



City of Palo Alto

City Council Staff Report

(ID # 8587)

Report Type: Action Items

Meeting Date: 11/7/2017

Summary Title: New Speed Limit Ordinance and Target Speed Resolution

Title: Adoption of an Ordinance to Increase the Posted Speed Limit on Deer Creek Road and a Segment of East Bayshore Road to Enable Radar Enforcement and to Reduce the Posted Speed Limit in School Zones Consistent With State Law, and Adoption of a Resolution Establishing Target Speeds for Certain Arterials and Residential Arterials. Environmental Assessment: Exempt Under CEQA Guidelines Section 15301 (Continued From October 16, 2017)

From: City Manager

Lead Department: Planning and Community Environment

Recommendation

Staff recommends that Council:

1. Adopt an Ordinance (Attachment A) increasing the Posted Speed Limit from 35 miles per hour to 40 miles per hour on Deer Creek Road between western city limits and Arastradero Road and on East Bayshore Road between the Embarcadero Road Bicycle and Pedestrian Overcrossing and Adobe Creek to enable enforcement by radar pursuant to the California Vehicle Code, reducing the Posted Speed Limit within school zones, consistent with State law, and amending Palo Alto Municipal Code Chapter 10.56;
2. Adopt a Resolution (Attachment B) establishing Target Speeds for certain Arterials and Residential Arterials where the Operating Speed has been found to exceed the Posted Speed Limit in order to reduce the Operating Speed through roadway design; and
3. Find the requested actions exempt from review under the California Environmental Quality Act (CEQA) as a minor alteration to existing facilities (Guidelines Section 15301, Class One, Existing Facilities).

Executive Summary

Speed limits in California are governed by the California Vehicle Code (CVC) Section 627, 22348 through 22413 and 40802. In conformance with State law, Posted Speed Limits can only be enforced using radar when they are calculated by using an official Engineering and Traffic Survey. Engineering and Traffic Surveys for many Palo Alto streets are currently expired and, hence, the Police Department is unable to enforce the speed limits using radar.

The updated *Engineering and Traffic Surveys*, conducted in 2016 for 70 roadway segments, are intended to serve as the basis for the establishment and enforcement of Posted Speed Limits for certain street segments within the City of Palo Alto. Based on the results of the surveys, Posted Speed Limits on 14 roadway segments within the City are outside of the acceptable deviation from the Operating Speed to allow for radar enforcement. However, based on input received from the public, Planning and Transportation Commission, and Council, Staff is only recommending increasing the Posted Speed Limit on two (2) of the 14 roadway segments. Staff recommends establishing “Target Speeds” for the remaining segments, with the goal of using roadway design elements to reduce the Operating Speed in the future, potentially enabling radar enforcement if/when design changes are successful at reducing speeds.

Background

As per California Vehicle Code 40802, the speed limit of 25 miles per hour has been established on designated local streets in Palo Alto that are less than 40 feet in width. In 2014, *Engineering and Traffic Surveys* were conducted for 34 Residential Arterial and Collector street segments within the City. Those surveys validated the Posted Speed Limits for 16 roadway segments, but indicated an unacceptable deviation from the Operating Speed on 18 roadway segments, precluding enforcement by radar. In 2016, *Engineering and Traffic Surveys* were conducted for all Arterial and Collector street segments in Palo Alto (a total of 70 segments, excluding the 16 segments that were validated in 2014).

The report included as Attachment C presents the results and recommendations of the *Engineering and Traffic Surveys* conducted in 2016. These surveys were authorized by the City and conducted by the consulting firm Stantec. These surveys were performed in accordance with the requirements of the California Vehicle Code (CVC) and the California Manual of Uniform Traffic Control Devices (CA-MUTCD).

In addition, as a part of this project, a preferred or “Target Speed” is also identified for street segments where the surveys show Posted Speed Limits to be outside of the acceptable deviation from the Operating Speed to allow for radar enforcement. The Target Speed is not based on Operating Speed but, instead, considers factors such as residential density, bicycle safety, roadside conditions, adjacent land use, and potential conflicts with pedestrians, bicyclists, and residential or business districts. The Target Speed is intended to be a design speed that anticipates the introduction of roadway design elements that may reduce the

Operating Speed, potentially enabling radar enforcement in the future. Staff intends to conduct additional *Engineering and Traffic Surveys* after design elements such as speed feedback signs, marked edgelines, median islands, curb extensions, and other treatments are installed, with the hope of certifying the roadway segments for radar enforcement.

With the passage of California Assembly Bill (AB) 321 in 2008, local jurisdictions were permitted to modify the Posted Speed Limits within school zones. The law allows local jurisdictions—through an ordinance or resolution—to 1) extend the 25 miles per hour Posted Speed Limit in school zones from 500 feet to 1,000 feet from the school property lines, and 2) reduce the Posted Speed Limit to 15 or 20 mph within 500 feet of the school grounds, under certain conditions. As part of a safe routes to school grant, Staff commissioned a study in 2012 to determine where the reduced Posted Speed Limits may be applied in Palo Alto. This memo is included as Attachment D.

Discussion

The *Engineering and Traffic Surveys* conducted in 2016 validate the Posted Speed Limits for 56 roadway segments and indicate an unacceptable deviation from the Operating Speed on 14 roadway segments, precluding enforcement by radar. These segments include:

	Roadway Segment	Current Posted Speed Limit (mph)	Posted Speed Limit Required for Radar Enforcement (mph)
1	Alma St from University Ave to Lincoln Ave	25	30
2	Arastradero Rd from Foothill Exp to El Camino Real	25	30
3	Charleston Rd from El Camino Real to Alma St	25	30
4	Charleston Rd from Middlefield Rd to Fabian Wy	25	30
5	Coyote Hill Rd from western city limit to Hillview Av	35	40
6	Deer Creek Rd from western city limit to Arastradero Rd	35	40
7	E Bayshore Rd from Embarcadero Rd to Bay Lands Frontage	35	40
8	E Bayshore Rd from Bay Lands Frontage to San Antonio Rd	35	40
9	Embarcadero Rd from eastern terminus to US 101	25	30
10	Embarcadero Rd from US 101 to Middlefield Rd	25	30
11	Embarcadero Rd from Middlefield Rd to Alma St	25	30

12	Middlefield Rd from Oregon Exp to E Charleston Rd	25	30
13	Middlefield Rd from E Charleston Rd to southern city limits	25	30
14	University Av from East City Limit to Middlefield Rd	25	30

Establishing Target Speeds

The National Transportation Safety Board (NTSB) on July 25, 2017 released a safety study aimed at reducing speed and speeding-related deaths and injuries involving passenger vehicles. According to the NTSB, more than 112,000 people died in speeding-related crashes in the United States from 2005 to 2014, averaging more than 10,000 deaths annually. In their recommendations, NTSB calls for a concerted effort to develop and implement a program to increase public awareness of speeding as a national traffic safety issue; modernization of the traditional practices used to set speed limits to include explicit consideration of factors such as crash experience, pedestrian and bicyclist usage, and roadway and roadside development characteristics; increased use of automated speed enforcement and updated guidelines on implementing automated speed enforcement systems; and establishing national level programs to incentivize state and local speed management activities.

A study session on the *Engineering and Traffic Surveys* (2016) was held on November 9, 2016 with the Planning and Transportation Commission and on November 21, 2016 with the City Council. Staff also conducted two community workshops in March 2017. Based on the feedback received at these meetings and considering recommendations from the NTSB study, staff recommends that Council adopt a resolution establishing Target Speeds for 12 roadway segments where the surveys indicate that the current speed limit cannot be enforced by radar. These segments include portions of Alma Street, Arastradero Road, Coyote Hill Road East and West Charleston Road, Embarcadero Road, Middlefield Road, and University Avenue. If adopted, Staff will to use the Target Speed to implement roadway design elements aimed at reducing the Operating Speed, potentially enabling radar enforcement in the future. Such designs are already underway as part of the Charleston-Arastradero Corridor Project, which is scheduled to begin construction in 2018. In 2016, minor low-cost signing and striping changes were introduced along Middlefield Road between Lowell Avenue and Oregon Expressway. These roadway features, designed at 25 miles per hour, reduced the Operating Speed by two to four miles per hour, depending on the segment. Prior to the implementation of these changes, the Operating Speed exceeded the Posted Speed Limit by four to 11 miles per hour, depending on the segment.

Design features recommended for the 12 roadway segments identified in the surveys include additional speed limit signs at key gateways, reduction of sign clutter to draw attention to

speed limit signs, new dynamic speed feedback signs, marked travel lane edgelines, narrowed travel lanes, raised landscaped median islands, curb-extensions, enhanced crosswalks, and traffic signal timing modifications. Staff has already begun to install new dynamic speed feedback signs along Embarcadero Road. It is anticipated that once these roadway design features are installed, updated *Engineering and Traffic Surveys* will be conducted to determine if the current Posted Speed Limit can be enforced by radar.

