



City of Laguna Hills Traffic Commission

Scott Miller
Chair

Neel Patel
Vice Chair

Mark Jones
Commissioner

Mike Caputo
Commissioner

Mark Schaff
Commissioner

Regular Meeting Agenda
Wednesday, March 18, 2026 - 6:00 PM

City Council Chamber
24035 El Toro Road
Laguna Hills, CA 92653

Any person wishing to address the Traffic Commission on any matter, whether or not it appears on this Agenda, is asked to complete a "Request to Speak" form available on the table at the back of the Chamber. The completed form is to be submitted to the Recording Secretary prior to an individual being heard by the Traffic Commission. Completion of the form is voluntary. All persons may attend the meeting regardless of whether this form is completed.

Members of the public wishing to address the Traffic Commission can do so during the Public Comments portion of the Agenda with a time limitation of three minutes per person, as determined by the Chair, for Public Comments. If you are commenting on an Agenda item, your comments will be heard at the time that item is scheduled on the Agenda. If you are addressing the Commission on an item not listed on the Agenda, the Traffic Commission is prohibited by law from discussing or taking any action on that item.

Call to Order

Resolution No. 96-04-09-1 established rules of decorum for public meetings held by the City of Laguna Hills. Resolution No. 96-04-09-1 is available on the table at the back of the City Council Chamber.

Pledge of Allegiance

Roll Call of Commissioner Members

1. Public Comment

This is the time to address the Traffic Commission on any matter not listed on this Agenda that is within the subject matter jurisdiction of the Commission. Public Comments are limited to three minutes per person as determined by the Chair.

2. Minutes Approval

2.1 Approval of Minutes for the January 21, 2026, Traffic Commission meeting.

Recommendation: That the Traffic Commission approve the minutes of the January 21, 2026, Traffic Commission meeting.

3. Presentations

4. Administrative Reports

4.1 Review of Traffic Conditions on Grissom Road and Wilkes Place

Recommendation: That the Traffic Commission provide direction to City Staff.

4.2 Review of Residential Permit Parking Program Request for Camberwell Street

Recommendation: That the Traffic Commission provide direction to City Staff.

4.3 Review of Parking Conditions on Beckenham Street

Recommendation: That the Traffic Commission discuss and provide direction to City Staff.

4.4 Review of Traffic Conditions on Greenfield Drive

Recommendation: That the Traffic Commission recommend that the City Engineer add Greenfield Drive to the speed-feedback radar trailer rotational deployment list and conduct another speed survey in 90 days, and that Police Services conduct increased law (speed) enforcement on Greenfield Drive.

4.5 Review of Radar Trailer Locations List

Recommendation: That the Traffic Commission receive and file the report.

5. Informational Items

5.1 Sheriff's Department Verbal Report

5.2 City Engineer's Verbal Report

6. Commissioner Comments

Adjournment

The next Regular Meeting of the Traffic Commission will be May 20, 2026, at 6:00 p.m. in the City Council Chamber, located at 24035 El Toro Road, Laguna Hills, California.

CERTIFICATION

I, JOE AMES, P.E., T.E., Assistant City Manager of the City of Laguna Hills, do hereby certify that a copy of the foregoing Agenda was posted at Laguna Hills City Hall, Laguna Hills Community Center, and Knotty Pine Park by March 13, 2026, at 5:00p.m.



Joe Ames, P.E., T.E., Assistant City Manager

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, you should contact the office of the Public Works Director/City Engineer at (949) 707-2651. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to assure access.

Materials related to an item on this Agenda submitted to the Commission after distribution of the Agenda packet are available for public inspection in the Public Services Department at 24035 El Toro Road, Laguna Hills, California, during normal business hours.

**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION**

**REGULAR MEETING
MINUTES
Wednesday, January 21, 2026**

CALL TO ORDER

Resolution No. 96-04-09-1 established rules of decorum for public meetings held by the City of Laguna Hills. Resolution No. 96-04-09-1 is available on the table at the back of the City Council Chamber.

The meeting was called to order at 6:00 p.m. by Chair Mike Caputo.

PLEDGE OF ALLEGIANCE

Chair Caputo led the pledge of Allegiance.

ROLL CALL OF COMMISSION MEMBERS

Attendee Name	Title	Status	Arrived
Mike Caputo	Chair	Present	
Neel Patel	Vice Chair	Present	
Mark Jones	Commissioner	Present	
Scott Miller	Commissioner	Present	
Mark Schaff	Commissioner	Present	

ELECTION OF CHAIR

Recommendation: That the Traffic Commission elect a new Chair.

Chair Mike Caputo nominated Vice Chair Neel Patel as Chair. Vice Chair Neel Patel seconded the nomination.

RESULT:	FAILED [2-3]
MOVER:	Mike Caputo, Chair
SECONDER:	Neel Patel, Vice Chair
AYES:	Mike Caputo, Chair and Neel Patel, Vice Chair
NOES:	Mark Jones, Commissioner, Scott Miller, Commissioner, and Mark Schaff, Commissioner

Commissioner Mark Schaff nominated Commissioner Miller as Chair. Commissioner Mark Jones seconded the nomination.

RESULT:	APPROVED [4-0-1]
MOVER:	Mark Schaff, Commissioner
SECONDER:	Mark Jones, Commissioner
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller Chair and Mark Schaff, Commissioner
NOES:	None
ABSTAIN:	Neel Patel, Vice Chair

ELECTION OF VICE CHAIR

Recommendation: That the Traffic Commission elect a new Chair.

Commissioner Mark Schaff nominated Commissioner Mark Jones as Vice Chair. Chair Scott Miller seconded the nomination.

RESULT:	FAILED [2-3]
MOVER:	Mark Schaff, Commissioner
SECONDER:	Scott Miller, Chair
AYES:	Scott Miller, Chair and Mark Schaff, Commissioner
NOES:	Mike Caputo, Commissioner, Mark Jones, Commissioner and Neel Patel, Vice Chair

Commissioner Mike Caputo nominated Vice Chair Neel Patel as Vice Chair. Vice Chair Neel Patel seconded the nomination.

RESULT:	APPROVED [5-0]
MOVER:	Mike Caputo, Commissioner
SECONDER:	Neel Patel, Vice Chair
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller, Chair, Neel Patel, Vice Chair and Mark Schaff, Commissioner
NOES:	None

1. PUBLIC COMMENTS

-Afsaneh Namiranian, a resident, lives in the Sunset Place neighborhood. She indicated that people from the apartments are parking in her neighborhood

overnight, and that they are littering. She requested permit parking for her neighborhood.

-Tracy Doudt, a resident, is an HOA board member for Sunset Place. Ms. Doudt indicated Beckenham Street is unsafe and unsanitary, and she has on many occasions found broken glass and drug paraphernalia while walking her dog and young child. Ms. Doudt said the onus should not be on the residents to contend with unsafe conditions on the sidewalks, nor to report abandoned vehicles on Beckenham. Ms. Doudt relocated to Laguna Hills to raise her family in a safe and clean environment, and she requested action from the City on these issues.

