

Issue Paper on Transportation and Circulation

City of Lompoc General Plan Update

Prepared by:

Rincon Consultants, Inc.
1530 Monterey Street, Suite D
San Luis Obispo, California 93401

July 2008

Table of Contents

Introduction	1
Existing Circulation System	1
Regional Access Routes	1
City Systems	2
Existing Traffic Conditions	4
Intersection Operations	4
Circulation Improvements	9
Transit	10
Bicycle and Pedestrian Facilities	10
Policy Considerations	12
References	13

Tables

1: Signalized Intersection Level of Service Definitions	5
2: Unsignalized Intersection Level of Service Definitions	6
3: Current Weekday Peak Hour LOS	7
4: Peak Hour LOS on Highway 1 at the Santa Ynez River Bridge.....	9



INTRODUCTION

The following transportation and circulation issue paper for the Lompoc General Plan Update includes an analysis of existing intersection and roadway operations, existing traffic patterns within the City and regional area, alternative modes of transportation, and options to improve the circulation system.

EXISTING CIRCULATION SYSTEM

Regional Access Routes

Highway 1 (Cabrillo Highway) is a two-lane undivided State Highway with a posted speed limit of 55 miles per hour (mph), south of State Route (SR) 246. Highway 1 is signalized at its intersection with SR 246, Ocean Avenue, and 12th Street. This facility is classified as a Major Arterial (100-foot right-of-way) in the Circulation Element of the current Lompoc General Plan. Average daily traffic volumes on Highway 1, south of SR 246, totaled 14,800 in 2007 (Caltrans 2008).

State Route 246 (Buellton-Lompoc Road) is a two-lane undivided State Highway. SR 246 provides a two-lane bridge over the Santa Ynez River that is 25 feet wide. Buellton-Lompoc Road has a posted speed limit of 55 mph east of the 12th Street/Highway 1 intersection. This facility is classified as a Major Arterial in the Circulation Element of the current Lompoc General Plan. Average daily traffic volumes on SR 246 (east of Highway 1) totaled 9,300 in 2007 (Caltrans 2008).

Lompoc-Casmalia Road (Highway 1) is a four-lane expressway that provides access to Vandenberg Air Force Base, Vandenberg Village, and Santa Maria from the City of Lompoc. Lompoc-Casmalia Road has a 35-foot median in the vicinity of H Street, 7-foot bike lanes on both sides of the roadbed, and 6-foot shoulders. It has a posted speed limit of 55 mph adjacent to the City of Lompoc and 65 mph north of the City Limit. Lompoc-Casmalia Road becomes Purisima Road east of H Street. Lompoc-Casmalia Road carried 19,000 average daily trips in 2007 (Caltrans 2008).

Harris Grade Road is a north/south two-lane undivided roadway with a speed of 55 mph. Harris Grade Road has 20-foot to 24-foot wide pavement and graded but unimproved 4-foot to 6-foot shoulders between Purisima Road and Burton Mesa Boulevard. This facility is classified as an Arterial Road in the *Santa Barbara Comprehensive Plan Circulation Element*. It is designated as a Major Arterial south of Burton Mesa Boulevard and a Minor Arterial north of Burton Mesa Boulevard in the Circulation Element of the current Lompoc General Plan.

Central Avenue is a divided four-lane roadway (west of H Street) with a curb-to-curb width of approximately 84 feet. East of H Street, Central Avenue is a four-lane undivided road with a curb-to-curb width of approximately 72 feet. Central Avenue has curbs, gutters and sidewalks on either side of H Street. The intersection of Central Avenue and H Street is signalized. The posted speed limit on Central Avenue is 45 mph. Central Avenue is designated as a Major Arterial in the Circulation Element of the current Lompoc General Plan.



H Street is the main north/south roadway in the City of Lompoc and is designated Highway 1 south of Purisima Road to Ocean Avenue. H Street is a 64-foot wide divided four-lane route with 12-foot travel lanes for most of its length and is improved with curbs, gutters, sidewalks and streetlights. The posted speed limit varies between 25 and 35 mph, south of Central Avenue, and 55 mph near the Santa Ynez River. H Street provides much of the commercial access for the area. North of its intersection with Lompoc-Casmalia Road/Purisima Road, H Street becomes Harris Grade Road. H Street is designated as a Major Arterial in the Circulation Element of the current Lompoc General Plan.

