-street parking along the south side of State Street would remain in it existing location. The planned modification of the State Street and de la Vina Street intersection to remove the existing free right-turn lane will allow some additional on-street parking to be developed east of the pocket. No on-street parking would be lost in this area.

For the north side bus stop, the development of the pocket requires closing at least one and preferably both State Street driveways to the property on the northwest corner of the intersection. Since one driveway is currently closed, the loss of the drive should not be a significant problem. Also, the site has several access drives on Calle Palo Colorado. Closing the drives on State Street would provide a cleaner bus stop and reduce the number of conflict points on State Street for vehicles, bicycles, and pedestrians.

While the pockets allow buses to move out of the traffic lanes to stop, if through traffic is heavy, some buses may have difficulty reentering the through lanes after stopping. The congestion and traffic levels in the Upper State Street corridor do not appear to be problematic for bus operations and discussions with MTD indicated they preferred the use of pockets. Some agencies have tried ways to make it easier for buses to pull out from the curb after loading, including bus right-of-way ordinances. The projected volumes for State Street do not indicate that this should not be a problem in this area.

Potential Funding Sources:

- Congestion Mitigation and Air Quality
- Section 5309 Bus & Equipment
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D

(See Chapter VII - Section D for a full description funding sources.)

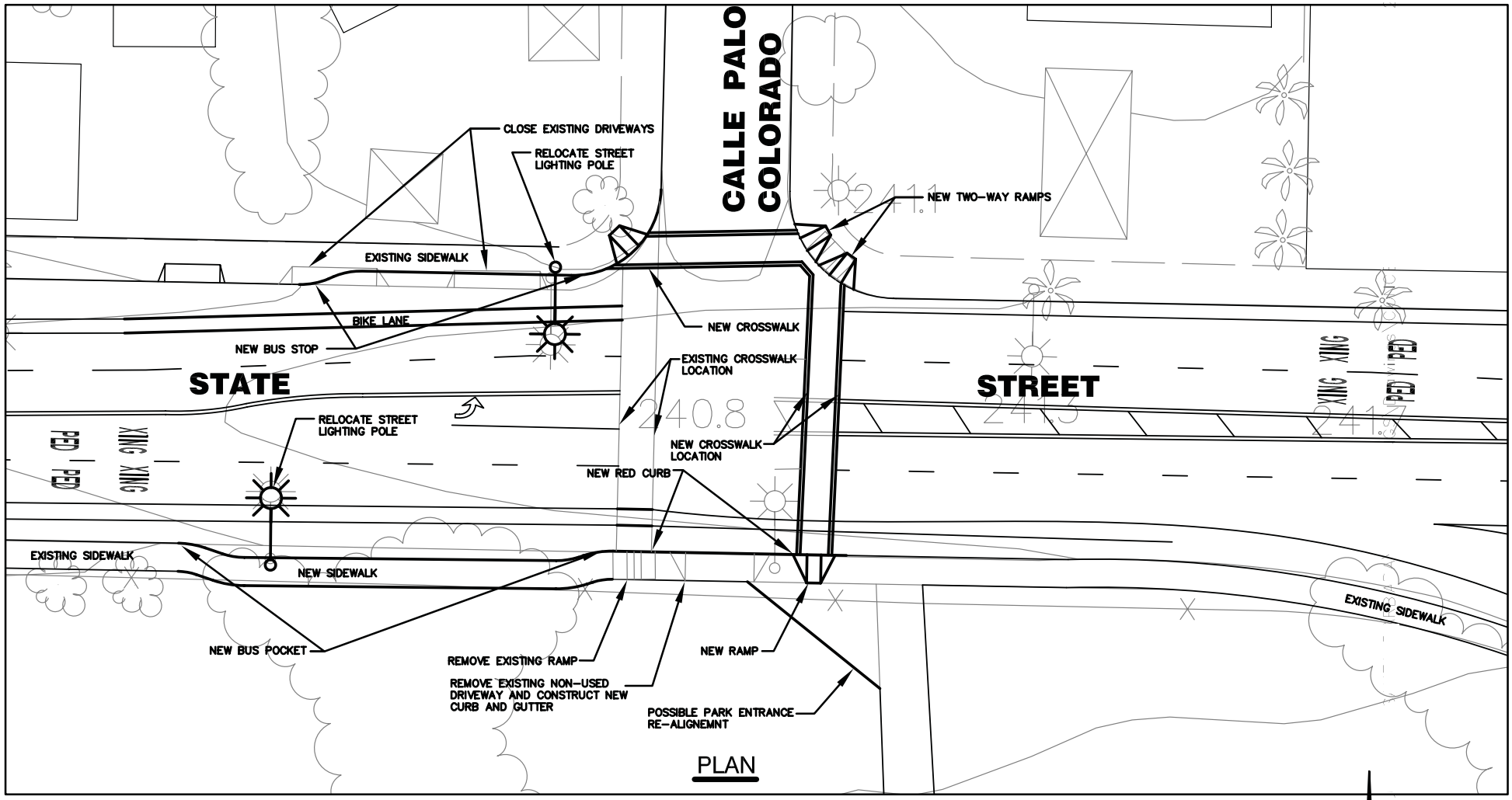

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FIGURE 18
Relocate State / Calle Palo Colorado Crosswalk

Project: Bus Pocket at Ontare Road and State Street

Description: Create a bus pocket for the existing MTD bus stop on the southside of State Street at Ontare Road.

General Benefit: Circulation Improvement (*non-LOS improvement*), Safety Enhancement

Estimated Cost: $109,000 *(See Appendix for details)*

Analysis:
Many of the existing bus stops along the Upper State Street corridor have pockets on the far side of the intersection for the buses to stop in while boarding and alighting. The bus pockets provide locations for buses to stop out of the through traffic and bicycle lanes. This reduces the number of lane changes occurring as drivers attempt to pass stopped buses, slowing of through traffic, the potential for rear end collisions between stopped buses and other vehicles, and buses forcing bicyclists to stop in an unsafe location while the bus is stopped. This project includes the creation of a bus pocket for the existing bus stop and widening of the sidewalk to provide more pedestrian staging and walking area.

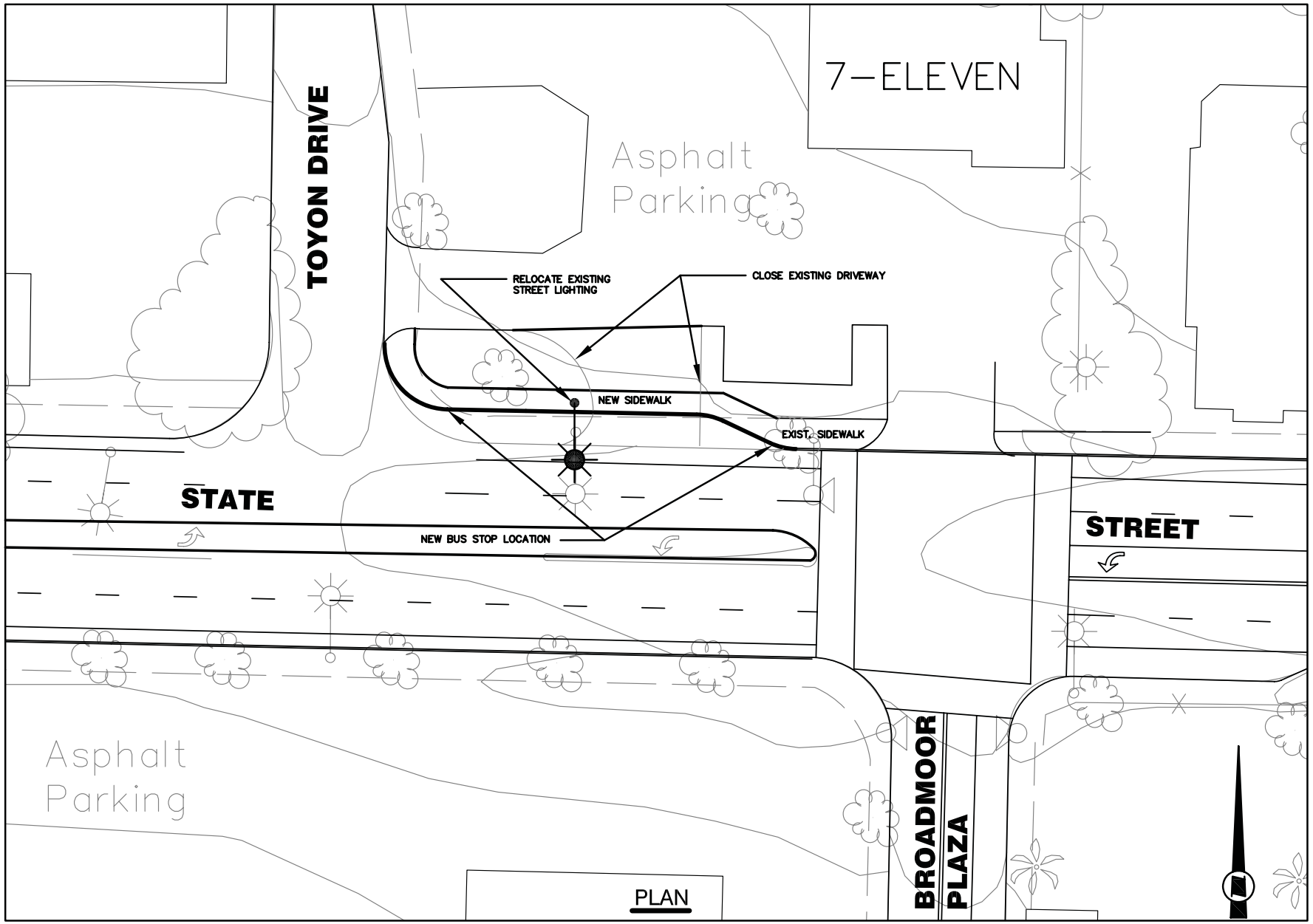
As the intersection levels of service get closer to the City's limits for congestion, it will be important to reduce the friction and delay caused by vehicles slowing and/or stopping in the through lanes. The creation of the pockets will allow traffic to flow smoother through the intersection and will reduce overall delay for people traveling along the corridor. In addition, the added width created by the pockets at this location will allow for more room for westbound traffic to make U-turns if needed.

The pocket will increase the pedestrian crossing distance on the east leg off the intersections by about 12 feet. This will require the pedestrian timings in the traffic signal to be extended by about 3 to 4 seconds so that adequate pedestrian crossing time is displayed.

State Street has limited right-of-way available for the development of this bus pocket and the project will require obtaining approximately 12 to 15 additional feet of right-of-way from the existing car wash to develop the pocket shown in Figure 20. In addition, the existing site access drives for the car wash and the adjacent hotel site to the east would need to be modified to accommodate the eastern end of the bus pocket. This design also only provides a minimal area for bus stop seating. If more extensive bus stop furniture or a larger transit waiting area is needed, additional right-of-way would need to be acquired. Replacement of the existing block-wall fencing would also be required, as well as some site redesign to the car wash site to accommodate future on-site circulation with the bus pocket right-of-way removed.

While the pockets allow buses to move out of the traffic lanes to stop, if through traffic is heavy, some buses may have difficulty reentering the through lanes after stopping. The congestion and traffic levels in the Upper State Street corridor do not appear to be problematic for bus operations and discussions with MTD staff indicated they preferred the use of pockets. Some agencies have tried ways to make it easier for buses to pull out from the curb after loading, including bus right-of-way ordinances. The projected volumes for this section of State Street should not be high enough indicate that exiting the bus pocket should be a problem for buses.

Potential Funding Sources:
- Congestion Mitigation and Air Quality
- Section 5309 Bus & Equipment
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
  (See Chapter VII - Section D for a full description funding sources.)



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SCALE: 1"=40'

FIGURE 21
Bus Pocket at Toyon Drive and State Street

Project: Bus Pocket at Toyon Drive and State Street

Description: Create a bus pocket for the existing MTD bus stop on the northside of State Street at Toyon Drive.

General Benefit: Circulation Improvement (*non-LOS improvement*), Safety Enhancement

Estimated Cost: $71,500 *(See Appendix for details)*

Analysis:
Many of the existing bus stops along the Upper State Street corridor have pockets on the far side of the intersection for the buses to stop in while boarding and alighting. The bus pockets provide locations for buses to stop out of the through traffic and bicycle lanes. This reduces the number of lane changes occurring as auto drivers attempt to pass stopped buses, slowing of through traffic, the potential for rear end collisions between stopped buses and other vehicles, and buses forcing bicyclists to stop in an unsafe location while the bus is stopped. This project includes the creation of a bus pocket for the existing bus stop and widening of the sidewalk to provide more pedestrian staging and walking area.

As the intersection levels of service get closer to the City's limits for congestion, it will be important to reduce the friction and delay caused by vehicles slowing and/or stopping in the through lanes. The creation of the pockets will allow traffic to flow smoother through the intersection and will reduce overall delay for people traveling along the corridor. The pocket design provides space for buses to move out of the through and bicycle lanes on State Street, provides a westbound right-turn lane for Toyon Drive when buses are not present, and as shown could be modified to provide added width for eastbound traffic to make U-turns if needed. However, the existing crosswalk at the Broadmoor intersection would likely be lengthened and the driveway to the 7-Eleven would need to be modified to accommodate the additional westbound lane width.

The pocket, shown in Figure 21, would begin just west of the existing Broadmoor traffic signal and continue west to Toyon Drive. The pocket will require that the existing site access drive located west of the traffic signal be removed. If right-of-way or an easement were obtained, the vacated site area could be a potential location for development of a transit waiting area. Since the existing driveway area is not currently used for parking, no site parking would be lost. The removal of the driveway would also reduce a potential driveway conflict point along State Street.

While the pockets allow buses to move out of the traffic lanes to stop, if through traffic is heavy, some buses may have difficulty reentering the through lanes after stopping. The congestion and traffic levels in the Upper State Street corridor do not appear to be problematic for bus operations and discussions with MTD staff indicated they preferred the use of pockets. Some agencies have tried with ways to make it easier for buses to pull out from the curb after loading, including bus right-of-way ordinances. . The projected volumes for this section of State Street should not be high enough indicate that exiting the bus pocket should be a problem for buses. Also, while the project creates a far-side bus pocket for the Broadmoor intersection, it creates a near-side pocket for the Toyon Drive intersection. With the low volume of traffic that turns at the Toyon/State intersection, the creation of the pocket should not contribute to any operational or safety problems at the intersection.

Potential Funding Sources:
- Congestion Mitigation and Air Quality
- Section 5309 Bus & Equipment
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
  (See Chapter VII - Section D for a full description funding sources.)

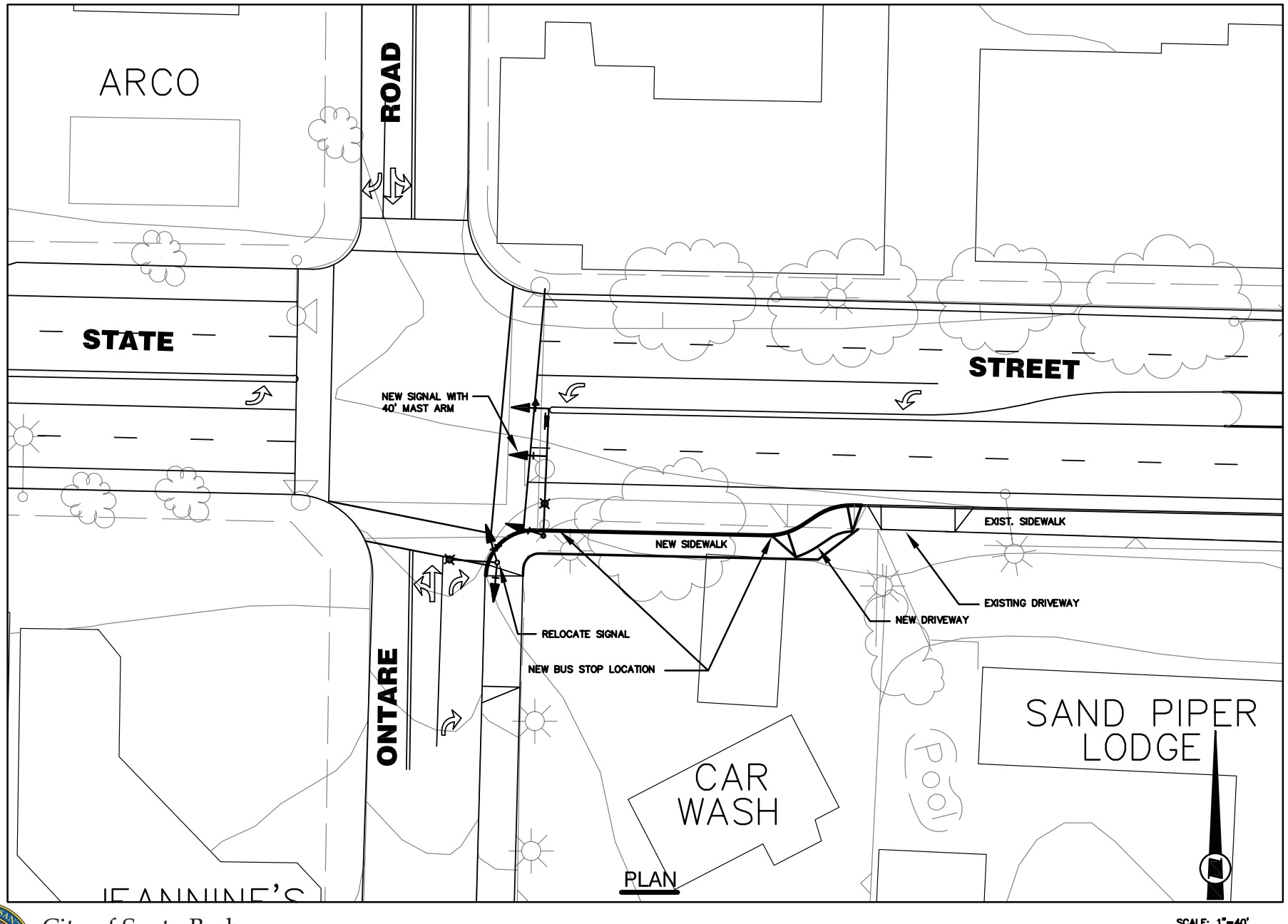

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FIGURE 20
Bus Pocket at Ontare Road and State Street

Project: New Traffic Signal at McCaw/Las Positas Intersection

Description: Install an actuated new traffic signal at the Las Positas Road and McCaw Avenue intersection.