2. MINUTES

2.1 Minutes

Recommendation: That the Traffic Commission approve the minutes of the 21, 2026, Traffic Commission meeting.

RESULT:	APPROVED [5-0]
MOVER:	Neel Patel, Vice Chair
SECONDER:	Mark Schaff, Commissioner
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller, Chair, Neel Patel, Vice Chair and Mark Schaff, Commissioner
NOES:	None

3. PRESENTATIONS

There were no Presentations.

4. ADMINISTRATIVE REPORTS

Chair Miller requested Item 4.2 be pulled from the Agenda out of order.

4.2 Review of Traffic Conditions on Grissom Road and Wilkes Place

Assistant Engineer Smantha Vu reviewed the information provided in the staff report and responded to Commissioner requests for additional information.

-Wendy Wilcox, a resident, indicated a vehicle on New Year’s Eve went past her house on three wheels due to a lost tire. Ms. Wilcox requested additional traffic control measures because her kids can’t play outside.

-Derek Shaw, a resident, indicated there were some missing pieces in the traffic study data. He wanted to focus on the egregious speeders, not the 85th

percentile. Mr. Shaw requested speed bumps, stop signs, and any other options available and indicated he would be willing to raise funds for additional traffic control.

-Amanda Cobb, a resident, played a video on her phone of the New Year's Eve vehicle. Ms. Cobb requested speed bumps and stop signs. Ms. Cobb said other streets have stop signs with the same conditions. She indicated she wanted to know why speed bumps are not an option and offered to fundraise for additional traffic control measures.

-Nick D'Antoni, a resident, asked what conditions were met to install a three-way stop at Pike Road and Grissom Road? Assistant City Manager Ames indicated that location met the MUTCD warrant for pedestrian crossings, specifically during school hours. Mr. D'Antoni said he disagreed with the traffic study and thinks there is in fact a visibility issue at Grissom Road and Velasquez Road. He also asked at what point is the outlier behavior so egregious that the City will act, even if it doesn't meet the 85th percentile threshold?

Recommendation: That the Traffic Commission recommend that staff: 1) Repeat the speed survey on Grissom and Wilkes; 2) Repeat the stop sign warrant analysis including pedestrian and bicycle counts for Grissom and Velasquez; 3) Provide a complete list of alternate traffic calming measures that align with section J in the Residential Streets Management Policy; and 4) Ask Police Services to perform additional enforcement at specific times that coincide with egregious speeding behavior.

RESULT:	APPROVED [5-0]
MOVER:	Scott Miller, Chair
SECONDER:	Mike Caputo, Commissioner
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller, Chair, Neel Patel, Vice Chair, Mark Schaff, Commissioner
NOES:	None

Chair Miller Requested Item 4.4 be pulled from the Agenda out of order.

4.4 Parking Stall Delineation on Via Lomas

Assistant City Manager/City Engineer Joe Ames reviewed the information provided in the staff report and responded to Commissioner requests for additional information.

Recommendation: That the Traffic Commission recommend to the City Council that marked parallel "T's" be installed on Via Lomas.

RESULT:	APPROVED [5-0]
MOVER:	Mike Caputo, Commissioner
SECONDER:	Neel Patel, Vice Chair
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller, Chair, Neel Patel, Vice Chair, Mark Schaff, Commissioner
NOES:	None

4.1 Engineering and Traffic Survey for Speed Limits

Assistant Engineer Samantha Vu reviewed the information provided in the staff report and responded to Commissioner requests for additional information.

Recommendation: That the Traffic Commission receive and file the report.

RESULT:	APPROVED [5-0]
MOVER:	Neel Patel, Vice Chair
SECONDER:	Mark Schaff, Commissioner
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller, Chair, Neel Patel, Vice Chair, Mark Schaff, Commissioner
NOES:	None

4.3 Review of Traffic Conditions on Ericson Way

Assistant Engineer Samantha Vu reviewed the information provided in the staff report and responded to Commissioner requests for additional information.

Recommendation: That the Traffic Commission receive and file the report and recommend that City staff and Police Services implement the following recommendations from the HCI report: 1) Increase law enforcement presence at the two locations, as often as available; 2) Install a STOP AHEAD warning sign in advance of each northbound and southbound approach (i.e., between the two stops); 3) Upgrade the existing STOP signs at the 2 Earhart Road intersections to the next larger size for better visibility; and 4) repeat the study in 18 months.

RESULT:	APPROVED [5-0]
MOVER:	Mike Caputo, Commissioner
SECONDER:	Neel Patel, Vice Chair
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller, Chair, Neel Patel, Vice Chair, Mark Schaff, Commissioner
NOES:	None

4.5 Moulton Ranch Parking Prohibition During Street Sweeping History

Assistant Engineer Samantha Vu reviewed the information provided in the staff report and responded to Commissioner requests for additional information.

Recommendation: That the Traffic Commission receive and file the report.

RESULT:	APPROVED [5-0]
MOVER:	Mark Schaff, Commissioner
SECONDER:	Mike Caputo, Commissioner
AYES:	Mike Caputo, Commissioner, Mark Jones, Commissioner, Scott Miller, Chair, Neel Patel, Vice Chair, Mark Schaff, Commissioner
NOES:	None

5. INFORMATIONAL ITEMS

5.1. Sheriff's Department Verbal Report

Administrative Sergeant Avalos provided a verbal report to the Commission.

5.2. City Engineer's Verbal Report

Assistant City Manager/City Engineer Joe Ames provided a verbal report to the Commission regarding CIP 153, Street Name Signs, that will soon be installed Citywide.

6. COMMISSIONER COMMENTS

Commissioner Caputo inquired about the radar speed trailer, and requested the trailer be deployed to Grissom Road.

Commissioner Schaff commented that if the City plans to upgrade our radar trailer in the future it would be nice to have a trailer that records data and has a camera.

Chair Miller inquired about the pending agenda report on Greenfield Drive.

7. ADJOURNMENT

There being no further business before the Traffic Commission at this session, Chair Miller declared the meeting adjourned at 8:47 p.m.

Julie Comella, Traffic Commission Secretary

ATTEST:

Scott Miller, Chair

Approved at the meeting of March 18, 2026



City of Laguna Hills Traffic Commission Staff Report

Date: March 18, 2026
To: Chair and Commission Members
From: Samantha Vu, Assistant Engineer
Issue: Review of Traffic Conditions on Grissom Road and Wilkes Place

Recommendation: That the Traffic Commission provide direction to City Staff.

Background:

During the January 21, 2026, Traffic Commission General Meeting, several public comments were made to re-evaluate the traffic conditions on Grissom Road and Wilkes Place. Please see the attached vicinity map. This topic was previously evaluated in 2019, 2023, 2024, and 2025. All previous evaluations concluded that the average and 85th percentile speed were within typical prevailing speed range (32-34 MPH) and thus no action was taken.

