Lompoc School Walkability Assessments

2010
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Prepared by California WALKS and Santa Barbara Walks

For

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Introduction

This report is intended for use by Healthy Lompoc Coalition, Lompoc parents, community residents and professionals. The report identifies overall walkability observations with specific priorities around four public schools in Lompoc, CA. The City of Lompoc has prioritized and therefore previously been successful in obtaining Safe Routes to Schools (SRTS) grants for infrastructure and engineering improvements near schools. The four school walk assessments note both the City’s already funded priorities and identify additional areas for pedestrian improvements that, with the appropriate funding sources, can improve both the walkability of the school neighborhoods as well as the overall walkability of Lompoc, CA. School walkability assessments in this report can be used in conjunction with other determinants of health (i.e.: access to healthy food, bicycle networks, access to usable green space, and access to healthcare) to improve the health of Lompoc residents.

California WALKS was invited by Healthy Lompoc to conduct the four walkability assessments covered in this report. California WALKS was founded to help organize and train local pedestrian advocacy groups in improving with pedestrian issues at a local and state level. California WALKS accomplishes its mission by conducting walkability assessments, pedestrian trainings, collaborative policy development and advocacy and teaching others throughout California how to address issues of pedestrian safety.

The report begins with the introduction and background information on why walkability is important and on characteristics of the Lompoc pedestrian environment. The report then outlines general walk and bike-related observations that California WALKS identified as pervasive throughout the four school neighborhoods in Lompoc, CA. Following the general observations and recommendations; there are specific observations and priorities identified for each of the four schools. A list of terms is outlined in Appendix 1.
Executive Summary

From 1999 to 2007, Lompoc has had 23 severely injured pedestrians from vehicle/pedestrian contact. Lompoc currently ranks number 2 (for a city of its size in California) for child (under the age of 15) pedestrian deaths and injury, with 10 in 2008. The rapid growth, changing land use patterns, combination of urban and rural areas, convergence of two state highways, and railways all highlight the need for pedestrian safety awareness and risk reduction efforts in the City of Lompoc, especially for child pedestrians.

Walkability assessments (also known as audits) are a tool that community members and professionals use to assess the level of pedestrian safety and comfort in a specific area.

California WALKS conducted walkability assessments around four Lompoc public schools chosen by Healthy Lompoc. The four schools were:

1. La Honda Elementary School
2. Miguelito Elementary School
3. Lompoc Valley Middle School
4. Lompoc High School

Recommendations from these four walkability assessments are as follows:

Overall recommendations:
1. Complete all sidewalks for continuous sidewalk connectivity in school zones
2. Install curb ramps at all crossings (preferably aligned directional ramps) in school zones
3. Install high visibility marked crosswalks consistently throughout all school zones
4. Install high visibility school zone signage consistently throughout all school zones
5. Install bike facilities (such as bike lanes) to encourage bicyclists to ride in bike lanes and not on the sidewalk while simultaneously creating a buffer for pedestrians from vehicular traffic
6. Improve pedestrian safety with marked crossings, signals, signage etc, on Ocean Ave. and H Streets
7. Improve park connectivity throughout the city, especially between nearby schools and neighboring parks

La Honda Elementary School recommendations:
1. Traffic calming on A Street

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1 SWITRS, 2003-2007
Lompoc School Walkability Assessments

2. Install high visibility crossings along A Street
3. Complete sidewalk connectivity on A and D Streets
4. Improve East Central Ave. and A Street intersection
5. Improve East Central Ave. and D Street intersection
6. Complete path connectivity from A to D to H Streets
7. Traffic calming on East Central Ave.

Miguelito Elementary School recommendations:
1. Complete new pedestrian bridge at South U Street and West Olive Ave.
2. Install high visibility marked crosswalks in the school zone (especially along West Olive Ave. at South U and South V Streets)
3. Evaluate the relocation of the school driveway exit
4. Reduce school pick-up/drop-off congestion (encourage parents to distance park and/or walk/bike)
5. Improve pedestrian safety to Westvale Park (control intersections)
6. Complete sidewalk connectivity in school zone
7. Install directional curb ramps at all pedestrian crossings

Lompoc Valley Middle School recommendations:
1. Eliminate drop-off horseshoe on South N Street
2. Add new signage and high visibility crosswalks and markings on West Ocean Ave.
3. Complete sidewalk connectivity within the school zone
4. Install directional curb ramps at all pedestrian crossings
5. Improve pedestrian safety and comfortable access to Ryan Memorial Park
6. Install consistent speed limit signage in the school zone
7. Install high visibility marked crosswalks consistently throughout the school zone

Lompoc High School recommendations:
1. Install high visibility marked crosswalks on both legs of all legal crossings on West College Ave. (e.g. such as the heavily used North I and North N, Street crossings).
2. Improve pedestrian-level railroad track warning signage around West Laurel Ave.
3. Improve pedestrian crossings on West Laurel Ave. with high visibility marked crosswalks and directional curb ramps
4. Complete sidewalk connectivity within the school zone
5. Evaluate installing pedestrian amenities (i.e.: high visibility crossings, stop signs) at both the North and South driveway of the Lompoc Shopping Center
6. Institute traffic calming measures on West Pine Ave.
7. Install a marked mid-block crossing on West Pine Ave.
8. Enhance existing “path” on east side of the school from West Pine Ave. to West College Ave.
9. Improve park connectivity by installing high visibility marked crossings at all intersections on the way to Thompson Park

Executive Summary
Background

What is walkability?
Walkable communities are an essential element of healthy communities. Walkability refers to how safe, friendly and accessible walking is in a neighborhood or community. Many factors influence walkability. Common factors include elements of the built environment such as availability of continuous, level sidewalks and pathways, safe crossings, lane and street width, and lighting. Other factors that influence walking and walkability include real and perceived safety from crime, gang activity and aggressive dogs, maintenance of trees and greenery, desired destinations, public amenities like benches, drinking fountains, public art, restrooms, and trash cans, among many others.

Why is walkability important?
The ability to stand upright and walk is one of the basic elements defining human beings. Pedestrians include both those who walk on two feet and those persons who walk using an assistive device, whether it be a baby in a stroller, a three year old on a tricycle, a young child on a bicycle with training wheels, or a person using a cane, crutches or wheelchair. Walkability indicates how many people can or will be physically active. Walking is a fundamental mode of transportation and everyone walks every day.

Walking itself is transportation and is also used with every other form of transportation (from car driving to bicycling to riding public transit). For example: users of public transit often have to walk a few to several blocks on either end of the public transit trip, and automobile drivers have to walk from a starting point (home) to the car and then from the car to the door of a destination. While some people walk more than others, it is important that our community environments are safe, accessible, and encourage walking for everyone. When we do so, more people have an option to walk more often, improving their own physical health as well as the surrounding natural environment (fewer greenhouse gas emissions).

It is important to note that walkability is a contextual term. Depending on the physical environment and an individual’s physical ability level, walkability may mean very different things to different people, at different times of day, etc. It is often thought that a pedestrian environment is walkable for nearly everyone, when it is walkable for an older adult or someone with a stroller/small child.

How does walkability contribute to the health and wellbeing of my community?
Nationwide walking is being recognized as a determinant to health and healthy living. Increasing walkability for communities can improve the health of a community. Walkability can improve:
1. **The health of individuals.** Walking is a form of physical activity and increased physical activity is linked to improved health outcomes. Regular walking can contribute to weight loss, lower blood pressure, prevent bone loss, improve cholesterol, blood sugar, immune system function, and insulin dynamics, reduce the risk of coronary heart disease, stroke, and other chronic disease; and improve mood and mental performance.\(^3\) Improved population and individual health can also reduce overall costs associated with negative health outcomes.

2. **Neighborhood crime rates.** The more people walking on the streets, the more eyes there are to observe and therefore deter criminal behavior.

3. **Individual and community economics.** Walking is a free form of transportation and those who walk can save money on gas or other transportation costs. Walking also improves community economic vitality by increasing the amount of foot traffic that passes through commercial areas.

4. **Social networks and social cohesion.** Walking can improve social networks and social cohesion by providing opportunities for neighbors and community members to interact and get to know one another. When people walk, they are engaged with their environment, meet new people, and are likely to build social ties.

**Pedestrians need\(^4\)**

The FHWA has identified five criteria for what pedestrians need:

1. A safe place to walk
2. The ability to see or detect traffic
3. Enough time to cross streets
4. Signs and markings designating the pedestrian route
5. Continuous facilities

**Poor walking accommodations\(^5\)**

Inverse to what pedestrians need, the FHWA has identified the following characteristics as contributing to poor walking accommodations:

1. No place to walk
2. Narrow sidewalks
3. Poor walking surfaces
4. Blocked pathways
5. No buffer
6. Difficult street crossings
7. Poor connectivity
8. Insufficient pedestrian lighting
9. Poor guidance
10. Conflicts with bicyclists

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**Pedestrian issues pertaining specifically to school zones**

Children are an especially vulnerable pedestrian population. School zones typically have many conflicts between pedestrians and drivers due to high volumes of children and parents approaching the school on foot and by drop-off/pick-up in motor vehicles. There are several ways the pedestrian environment can be modified and enhanced to improve the safety of children coming to and from school. Examples of pedestrian safety measures specifically around schools include:

1. Crossing guards
2. Complete sidewalks or separated walkways
3. Police enforcement
4. Prohibiting parking near intersections and crosswalks
5. Child supervision at crossings
6. School advance warning signs
7. High visibility marked crossings
8. Clear and reduced speed limit signage
9. Educating children on pedestrian safety
10. Clear and demarked drop-off and pick-up zones which don’t conflict with crosswalks

**Conducting walkability assessments and audits**

Walkability assessments (also known as audits) are a tool that community members and professionals can use to assess the level of pedestrian safety and comfort in a specific area. Often, the simple process of walking around a neighborhood with the purpose of identifying issues of pedestrian safety can provide significant amounts of information. Information gathered from these assessments can be used as a baseline measurement of the area’s pedestrian environment. This baseline can in turn be used to develop priorities and next steps in the improvement process. Many priorities can be addressed through engineering, environment, enforcement, evaluation, education, encouragement, emergency services, engagement, and empowerment. There is often a range of who can be responsible for actions based on the priorities. Many of the priorities can be directly addressed through community involvement (engagement) and articulation (empowerment) of pedestrian issues. Other priorities, such as engineering, education and enforcement, will need the assistance of professionals and their resources in collaboration with community residents for successful implementation.