General Benefit: LOS and Circulation Improvement, Safety Enhancement

Estimated Cost: $430,000 *(See Appendix for details)*

Analysis:
In discussions with area residents during the public review process of the Upper State Street study, many expressed difficulty making turns into and out of McCaw Avenue at Las Positas Road because of the speed of traffic and the lack of a traffic signal. Some stated they use the Ontare Road intersection at State Street as an alternative to turning at McCaw. This creates additional delay along the State Street corridor. The Las Positas/McCaw intersection is also the access to the parking lot for MacKenzie Park and congestion at this intersection affects the accessibility of the park. Providing a traffic signal at the McCaw Avenue intersection is expected to both divert some traffic away from the Ontare/State intersection by reducing delay on McCaw Avenue and allow drivers to more efficiently and safely make turns to and from Las Positas at the intersection.

To develop a traffic signal at this intersection, physical improvements would need to be provided including new curb and gutter along both Las Positas Road and McCaw Avenue. Currently the drainage along both streets is provided in open ditches. Sidewalks would also be provided along east Las Positas and north side of McCaw and as extension into MacKenzie Park. The new traffic signal would be interconnected with the existing signals to the north and south. New fiber optic cable would need to be provided along Las Positas Road to upgrade the existing interconnect system. The signals would be fully actuated with vehicle detectors on the McCaw and Park driveway approaches along with the northbound and southbound left-turn lanes. A concept design for the traffic signal and geometric improvements is shown in Figure 22.

In addition to providing improved vehicle operations at the intersection, the traffic signal would include pedestrian crossing lights and actuation buttons to allow safer movement for pedestrians and bicyclists between the residential area to the west and MacKenzie Park. Pedestrian features would also include ADA compliant ramping and marked crosswalks. Another study project proposes the development of a new bicycle and pedestrian route that would connect to MacKenzie Park via McCaw Avenue. The traffic signal would provide a controlled access to the park along that route.

While no existing or future traffic data was available for this intersection, based on the traffic volumes on Las Positas Road and field observations during the peak hours the traffic signal at this intersection would be warranted. As previously mentioned, a traffic signal at this intersection would also likely draw some traffic away from intersections along State Street as residents would find it easier to access Las Positas Road at this intersection. The signal would induce some delay to through traffic on Las Positas that currently does not stop. However, traffic delay would be reduced on McCaw Avenue and if traffic is diverted from State Street then the delay and congestion would be reduced on that corridor.

Potential Funding Sources:
- Transportation Enhancement Activities
- Safe Route to School Program
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara Capital Improvement Program
- Measure D
- Traffic Impact Fee
- Project-Specific Mitigation
- Public/Private Partnership

(See Chapter VII - Section D for a full description funding sources.)

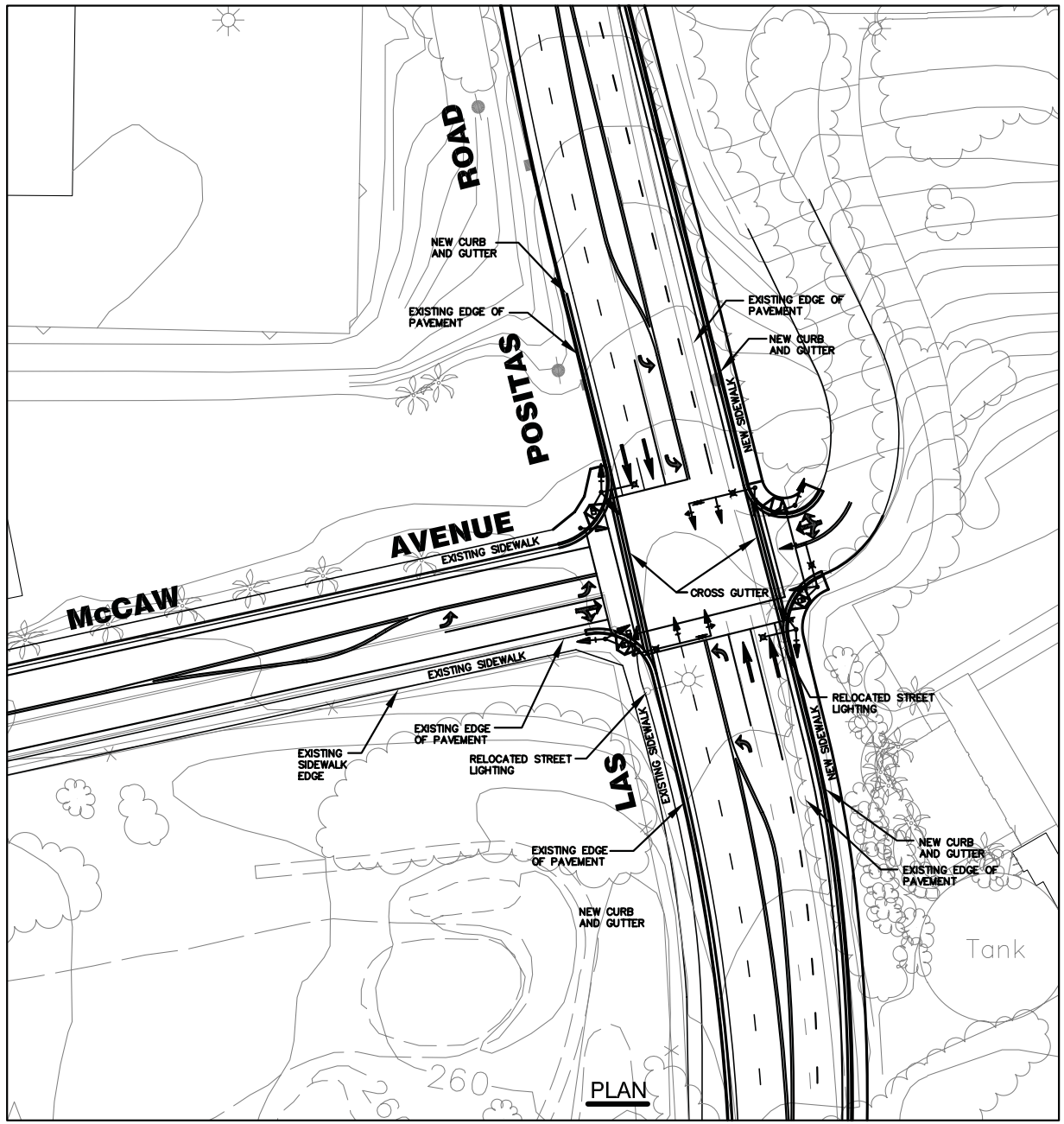

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FIGURE 22
New Traffic Signal at McCaw/Las Positas Intersection

Project: Additional State Street Raised Median Between Route 101 Northbound Ramp / Calle Real and La Cumbre Road

Description: Install additional raised median between the existing median islands to limit most mid-block left turns along section of State Street.

General Benefit: Mid-Block Circulation Improvement (*non-LOS)*, Driveway Vehicle and Pedestrian Safety Enhancement

Estimated Cost: $47,200 *(See Appendix for details)*

Analysis:
A conclusion of the corridor study is that traffic flow can be improved by reducing the conflicts between through traffic and traffic turning to/from site driveways along each block. Traffic accident data for the section of State Street between the Route 101 Northbound Ramp/Calle Real intersection and La Cumbre Road showed a high number of accidents related to vehicles turning to and from State Street at the Five Points Shopping Center driveway west of the Carls Jr. and the McDonalds driveway. By limiting left-turn access along this section of State Street the goal is to reduce the number of accidents and improve mid-block traffic flow by reducing the conflicts between through traffic and turning vehicles.

This median design, as illustrated in Figure 23, will extend the existing raised median to eliminate mid-block eastbound left and U-turns and restrict left turns out of both the Five Points Shopping Center and McDonalds. Westbound left-turn access to Five Points would still be allowed. Westbound traffic wanting to access the land uses along the north side of State Street would need to make a U-turn at the La Cumbre/State intersection. Traffic exiting the northside land uses would need to go west on State Street to the frontage west of the bridge to negotiate a U-turn. U-turns would not be allowed at the 101 Ramp/Calle Real intersection as some drivers may confuse a U-turn lane with a left-turn lane to the one-way Route 101 off-ramp. Traffic exiting Five Points wanting to go west could either make a U-turn at the La Cumbre intersection or could exit the Center using one of the La Cumbre Road driveways and then turn left onto State Street or travel south on La Cumbre to access Route 101.

The median closure will create some degradation of the intersection LOS at the La Cumbre Road intersections as some traffic is directed through the intersections at State Street and the Route 101 ramps; however, some mid-block traffic flow improvement will be experienced State Street by limiting left turns.

Issues Related to Medians
Raised medians are intended to improve traffic flow by limiting the number of potential conflict points between vehicles along a corridor. By limiting left turns into and out of side streets and/or driveways, there are fewer potential conflict locations between turning and through vehicles and pedestrians crossing driveways. This results in improved safety in the corridor. In addition, raised medians can increase through vehicle capacity along the street by reducing the mid-block friction for through traffic. NCHRP Report 524 presents a detailed discussion on the benefits of raised medians on improved traffic flow and accident reduction from mid-block turns.

However, by their nature raised medians also limit access to local development along the corridor. Patrons that would have made a left-turn into or out of a site must either change their route to or from the site or make a U-turn at median breaks or a nearby intersection to get to their destination. This can result in circuitous travel, increased overall miles traveled in an area, and additional delay at nearby intersections as vehicles wait to make U-turns.

In corridors where there is more congestion there is the potential for slowed or stopped traffic to obstruct emergency vehicles if adequate street width is not available for vehicles to move out of the way. The potential for these situations can be reduced by installing Opticom or other traffic signal pre-emption systems to extend or turn on a green light at intersections to move traffic queues. At some intersections, right-turn lanes and bus pockets can serve as locations for vehicles to move out of the way of approaching emergency vehicles. In some area where congestion is significant, emergency vehicles may need to operate on the wrong side of the median for portions of the street to by-pass stopped traffic or access a local site.

Because of the issue of restricted access and potential traffic queues blocking access, police and fire departments prefer not to have raised medians along most streets where alternative access and circulation routes limited. To avoid situations where emergency vehicle could be significantly affected, locations where medians are being considered should be reviewed with emergency services staff to make sure potential issues can be appropriately addressed. The median proposed in this project was discussed with the City of Santa Barbara Fire Marshall.

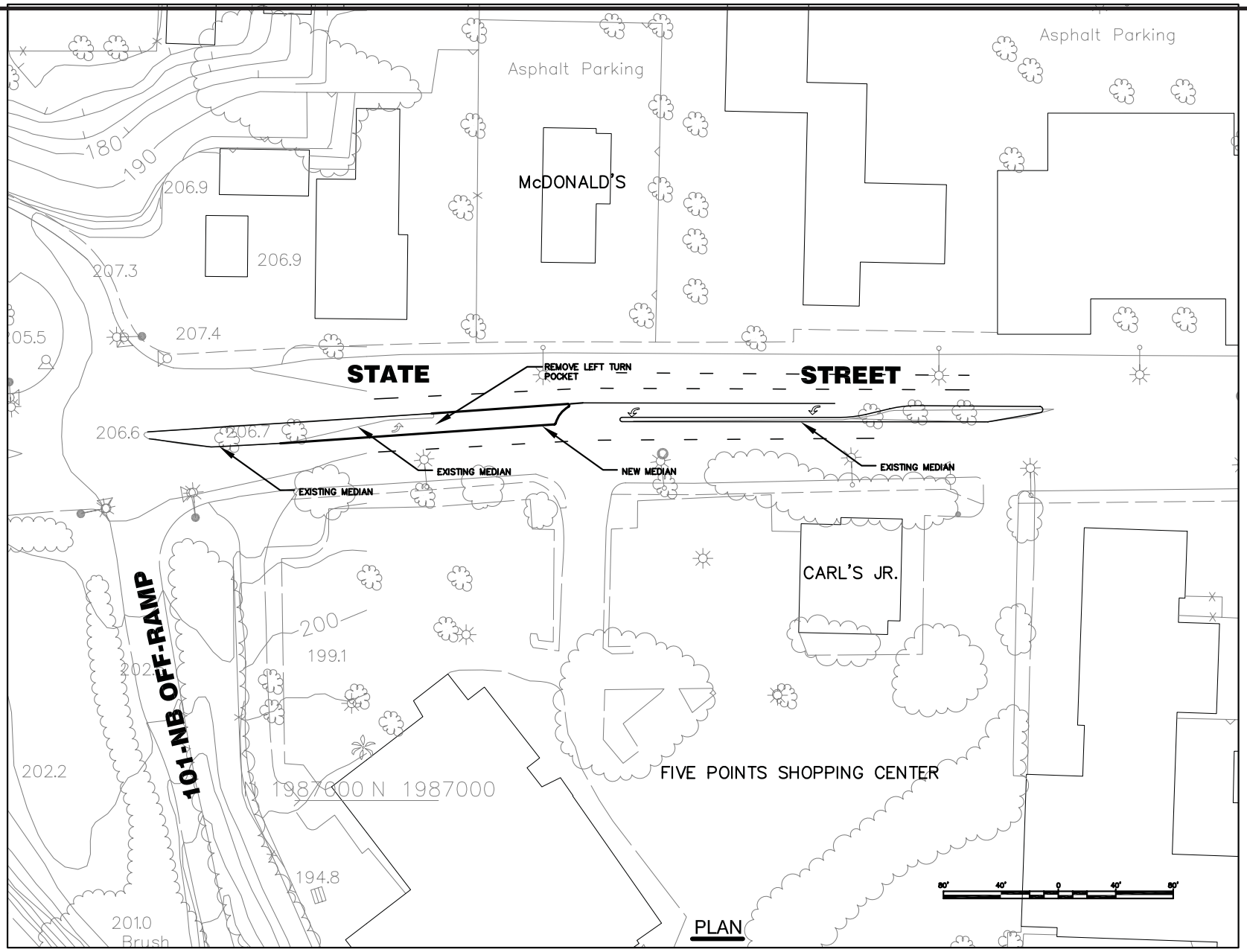
Truck access to commercial sites must also be considered and the impacts on large vehicle circulation and access must also be considered.

Issues related to each median proposal can be addressed through a staff and public review process to identify any potential problems with access and circulation. Creating/expanding raised medians must be carefully planned and analyzed so as also not to impact adjacent intersections with excessive U-turns in addition to maintaining effective access for emergency services and an appropriate amount of access to local land uses.

Potential Funding Sources:

- Transportation Enhancement Activities
- Traffic Congestion Relief Program
- Air Quality Vehicle Registration Fees
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
- Business Improvement District Funding
- Public/Private Partnership

(See Chapter VII - Section D for a full description funding sources.)



City of Santa Barbara
Upper State Street
Traffic and Circulation Study

FIGURE 23
Additional State Street Raised Median Between
Route 101 NB Ramp and La Cumbre Road

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Project: Additional State Street Raised Median Between Hitchcock Way and Ontare Road

Description: Install additional raised median on State Street to limit mid-block left turns from State Street to two mid-block locations and left-turns on to State Street to U-turns at signalized intersections.

General Benefit: Mid-Block Circulation Improvement, Driveway Vehicle and Pedestrian Safety Enhancement

Estimated Cost: $108,300 *(See Appendix for details)*

Analysis:
The section of State Street between Hitchcock Way and Ontare Road is one of the longest sections of State Street with both painted median and mid-block driveways. To reduce the number of potential conflict points along State Street in this block without reducing the number of driveways, extension of the raised median is proposed to limit left-turns to and from the land uses along the block. Numerous studies have shown that as the number of access drives along a street increases the traffic operations on the street decreases. These mid-block conflicts create congestion that is not measured at the intersections, but contributes to the overall delay in the corridor.

Using site access spacing guidelines presented in the report, the scale of the developments, and location of the existing driveways a concept median plan was developed. The median plan for this block is illustrated in Figure 24. Because of the length of the block and the width of State Street for U-turns, access into sites was limited to two mid-block locations and left-turns out of sites were not permitted. Drivers wanting to turn left out of sites will need to make a U-turn at either the Hitchcock or Ontare intersections. Larger sites with driveways that were more than 200 feet from the signalized intersections and locations where consolidated access could be provided were given the highest priority for median access. In addition, sites with access to other streets would be given less direct access to State Street.

People not able to directly access the sites along the north side of State Street may use San Remo Drive to access their site. Any redevelopment projects in this section of State Street should be encouraged to develop shared access drives. The addition of some U-turning traffic to the Hitchcock and Ontare intersections will reduce the LOS at those locations, but an improvement in the mid-block traffic operations would be experienced.

Issues Related to Medians
Raised medians are intended to improve traffic flow by limiting the number of potential conflict points between vehicles along a corridor. By limiting left turns into and out of side streets and/or driveways, there are fewer potential conflict locations between turning and through vehicles and pedestrians crossing driveways. This results in improved safety in the corridor. In addition, raised medians can increase through vehicle capacity along the street by reducing the mid-block friction for through traffic. NCHRP Report 524 presents a detailed discussion on the benefits of raised medians on improved traffic flow and accident reduction from mid-block turns.