Increasing Posted Speed Limit on Two Collectors

Based on the results of the *Engineering and Traffic Surveys*, Staff is recommending increasing the Posted Speed Limit at the following two roadway segments from 35 to 40 miles per hour:

- East Bayshore Road from the Embarcadero Road Bicycle and Pedestrian Overcrossing to Adobe Creek
- Deer Creek Road from the western city limits to Arastradero Road

These two streets are classified as Collectors within the Palo Alto Street Network System. Collectors connect Local Streets to Arterials and Residential Arterials. They serve through traffic, as well as provide direct property access. The average daily traffic (ADT) for these two streets is only about 5,000 vehicles and both are characterized by few driveways and cross-streets. Neither roadway has continuous sidewalks or significant pedestrian activity (Deer Creek Road has a short segment with sidewalks near Arastradero Road). The section of East Bayshore Road recommended for a Posted Speed Limit increase includes on-street Class II bicycle lanes as well as a parallel Class I shared-use path. Staff is not recommending an increase in the Posted Speed Limit for the segments without an adjacent Class I shared-use path.

Traffic engineering studies have shown that most motorists will travel at a speed at which they feel comfortable, given the context and conditions. They will ignore a Posted Speed Limit that is set unrealistically low or high, leading to enforcement difficulty. A Posted Speed Limit that matches the context and conditions is generally obeyed by a majority of motorists. It is also important to set realistic Posted Speed Limits in order to reduce the speed differential between motor vehicles. The accident rate is lower when the majority of motor vehicles are traveling at about the same speed and it improves overall compliance with traffic control devices.

Reducing Posted Speed Limit in School Zones

The study commissioned by staff in 2012 after the passage of AB 321 (Attachment D) recommends two actions:

1. Implement a 15-mile-per-hour Posted Speed Limit within 500 feet of school grounds on all two-lane residential Local Streets that currently have a Posted Speed Limit of 30 miles per hour or less, and
2. Extend current 25-mile-per-hour Posted Speed Limits from 500 feet to 1,000 feet from the school grounds.

In lieu of a reduction to 15 miles per hour within 500 feet of school grounds, Staff is, instead, recommending a reduction to 20 miles per hour. Staff believes that a Posted Speed Limit of 20 miles per hour is more likely to encourage compliance, while still achieving the same safety benefits as a 15-mile-per-hour Posted Speed Limit. The 20-mile-per-hour Posted Speed Limit will be in effect only during school days when children are present. If approved, approximately 66 new speed limit signs will be required.

Currently, all two-lane residential Local Streets within school zones are already signed at 25 miles per hour, so implementation of the second recommendation would not change the Posted Speed Limit for any roadway segments.

The 2012 study did not include an analysis of the 10 existing private schools within Palo Alto. However, Staff augmented the study and completed this analysis and identified 13 additional street segments that would be eligible for reduced speed limit near private schools. Staff is interested in the Council's perspective on the reduction of Posted Speed Limits near private schools. There will be added costs for installation the required new signs and some of the private schools may relocate in the future, necessitating removal or relocation of the signage.

Policy Implications

The following goals, policies and programs from the Comprehensive Plan are directly related to this discussion:

- PROGRAM T-32: Improve pedestrian crossings with bulbouts, small curb radii, street trees near corners, bollards, and landscaping to create protected areas.
- POLICY T-24: Maintain a hierarchy of streets that includes freeways, expressways, arterials, residential arterials, collectors, and local streets.
- PROGRAM T-33: Develop comprehensive roadway design standards and criteria for all types of roads. Emphasize bicycle and pedestrian safety and usability in these standards.
- POLICY T-30: Reduce the impacts of through-traffic on residential areas by designating certain streets as residential arterials.
- PROGRAM T-42: Use landscaping and other improvements to establish clear “gateways” at the points where University Avenue and Embarcadero Road transition from freeways to neighborhoods.
- POLICY T-34: Implement traffic calming measures to slow traffic on local and collector

residential streets and prioritize these measures over congestion management. Include traffic circles and other traffic calming devices among these measures.

- POLICY T-39: To the extent allowed by law, continue to make safety the first priority of citywide transportation planning. Prioritize pedestrian, bicycle, and automobile safety over vehicle level-of-service at intersections.
- PROGRAM T-47: Utilize engineering, enforcement, and educational tools to improve traffic safety on City roadways.
- POLICY T-40: Continue to prioritize the safety and comfort of school children in street modification projects that affect school travel routes.
- POLICY T-41: Vigorously and consistently enforce speed limits and other traffic laws.

Resource Impact

It will cost approximately \$35,000 to install new speed limit signs on the two (2) roadway segments with an increase in the Posted Speed Limit and on the 33 roadway segments with reduced school zone Posted Speed Limits. An additional \$7,000 will be required to install new speed limit signs on the 13 street segments near private schools. There is sufficient budget in PL-12000, Transportation and Parking Improvements, in the *Fiscal Year 2018 Adopted Capital Budget*. No additional funds are needed at this time.

Cost estimates for implementing the roadway design elements based on Target Speeds will be determined as part of finalizing the concept plans. However, many of these changes can be implemented through planned maintenance activities, similar to what was done on Middlefield Road between Lowell Avenue and Oregon Expressway in 2016. Adoption of Target Speeds does not necessitate the immediate implementation of specific roadway design elements. It does, however, provide Staff with the direction needed to work toward reducing Operating Speeds through design decisions. If additional funding is required, it will be requested as part of the regular capital budgeting process in future fiscal years.

Timeline

Upon direction from City Council, Staff will work with an on-call contractor to install increased speed limit signs along the two (2) roadway segments and reduced speed limit signs in school zones. Staff will continue to use existing resources and coordinate with the Public Works Department to implement roadway design elements on roadways with adopted Target Speeds.

Environmental Review

The proposed installations are minor upgrades to an existing residential street right-of-way and

would not result in any new impacts to the existing environment. This project is considered as a minor alteration to the existing street system, and therefore categorically exempt (Class 1 Exemption, Section 15301) from the provisions of the California Environmental Quality Act (CEQA).

Attachments:

Attachment A - Ordinance Establishing Speed Limit on Certain Streets (PDF)

Attachment B - Draft Resolution Establishing Target Speeds (PDF)

Attachment C- 2016 Engineering & Traffic Survey Report (DOCX)

Attachment D - 2012 Reduced School Zone Speed Limits Recommendations Memo (PDF)

Not Yet Approved

Ordinance No. _____

Ordinance of the Council of the City of Palo Alto Establishing Speed Limits for Certain Streets Pursuant to the California Vehicle Code and Amending Palo Alto Municipal Code Chapter 10.56 (Special Speed Zones) to Establish Such Speed Limits, Including Increased Speed Limits of 40 MPH on Two Roadway Segments and Reduced Speed Limits of 20 MPH Within School Zones During School Hours When Children Are Present

The City Council of the City of Palo Alto ORDAINS as follows:

SECTION 1. Findings and Recitals. The Council of the City of Palo Alto finds and declares as follows:

A. California Vehicle Code section 22357 provides that whenever a local authority determines upon the basis of an engineering and traffic survey that a speed greater than 25 miles per hour would facilitate the orderly movement of vehicular traffic and would be reasonable and safe upon any street other than a state highway otherwise subject to a prima facie limit of 25 miles per hour, the local authority may by ordinance determine and declare a prima facie speed limit of 30, 35, 40, 45, 50, 55, or 60 miles per hour or a maximum speed limit of 65 miles per hour, whichever is found most appropriate.

B. California Vehicle Code section 22358.3 provides that whenever a local authority determines upon the basis of an engineering and traffic survey that the prima facie speed limit of 25 miles per hour in a business or residence district or in a public park on any street having a roadway not exceeding 25 feet in width, other than a state highway, is more than is reasonable or safe, the local authority may, by ordinance or resolution, determine and declare a prima facie speed limit of 20 or 15 miles per hour, whichever is found most appropriate.

C. California Vehicle Code section 22358.4 provides that a local authority may, by ordinance or resolution, determine and declare prima facie speed limits of 15 miles per hour, in a residence district, on a highway with a posted speed limit of 30 miles per hour or slower, when approaching, at a distance of less than 500 feet from, or passing, a school building or the grounds of a school building, contiguous to a highway and posted with a school warning sign that indicates a speed limit of 15 miles per hour, while children are going to or leaving the school, either during school hours or during the noon recess period. The prima facie limit shall also apply when approaching, at a distance of less than 500 feet from, or passing, school grounds that are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children and the highway is posted with a school warning sign that indicates a speed limit of 15 miles per hour.

Not Yet Approved

D. The declared prima facie limit shall only be effective when appropriate signs giving notice thereof are erected upon the street and the limits shall not be revised except upon the basis of an engineering and traffic study.

E. An engineering and traffic study survey was conducted for the City by Stantec Consulting Services Inc. in 2016.

F. The City Council desires to establish an increased speed of 40 mph for two roadway segments – East Bayshore from the Bay Lands frontage to San Antonio Road, and Deer Creek Road from Page Mill Road to Arastradero Road -- to allow for radar enforcement of speed limits consistent with the 2016 survey.