Several walk assessment checklists have been developed to guide professionals and community residents alike in conducting walkability assessments. These checklists provide a template of common pedestrian issues to be aware of when completing an assessment. Sample walkability assessment checklists are available at:

California Walk to School Headquarters


WalkingInfo: Pedestrian and Bicycle Information Center

[www.walkinginfo.org](http://www.walkinginfo.org)
**Overlap with bikeability and bicycle accommodations**

Bicyclists are also vulnerable road users and while this report primarily focuses on walkability, very basic elements of bikeability are noted throughout this report based on observations made during the walkability assessments as well as via the City's Bicycle Transportation Plan. Bicyclists need a safe place to bicycle preferably with continuous and designated bicycle facilities as well as appropriate countermeasures to make bicycling safe and fun.

Several bikeability assessment checklists have been developed to guide professionals and community residents alike. These checklists provide a template of common bicycle-related issues to be aware of when completing an assessment. Bikeability checklists, to help assess your community’s bikeability, can be found at:

- BicyclingInfo.org
  - [http://www.bicyclinginfo.org](http://www.bicyclinginfo.org)
- National Center for Safe Routes to School
  - [www.saferoutesinfo.org](http://www.saferoutesinfo.org)

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**Existing conditions in Lompoc, CA**

The City of Lompoc is located in Southern California 55 miles North of Santa Barbara and 27 miles South of Santa Maria at the southern entrance of California State Highway 1, to the west of Highway 101. Historically, Lompoc was comprised primarily of agricultural land, the majority of which was devoted to flowers.

In 1941 the land just West of Lompoc was established as Camp Cooke for the US Army, transferred to the US Air Force in the 50s, becoming Vandenberg Air Force Base. The presence of Vandenberg Air Force Base significantly contributed to the growth of Lompoc and the diversification of the economic base and labor force. From 1957 to 2000, the population of Lompoc grew from 6,665 to 42,000 persons, 11,000 of which are school aged students.

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6 City of Lompoc Bicycle Transportation Plan. 2008. Available at: [http://www.cityoflompoc.com](http://www.cityoflompoc.com)


8 Lompoc Valley Chamber of Commerce and Visitors Bureau. 2009.
The City of Lompoc is currently 11 square miles with a total population of 39,883 (2006 estimate) and an average population density of 3,531 persons per square mile. The areas with the highest population density are in the Southwest and Northeast regions of the city (See Appendix 2). These areas are also the same areas where the majority of the reported pedestrian-bicyclists/automobile crashes occurred from 2004-2008 (See Appendix 3). From 1999 to 2007, Lompoc has had 23 severely injured pedestrians from vehicle/pedestrian contact.

35 percent of the 23 severely injured pedestrians (1999-2007) have occurred on the two highways that converge in, and run directly through, the City of Lompoc: California State Highway 1 and California State Highway 246. The presence of the State Highways poses attractions as well as complications for pedestrians in Lompoc.

As presently designed, motorists and trucks driving through the City of Lompoc on either of these State Highways may not be fully aware that they are entering a community and are, more specifically, entering school zones. These motorists may be traveling at higher speeds and preventive measures should be taken to further encourage motorists to slow down while within the City Limits.

Ten trucking companies serve Lompoc on a daily basis and use both State Highways and many of the local roads as well. In addition, there is a Southern Pacific Railroad yard (located in east central Lompoc) that connects to the north-south mainline via a spur at the Surf Station west of Lompoc. Amtrak also services the Surf Station. Rail service is available upon request to the major distribution centers in San Francisco and Los Angeles. Hence, there is no regular rail traffic through the city of Lompoc, but the rail line is maintained though the main part of downtown for occasional use.

Older neighborhoods, in the downtown areas of Lompoc are primarily based on a grid system and have very good pedestrian street connectivity. However, many of the newer residential areas of Lompoc (on the outskirts of town) have been developed in a cul-de-sac fashion with poor street and pedestrian connectivity. Connectivity encourages pedestrians to walk and should be strengthened as Lompoc continues to grow and develop.

The City of Lompoc currently has a Bicycle Transportation Plan that serves to address existing and planned bicycle facilities in the context of current land use and density.

The rapid growth, changing land use patterns, combination of urban and rural areas, the existence of two state highways, and railways all highlight the need for pedestrian safety awareness and risk reduction efforts in the City of Lompoc.

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9 US Census Bureau. State and County QuickFacts. [http://quickfacts.census.gov](http://quickfacts.census.gov)
10 SWITRS, 2003-2007
11 Lompoc Valley Chamber of Commerce and Visitors Bureau. 2009.
13 City of Lompoc Bicycle Transportation Plan. 2008. Available at: [http://www.cityoflompoc.com](http://www.cityoflompoc.com)
Lompoc School Walkability Assessments

**Methodology**

*California WALKS* conducted walkability assessments around Lompoc public schools. Four school sites were selected by *Healthy Lompoc*:

1. La Honda Elementary School  
2. Miguelito Elementary School  
3. Lompoc Valley Middle School  
4. Lompoc High School

Prior to the walkability assessments, *California WALKS* was provided with City Traffic Engineering data and Safe Routes to Schools (SRTS) applications (both funded and not yet funded data) as well as public school district information.

Walkability was assessed around the four schools within a two-block radius. A walk assessment form was completed (See Appendix 4), locations mapped and observations photographed. Data was compiled and priorities were developed for each school based on area observations of high pedestrian volumes, overall connectivity, and multiple threats to pedestrian safety. Selected priorities are paired with recommendations and rationale in the Report findings.
Overall Observations and Recommendations

Through the walkability assessments several common pedestrian safety improvements were identified at all four school sites. While a citywide walkability assessment was not conducted, it is likely that many of the repetitive issues observed in these four areas are pervasive throughout the City of Lompoc and its school catchment areas. While it may be of some concern that there are multiple sites with similar pedestrian safety concerns, this also provides an opportunity for citywide solutions. Improving the pedestrian safety for a school not only affects the students and parents of that school, but also contributes to the citywide pedestrian network and to the overall community walkability.

Below are observed pedestrian safety concerns observed at all four locations along with recommendations for improvements.

Incomplete sidewalks

*Observations:* The City of Lompoc has many areas with incomplete and/or interrupted sidewalks. (See Photo # 1 and 2) Incomplete sidewalks were observed at all of the four schools assessed in this report (some more than others). Incomplete sidewalks may require pedestrians to cross mid-block and/or at unsafe locations. The City Department of Public Works Traffic Engineering has already identified and prioritized areas where sidewalks are missing around schools. Those missing sidewalks, which were highly prioritized during these assessments, have already been included in SRTS funding applications and many have funding for completion in the next two years. There are still many missing segments.

*Recommendations:* It is recommended that the City continue to seek funding for sidewalk improvements. Increasing community support for local general fund and SRTS state grant funding will also enable the City to continue completion of the sidewalk network. The Federal Highway Administration (FHWA) states that “sidewalks should be continuous; interruptions may require pedestrians to cross a busy arterial street mid-block or at an unsignalized location to continue walking. Sidewalks should also be placed along both sides of all fully improved arterial, collector, and local streets in urban and suburban areas.” It is recommended that the City adopt a policy to complete the sidewalks within .5-mile radius of identified schools. (See Photo # 3)

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Curb Ramps

Observations: During the walk assessments, it was noted that although many of the curb ramps are being updated, they are diagonal (or unaligned) ramps. (See Photos # 4 and 5) Single diagonal curb ramps direct pedestrians, especially the vulnerable blind, wheelchair user, senior and small child in a stroller or holding a parent’s hand, into the middle of the intersection outside the unmarked crosswalk zone (which extends the sidewalk edge lines across the street). It was also observed that the newer curb ramps on the alleyways in Lompoc are directional in keeping with the correct orientation (an excellent design). (See Photo # 6)

Recommendations: Replacing the existing curb ramps is a current priority for the City of Lompoc. The City has the intent to complete a system of citywide curb ramps as required by ADA. To be ADA compliant, if a single, central ramp is used it must be accompanied by octagonal marked crosswalks which at a minimum provide 5’ of clearance on a flat surface at the bottom of the ramp (large enough for a wheelchair) with the marked crosswalk.

Diagonal ramps are currently not ADA-non-compliant; however, directional ramps are preferred and recommended as they steer pedestrian traffic in the correct direction and do not direct pedestrian traffic into the middle of an intersection. The FHWA states that separate curb ramps for each crosswalk at an intersection should be provided rather than having a single ramp at a corner for both crosswalks. This provides improved orientation for pedestrians. Directional ramps encourage pedestrians to stay on the sidewalk and discourage crossing the through street mid-block at the alleyway where drivers and oncoming traffic may not be expecting pedestrians to be crossing the street. (See Photo # 6)

It is recommended that the city upgrade curb ramp

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16 FHWA. 2004. Pg 53.
standard design to aligned curb ramps with yellow truncated domes.\textsuperscript{17}

**Marked crosswalks**

*Observations:* All of the schools have marked and unmarked crosswalks. However, all of the schools lack consistency in regards to quantity and quality of marked crossings, and high visibility crosswalks are particularly not uniformly present.

