

City of Jurupa Valley

**Traffic Safety Committee
STUDY SESSION
MEETING AGENDA
City of Jurupa Valley City Hall
Council Chambers**

March 28, 2019

3:00 P.M

8930 Limonite Ave., Jurupa Valley, CA 92509

- A. As a courtesy to those in attendance, we ask that cell phones be turned off or set to their silent mode and that you keep talking to a minimum so that all persons can hear the comments of the public and Traffic Safety Committee. The Committee Rules of Procedure and Order require permission of the Chair to speak with anyone at the staff table or to approach the dais.
- B. A member of the public who wishes to speak under Public Comments must fill out a "Speaker Card" and submit it to the City Staff BEFORE the Chairman calls for Public Comments on an agenda item. Each agenda item up will be open for public comments before taking action. Public comments on subjects that are not on the agenda can be made during the "Public Appearance/Comments" portion of the agenda.
- C. If you wish to address the Traffic Safety Committee on a specific agenda item or during public comment, please fill out a speaker card and hand it to the Clerk with your name and address before the item is called so that we can call you to come to the podium for your comments. While listing your name and address is not required, it helps us to provide follow-up information to you if needed. Exhibits must be handed to the staff for distribution to the Committee
- D. As a courtesy to others and to assure that each person wishing to be heard has an opportunity to speak, please limit your comments to 5 minutes.

REGULAR SESSION

1. 3:00 P.M. – Call to Order and Roll Call for Regular Session

Committee Members:

- Carol Crouch, Chair
- Jake Orta, Vice Char
- Steve Loriso, Secretary
- Sgt. Raemie Wood
- George Wentz
- Robert Galindo
- Mayra Jackson
- Hugo Bustamante- Alternate

2. Pledge of Allegiance
3. Public Appearance/Comments
4. Approval of Agenda
5. Approval of Minutes January 24, 2019

STUDY SESSION:

6. Discussion on setting City speed limits in compliance with state law
7. Discussion on stop sign warrant requirements in compliance with state law

INFORMATIONAL ITEMS

8. I-15 /Limonite Avenue Interchange Improvements.

COMMITTEE MEMBER REPORTS AND COMMENTS

9. Emails to the Traffic Safety Committee
10. Adjournment to the April 25, 2019 meeting at City Hall – Council Chambers.

In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if you need special assistance to participate in a meeting of the Jurupa Valley Traffic Safety Committee, please call 951-332-6464. Notification at least 48 hours prior to the meeting or time when services are needed will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

Agendas of public meetings and any other writings distributed to all, or a majority of, the Jurupa Valley Traffic Safety Committee in connection with a matter subject to discussion or consideration at an open meeting of the Traffic Safety Committee are public records. If such writing is distributed less than 72 hours prior to a public meeting, the writing will be made available for public inspection at the City of Jurupa Valley, 8930 Limonite Ave., Jurupa Valley, CA 92509, at the time the writing is distributed to all, or a majority of, the Jurupa Valley Traffic Safety Committee. The Traffic Safety Committee may also post the writing on its Internet website at www.jurupavalley.org.

City of Jurupa Valley

DRAFT MINUTES
Traffic Safety Committee
CITY OF JURUPA VALLEY
SPECIAL MEETING
January 24, 2019

1. Call to Order and Roll Call

The regular meeting of the Jurupa Valley Traffic Safety Committee was called to order at 3:00 pm. January 24, 2019 at the City Council Chambers, 8930 Limonite Ave., Jurupa Valley, California 92509.

Carol Crouch presiding as Chair

Members present:

- Jake Orta, Vice Chair
- Tim Jonasson for George Wentz
- Steve Loriso, Secretary
- Sgt. Ramie Wood, Member
- Robert Galindo, Member
- Hugo Bustamante, Alternate Member

Members absent:

- George Wentz
- Mayra Jackson

Attendees:

- Taher Jalai, City Staff
- Deanna Heredia, City Staff
- Grizelda Reed, City Staff

2. Pledge of Allegiance – Led by Chair Orta

3. Public Appearance/Comments – Richard Miller, resident discussed traffic concerns on Tyrolite

4. Approval of the Agenda

Vice Chair Orta moved and Member Robert Galindo seconded the motion to approve the January 24, 2019 agenda. The motion was approved 6-1.

Ayes: Crouch, Orta, Loriso, Wood, Jonasson for George Wentz, Galindo
Noes: None
Abstained: None
Absent: Wentz, Jackson

5. Approval of Minutes

Member Robert Galindo moved and Vice Chair Orta seconded the motion to approve the August 30, 2018. The motion was approved 6-2.