G. In 2008, California Assembly Bill (AB) 321 went into effect which allows local jurisdictions, by adoption of an ordinance or resolution, to extend the 25 mph prima facie speed limit in school zones from 500 feet to 1,000 feet from the school grounds and to reduce the speed limit to 15 or 20 mph up to 500 feet from the school grounds, under certain conditions.

H. The City Council desires to establish a reduced speed limit of 20 mph within 500 feet of public schools within the City during school hours when children are present, as allowed by law.

I. The City Council has determined and declares that on the basis of the California Vehicle Code and the relevant engineering and traffic survey(s) that the speed limits set forth herein are the most reasonable, safe and appropriate to facilitate the orderly movement of traffic on the applicable portions of such streets within the City.

SECTION 2: Section 10.56.010 (State twenty-five miles per hour prima facie speed limit justified) is hereby amended as follows:

10.56.010 Twenty-five (25) miles per hour prima facie speed limit justified

It is determined that the state twenty-five miles per hour prima facie speed limit for business or residence districts is justified, as required by state law, with respect to the following streets or portions of streets by engineering and traffic surveys conducted by the city and completed on the dates shown below:

Street or Portion Thereof Affected	Engineering and Traffic Survey Completion Date
Churchill Avenue from Embarcadero Road to El Camino Real	March 21, 1994
Colorado Avenue from Middlefield Road to Louis Road	September 26, 1995
University Avenue from Middlefield Road to easterly city limit	September 26, 1995
Embarcadero Road from Alma Street Underpass to El Camino Real	September 26, 1995
Welch Road from Quarry Road to Pasteur Drive	September 26, 1995

Not Yet Approved

<u>Road Segment Name</u>	<u>Survey Completion date</u>
<u>Alma St from El Camino Real to University Ave</u>	<u>June, 12, 2014</u>
<u>Amaranta Ave from Los Robles Ave to Maybell Ave</u>	<u>September 13, 2016</u>
<u>Arboretum Rd from Sand Hill Rd to Quarry Rd</u>	<u>September 13, 2016</u>
<u>Birch St from California Ave to Page Mill Exp</u>	<u>September 13, 2016</u>
<u>California Ave from Park Blvd to El Camino Real</u>	<u>September 13, 2016</u>
<u>California Ave from El Camino Real to Hanover St</u>	<u>September 13, 2016</u>
<u>Charleston Rd from Fabian Way to South City Limit</u>	<u>June, 12, 2014</u>
<u>Channing Ave from W Bayshore Rd to Newell Rd</u>	<u>September 13, 2016</u>
<u>Channing Ave from Newell Rd to Guinda Ave</u>	<u>September 13, 2016</u>
<u>Channing Ave from Guinda Ave to Alma St</u>	<u>September 13, 2016</u>
<u>Charleston Rd from Alma St to Middlefield Rd</u>	<u>September 13, 2016</u>
<u>Churchill Ave from Embarcadero Rd to Alma St</u>	<u>September 13, 2016</u>
<u>Churchill Ave from Alma St to El Camino Real</u>	<u>September 13, 2016</u>
<u>Colorado Ave from W Bayshore Rd to Middlefield Rd</u>	<u>September 13, 2016</u>
<u>E Meadow Dr from W Bayshore Rd to Louis Rd</u>	<u>September 13, 2016</u>
<u>E Meadow Dr from Louis Rd to Alma St</u>	<u>September 13, 2016</u>
<u>El Camino Way from Los Robles Ave to Maybell Ave</u>	<u>September 13, 2016</u>
<u>Embarcadero Rd from El Camino Real to Alma St</u>	<u>June, 12, 2014</u>
<u>Guinda Ave from Lytton Ave to Channing Ave</u>	<u>September 13, 2016</u>
<u>Hamilton Ave from Middlefield Rd to Alma St</u>	<u>September 13, 2016</u>
<u>High St from Lytton Ave to Channing Ave</u>	<u>September 13, 2016</u>
<u>Homer Ave from Guinda Ave to Alma St</u>	<u>September 13, 2016</u>
<u>Laguna Ave from Matadero Ave to Los Robles Ave</u>	<u>September 13, 2016</u>
<u>Lambert Ave from Park Blvd to El Camino Real</u>	<u>September 13, 2016</u>
<u>Loma Verde Ave from W Bayshore Rd to Middlefield Rd</u>	<u>September 13, 2016</u>
<u>Loma Verde Ave from Middlefield Rd to Alma St</u>	<u>September 13, 2016</u>
<u>Los Robles Ave from Laguna Ave to El Camino Real</u>	<u>September 13, 2016</u>
<u>Louis Rd from Embarcadero Rd to Oregon Exp</u>	<u>September 13, 2016</u>
<u>Louis Rd from Oregon Exp to Loma Verde Rd</u>	<u>September 13, 2016</u>
<u>Louis Rd from Loma Verde Rd to Charleston Rd</u>	<u>September 13, 2016</u>
<u>Lytton Ave from Alma St to Middlefield Rd</u>	<u>September 13, 2016</u>
<u>Matadero Ave from El Camino Real to Laguna Ave</u>	<u>September 13, 2016</u>
<u>Middlefield Rd from University Ave to Embarcadero Rd</u>	<u>June, 12, 2014</u>
<u>Middlefield Rd from Embarcadero Rd to Oregon Exp</u>	<u>September 13, 2016</u>
<u>Newell Rd from East City Limit to Channing Ave</u>	<u>September 13, 2016</u>
<u>Newell Rd from Channing Ave to Embarcadero Rd</u>	<u>September 13, 2016</u>
<u>N California Ave from Embarcadero Rd to Middlefield Rd</u>	<u>September 13, 2016</u>

Not Yet Approved

<u>N California Ave from Middlefield Rd to Alma St</u>	<u>September 13, 2016</u>
<u>Park Blvd from California Ave to Lambert Ave</u>	<u>September 13, 2016</u>
<u>Peter Coutts Rd from Stanford Ave to Page Mill Rd</u>	<u>September 13, 2016</u>
<u>Porter Dr from Hillview Ave to Page Mill Rd</u>	<u>September 13, 2016</u>
<u>Quarry Rd from El Camino Real to Campus Dr</u>	<u>September 13, 2016</u>
<u>Stanford Ave from El Camino Real to Peter Coutts Rd</u>	<u>September 13, 2016</u>
<u>Stanford Ave from Peter Coutts Rd to Junipero Serra Blvd</u>	<u>September 13, 2016</u>
<u>University Ave from Middlefield Rd to Alma St</u>	<u>September 13, 2016</u>
<u>Waverley St from Lytton Ave to Channing Ave</u>	<u>September 13, 2016</u>
<u>Waverley St from Channing Ave to Embarcadero Rd</u>	<u>September 13, 2016</u>
<u>W Meadow Dr from Alma St to El Camino Way</u>	<u>September 13, 2016</u>

SECTION 3: Section 10.56.015 (State speed limit decreased (thirty miles per hour)) is hereby amended as follows:

10.56.015 Thirty (30) miles per hour prima facie speed limit

It is determined and justified upon the basis of engineering and traffic surveys, ~~conducted by the city, as required by state law and completed on the date shown in this section, that the maximum speed limit applicable under state law is more than is reasonable or safe upon the following streets or portions of streets, and that the following speed limits which facilitate the orderly movement of vehicular traffic and are reasonable and safe, and it is declared that the prima facie speed shall be as set forth in this section, except for school zones, on those streets or parts of streets designated in this section when signs are erected giving notice thereof:~~ that a speed greater than the twenty-five (25) miles per hour prima facie speed limit set forth in Section 22352 of the Vehicle Code of the state, would facilitate the orderly movement of vehicular traffic and would be reasonable and safe under the conditions found to exist upon the streets, or portions thereof, set forth in this section, and it is hereby declared that thirty (30) miles per hour shall be the prima facie speed limit upon these streets, or portions thereof, except for school zones, as shown below:

30 MPH DECLARED

~~PRIMA FACIE SPEED LIMIT~~

Street or Portion Thereof Affected	Engineering and Traffic Survey Completion Date
Fabian Way from East Charleston Road to West Bayshore Frontage Road	September 26, 1995
Hanover Street from Page Mill Expressway to Hillview Avenue	September 26, 1995
Hillview Avenue from Hanover Street to Foothill Expressway	September 26, 1995
Hansen Way from El Camino Real to Page Mill Expressway	September 26, 1995

<u>Road Segment Name</u>	<u>Survey Completion Date</u>
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Not Yet Approved