Santa Lucia Canyon Road (Flordale Avenue) is a two-lane undivided roadway that extends between Lompoc-Casmalia Road (Highway 1) and Ocean Avenue. Santa Lucia Canyon Road provides a high-speed access to the north for motorists traveling to Santa Maria that avoids the traffic signals along H Street. Santa Lucia Canyon Road serves the Federal Penitentiary and the Vandenberg Air Force Base access at Washington Avenue. Santa Lucia Canyon Road is controlled by a stop sign at Highway 1 and at Central Avenue.

The Santa Ynez Bridge on Highway 1 provides four 12-foot wide through lanes over the Santa Ynez River. This bridge provides a critical connection between Vandenberg Village and the City of Lompoc. The combined lateral clearance on each side of the travel lanes is a minimum of 6.4 feet. There is no cross traffic or vehicles turning on or off of Highway 1 as it crosses the Santa Ynez River.

City System

Primary north-south roadways in the City of Lompoc include the following (listed from east to west):

Bailey Avenue is a two-lane north/south undivided roadway that is poorly maintained and is utilized as an agricultural road. Bailey Avenue extends from Central Avenue to Olive Avenue. From Ocean Avenue to Olive Avenue, Bailey Avenue is paved and provides access for residential development and the City Landfill located south of Olive Avenue. South of Central Avenue, Bailey Avenue will merge with Western Avenue to separate future residential traffic from the agricultural activities that require the use of Bailey Avenue.

V Street is a two-lane north/south undivided roadway that extends from Central Avenue to Olive Avenue. Its intersections with North Avenue, College Avenue, and Laurel Avenue have all-way stop control. The intersection of V Street with Central Avenue is signalized. The posted speed limit on V Street is 40 mph (north of North Avenue and south of Ocean Avenue) and 35 mph (between North Avenue and Ocean Avenue). Because of the railroad tracks, the intersection of Laurel Avenue with V Street is offset (with the west legs north and south of the east leg). The intersection of V Street with Laurel Avenue experiences congestion during the morning peak hour associated with traffic to and from Clarence Ruth Elementary School.

O Street is a north/south roadway that extends from the Airport property, north of Central Avenue, to Olive Avenue. O Street is a four-lane roadway north of Oak Avenue and a two-lane roadway south of Oak Avenue. The intersections with Central Avenue, Barton Avenue, and



Ocean Avenue are currently signalized. The four intersections at North Avenue, Pine Avenue, College Avenue and Laurel Avenue are currently all-way stop controlled, but signalization is planned for these intersections. The O Street intersections with Cypress Avenue and Olive Avenue are also all-way stop controlled. O Street has a posted speed limit of 35 mph (north of Pine Avenue) and 30 mph (south of Pine Avenue). O Street is designated as a Minor Arterial between Central Avenue and Ocean Avenue, and a Collector Street south of Ocean Avenue.

A Street is a two-lane north/south undivided roadway that extends from East Locust Avenue across Ocean Avenue/State Route 246 to Rucker Road, where it transitions to McLaughlin Road.

7th Street is a two-lane north/south undivided roadway that extends from the southern City Limit, across Ocean Avenue/State Route 246 to East Tangerine Avenue, where it transitions to Riverside Drive. The intersection of 7th Street with Ocean Avenue/Highway 1 is signalized.

Primary east-west roadways in the City of Lompoc include the following (listed from north to south):

North Avenue is an east/west two-lane undivided roadway with a posted speed limit of 35 mph. The North Avenue intersections with V Street, O Street, A Street, and 7th Street are all-way stop controlled and its intersection with H Street is signalized. North Avenue is approximately 55 feet wide (west of H Street) and 44 feet wide (east of H Street). Improvements such as curbs, gutters and sidewalks exist along North Avenue. North Avenue is designated as a Minor Arterial (east of V Street) and as a Collector Street (between V Street and Bailey Avenue) in the Circulation Element of the current Lompoc General Plan.

Pine Avenue is a two-lane east/west undivided roadway with a posted speed limit of 30 mph that is aligned along the north side of Lompoc High School. The intersection of Pine Avenue at V Street is controlled by stop signs on Pine Avenue. The intersection of Pine Avenue and O Street is all-way stop controlled. The intersection of Pine Avenue and H Street is signalized. The intersection of Pine Avenue with A Street is all-way stop controlled. The intersection of Pine Avenue with 7th Street is controlled by stop signs on Pine Avenue. Pine Avenue is designated as a Collector Street east of V Street in the Circulation Element of the current Lompoc General Plan.