*Recommendations:* It is recommended that marked crossings be improved with new paint and/or high visibility paint and signage. High visibility crosswalks have been shown to reduce pedestrian collisions at crossings when implemented.\textsuperscript{18} It is recommended that the City upgrade crosswalk standard design to high visibility crosswalk markings on all arterials (major and minor) with a priority for those within .5 mile of school, park or path connection. Consider a new design standard for marked crosswalks as many around the City are the standard two striped lines and other schemes such as ladder or continental should be considered as they have better visibility.\textsuperscript{19} Marked crossings in school zones can also be painted in high visibility reflective yellow paint for the most visibility. (See Photo # 7 and graphic illustration below)

\begin{center}
\begin{tabular}{|c|c|c|c|c|c|}
\hline
Solid & Standard & Continental & Dashed & Zebra & Ladder \\
\hline
\includegraphics[width=0.15\textwidth]{solid.png} & \includegraphics[width=0.15\textwidth]{standard.png} & \includegraphics[width=0.15\textwidth]{continental.png} & \includegraphics[width=0.15\textwidth]{dashed.png} & \includegraphics[width=0.15\textwidth]{zebra.png} & \includegraphics[width=0.15\textwidth]{ladder.png} \\
\hline
\end{tabular}
\end{center}

Examples of different crosswalk marking patterns.\textsuperscript{20}

\begin{itemize}
\item \textsuperscript{17} U.S. Access Board. Public Rights-of-Way Guidelines (DRAFT). Available at: \url{http://www.access-board.gov/rowdrafthtm} or \url{http://www.access-board.gov/}
\item \textsuperscript{19} FHWA. 2004, Pg 55.
\item \textsuperscript{20} FHWA. 2004, Pg 55.
\end{itemize}
School zone signage (advanced warning signage)

Observations: All of the schools assessed had advanced warning signage notifying vehicular traffic of pedestrians. However, all of the schools lack consistency in regards to the pedestrian school zone signage both for crossings and speed limits.

Recommendations: Work to ensure that school zone signage is consistent around all schools within a minimal 500’ perimeter. Evaluate the need for additional and appropriately placed signs around schools. Reflective fluorescent yellow/green signs are preferred to the standard yellow school signage because they provide the most visibility.

Reduce speed limits in school zones with clear and consistent signage. (See Photo # 8) AB 321, 2007 allows for speed limits around schools to be lowered to 15 mph. Implementing AB 321 allows local government to reduce speed limit in school zones to 15 mph in the area up to 500’ from the school when children are present. If you think your school qualifies, contact your principal, PTA and Superintendent and if they agree then contact the local Public Works Department (Transportation Division). Public Works will likely perform a traffic survey to determine the existing conditions. From there, by resolution, the City may declare the lower speed limit. A successful example of similar implementation of school zone speed limit reductions has occurred in the City of Goleta.

Bike facilities

Observations: Lompoc has many identified and marked bike paths and lanes as well as a Bicycle Transportation Plan. This plan identifies next steps and priorities to continue the bicycle network (See Appendix 5). Although there are many existing bikeways, it was observed that many cyclists ride on the sidewalks (especially along busy streets without striped bike lanes). Continuous bikeway connectivity can encourage bicycle riding and alleviate current pedestrian concerns.

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21 Assembly Member P. Nava. AB 321, 2007. Approved by California Governor October 10, 2007. Available at: [http://www.leginfo.ca.gov/bilinfo.html](http://www.leginfo.ca.gov/bilinfo.html)
22 City of Lompoc Bicycle Transportation Plan. 2008. Available at: [http://www.cityoflompoc.com](http://www.cityoflompoc.com)
and hazards associated with bicycle conflicts (such as riding on sidewalks).

**Recommendations:** Continue to improve bicycle facilities and bicyclist education to get adult bicycles off the sidewalks and into bike lanes. (See Photo # 9) Bike lanes on roadways are one strategy in the implementation of road diets. Road diets using bike lanes encourage vehicular traffic to slow down, as well as provide a buffer between the vehicle and pedestrian traffic. Many streets in Lompoc are wide streets that can easily accommodate the addition of bike lanes without creating any delay in motor vehicle traffic. (See Photo # 10)

**Ocean Ave. and H Street (State Highways 1 and 246) intersection**

**Observations:** This main street downtown area has great potential. Much work has already been done to improve the safety and aesthetics of the intersection. For example on the north side of West Ocean Ave. and South H Street there are very pedestrian friendly sidewalk treatments (sidewalk width, curbside plantings & trees, pedestrian seating and planters abutting stores, pedestrian scale lighting, street retail). (See Photo # 11)

Ocean Ave. itself is a very wide street and may be difficult for many to cross safely. There is a median paired with all of the crosswalks, however none of them are pedestrian medians with through curb cuts to make them accessible to wheelchair users, adults with children in strollers, or those with mobility limitations.

At the intersection from Ocean Ave. onto South H Street (also on Ocean southeast of H Street) there are “One Way” arrow signs and “No One Way” turn signs that may confuse drivers, particularly those out of town tourists who are unfamiliar with the one way alleys.

Sidewalk curb ramps at all corners are non-ADA compliant with the lips being too high (either cement lip of the ramp itself or the asphalt lip of roadway). This poses a hazard for wheelchairs, skateboards, strollers and crutches in particular. (See Photo # 12) At the
Northeast corner of this intersection there are some areas where the sidewalk is broken or cracked at the curb ramps or utility boxes. (See Photo # 13)

**Recommendations:** Many of the public destinations are along the main street State Highways and Lompoc’s unique status as the southernmost town on the scenic State Highway 1 could be used to create a truly pedestrian main street atmosphere that would encourage walking, shopping and street side art mural and other attractions for both tourists and local residents. (See Photo # 14) However, nothing quite says to the tourist: "Stop here, this is your destination". From the highways, no one knows that there are great murals, the Mission, the vineyards (this will change with the new wine center at the edge of town), arts, farms, flowers and history. If the City wants to become such a destination, it could do so and Healthy Lompoc could work with the City to become a walkable destination with identified walk routes of interest (such as a pre-identified mural walk route).

South H Street just south of Ocean has been improved with the addition of curb extensions, high visibility crosswalks and pedestrian signage, streetside cafe seating. South H Street and the first block of West Ocean Ave. are good local examples of how such treatments could be extended along the length of the State Highways using Caltrans’ “Main Streets” and “Context Sensitive Solutions” guidelines. (See Photos # 15 and 16)

The Northwest safety and beautification corner treatment could be extended to the Northeast corner of the intersection, tying the intersection together as a destination. The theatre on North H Street off the Northeast corner will be a great addition to the neighborhood and intersection, when restored. The adjoining lot could currently be improved for community use and as a tourist attractor with large rocks, community seating, and possibly a community garden at back. (See Photo # 17)

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23 California Department of Transportation (Caltrans). *Context Sensitive Solutions*. Available at: [http://www.dot.ca.gov/hq/oppd/context/index.htm](http://www.dot.ca.gov/hq/oppd/context/index.htm)
“One Way” signage can be re-evaluated for slight adjustment as needed so it is only visible to the drivers the signs are meant to be directed to.

Curb ramps and cracked sidewalks should be smoothed out to prevent pedestrians from tripping. This is especially important for persons with mobility limitations such as wheelchairs, older adults, etc., as well as those with strollers.

**Park connectivity**

*Observations:* Lompoc is fortunate to have many beautiful parks including neighborhood and regional parks. Each of the four schools had at least one park within an approximate two-block radius. However, many opportunities for improving pedestrian access and safety from the schools to the parks were identified during the walk assessments. Specific opportunities for park connectivity are discussed more explicitly in each school section.

*Recommendations:* Improve park connectivity for pedestrians and bicyclists. Parks are a place where people walk, play, engage in physical activity, relax and have fun outside. Parks can be safer and more easily accessible with the installation of complete sidewalks, controlled intersections, high visibility crosswalks, directional curb ramps in alignment with pedestrian crossings, and pedestrian signaling. (See Photo # 18)

**Overall recommendations**

*Recommendation:* It is recommended that Healthy Lompoc Coalition continue to support, develop, and work with the City Department of Public Works Transportation Engineering in the City’s aggressive campaign for grant funding. The City is aggressively pursuing outside funding such as Safe Route to School (SRTS) grants, for its curb ramp completion and sidewalk gap closure program. These projects have the opportunity to bring outside dollars into Lompoc for improvements to the walking and bicycling infrastructure.
The City of Lompoc is to be commended for its highly proactive efforts, which have consistently been more successful in securing bicycle and walking infrastructure improvement funds than the average California city of similar size. In continuing to be highly competitive, it is recommended that pavement markings (school signage, crosswalk marking, bicycle lane striping and road diet improvements) be included with missing sidewalk and curb ramp gap closures to address crossing crash reduction as well as along-the-road crash reduction, particularly in SRTS grant applications. It is recommended that improved crosswalk striping and school/pedestrian signage be included at every curb ramp intersection included in City grant applications. A complete safety treatment then occurs at the intersection and scores higher on grant applications than curb ramps and sidewalk gap closures do alone. This strategy may increase the likelihood of the City’s success in the increasingly competitive state and federal grant programs.

Caltrans currently has an expanded curb ramp, sidewalk gap closure and crosswalk-marking program for state highways. Improvements along H Street and Ocean Ave. (State Highways 1 and 246) may qualify for this funding program and these findings certainly support such funding. It is telling that wheelchair users are in the street and not on the sidewalk on Ocean Ave. (See Photo # 12 above)

**Recommendation:** It is recommended that Healthy Lompoc Coalition work together with the City to increase City general fund budget allocations for sidewalk, curb ramp, crosswalk striping and signage. Healthy Lompoc and the City could also work together to secure a greater allocation within the City’s Streets and Roads budget for curb ramp completion and crosswalk striping. Securing additional City funds would also increase the competitiveness of such grant applications such as SRTS. When the City includes local match information, it scores extra points for local investment and for demonstration of the City’s commitment by extra City funding, thus scoring higher than Cities without an added local match.
Recommendation: It is recommended that the City complete intersection/mid-block crossing upgrades (high visibility striping and signage) when completing curb ramp upgrades & closing sidewalk gaps. Safety can be geometrically increased when crossing-the-road improvements are combined with walking-along-the-road improvements (sidewalk gap closures and alley curb cuts). Such crossing-the-road improvements include inexpensive signage (state law yield to pedestrian center line signs at unsignalized intersections; pedestrian crossing, bicycle lane and school zone signs in fluorescent green/yellow along the road are the most often used to improve the school environment) and high visibility crosswalk markings within .5 mile of school (or at least across arterials). It is recommended that the City complete intersection safety upgrade of curb ramp improvements along with high visibility crosswalk markings and additional pedestrian, bicycle and school zone signage. (See Photos # 19-24)

Recommendation: Consider other traffic calming treatments such as advanced stop back lines, road diets, bicycle lanes, roundabouts and traffic circles. Lompoc has a good example of a road diet on Walnut Street between N and O where vehicle lanes have been narrowed to two through lanes plus one turning lane and bike lanes added. (See Photo # 25)
La Honda Elementary School

La Honda Elementary Executive Summary
La Honda Elementary School is located in the northeast part of the City on North A Street. This school area serves several hundred elementary students as well as being a pick-up/drop-off bus location for middle school students. The pedestrian environment and amenities around La Honda Elementary could be enhanced to vastly improve the safety and comfort of pedestrians, especially children who walk to and from school.