<u>Fabian Way from Charleston Rd to W Bayshore Rd</u>	<u>June, 12, 2014</u>
<u>Hansen Way from El Camino Real to Page Mill Exp</u>	<u>September 13, 2016</u>
<u>Hanover St from Page Mill Rd to Hillview Ave</u>	<u>June, 12, 2014</u>
<u>Hillview Ave from Hanover St to Foothill Exp</u>	<u>June, 12, 2014</u>
<u>Sand Hill Rd from El Camino Real to Arboretum</u>	<u>September 13, 2016</u>
<u>W Bayshore Rd from Oregon Exp to Colorado Ave</u>	<u>September 13, 2016</u>

SECTION 4: Section 10.56.020 (State speed limit decreased (thirty-five miles per hour)) is hereby amended ~~by deleting its text and title in entirety and replacing the deleted text with the as follows:~~

Section 10.56.020 Thirty-five (35) miles per hour prima facie speed limit

It is determined and justified upon the basis of engineering and traffic surveys, ~~conducted by the city, as required by state law, and completed on the dates shown below, that the maximum speed limit applicable under state law is more than is reasonable or safe upon the following streets or portions of streets, and that the following speed limits would facilitate the orderly movement of vehicular traffic and are reasonable and safe, and it is declared that the prima facie speed limit shall be as set forth in these sections, except for school zones, on those streets or parts of streets designated in this section when signs are erected giving notice thereof:~~ that a speed greater than the twenty-five (25) miles per hour prima facie speed limit set forth in Section 22352 of the Vehicle Code of the state, would facilitate the orderly movement of vehicular traffic and would be reasonable and safe under the conditions found to exist upon the streets, or portions thereof, set forth in this section, and it is hereby declared that thirty-five (35) miles per hour shall be the prima facie speed limit upon these streets, or portions thereof, except for school zones, as shown below:

**35 MPH DECLARED
PRIMA FACIE SPEED LIMIT**

Street or Portion Thereof Affected

**Engineering and Traffic Survey
Completion Date**

~~Arastradero Road from Foothill Expressway to city limit west of Deer Creek Road~~
~~Oregon Expressway from Middlefield Road to Alma Street~~
~~Oregon Expressway from Middlefield Road to U.S. 101~~
~~Sand Hill Road from Arboretum Street to Pasteur Drive~~
~~Sand Hill Road from Pasteur Drive to westerly city limit~~
~~Page Mill Expressway from Hanover Street to Foothill Expressway~~
~~Hillview Avenue from Foothill Expressway to Arastradero Road~~

~~March 21, 1994~~
~~March 21, 1994~~
~~September 26, 1995~~
~~September 26, 1995~~
~~September 26, 1995~~
~~September 26, 1995~~

<u>Road Segment Name</u>	<u>Survey Completion Date</u>
<u>Alma St from Lincoln Ave to Oregon Expy</u>	<u>September 13, 2016</u>
<u>Alma St from Oregon Exp to E Meadow Dr</u>	<u>September 13, 2016</u>
<u>Alma St from E Meadow Dr to South City Limit</u>	<u>September 13, 2016</u>
<u>Arastradero Rd from Purissima Rd to Deer Creek Rd</u>	<u>September 13, 2016</u>

Not Yet Approved

<u>Arastradero Rd from Deer Creek Rd to Foothill Exp</u>	<u>September 13, 2016</u>
<u>Hillview Ave from Foothill Exp to Arastradero Rd</u>	<u>September 13, 2016</u>
<u>Oregon Exp from Middlefield Rd to Highway 101</u>	<u>June, 12, 2014</u>
<u>Oregon Exp from Middlefield Rd to Alma St</u>	<u>September 13, 2016</u>
<u>Page Mill Rd from El Camino Real to Hanover St</u>	<u>June, 12, 2014</u>
<u>Page Mill Rd from Hanover St to Foothill Exp</u>	<u>June, 12, 2014</u>
<u>Sand Hill Rd from Arboretum to West City limit</u>	<u>September 13, 2016</u>
<u>San Antonio Rd from Alma St Overpass to Middlefield Rd</u>	<u>June, 12, 2014</u>
<u>San Antonio Rd from Middlefield Rd to Charleston Rd</u>	<u>June, 12, 2014</u>
<u>San Antonio Rd from Charleston Rd to East City Limit</u>	<u>June, 12, 2014</u>
<u>W Bayshore Rd from Oregon Exp to Loma Verde Ave</u>	<u>September 13, 2016</u>
<u>W Bayshore Rd from Loma Verde to Fabian Way</u>	<u>June, 12, 2014</u>

SECTION 5: Section 10.56.025 (State speed limit increased (thirty miles per hour)) is hereby amended as follows:

Section 10.56.025 Forty (40) miles per hour prima facie speed limit

It is determined and justified upon the basis of engineering and traffic surveys, ~~conducted by the city, as required by state law, and completed on the dates shown below, that a speed greater than that provided by state law would facilitate the orderly movement of traffic and would be reasonable and safe upon the following streets or portions of streets, and it is declared that the prima facie speed limit shall be as set forth in this section except for school zones, on the streets or parts of streets designated in this section when signs are erected giving notice thereof:~~ that a speed greater than the twenty-five (25) miles per hour prima facie speed limit set forth in Section 22352 of the Vehicle Code of the state, would facilitate the orderly movement of vehicular traffic and would be reasonable and safe under the conditions found to exist upon the streets, or portions thereof, set forth in this section, and it is hereby declared that forty (40) miles per hour shall be the prima facie speed limit upon these streets, or portions thereof, except for school zones, as shown below:

**~~30 MPH DECLARED
PRIMA-FACIE SPEED LIMIT~~**

~~Street or Portion Thereof Affected~~

~~West Bayshore Frontage Road from Oregon Expressway to Amarillo Avenue~~

**~~Engineering and Traffic Survey
Completion Date~~**

~~September 26, 1995~~

<u>Road Segment Name</u>	<u>Survey Completion Date</u>
<u>E Bayshore from Bay Lands frontage to San Antonio Rd</u>	<u>September 13, 2016</u>
<u>Deer Creek Rd from Page Mill Rd to Arastradero Rd</u>	<u>September 13, 2016</u>

SECTION 6: Section 10.56.30 (State speed limit increased (thirty-five miles per hour)) is hereby amended as follows:

Section 10.56.30 Forty-five (45) miles per hour prima facie speed limit

It is determined and justified upon the basis of engineering and traffic surveys, ~~conducted by the city, as required by state law, and completed on the dates shown below, that a speed greater than that provided by state law would facilitate the orderly movement of traffic and would be reasonable and safe upon the following streets or portions of streets, and it is declared that the prima facie speed limit shall be as set forth in this section, except for school zones, on the streets or parts of streets designated in this section when signs are erected giving notice thereof:~~ that a speed greater than the twenty-five (25) miles per hour prima facie speed limit set forth in Section 22352 of the Vehicle Code of the state, would facilitate the orderly movement of vehicular traffic and would be reasonable and safe under the conditions found to exist upon the streets, or portions thereof, set forth in this section, and it is hereby declared that forty-five (45) miles per hour shall be the prima facie speed limit upon these streets, or portions thereof, except for school zones, as shown below:

**~~35 MPH DECLARED
PRIMA FACIE SPEED LIMIT~~**

~~Street or Portion Thereof Affected~~

**~~Engineering and Traffic
Survey Completion Date~~**

~~East Bayshore Road from Embarcadero Road to northerly city limit~~

~~March 21, 1994~~

~~Page Mill Expressway from Alma Street to Hanover Road~~

~~March 21, 1994~~

~~San Antonio Road from East Bayshore Road to Alma Street~~

~~March 21, 1994~~

~~Alma Street from Embarcadero Road to Oregon Expressway~~

~~September 26, 1995~~

~~Alma Street from Oregon Expressway to Meadow Drive~~

~~September 26, 1995~~

~~Alma Street from Meadow Drive to San Antonio Road~~

~~September 26, 1995~~

<u>Road Segment Name</u>	<u>Survey Completion Date</u>
Foothill Expressway from Page Mill Rd to South City Limit	September 13, 2016

SECTION 7: New Section 10.56.35 (Twenty (20) miles per hour School Zones Speed Limit) is added as follows:

Section 10.56.35 Twenty (20) miles per hour School Zones Speed Limit

It is determined and justified pursuant to California Vehicle Code Section 22358.4(b)(1) that twenty (20) miles per hour shall be the prima facie speed limit on the road segments shown below at a distance within 500 feet from or of the school grounds while children are going to or leaving the school, either during school hours or during the noon recess period.