In 2019, Staff was initially contacted by a resident regarding concerns of vehicular speeding, cut-through traffic and traffic collisions on Wilkes Place south of Alicia Parkway and Grissom Road east of Wilkes Place. Based upon the resident's concern and in accordance with the Residential Streets Traffic Management Policy, staff initiated a review of the requested area.

The City's traffic engineering consultant, Hartzog & Crabill, Inc., (HCI) completed the attached January 9, 2019, study of the traffic attributes of Wilkes Place and Grissom Road. The speed survey counts, performed by HCI, as shown in the study, determined the 85th percentile speed on Wilkes Place and on Grissom Road to be below the typical prevailing speed range, and the 24-hour volumes were low for a typical residential street that is a connecting, or through, street to other neighborhoods. The origin and destination study revealed the peak hourly percentages to be very low, in the 5-10% range, for what may be considered 'cut-through' traffic. The traffic volumes and cut-

through traffic were deemed not significant and no action was needed in response to the data. More information can be seen in the Traffic Commission Agenda Item 4.1, dated January 16, 2019 available at <https://lagunahillsca.portal.civicclerk.com/event/690/files/agenda/1448>.

In 2023, Staff was contacted by a different resident regarding concerns of vehicular speeding along Grissom Road and Wilkes Place. Staff initiated a speed survey for a total of 4 days in three locations to evaluate any changes since the 2019 report. Counts Unlimited collected and reported the 24-hour speed survey on Grissom Road and Wilkes Place, between December 8 and December 11, 2023. Please see the Traffic Commission Agenda Item 4.2, dated January 17, 2024 available at <https://lagunahillsca.portal.civicclerk.com/event/687/files/agenda/1439> for more information. The Traffic Commission did not recommend any further action.

A follow-up survey was performed after six-month period and presented to the Traffic Commission on July 17, 2024. Staff initiated a speed survey for the same locations as done in 2023 for comparison. The 85th percentile speeds were found to be in an acceptable range and well below typical prevailing speed range. Please see the Traffic Commission Agenda Item 4.4, dated July 17, 2024 available at <https://lagunahillsca.portal.civicclerk.com/event/95/files/agenda/1568>. The Traffic Commission did not recommend any further action.

After being requested by the Traffic Commission at the July 17, 2024 meeting and due to several resident complaints, City staff contacted Counts Unlimited, Inc. to conduct a new speed survey in 2025. Staff initiated a new speed survey for a total of four (4) days in the same three (3) locations as done in 2023 and 2024. Counts Unlimited, Inc. collected and reported the results of a 24-hour speed survey on Grissom Road and Wilkes Place, between December 12 and December 15, 2025. Please see the Traffic Commission Agenda Item 4.2, dated January 21, 2026 available at <https://lagunahillsca.portal.civicclerk.com/event/863/files/agenda/2630>.

During the January 21, 2026, Traffic Commission General Meeting, the Traffic Commission received a City staff report and reviewed the results of the Counts Unlimited study. After review, the Traffic Commission requested that City staff 1) Repeat the speed survey on Grissom and Wilkes; 2) Repeat the stop sign warrant analysis including pedestrian and bicycle counts for Grissom and Velasquez; 3) Provide a complete list of alternate traffic calming measures that align with section J in the

Residential Streets Management Policy; and 4) Ask Police Services to perform additional enforcement at specific times that coincide with egregious speeding behavior.

In response to the recommendation from the Traffic Commission, Hartzog & Crabill, Inc., (HCI) completed the attached March 10, 2026, study of the traffic conditions of Wilkes Place and Grissom Road. HCI completed a five (5) day traffic survey from February 20 through February 24, 2026. The average of all 4 days to the speed surveys done in 2019, 2023, 2024, and 2025 are in Table 1. The new counts from 2026 are in Table 2.

Table 1: Historical Speed Survey Summary (MPH)

Speed Summary	Along Wilkes Place Segment				Along Grissom Road Segment						
	2019	2023	2024	2025	2019	2023 (Between Wilkes and Velasquez)	2023 (Between Velasquez and Las Bolsas)	2024 (Between Wilkes and Velasquez)	2024 (Between Velasquez and Las Bolsas)	2025* (Between Wilkes and Velasquez)	2025 (Between Velasquez and Las Bolsas)
Average Speed	25	24	26	25	25.2	25.5	22	24.5	25.5	22	21.5
85 th Percentile Speed	30	28.5	30.5	29	28.4	31.25	27.75	31	31.75	28	28
10 MPH Pace Range	21-30	21-30	21-30	21-30	20-29	21-30	16-25	21-30	21-30	21-30	21-30
Percent of Vehicles in Pace	74.1%	73%	69.3%	73.4%	87.3%	58.7%	59.1%	58.63%	57.5%	58.4%	60.5%

* It should be noted that a vehicle was parked on the tube for Grissom Road between Velasquez and Las Bolsas from 6:00 AM to 1:00 PM on Monday, December 15, 2025 thereby invalidating the data for that day. The Traffic Commission requested that the entire speed survey be reformed based, in part, on this error. This data has been updated from the previous report.

Table 2: February 20-24, 2026 Speed Survey Summary (MPH)

Speed Summary	Wilkes Place		Grissom Road (between Wilkes and Velasquez)		Grissom Road (Between Velasquez and Las Bolsas)	
	Average Speed	85 th Percentile	Average Speed	85 th Percentile	Average Speed	85 th Percentile
Friday February 20	21	28	23	29	22	29
Saturday February 21	21	29	24	29	23	28
Sunday February 22	21	27	23	29	22	28
Monday February 23	19	26	23	30	22	28
Tuesday February 24	20	26	23	29	22	28
Combined	20.4	27.2	23.2	29.2	22.2	28.2

Staff's experience has found the typical prevailing speed range for such streets to be between 32 and 34 MPH, without traffic safety concerns. Based on the data in Table 2, the 85th percentile speeds were below this range, and the 24-hour volumes were low for a typical residential street that is a connecting, or through, street to other neighborhoods. The origin and destination study revealed the peak hourly percentages to be very low, 4%, for what may be considered 'cut-through' traffic.

A multi-way stop control warrant analysis was also completed for Grissom Road at Velasquez Road. The California Manual of Uniform Traffic Control Devices (MUTCD) provides guidelines (warrants) which should be met prior to installation of multi-way stop control. One of the criteria used as a warrant for the installation of multi-way stop control is pedestrian and bicycle counts. During the same five (5) day period, pedestrian and bicycle counts were conducted from 7:00 AM to 7:00 PM, as required by the warrant analysis. On average, at the intersection of Grissom Road and Velasquez Road, 14 pedestrians crossed Grissom Road and 16 pedestrians crossed Velasquez Road each day. The highest pedestrian count crossings occurred on Sunday, February 22, 2026, with 24 pedestrians crossing Grissom Road, and on February 21, 2026 with 24 pedestrians crossing Velasquez Road.