Recommendations to improve the pedestrian environment around La Honda Elementary include:

1. Traffic calming on A Street (including installation of a bike lane)
2. Install high visibility marked crosswalks along A Street
3. Complete sidewalk connectivity on A and D Streets
4. Improve East Central Ave. and A Street intersection to increase safety and multiuse trail connectivity and access
5. Improve East Central Ave. and D Street intersection to increase safety and multiuse trail connectivity and access
6. Improve park connectivity via improving pedestrian paths and regional trails accessibility. Specifically, complete path connectivity from A to D to H Streets
7. Install directional curb ramps at all pedestrian crossings
8. Traffic calming on East Central Ave. (consider a more aggressive road diet)
9. Install high visibility school zone signage consistently throughout the school zone area
La Honda Elementary School Complete Findings

La Honda Elementary is located in the Northeast part of the City on North A Street. The school currently has 424 students with 68% of Hispanic or Latino ethnicity.²⁴ The school catchment area is primarily coming from the Northeast part of town (See Appendix 6).

From 2004-2008, there have been seven pedestrian-bike/auto collisions two of which involved minors along North A Street. Three of these collisions took place near the intersection of North A Street and East Central Ave., and four took place near the intersection of North A Street and East North Ave. There have also been three pedestrian-bike/auto collisions on North Ave. near North D Street, including one adult and two minors. Additionally, there have been two pedestrian-bike/auto collisions (one adult and one minor) at North D Street and East Central Ave. (See Appendix 3)

The walk assessment for La Honda Elementary focused on North A Street, due to safety concerns on this street, and the existing path connectivity around the school. The complete walk assessment included areas from Orchid Street (on the Eastern side), to East North Ave., to North D Street, and up to East Central Ave.

North A Street

Observations: North A Street has high traffic volume and is used as a cross-town throughfare by many local residents. Although the Department of Public Works characterizes North A Street as a “minor arterial,” it could more properly be described as a “major arterial” at certain times of day, including during school commute hours. This would be a more accurate picture for Safe Routes to School applications. North A Street is a quick alternate route which parallels Highway 1 (North H Street) and is the major eastside north-south connector for local vehicle traffic (who know to avoid the Hwy. 1 H Street traffic signals). Many vehicles, in the presence of dozens of walking and bicycling students, were observed driving in excess of 40 mph and yielding behavior was generally poor. (See Photo # 1 and 2)

Between East Central Ave. and East North Ave. on North A Street there have been seven pedestrian-bike/automobile collisions, two of whom involved minors. (See Appendix 3)

Not only do some elementary school students walk or bicycle along North A Street, but significant numbers of older students are bused to and from a La Honda School drop off and walk south along North A Street (and west on the A-D street path or across East North Ave. to homes further south). (See Photo # 3)

In many locations along North A Street, two students could not comfortably walk abreast, and several students were observed walking in the street next to the curb along side cars travelling at high speeds: a dangerous situation. (See Photo # 4)

At 3:30 pm, more than 25 students in 5 minutes crossed East North Ave. at North A Street, with another 12 turning West on East North Ave. toward the library or D Street. Despite this high volume of pedestrian student traffic, there are missing sidewalk segments all along North A Street from East North Ave. to East Pine Ave. as well as to East Laurel Ave., which makes it even more dangerous to walk on North A Street.
Speed limit signage is inconsistent and inappropriate for an elementary school. Proceeding north on North A Street, at East Barton Ave. the speed limit is posted at 35 mph where legally it could be reduced to 15 mph during school hours. Between Tangerine Ave. and East Barton Ave. going north on North A Street, the speed limit is posted as 25mph, then 35 mph at East Barton Ave. going south on North A Street (both painted in the street and on street sign). It is recommended that speed limits not be immediately increased at the school boundary itself as drivers are observed speeding in front of the school in anticipation of the approaching increase in speed limit.

**Recommendations:** Implement a road diet along North A Street to three lanes between East Central Ave. and East North Ave. (one lane each direction and a turning lane where needed). This will free up space for adding Class II bike lanes in each direction and widening the sidewalk. Currently the sidewalk on the east side of North A Street between Tangerine Ave. and East Central Ave. and on the west side at East Barton Ave south to East North Ave. are very narrow, have obstructions in the right of way and do not have a parkway or buffer, which would further protect pedestrians from traffic. (See Photo # 5)

Completing the sidewalk network and buffering pedestrians from traffic (with park/utility strips, on street parking and/or bike lanes on both sides) north and south of the school along North A Street is very important. The sidewalk gaps at North A Street and Airport, Oak and Lemon Avenues, which the City has previously identified as funding priorities are critical connections for Fillmore Elementary School and for middle and high school students commuting by bus to and from La Honda School.

It is also recommended that the speed limit be consistently marked, reduced and enforced. Speed limit should be no faster than 25 mph, clearly posted within the school zone and the City should investigate lowering the speed limit to 15 mph during school hours. (See School Zone Signage in Overall Observations and Recommendations)
North A Street and East Barton Ave. crossing  
*Observations:* This intersection is a major crossing for both students from La Honda Elementary as well as students that get bussed to La Honda (presumably from the Middle School). This is the main crossing for students and should be considered as part of the school zone.

*Recommendations:* This intersection needs a higher visibility crossing. At a minimum, the existing crossing should be re-striped. The City should consider a pedestrian activated demand signal that would stop cars when pedestrians are present. (See Photo # 6)

North A Street and East Central Ave.  
*Observations:* This intersection is the first major intersection north of the school on North A Street and has had one adult pedestrian-bike/automobile collision from 2004-2008 (See Appendix 3). The regional bike trail has a spur that is accessible at the northeast side of this intersection. There are two directional ramps to cross East Central Ave. where there is a marked crosswalk. However, there are no marked crosswalks or directional curb ramps along the north or south side of this intersection to cross North A Street (the primary route to the regional multiuse trail). (See Photo # 7 and 8)

*Recommendations:* It is recommended to install high visibility crosswalk markings on all three crossing locations at this intersection and include aligned curb ramps to cross North A Street. Putting in high visibility marked crosswalks and aligned curb ramps will not only increase pedestrian pathway visibility, but will also enhance the existing bike and trail network that the City is committed to maintaining and developing. (See Appendix 6 for the Lompoc Bike Plan)

Curb ramps  
*Observations:* There were two primary areas around La Honda Elementary where curb ramps were widely not in use: 1) In the neighborhood across from La Honda Elementary (east of North A Street) there are several intersections that have missing curb cuts. Specific areas include: Orchid Street at Bell Ave., Barton Ave. at Orchid Street. 2) On the West (or back side) of La Honda
Elementary School, there are many intersections in the residential areas where there is only one diagonal ramp and/or no marked crossings. Specific areas include Birch Ave. to East Barton Ave. along North C Street and North B Street. (See Photo #9)

*Recommendations:* See curb ramp recommendation in General Observations and Recommendations section.

**Incomplete sidewalks on North D Street**

*Observations:* There is no sidewalk along the westside of North D Street from East North Ave. to just south of East Barton Ave. (See Photo #10) However, there is a path that starts on East North Street just west of where the sidewalk would be on North D Street that turns left below East Barton Ave. and connects to North H Street. (See Photo # #11) There is a desire line path (down and up a large ditch) just below East Barton Ave. between North D Street and the path that runs along the west side of North D Street. (See Photo #12) This path is used as the most direct pedestrian route to travel from North H Street to North D Street and can be included in the development of a comprehensive pedestrian/bicycle network. (The City has already identified North D Street as an area for proposed Class II Bikeway – See Appendix 6).

*Recommendations:* It is recommended that the City complete the sidewalk along the west side of North D Street where there is no existing sidewalk. Additionally, the City should work to improve and maintain the path connectivity along the west side of North D Street and the desire line path connecting the path to North D Street. Currently, there is a ditch between the path to North D Street where people have created a desire line path.

**School/park connectivity**

*Observations:* There is an existing network of paths around La Honda Elementary School, however there are many missing pieces or gaps in the path connectivity. An improved path exists from North A to North D Streets south of La Honda School (along a boundary wall from the water company settling ponds). Many students were observed using this path after school. Most of the length it is in good repair, although some
maintenance is needed close to North D Street. It is, however, not well maintained in terms of trash and graffiti and could benefit from a community clean up project. (See Photo #13 and 14)

There is an unimproved connection from the North D Street side of this path to the southwesterly corner of La Honda School. (See Photo # 15) It is not a safe path as it has a steep incline with sudden drop-offs, but could be easily improved as it is merely sandy soil which could be widened and more gradually sloped. The adjoining subdivision to the north and commercial properties have high walls blocking the path from “eyes on the street” and therefore in the past it was a magnet for fighting and drug activity, as reported by the La Honda School Principal, before she closed the school gate.

There are sidewalks where the path exits to North D Street (on the east side), but there is no designated mid-block crossing across North D Street to access the path along the west side of North D Street and westward to North H Street. This path could easily be connected to create a cross town network of paths, including the multi-use river path (at North A Street and East Central Ave.), the North D Street path and the path from D to H Streets.

**Recommendations:** Although longer range, completing the path network infrastructure would increase the access to La Honda School by walking and bicycling. Issues of crime, fighting, trash, drug use and eyes on the street will have to be overcome. Increasing foot traffic so that the path area is not a deserted hideout is the least expensive cure; a crossing guard during school commute hours may be an on-going (thus expensive) way to increase foot and bicycle traffic.

With the proper planning and improvements, it is recommended to reopen the gate at the back of the school to encourage children walking to school in conjunction with infrastructure improvements to the path (to maintain it) as well as a Safe Routes to School program. It is also recommended that a designated marked mid-block crossing on North D Street be added so that persons exiting the path (westward from North
A Street) can safely cross North D Street to continue on the pedestrian path to North H Street.