	<u>School name</u>	<u>Road Segment Name</u>
<u>1</u>	Addison Elementary School	Middlefield Rd
		Webster St

Not Yet Approved

		<u>Addison Ave</u>
		<u>Lincoln Ave</u>
<u>2</u>	<u>Palo Alto High School</u>	<u>Churchill Ave</u>
		<u>Embarcadero Rd</u>
<u>3</u>	<u>Walter Hays Elementary School</u>	<u>Embarcadero Rd</u>
		<u>Middlefield Rd</u>
<u>4</u>	<u>Duveneck Elementary School</u>	<u>Channing Ave</u>
		<u>Alester Ave</u>
<u>5</u>	<u>Jordan Middle School</u>	<u>California Ave</u>
		<u>Middlefield Rd</u>
<u>6</u>	<u>Ohlone Elementary School</u>	<u>Amarillo Ave</u>
<u>7</u>	<u>El Carmelo Elementary School</u>	<u>El Carmelo Ave</u>
		<u>Loma Verde Ave</u>
		<u>Bryant St</u>
		<u>Ramona St</u>
<u>8</u>	<u>Palo Verde Elementary School</u>	<u>Louis Rd</u>
		<u>Rorke Way</u>
<u>9</u>	<u>Fairmeadow Elementary School</u>	<u>East Meadow Dr</u>
<u>10</u>	<u>JLS Middle School</u>	<u>East Meadow Dr</u>
<u>11</u>	<u>Herbert Elementary School</u>	<u>Charleston Rd</u>
<u>12</u>	<u>Barron Park Elementary School</u>	<u>Barron Ave</u>
<u>13</u>	<u>Juana Briones Elementary School</u>	<u>Maybell Dr</u>
		<u>Gerogia Ave</u>
		<u>Orme St</u>
<u>14</u>	<u>Terman Elementary School</u>	<u>Terman Ave</u>
		<u>Arastradero Rd</u>
<u>15</u>	<u>Gunn High School</u>	<u>Arastradero Rd</u>
<u>16</u>	<u>Lucille Nixon Elementary School</u>	<u>Stanford Ave</u>

Not Yet Approved

<u>17</u>	<u>Escondido Elementary School</u>	<u>Escondido Rd</u>
		<u>Stanford Ave</u>
		<u>Bowdoin St</u>

SECTION 8. Severability. If any provision, clause, sentence or paragraph of this ordinance, or the application to any person or circumstances, shall be held invalid, such invalidity shall not affect the other provisions of this ordinance which can be given effect without the invalid provision or application and, to this end, the provisions of this ordinance are hereby declared to be severable.

SECTION 9. CEQA. The City Council finds and determines that this Ordinance is not a project within the meaning of section 15378 of the California Environmental Quality Act ("CEQA") because it has no potential for resulting in physical change in the environment, either directly or ultimately.

SECTION 10. Effective Date. This ordinance shall be effective upon the thirty-first date after its passage and adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSTENTIONS:

ABSENT:

ATTEST:

APPROVED:

City Clerk

Mayor

APPROVED AS TO FORM:

City Manager

Assistant City Attorney

Director of Planning and Community
Environment

Resolution No. XXX
Resolution of the Council of the City of Palo Alto to Establish Target Speeds for Arterials, Residential
Arterials, and Collector Streets within Palo Alto

R E C I T A L S

A. Speed plays a critical role in the cause and severity of crashes. There is a direct correlation between higher speeds, crash risk, and the severity of injuries.

B. Embracing a proactive design approach on new and existing streets with the goal of reducing speeds may be the single most consequential intervention in reducing pedestrian injury and fatality.

C. Conventional roadway design uses the Operating Speed when making geometric design and traffic engineering decisions.

D. A higher Design Speed often mandates larger curb radii, wider travel lane widths, on-street parking restrictions, guardrails, and clear zones.

E. A lower Design Speed reduces observed speeding behavior, providing a safer place for people to walk, park, and drive.

F. Streets should be designed using a Target Speed, which is the speed motorists at which should operate, rather than the Operating Speed, which is the speed at which motorists currently drive.

G. The Design Speed should be brought in line with the Target Speed by implementing measures to reduce and stabilize the Operating Speed as appropriate.

H. Ultimately, the Target Speed, Design Speed, Posted Speed, and Operating Speed should be consistent on each roadway.

I. The City desires to establish Target Speeds for certain Arterials and Residential Arterials where the Operating Speed has been found to exceed the Posted Speed Limit in order to reduce the Operating Speed through roadway design. The Target Speeds will have no regulatory effect, and merely sets forth the desired Operating Speed to guide City efforts to redesign and improve the relevant roadways.

NOW, THEREFORE, the Council of the City of Palo Alto RESOLVES, as follows:

SECTION 1. Definitions.

A. "Target Speed" is the highest speed at which motorists should operate on a street in a specific context, consistent with the level of multimodal activity generated by adjacent land uses, to provide both mobility for motor vehicles and a safe environment for pedestrians and bicyclists.

B. "Design Speed" is the speed a roadway designer uses to determine curb radii, travel lane widths, merge taper length, signal stopping distance, guardrails, and clear zones.

C. The “Posted Speed” is the speed limit, which is posted and enforced by the agency with jurisdiction over a particular street segment.

D. The “Operating Speed” is the speed at which 85% of motorists travel at or below on a particular street segment during free flow conditions as established in an engineering and traffic study.

SECTION 2. Establishment of Target Speeds.

A. In order to ensure consistency between the Design Speed, Posted Speed, and Operating Speed, a Target Speed of 25 miles per hour is established for the following streets:

- 1) Alma Street between University Avenue and Lincoln Avenue
- 2) Embarcadero Road between eastern terminus (east of Highway 101) and western city limits
- 3) Middlefield Road from northern city limits to southern city limits
- 4) University Avenue from eastern city limits to western city limits

B. In order to ensure consistency between the Design Speed, Posted Speed, and Operating Speed, a Target Speed of 35 miles per hour is established for the following streets:

- 1) Coyote Hill Road between western city limits and Hillview Avenue

SECTION 3. CEQA.

This resolution is exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15301 in that this proposed resolution will have a minor impact on existing facilities.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

City Clerk

Mayor

APPROVED AS TO FORM:

APPROVED:

Senior Assistant City Attorney

City Manager

Director of Planning and Community Environment

Attachment C

2016 Engineering and Traffic Survey Report

The 2016 Engineering and Traffic Safety Survey Report can be viewed by clicking on the following link:

<http://www.cityofpaloalto.org/civicax/filebank/documents/59769>

MEMORANDUM

TO: Jaime Rodriguez, City of Palo Alto

FROM: David Parisi, Parisi Associates and Jennifer Donlon-Wyant, Alta Planning + Design

DATE: August 7, 2012

SUBJECT: Reduced School Zone Speed Limits Recommendations

This memorandum presents an overview of the California Assembly Bill that allows local jurisdictions to reduce speed limits in school zones and recommendations for where it may be applied in Palo Alto.

The memorandum includes the following sections:

1.	Background.....	2
2.	Recommendations	3
3.	Appendices	9
3.1	Appendix A: Assembly Bill No. 321	9
3.2	Appendix B: California MUTCD 2012 Edition Section 7B.15 and 7B.16	12

1. Background

On January 1, 2008, California Assembly Bill (AB) 321 went into effect (see **Appendix A** for the bill language). The bill allows local jurisdictions – through an ordinance or resolution – to extend the 25 mph prima facie speed limit in school zones from 500 feet to 1,000 feet from the school grounds and to reduce the speed limit to 15 or 20 mph up to 500 feet from the school grounds, under certain conditions.

One of the intentions of the new law was to enhance the safety of children walking and bicycling to school. If a vehicle is in a collision with a child, a slower moving vehicle will generally result in a less severe injury or the avoidance of a death.

In 1999 the National Highway Traffic Safety Administration published a “Literature Review on Vehicle Travel Speeds and Pedestrian Injuries.” According to NHTSA’s study, fatality and serious injury rates increase substantially when travel speeds rise. For example, for children ages 14 or less, 20.2 percent suffer fatal or serious injuries when struck by a vehicle traveling 1-20 mph, while 32.8 percent are killed or seriously injured when hit by a vehicle traveling 21-25 mph.

California’s new reduced or extended school zone speed limits can be applicable on streets that meet the following conditions: 1) Within a residential district that has a posted speed limit no greater than 30 mph, and 2) No more than a total of two through lanes of traffic.

Similar to the reduced 25 mph school zone speed limit on streets with higher posted streets, the reduced 15 or 20 mph school zone speed limit would only be in effect when children are present (going to or leaving school, either during school hours or during the noon recess hour). However, if a fence, gate or other physical barrier does not surround a portion of the school grounds, the 15 or 20 mph limit would be in effect any time of day or any day of the week.

Figure 7B-103(CA) in **Appendix B** of this memorandum illustrates the use of extended and reduced school zone speed limits.

A number of jurisdictions in California have reduced the school zone speed limit on eligible residential district street to 15 or 20 mph since adoption of AB 321. The cities of Goleta, Lompoc, and Santa Maria were among the first jurisdictions to reduce school speed limits. In the summer of 2011, the City and County of San Francisco implemented a program of citywide 15 mph reduced school zone speed limits covering 181 public and private schools. San Jose implemented a pilot program to reduce the school zone speed limit to 15 mph at three schools. Sunnyvale is evaluating the possibility of establishing a reduced school speed limit program.

The provisions of AB 321 apply to public, charter, and private schools.