Ayes: Crouch, Orta, Loriso, Jonasson for Wentz, Wood, Galindo
Noes: None
Abstained: None
Absent: Wentz, Jackson

6. New Business:

REQUEST FOR ALL-WAY STOP CONTROL AT THE INTERSECTION OF WINEVILLE AVENUE AND 64TH STREET

Staff member Mr. Taher Jalai presented background information for request received for All-Way Stop Sign at Wineville Avenue and 64th Street. Mr. Jalai provided information at the August 30, 2018 the Traffic Safety Committee meeting staff recommended denial of the all-way stop signs request however staff recommend to re-analyze the intersection as the construction activities associated with Limonite Avenue and 1-15 interchange may result in increased traffic. After analysis conducted and as previously noted the data does not support the need for stop signs at this intersection. Based on the staff recommendations it is not recommended the installation of stop sign on Wineville Ave at the intersection of 64th Street as it does not meet any of the all-way stop control warrants listed in the California Manual on Uniform traffic Control Devices.

Vice Chair Orta moved and Member Galindo seconded the motion to approve recommendation by staff to deny All-Way Stop Control. The motion was approved 6-2

Ayes: Crouch, Orta, Loriso, Jonasson for Wentz, Wood, Galindo
Noes: None
Abstained: None
Absent: Wentz, Jackson

7. REQUEST FOR ALL-WAY STOP CONTROL AT THE INTERSECTION OF RUTILE STREET AND 58TH STREET.

Staff Member Taher Jalai provided information of request received by resident that southbound vehicles on Rutile Street failed to stop causing damage to resident's property. Mr. Jalai noted there is an existing all-way stop sign at 58th Street and Beach Street intersection approximately 350 feet to the east of the study intersection. Based on the findings installation of stop signs at the intersection of 58th Street and Rutile does not meet any of the all-way stop control warrants listed in the California Manual, however due to the overgrown vegetation and shrubbery inside the private property at the northwest quadrant of

the intersection, staff recommends installation of a stop sign on Rutile Street only and to notify resident of the overgrown vegetation maintenance.

Vice Chair moved and Member Galindo seconded the motion to approve staff's recommendation for all-way stop sign on Rutile Street only and notify resident for maintenance. The motion was approved 6-2

Ayes: Crouch, Orta, Loriso, Jonasson for Wentz, Wood, Galindo

Noes: None

Abstained: None

Absent: Wentz, Jackson

8. REQUEST FOR SPEED HUMP ON BALDWIN DRIVE BETWEEN GOLF STREET AND GREENS DRIVE

Staff Member Taher Jalai provided information of a petition received by residents for an installation of speed humps for Baldwin Drive. City Engineer, Steve Loriso noted other alternatives for consideration. Mr. Taher noted due to severe vertical and horizontal curves and limited visibility in the eastbound direction, staff does not recommend the installation of speed hump on Baldwin Drive between Gold Street and Greens Drive

Member, Loriso moved and Member Jonasson for Wentz seconded the motion to approve staff's recommendation to deny speed humps on Baldwin Drive. The motion was approved 5-3

Ayes: Crouch, Loriso, Jonasson for Wentz, Wood, Galindo

Noes: None

Abstained: Orta

Absent: Wentz, Jackson

9. Information Items

Staff Member Taher Jalai, presented a brief update on the upcoming Van Buren Avenue and Jurupa Road Grade Separation and noted the County of Riverside is the lead agency for the project and work is to be starting June.

10. Emails to the TSC Committee

City Engineer Steve Loriso noted emails received and were addressed

Adjournment at 4:45 pm to the February 28th 2019, meeting at City Hall Council Chambers

Respectfully submitted,

Steve Loriso, City Engineer/Secretary

City of Jurupa Valley

STAFF REPORT

DATE: MARCH 28, 2019
TO: CHAIR CROUCH AND TRAFFIC SAFETY COMMITTEE MEMBERS
FROM: TAHER JALAI, TRANSPORTATION MANAGER
SUBJECT: AGENDA ITEM NO. 6
SETTING SPEED LIMITS IN THE CITY BASED ON STATE LAWS

The City Manager had asked the Department of Public Works to provide an informational report to the Traffic Safety Committee members on State of California speed laws and how the speed limits are set and enforced. The process of setting speed limits in California can present challenges for municipalities. With proper understanding of speed laws, the City had reduced speed related motor vehicle accidents in the past 7 years, and provides a path forward for improved safety.