**North D Street and East Central Ave.**

*Observations:* East Central Ave. is a wide 5-lane (including a middle turning lane) road with a bike lane on either side and no street parking. The bike lane provides the only barrier from the oncoming vehicular traffic for pedestrians who must walk at the curb. The speed limit along East Central Ave. is 45 mph. (See Photo # 16)

The intersection of North D Street and East Central Ave. has had two pedestrian-bike/automobile collisions from 2004-2008, one of whom was a minor (See Appendix 3). This intersection has the minimal 2 parallel-striped lines as marked crossings at each leg of the intersection and no aligned curb ramps. East Central Ave. is a 5-lane road at the intersection and is difficult for pedestrians to cross without a pedestrian island or median. (See Photo # 17) Further, pedestrians must push a pedestrian signal button to activate the pedestrian crossing. (See Photo # 18) All of these raise concern as they discourage people from crossing. It is important that this intersection and connecting streets be pedestrian friendly to encourage use of the existing pedestrian and bicycle networks to access the school and the regional multiuse trail.

*Recommendations:* It is recommended that the speed limit on East Central Ave. be lowered to 25 mph and that a request be made for East Central Ave. to be evaluated by City traffic engineering for a road diet. A road diet along Central Ave. could include installing a pedestrian-protected median, widening sidewalks to encourage pedestrian use, adding a sidewalk buffer for protection against oncoming traffic or installing on-street parking.

At the intersection of North D Street and East Central Ave., it is recommended that a request be made for traffic engineering evaluation for installation of curb extensions at every corner along with a pedestrian safety island in order to shorten the crossing distance for pedestrians (as well as reduce the vehicle waiting time for the ped signal phase). It is also recommended that automatic pedestrian crossing timing replace the
existing push buttons. These recommendations are intended to encourage pedestrian and bicycle travel along both North D Street and East Central Ave. to school as well as use of the multiuse trail that begins at East Central Ave. and North A Street. (See Photo # 19)
Miguelito Elementary School

Miguelito Elementary Executive Summary
Miguelito Elementary School is located in the Southwest part of Lompoc on West Olive Ave. This school serves several hundred students, many of who walk or are dropped-off/picked-up by parents in cars. There is considerable motor vehicle congestion and pedestrian conflict during school commencement and dismissal hours. Additionally, there are many physical improvements that would vastly improve the safety and comfort of pedestrians, especially children who walk to and from school.

Recommendations to improve the pedestrian environment around Miguelito Elementary School include:

1. Complete a new pedestrian bridge at South U Street and West Olive Ave.
2. Install high visibility marked crosswalks consistently throughout the school zone (especially along West Olive Ave. at South U and South V Streets)
3. Evaluate the relocation of the school driveway exit
4. Reduce school pick-up/drop-off (encourage parents to park/walk/bike)
5. Improve pedestrian safety and park connectivity to Westvale Park (control intersections, install high visibility marked crosswalks and aligned curb ramps)
6. Complete sidewalk connectivity in school zone
7. Install directional curb ramps at all pedestrian crossings
8. Install high visibility school zone signage consistently throughout the school zone
Miguelito Elementary School Complete Findings
Miguelito Elementary is located in the Southeast part of the City on West Olive Ave. The school currently has 532 students including 52% of Hispanic or Latino ethnicity. The school catchment area is primarily coming from the Southwest part of town (See Appendix 6).

From 2004-2008, there were two pedestrian-bike/auto collisions involving minors; one at the intersection of Bodger Road and West Olive Ave. and the other at the intersection of South R Street and West Olive Ave. (See Appendix 3).

The walkability assessment for Miguelito Elementary focused on children crossing at South U Street and using the pedestrian bridge, the school drop-off/pick-up congestion, and park connectivity. The complete walk assessment area included West Olive Ave., to South T Street, to West Willow Ave., to West Fir Ave., to Bodger Rd. The assessment also included a two-block radius beyond the pedestrian bridge, up South U Street to West Cypress Ave. and back around to South R Street.

*Courtesy of Google Maps

Pedestrian bridge at South U Street

Observations: Going to and from school, many students as well as parents with children crossed the irrigation canal using the bridge at South U Street and West Olive Ave. It was the most heavily used route during Miguelito Elementary School dismissal (second only to parent pickup in single occupant vehicles) and is extremely dangerous, due to its dilapidation. During the second release of children from Miguelito Elementary School (from 2:25 - 2:35 pm), 47 children used the bridge (37 pedestrians, 10 bicyclists). This is an important connection between the school and the neighborhoods across the irrigation canal and should be prioritized. (See Photos # 1-4)

The existing bridge is showing significant signs of age and wear and needs to be replaced soon. The Department of Public Works is to be highly commended for successfully obtaining a State of California Highway Safety Improvement Program grant of $247,000 in federal funds for bridge design. These are very competitive state safety grants and the City made an excellent case of the high priority for replacement of this bridge.

While observing, a neighbor approached to learn if the bridge was being replaced, volunteering that it is very dangerous to use. His elderly mother, who uses it to go shopping, has become afraid to cross. For this neighborhood, grocery shopping is available at Von’s at the Westside Shopping Center on West Ocean Ave. between South U and South R Streets. It is becoming quite difficult for strollers and grocery carts to cross on the wooden bridge as plywood boards become more and more uneven due to warping as the neighbor demonstrated. (See Photo # 5) This neighbor also stated that other neighbors along West Olive Ave. (where he lives) would sign a petition supporting funding for the bridge replacement. The neighbor was pleased to learn that the City had already secured funding to begin the design process for replacing the bridge.

Recommendations: The design of the new pedestrian/bicycle bridge is funded but additional funds are needed to complete construction. It is
recommended that potential sources for needed funds be identified.

It is recommended that this be a very high priority of Healthy Lompoc Coalition and the community at large. Healthy Lompoc and the community can work with the City through the Department of Public Works to secure the additional funds needed to complete construction of the new bridge.

Crossings of West Olive Ave. at South V and South U Streets

Observations: The intersections of West Olive Ave. at South V and South U Streets are skewed and complicated. Many school children and parents cross at these locations on a daily basis.

There are no marked crossings at South V Street, although there is a bike/pedestrian path that students use along east South V Street and West Olive Ave. This path is part of the existing bicycle network (See Appendix 6). (See Photo # 6)

The intersection of South U Street and West Olive Ave. is a “T” intersection with three marked crossings. All of the marked crossings are painted with the basic two yellow parallel striped lines. Most students and parents with children cross on the west side of South U Street at West Olive Ave. although many also use the east leg of the intersection. (See Photo # 7) This marked crossing on the west leg of the West Olive Ave. and South U Street intersection leads to a curb lacking a curb cut, which links directly to the bike path. (See Photo # 8)

Additionally, there is a bus stop between South V and South U Streets on the south side of West Olive Ave. This bus stop location contributes to an already chaotic set of intersections.

Recommendations: It is recommended that the skewed intersections be evaluated by traffic engineering for improvements to overcome the challenges for both pedestrians and vehicles alike. Crosswalks should be re-striped using high visibility techniques (See Marked Crossing recommendations in the General Observations and Recommendations section).
It is also recommended that the eastbound bus stop location on West Olive Ave. be re-evaluated. A possible location could be directly eastward of South U Street provided the South U Street crosswalk markings and signage is improved. This location would likely alleviate any unintended traffic congestion that the current location of the bus stop may be contributing to.

**School Driveway**

*Observations:* The driveway exit for the schoolteachers' parking lot is located just west of South V Street on West Olive Ave. There is no stop sign heading east on West Olive Ave. at South V Street. This intersection is very confusing to drivers and, during school hours, the driveway adds to the confusion. Additionally, many pedestrian children and parents are using the driveway to walk off the school premises, and others are crossing the driveway while walking along the sidewalk.

*Recommendations:* It is recommended that the School and City re-evaluate the location of the school exit driveway to eliminate unnecessary confusion. One suggestion would be to combine the driveway entrance and exit at the current location of the parking lot entrance (the west entrance).

**Drop-off/pick-up**

*Observations:* Miguelito School drop-off/pick-up zone is chaotic and the presence of an LPD Traffic officer is immensely helpful. Officer Andreasen from the City of Lompoc Police Department indicated that there is a significant issue with parents parking in the bus zone in front of the school. Though enforcement has proven successful and this violation carries a steep fine, parents continue to park in this bus zone. In addition, parents picking up and dropping off children are making U turns on West Olive Ave. as they head west past the school. This is a fairly narrow road at this location and the improper U turns add to congestion along the frontage of the school. (See Photo #9 and 10)

*Recommendations:* A potential solution is to encourage parents to park along West Olive Ave., east of South U Street and along South U Street where there is available on-street parking (less than a block from the front of the
Lompoc School Walkability Assessments

school). This would reduce the pedestrian-vehicle conflicts. With this recommendation, as with the bus stop relocation, the marked crosswalks would need higher visibility markings and added signage.

South X Street and West Loquat Path to West Olive Ave.
The path along the west side of the school from the corner of South X Street and West Loquat Ave. enhances walkability to and from Miguelito School.

Connection to Westvale Park
Observations: Westvale Park is less than a block from the Miguelito school premises. (See Photo # 12) Improving connectivity and improving the safety of the walk from the school to the park can increase access to physical activity in the park. On the walk from the school to the park there is an uncontrolled intersection at West Fir Ave. and South U Street without any marked crossings. (See Photo # 13) There is no way to enter the park from West Willow Ave., only from West Fir Ave. so it is important that this entrance and approaching streets to this park be safe for pedestrian use.

Recommendations: Control the intersection at West Fir Ave. and South U Street with stop signs and high visibility marked crosswalks. This will encourage pedestrian access to the park while simultaneously increasing the visibility of the crossings to vehicular traffic.