A five-year traffic collision history review was also included in the study which reported one traffic collision from the State of California highway patrol (CHP) Statewide Integrated Traffic records System (SWITRS) from January 1, 2021 to December 31, 2025. One collision occurred on Wilkes place approximately 100 feet north of Grissom Road and was categorized as a "rear-end collision" with a parked vehicle due to improper turning.

As a reminder, The MUTCD states the following criteria should be considered in the engineering study for a multi-way STOP sign installation:

Guidance:

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 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.

Option:

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.

In the attached report, HCI found that:

- Zero (0) collisions occurred at the intersection in a 5-year period. The previous collision mentioned did not occur at the intersection and does not add to the warrant analysis.
 - It should be noted that there was a recent incident at the intersection involving hit and run with a parked vehicle that is not shown on the SWITRS data. The accident occurred on December 30, 2025 and the paperwork was not processed until a later date outside of the SWITRS search.

- The intersection experiences only 13% of the required vehicular volume entering the intersection from the major street approaches and only 15% of the required vehicular volume entering the intersection from the minor street approaches.
- The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) does not average at least 200 units per hour
- Visibility for approaching drivers on Velasquez Road is sufficient. However, vegetation needs to be trimmed. The City is notifying the homeowner to remove overgrown vegetation in the parkway.

Based on this summarized data, HCI does not recommend multi-way stop control at Velasquez Road and Grissom Road. However, the current data shows that the incremental solutions previously implemented have been effective as the new speed survey continues to show a downward speeding trend from previous studies. HCI recommends the following:

- Install one (1) 25 MPH Speed Limit sign on Grissom Road, just west of Velasquez Road.
- Consider installing '25' pavement markings to supplement the existing and new 25 MPH Speed Limit signs.
- Increase law enforcement presence as often as available, or as resources permit.
- Place a portable radar speed trailer near the midpoints of the roadway segments, as often as available.

While the speed data indicates no further traffic calming solutions are warranted, at the request of the Traffic Commission, the following traffic calming solutions are provided for review:

- Speed reduction markings (also known as optical speed bars)
 - Speed reduction markings are transverse pavement markings placed with progressively reduced spacing on both edges of the traveled way to create the perception of increased speed. This illusion encourages drivers to slow down as they pass by the markings.
 - Low cost solution.
- Vehicle Speed Feedback Sign
 - Vehicle Speed Feedback Signs (SFS), also known as Dynamic Speed Displays, provide drivers with a feedback display of vehicles speed, while reminding drivers of the posted speed limit.
 - SFS can be an effective method for reducing speeds at a desired location when appropriately complemented with police enforcement.

- Most SFS can record speed data.
- High cost solution.
- Neckdowns (also known as chokers, curb extensions, or bulbouts)
 - In this context, neckdowns are a type of curb extension and may have a traffic calming effect because they artificially narrow the roadway, thereby inducing speed reductions by motorists..
 - Moderate cost solution.
- Traffic Islands
 - Traffic islands are typically used for channelization, but could also be used to create an artificial median island.
 - May have a traffic calming effect because they artificially narrow the roadway and require the motorist to drive around the island thereby inducing a speed reduction.
 - May be difficult to site as it can not interfere with on-street parking requirements or driveways.
 - Moderate-to-high cost solution.
- Traffic delineators
 - Traffic delineators are vertical, retro-reflective delineators that are typically used to separate vehicular traffic from bike lanes or to mark edges of roadways.
 - As a traffic calming solution, these could be combined with paint to create artificial bulbouts, or a traffic island.
 - Moderate-to-high cost solution.
- Transverse Rumble Strips
 - Transverse rumble strips are raised or grooved patterns installed perpendicular to the direction of travel in the roadway travel lane.
 - Traditionally, transverse rumble strips are used to provide an audible and tactile warning in advance of a decision point. They are different from center line and edge line rumble strips, which are located off the travel lane.
 - May be used as a traffic calming device to provide an audible and tactile warning to a motorist, signifying that they are in a residential area.
 - Moderate-to-high cost solution.
- Raised Pavement Markers
 - Raised pavement markers can also be used as a traffic calming device to provide an audible and tactile warning to a motorist device in advance of a decision point.
 - May be used as a traffic calming device to provide an audible and tactile warning to a motorist, signifying that they are in a residential area.
 - Low cost solution.

City Staff recommends that the Traffic Commission provide direction to City staff.

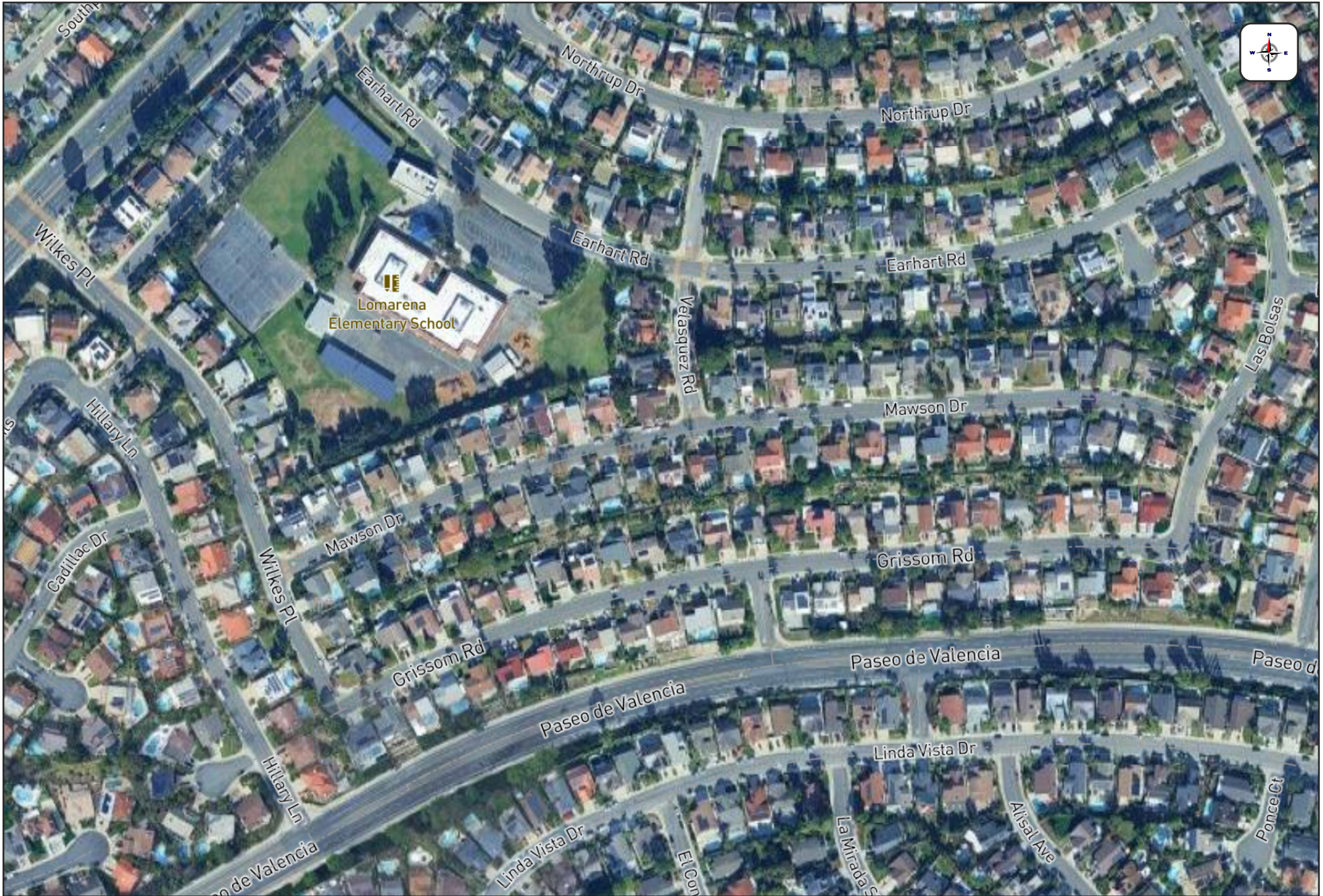
Fiscal Impact:

There is no fiscal impact associated with this report.

Attachments:

1. Vicinity Map
2. Hartzog and Crabill, Letter of Opinion, dated January 9, 2019
3. Hartzog and Crabill, Evaluation of Roadway Traffic Speeds & Cut-Through Traffic along Wilkes Place and Along Grissom Road, dated March 10, 2026

Vicinity Map



1" = 255 ft

Grissom Road and Wilkes Place

03/13/2026





Trammell Hartzog, President
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January 9, 2019

Mr. Kenneth H. Rosenfield, PE
Assistant City Manager/Public Services Director
City of Laguna Hills
24035 El Toro Road
Laguna Hills, CA 92653

Subject: Letter of Opinion – Speeding, Cut-through Traffic, and Collision Concerns along Wilkes Place and Grissom Road, and Speeding Along Bridlewood Drive and Nellie Gail Road

Dear Mr. Rosenfield,

Pursuant to your request, Hartzog & Crabill, Inc. (HCI) has prepared this traffic engineering evaluation regarding resident concerns of speeding and cut-through traffic, along with review of collisions, on the following two street segments:

- Wilkes Place, south of Alicia Parkway, and
- Grissom Road, east of Wilkes Place.

This evaluation also includes follow-up spot speed radar surveys along the two following two segments:

- Bridlewood Drive, between Vista Viejo Road and Laurel Crest Drive,
- Nellie Gail Road, between Oso Parkway and Hidden Trail Road.

BACKGROUND

Wilkes Place

Wilkes Place, between Alicia Parkway and Grissom Road, is a 36-foot to 40-foot wide, 2-lane, diagonal north-south residential collector roadway. At the project limits, there is a traffic signal at Alicia Parkway and a 90 degree bend at Grissom Road. There is double-yellow and single-yellow skip centerline striping along the entire segment. There is also an uncontrolled, marked yellow crosswalk across Wilkes Place at Barents Street, along with SCHOOL XING warning signs and advance SLOW SCHOOL XING pavement markings. There is a posted 25 MPH speed limit sign just south of Alicia Parkway. On-street parking is allowed along both sides of Wilkes Place.

BACKGROUND (continued)

Grissom Road

Grissom Road, between Wilkes Place and Las Bolsas Street, is a 36-foot wide, 2-lane, east-west residential collector roadway. At the project limits, there are 90-degree bends with double-yellow centerlines delineating the curves only. There is no centerline striping along the entire segment, and no posted speed limit signs. On-street parking is allowed along both sides of Grissom Road. An intersecting T-intersection with Velasquez Road connects to Paseo de Valencia.

Bridlewood Drive

Bridlewood Drive, between Vista Viejo Road and Laurel Crest Drive, is a 40-foot wide, 2-lane, north-south residential collector roadway. At the project limits, there is a 1-way stop at Vista Viejo Road and a 3-way stop at Laurel Crest Drive. There is no centerline striping along the entire segment, with exception of a short length of double-yellow centerline at the project limits. There are posted 25 MPH speed limit signs along Bridlewood Drive, between Vista Viejo Road and Laurel Crest Drive. There are also '25' pavement markings adjacent to the sign postings. On-street parking is allowed along both sides of Bridlewood Drive.

Nellie Gail Road

Nellie Gail Road, between Oso Parkway and Hidden Trail Road, is a 40-foot wide, curvy 2-lane, residential collector roadway. There is a traffic signal control at Oso Parkway and a one-way Stop control at Hidden Trail Road. There is a double-yellow centerline stripe along the entire segment, and a raised landscaped center median at Oso Parkway. There are Equestrian Xings with posted warning signs within this segment, along with other advance Side Street warning signs. There are posted 25 MPH speed limit signs along Nellie Gail Road between Oso Parkway and Hidden Trail Road. There is also a '25' pavement marking adjacent to the sign posting just south of Oso Parkway. On-street parking is allowed along both sides of Nellie Gail Road.

TRAVEL SPEED DATA

To determine travel speeds on the four (4) segments of:

- 1) Wilkes Place, between Alicia Parkway and Grissom Road;
- 2) Grissom Road, between Wilkes Place and Las Bolsas Street;
- 3) Bridlewood Drive, between Vista Viejo Road and Laurel Crest Drive;
- 4) Nellie Gail Road, between Oso Parkway and Hidden Trail Road;

a spot speed radar survey was conducted on each of the locations on Tuesday, December 11, and on Wednesday, December 12, 2018. Tables 1 and 2 (next page) summarize the spot speed radar survey data.

TRAVEL SPEED DATA (continued)

**TABLE 1
 SPEED SURVEY SUMMARY
 WILKES PLACE, FROM ALICIA PARKWAY TO GRISSOM ROAD
 GRISSOM ROAD, FROM WILKES PLACE TO LAS BOLSAS STREET**

Speed Summary	Along Wilkes Place Segment	Along Grissom Road Segment
Posted Speed Limit	25 MPH	25 MPH
85 th Percentile Speed	30 MPH	28.4 MPH
Average Speed	25 MPH	25.2 MPH
10 MPH Pace Range	21 - 30 MPH	20 - 29 MPH
Percent of Vehicles in Pace	74.1%	87.3%

Source: Hartzog & Crabill, Inc., 2018.

**TABLE 2
 SPEED SURVEY SUMMARY
 BRIDLEWOOD DRIVE, FROM VISTA VIEJO ROAD TO LAUREL CREST DRIVE
 NELLIE GAIL ROAD, FROM OSO PARKWAY TO HIDDEN TRAIL ROAD**

Speed Summary	Along Bridlewood Drive Segment	Along Nellie Gail Road Segment
Posted Speed Limit	25 MPH	25 MPH
85 th Percentile Speed	36.1 MPH	34.8 MPH
Average Speed	29.3 MPH	30.9 MPH
10 MPH Pace Range	25 - 34 MPH	26 - 35 MPH
Percent of Vehicles in Pace	70.7%	77.0%

Source: Hartzog & Crabill, Inc., 2018.