2. Recommendations

It is recommended that all of Palo Alto's two-lane, residential-district roadways within school zones that are signed at 30 mph or less be declared by ordinance or resolution to have a reduced 15 mph school zone speed limit within 500 feet of the school grounds and an extended 25 mph school zone speed limit between 500 feet and 1,000 feet of the school grounds. The use of 15 mph reduced speed zones, instead of 20 mph reduced speed zones, is suggested due to the potential for fewer severe injury or fatal collisions with the use of a lower speed limit, as shown in the previously discussed research.

Table 1 and **Figures 1-3** present locations where 15 mph school speed zones would be eligible in Palo Alto. **Figures 1-3** also show eligible locations for an extended 25 mph school zone.

It should be noted that in the absence of regular enforcement, the 15 mph speed limit signs could a limit potential in reducing speeds. Increased periodic enforcement should be provided within reduced speed zones.

Reducing school zone speed limits below 25 mph is not allowable on roadways with more than two lanes, within non-residential districts, or when non-school speed limits exceed 30 mph. For such roadways, it is suggested that other measures be considered, such as using larger school speed limit assembly signs (i.e., SCHOOL SPEED LIMIT 25 WHEN CHILDREN ARE PRESENT) and driver speed feedback signs (which cost up to \$10,000 per sign).

Table 1: Streets Eligible to 15MPH

School/Street	Posted Speed Limit	Total Travel Lanes	Start	End	Recommendation
Addison Elementary School					
Addison Ave	25 MPH	2	500' SW of School Grounds	500' NE of School Grounds	Reduce to 15 MPH
Lincoln Ave	25 MPH	2	500' SW of School Grounds	500' NE of School Grounds	Reduce to 15 MPH
Webster St	25 MPH	2	Kingsley Ave	Channing Ave	Reduce to 15 MPH
Middlefield Rd	25 MPH	2	Kingsley Ave	Channing Ave	Reduce to 15 MPH
Barron Park Elementary School					
Barron Ave	25 MPH	2	Laguna Ave	500' NE of School Grounds	Reduce to 15 MPH
Duveneck Elementary School					
Alester Ave	25 MPH	2	Channing Ave	Hamilton Ave	Reduce to 15 MPH
Channing Ave	25 MPH	2	500' W of School Grounds	500' E of School Grounds	Reduce to 15 MPH
El Carmelo Elementary School					
Bryant St	25 MPH	2	500' SE of School Grounds (Campesino Ave)	Canal	Reduce to 15 MPH

School/Street	Posted Speed Limit	Total Travel Lanes	Start	End	Recommendation
El Carmelo Ave	25 MPH	2	500' SW of School Grounds	500' NE of School Grounds	Reduce to 15 MPH
Ramona St	25 MPH	2	500' SE of School Grounds (Campesino Ave)	Canal	Reduce to 15 MPH
Loma Verde Ave	25 MPH	2	500' SW of School Grounds	500' NE of School Grounds	Reduce to 15 MPH
Escondido Elementary School					
Bowdoin St	25 MPH	2	Running Farm Ln	500' W of School Grounds	Reduce to 15 MPH
Escondido Rd	25 MPH	2	Stanford Ave	500' W of School Grounds	Reduce to 15 MPH
Pine Hill Rd	25 MPH	2	Stanford Ave	Running Farm Ln	Reduce to 15 MPH
Running Farm Ln	25 MPH	2	Pine Hill Rd	Escondido Rd	Reduce to 15 MPH
Stanford Ave	25 MPH	2	500' SW of School Grounds	Oberlin St	Reduce to 15 MPH
Fairmeadow Elementary School					
Meadow Dr	25 MPH	2	Waverly St	500' NE of School Grounds	Reduce to 15 MPH
Hoover Elementary School					
Waverley St	25 MPH	2	Charleston Rd	Meadow Dr	Reduce to 15 MPH
Charleston Rd	25 MPH	2	530' SW of Waverly St	950' NW of Waverly St	Reduce to 15 MPH
Jan Lathrop Stanford Middle School					
Meadow Dr	25 MPH	2	500' SW of School Grounds	500' NE of School Grounds	Reduce to 15 MPH
Waverley St	25 MPH	2	500' NW of School Grounds	500' SE of School Grounds	Reduce to 15 MPH
Jordan Middle School					
California Ave	25 MPH	2	Middlefield Rd	500' NW of School Grounds	Reduce to 15 MPH
Middlefield Rd	25 MPH	2	Garland Dr	Portal Pl	Reduce to 15 MPH
Juana Briones Elementary School					
Georgia Ave	25 MPH	2	Orme St	500' N of School Grounds	Reduce to 15 MPH
Maybell Ave	25 MPH	2	500' S of School Grounds	500' N of School Grounds	Reduce to 15 MPH
Orme St	25 MPH	2	500' W of School Grounds	Georgia Ave	Reduce to 15 MPH
Lucille Nixon Elementary School					
Stanford Ave	25 MPH	2	500' SW of School	500' N of School	Reduce to 15 MPH

Reduced School Zone Speed Limits Recommendations

School/Street	Posted Speed Limit	Total Travel Lanes	Start	End	Recommendation
			Grounds	Grounds	
Ohlone Elementary School					
Amarillo Ave	25 MPH	2	Louis Rd	500' NE of School Grounds	Reduce to 15 MPH
Palo Alto High School					
Churchill Ave	25 MPH	2	El Camino Real	500' NE of School Grounds	Reduce to 15 MPH
Palo Verde Elementary School					
Rorke Way	25 MPH	2	Ames Ave	Loop around Ames Ave	Reduce to 15 MPH
Louis Rd	25 MPH	2	500' NW of School Grounds	500' SE of School Grounds	Reduce to 15 MPH
Terman Middle School					
Terman Dr	25 MPH	2	Arastradero Rd	End of Terman Dr (School Grounds)	Reduce to 15 MPH
Walter Hays Elementary School					
Middlefield Rd	25 MPH	2	500' SE of School Grounds (Lowell Ave)	500' NW School Grounds	Reduce to 15 MPH