California Speed Laws

The City of Jurupa Valley Public Works Department has the authority to establish certain speed limits, by council ordinance, on City streets, as prescribed in State law and the City of Jurupa Valley Municipal Code (JVMC). City of Jurupa Valley must follow the guidelines and requirements of the California Vehicle Code (CVC) and the California Manual of Uniform Traffic Control Devices (MUTCD) when establishing speed limits.

The following is a summary of the key provisions of speed laws in California:

- Basic speed law (CVC 22350): No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property.
- Prima Facie Speed Limits (CVC 22352): The State establishes prima facie speed limits. The State establishes a prima facie speed limit of 15 mph at certain railroad crossings, at uncontrolled "blind" intersections and on alleys. A prima facie speed limit of 25 mph applies to streets, not designated as State Highways, in any business or residence district, a school zone or near a senior center.

- CVC 22349: For all other roadways, the speed limit where no signs are posted is 65 mph, except for two-lane undivided highways with one lane in each direction, where the speed limit is 55 mph.
- CVC 22357 & 22358: Whenever a local authority determines by conducting an Engineering and Traffic Survey (ETS) that a speed greater than the 25 mph prima facie speed limit or lower than the 65 mph speed limit, as described above, would facilitate the orderly movement of vehicular traffic and would be reasonable and safe, the local authority may declare a prima facie speed limit of five mile-per-hour increments between 25 mph and 65 mph. The declared prima facie or maximum speed limit shall be effective when appropriate signs giving notice are erected and shall not be revised except upon the basis of an ETS.
- School slow zones (CVC 22358.4): The school zone speed limit of 25 mph described above may be reduced to 20 mph and 15 mph as the vehicle approaches the school on streets with a maximum of two lanes and a maximum posted speed limit of 30 mph prior to and after the school.
- Engineering and Traffic Survey (CVC 627): A survey of highway and traffic conditions in accordance with methods determined by California Department of Transportation (Caltrans) for use by state and local authorities to determine speed limits. Further explanation is given below.
- CVC 21400(b) : To determine the speed limit, local authorities are to round the 85 percentile speed of free-flowing traffic to the nearest 5 mph increment. However, if this indicates rounding up, the local authority may instead round down to the nearest 5 mph increment, but shall not reduce the speed limit any further for any reason.
- CVC 22358.5: Width, curvature, grade and surface conditions, or any other condition readily apparent to the driver would not indicate a need to further lower the speed limit, as the Basic Speed Law is sufficient to address such conditions.
- CVC 40802: Defines a "speed trap". a) A "speed trap" is either of the following:
 - (1) A jurisdiction cannot use the time it takes to traverse a particular section of a highway in order to determine a vehicle's speed; and 2) If the posted speed limit is not justified by an Engineering and Traffic Survey conducted within the last 5 years prior to date of violation, then enforcing the speed limit electronically becomes a speed trap, with some exclusions explained below.

Engineering and Traffic Surveys

An engineering and traffic survey (ETS), as mandated in CVC 627, is an engineering study that is used to determine speed limits. The California MUTCD directs the methodology that municipalities shall follow in determining appropriate speed limits. The City of Jurupa Valley

collects the necessary data and prepares the necessary documents for each segment to be studied.

- An ETS involves the collection and analysis of the following information and data:
- Field investigations of roadway geometry, conditions, curvature, grade, driveways, traffic controls, signs, parking, and roadside developments
- Vehicle counts conducted at various points in the segment to determine average daily traffic (ADT)
- Spot speed studies at various locations in the segment. The speed of 100 vehicles in each direction is measured. Locations should be midblock and measure the speed of free flowing traffic (uninhibited by controls).
- Collision data to determine if there is an unusually high collision rate for the type of facility under study

The speed limit determination begins by using the spot speed data, collected in an unmarked vehicle, and ranking the speed of the 100 vehicles. The critical speed, also called the 85th percentile speed, is the speed at which 85% of the drivers are driving at or below. Speed limits should be posted to reflect the maximum speed that is considered safe and reasonable by the majority of drivers. The majority of motorists select a speed that they feel is based on the conditions presented to them. Research has shown that the upper region of acceptable risk to motorists is in the vicinity of the 85 percentile speed.