As shown above, the 85th percentile speeds on Wilkes Place and Grissom Road were recorded at 30 MPH and 28.4 MPH, respectively. This data shows that typical travel speeds are occurring for a posted 25 MPH speed limit street. The 85th percentile speeds on Bridlewood Drive and Nellie Gail Road were recorded at 36.1 MPH and 34.8 MPH, respectively. This data shows that higher travel speeds are occurring along Bridlewood Drive. It is noted, back in March 2018, the 85th percentile speed on Bridlewood Drive was recorded at 37.1 MPH. In May 2018, the 85th percentile speed on Nellie Gail Road was recorded at 39 MPH, which has reduced to a typical speed for this type of roadway.

The overall speed radar survey data is attached to this letter.

TRAVEL SPEED DATA (*continued*)

In an effort to lower overall speeds on Bridlewood Drive, the City may want to consider taking an incremental approach that may include the following:

- increased law enforcement
- frequent deployment of portable radar speed-feedback trailers
- neighborhood watch committee meeting to help make all residents aware of speeding

TRAFFIC VOLUME DATA

Average Daily Traffic (ADT) counts were collected for the two (2) segments of Wilkes Place and Grissom Road on Wednesday, December 12, 2018. The ADT, or 24-hour two-way traffic volume, along these segments resulted in 838 and 494 vehicles, respectively.

A two-lane collector street generally has a Level-of-Service (LOS) 'D' capacity of 11,300 vehicles per day. Consequently, the current traffic volumes are well under the roadway capacity, and there are no other recommendations regarding traffic volume data to provide at this time.

The ADT count data collected as part of this evaluation is attached to this letter.

COLLISION DATA

HCI obtained collision data for the past six (6) years, between January 1, 2013 – November 30, 2018, from the Statewide Integrated Traffic Records System website (*i-SWITRS*) database to determine the number of collisions occurring on the two (2) segments of Wilkes Place and Grissom Road.

Tables 3 and 4 (next page) presents the summary collision data.

COLLISION DATA (continued)

**TABLE 3
 TRAFFIC COLLISION DATA SUMMARY
 WILKES PLACE, FROM ALICIA PARKWAY TO GRISSOM ROAD**

YEAR	NUMBER OF COLLISIONS	FATAL	INJURY	PROPERTY DAMAGE ONLY
2013	0	0	0	0
2014	0	0	0	0
2015	0	0	0	0
2016	3	0	3	0
2017	0	0	0	0
2018 *	0	0	0	0

* Available SWITRS data up to November 2018 at the time of report preparation.

As shown above, there have been a total of three (3) collisions reported within the last six (6) years on Wilkes Place. It is noted, all three collisions occurred at the intersection of Wilkes Place and Alicia Parkway. There were no collisions determined as ‘speed-related’.

**TABLE 4
 TRAFFIC COLLISION DATA SUMMARY
 GRISSOM ROAD, FROM WILKES PLACE TO LAS BOLSAS STREET**

YEAR	NUMBER OF COLLISIONS	FATAL	INJURY	PROPERTY DAMAGE ONLY
2013	0	0	0	0
2014	0	0	0	0
2015	0	0	0	0
2016	0	0	0	0
2017	0	0	0	0
2018 *	1	0	0	1

* Available SWITRS data up November 2018 at the time of report preparation.

As shown above, there has been a total of one (1) collision reported within the last six (6) years on Grissom Road. This collision occurred at the intersection of Grissom Road and Las Bolsas Street, and was not determined as ‘speed-related’.

Consequently, there are no other recommendations regarding collision data on these two segments at this time.

The comprehensive 6-year segment collision history reports are attached to this letter.

CUT-THROUGH TRAFFIC

An Origin and Destination (O&D) study (i.e., license plate survey) was conducted on Wednesday, December 12, 2018 during the AM peak period (7 - 9am) to quantify the amount of traffic that are likely using Wilkes Place and Grissom Road as a short-cut.

The study collected license plate numbers in a 5-minute interval basis for all vehicles entering and exiting Wilkes Place at the project limit of Alicia Parkway, and also entering and exiting Velasquez Road at Paseo de Valencia (via Grissom Road).

Table 5 below shows a summary of the license plate matches recorded per each hour.

**TABLE 5
ORIGIN-DESTINATION LICENSE PLATE MATCHES
USING WILKES PLACE AND GRISSOM ROAD**

Path	7:00:00 AM	7:05:00 AM	7:45:00 AM	7:50:00 AM	8:05:00 AM	8:10:00 AM	8:15:00 AM	8:50:00 AM	8:55:00 AM	Total
2 to 1	1	1	1		3		1			7
1 to 2				2	1	2	1	1	1	8
Grand Total	1	1	1	2	4	2	2	1	1	15

The numbers (1 to 2 & 2 to 1) in Table 5 above refer to vehicles entering from and exiting to as follows:

Location 1 - Wilkes Place, just south of Alicia Parkway.

Location 2 - Velasquez Road, just north of Paseo de Valencia (short leg leading to Grissom Road).

The overall Origin-Destination Study spreadsheet is attached to this letter.

Per the ADT count data collected, the hourly traffic volumes for these same peak hours are compared as follows:

<u>Hour</u>	<u>ADT Traffic Volume</u>	<u>Cut-Thru</u>	<u>Cut-Thru/Volume</u>
7-8 AM	48	5	10%
8-9 AM	170	10	6%

As shown above, the actual hourly percentages are very low for what may be considered ‘cut-through’ traffic. Consequently, there are no recommendations regarding ‘cut-through’ traffic at this time.

SUMMARY

Wilkes Place and Grissom Road

In summary, the traffic data on Wilkes Place and Grissom Road resulted in the following:

- ✓ typical travel speeds are occurring for these 25 MPH speed limit streets;
- ✓ traffic volumes are well-below the traffic carrying capacity of the two roadways;
- ✓ there is no traffic collision history related to traffic speeds along these segments; and,
- ✓ 'cut-through' traffic is determined as very low.

Bridlewood Drive and Nellie Gail Road

In summary, the recent speed data on Bridlewood Drive and Nellie Gail Road resulted in the following:

- ✓ higher than typical travel speeds are occurring along Bridlewood Drive.
- ✓ the Nellie Gail Road speed results are typical and do not result in recommended actions.

RECOMMENDATIONS

Wilkes Place and Grissom Road

In review of the existing School Xing signage on Wilkes Place, it is recommended to update the signage to the newer standard signs with fluorescent yellow-green background.

Bridlewood Drive

In order to address the higher travel speeds along Bridlewood Drive, it is recommended that an incremental approach continue to be followed, which includes:

- increased law enforcement.
- frequent deployment of portable radar speed-feedback trailers.
- neighborhood watch committee meeting to help make all residents aware of speeding.