However, by their nature raised medians also limit access to local development along the corridor. Patrons that would have made a left-turn into or out of a site must either change their route to or from the site or make a U-turn at median breaks or a nearby intersection to get to their destination. This can result in circuitous travel, increased overall miles traveled in an area, and additional delay at nearby intersections as vehicles wait to make U-turns.

In corridors where there is more congestion there is the potential for slowed or stopped traffic to obstruct emergency vehicles if adequate street width is not available for vehicles to move out of the way. The potential for these situations can be reduced by installing Opticom or other traffic signal pre-emption systems to extend or turn on a green light at intersections to move traffic queues. At some intersections, right-turn lanes and bus pockets can serve as locations for vehicles to move out of the way of approaching emergency vehicles. In some area where congestion is significant, emergency vehicles may need to operate on the wrong side of the median for portions of the street to by-pass stopped traffic or access a local site.

Because of the issue of restricted access and potential traffic queues blocking access, police and fire departments prefer not to have raised medians along most streets where alternative access and circulation routes limited. To avoid situations where emergency vehicle could be significantly affected, locations where medians are being considered should be reviewed with emergency services staff to make sure potential issues can be appropriately addressed. The median proposed in this project was discussed with the City of Santa Barbara Fire Marshall.

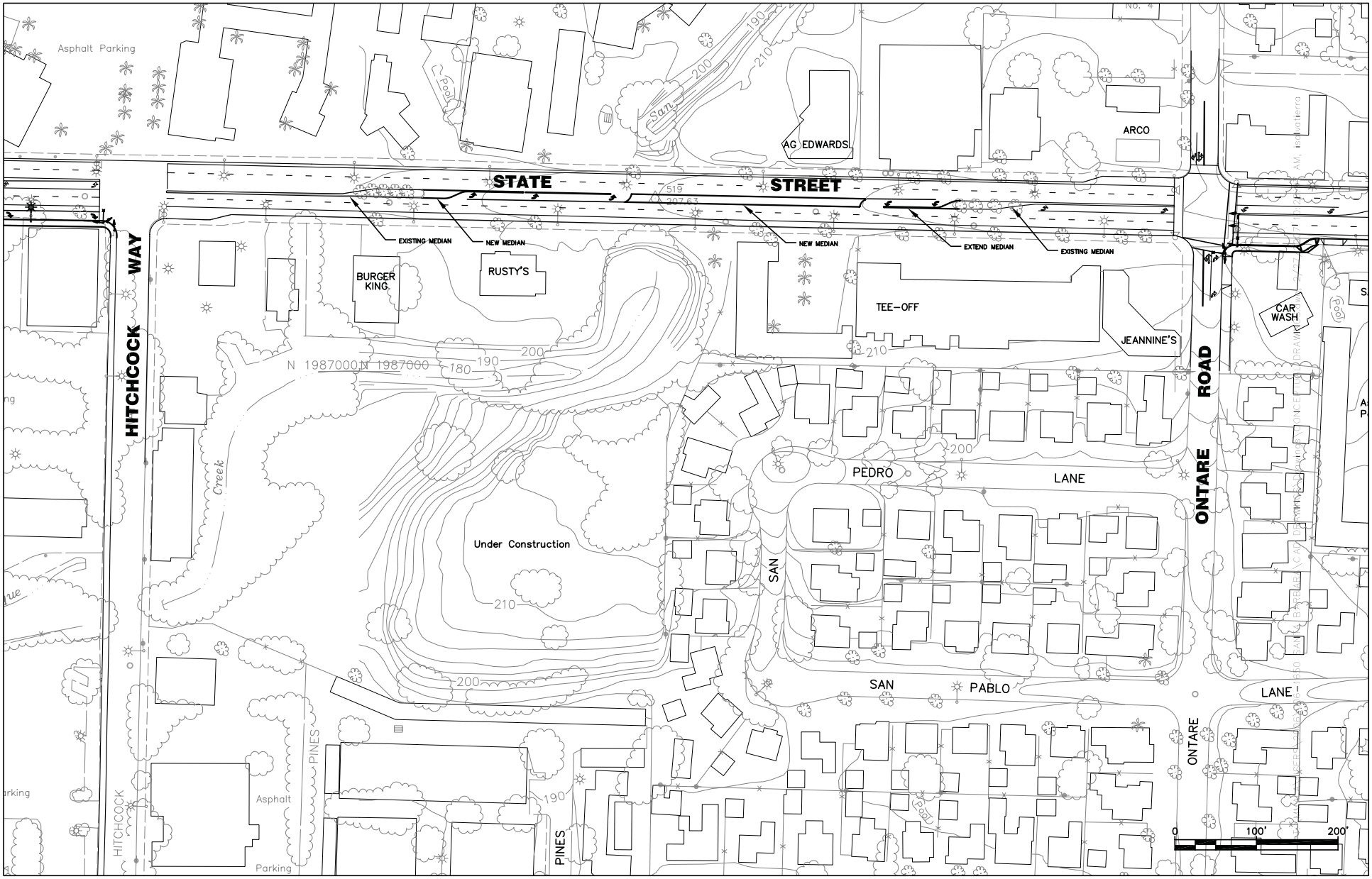
Truck access to commercial sites must also be considered and the impacts on large vehicle circulation and access must also be considered.

Issues related to each median proposal can be addressed through a staff and public review process to identify any potential problems with access and circulation. Creating/expanding raised medians must be carefully planned and analyzed so as also not to impact adjacent intersections with excessive U-turns in addition to maintaining effective access for emergency services and an appropriate amount of access to local land uses.

Potential Funding Sources:

- Transportation Enhancement Activities
- Congestion Mitigation and Air Quality
- Traffic Congestion Relief Program
- Air Quality Vehicle Registration Fees
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
- Business Improvement District Funding
- Public/Private Partnership

(See Chapter VII - Section D for a full description funding sources.)



City of Santa Barbara
Upper State Street
Traffic and Circulation Study

FIGURE 24
Additonal State Street Raised Median Between
Hitchcock Way and Ontare Road

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Project: Additional State Street Raised Median Between Ontare Road and Broadmoor Plaza

Description: Install additional raised median on State Street to limit mid-block left turns from State Street to two mid-block locations and left-turns on to State Street to U-turns at signalized intersections.

General Benefit: Mid-Block Circulation Improvement, Driveway Vehicle and Pedestrian Safety Enhancement

Estimated Cost: $96,500 *(See Appendix for details)*

Analysis:
State Street between Ontare Road and Broadmoor Plaza is accessed by numerous site driveways and Toyon Drive, which is offset from the Broadmoor intersection by less than 200 feet. The result is numerous conflict points for through and turning traffic along this block. The proposed median project would reduce the number of potential conflicts by eliminating left turns from State Street to sites on the north side of State Street and limiting left-turn driveway access for the south side uses to a consolidated access drive near the middle of the block. Left turns out of the sites would not be allowed. This proposed median is illustrated in Figure 25.

A consolidated shared access for the motels and the shopping center would be developed with this project with left-turn and right-turn access in and right-turn-only exit. Development of a cross-access and maintenance agreement between the land owners will be required. Some internal site reconfiguration may also be required to accommodate traffic flows between the three sites. The Toyon Drive intersection with State Street will be restricted to right turns only. Access to the residential area to the north for eastbound traffic would be via either Ontare Road or Canon Drive. Reducing access along State Street may encourage diversion to Ontare and McCaw, especially if a traffic signal is added at McCaw/Las Positas intersection. Hotel traffic may try to cut through the shopping center lot to get access to Broadmoor access drive. Monitoring of traffic patterns would be required to address any unwanted diversion. Sites on the north side of State Street all have alley access on their north sides, so limited diversion would be expected. Bus pockets proposed as part of other projects would create added room for U-turns at Ontare Road. Modification to the Broadmoor intersection may be required to accommodate U-turns. Removal of the mid-block and Toyon Drive left turns would improve through traffic operations along the block; however, some additional intersection delay would be added by the U-turning traffic.

Issues Related to Medians
Raised medians are intended to improve traffic flow by limiting the number of potential conflict points between vehicles along a corridor. By limiting left turns into and out of side streets and/or driveways, there are fewer potential conflict locations between turning and through vehicles and pedestrians crossing driveways. This results in improved safety in the corridor. In addition, raised medians can increase through vehicle capacity along the street by reducing the mid-block friction for through traffic. NCHRP Report 524 presents a detailed discussion on the benefits of raised medians on improved traffic flow and accident reduction from mid-block turns.

However, by their nature raised medians also limit access to local development along the corridor. Patrons that would have made a left-turn into or out of a site must either change their route to or from the site or make a U-turn at median breaks or a nearby intersection to get to their destination. This can result in circuitous travel, increased overall miles traveled in an area, and additional delay at nearby intersections as vehicles wait to make U-turns.

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Because of the issue of restricted access and potential traffic queues blocking access, police and fire departments prefer not to have raised medians along most streets where alternative access and circulation routes limited. To avoid situations where emergency vehicle could be significantly affected, locations where medians are being considered should be reviewed with emergency services staff to make sure potential issues can be appropriately addressed. The median proposed in this project was discussed with the City of Santa Barbara Fire Marshall.

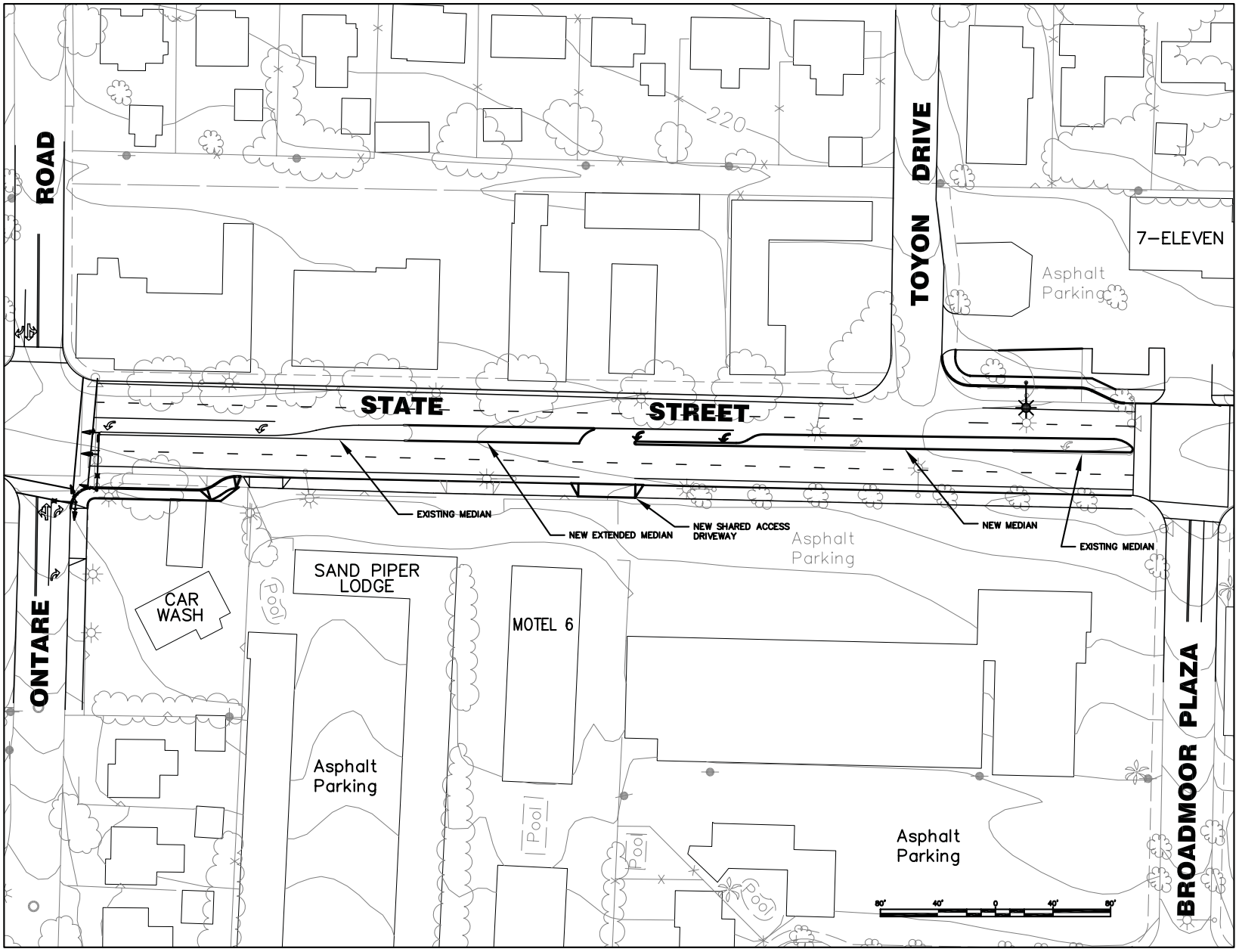
Truck access to commercial sites must also be considered and the impacts on large vehicle circulation and access must also be considered.

Issues related to each median proposal can be addressed through a staff and public review process to identify any potential problems with access and circulation. Creating/expanding raised medians must be carefully planned and analyzed so as also not to impact adjacent intersections with excessive U-turns in addition to maintaining effective access for emergency services and an appropriate amount of access to local land uses.

Potential Funding Sources:

- Transportation Enhancement Activities
- Congestion Mitigation and Air Quality
- Traffic Congestion Relief Program
- Air Quality Vehicle Registration Fees
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
- Business Improvement District Funding
- Public/Private Partnership

(See Chapter VII - Section D for a full description funding sources.)



City of Santa Barbara
Upper State Street
Traffic and Circulation Study

FIGURE 25
Additional State Street Raised Median Between Ontare Road and Broadmoor Plaza

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Project: New Off-Street Pedestrian/Bike Trail

Description: Develop a new east-west pedestrian/bicycle path between Hope Avenue and Las Positas Road including sections of on-street bike route, sidewalk, and off-street paved trail.

General Benefit: LOS and Circulation Improvement, Pedestrian/Bicycle Safety Enhancement

Estimated Cost: $932,800 *(See Appendix for details)*

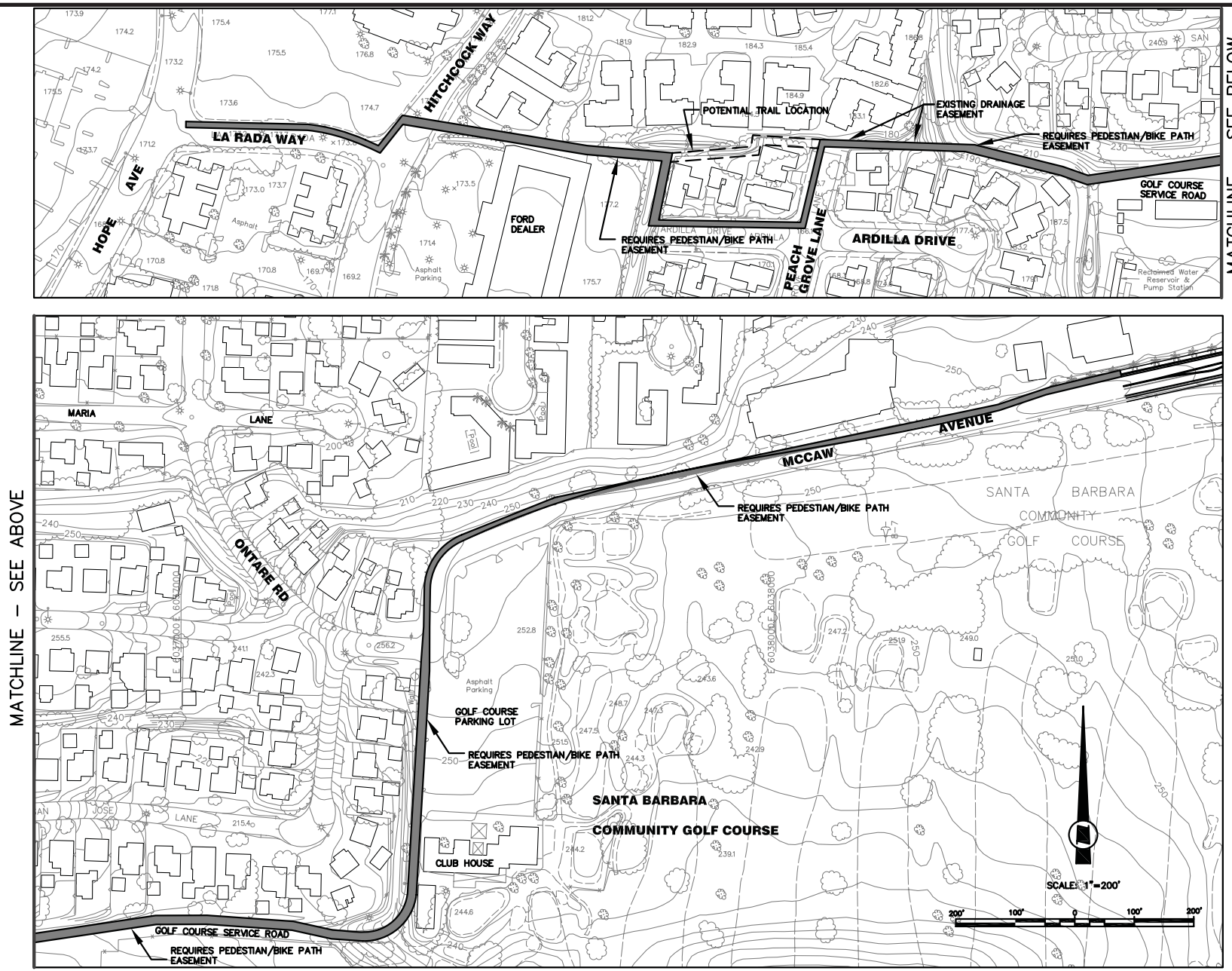
Analysis:
An important element of the reducing congestion in the Upper State Street corridor is encouraging non-motorized travel. Many people have expressed the need for an alternative east-west pedestrian/ bicycle facility to the bike lanes and sidewalks on State Street and a system that would link the neighborhoods along the south side of State Street that are only accessible today by car like the local street system and sidewalks on the north side of State Street. This project addresses that need and includes the development of an east-west multi-use trial that would extend from Hope Avenue on the west to Las Positas Road and MacKenzie Park on the east. By encouraging the use of walking and biking the number or auto trips on State Street and intersecting streets can be reduced along with traffic congestion.