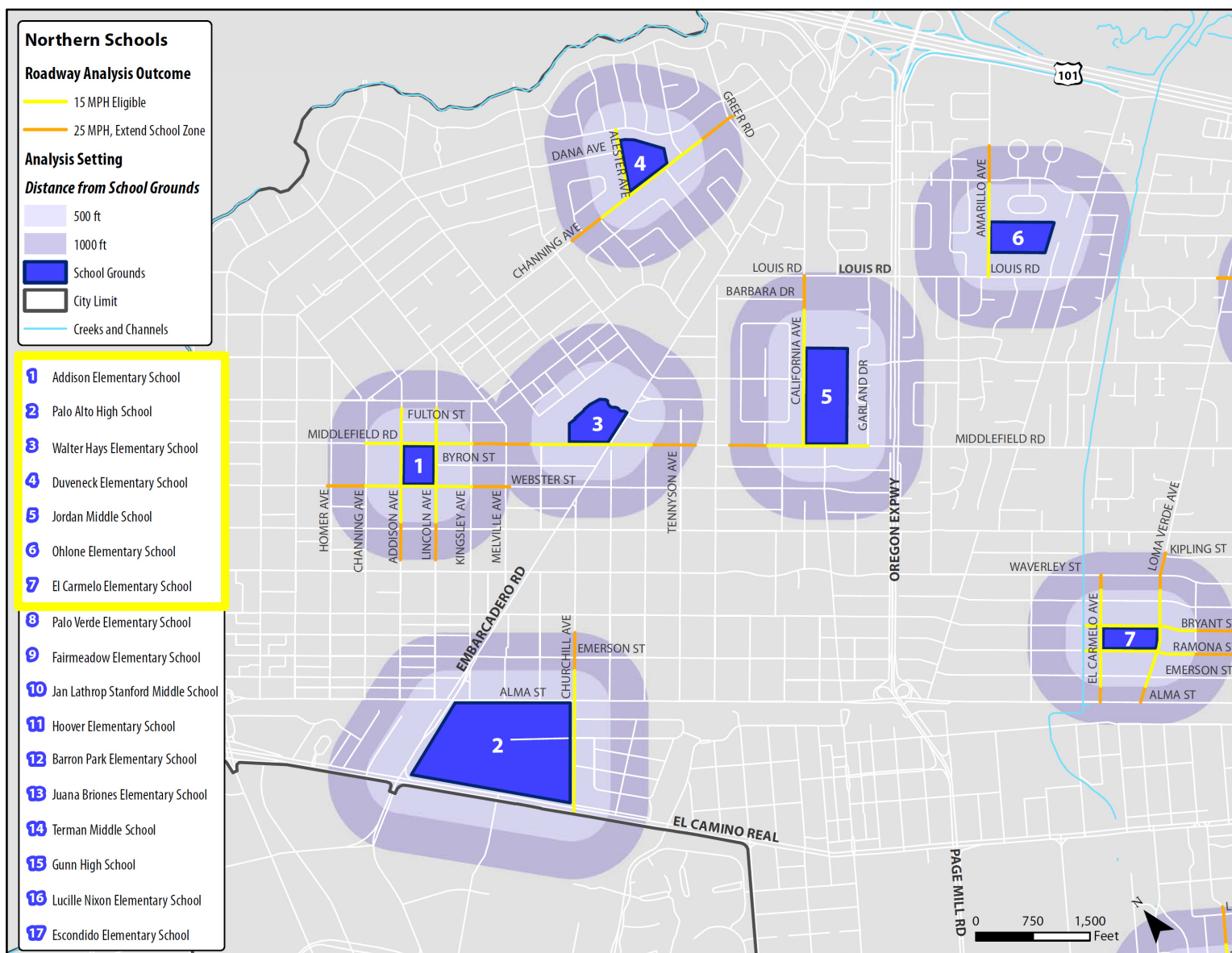


Figure 1: Northern Schools

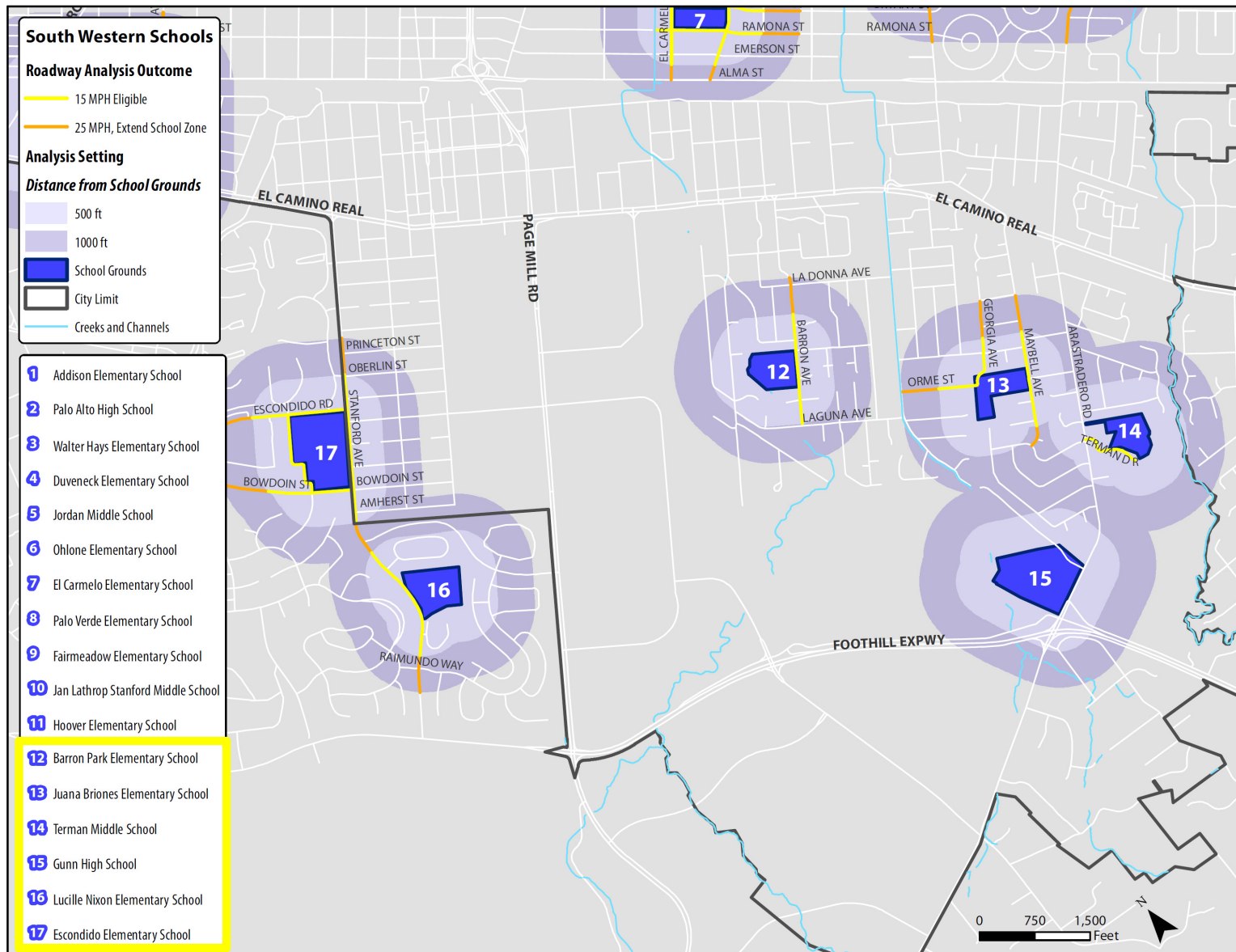


Figure 2: South Western Schools

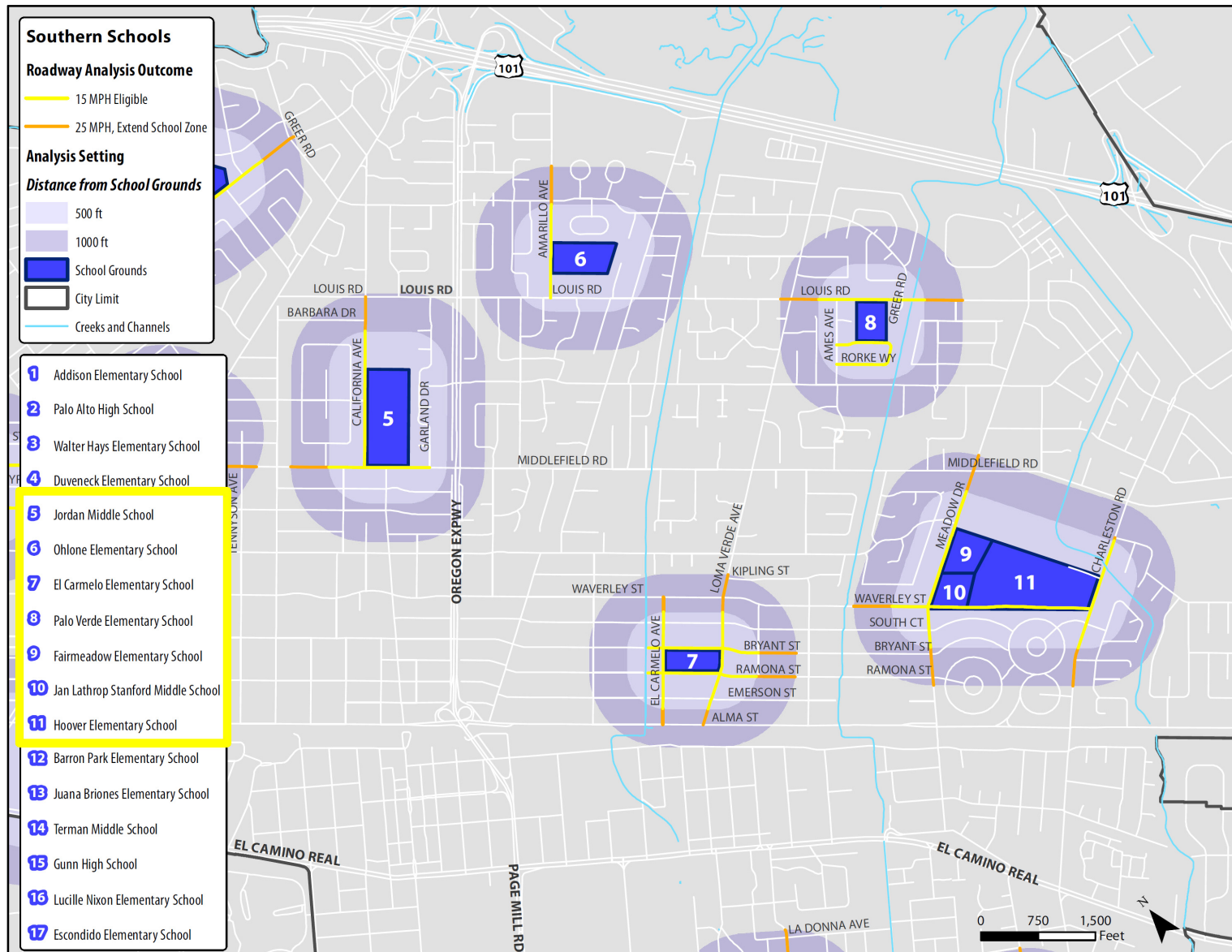


Figure 3: Southern Schools

3. Appendices

3.1 Appendix A: Assembly Bill No. 321

CHAPTER 384

An act to amend Section 22358.4 of the Vehicle Code, relating to vehicles.

[Approved by Governor October 10, 2007. Filed with Secretary of State October 10, 2007.]

AB 321, Nava. Vehicles: prima facie speed limits: schools.