Mr. Kenneth H. Rosenfield, PE

January 9, 2019

Page 8 of 8

It has been our pleasure to prepare this letter of opinion regarding speeds, traffic volumes, collisions, and cut-through traffic on these project segments. If you have any questions or need additional information, please feel free to call us anytime at (714) 731-9455.

Sincerely,

HARTZOG & CRABILL, INC.



Gerald J. Stock, PE, TE
Executive Vice President

Attachments: Spot Speed Radar Data
 ADT Traffic Volume Data
 Collision History Data
 Origin-Destination Study

Spot Speed Radar Data

**SUMMARY OF SPOT SPEED SURVEYS
DECEMBER 2018**

STREET LOCATION	EXISTING SPEED LIMIT	RECOMMENDED SPEED LIMIT	85TH PERCENTILE SPEED	AVERAGE SPEED	10 MPH PACE RANGE	PERCENT OF VEHICLES IN PACE	DAY / DATE / TIME
<u>BRIDLEWOOD DRIVE</u>							
LAUREL CREST TO VISTA VIEJO	25	-	36.1	29.3	25-34	70.7	WED / 12-12-18 / MID-DAY (12:15 - 2:00)
<u>GRISSOM ROAD</u>							
WILKES PL TO LAS BOLSAS ST	25	-	28.4	25.2	20-29	87.3	TUES / 12-11-18 / MID-DAY (12:15 - 2:00)
<u>NELLIE GAIL ROAD</u>							
OSO PKWY TO HIDDEN TRAIL RD	25	-	34.8	30.9	26-35	77.0	WED / 12-12-18 / MID-DAY (11:00 - 12:00)
<u>WILKES PLACE</u>							
ALICIA PKWY TO GRISSOM RD	25	-	30.0	25.0	21-30	74.1	TUES / 12-11-18 / MID-DAY (10:45 - 12:15)

HARTZOG AND CRABILL INC.
 Consulting Traffic Engineers
 17592 Inna Blvd., Suite 122, Tustin, CA 92680
 (714) 731-9452

Radars Speed Survey Field Sheet

AGENCY: CITY OF LAGUNA HILLS
 STREET: BRIDLEWOOD
 LOCATION: VISTA VIEJO RD TO LAUREL CREST DR

WEATHER: SUNNY DATE: 12-12-18
 ROAD CONDITION: DRY START TIME: 12:15 PM
 OBSERVER: CATHY BUENDIA END TIME: 2:00 PM VUL

DIRECTION: SOUTHBOUND

MPH	NUMBER OF VEHICLES					TOTAL
	5	10	15	20	25	
60						
59						
58						
57						
56						
55						
54						
53						
52						
51						
50						
49						
48						
47	/					1
46						0
45						0
44	/					1
43	/					1
42						0
41						0
40	/					1
39	//					2
38						0
37						0
36						0
35	/					1
34	//					2
33	/					1
32	/					1
31	//					2
30	//					2
29	//					2
28	//					2
27	//					2
26	//					2
25	//					2
24	//					2
23	/					1
22						0
21						0
20	/					1
19						
18						
17						
16						
15						

DIRECTION: NORTHBOUND

MPH	NUMBER OF VEHICLES					TOTAL	CUMULATIVE TOTAL	MPH
	5	10	15	20	25			
60								60
59								59
58								58
57								57
56								56
55								55
54								54
53								53
52								52
51								51
50								50
49								49
48								48
47	/					1	2	47
46						0	0	46
45	/					1	1	45
44						0	1	44
43						0	0	43
42						0	0	42
41	//					2	2	41
40	/					1	3	40
39	//					2	5	39
38						0	5	38
37	//					3	8	37
36						0	8	36
35	//					4	12	35
34	/					4	16	34
33	/					4	20	33
32	//					6	26	32
31	//					4	30	31
30	//					3	33	30
29	//					2	35	29
28	//					6	41	28
27	/					0	41	27
26	//					2	43	26
25	//					5	48	25
24	/					1	49	24
23	/					2	51	23
22	/					1	52	22
21							52	21
20	/						53	20
19							53	19
18							53	18
17							53	17
16							53	16
15							53	15

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____

RADAR SPEED DISTRIBUTION SHEET



CITY OF LAGUNA HILLS

BRIDLEWOOD DRIVE

DATE: 12/12/2018

TIME: 12:15 PM - 2:00 PM

LAUREL CREST DR TO VISTA VIEJO

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

SPEED	NUMBER OF VEHICLES										VEH.	PCT.	CUM. PCT.	
	5	10	15	20	25									
60													100.0%	
													100.0%	
													100.0%	
													100.0%	
55													100.0%	
													100.0%	
													100.0%	
													100.0%	
50													100.0%	
													100.0%	
													100.0%	
	X	X										2	2.0%	100.0%
45	X											0	0.0%	98.0%
	X											1	1.0%	98.0%
	X											1	1.0%	97.0%
												0	0.0%	94.9%
	X	X										2	2.0%	94.9%
40	X											1	1.0%	92.9%
	X	X	X	X								4	4.0%	91.9%
												0	0.0%	87.9%
	X	X	X									3	3.0%	87.9%
35	X	X	X	X	X							0	0.0%	84.8%
	X	X	X	X								4	4.0%	79.8%
	X	X	X	X	X							5	5.1%	75.8%
	X	X	X	X	X	X	X					7	7.1%	70.7%
	X	X	X	X	X	X	X	X	X			9	9.1%	63.6%
30	X	X	X	X	X							6	6.1%	54.5%
	X	X	X	X								4	4.0%	48.5%
	X	X	X	X	X	X	X	X	X	X		11	11.1%	44.4%
	X	X	X	X	X	X	X					8	8.1%	33.3%
	X	X	X	X	X							5	5.1%	25.3%
25	X	X	X	X	X	X	X	X	X	X		11	11.1%	20.2%
	X	X	X	X								4	4.0%	9.1%
	X	X	X									3	3.0%	5.1%
	X											1	1.0%	2.0%
20	X											0	0.0%	1.0%
												1	1.0%	1.0%
													0.0%	0.0%
													0.0%	0.0%
													0.0%	0.0%
15													0.0%	0.0%
TOTAL VEHICLES											99			

UPPER LIMIT 10 MPH PACE:	34	MPH	85th PERCENTILE SPEED:	36.1	MPH
LOWER LIMIT 10 MPH PACE:	25	MPH	MEDIAN SPEED:	29.3	MPH
PERCENT OVER PACE:	24.2	%	15th PERCENTILE SPEED:	24.5	MPH
PERCENT IN PACE:	70.7	%			
PERCENT UNDER PACE:	9.1	%			

Radar Speed Survey Field Sheet

HARTZOG AND CRABILL INC.
 Consulting Traffic Engineers
 1592 Irvine Blvd., Suite 122 Irvine CA, 92618
 (714) 731-9455

AGENCY: CITY OF LAGUNA HILLS
 STREET: GRISSOM ROAD
 LOCATION: WILKES PL TO LAS BOLSAS ST.