Speed limits that are set near the 85th percentile speed are more consistent and results in a predictable traffic flow. Studies have shown that artificially lowering speed limits below what is required by the MUTCD has little effect on actual speeds. Additionally, collisions have been shown to increase with artificially lowered speed limit, due to the greater variation in vehicle speed that typically results. The Federal Highway Administration (FHWA) has reported that speed limits that are set too high or too low can increase the risk of collisions. An artificially low speed limit would cause a higher number of drivers to be in violation of posted speed limits and would require constant enforcement.

City of Jurupa Valley follows these guidelines in determining speed limits as required by the State of California. The current MUTCD allows two options for modifying the indicated speed limit. A high collision rate (calculated as collisions per million vehicle miles) as compared to the average for the type of roadway, would justify the additional lowering of the speed limit under Option 1 and indicates that there may be conditions not readily apparent to the driver. Other non-apparent conditions include traffic generators that are not visible to the motorist. Non-apparent conditions may not be used to lower the speed limit more than 5 mph in total. Rounding down from the nearest 5 mph increment to the critical speed is allowed (Option 2), as long as no further reductions are taken due to conditions that are not readily apparent (non-apparent) to the driver.

Examples are shown in the following table:

Critical Speed (mph)	Indicated Speed Limit Nearest 5mph increment	Speed Limit – Option 1 Can reduce to the nearest 5 mph increment by 5 mph based on conditions not readily apparent to the motorist	Speed Limit – Option 2 Can round down to the nearest 5 mph increment from the critical speed, if no further reduction are taken for non-apparent conditions
35	35	30	35
34	35	30	30
33	35	30	30
32	30	25	30
31	30	25	30
30	30	25	30

Conditions such as width, curvature, and poor surface conditions are readily apparent to the driver and cannot be used to lower the speed limit (per CVC22358.5).

City of Jurupa Valley generally sets the speed limit as low as is practical and allowed by these guidelines. Based on these principles, a renewed speed survey could result in the increase of the speed limit at certain locations. Justification of the speed limit based on the ETS will allow for enforcement of the speed limits by electronic means. Changes in speed limit will require an ordinance by the City Council authorizing the change.

Enforcement and Speed Traps

Speed traps cannot be used to determine speed and enforce a speed limit. A speed trap is clearly defined in the CVC (40802). The first definition states that a jurisdiction cannot use the time it takes to traverse a particular section of roadway in order to determine a vehicle's speed.

The second definition states the circumstances under which jurisdictions are allowed to use electronic means to determine vehicle speed. This definition of a speed trap involves the use of radar, laser, or other electronic equipment that measures the speed of a moving object. If the posted speed limit is not justified by an Engineering and Traffic Survey conducted within the five years prior to the date of the alleged violation, then enforcing the speed limit electronically becomes a speed trap. The five year period can be extended to seven years if the officer shooting the radar/laser is properly certified in the use of the equipment and the electronic device used was calibrated within three years of the alleged violation.

Additionally, if a registered engineer determines that no significant changes have occurred on the roadway after seven years, the Engineering and Traffic Survey can be extended for an additional three years.

While electronic methods (radar/laser) cannot be used to enforce speed limits if the ETS is expired, speed limits can be enforced using other methods, such as pacing. In cases of very excessive speed, such as reckless driving and street racing, an ETS is not necessary to site the violator.

The definition of a speed trap does not apply to local streets or school zones. A local street in this section is defined as a road with a width of not more than 40 feet, not more than one-half mile of uninterrupted length and not more than one traffic lane in each direction, as stated in CVC 22352. No ETS is necessary to enforce the 25 mph speed limit with radar/laser under such conditions.

Tools to Reduce Speed

Speed and speeding are complex issues. Regardless of how the speed limit is determined, there are tools that can be used to reduce the critical speeds. These tools can reduce the prevailing speeds over a period of time and can have permanent and lasting effects, while others only provide short-term speed reduction. These can include:

- Speed trailers and speed feedback signs
- increased police presence
- Road diets (removal of traffic lanes)
- Lane narrowing
- Physical improvements (bump outs, roundabouts, median island, roadway narrowing)
- Speed humps
- Signaltiming techniques
- School slow zones

City of Jurupa Valley have used many of these tools over the years, and continue to experiment with new ways of calming traffic. These efforts can be controversial, but if applied with community support and at the proper locations, can be very effective. Recent focus has been on road diets, and restriping to narrow pedestrian crossing distances. Data on the effectiveness of various measures is available through the Federal Highway Administration (FHWA).