Incomplete sidewalks
Observations: There is one location in particular within a one block radius of Miguelito Elementary School where there are sidewalks are missing or incomplete: West Fir Ave. at South M to X Streets (behind the school). (See Photo # 14)

Recommendations: It is recommended that sidewalks with directional curb ramps be installed all along West Fir Ave. Continuous sidewalks will encourage children and adults to walk to school, walk in their neighborhood, increase safety for walkers, and increase use of Westvale Park. (See the incomplete sidewalks section in the General Observations and Recommendations)
Marked crossings

Observations: There are several locations around Miguelito Elementary School that do not have marked crossings. Locations include West Olive Ave. at South R Street (North leg). The multi-use path continues on either side of this intersection and a crosswalk markings at this stop sign should be added. South U and T Streets at West Loquat Ave. and West Locust Ave. also do not have crosswalk markings, although they are legal crosswalks. (See Photo #15)

Recommendations: Place high visibility marked crosswalks at West Olive Ave. at South R Street and South U Street at West Loquat Ave. and West Locust Ave. (See high visibility crosswalk marking recommendations in the General Observations and Recommendations)

Missing curb ramps

Observations: There are several locations on the East and Southeast side of the School where there are no curb ramps. Identified locations without ramps include the intersections of South T Street at West Loquat Ave. and West Locust Ave. and at West Willow Ave. and South T and U Streets. (See Photo # 16 and 17)

Recommendations: Install directional curb ramps at identified locations. (See curb ramp recommendations in the General Observations and Recommendations section)
Lompoc Valley Middle School

Lompoc Valley Middle School Executive Summary
Lompoc Valley Middle School is located in the Southwest part of Lompoc. This school serves approximately 1,000 students. Many students walk to school, but many are also still dropped off/picked-up by parents in vehicles. There are several locations where improvements can be made that would vastly improve the safety and comfort of pedestrians, especially children who walk to and from school.

Recommendations to improve the pedestrian environment around Lompoc Valley Middle School include:

1. Eliminate drop-off horseshoe on South N Street
2. Add new signage and high visibility crosswalks and markings on West Ocean Ave.
3. Complete sidewalk connectivity within the school zone
4. Install directional curb ramps at all pedestrian crossings
5. Improve pedestrian safety and comfort to Ryan Memorial Park
6. Install consistent pedestrian school zone signage throughout the school zone
7. Install consistent speed limit signage in the school zone
8. Install high visibility marked crosswalks consistently throughout the school zone
9. Install bike facilities (such as bike lanes) to encourage bicyclists to ride in bike lanes and not on the sidewalk
10. Improve park connectivity to Ryon Memorial Park
### Lompoc Valley Middle School Complete Findings

Lompoc Valley Middle School is located in the Southwest part of the City on South N Street. The school currently has 985 students with 60% of Hispanic or Latino ethnicity. The school catchment area primarily encompasses the Northwest, Mideast and Southeast parts of town (See Appendix 6).

From 2004-2008, there have been two pedestrian-bike/auto collisions involving minors at the corner of West Cypress Ave. and South L Street, two more crashes, one adult and one minor bicyclist/pedestrian at South O Street and West Olive Ave., and several involving adults and minors along West Ocean Ave. between South O and South H Streets (See Appendix 3).

The walkability assessment for Lompoc Valley Middle School focused on school drop-off/pick-up congestion, on West Ocean Ave. crossings, on incomplete sidewalks, and on park connectivity. The complete assessment area included West Ocean Ave. from South K Street, to West Locust Ave., to South O Street.

*Courtesy of Google Maps

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26 Lompoc Unified School District. [http://www.lusd.org/schools/sarc](http://www.lusd.org/schools/sarc)
School drop off along South N Street

Observations: The pedestrian/vehicle conflict is high at the intersection of West Hickory Ave. and South N Street as car drivers are dropping students along West Hickory Ave., along the east side of South N Street, and turning into this intersection’s drop-off horseshoe in front of the School. The entrance and exit driveways for the drop-off are not marked or signed to look for pedestrians and parent behavior is poor (limited signaling, aggressive driving, distractions, poor yielding etc). (See Photo # 1)

There are also several sidewalk gaps, missing sidewalks and curb ramps at West Hickory Ave. and South N Street complicating continuous pedestrian travel. (See Photos # 2-4)

Recommendations: Work with the School District and City to consider eliminating the drop off horseshoe, directing parents to drop students off and pick up along the south side of West Cypress Ave. east of South N Street. This would eliminate the conflicts between vehicle turning movements into and out of the drop-off zone driveway while students are also crossing from all directions.

The City has prioritized the missing links in the sidewalks in this area and it is recommended that this intersection also be prioritized as there are significant numbers of students using the marked crosswalks at South N Street and West Hickory Ave.

West Ocean Ave.

Observations: Although there are traffic signals at North Q and North K Streets, more than twice as many students cross at North L and North N Streets, where there are no controls for oncoming West Ocean Ave. motor vehicle traffic. There is a 7-11 market at West Ocean and North N Streets that many students frequent. (See Photo # 5) Traffic calming is needed along West Ocean Ave. from South A to South V Streets as West Ocean Ave. is not only a state highway and a downtown main street from F to K Streets, but it is also three or
fewer blocks from five Lompoc schools (including Lompoc Valley Middle School and Lompoc High School). The Middle School and High School have close to City-wide enrollment and most students, in order to walk or bicycle to and from school, have to cross Ocean Ave. at some point. As a state highway, Ocean Ave has few if any positive crossing traffic calming measures. There have been eleven crashes involving minor pedestrians or bicyclists within five years on Ocean Ave. (D-S Streets) plus four more involving adults (See Appendix 3). Slow School Crossing pavement markings paint is faded and school signs are old. (See Photo # 6)

Recommendations: West Ocean Ave. should be prioritized for new signage and high visibility crosswalk markings. It is recommended to work with the City to seek Caltrans approval for reduced speed limits in highway school zones. West Ocean Ave. can also be evaluated for bike lane installation, to increase safe bicycle travel and assist in traffic calming. Currently, the span of West Ocean Ave near Lompoc Valley Middle School does not, and is not prioritized to, have bike lanes (See Appendix 6).

Missing sidewalk links

Observations: Lompoc’s Public Works Department is aware of the many missing sidewalk links around the city and has been working to eliminate gaps. Observations in this section are specific to areas around Lompoc Valley Middle School where sidewalk completion will enhance pedestrian travel targeted at school-aged children.

Sidewalks are missing along:
• South N Street south of West Ocean Ave. (See Photo # 7)
• West Cypress Ave. east of South O Street
• South O Street at alley between West Ocean Ave. and West Cypress Ave.
• North N Street between West Cypress Ave. and West Ocean Ave. where the sidewalks are interrupted by driveways, unlike most other residential parts of central Lompoc where sidewalks are recessed from curb with protective landscaped park strip or utility zone
• South M Street south of West Cypress Ave. and at West Ocean Ave. a fence blocks to the curb
Lompoc School Walkability Assessments

- Southwesterly side of South N Street behind the 7-11 on West Ocean Ave., the pavement is uneven in the alley crosswalk
- Along South M Street is a new example of a sidewalk that is very difficult for blind and wheelchair bound pedestrians (and which is likely soon not to be ADA compliant). The sidewalk is installed abutting the curb then zig zags back of the driveway to create a continuous but not a straight, level clear path of travel. This installation type was also used in the new subdivision near Mission Purisima and Allen Hancock Community College off Hwy 1 north.
- West Olive Ave. has many areas of missing sidewalk and curb ramps between South K and South L Streets. Continuous sidewalks are important along West Olive Ave. for continuous connectivity to Ryon Memorial Park (See Photo # 8)
- South side of West Olive Ave. between the alleyway between South M and South L Streets to the alleyway between South L and South K Streets. Two women were observed walking who had to cross to the North side of West Olive Ave. to use the sidewalk. (See Photo # 9)
- East side of South L Street on the first, second, and third blocks south from West Cypress Ave. towards West Locust Ave.
- South side of West Hickory Ave. between South N Street and South O Streets
- South side of West Olive Ave. at South L Street (going one block both directions) and West side of South L Street below West Olive Ave.
- South K Street between West Hickory Ave. and West Olive Ave. – both west and east sides have only partial sidewalks
- South N Street at West Hickory Ave.
- South side of West Olive Ave. between Locust Ave. and South N Street (See Photo # 10)
- South side of West Olive between South N Street and alley to the east
- South of West Olive along South M Street
- West side of South N Street south of West Olive Ave. (dead end street)

**Recommendations:** It is recommended to complete sidewalks and add high visibility marked crosswalks along West Olive Ave. (especially for access to Ryon Memorial Park) and install aligned directional curb
ramps at all intersections. This will improve park connectivity and encourage pedestrian activity. (See Photo # 11) It is also recommended that Healthy Lompoc work with the Department of Public Works to reinstate as the City standard the City’s original public right of way (PROW) design with a 5’ sidewalk parallel to and set back 5’ from the curb (with tree planting required).

**No curb ramps**

*Observations:* Curb ramps are missing at many intersections around Lompoc Middle School, partly due to an incomplete sidewalk network. Lompoc’s Public Works Department is aware of the many missing curb ramps around the City and has made it a priority to install curb ramps. Observations in this section are specific to curb ramp installation needed in areas around Lompoc Valley Middle School that will enhance pedestrian travel targeted at school-aged children.

Curb ramps are missing along/at:

- North N Street at West Ocean & West Cypress. with gravel sidewalks (See Photo # 12)
- Northwest, Southwest and Southeast corners of South K St. at West Hickory Ave. (See Photo # 13)
- South side of West Olive Ave. at South O and South M Streets and one block in either direction (to West Locust Ave. and the alley)
- West Hickory Ave. at South O Street and at South N Street (both corners at each)
- South M Street at West Locust Ave. (all corners)
- South side of West Olive Ave. at South O Street

*Recommendations:* Many of the alleyways in Lompoc do have curb ramps that are directional in alignment with the sidewalks and encourage pedestrian use and safety. However, there is one observed location at the intersection of West Olive Ave. and the alleyway between South L and South K Streets that directs foot-traffic into the street (West Olive Ave). This is not a recommended curb ramp for the safety of pedestrians. (See Photo # 14) (See recommendations for curb ramps in the General Observations and Recommendations section.)
Lompoc School Walkability Assessments

Park connectivity

Observations: Ryon Memorial Park on the westerly side of South O Street south of West Ocean Ave. has a popular walking path that is not accessible by sidewalk or path connection from South O Street. It was observed that this path was currently being used by small groups of women for morning walks. (See Photo # 15 and 16)

Recommendations: Increasing park connectivity, such as installing an accessible entrance at South O Street, and completing sidewalks, curb ramps, and high visibility crosswalk markings on all streets approaching the Park. (See Photo # 8)

Existing walkers could be the core for organized daily walking groups using the park and for a community organized for health.