The trail, as shown in Figure 26, would begin on the west at the La Rada Way and Hope Avenue intersection. The section along La Rada would utilize the existing street and sidewalk. At Hitchcock Way, the trail would access a new right-of-way along the Ford Auto Dealership property. The trail would then connect to Ardilla Drive where the trail would again return to the street and sidewalk. It may be possible to extend the trail straight east from the northeast corner of the Ford property, however field observations did not allow access to this area to verify. The trail would extend along Ardilla Drive and Peach Grove Lane and then access the existing drainage easement between the residences. Some additional easement would be required as the trail extends up the slope towards the golf course. Once at the golf course property, the trail would use the existing service drive and parking lot to access McCaw Avenue and then via on-street bike lanes and sidewalks to Las Positas Road.

The facility would include both on and off-street sections and would access through some existing private properties and along some municipal lands. The development of the trail would require the acquisition of either right-of-way or easements in several locations. In addition, the golf course access drive and parking drive aisle would need to be modified to accommodate bikes and pedestrian access. The existing drainage easement along a portion of Ardilla Drive contains an open channel drain, which would need to be enclosed to accommodate a bike/ped facility. The proposed facility would be paved and would traverse along some flat and some sloped terrain. The preliminary design accounts for some construction on the slope, however additional geologic analysis of the slope must be conducted to determine if additional slope stabilization would be required. ADA requirements will also need to be met with access ramps and landing areas on the sloped section. The trail would be surfaced with asphalt along most portions, although natural surfaces could be used if run-off and drainage is stabilized. Security lighting would need to be provided and visibility for users to avoid obstructed areas that could become safety problems will be needed. Additional analysis would also need to be conducted to determine if the trail could be developed to design level that would accommodate vehicles, such as small electric vehicles, other than bicycles and pedestrians.

Potential Funding Sources:
- Transportation Enhancement Activities
- Congestion Mitigation and Air Quality
- Safe Route to School Program
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D

(See Chapter VII - Section D for a full description funding sources.)



City of Santa Barbara
Upper State Street
Traffic and Circulation Study

FIGURE 26
New Off-Street Pedestrian/Bike Trail

Project: Signal Phasing Modifications

Description: Install dedicated right-turn arrows at selected intersections to expedite traffic flow.

General Benefit: Intersection LOS Improvement, Corridor Traffic Flow Improvement

Estimated Cost: See Table Below

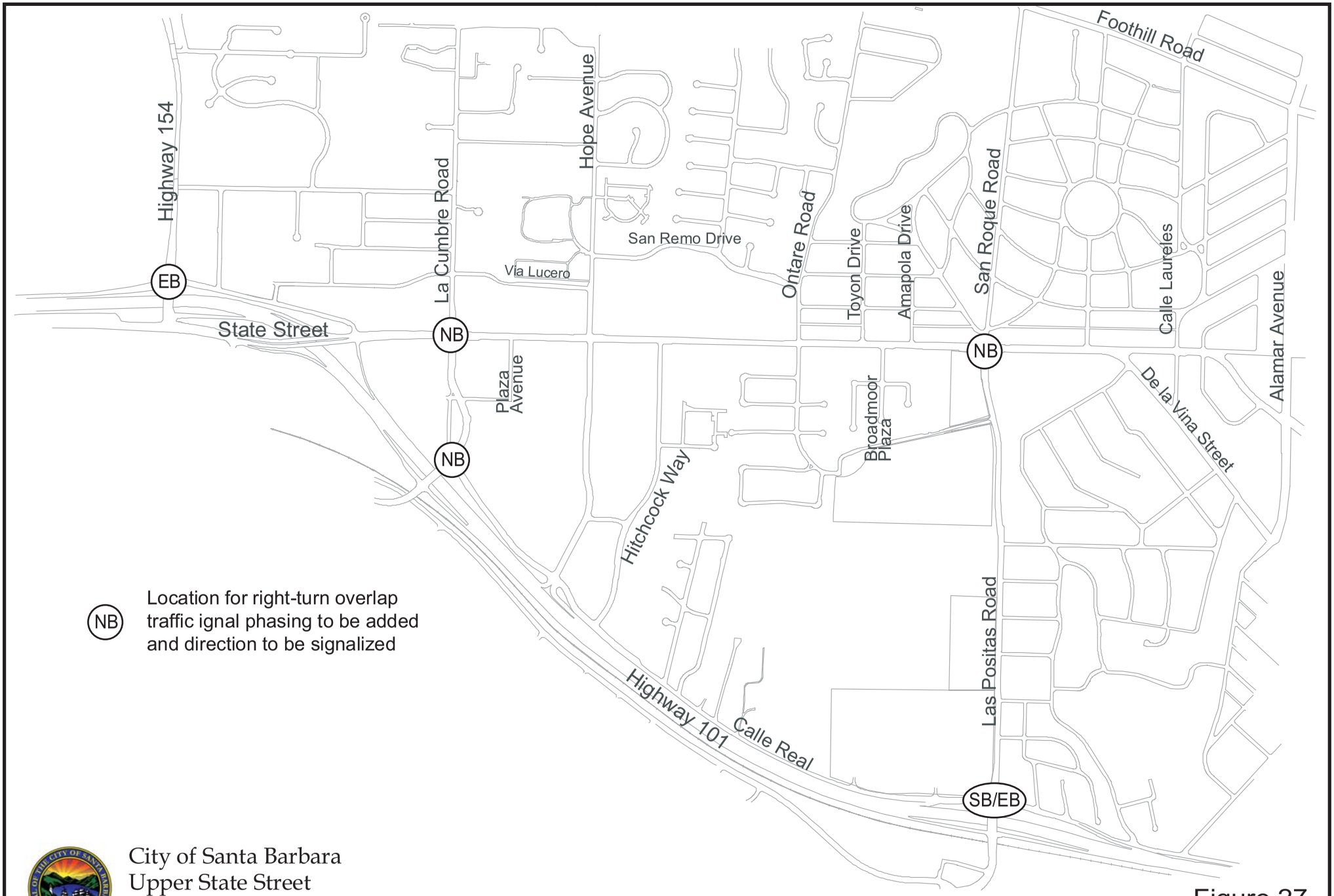
Analysis:
Traffic at signalized intersections can move during two conditions. The first condition is when the signal light is giving a green indicator to that movement as either a green ball (round light) or a green arrow. The second condition is when a red light is displayed, but there is no conflicting traffic for right-turning vehicles so vehicles can stop and then proceed when there is an adequate gap in traffic (right turn on red or RTOR). The capacity of a lane is increased the more "green time" is displayed to traffic. For intersections with dedicated right-turn lanes and large right-turn volumes the overall capacity of the intersection can be increased by providing a right-turn arrow that is displayed when no conflicting traffic for those vehicles is moving. For example, if north and southbound left turns are moving, there is no conflict for east and westbound right turns to move. Displaying a green right-turn arrow for those vehicles is referred to a as right-turn overlap phase. The addition of a right turn overlap phase can reduce the delay for turning vehicles and in turn reduce the intersection V/C ratio.

This project entails the addition of right-turn overlap phasing at the intersections listed in the table below and shown in Figure 27. The project includes the modification of the existing traffic signal timing plans to include the overlap phase and the addition of the right-turn arrow signal heads for the identified approaches. The number of signal heads needed and the locations varies depending on the intersection. It is not anticipated that additional signal poles or other equipment would be need to accommodate the signal changes at most locations. Discussion with City engineering staff indicated that all of the traffic signal control equipment was adequate to handle the added signal indicators and phasing.

The benefit of these signal changes is the added capacity that can be realized when right-turning vehicles can be processed quicker as they can move without stopping or significantly slowing to make the right turn during the overlap signal phase. As the table below shows, the V/C level at all of the intersections improves with the right turn overlap installed, in some cases more than just allowing a right-turn-on-red movement.

Intersections		Int. Leg Overlap Added	Future Year 2016 Cumulative PM			Estimated Cost
			V/C	V/C With RTOR	V/C With Overlap	
1	Highway 154 at Calle Real	EB	0.65	N/A	0.59	$10,000
6	La Cumbre Road at State Street	NB	0.75	0.73	0.73	$5,000
12	Las Positas Rd/San Roque Rd at State Street	NB	0.78	0.72	0.70	$5,000
18	La Cumbre Road at Calle Real	NB	0.69	N/A	0.62	$13,000
23	Las Positas Road at Calle Real	SB & EB	0.83	0.73	0.72	$5,000
Notes: N/A – locations where right-turn-on-red traffic volume data was not available.						

Potential Funding Sources:
- Congestion Mitigation and Air Quality
- Intelligent Transportation System Funds
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
- Traffic Impact Fee
- Project-Specific Mitigation
  (See Chapter VII - Section D for a full description funding sources.)



City of Santa Barbara
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Figure 27
Traffic Signal Phasing Modifications

B. Near-Term Circulation and Parking Management Improvements

The near-term circulation and parking management improvements are more programmatic efforts than those in the previous physical improvements and would be refined through the development and implementation process. However, the items addressed in this section provide parameters as a starting point for the development of a process to review and implement programs for the following areas.

- Shared Access and Parking Program/ Driveway Spacing Guidelines
- Improved Pedestrian Connections
- Parking Management Program

In this section, components of each of these three areas are identified along with sample parameters and key components and considerations.

Shared Access and Driveway Spacing Guidelines

Promotion of shared driveway access, alley or rear side access will occur primarily as a result of, and in conjunction with, development activity. It is possible that changes to access or driveway configuration could be made without parcel development, although unlikely, since businesses tend to want their own access and exposure to the street. Also, modifications to driveway access will also require costly re-design to on-site circulation and internal parking layouts. While such modifications may be desirable at locations such as Five Points near the freeway interchange (to limit or relocate driveways), such retrofits may be infeasible without some concurrent change in the land use or application for modification to the site.

When development/redevelopment occurs, especially when multiple parcels are combined, many changes could be made to limit the number of driveways, change access to alleys or side streets, limit distances to nearest traffic signal, etc. This will naturally occur as a result of site review and lot consolidation, however, it would be important to impose a set of generalized standards or policies that relate to access and parking to ensure appropriate designs develop to maximize traffic flow while maintaining access.

When development occurs, access control guidelines can be used to specify the location and design requirements of all access points along a major roadway such as Upper State Street. The guidelines can control the number of access points to avoid or minimize conflict points. Guidelines typically include specific design criteria for access points. These ensure adequate driveway throat length to avoid conflicts with flow of off-site traffic, adequate driveway spacing requirements, sufficient corner clearances, and joint and cross access configurations. As redevelopment occurs and property owners apply for a new driveway permits, these guidelines can be enforced and applied. For existing driveways that may not currently meet the standards, conformance may be achieved when new permit requests are made to modify a building, when land use intensities change, or when other site improvements are initiated.

Studies and research projects by the Federal Highway Administration (FHWA), the National Cooperative Highway Research Program (NCHRP), and sponsored by the American Association of State Highway and Transportation Officials (AASHTO) - all have concluded that access connections, as roadway design elements, create conflicts for motorists as vehicles enter, maneuver and exit the roadway. As access frequency increases, collisions increase as well as travel delay. As access proliferates, the functional performance of the roadway will decline. This is obvious along Upper State Street, which is characterized by average daily and peak hour traffic flow for a roadway of its type and function, but experiences high motorist delay and number of collisions of certain types.

As experienced along Upper State Street, one of the important understandings of traffic congestion and increased collision rates has been the acknowledgment that the frequency of access points and the type of access is the single most important roadway element generating these problems. Traffic signals and access maneuvers contribute to travel delays, congestion and loss of capacity. Traffic controls and operations are made more complicated by the need to accommodate frequent access locations. Past studies indicate that aggressive access management when applied to a corridor such as Upper State Street can potentially achieve 40 to 60 percent

reductions in accident frequency for certain types of collisions such as rear end and left turn away from intersections.

General measures to promote effective access management, include:

- Require larger minimum lot frontages.
- Encourage joint and cross access, consolidate access whenever separate parcels are assembled under one purpose, plan, entity or use to increase average spacing between adjacent driveways.
- Combine access to existing developments when adjacent owners can be persuaded to share joint-use driveways in lieu of separate driveways, to be located on the centerline between adjacent properties.
- Attempt to achieve uniform spacing of driveways as much as possible.
- Require complete on-site circulation.
- Promote activity centers rather than strip development.
- Ensure design of adequate driveway throat length to avoid a conflict with the flow of off-site traffic (current City standards require 20 feet of depth).
- Provide adequate driveway spacing requirements, corner clearance, and joint and cross access configurations.
- Orient lots, buildings, and access points to local streets.

Corner clearances represent the minimum distances that are (or should be) required between intersections and driveways along arterial roads. As stated in the AASHTO *A Policy on Geometric Design of Highways and Streets:* "Driveways should not be situated within the functional boundary of at-grade intersections. This boundary would include the longitudinal limits of auxiliary lanes." In other words, the driveways should be located beyond the beginning or end of turn bays and transitions for turn lanes. Inadequate corner clearances can result in traffic-operation, safety, and capacity problems. These problems can be caused by blocked driveway ingress and egress movements, conflicting and confusing turns at intersections, insufficient weaving distances, and backups from far-side driveways into intersections. Specific operational and safety problems include:

- Through traffic is blocked by vehicles waiting to turn into a driveway.
- Right or left turns into or out of a driveway are blocked.
- Driveway traffic is unable to enter left-turn lanes.
- Driveway exit movements are impacted by stopped vehicles in left-turn lanes.
- The weaving maneuvers for vehicles turning onto Upper State Street and then immediately turning left into a driveway are too short.
- Confusion and conflicts resulting from dual interpretation of right-turn signals.

It is not possible to describe a full set of standards in this program overview given the many variables involved including the unique characteristics of each block along Upper State Street, the type and size of proposed future developments, proximity of proposed driveways to signalized or stop controlled intersections, presence of parking or not, presence of a median or not, nearby driveways and intersections, collision history on that block, type of driveway design, land uses to be served, projected traffic volume of the driveway and many other factors. Given all of these considerations, the following general guidelines are recommended for consideration

in Upper State Street regarding access control and spacing where feasible based on future development plans. Further additional coordination with the City's Transportation staff will be required, and ultimately this process involves case-by-case review and determination of access spacing and design.

- Target a desirable minimum of 440 feet (1/12 of a mile) *where feasible* given redevelopment patterns. Consider a target for *absolute minimum* driveway spacing at new developments to be no less than 220 feet, and only where necessary based on special land use patterns and access requirements that cannot otherwise be met.
- Locate driveways at median openings or offset from median openings by at least 150 feet.
- The centerline of a single driveway shared by two adjacent properties should be located on the joint property line.
- Corner clearance near intersections will vary depending on specific characteristics, but allow a minimum of 220 feet for driveways on the far side of the intersection (intersection departure area), but attempt to locate the driveway beyond the endpoint of the intersection turning lanes. In such cases the corner clearance will likely be at least 200 to 300 feet or more if the turn lanes are longer.
- Where there is a raised median, locate the near side (approach side) driveway no less than 110 feet from the intersection
- Where there is not a raised median, locate the near side driveway at least 220 feet from the intersection.
- Limit all new access to one driveway per property except where properties exceed 300 feet in frontage, in which case allow two driveways as needed based on site design
- Recognize that access for parcels that cannot conform to the spacing criteria may be necessary when no alternative reasonable access is available. The basis for exceptions or variances should be identified in the guidelines.

The minimum spacing and clearances would be even larger for entirely new parcels in a newly developing area. For example, some jurisdictions require 500-foot spacing or more along all arterial roadways with posted or design speeds similar to Upper State Street. To meet strict engineering standards for a 40-mile per hour roadway for acceleration, deceleration merging and maximum capacity, the spacing standards would be even longer. However, in a location such as Upper State Street it is recognized that more flexible standards will be required given the historic land use and development patterns, lot frontage sizes, and other characteristics of the study area. Incremental changes that will eliminate driveways over time, create more uniform spacing, eliminate direct conflicts, move driveways away from intersections and consolidate parcels will have a highly beneficial effect on traffic flow, reduction in delay and reduction in certain types of collisions, even if strict design requirements cannot be met.

Mid-Block Driveway Analysis

Existing curb cuts in the Upper State Street corridor are summarized by block in Table 11. Each block is identified by its west and east terminal streets and side of the road (north or south). The distance from the intersections to the nearest curb cut and the average distance between curb cuts within the block are listed in feet. The table also lists the existing number of mid-block curb cuts followed by the number of mid-block curb cuts that would be allowed if; 1) desirable, or 2)

absolute minimum recommended spacing were implemented. These data are provided both for sections where there is no median and sections where there is a raised median since the recommendations allow for closer spacing of curb cuts where there are raised medians.