(1) Existing law establishes a 25 miles per hour prima facie limit when approaching or passing a school building or the grounds thereof, contiguous to a highway and posted up to 500 feet away from the school grounds, with a standard "SCHOOL" warning sign, while children are going to or leaving the school either during school hours or during the noon recess period. The prima facie limit also applies when approaching or passing school grounds that are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children and the highway is posted with a standard "SCHOOL" warning sign. A violation of that prima facie limit is an infraction.

Existing law allows a city or county, based on an engineering and traffic survey that the prima facie speed limit of 25 miles per hour is more than is reasonable or safe, by ordinance or resolution, to determine and declare a prima facie speed limit of 20 or 15 miles per hour, whichever is justified as the appropriate speed limit by that survey.

This bill would additionally allow a city or county to establish in a residence district, on a highway with a posted speed limit of 30 miles per hour or slower, a 15 miles per hour prima facie limit when approaching, at a distance of less than 500 feet from, or passing, a school building or the grounds thereof, contiguous to a highway and posted with a school warning sign that indicates a speed limit of 15 miles per hour, while children are going to or leaving the school, either during school hours or during the noon recess period. The prima facie limit would also apply when approaching, at that same distance, or passing school grounds that are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children and the highway is posted with one of those signs.

The bill would provide that a 25 miles per hour prima facie limit in a residence district, on a highway with a posted speed limit of 30 miles per hour or slower, applies, as to those local authorities, when approaching, at a distance of 500 to 1,000 feet from, one of those areas where children are going to or leaving the school, either during school hours or during the noon recess period, that is posted with a school warning sign that indicates a speed limit of 25 miles per hour.

The bill would require that these prima facie speed limits apply only to highways that meet certain conditions.

The bill would require a city or county that adopts a resolution or ordinance establishing revised prima facie limits to reimburse the Department of Transportation for any costs incurred by that department in implementing the bill.

By authorizing a change in the prima facie limits, the bill would expand the scope of an existing crime, thereby imposing a state-mandated local program.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. Section 22358.4 of the Vehicle Code is amended to read:

22358.4. (a) (1) Whenever a local authority determines upon the basis of an engineering and traffic survey that the prima facie speed limit of 25 miles per hour established by paragraph (2) of subdivision (a) of Section 22352 is more than is reasonable or safe, the local authority may, by ordinance or resolution, determine and declare a prima facie speed limit of 20 or 15 miles per hour, whichever is justified as the appropriate speed limit by that survey.

(2) An ordinance or resolution adopted under paragraph (1) shall not be effective until appropriate signs giving notice of the speed limit are erected upon the highway and, in the case of a state highway, until the ordinance is approved by the Department of Transportation and the appropriate signs are erected upon the highway.

(b) (1) Notwithstanding subdivision (a) or any other provision of law, a local authority may, by ordinance or resolution, determine and declare prima facie speed limits as follows:

(A) A 15 miles per hour prima facie limit in a residence district, on a highway with a posted speed limit of 30 miles per hour or slower, when approaching, at a distance of less than 500 feet from, or passing, a school building or the grounds of a school building, contiguous to a highway and posted with a school warning sign that indicates a speed limit of 15 miles per hour, while children are going to or leaving the school, either during school hours or during the noon recess period. The prima facie limit shall also apply when approaching, at a distance of less than 500 feet from, or passing, school grounds that are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children and the highway is posted with a school warning sign that indicates a speed limit of 15 miles per hour.

(B) A 25 miles per hour prima facie limit in a residence district, on a highway with a posted speed limit of 30 miles per hour or slower, when approaching, at a distance of 500 to 1,000 feet from, a school building or the grounds thereof, contiguous to a highway and posted with a school warning sign that indicates a speed limit of 25 miles per hour, while children are going to or leaving the school, either during school hours or during the noon recess period. The prima facie limit shall also apply when approaching, at a distance of 500 to 1,000 feet from, school grounds that are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children and the highway is posted with a school warning sign that indicates a speed limit of 25 miles per hour.

(2) The prima facie limits established under paragraph (1) apply only to highways that meet all of the following conditions:

(A) A maximum of two traffic lanes.

(B) A maximum posted 30 miles per hour prima facie speed limit immediately prior to and after the school zone.

(3) The prima facie limits established under paragraph (1) apply to all lanes of an affected highway, in both directions of travel.

(4) When determining the need to lower the prima facie speed limit, the local authority shall take the provisions of Section 627 into consideration.

(5) (A) An ordinance or resolution adopted under paragraph (1) shall not be effective until appropriate signs giving notice of the speed limit are erected upon the highway and, in the case of a state highway, until the ordinance is approved by the Department of Transportation and the appropriate signs are erected upon the highway.

(B) For purposes of subparagraph (A) of paragraph (1), school warning signs indicating a speed limit of 15 miles per hour may be placed at a distance up to 500 feet away from school grounds.

(C) For purposes of subparagraph (B) of paragraph (1), school warning signs indicating a speed limit of 25 miles per hour may be placed at any distance between 500 and 1,000 feet away from the school grounds.

(D) A local authority shall reimburse the Department of Transportation for all costs incurred by the department under this subdivision.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

3.2 Appendix B: California MUTCD 2012 Edition Section 7B.15 and 7B.16

Section 7B.15 School Speed Limit Assembly

EXTENDED 25 MPH AND/OR REDUCED SPEEDS IN SCHOOL ZONES

Option:

A local authority may declare a 15 mph prima facie speed limit within 500 feet of a school building or school grounds and an extended 25 mph prima facie speed limit within 500 to 1000 feet from a school or school grounds.

Support:

The extended 25 mph school speed zone can provide a progressive speed reduction.

Standard:

If the local authority declares by ordinance or resolution the above prima facie speed limits, all of the following criteria shall be met:

- A. Street (or highway) is in a residential district.
- B. Street (or highway) outside of a school zone has a posted speed limit no greater than 30 mph.
- C. Street (or highway) has no more than a total of two through traffic lanes (one in each direction or two in one direction).
- D. The reduced school zone speed limit of 15 mph is within 500 feet of school grounds.
- E. The extended school zone speed limit of 25 mph is within 500 to 1000 feet of school grounds.

When used, a local ordinance or resolution adopted to establish a 15 mph reduced school zone speed limit and/or an extended 25 mph school zone speed limit shall not be effective until School Speed Limit Assembly C (CA) giving notice of the speed limit(s) is erected upon the highway.

On a State highway, the ordinance or resolution shall not be effective until the ordinance or resolution has been approved by the Department of Transportation and appropriate school zone speed signs are erected upon the State highway.

For purposes of a 15 mph reduced prima facie speed limit, School Speed Limit Assembly C (CA) indicating a speed limit of 15 mph shall be placed at a distance up to 500 feet away from school grounds. For purposes of an extended 25 mph prima facie speed limit, School Speed Limit Assembly C (CA) indicating a speed limit of 25 mph shall be placed at any distance between 500 to 1,000 feet away from school grounds. Refer to Figure 7B-103(CA).

The established school speed limits shall be effective when children are going to or leaving the school, either during school hours or during the noon recess hour. The school speed limits shall also apply when the school

grounds are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children (this condition can apply at any time of day or any day of the week).

The determination to reduce a prima facie speed limit to 15 mph and/or extend a 25 mph school zone speed limit, as described above, shall be documented in writing, in an engineering study. The engineering study shall identify the provisions of Section 627 of the Vehicle Code that support the reduced and/or extended school zone speed limit(s).

Guidance:

When preparing an engineering study pursuant to the Standard above, the local authority should cite all elements of an Engineering and Traffic Survey, as discussed in Section 627 of the Vehicle Code, that support the need for a reduced speed limit of 15 mph and/or an extended 25 mph school zone speed limit.

Support:

The documentation of prevailing speeds found in CVC Section 627 can be used to establish an existing speed profile for the school zone, but the 85th percentile speed is not used to set the reduced or extended school speed limit.

Standard:

The local authority shall reimburse the Department of Transportation for all costs incurred by the Department under this section.

Section 7B.16 Reduced School Speed Limit Ahead Sign (S4-5, S4-5a)

Guidance:

A Reduced School Speed Limit Ahead (S4-5, S4-5a) sign (see Figure 7B-1 or 7B-1(CA)) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates that advance notice would be appropriate for the School Advance Warning Assembly D (CA).

Standard:

If used, the Reduced School Speed Limit Ahead sign shall be followed by a School Speed Limit sign or a School Speed Limit Assembly C (CA).

The speed limit displayed on the Reduced School Speed Limit Ahead sign shall be identical to the speed limit displayed on the subsequent School Speed Limit sign or School Speed Limit Assembly C (CA).

EXTENDED 25 MPH AND/OR REDUCED SPEEDS IN SCHOOL ZONES

Option:

For school area traffic control with a reduced school zone speed limit of 15 mph and/or an extended school zone speed limit of 25 mph in a residential district, the Reduced Speed School Zone Ahead (S4-5, S4-5a) sign may be used to give advance notice of a reduced 15 mph school zone speed limit and/or an extended school zone speed limit of 25 mph.