College Avenue is an east/west two-lane undivided roadway with a posted speed limit of 30 mph. College Avenue is a primary access route for Lompoc High School. The College Avenue intersections with V Street and O Street are all-way stop controlled and its intersection at H Street is signalized. The intersections of College Avenue with A Street and 7th Street are all-way stop controlled. College Avenue is approximately 55 feet wide (west of H Street) and 44 feet wide (east of H Street). Improvements such as curbs, gutters and sidewalks exist along College Avenue. College Avenue is designated as a Minor Arterial (east of V Street) and as a Collector Street (west of V Street) in the Circulation Element of the current Lompoc General Plan.

Laurel Avenue is a two-lane undivided local roadway separated by the Lompoc Local Railroad Line that terminates at the western City Limits. East of V Street, the Lompoc Local Railroad Line



runs along the center of Laurel Avenue. The typical operating speed on Laurel Avenue is 25 mph. Laurel Avenue at V Street is all-way stop controlled. The intersection of Laurel Avenue with A Street is offset and controlled by stop signs on Laurel Avenue. The intersection of Laurel Avenue with 7th Street is all-way stop controlled. Laurel Avenue is classified as a Local Street with a 60-foot right-of-way between V Street and the western City Limits and as a Collector Street east of V Street) in the Circulation Element of the current Lompoc General Plan.

Chestnut Avenue is a two-lane east/west undivided roadway that serves residential neighborhoods from the western City Limits to 7th Street and provides access for a business/industrial center located east of 7th Street. Chestnut Avenue has improvements such as sidewalks, curbs, gutters and streetlights, and has a posted speed limit of 25 mph. Chestnut Avenue intersects V Street from the west but does not cross the San Miguelito Creek drainage culvert to intersect V Street from the east.

Ocean Avenue is a four-lane divided roadway, west of the intersection of Highway 1. It is Highway 1 west of H Street and State Route 246 east of H Street. Ocean Avenue has recently been widened adjacent to the Home Depot development to provide a two-way left-turn lane in the median. Four-lane divided roadways typically have striped left-turn pockets at intersections and include two-way left-turn lanes in some segments. At the intersection of Highway 1 (the Cabrillo Highway), a free-flow right-turn lane onto Highway 1 exists. Ocean Avenue is master planned as a Major Arterial with a 100-foot right-of-way.

Olive Avenue is a two-lane undivided roadway with a posted speed limit of 30 mph. Its intersections with O Street and I Street are all-way stop controlled. Olive Avenue, east of V Street, is designated as a Collector Street in the Circulation Element of the current Lompoc General Plan. The segment of Olive Avenue between Bailey Avenue and V Street is outside the City of Lompoc and not shown in the Circulation Element of the current Lompoc General Plan.

EXISTING TRAFFIC CONDITIONS

When examining traffic patterns in a city roadway system, intersections are the key components of the system where congestion occurs. Intersection operations are generally quantified by collecting traffic counts during peak morning and afternoon commute periods.

Intersection Operations

Levels of service (LOS) A through F are used to rate intersection operations, with LOS A indicating very good operations with little congestion and LOS F indicating poor operations with heavy congestion. LOS reflects a number of factors such as speed and travel lanes, traffic interruptions, vehicle delay, freedom to maneuver, driver comfort and convenience, and vehicle operating costs. Levels of service do not reflect safety. The current Lompoc General Plan performance standard for intersections is LOS C, with the exception of intersections monitored in accordance with the Congestion Management Program (CMP) administered by the Santa Barbara County Association of Governments (SBCAG). Table 1 summarizes the level of service



definitions for signalized intersections, as presented in the Highway Capacity Manual (HCM).¹ The operations for the key intersections in the City were evaluated based on existing geometries, traffic control and A.M. and P.M. peak hour traffic volumes.

Levels of service for signalized and unsignalized intersections were calculated using the Highway Capacity Manual (HCM) methodology. The HCM uses control delay to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed. Table 2 presents the level of service definitions for unsignalized intersections.

Table 1: Signalized Intersection Level of Service Definitions

LOS	Control Delay Seconds per Vehicle	Definition
A	< 10.0	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

¹ Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 2000.



Table 2: Unsignalized Intersection Level of Service Definitions

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

From available peak hour traffic counts (2007), the morning and evening peak hour traffic volumes and the peak hour factor at each key intersection were identified. These traffic volumes reflect the weekday morning peak hour (which occurs over 60 consecutive minutes between 7:00 AM and 9:00 AM) and the weekday evening peak hour (which occurs over 60 consecutive minutes between 4:00 PM and 6:00 PM). Table 3 summarizes the existing intersection levels of service.