As noted in the recommended guidelines, the desirable distance between driveways is 440-feet; the absolute minimum recommended distance between driveways is 220-feet. For sections without a raised median, the recommended minimum distance from a driveway to an intersection is 220-feet; for sections with a raised median, the recommended minimum distance from a driveway to an intersection is 110-feet. Using those specifications, most blocks along Upper State Street would be allowed from one to 5 curb cuts, based on block length and presence of a median or not. Currently, many blocks have 4, 5 or 6 curb cuts, and three block faces have over ten curb cuts. On most blocks, the average spacing between curb cuts is currently between about 50 to 100 feet, as compared to the guidelines of 220 to 440 feet. As shown by the data in Table 11, most blocks in the Upper State Street corridor do not meet the minimum recommended spacing between driveways. In terms of distance from curb cuts to the intersection, many blocks have driveways within 25 to 75 feet, of the intersection and there is one location where a driveway is located within 12 feet of an intersection. Thus, in most locations along Upper State Street, the minimum 110 to 220 feet spacing between curb cuts and intersections is not currently met.

TABLE 11: UPPER STATE STREET MID-BLOCK DRIVEWAY SPACING ANALYSIS

North Side of Upper State Street

Block		Mid-Block Driveway Spacing (in feet)				Number of Mid-Block Driveways				
North Side	Block Length (feet)	Distance to Intersection		Distance Between Driveways		Existing	Desirable (440-Feet)		Minimum (220-Feet)	
Street Segment		From West Side	From East Side	Average	Maximum		Without Median	With Raised Median	Without Median	With Raised Median
Calle Real to La Cumbre Road	877	76	278	79	183	6	1	2	2	3
La Cumbre Road to Plaza Avenue	643	12	28	56	124	7	1	1	1	2
Plaza Avenue to Hope Avenue	621	228	171	176	176	2	1	1	1	2
Hope Avenue to Hitchcock Way	642	152	307	130	130	2	1	1	1	2
Hitchcock Way to Ontare Road	1296	22	25	69	167	13	2	3	4	5
Ontare Road to Toyon Drive	586	137	52	76	123	5	1	1	1	2
Toyon Drive to Broadmoor Plaza	158	68	60	-	-	1	0	0	0	0
Broadmoor Plaza to Amapola Drive	245	38	80	39	48	3	0	0	0	1
Amapola Drive to Las Positas Road	666	69	150	62	123	6	0	0	2	2
Las Positas Road to Calle Palo Colorado	939	48	34	75	190	10	2	2	3	3

South Side of Upper State Street

Block		Mid-Block Driveway Spacing (in feet)				Number of Mid-Block Driveways				
South Side	Block Length (feet)	Distance to Intersection		Distance Between Driveways		Existing	Desirable (440-Feet)		Minimum (220-Feet)	
Street Segment		From West Side	From East Side	Average	Maximum		No Median	Raised Median	No Median	Raised Median
Calle Real to La Cumbre Road	858	54	158	154	211	4	1	2	2	3
La Cumbre Road to Plaza Avenue	638	169	18	45	87	4	1	1	1	2
Plaza Avenue to Hope Avenue	638	162	441	-	-	1	1	1	1	2
Hope Avenue to Hitchcock Way	631	127	136	61	146	5	1	1	1	2
Hitchcock Way to Ontare Road	1292	28	115	95	253	10	2	3	4	5
Ontare Road to Broadmoor Plaza	772	137	120	145	212	4	1	1	2	3
Broadmoor Plaza to Las Positas Road	935	351	118	109	199	4	2	2	3	3
Las Positas Road to De la Vina Street	1181	409	736	-	-	1	2	2	4	4

Improved Pedestrian Connections

A key point emphasized throughout the study process was improving pedestrian connectivity throughout the corridor. Many people felt that the existing development patterns along with the street and sidewalk system isolates neighborhoods from State Street and does not promote travel on foot or by bicycle. More extensive use of paseos and widened sidewalks along with providing sidewalks in more of the adjacent neighborhoods were identified as high priority features. To encourage more pedestrian connectivity in the area, a program should be developed that identifies key connection corridors, establishes creating these connections as a priority item in any redevelopment that occurs, and provides regular funding for the development of new corridors and the enhancement and extension of existing connections.

Identifying priority corridors is the first step in establishing a paseo program for the area that ultimately would identify specific sites where right-of-way acquisition or the creation of easements would be needed to develop the identified connections. These connections could also be created as part of redevelopment projects as long as long-term operation and maintenance agreements could be developed to ensure that the paseos would be available to the public on a long-term basis (i.e., not created as privately held site amenities).

Figure 28 identifies several potential pedestrian corridors at mid-block locations along State Street between La Cumbre Road and San Roque/Las Positas. The map shows locations where new off-street paseos could be considered along with existing street corridors where sidewalks should be added, improved, or extended. The corridors are intended to identify locations where neighborhoods and significant trip generators could be linked to reduce the need for auto trips. In addition, the corridors include areas that may attract people as gathering places if sites are designed to accommodate social interaction and activities.

The corridor planning effort should be formalized in a paseo plan for Upper State Street that would identify the need to provide these important connections and design criteria for their implementation.

The development of a larger network of pedestrian facilities and connections is a step towards reducing auto usage in the area. Fewer autos will result in less vehicle noise and pollution and better roadway operations for those who must drive and for transit buses. This will slow the increase in capacity demand at the area intersections by reducing auto usage. The end result will be a significantly slower increase in V/C levels at the area intersections than if local residents and employees used their autos for every trip. Many of the potential corridors listed provide connections between neighborhoods that today are separated by fences and major roadways.

Providing improved pedestrian corridors should be linked to efforts to reduce the number of driveways along Upper State Street and enhancement of pedestrian traffic signals at intersections. This will reduce the number of potential conflict points between pedestrians and autos and provide for a safer pedestrian environment. Enhancements that should be included as part of this effort include providing improved buffers between autos and pedestrians, improved landscaping and wider sidewalks to enhance the pedestrian experience, and providing pedestrian-oriented uses along the street to encourage walking.

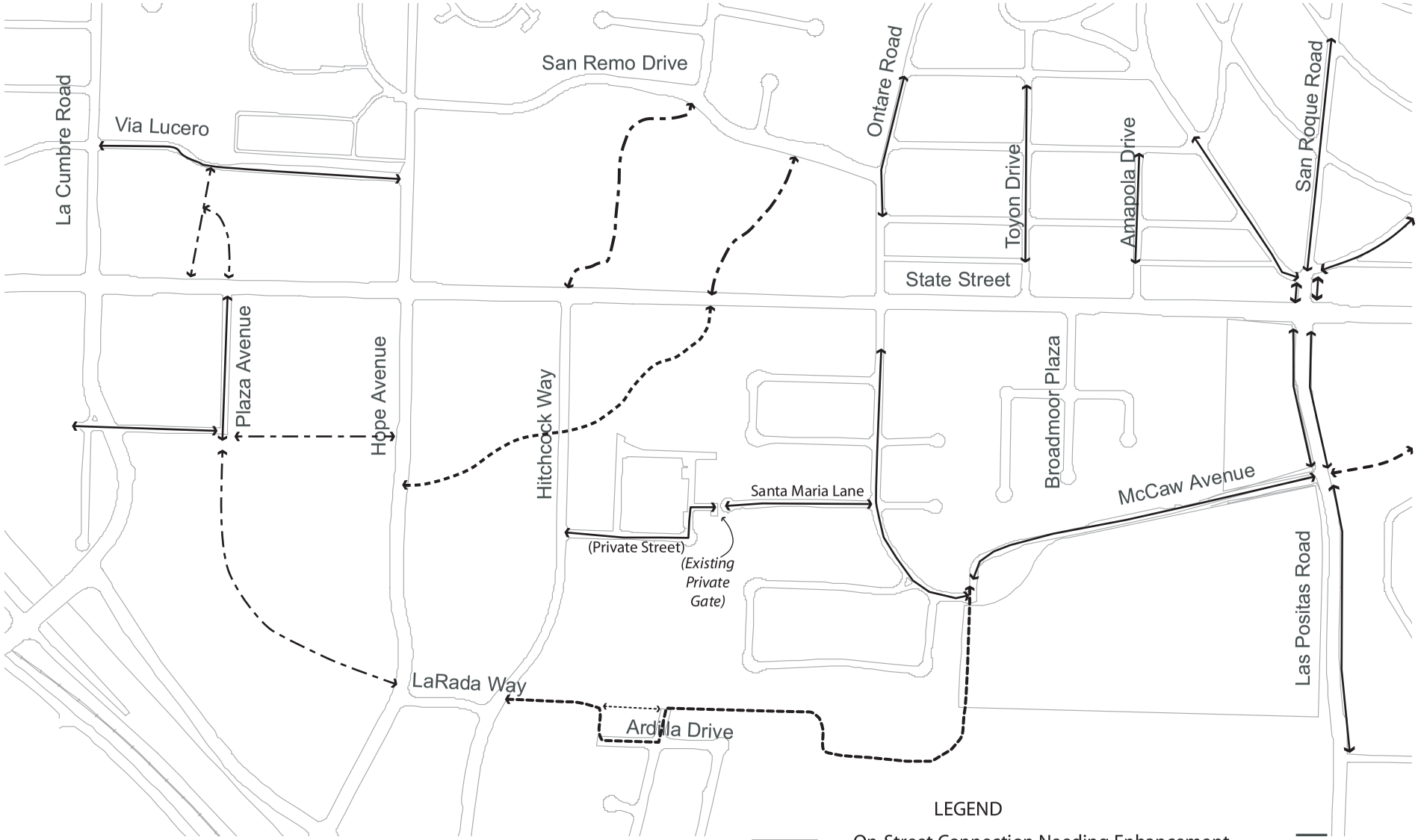

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FIGURE 28
Potential Pedestrian Connection Corridors

The following briefly describes the potential corridors identified in Figure 28 and the enhancements to promote increased pedestrian activity along those corridors:

- New paseo corridors should be developed at several locations on the north side of State Street. One is a corridor between Via Lucero and State near Plaza Avenue. The paseo could be developed as part of a future redevelopment project. A second paseo could be developed between San Remo Drive and State through the proposed Sandman project. The paseo would ultimately connect to the Hitchcock intersection via the sidewalk along State Street.

- Expansion of the pathway along San Roque Creek to create a public pathway between San Remo Drive and Hope Avenue. Missing sections are located between Hope and Hitchcock and between State and San Remo. Some additional easements or right-of-way acquisition will be required to complete the pathway. Dedications should be exacted from redevelopment projects along the creek.

- A pedestrian corridor could be developed by acquiring an easement from the Monterey Pines development for pedestrian and bicycle access through the existing gated access that currently separates Monterey Pines Street from Santa Maria Lane. This connection would create a pedestrian/bicycle connection between Hitchcock Way and Ontare Road.

- Creation and extension of the sidewalks along Ontare Road, Toyon Drive, Canon Drive, San Roque Road and Calle Alamo should be programmed to promote pedestrian activity between the neighborhoods to the north and along Ontare Road to the south and the Upper State Street corridor. Crosswalks should be installed across the intersections near the State Street and San Roque intersection to more clearly identify the preferred pedestrian routes through the area. Some intersection design changes may be required to reduce the pedestrian crossing distances at some intersections.

- Sidewalks should be extended along Las Positas Road to connect the neighborhoods on the east side of Las Positas with Upper State Street. In addition, connections should be evaluated that would connect San Roque Road to the proposed ped/bike route along McCaw Avenue.

- A new ped/bike path is proposed along on- and off-street corridors that would extend between Hope Avenue and Las Positas/MacKenzie Park. This east-west route could be connected to several north-south corridors. An additional option for this pathway would be a southern extension along the golf course to access Calle Real.

- With future redevelopment of the La Cumbre Plaza site, new pedestrian and bicycle access should be developed to provide access through the site that would connect Five Points with Hope Avenue and ultimately to the proposed east-west ped/bike path.

Parking Management Program

Parking observations reveal that there is sufficient parking overall in the Upper State Street Corridor study area, however, certain portions of the area and specific lots and blocks experience parking shortages due to excess demand during peak time periods. Management of the existing parking spaces would help the current parking supply more efficiently serve the current demand. As the corridor changes, land uses turn over and growth occurs, added parking demand may occur and put a strain on the available supply. Some of the land use changes and growth may occur without a concurrent increase in parking supply (due to re-occupancy of structures with more successful businesses).

The parking analysis and parking demand surveys of Upper State Street revealed the following:

- Five Points Shopping Center overall has sufficient parking, however, the most convenient and accessible parking spaces reach near capacity use during peak times such as Friday and Saturday afternoons
- Loreto Plaza similarly has sufficient parking overall, but the main central parking area east of the buildings reaches near capacity use on Friday and Saturday afternoons (less convenient, outlying spaces are still available)
- Ontare Plaza also has adequate parking most of the time, with peak occupancy of about 75 percent. On Friday and Saturday afternoons, the eastern and central portions of the lot were observed to reach 90 to 100 percent occupancy, with parking available in the more remote western section. The Plaza also experiences high parking demand and occupancy during weekend morning hours adjacent to restaurants.
- Field observation of many of the smaller lots that serve individual businesses or a small group of businesses indicate that most have adequate parking capacity at this time, but a few experience peak parking demand of over 90 percent at peak times.
- On-street parking along Upper State Street is limited to the western end of the study area between San Roque and Calle Laureles. Most on-street parking is observed to be well used during commercial business hours.

To address existing and especially potential future parking issues along Upper State Street, two types of parking improvement and management strategies that can be applied include:

- *Parking Management Tactics and Programs* – an integrated set of parking management tactics designed to further the attainment of local objectives, which could include more shared use of existing private parking, management of employee parking, a parking marketing and information program, strict enforcement of parking regulations, use of spaces outside of the study area, shared use valet parking, etc.

- *Parking Supply* – alternations to parking supply through changes to City code requirements or construction of additional public or private parking

Typically, parking improvements may include changes to how parking is managed and shared, and/or increases in the parking supply. The potential to effectively improve the parking operating systems in Upper State Street is somewhat constrained by the fact that parking is generally

available at no cost throughout the area. Efficient enforcement is a way to manage parking, to reduce the number of people who exceed parking time limits, to increase turnover, and make spaces available where there are a large number of public spaces. However, on Upper State Street, most parking is privately owned and operated, which limits the ability to use parking enforcement as a tool. Also, parking management via the parking fee system is a powerful tool to control and manage parking. Parking fees can be used to manage parking in areas where there are parking meters and user charges for public parking lots. In the Upper State Street area, the ability to manage parking via economic means is thus not available unless parking fees are imposed. This is unlikely on a universal basis due to the large number of private spaces and the nature of the land uses.

If this is not a feasible option, then some other strategies can be employed such as focusing on shared parking opportunities, employee parking, implementing valet parking during peak times where viable based on demand, or using remote parking with some type of shuttle system. If those measures are not feasible or do not achieve the desired results, then construction of additional surface or parking structure parking spaces would be investigated at strategic locations along Upper State Street. It is important to note, however, that parking spaces in structures are expensive (approximately $7,000 to $15,000 per space plus land costs) and new parking should be built only after effective management of the existing supply. These potential improvements are discussed below.

In general, the Upper State Street parking management programs should promote some "best practices" for parking. Typical methods include:

- Efficient use of resources, including shared parking, efficient use of existing parking prior to building costly new parking, good parking information (signs, maps)
- Most desirable spaces should be managed to favor shoppers and customers rather than parkers who stay all day such as employees, commuters and residents
- Effective enforcement is important to ensure that time limits are being followed in order to ensure turnover of spaces
- Parking should be a high-quality service with signs, maps, brochures, attractive and well lit facilities
- Parking management must include stakeholder consultation and involvement
- In order to manage any projected future parking deficits, a series of recommendations for parking management have been made, and may be used by the City to help manage parking in Upper State Street. Because building new parking is very expensive, it is recommended that parking improvements be implemented in phases. The initial phase would consist of near-term actions such as more efficient shared use of existing parking and monitoring of changes in parking demand through period parking occupancy counts of key facilities. Recommendations that require further study include valet parking and shuttle services. The long-term recommendations include the acquisition of land for parking and addition/construction of new parking if found to be warranted based on on-going monitoring of parking demand.

Potential parking management tactics for Upper State Street are described in more detail below.

A parking management program for the Upper State Street Area should include techniques to manage existing and future parking spaces as efficiently as possible. Several methods may be considered to accomplish this goal, as described in the following paragraphs. It is also important to note that future-parking conditions will vary block-by-block and site-by-site due to the unique conditions at each location. Different actions will be appropriate based on type of use, level of demand, availability of land for parking and other factors.

Parking Monitoring

Many areas undergoing redevelopment of land uses and turnover from one type of business to another do not react to increases in parking demand as they occur, and in many cases not until the parking supply becomes a critical issue to the businesses. To avoid this, the City should institute regular monitoring of parking usage to help identify areas that develop deficiencies or have unique parking needs. It is critical to actually measure and monitor parking usage over time. Early identification of parking problems can be used to help find appropriate solutions. Parking monitoring can include a periodic (every year at a minimum) parking count of public parking occupancy on key blocks that have been identified as potential locations for future parking shortages. A baseline has now been established with the parking occupancy counts at Five Points, Ontare Plaza and Loreto Plaza. Those shopping centers should be periodically monitored to test parking usage trends. In addition, on-street parking occupancy could be monitored along with selected smaller private parking lots in other areas of Upper State Street.

Parking Enforcement

Review the effectiveness of current enforcement of public parking in order to increase turnover of parking spaces, and make more spaces available to customers. Since the corridor currently has no public off-street parking spaces and a limited number of on-street spaces with time limits, the effectiveness of enforcing parking time limits will be minimal at this time. However, as more public parking is developed in the area or if time limits are placed on more on-street parking this tool will become more important in maintaining turnover of public parking spaces.