City of Jurupa Valley

STAFF REPORT

DATE: MARCH 28, 2019

TO: CHAIR CROUCH AND TRAFFIC SAFETY COMMITTEE MEMBERS

FROM: TAHER JALAI, TRANSPORTATION MANAGER

SUBJECT: AGENDA ITEM NO. 7

STOP SIGN WARRANT REQUIREMENTS IN COMPLIANCE WITH STATE LAW

The City Manager had asked the Department of Public Works to provide an informational report to the Traffic Safety Committee members on stop sign warrant requirement in compliance with State of California law. The City of Jurupa Valley Engineering Department oversees the placement and installation of stop signs to provide for the safe, sustainable and efficient movement of people and goods. Safety is the primary factor of consideration in stop sign placement.

Generally, stop signs are placed to prevent crashes where there might be a question about who should have the right of way. When considering stop sign placement, how a stop sign affects the overall safety and needs of the community is closely examined. For example, stop signs in one location could affect traffic on nearby streets. Drivers may seek new routes to avoid stop signs, which can lead to new traffic problems in adjacent neighborhoods.

The final decision to install a stop sign is made considering the traffic flow and volume, the configuration of the intersection, crash reports and the overall safety of the neighborhood.

Do Stop Signs Really Reduce Speeding?

Stop signs may often seem like a good solution to neighborhood speeding, but traffic studies and experience show that using stop signs to control speeding doesn't necessarily work. When stop signs are installed to slow down speeders, drivers may actually increase their speed between signs to compensate for the time they lost by stopping. Some drivers tend to accelerate rapidly after a stop, possibly creating an even more dangerous situation. In fact, most drivers reach their top speed within 100 feet of a stop sign. A before and after studies conducted in the City of Troy indicate that stop sign are not effective in controlling speed, and in fact 85% speed increased after the installation stop signs by as much as 4 mph. In addition, traffic studies have shown that too many or unwarranted stop signs could cause motorists to ignore the right of way rule, and some may simply choose to ignore the stop sign. Furthermore, increased number of stop signs in a neighborhood results in higher levels of pollution and noise.

Right-of-Way at Intersections

State or local laws written in accordance with the “Uniform Vehicle Code” establish the right-of-way rule at intersections having no regulatory traffic control signs such that the driver of a vehicle approaching an intersection must yield the right-of-way to any vehicle or pedestrian already in the intersection. When two vehicles approach an intersection from different streets or highways at approximately the same time, the right-of-way rule requires the driver of the vehicle on the left to yield the right-of-way to the vehicle on the right.

The right-of-way can be modified at through streets or highways by placing STOP signs on one or more approaches. Engineering judgment should be used to establish intersection control. The following factors should be considered:

- A. *Vehicular, bicycle, and pedestrian traffic volumes on all approaches;*
- B. *Number and angle of approaches;*
- C. *Approach speeds;*
- D. *Sight distance available on each approach; and*
- E. *Reported crash experience.*

Criteria for STOP Signs at Intersection of Two Minor Streets

In addition STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

- A. *The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day;*
- B. *The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or*
- C. *Crash records indicate that five (5) or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three (3) or more such crashes have been reported within a 2-year period.*

Criteria for STOP Signs on Minor Streets

The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:

- A. *The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;*
- B. *A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or*
- C. *Crash records indicate that three (3) or more crashes that are susceptible to*

correction by the installation of a STOP sign have been reported within a 12-month period, or that five (5) or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.

Once the decision has been made to control an intersection, the decision regarding the appropriate roadway to control should be based on engineering judgment. In most cases, the roadway carrying the lowest volume of traffic should be controlled.

Stop sign should not be installed on the higher volume roadway unless justified by an engineering study.

The following are considerations that might influence the decision regarding the appropriate roadway upon which to install a Stop sign where two roadways with relatively equal volumes and/or characteristics intersect:

- A. Controlling the direction that conflicts the most with established pedestrian crossing activity or school walking routes;
- B. Controlling the direction that has obscured vision, dips, or bumps that already require drivers to use lower operating speeds; and
- C. Controlling the direction that has the best sight distance from a controlled position to observe conflicting traffic.

Criteria for Multi-Way Stop Applications

Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

The decision to install multi-way stop control should be based on an engineering study.

The following criteria should be considered in the engineering study for a multi-way STOP sign installation:

- A. *Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
- B. *Five(5) or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
- C. *Minimum volumes:*
 - 1. *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*

2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*
- D. *Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Other criteria that may be considered in an engineering study include:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.