The data presented in Table 3 indicate that all but one intersection currently operates at LOS C or better during the A.M. and P.M. peak hour periods, which is acceptable based on the City's LOS C standard. The average intersection control delay values during the morning peak hour range from 3 seconds per vehicle to 30 seconds per vehicle. During the evening peak hour, the average intersection control delay values range from 2 seconds per vehicle to 36 seconds per vehicle (which corresponds to the LOS D operations at the signalized H Street/Central Avenue intersection).

Table 4 summarizes the traffic volumes and LOS operations on the Highway 1 Santa Ynez River Bridge. The evaluation indicates that the bridge currently operates at an acceptable LOS in accordance with City standards.



Table 3: Current Weekday Peak Hour LOS

Intersection	Peak Hour	LOS
V Street & Central Avenue	AM	B
	PM	B
V Street & North Avenue	AM	A
	PM	A
V Street & Pine Avenue	AM	A
	PM	A
V Street & College Avenue	AM	B
	PM	B
V Street & Laurel Avenue	AM	A
	PM	A
V Street & Ocean Avenue	AM	B
	PM	B
R Street & Ocean Avenue	AM	A
	PM	A
O Street & Central Avenue	AM	C
	PM	C
O Street & North Avenue	AM	B
	PM	B
O Street & Pine Avenue	AM	B
	PM	C
O Street & College Avenue	AM	C
	PM	C
O Street & Laurel Avenue	AM	C
	PM	C
O Street & Ocean Avenue	AM	B
	PM	B
I Street & Ocean Avenue	AM	A
	PM	A
I Street & Olive Avenue	AM	A
	PM	A
H Street/Harris Grade Road & Purisima Road/Cabrillo Hwy	AM	C
	PM	C
H Street & Central Avenue	AM	C
	PM	D
H Street & Barton Avenue	AM	A
	PM	B
H Street & North Avenue	AM	B
	PM	B
H Street & Pine Avenue	AM	B
	PM	B



Table 3: Current Weekday Peak Hour LOS

Intersection	Peak Hour	LOS
H Street & College Avenue	AM	C
	PM	B
H Street & Laurel Avenue	AM	A
	PM	A
H Street & Ocean Avenue	AM	B
	PM	C
D Street & North Avenue	AM	C
	PM	B
A Street & Central Avenue	AM	C
	PM	C
A Street & North Avenue	AM	C
	PM	B
A Street & Pine Avenue	AM	C
	PM	A
A Street & College Avenue	AM	B
	PM	B
A Street & Ocean Avenue	AM	B
	PM	B
7th Street & Laurel Avenue	AM	A
	PM	A
7th Street & Ocean Avenue/SR-246	AM	A
	PM	B
12th Street/SR-1 & Ocean Avenue/SR-246	AM	B
	PM	B
<i>Source: Bailey Avenue Corridor Specific Plan Constraints Analysis, June 2007</i>		



Table 4: Peak Hour LOS on Highway 1 at the Santa Ynez River Bridge

Peak Hour/Direction	LOS ^a
Existing Conditions	
AM Peak - Northbound	LOS B
AM Peak - Southbound	LOS B
PM Peak - Northbound	LOS B
PM Peak - Southbound	LOS B
Current General Plan Buildout	
AM Peak - Northbound	LOS C
AM Peak - Southbound	LOS C
PM Peak - Northbound	LOS C
PM Peak - Southbound	LOS C

Source: Bailey Avenue Corridor Specific Plan Constraints Analysis, June 2007

^a The LOS was determined through interpolation from the maximum service flow rates at each level of service in the Highway Capacity Manual for multi-lane highways with a free-flow speed of 55 mph and those for 60 mph. For a free-flow speed of 59 mph, the upper limit of LOS A is 648 pc/hr/ln, the upper limit of LOS B is 1,062 pc/hr/ln, the upper limit of LOS C is 1,522 pc/hr/ln, the upper limit of LOS D is 1,957 pc/hr/ln, and the upper limit of LOS E is 2,172 pc/hr/ln.

CIRCULATION IMPROVEMENTS

The following circulation improvements are listed in the current City of Lompoc General Plan:

Measure 2. The City shall work with Caltrans to relieve congestion on North H Street through traffic control measures.

Measure 3. The City shall explore options, which do not adversely affect the viability of existing businesses, to relieve congestion at the A Street/Ocean Avenue intersection.