Shared Valet Parking

As parking demand reaches near occupancy during peak periods, consider the use of shared valet parking (a single valet service for a group of adjacent businesses) in the peak demand areas during time periods when restaurant demand is highest. Restaurants in many popular areas throughout California have found this to be a method that encourages patronage, is convenient for the customer, and helps manage parking by having the valet service park cars in areas that are traditionally underused. This type of project can be self-sufficient by using valet parking fees charged, and does not require significant oversight from the City. In some areas, groups of restaurants have set up a program on their own.

The valet would service a group of adjacent or contiguous businesses. This may require the removal of a few lot spaces or on-street parking spaces during the time of valet operation to accommodate staging areas. It is recognized that some shopping trips require parking immediately adjacent to the business (dry-cleaners, take-out coffee, etc.), however, many other types of visitors are willing to walk a few blocks during more extended visits, such as for longer shopping trips or for restaurant patrons.

For the valet service, there would be a fee charged per vehicle of approximately $4 to $6 (to be negotiated with the valet operator), which would cover all of the costs. If it was determined that the cost is too high for the customers, the City and/or businesses could subsidize the program, thereby reducing the fee to the valet patrons. All insurance, materials and other costs would be covered by the valet operator within the $4 to $6 per vehicle fee.

One major advantage of valet operations is that remote and less desirable parking several blocks away can be effectively used that otherwise would go unused by visitors. The details of a valet system would need to be designed in consultation with restaurant owners and valet operators to ensure the system will work efficiently and meet the needs of the businesses and customers. This option is recommended where there would be a high concentration of restaurants.

While valet parking has worked well in areas such as Downtown Santa Barbara, there is currently not enough demand to implement valet parking on a larger scale in Upper State Street as valet parking would add a cost for parking to patrons currently used to parking for free.

Shared Parking

For portions of Upper State Street with multiple land uses and businesses in close proximity, the shared use of parking can be a very effective technique to deal with increasing parking demand as conditions change and business turnovers increase vehicle generation and parking demand. It is very likely that “ad-hoc” shared parking arrangements now exist in the Upper State Street area since it is common for adjacent businesses to recognize the value of sharing parking when their peak times do not overlap. This recommendation would take the use of shared parking a step farther by promoting it and providing for shared parking agreements to be developed by businesses and parking lot owners in conjunction with the City.

The most under-utilized parking is in off-street private lots. It must be recognized that many of these spaces are in small private lots of 10 spaces or less that are accessed via alleys or private driveways and could not be reasonably used for overflow and shared parking. Some of the spaces, however, are located in desirable locations that could be used during peak time periods and are easily accessible by visitors. Examples include La Cumbre Plaza and some office buildings along the north side of State Street. These lots are under-utilized during peak evening hours since they are primarily used during the day. They may also tend to be available on weekends.

The use of private lots is not a universal solution to parking problems since it requires the cooperation of private landowners who may have reasons for not sharing parking. However, use of selected lots may be a method to help relieve the parking problem. Traditional impediments to the use of private parking include lot owners' concerns over liability, safety, vandalism and interference with their own business. While some of these concerns are well founded, some can be overcome through the use of negotiated agreements and common insurance policies that are obtained with the assistance of the City. The parking may be shared with a fee paid to the parking owners, or some cases there would be no fee for use of the lot but some type of reimbursement for costs such as cleaning, maintenance, insurance and security. In many beachside communities, the use of private lots during weekends and evenings has even become a

condition of approval for Coastal Commission permits. An example of a shared parking agreement is provided in the Appendix.

To implement a shared parking program the following initial actions by the City are recommended:

- Identify blocks with peak parking capacity deficiencies
- Survey private lot owners regarding the willingness to consider shared use of parking
- After identifying potential sites, secure agreements for use of the lots by adjacent businesses, determine parking fees (if any) to be charged, develop shared use parking contracts that specify hours of operation, maintenance, insurance requirements and other pertinent issues.
- Investigate the availability of insurance coverage for public use of private lots and assist businesses in obtaining the insurance
- Consider Police or private patrol to monitor the private lots
- Develop signage and restripe private lots if needed on a case-by-case basis

Create Visitor Parking Information Guide/Map

Many cities and commercial districts have created user-friendly maps and parking guides that are oriented toward the commercial visitor. The guide would include clear maps showing all public parking, as well as information regarding meter time limits and rates. The guide/map should be professionally prepared with high quality graphics and should be made available at public venues (City Hall, libraries, etc.) and distributed to all Upper State Street businesses that would be willing to make them available to customers (e.g., on the counter at stores, in offices and at restaurants).

Remote Parking and Shuttle

If future parking demand is high enough, consider as a longer-term solution the implementation of remote parking with a shuttle for Upper State Street employees. This is common in many successful commercial areas. The City could identify one or more remote lots that have parking availability and provide a shuttle service for employees and/or visitors. Costs should be low or free to encourage use, and help make other parking available for other patrons. Currently many of the employers along Upper State Street have ample supplies of parking and the density of development does not warrant the need to shuttle employees in from remote lots. However, if more clustered development were to occur in the area with a large number of employees and limited proximate parking then shuttling employees from remote lots may be an option to address employee parking demand.

Add New Parking

New development must provide parking to meet demand, thus eliminating the potential for parking deficiencies for those new businesses. For a change in use, the City code requires the new land use to provide the required additional parking supply. However, in the case of turnover of underutilized parcels to higher traffic-generating land uses, more parking demand may occur without a concurrent increase in the supply of parking (analogous to the increase in vehicle trips that could occur). For example, the change could occur from an underperforming restaurant to one that is highly successful and very parking intensive. In this situation, the same land use type can generate much higher parking demand. Another situation could arise whereby a change in

use occurs and the landowner is not able to physically provide the required new parking supply on-site due to a constrained layout of the project site. In these cases, shared parking facilities that serve multiple uses may be used to solve the parking demand problem. The new parking may either be public parking in lots or future structures, or private parking that is shared through covenant agreement.

There are two primary methods to add parking. One option is to build one or more new public parking lots or structures in or near the Upper State Street study area. This option could begin with the purchase of land to construct surface parking, which is then converted to structured parking as demand increases. The second option is to add parking within new private developments as they occur, through negotiated agreements. Under this option, the City would work with developers to replace any parking lost as part of their development, provide code-required parking to serve their development, and also work to provide additional parking over and above their code requirement to help serve the other businesses through public/private partnerships (with possible financial assistance).

As demand grows for parking, one method to expand existing parking is to acquire and add smaller surface parking areas. These sites need to be investigated in more detail. The overall feasibility and desirability of adding parking needs to be reviewed in association with parking management recommendations noted above. A phased approach is recommended, whereby the easier to implement parking management techniques are employed first, followed by the construction of new parking only when other measures have been fully implemented. To determine where to add parking spaces, lots and structures, a comprehensive study of potential land use growth and turnover is required. Typically, this will require block level assessments of potential growth and change in land use, the associated increase in parking demand by block, and the anticipated parking supply per block. Then, underserved blocks are projected, and locations for new parking are determined based on available land parcels, likely parcels to be redeveloped or proposed development projects are added (over code required parking) may be included as a condition of development.

Additional longer-term parking options are also discussed in the next section.

Providing proximate consolidated parking supplies can reduce the amount of circuitous travel by drivers searching for a convenient parking space. This reduces the amount of travel within the sites and if land uses are close by can reduce travel onto the adjacent streets by promoting a “park once” strategy. In addition, having patrons drop off their car or limit the time to search for a parking space will reduce the number of potential conflicts with other cars and with pedestrians in the lots and crossing the site driveways. Remote employee parking shuttles can also help reduce congestion on the streets and reduce the amount of circuitous travel by having employees park in outlying lots and limiting driving into the more congested central portion of the corridor. Visitor information programs and positive guidance programs can help reduce the amount of wandering as they look for convenient available parking.

C. Longer-Term Physical Improvements

The longer term options are discussed on a more schematic scale with possible constraints and options identified along with order of magnitude cost estimates. The analysis of each item includes discussion about the general issues involved and the coordination and studies needed to more fully analyze the option. The longer-term improvements include:

- Hope Avenue / State Street Intersection Eastbound Right-Turn Lane and Sidewalk
- Two-Way Calle Real/ Junipero Bridge
- Alternative East-West Routes
- Parking Structures and Shuttles

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Hope/State Intersection Eastbound Right-Turn Lane and Sidewalk

Description: Create an eastbound right-turn lane and expanded sidewalk in the southwest corner of the intersection.

General Benefit: Future LOS improvement, Circulation Improvement, and Safety Enhancement

Estimated Cost: $485,300 (Alternative A) or $1,506,700 (Alternative B) *(See Appendix for details)*

Analysis:

As traffic volumes increase along State Street in the future, the volume of right-turning traffic at this intersection is expected to also increase. While current traffic volumes do not indicate that the eastbound-to-southbound right turns are a critical movement (those movements that combine to make the volume-to-capacity {V/C} ratio) it is possible that in the future the right-turn movement could be more significant movement. In addition traffic capacity, many people during the Upper State Street study expressed the desire for wider sidewalks along State Street. The project addresses both of these issues through the addition of a right-turn lane and a wider sidewalk adjacent to the turn lane on eastbound State Street.

The addition of the right-turn lane will reduce the potential for rear end accidents between eastbound traffic and will improve visibility at the intersection to the west for northbound traffic. The wider sidewalk and planting area between the sidewalk and travel lanes will provide for safer pedestrian conditions and a buffer between pedestrians and vehicles. This was an item expressed by many during the public workshop process. The wider crosswalk on the intersections west side will require that traffic signal times for pedestrians be extended to account for the longer crossing distance. The addition of the turn lane will improve the future V/C conditions even if there may be no near-term V/C benefit.

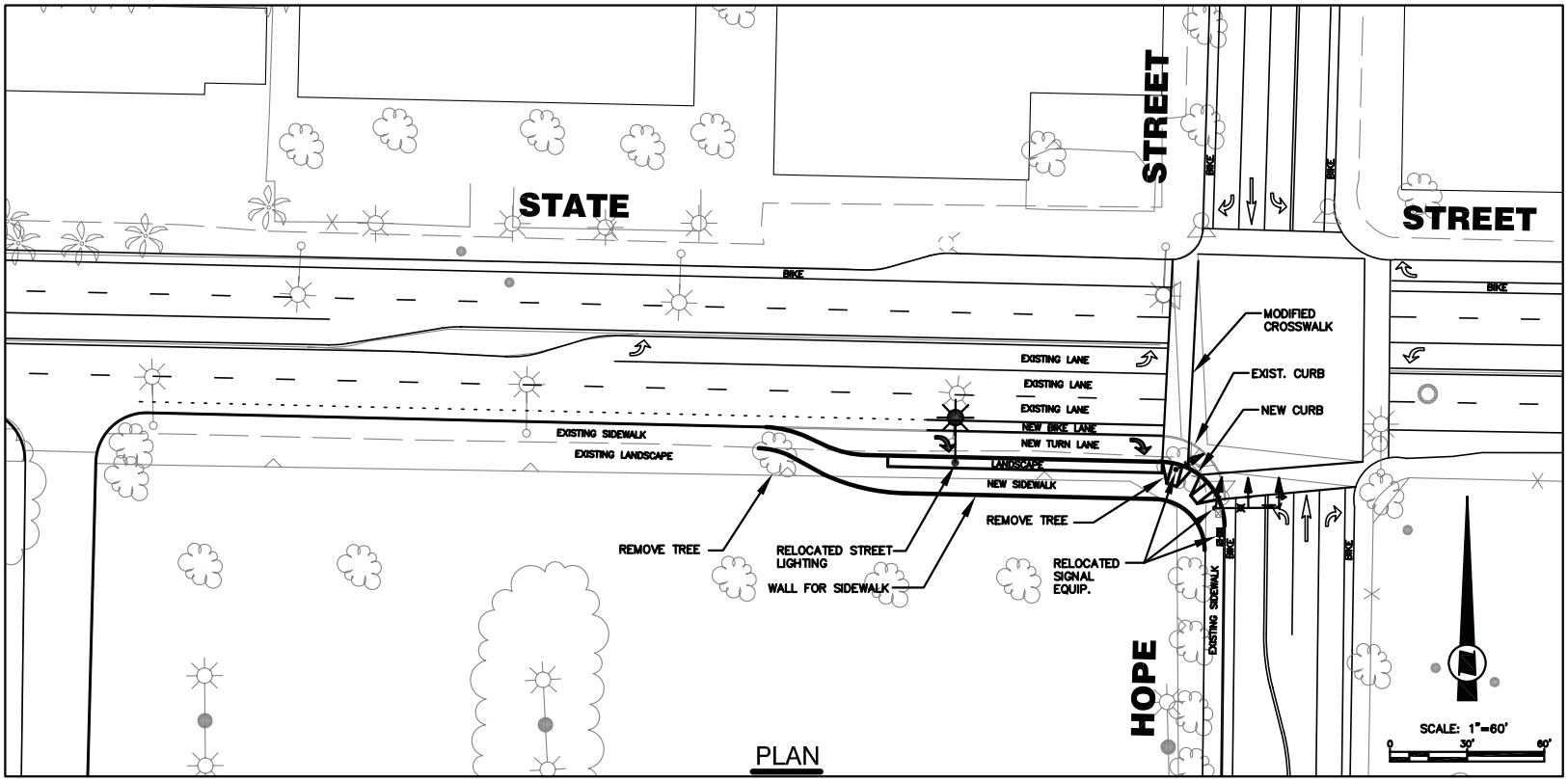
The project would need additional right-of-way from La Cumbre Plaza as the existing right-of-way is not wide enough to construct the added lane and sidewalk. Because a portion of the added right-of-way would extend over the lower level parking for the Plaza, this project is considered a long-term project and would likely be accomplished as part of a redevelopment project on the La Cumbre Plaza site. The designs shown in this concept project could also be expanded as part of a future redevelopment including a structure over the existing La Cumbre Plaza lower level parking lot.

The project is shown in two alternative formats. The first is developed on top of a retaining wall with fill while the second is built on a structure with the lower level open for parking underneath. For both alternatives, the structure provides an approximately 100-foot long right-turn lane. An illustration of the project is shown in Figure 29. For both designs, the existing south curbline on State Street would be removed and relocated to the south creating a new 10-foot-wide right-turn lane, a 10-foot-wide sidewalk, and a 4-foot-wide planting area between the curb and sidewalk. The bike lane would be widened to 5 feet. The first alternative uses a retaining wall along the perimeter, while the second alternative has an overhead structure supported by columns in the parking lot and behind the existing retaining wall. Since the sidewalk structure is elevated, most of the existing parking in the La Cumbre Plaza lot would remain. The only spaces that are removed are about eight to ten spaces to accommodate the structural columns and tree planting wells that could be incorporated into the design.

Potential Funding Sources:

- Transportation Enhancement Activities
- Congestion Mitigation and Air Quality
- Traffic Congestion Relief Program
- State Gas Tax and Motor Vehicle Subventions
- City of Santa Barbara CIP
- Measure D
- Traffic Impact Fee
- Project-Specific Mitigation
- Public/Private Partnership

(See Chapter VII, Section D for a full description of each funding source.)



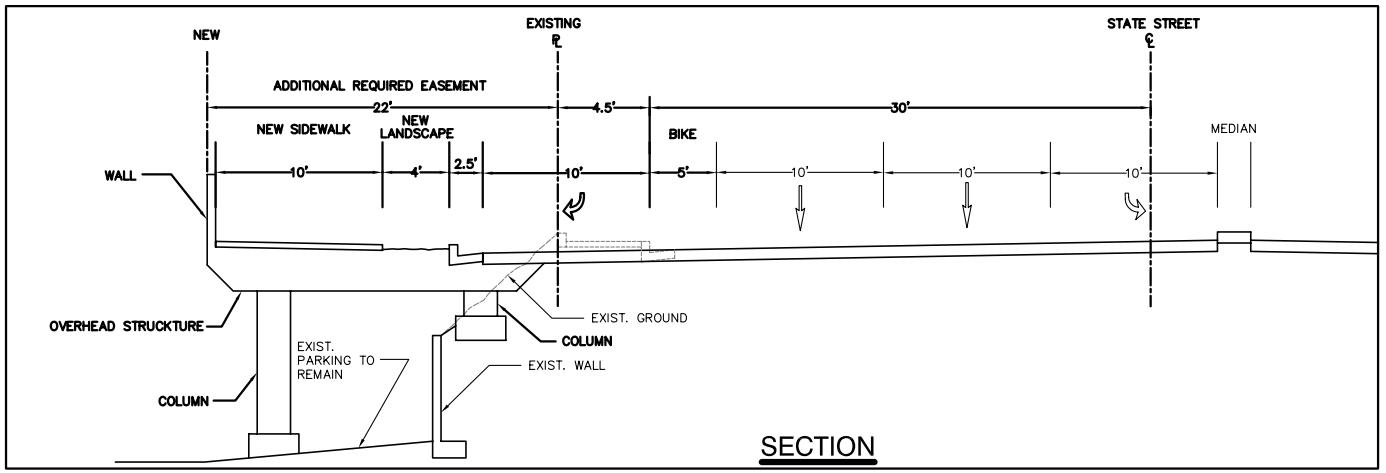


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FIGURE 29
Hope/State Intersection Eastbound
Right-Turn Lane and Sidewalk Expansion

Two-Way Calle Real/ Junipero Bridge

To reduce the reliance on State Street as a parallel corridor to Route 101 and for alternative east-west circulation, an option identified during the study process was to convert the one-way section of Calle Real back to two-way operation between Las Positas and Treasure Drive. The road was converted to one-way operation when the Route 101 northbound ramp was added. Providing two-way operation would allow traffic from as far west as La Cumbre Road to go east to Junipero and Pueblo Street without using Route 101 or State Street. The City is proceeding with a Project Study Report (PSR) for this option, so this report analysis is limited to identifying traffic effects/benefits for the Upper State Street corridor.