Speed Limit Signage

Observations: Speed limit signage is inconsistent around the school zone near the corner of West Olive Ave. and South N Street. (See Photo # 17)

Recommendations: Install consistent speed limit signage in the school zone. (See signage recommendations for signage in the General Observations and Recommendations section.)

Crosswalk Markings

Observations: Many crosswalks around the School are marked inconsistently. (See Photo # 18)

Recommendations: It is recommended that consistent high visibility yellow crosswalk striping be installed at all legal crosswalks in the school zone. (See recommendations for marked crossings in the General Observations and Recommendations section.)

The westerly crosswalk at North N Street across West Cypress Ave. is a new high visibility crosswalk (with new school signs all along West Cypress). It is recommended that these treatments be extended throughout the area, with high visibility crosswalks markings installed at all crosswalks across West Laurel Ave., West College Ave., West Pine Ave., West North Ave., West Cypress Ave., West Ocean Ave. and West
Olive Ave. These east-west corridors are all arterials (minor or major). Since drivers are proceeding at faster speeds, they need more warning that legal crosswalks are approaching and to be alert to yield to pedestrians.
Lompoc High School

Lompoc High School Executive Summary
Lompoc High School is located in the center of Lompoc on West College Ave. The school serves over 1,500 students and is surrounded by streets with high motor-vehicle traffic. The pedestrian environment and amenities around Lompoc High School could be improved to vastly improve the safety and comfort of pedestrians, especially youth who walk to and from school.

Recommendations to improve the pedestrian environment around Lompoc High School include:

1. Install high visibility crosswalk markings on both legs of all legal crossings on West College Ave. and throughout the school zone area
2. Improve pedestrian-level railroad track warning signage around West Laurel Ave.
3. Improve pedestrian crossings on West Laurel Ave. with high visibility marked crosswalks and directional curb ramps
4. Complete sidewalk connectivity within the school zone
5. Evaluate installing pedestrian amenities (i.e.: high visibility crossings, stop signs) at both the North and South driveway of the Lompoc Shopping Center
6. Institute traffic calming measures on West Pine Ave.
7. Install a marked mid-block crossing on West Pine Ave.
8. Enhance existing “path” on east side of the school from West Pine Ave. to West College Ave.
9. Improve park connectivity by installing high visibility crosswalk markings at all intersections on the way to Thompson Park
10. Install curb ramps at all crossings (preferably aligned directional ramps)
11. Install consistent high visibility school zone signage consistently throughout the school zone
12. Install bike facilities (such as bike lanes) to encourage bicyclists to ride in bike lanes and not on the sidewalk
13. Improve park connectivity to Thompson Park
Lompoc High School Complete Findings

Lompoc High School is centrally located in Lompoc with frontage along West College Ave. The School currently has 1,546 students with 59% of Hispanic or Latino ethnicity. The School catchment area encompasses the Northwest, Mideast and Southeast parts of town (See Appendix 6).

From 2004-2008, there have been ten pedestrian-bike/auto collisions, seven of which involved minors along the front of the school on West College Ave. (from North O Street to North H Street). There have been an additional fourteen pedestrian-bike/auto collisions, nine of which involved minors in the neighborhood just south of the High School. There is a cluster of these collisions at the intersection of West Laurel Ave. and North O Street, as well as several along East Laurel Ave. Additionally, there have been six pedestrian-bike/auto collisions one of which involved a minor along West Pine Street: one at North O Street, and four on or near the North H Street intersection) (See Appendix 3).

The walk assessment for Lompoc High School had many areas of concern. Specifically, West College Ave., the rail line and crossings on West Laurel Ave., West Pine Ave., and the parking lot entrance and exits at the Lompoc Shopping Center on North H Street. The complete walk assessment included areas from West Pine Ave. to North H Street, to West Laurel Ave., to North R Street, to West North Ave., and down North O Street.

*Courtesy of Google Maps

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West College Ave.

*Observations:* West College Ave. is a high use street for students and vehicular traffic. (See Photo # 1) Many students use West College Ave. as their route to and from school. There are many legal crossings along West College Ave., but less than half of them are marked and in many places the crosswalk markings are worn and would benefit from new high visibility painting. The corner of West College Ave. and North O Street has four marked crossings, but these are not high visibility. There are ladder style marked crossings only on the western legs of West College Ave. and North M, North L and North I Streets.

Many students were observed during morning and lunch hours using unmarked crosswalks at several intersections: the eastern legs of West College Ave. and North M, North L and North I Streets and both legs of West College Ave. and North K Street. (See Photo # 2)

*Recommendations:* Install high visibility marked crosswalks on both legs of the intersection of West College Ave. and all perpendicular streets from North H Street to North O Street. Existing marked crosswalks can be improved by new high visibility markings and more signage. (See marked crossings in the General Observations and Recommendations section) Additional pedestrian warning signage targeted at drivers is also recommended.

West Laurel Ave. from North H to North R Streets

*Observations:* West Laurel Ave. was observed to have many complications such as an existing rail line, no rail signage targeted to pedestrians, little to no crosswalk markings, and inconsistent ramps. Uneven asphalt around the centerline rail tracks makes it extremely difficult for people in wheelchairs or using strollers to cross. All along West Laurel Ave. there are no marked crosswalks at intersections. There is limited pedestrian visibility due to parking directly up to the intersection corners. There are also many areas along West Laurel Ave. where there are no or inconsistent curb ramps (especially at South K Street). (See Photos # 3 and 4)
Recommendations: The train tracks are still in operation along West Laurel Ave., although only by special request. It is recommended that each intersection crossing should be signed notifying both pedestrians and motorists of the approaching rail crossing. High visibility crosswalks should also be installed at select locations with proper signage for pedestrians, motorists and trains regarding one another’s presence.

It is recommended to eliminate parking to the corners at West Laurel Ave. and the cross streets to improve visibility for pedestrians. Consider the addition of pedestrian curb extensions to shorten the distance pedestrians have to cross and to increase the visibility between pedestrians, motorists, and the rail line.

Missing sidewalks
Observations: North N Street was a good example of the pervasive lack of sidewalks on popular school walking routes. The Department of Public Works is commended for having previously prioritized this school route and for successfully securing Safe Routes to School state funding for completion of sidewalk gaps around schools. Healthy Lompoc Coalition and collaborators can be powerful partners with the Department of Public Works in securing outside funding to make school safety improvements more quickly than local funds alone allow.

Recommendations: Complete the sidewalk network around Lompoc High School. (See incomplete sidewalks recommendation in the General Observations and Recommendations section)

Parking lot
Observations: The Lompoc Shopping Center located between West Pine Ave. and West College Ave. on North H Street is frequented by Lompoc High School Students. Students were observed cutting through the parking lot on their way to school, as well as walking through the parking lot during the lunch hour to have lunch at the Von’s supermarket or other food suppliers in the shopping center. With high rates of high school pedestrians, and high rates of motor vehicles entering and exiting the shopping center, there is potential for
many pedestrian/vehicle conflicts.

On the South driveway of the shopping center, many drivers were observed taking a right out of the driveway heading west on West College Ave., and then taking an immediate left on to North I Street, where many students cross. (See Photos # 5 and 6) From 2004-2008, there were three pedestrian-bike/auto collisions at this “T” intersection, two involving minors (See Appendix 3).

On West Pine Ave. (North driveway) students were observed using the Von’s driveway area as a place to cross West Pine Ave. (especially students going to McDonalds on North H Street). There is no marked crossing here, and high pedestrian and motor vehicle traffic. Additionally, there are bus stops on either side of West Pine Ave. near the Von’s driveway. (See Photo # 7)

Recommendations: It is recommended to evaluate both the Southern and Northern driveways of the shopping center. Consider prohibiting left turns from the Von’s parking lot onto West College Ave. and onto North I Street from West College Ave. There are many vehicle-vehicle and vehicle-pedestrian conflicts at this location.

Consider installing a high visibility marked crossing with signage and a stop sign at the North driveway. There is currently a school crossing pedestrian sign (traffic fines doubled) at the bus stop on the Northern side of West Pine Ave., but there is no marked crossing. (See Photo # 8)

West Pine Ave. crossings
Observations: West Pine Ave. is the street that runs along the back of the High School. Many students park their cars along this street and use gates to go in and out of the school property. There are three open gates that High School students use along West Pine Ave. Many students were observed exiting the gate closest to North H Street to go to Von’s or McDonalds during the lunch hour. (See Photo # 9) Students were observed crossing diagonally across West Pine Ave. to get to the North side of West Pine Ave. where their cars were parked or to head to McDonalds. There are no marked crossings
from North H Street to North O Street (approximately one half mile or 2,540’ in distance). (See Photo # 10) The speed along West Pine Ave. is 35 mph and 25 mph during school hours. The street itself is very wide and could benefit from a road diet to encourage slower traffic.

**Recommendations:** It is recommended to identify an area for a marked mid-block crossing with accompanying signs to alert motorists of pedestrian crossing along West Pine Ave. It is recommended that the street be evaluated for a road diet. In particular, adding bike lanes, sidewalk buffers, and improved lane striping will encourage drivers to slow down and be alert for pedestrians. Currently, West Pine Ave. does not, and is not prioritized to, have a bike lane (See Appendix 6).

**Desire path along East side of the High School**

**Observations:** There is a desire path along the west side of the High School gate. West Pine and West College Avenues are very long blocks between North H Street and North O Street with no cut through to one another. This path serves as a way to get from West Pine Ave. to West College Ave. This path leads pedestrians directly from West Pine Ave. to the back of the YMCA on West College Ave. On the YMCA side there is a hole in the gate that people clearly use. (See Photos # 11 and 12)

**Recommendations:** It is recommended that the path be enhanced and maintained to encourage further pedestrian and bicycle use. It is unclear whose property the desire path runs across, but it is recommended to find out and work with the YMCA and the High School to encourage access to and from West College Ave. and West Pine Ave.