Measure 4. The City shall pursue funding from Federal, state, and regional agencies for: 1) construction of a fair-weather crossing across the Santa Ynez River using the existing right-of-way along McLaughlin Road, and 2) widening of Robinson Bridge on Highway 246.

Measure 5. The City shall encourage Caltrans to provide traffic signals at the Ocean Avenue/V Street intersection.

Measure 8. The City shall amend the Zoning Ordinance to require the provision of adequate bicycle facilities in development projects.

Measure 9. The City shall integrate bicycle lanes or separate bikeways into street projects located along planned bicycle routes.

Measure 10. The City shall develop a pedestrian and bicycle trail system which connects major park and wildlife areas within the Lompoc Valley.

Measure 11. The City shall encourage Federal, state, and regional agencies to widen the H Street/Highway 1 Bridge and Robinson Bridge on Highway 246 to assure safe bicycle and pedestrian use.



Measure 35. An economic impact study shall be undertaken prior to funding construction of the Central Avenue Extension to study the potential economic effects on the Old Town and other areas of the City.

Measure 36. To accommodate the projected buildout traffic demands, Central Avenue shall: (1) be widened to its full planned width from O Street to a point west of V Street to allow for the required intersection improvements; and (2) include the intersection modifications illustrated in Figure 4 of the Addendum to the Final EIR for the General Plan revision (File No. GP 94-01). As shown therein, the following improvements will be necessary:

- The intersection of Central Avenue and H Street will require the addition of a second southbound left-turn lane.
- The intersection of Central Avenue and A Street will be modified in conjunction with the construction of the Central Avenue extension for A Street east to Highway 246.
- The intersection of H Street and North Avenue will require the addition of an exclusive westbound right-turn lane. [Final EIR Circulation Mitigation Measure 1, as modified in the Addendum to the Final EIR]. This improvement has been completed.

TRANSIT

City of Lompoc Transit (COLT) provides public transit service within Lompoc, Mission Hills, and Vandenberg Village. There are five local bus routes serving these areas. Service is available from 6:30 am to 8:00 pm on weekdays, and 9:00 am to 5:00 pm on Saturday. Curb-to-curb service is also available for persons with disabilities.

Lompoc has a well-developed transit system, given the size of the City and its car-dependent nature. There are no major deficiencies in the transit system, although the system is limited by the requirement that services meet a 20% farebox recovery ratio (the proportion of the amount of revenue generated through fares by its paying customers as a fraction of the cost of its total operating expenses).

COLT is currently designing a Transit Center, the planning for which should be complete by August 2008.

BICYCLE AND PEDESTRIAN FACILITIES

The City of Lompoc contains Class I, Class II and Class III bicycle facilities, which are defined as follows:

- ❖ Class I - Bike Path: Routes which provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians. Cross-flows by motor vehicles are minimized.
- ❖ Class II - Bike Lane: Routes which provide a right-of-way within the paved area of a roadway, designated for the exclusive or semi-exclusive use of bicycles with through



travel by motor vehicles or pedestrians prohibited. Cross-flows by pedestrians and motor vehicles are permitted; motor vehicle parking may be permitted.

- ❖ **Class III - Bike Route:** Routes which provide a right-of-way within the paved area of a roadway, designated by signs or markings on the pavement. The route is shared with pedestrians and motor vehicles.

Class I Bike Paths are currently located east of Bailey Avenue (between Central and North Avenues), adjacent to H Street (north of Central Avenue and along the H Street Bridge), near Barton Park along the east/west channel (from V to H Streets and again in the vicinity of A Street), extending east from Central Avenue (at its termination at A Street), adjacent to V Street (between Ocean and Olive Avenues), and along the Santa Ynez River east of the community (refer to Figure 2). Future Class I Bike Paths are also planned in the following locations: along the Santa Ynez River west of the existing Class I Bike Path to the eastern extent of the community, along the remainder of Bailey Avenue, from Bailey Avenue to V Street in the vicinity of College Avenue, from the eastern extent of Burton Mesa Road to Purisima Road, and looping within La Purisima Mission State Park.