In considering alternatives for reinstating two-way traffic on Calle Real the goals of converting the traffic must be defined. These would include maximizing the distance of east-west travel on the street along with maintaining good operating conditions at the intersecting streets. Access to local side streets is also important, but could be limited if the larger goals of improved regional circulation are met.

Several field reviews were conducted to look at constraints and opportunities for the design options. The topography of the area and the close spacing of the highway and the local streets are problematic for the design. Options that would have moved the northbound off-ramp to intersect Calle Real at a 90-degree angel either east or west of Las Positas were rejected as not physically available or would create poor sight distances at the intersection. Figure 30 shows an option that allows two-way traffic on Calle Real, maintains the existing intersection with Las Positas, and works well with the existing topography. It does not provide two-way access to the local street between Las Positas and Treasure Drive, but full access is available at Treasure Drive.

This ramp modification combined with a bridge/ramp structure at Junipero Street could provide alternative routes for local traffic to access the area and circulate without using Route 101. Care in the design will need to be taken so as not to attract cut-through traffic through the neighborhoods. However, the ramps as shown do not provide a significant improvement in regional circulation, but rather provides local traffic with more access options. Based on the volume of traffic in the area and the congestion on other area streets, the “re-opened” sections of Calle Real could attract several hundred vehicles during the peak hours from people looking for alternative travel routes to residents that can travel to/from their homes via Calle Real that use other routes today. Even with this additional turning and through traffic, the intersection is still expected to operate acceptably and, depending on the actual directions of travel, the V/C ratio for the intersection should not increase by more than a few percentage points from its projected 0.74 with the traffic signal modifications previously proposed to possibly 0.77. However, the traffic attracted to this corridor from other area streets would be leaving those streets and improving conditions at other area intersections and neighborhood streets.

Study of this interchange modification will require conducting a PSR to more accurately determine its feasibility and projected costs. The project would also need to be coordinated with Caltrans. The preliminary cost for this interchange design is expected to be about $17,000,000 including study, design, and construction costs.

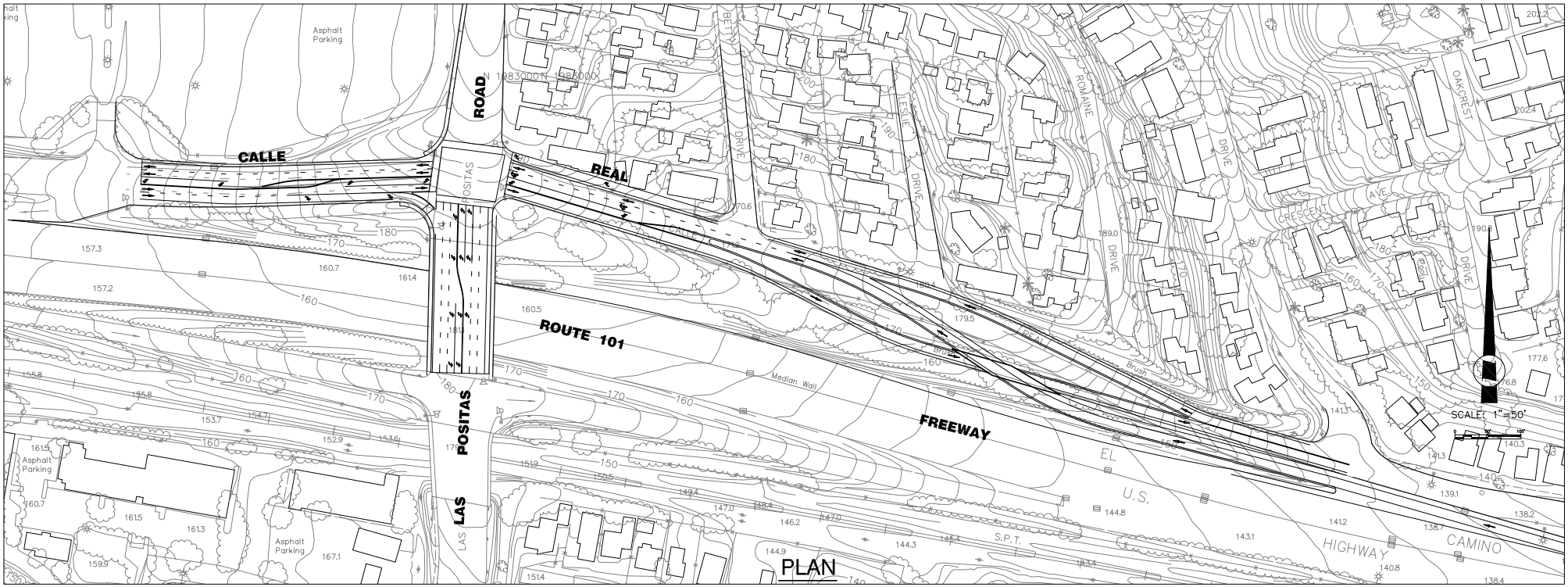

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FIGURE 30
Two-Way Calle Real / Jumipero Bridge

Alternative East-West Routes

Circulation in the Upper State Street area is restricted by the lack of connections between some area streets. This means area traffic is focused onto State Street as a key connection between major access streets. In addition, access for many of the businesses along State Street is limited to driveways on State Street itself since no other options exist. This project reviews the issues and feasibility of providing a future east-west street between La Cumbre Road and Hope Avenue along with the extension of the alley system along the north side of State Street between Toyon Drive and Ampola Drive.

New Street Between La Cumbre Road and Hope Avenue

Any options for developing a new east-West Street between La Cumbre Road and Hope Avenue south of State Street would require some level of redevelopment of the existing La Cumbre Plaza site and/or the adjacent properties. With the redevelopment of the Plaza site, a new road could be extended through the site in various configurations. Any extension through the site should be done through a dedication of right-of-way to control the design and configuration of the street. The connection to La Cumbre Road should be made at the existing signalized intersection. The connection to Hope Avenue could be made directly east of the La Cumbre connection near the existing site access drive as shown in Figure 31. A primary or secondary access further to the south near La Rada or opposite Calle Esperanza would provide good access to Calle Real and the Route 101 northbound ramps.

Acquisition of the property would most likely be done during the redevelopment process, although talks with property owners well before the redevelopment process has begun and the creation of an area specific plan would make the City's intention of developing the road known and could avoid a long negotiating process because of redevelopment plans that did not include the connection. The construction of the street could be done through public funds or through developer contributions.

Development of the road would provide several circulation options for area traffic and would likely draw some traffic away State Street and the intersections of State Street with Hope Street and La Cumbre Road. The parallel street to State Street would provide an option for several different routes in the area and would also likely attract some traffic from the adjacent neighborhoods. Since any redevelopment plan for the area has not been identified, the actual volume of traffic these new streets would carry is not known. However, the optional streets illustrated in the figure provide an alternative "mini grid" of streets to spread the traffic of any future development to multiple area streets and intersections.

Connecting the Existing Alleys Between Toyon and Amapola

One goal for the State Street corridor is to improve access to area businesses fronting the street, but to limit direct access to State Street in order to help maintain good traffic flow on State Street. One method to accomplish this is to provide alley access to sites that parallel State Street and provide access to the adjacent north-south streets. During any redevelopment process, sites should be reviewed to determine if, and where, alley access could be provided. One location where the development of an alley is possible is in the block on the north side of State Street between Toyon Drive and Ampola Drive. An existing alley is located within the blocks on both

sides of this block. Currently the existing 7-Eleven store obstructs the extension of the alley through the block. However, if this site were to redevelop, right-of-way could be acquired that would allow the alley to be developed, creating a continuous alley between Ontare Road and Canon Drive. The location of the necessary alley dedication is shown in Figure 32.

Other locations are also potential sites for alley development or parallel street enhancement to encourage access off of State Street, including Via Lucero and San Remo Drives, and the properties fronting the south side State Street between Hitchcock Way and Ontare Road.

Developing Alleys Along the South Side of State Street

The development of alleys along the south side of State Street will be more difficult, but could be considered as a longer-term strategy for some areas. The areas between Hitchcock Way and Ontare Road and the between Ontare Road and Loreto Plaza could be redeveloped with a rear-side alley that linked the developments to the bounding north-south streets. These could be developed as both vehicular access to parking areas, as well as pedestrian/bicycle corridors. Alleys along any of these blocks would require redevelopment of most of the buildings on the blocks and likely the modification of the site access points along State Street and the adjacent side streets. As shown in Figure 32, even basic rear side access today is limited a few partial blocks and does not provide any significant continuity. Connections through the three existing motel sites and connections into Loreto Plaza would be needed to provide a continuous corridor. Longer-term access through the Hacienda Motel site between a rear side pathway and the existing and future creek trail could provide a continuous path between Hope Avenue and Ontare Road. Further access through the Sandpiper and Motel 6 sites would provide access to Loreto Plaza. If existing site are considered for future redevelopment, consideration to an access along the south sides of the sides should be considered.

Summary

Alleys can provide excellent circulation alternative for autos and trucks as they link a mid-block site to several streets rather than just on or more driveways on a single street. However, the retrofitting of alleys into an existing development fabric must be a long-term process with space being acquired from each site as it redevelops over the years and possibly provide incentives to some sites to speed that process when needed.

Providing multiple connections for autos to a development site can be a significant benefit for not only the site, but also the surrounding streets. As autos are loaded to and from the adjacent streets, the burden of providing access and capacity is reduced on the sites fronting street. This improves capacity on the main street by removing traffic and reducing the number of friction points if the driveway can be eliminated. Local traffic can access a site without having to travel on the fronting street, such as State Street, thereby limiting the impact of a site on traffic operations. If designed appropriately, providing a series of connecting alleys can also serve as a secondary circulation system for pedestrians and bicycles and can provide a secondary “front” for businesses.

The design of the alleys must be carefully considered especially if the alley is to be used as both a multi-modal corridor and a delivery route as pedestrians and bicycles activity and large truck access may not be compatible for many sites.

Potential East-West Streets as Part of a Redevelopment of La Cumbre Plaza

Linking of Existing Alleys Between Toyon Drive and Ampola Drive

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FIGURE 31
Alternative East-West Routes

* Large developments blocking the east-west continuity of a south side alley or trail will make the development of such a facility a longer-term project. Rear side access to sites will require that new buildings be located far enouch north to allow adequate pedestrian and vehicle access on their south side.

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FIGURE 32
Alley Connection Issues on the South Side of State Street

Parking Structures and Shuttles

As businesses grow in the area there will be associated pressure to provide additional parking. However, given the constraints for land to provide additional surface parking lots one option will be to provide structured parking that would serve several sites or blocks rather than individual sites. This parking could provide several benefits including providing shared parking opportunities that in turn could reduce the number of spaces that may need to be provided, opening areas for open space and paseos, and providing options for added parking to small sites that either do not have on-site parking or cannot provide adequate on-site parking.

Structured parking can provide several benefits in that parking spaces can be stacked above or below development areas or can be placed below ground to increase the amount of green surface in the corridor, while still providing enough parking to effectively serve development. These parking facilities can also be used in cooperation with MTD and future shuttle stops to allow patrons and visitors to park once and then walk or use local shuttles or MTD transit buses. This analysis provides a limited review of the options for providing small parking structures to park several sites and/or two-level decks for individual sites, and the option of a local shuttle-type service.

Potential Structured Parking Sites

Patrons and visitors typically do not want to walk more than about 500 feet from where they parked to their destination. This distance can be extended if the walking experience is pleasant and/or the path is fairly direct. Conversely, that distance can be less if the walk is not pleasant and/or direct. The Upper State Street corridor has only a few locations where these conditions are available and structured parking may be feasible. They include the large shopping center sites and several smaller sites that could be redeveloped with a small structure or roof-top parking to provide adequate parking and maximize open space. The list of potential structured parking sites includes the following:

La Cumbre Plaza – larger structure in lower area with possible decked top for plaza
Five Points – structure behind building would screen garage
Loretto Plaza – smaller structure could provide needed area employee or transit parking
Ontare Plaza – smaller structure could provide needed site parking
Circuit City/Whole Foods site – rooftop parking could increase open area
Future development at Army Reserve Center –could provide parking for MacKenzie Park

It is important to note that structured parking in the Upper State Street corridor is considered to be a tool that could save some buildings from being torn down to provide adequate parking for other developments or could maximize the options for redeveloping a site and not as a Downtown-type policy to provide only centralized parking and no parking on individual sites.

The most common problem with the development of structured parking in a low intensity development area such as Upper State Street is justifying the additional cost of structured versus surface parking. This can be overcome by policies that provide incentives for creating shared parking facilities or through the creation of parking districts with public/private partnerships for developing parking facilities that are financed through the district. A more detailed discussion of

shared parking is provided in the previous section. In addition to the capital cost of building a garage, there are other costs associated with providing parking that go beyond the initial cost of providing the parking space. These include maintenance and repairs, land costs and taxes, and security and insurance.

Several studies have outlined ways to determine the true cost of providing parking to employees and patrons and the need to reconsider the practice of providing free on-site parking for patrons and employees. They cite that a significant cost in providing parking facilities is the incentive for people to drive when parking is provided in free lots and the regional congestion that results on the area highways. Through the management of parking in larger combined facilities the cost of providing parking can be reduced through not only the reduction of hard costs in providing the spaces, but also provides opportunities for people to carpool and ride transit reducing regional roadway congestion. Including these benefits, the cost of providing "free parking" can be reduced to manageable amounts.

The cost of providing structured parking within a development's building or in a consolidated facility can be less expensive than stand-alone structures since a portion of the structural components of the garage would be shared with those provided for the building anyway. Rooftop parking would require heavier roof trusses, but the cost of providing and maintaining parking lots can be saved. Parking that would serve other sites can be financed through fees collected through new parking districts and through financing in public/private partnerships. The cost of creating structured parking can vary significantly depending on the design and the amenities provided. The typical structured parking space costs between $7,000 and $15,000 per space, however parking provided on a roof top or in a simple structure can run a couple thousand dollars per space less than providing parking in a stand-alone structure.

Local Shuttle Service

A complimentary service to centralized parking would be a shuttle service that encouraged patrons, employees and visitors to park once and use the shuttle to travel between businesses within the area and that could extend into the nearby residential areas or other transit facilities to provide connections not served by longer haul MTD routes. The key to the success for any shuttle system is to provide service between people and their destinations. This service could be difficult in the Upper State Street corridor.

Discussions were held with representatives of MTD to discuss options for shuttles in this corridor. MTD staff indicated that they conclude that the corridor doesn't currently have the right trip making patterns that would support a shuttle service without significant fare subsidies. Any shuttle service in the area would need to provide frequent enough service to get people to stop walking and driving and take the shuttle bus. This requires short headways and connections to origins and destinations not served by the MTD transit routes and not within walking distance. This would require a shuttle route that serpentines north and south to connect the neighborhoods to State Street. MTD did not feel this type of feeder route has the ridership in the near term without significant fare subsidy from the City.

If a shuttle were developed, an initial shuttle program could extend between La Cumbre Plaza and Calle Laureles with various stops along State Street. Service with 7 minute headways could

provide intermediate service to the MTD routes. Another option would be a partner program where trips on MTD buses within the immediate Upper State Street area would be at a reduced fee subsidized by the City and/or related areas businesses. If clustered or structured parking is created or redevelopment increases demand along the corridor, a shuttle program could be expanded to travel further north and south from State Street. Shuttles could also be used to transport people for special events in the area or for holiday activities.

However, based on initial discussions with MTD staff, a local shuttle does not seem feasible at this time.

D. Financing Mechanisms

There are a variety of financing mechanisms that can be employed to implement the improvements recommended in this study. They include both public financing mechanisms and contributions by the private sector, primarily property owners along Upper State Street, as well as combinations of the two that result in public/private partnerships. In this section of the report, mechanisms to fund transportation improvements are identified and assessed for applicability. It should be noted that some of the transportation improvements may also be combined with urban design or aesthetic improvements and could receive partial funding through other funding sources not restricted to transportation uses.

Public Funding Sources

Funding sources for transportation improvements are available at the local level, which would include the City and County of Santa Barbara, as well as from the state and federal governments. Since most of the improvements recommended in this report are short-term improvements and limited in scope, they are most likely going to need to be locally funded, but a brief review of federal and state programs is provided to illustrate the range of funding programs available for transportation projects. Sometimes, a smaller project can be packaged with other elements of a larger project, such as improvements on the 101 freeway, to be included in a federally or state funded program.

Federal Funds

Federal transportation funding was last reauthorized in August 2005 with the Safe, Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU). The primary federal funding sources include:

SAFETEA-LU HIGHWAYS PROGRAMS

- Surface Transportation Program (STP)
  - Regional Surface Transportation Program (RSTP)
  - Surface Transportation Program – State
  - Surface Transportation Program – Local (STP-L)
    Transportation Enhancements
- High Priority Projects
- Projects of National and Regional Significance (NHS)
- Congestion Mitigation and Air Quality Program (CMAQ)
- Safe Routes to School Program
- Intelligent Transportation Systems (ITS)
- Equity Bonus Program
- Highway Safety Improvement Program
- Transportation Improvements (earmarks)

SAFETEA-LU TRANSIT PROGRAMS

- Section 5307 Urbanized Area Formula Grants
- Section 5308 Clean Fuels Grant Program
- Section 5309 New Starts

- Section 5309 Small Starts
- Section 5309 Fixed Guideway Modernization
- Section 5309 Bus and Bus-Related Equipment & Facility Grants
- Section 5310 Elderly and Persons with Disabilities
- Section 5311 Non-Urbanized Area Formula Grants
- Section 5314 National Research Program
- Section 5316 Jobs Access and Reverse Commute Program
- Section 5317 New Freedom Program
- Section 5339 Alternatives Analysis Program
- Section 5340 Growing States and High Density States

The Surface Transportation Program is administered by FHWA and Caltrans. The STP funds are distributed as follows:

10% - Safety construction
10% - Transportation Enhancement Activities
50% - Regional STP, STP local & rural areas guaranteed return
30% - State discretionary.