**Park Connectivity**

**Observations:** Thompson Park is just two blocks west of Lompoc High School. (See Photo # 13) Healthy Lompoc Coalition has worked to improve the quality, safety and aesthetics of the park. However, when approaching the park from the High School area, there is only a marked crossing on the western side of the North R Street and West College Ave. intersection.
Recommendations: It is recommended that several high visibility marked crosswalks be installed at the intersections of West College Ave. and North S, North R, North Q, and North O Streets. These crosswalks should be accompanied by pedestrian warning signage.
Appendix

1. Definition of Terms Used in This Report
2. Lompoc population density map
4. Walkability assessment forms used
5. Maps of existing and prioritized bicycle routes
6. School catchment area map
Definitions of Terms

ADA: Americans with Disabilities Act (ADA) enacted in 1990 to ensure people with disability have equal opportunities and access to public spaces as those who do not have disabilities.28

Advanced stop lines: (also known as stop-back bars) At controlled intersections and mid-block crossings, moving the vehicle stop or yield line farther back from the pedestrian crosswalk creates an 18% improved crash reduction factor29 and improves visibility of pedestrians and drivers.30

Advanced warning signs: signs that signal to drivers that there may be pedestrians in the approaching roadway. School advanced warning signs can be fluorescent yellow/green in color to attract driver attention.

Arterials or Collectors: main thoroughfares that are intended for high volumes of vehicular traffic and pull cross-town traffic off residential streets. Arterial streets should take precedence because they generally have higher pedestrian use, have a greater need to separate pedestrians from motor vehicles, and are the main links in a community.31

Bike lane: a designated lane for bicycle traffic in the street. Class I bike lanes are physically separated from vehicular traffic and most often are multi-use paths for pedestrian and bicycle use. Class II bike lanes are designated street lanes for bicyclists usually by painted lines). Class III bike lanes are identified by signage.

Blight: trash, deterioration, unkempt vegetation, boarded up, abandoned property or other unsightly aspects contributing to a overall rundown look and unsafe feel of a neighborhood. It also discourages community use and is therefore attractive for criminal activity.

Buffer zone: a zone separating pedestrians on sidewalks from moving vehicles on the road.32 This can be in the form of a vegetation or utility strip abutting the curb, on-street parking, and/or bike lane. A buffer zone creates greater safety for the pedestrian since the added space provides additional reaction time to respond to faster moving vehicle activity. For this reason, pedestrians both are and feel less safe walking on narrow curbside sidewalks, especially on fast moving (over 30 mph) streets.

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30 FHWA. 2004. Pg 104.

Appendix 1: Definitions of Terms Used in This Report
**Connectivity:** continuous and direct thoroughfares for pedestrians, bicycles or motor vehicles.\(^{33}\)

**Crosswalks:**\(^{34}\) According to California Vehicle Code\(^{35}\) a crosswalk is either: a) That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersection where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street (includes “T” intersections and unmarked intersections that are a continuation of the sidewalk), or b) any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface (marked mid-block crossing).

**Curb ramps:** a ramp providing a smooth transition between sidewalk and street, required to be ADA-compliant in width, slope and level surface at top and bottom, and if non-compliant, to be upgraded to a minimum of ADA compliance at the time of street maintenance (slurry seal, repavement or reconstruction).\(^{36}\)

**Curb extension:** (also known as bulb outs) an extension of the sidewalk into the street to the outside edge of the parking lane. The extensions make the pedestrian more visible to approaching or turning drivers and reduce the distance pedestrians must cross in front of vehicle traffic.\(^{37}\) These extensions of the sidewalk also help to calm and slow vehicular traffic.

**Desire line:** are people’s preferred walking paths, often the shortest or most direct path between two points. They can typically be found in worn dirt paths (or “goat trails”) through grass, and this volume of pedestrian traffic indicates the need for a sidewalk.\(^{38}\)

**Flashing beacon:** a flashing light usually on a sign signaling to motorists the presence of approaching crossing pedestrian traffic.

**Local roads:** Streets and roads that are not part of the State (or Federal) Highway System (and are not private roads or parking lots) and which are the responsibility of the City or County.

**Marked crosswalks:** areas on the street (delineated by paint, brick, etc.) indicating to pedestrians where they should cross the road.\(^{39}\) Marked crosswalks are also a signal to motor vehicles that pedestrians may be present.

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\(^{33}\) FHWA. 2008. Pg 30.


\(^{35}\) California Vehicle Code 275. Available at: [http://www.dmv.ca.gov](http://www.dmv.ca.gov)

\(^{36}\) FHWA. 2008. Pg 19.


\(^{38}\) FHWA. 2008. Pg 2.

\(^{39}\) FHWA. 2008. Pg 19.

Appendix 1: Definitions of Terms Used in This Report
Pedestrian island or median: where the street may be too wide to cross in the allotted time, a protected street level crossing through a raised island placed in the center of the street at intersections or midblock to help protect crossing pedestrians from motor vehicles. These islands are distinct from the raised medians commonly used to separate oncoming lanes of vehicle traffic from each other. It is important that the pedestrian safety medians are accessible to persons with disabilities and have pedestrian push buttons to signal the presence of a pedestrian waiting to cross (unless there is an automatic pedestrian crossing time at the signalized intersection). Often, the section closest to the intersection vehicle turning movements is a thinner oblong raised cement block referred to as a “nose”, which may also include a guard rail to protect waiting pedestrians from approaching vehicles illegally leaving their turning lanes (often due to driver speed or incapacity). Such pedestrian safety medians are not required where the signal is timed to allow older pedestrians (or parents with small children or persons with disabilities) to fully cross the width of the intersection before the signal turns red.

Road diet: Designing and restriping a road to separate turning lanes from through lanes, narrowing or eliminating motor-vehicle travel lanes on a roadway, often without significant loss in through vehicular traffic, while making more room for pedestrians and bicyclists. Good examples of road diets in Lompoc are on South H Street just south of Ocean Ave., and on Cypress Ave. near South H Street.

Roundabouts: a circular intersection that eliminates many of the conflicts between oncoming and turning traffic, such as left turns, that result in crashes at traditional intersections.

Safe Routes to School: Safe Routes to School (SRTS or SR2S) is an international program that enables community leaders, schools, children and parents to improve safety and encourage more children to safely walk and bike to school.

School zone: Ideally, the school zone starts at the school’s front door, encompasses the campus and as many blocks as possible that surround the school and have a high concentration of school-generated traffic. California School zone is defined as up to a 1,000’ around school property while school is in session. In California crosswalks in school zones are painted yellow. The school zone should be marked with special signage alerting drivers of the high concentration of children. In California school zones have a speed of 25 mph or less (down to 15 mph) and are only applicable during school hours. The 15 mph provision has been implemented the City of Goleta with great success.

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40 FHWA. 2004. Pg 81.
42 FHWA. 2004. Pg 71.
44 California Vehicle Code 21368. Available at: http://www.dmv.ca.gov
45 Safe Routes to School National Partnership. The School Zone. Available at: http://www.saferoutesinfo.org/guide/engineering/the_school_zone.cfm
46 California Vehicle Codes 22352 & 22358.4. Available at: http://www.dmv.ca.gov

Appendix 1: Definitions of Terms Used in This Report
Sidewalks: the portion of a street between the curb lines, or the lateral lines of a roadway, and the adjacent property lines, intended for use by pedestrians.47

Sidewalk buffer: are buffer zones between designated pedestrian thoroughfares (i.e.: sidewalks) and motor vehicle traffic. They are important in providing greater levels of comfort, security, and safety to pedestrians.48

Traffic calming: physical changes to a street to encourage drivers to drive slowly or to discourage cut-through traffic.49 It creates physical and visual cues that induce drivers to travel at slower speeds.50 It is usually intended to improve the street environment for all users.

Traffic sign: an official device that gives a specific message, either by words or symbols, to the public. Examples are “stop”, “yield”, “school zone,” etc.51

Traffic signal: a visual signal to control the flow of traffic. Pedestrian crossing signals let pedestrians know when they have priority and pedestrian beacons warn drivers to stop/yield for pedestrians.52

Uncontrolled intersection: an intersection that is not protected by a stop sign or traffic signal.

Unmarked crosswalks: the portion of a roadway included within the extension or connection of imaginary boundary lines of sidewalks at intersections. It is legal to cross at unmarked crosswalks at intersections (unless a restriction is posted), but many drivers, pedestrians, and occasionally even law enforcement officers, may not know this.53

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47 FHWA. 2004.
50 FHWA. 2004. Pg 74.

Appendix 1: Definitions of Terms Used in This Report
Appendix 2: City of Lompoc Density Map

Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrix P1.
Appendix 3: Lompoc pedestrian-bike/auto collision points (2004-2008)
*Courtesy of the City of Lompoc Public Works Department, from SRTS Cycle 8 Application.
Appendix 4: Walkability assessment forms used
Lompoc School Walkability Assessments

Appendix 4: Walkability assessment forms used

3. Crossing the Street
   - Road is too wide to cross safely.
   - There aren't safe places to cross every 300 ft.
   - There wasn't median for streets over 2 lanes.
   - Need a traffic signal.
   - Traffic signal makes pedestrians wait too long before crossing.
   - Crossing does not have a pedestrian signal/audible signal.
   - Pedestrian crossing signal doesn't give you enough time to cross.
   - Crosswalk is not marked or poorly marked.
   - Parked cars on the street or utility poles are blocking the view of traffic.
   - Other (please specify)

Overall rating of street crossings in the audit area: □ Excellent □ Good □ Fair □ Poor

4. Driver Behavior
   - Drivers do not stop at stop signs.
   - Drivers do not obey traffic signals.
   - Drivers seem to go over the speed limit.
   - Drivers do not yield to pedestrians.
   - Drivers do not look when backing out of driveways.
   - Other (please specify)

Overall rating of driver behavior in the audit area: □ Excellent □ Good □ Fair □ Poor

5. Safety
   Don't feel safe because:
   - Car speeds are too high.
   - Too much traffic.
   - Street or crossing doesn't have enough lighting.

Locations
Appendix 4: Walkability assessment forms used
Appendix 5: Maps of existing and prioritized bicycle routes
City of Lompoc Bicycle Transportation Plan. 2008. Available at: http://www.cityoflompoc.com
Appendix 5: Maps of existing and prioritized bicycle routes
City of Lompoc Bicycle Transportation Plan. 2008. Available at: http://www.cityoflompoc.com
Appendix 6: School catchment area map
*Courtesy of Lompoc Unified School District