Class II Bike Lanes are currently located along: Central Avenue (from Santa Lucia Canyon Road to A Street), Barton Avenue (from H to D Streets), North Avenue (from Z to H Streets), College Avenue (from V to Seventh Streets), Cypress Avenue (from O to Seventh Streets), Olive Avenue (from V to O Streets and A Street to Beattie Drive), V Street (from Ocean to Central Avenues), O Street (from Olive to Laurel Avenues and south of Central Avenue), I Street (south of Cypress Avenue), A Street (north of Olive Avenue), and Seventh Street (from Cypress to College Avenues). Future Class II Bike Lanes are also planned along: Central Avenue (west of Santa Lucia Canyon Road), Chestnut Avenue, Ocean Avenue (west of Bailey Avenue), Flordale Avenue/Santa Lucia Canyon Road, San Miguelito Canyon Road, Highway 1, Santa Rosa Road, Lompoc-Casmalia Road, Burton Mesa Road, Harris Grade Road, Purisima Road, and Highway 246.

Existing Class III Bike Routes are located along: Seventh Street (from College Avenue to North Avenue), Laurel Avenue (from Seventh Street to Highway 1), and Olive Avenue (from O to A Streets). Additional Class III connections are planned on I Street (from Cypress to Chestnut Avenues) and H Street (north of Central Avenue to the planned Class I Bike Path along Highway 1 to Harris Grade Road).

Many of the planned Class II Bike Lanes and several of the Class I Bike Paths have not yet been implemented. Additional facilities will be added as funds become available. It should be noted, however, that two Class I Bike Paths are proposed and funded, but are pending construction: (1) from H Street north of the Community through Ken Adam Park, and (2) from the eastern extent of Laurel Avenue north to the existing Class I facility along Santa Ynez River.

POLICY CONSIDERATIONS

The following issues will be addressed in the Transportation/Circulation Element of the 2030 General Plan.

- **Planned and recommended improvements to the circulation system**

The intersection of H Street/Central Avenue currently operates at level of service (LOS) D. City growth and development intensification over the 20 year horizon of the General Plan Update will place further demands on the circulation system. As part of the General Plan Update, the City will consider annexing major landholdings north, south, east, and west of the existing City Limits. In addition, the City will consider urban infill, and greater residential densities within existing City Limits to satisfy State housing mandates. Development associated with annexation generally results in longer trip lengths because annexation areas are located on the fringe of the City. Such future development is likely to cause key intersections in the City, including intersections along H Street, as well as the segment of H Street that contains the Santa Ynez River Bridge, to operate at deficient levels of service. The General Plan Update will identify improvements to the circulation system to alleviate such deficiencies. Improvements may include one or more of the following:

- ❖ Central Avenue extension
- ❖ Widening of the H Street Santa Ynez River Bridge
- ❖ Widening of State Route 246 east of town
- ❖ Santa Lucia widening or improvements

The General Plan Circulation Element Update will evaluate each of these improvements. Constraints associated with these improvements, which may include infrastructure costs, physical barriers to implementation, impacts on adjacent properties, and/or secondary congestion due to circulation pattern changes, will also be identified.

- **Citywide emergency access**

In the event of a major natural disaster or other large-scale emergency, access routes into and out of the City are limited by the relatively small amount of Santa Ynez River crossings. Access to the west is ultimately limited by the Pacific Ocean. Currently, access across the Santa Ynez River is provided by the H' Street Bridge, State Route 246/Robinson bridge, and the Santa Lucia Canyon Road Bridge. The main crossings, at H Street and State Route 246 are located on existing congested routes, and the crossings may be undersized. The General Plan Update will evaluate the adequacy of these crossings and the need for additional crossings, including the Central Avenue extension.

- **Congestion and safety issues related to school traffic**

Congestion caused by school traffic during morning and afternoon peak hours is a concern from both operational and safety perspectives. For example, traffic associated with Clarence Ruth Elementary School causes congestion at the intersections of V



Street/College Avenue and V Street/Laurel Avenue, and traffic associated with Lompoc High School causes congestion at the intersection of H' Street/College Avenue. The General Plan Update will evaluate congestion and safety issues related to school traffic, and recommend circulation and safety improvements, such as “safe routes to schools” and alternative transportation measures.

- **Planned and recommended improvements to the bikeway system**

The General Plan Update will evaluate funding and implementation issues related to bikeways, and recommend mechanisms to improve the existing system.

REFERENCES

California Department of Transportation, Traffic and Vehicle Data Systems Unit, 2007 All Traffic Volumes on California State Highway System, 2008.

City of Lompoc General Plan & EIR, 1997.

County of Santa Barbara Air Pollution Control District Clean Air Plan.
<http://www.sbcapcd.org/cap.htm>

Endo Engineering; Bailey Avenue Corridor Specific Plan Constraints Analysis, June 2007

State of California General Plan Guidelines.
http://www.opr.ca.gov/planning/publications/General_Plan_Guidelines_2003.pdf