The federal funding sources that would be most applicable to the types of projects proposed in the Upper State Street area are;

Transportation Enhancement Activities: This program funds the design and construction of improvements that beautify or enhance the interface between transportation systems and adjacent communities. Examples of projects eligible for TEA funds include pedestrian facilities, landscaping and other scenic beautification, and provision of safety activities for pedestrians and bicyclists.

Congestion Mitigation & Air Quality Program CMAQ): This program is designed to fund projects that contribute to the attainment of national ambient air quality standards, with a focus on ozone and carbon monoxide. Typical projects include; public transit improvements, HOV lanes, employer-based transportation management plans, traffic flow improvement programs, fringe parking, shared-ride services, and pedestrian and bicycle facilities. Since the City is no longer in a non-attainment area, this funding source is no longer applicable.

Section 5309 Bus and Bus-Related Equipment and Facility Grants: These are FTA Capital Program funds which can be used to benefit an existing transit system. They can be used to purchase vehicles or transit stop amenities, maintenance and rehabilitation.

Safe Routes to School Program (SR2S): SR2S funds are federal transportation safety funds. They can be used for projects less than $500,000 in value, such as sidewalk improvements, traffic calming, pedestrian/bicycle crossing improvements, on- or off-street bicycle or pedestrian facilities.

Intelligent Transportation Systems (ITS): These funds support integration (not components) of metropolitan area travel management ITS infrastructure to improve transportation efficiency,

safety, increase traffic flow, reduce emissions, improve traveler information, enhance alternative modes or promote tourism.

State of California Funds
The primary state funding sources include:

- Traffic Congestion Relief Program
- State Transportation Improvement Program (STIP)
- Interregional Transportation Improvement Program
- State Highway Operation and Protection Program (SHOPP)
- Environmental Enhancement & Mitigation
- Air Quality Vehicle Registration Fee (AB 2766 Discretionary)
- Carl Moyer Memorial Air Quality Standards Attainment Program
- Petroleum Violation Escrow Account
- State Gas Tax Subventions
- State PUC Grade Separation Project Fund
- Highway Bridge Rehabilitation & Replacement
- State Infrastructure Bank(SIB)/Transportation Finance Bank (TFB)

The state funding sources that would be most applicable to the types of projects proposed in the Upper State Street area are;

Traffic Congestion Relief Program (TCRP) - The Traffic Congestion Relief Act of 2000 created a funding plan for state and local transportation needs. It included a specific list of projects, but also created the Transportation Investment Fund (TIF) that distributes sales tax on gasoline for local streets and roads improvements.

Environmental Enhancement & Mitigation (EEM) – This is a statewide discretionary program for mitigating the negative environmental effects of transportation. Projects could include landscaping or other improvements to reduce the impacts of a transportation improvement project, such as widening US 101.

Air Quality Vehicle Registration Fee – This is a discretionary program administered by the Mobile Source Air Pollution Reduction Committee to fund programs that reduce mobile source emissions, including bus, highway and transportation demand management.

State Gas Tax and Motor Vehicle Subventions – State funds provided directly to cities to fund street and highway projects.

Local Funds
Two sources of local public funds could be allocated to infrastructure projects in the Upper State Street area:

- City of Santa Barbara Capital Improvement Program Funds
- Santa Barbara County Measure D funds

City Funds - The City Council could include some of the elements of the Upper State Street improvement program in its annual Capital Improvement Program (CIP). The specific elements of the Upper State Street program would have to be judged a higher priority by the Council than other infrastructure projects elsewhere in the City to be included in the CIP.

Measure D - Measure D, a ½ cent sales tax, was approved by Santa Barbara County residents in 1989 and extends through 2010. The allocation of Measure D funds is as follows:

- Local Program - 70%
- Regional Program - 29.5%
- Paratransit - 0.5%

The City of Santa Barbara chooses how its share of local funds will be spent by adopting a five-year program of projects, which must be approved by the Santa Barbara County Association of Governments (SBCAG) Board which administers the Measure D program. Measure D funds can be used for many of the types of projects recommended for the Upper State Street area, including pedestrian and bicycle facilities, local road improvements (e.g., traffic signals, medians, intersection improvements), and support for local transit improvements.

Private Funding Sources

Several of the improvements recommended for the Upper State Street area could be implemented by the private sector, businesses and property owners along the street, who will benefit from the improvements. Several types of funding mechanisms could be employed:

Business Improvement District - In many locations, private businesses have voluntarily elected to form a Business Improvement District (BID) or association to fund improvements in the area where they operate. Such BIDs often fund aesthetic improvements, such as street furniture and banners, trash clean-ups, security, and public relations. They can also work with the City to implement landscaping or street tree programs. The property and business owners must vote to participate in such voluntary BIDs, so this is not a funding source that the City can adopt and force businesses to participate in. The boundaries of a BID can be crafted to include the largest supporters of the improvements, leaving opponents outside the BID, to increase its chances of formation, but that would limit the breadth of the area in which the improvements would be implemented and could lead to a non-uniform look along the corridors. Perhaps to increase the likelihood of success for a BID formation, the City could work with the property owners to start with less-expensive features (e.g., seasonal banners along Upper State Street) that would demonstrate the benefits of some low-cost coordinated efforts initially before more expensive features such as median islands or street trees were added to the BIDs work program.

Traffic Impact Fee Program - The City of Santa Barbara could utilize the traffic analysis completed for the Upper State Street project as a basis to complete a nexus study that would allow the City Council to implement a traffic impact fee that would be assessed on new developments along Upper State Street to implement transportation improvements necessary to mitigate the impacts of future development projects along Upper State Street. In order to do so would require a change in the City policy that developments may not add any net new trips in areas with impacted intersections. A nexus study would typically entail identification of all

potential new trips associated with potential developments and identification of the infrastructure improvements necessary to mitigate the impacts of those new trips.

The State of California adopted Assembly Bill 1600 in 1987, created Section 66000 *et seq.* of the Government Code and imposed certain conditions on local agencies for the establishment or increase of any fee related to the development of a project. The conditions imposed by AB 1600 (i) require a nexus or benefit between the fees imposed and development the fee is imposed on, (ii) specify procedures related to the use and accounting of fees paid to a public agency, (iii) provide for the dedication of property in-lieu of fees, and (iv) prescribe when fees can be collected.

AB 1600 requires that there be a nexus between fees imposed, the use of the fees, and the development projects on which the fees are imposed. Furthermore, there must be a relationship between the amount of the fee and the cost of the improvements. In order to impose a fee as a condition to a development project, a public agency must do the following:

1. Identify the purpose of the fee.

2. Identify the use to which the fee is to be put. If the use is financing public facilities, the facilities must be identified.

3. Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.

4. Determine how there is a reasonable relationship between the need for the public facility and the type of project on which the fee is imposed.

These last two requirements appear to be repetitive, but are meant to address the issue raised in *Nollan v. California Coastal Commission*. There must be a clear trail from (i) a development project, (ii) *impacts this project* has on public facilities, and (iii) fees collected from the project to mitigate the *impacts on those facilities*. In other words, it would not be appropriate to impose a fee to pay for a public facility, and justify the fee because the project created impacts on other facilities.

The public agency must also determine that there is a reasonable relationship between the *amount of a fee* and the *cost of the facilities* or portion of the facilities attributable to new development. Therefore, although the fee directly attributable to new development may be quite high, it should not be so high that future development becomes infeasible in the agency's jurisdiction

Implicit in these requirements is a stipulation that a public agency cannot impose a fee to cure existing deficiencies in public facilities or improve public facilities beyond what is required based on the impacts from new development.

Project Specific Mitigation Measures – Some of the improvements included in the recommendations for Upper State Street could be implemented by proposed development

projects as mitigation measures for project-specific impacts. These could include intersection improvements, access management, parking demand management, or transportation demand management.

Public/Private Partnerships – The City of Santa Barbara could enter into agreement(s) with a private developer to partially fund one or more elements of the Upper State Street improvement program. The private contribution to the improvement could serve as the local match required of many of the state and federal funding programs, for which the City could then submit a funding application.

Parking Funding Programs

The construction of consolidated parking facilities or parking structures is a longer-term improvement. They would also be subject to a variety of other funding mechanisms that rely on financing options based on borrowing (bonding) with parking revenues to pay off the bonds.

Other mechanisms that could be used to fund additional parking could include:

- Parking meter revenues
- In-lieu parking fees, which allow developments to forego providing some of their code-required parking on-site, with the fees intended to be used to develop a consolidated public parking facility near the development

Transit Funding Programs

The Santa Barbara Metropolitan Transit District provides transit passenger service in the Upper State Street area. Its Board of Directors could be asked to fund additional transit service in the study area. The five-member board of directors includes two members appointed by the Santa Barbara City Council, two by the Santa Barbara County Board of Supervisors, and a fifth member at large appointed by the MTD Board of Directors.

Summary of Potential Funding Programs

The following summarizes the potential applicable funding sources for the previously outlined shorter-term physical improvements:

Applicability of Potential Funding Sources for Short-Term Physical Improvements

		Hope/State Intersection Right Turn Only Lane & Sidewalks	State/Calle Palo Colorado Crosswalk	New Signal at McCaw / Las Positas	Additional Raised Medians	Relocate Bus Stops	Additional Bus Pockets	New Off-Street Pedestrian / Bike Trail	Signal Phasing Modifications
Feder	Transportation Enhancement Activities	✓	✓	✓	✓			✓	
	Safe Routes to School		✓	✓				✓	
	ITS								✓
State	TCRP	✓	✓	✓	✓	✓	✓	✓	✓
	Environmental Enhancement								
	Air Quality Vehicle Registration Fee				✓				
	State Gas Tax and Motor Vehicle Subventions	✓	✓	✓	✓	✓	✓	✓	✓
Local	City of Santa Barbara CIP	✓	✓	✓	✓	✓	✓	✓	✓
	Measure D	✓	✓	✓	✓	✓	✓	✓	✓
	Business Improvement District				✓				
	Traffic Impact Fee	✓		✓					✓
	Project-Specific Mitigation	✓		✓					✓
	Public/Private Partnership	✓	✓	✓	✓				

E. Cumulative Traffic Analysis

With the development of the ten near-term physical improvements outlined in the previous sections, the projected future Year 2016 intersection levels of service for the PM peak hour were calculated and are summarized in Table 12. The analysis indicates that while some of the intersections will be close to the City's limit for acceptable intersection operations of a V/C ration of 0.77, all of the analyzed intersections will continue to operate at acceptable levels. The locations for the improvements are illustrated in Figure 33.

TABLE 12: INTERSECTION LEVEL OF SERVICE WITH RECOMMENDED IMPROVMENTS

Intersection		Future Cumulative Year 2016 PM Peak Hour	
		V/C	LOS
1	Highway 154 at Calle Real	0.59	A
2	Highway 154 at Highway 101 SB On-Ramp	0.49	A
3	Highway 101 Off-Ramp at State Street	0.72	C
4	Highway 154 at State Street	0.54	A
5	Highway 101 NB Off-Ramp at State Street	0.67	B
6	La Cumbre Road at State Street	0.73	C
7	Plaza Avenue at State Street	0.66	B
8	Hope Avenue at State Street	0.76	C
9	Hitchcock Way at State Street	0.77	C
10	Ontare Road at State Street	0.64	B
11	Broadmoor Plaza at State Street	0.69	B
12	Las Positas Rd./San Roque Rd. at State St.	0.70	B
13	De la Vina Street at State Street	0.52	A
14	Calle Laureles at State Street	0.52	A
15	Alamar Avenue at State Street	0.62	B
16	Alamar Avenue at Foothill Road	0.65	B
17	La Cumbre Road at Plaza Ave	0.72	C
18	La Cumbre Road at Calle Real	0.62	B
19	La Cumbre Road at Highway 101 SB ramps	0.56	A
20	Hope Avenue at Calle Real	0.70	B
21	Hitchcock Way at Calle Real	0.53	A
22	Calle Real at Highway 101 NB On-Ramp	0.76	C
23	Las Positas Road at Calle Real	0.72	C
24	Las Positas Road at Highway 101 SB Ramps	0.73	C

Notes: V/C - Volume-to-Capacity ratio; RTOR = Right turn on red
LOS = Level of Service (A = 0.00 to 0.60, B = 0.61 to 0.70, C = 0.71 to 0.80, D = 0.81 to 0.90, E = 0.90 to 1.00, F > 1.00)

The improvements included in the calculations are:

- Relocate State Street / Calle Palo Colorado Crosswalks and On-Street Parking
- Relocate State Street / Calle Palo Colorado Bus Stops and Add Bus Pockets
- Bus Pocket at Ontare Road and State Street
- Bus Pocket at Toyon Drive and State Street
- New Traffic Signal at McCaw/Las Positas Intersection
- Additional Raised Median – Route 101 Northbound Ramp / Calle Real to La Cumbre
- Additional Raised Median – Hitchcock Way to Ontare Road
- Additional Raised Median – Ontare Road to Broadmoor Plaza
- New Off-Street Pedestrian/Bike Trail
- Signal Phasing Modifications

It is important to note that while some of the recommended improvements do not provide direct LOS benefits to the corridor, such as bus pockets and raised medians, they will affect conditions at mid-block locations and at other area intersections by reducing mid-block conflicts, diverting traffic to other streets, or requiring U-turns at intersections. A precise quantification of these impacts could not be made here because of the planning level of detail of this analysis.

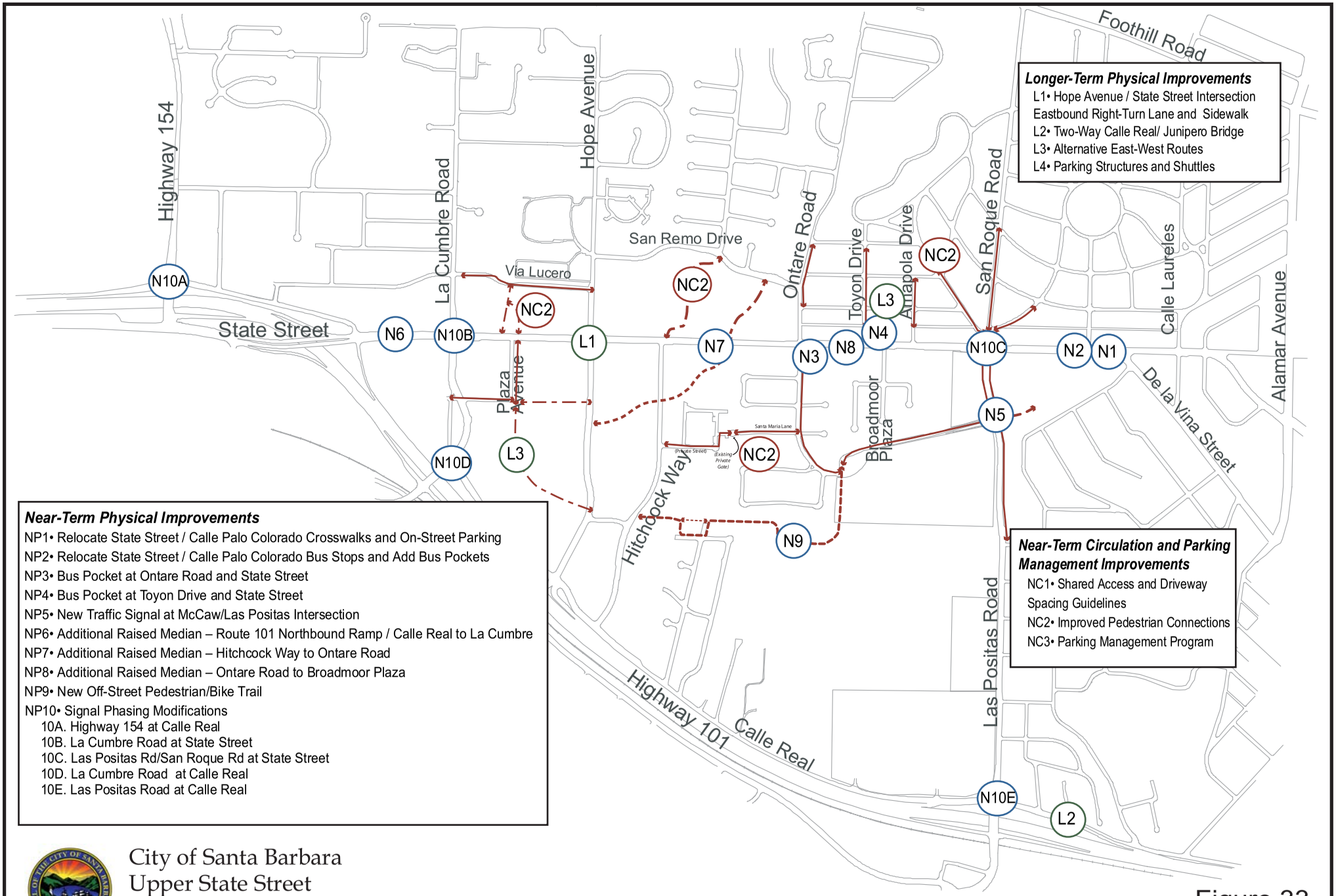

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Figure 33
Recommended Improvements

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APPENDIX