WEATHER: SUNNY DATE: 12-11-18
 ROAD CONDITION: DRY START TIME: 12:15 PM
 OBSERVER: CATHY BUENDIA END TIME: 2:00 PM

DIRECTION: <u>WESTBOUND</u>						
MPH	NUMBER OF VEHICLES					TOTAL
	5	10	15	20	25	
60						
59						
58						
57						
56						
55						
54						
53						
52						
51						
50						
49						
48						
47						
46						
45						
44						
43						
42						
41						
40						
39						
38						
37						
36						
35	/					1
34	/					0
33	/					0
32	/					0
31	/	/				2
30	/	/				1
29	/	/				1
28	/	/	/			4
27	/	/	/	/		3
26	/	/	/	/		4
25	/	/	/	/		4
24	/	/	/	/		5
23	/	/	/	/		2
22	/	/	/	/		2
21	/	/	/	/		1
20	/	/	/	/		2
19						
18						
17						
16						
15						

DIRECTION: <u>EASTBOUND</u>							CUMULATIVE TOTAL	MPH
MPH	NUMBER OF VEHICLES					TOTAL		
	5	10	15	20	25		30	
60								60
59								59
58								58
57								57
56								56
55								55
54								54
53								53
52								52
51								51
50								50
49								49
48								48
47								47
46								46
45								45
44								44
43								43
42								42
41								41
40								40
39								39
38								38
37								37
36	/						1	36
35	/					0	1	35
34	/						1	34
33	/						1	33
32	/					0	0	32
31	/	/				0	2	31
30	/	/				0	1	30
29	/	/				1	2	29
28	/	/	/			5	6	28
27	/	/	/	/		2	6	27
26	/	/	/	/		5	6	26
25	/	/	/	/		4	6	25
24	/	/	/	/		4	6	24
23	/	/	/	/		0	2	23
22	/	/	/	/		2	3	22
21	/	/	/	/		1	2	21
20	/	/	/	/			2	20
19								19
18								18
17								17
16								16
15								15

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____

RADAR SPEED DISTRIBUTION SHEET



CITY OF LAGUNA HILLS

GRISSOM ROAD

DATE: 12/11/2018

TIME: 12:15 PM - 2:00 PM

WILKES PLACE TO LAS BOLSAS ST

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

SPEED	NUMBER OF VEHICLES										VEH.	PCT.	CUM. PCT.		
	5	10	15	20	25	30	35	40	45	50					
60															100.0%
															100.0%
															100.0%
															100.0%
55															100.0%
															100.0%
															100.0%
															100.0%
50															100.0%
															100.0%
															100.0%
															100.0%
45															100.0%
															100.0%
															100.0%
															100.0%
40															100.0%
															100.0%
															100.0%
															100.0%
35													X		100.0%
													X		98.2%
													X		96.4%
													X		94.5%
															92.7%
30	X	X													92.7%
	X	X													89.1%
	X	X	X	X	X	X									87.3%
	X	X	X	X	X	X									83.6%
25	X	X	X	X	X	X	X	X							72.7%
	X	X	X	X	X	X	X	X	X						61.8%
	X	X	X	X	X	X	X	X	X	X					47.3%
	X	X													32.7%
	X	X													16.4%
20	X	X	X												12.7%
	X	X													7.3%
	X	X													3.6%
															0.0%
															0.0%
															0.0%
15															0.0%
TOTAL VEHICLES											55				

UPPER LIMIT 10 MPH PACE:	29	MPH	85th PERCENTILE SPEED:	28.4	MPH
LOWER LIMIT 10 MPH PACE:	20	MPH	MEDIAN SPEED:	25.2	MPH
PERCENT OVER PACE:	12.7	%	15th PERCENTILE SPEED:	22.6	MPH
PERCENT IN PACE:	87.3	%			
PERCENT UNDER PACE:	0.0	%			

Radar Speed Survey Field Sheet

AGENCY: CITY OF LAGUNA HILLS
 STREET: NELLIE GAIL ROAD
 LOCATION: 050 PKWY TO HIDDEN TRAIL RD

WEATHER: SUNNY DATE: 12-12-18
 ROAD CONDITION: DRY START TIME: 11:00 AM
 OBSERVER: CATHY BUENDIA END TIME: 12:00 PM ✓ OK

DIRECTION: <u>SOUTHBOUND</u>						
MPH	NUMBER OF VEHICLES					TOTAL
	5	10	15	20	25	
60						
59						
58						
57						
56						
55						
54						
53						
52						
51						
50						
49						
48						
47						
46						
45						
44						
43	/					2
42	/					0
41	/					0
40						0
39						0
38	/					1
37	/	/				2
36	/	/				0
35	/	/	/			7
34	/	/	/	/		4
33	/	/	/	/		4
32	/	/	/	/		6
31	/	/	/	/		2
30	/	/	/	/		3
29	/	/	/	/		9
28	/	/	/	/		4
27	/	/	/	/		4
26	/	/	/	/		5
25	/	/	/	/		4
24	/	/	/	/		2
23	/	/	/	/		
22	/	/	/	/		
21	/	/	/	/		0
20	/	/	/	/		1
19						
18						
17						
16						
15						

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

DIRECTION: <u>NORTHBOUND</u>							CUMULATIVE TOTAL	MPH
MPH	NUMBER OF VEHICLES					TOTAL		
	5	10	15	20	25		30	
60								60
59								59
58								58
57								57
56								56
55								55
54								54
53								53
52								52
51								51
50								50
49								49
48								48
47								47
46								46
45								45
44								44
43							2	43
42							0	42
41							1	41
40							1	40
39	/	/					2	39
38	/	/					0	38
37	/	/	/				4	37
36	/	/	/				2	36
35	/	/	/	/			10	35
34	/	/	/	/			7	34
33	/	/	/	/			9	33
32	/	/	/	/			8	32
31	/	/	/	/			9	31
30	/	/	/	/			7	30
29	/	/	/	/			4	29
28	/	/	/	/			4	28
27	/	/	/	/			7	27
26	/	/	/	/			0	26
25	/	/	/	/			5	25
24	/	/	/	/			3	24
23	/	/	/	/			0	23
22	/	/	/	/			1	22
21	/	/	/	/				21
20	/	/	/	/				20
19								19
18								18
17								17
16								16
15								15

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____



RADAR SPEED DISTRIBUTION SHEET

CITY OF LAGUNA HILLS

NELLIE GAIL ROAD

OSO PKWY TO HIDDEN TRAIL RD

DATE: 12/12/2018

SURVEY BY: C. BUENDIA

TIME: 11:00 AM - 12:00 PM

CHECKED BY: JERRY STOCK

SPEED	NUMBER OF VEHICLES										VEH.	PCT.	CUM. PCT.	
	5	10	15	20	25									
60													100.0%	
													100.0%	
													100.0%	
													100.0%	
													100.0%	
55													100.0%	
													100.0%	
													100.0%	
													100.0%	
50													100.0%	
													100.0%	
													100.0%	
													100.0%	
45													100.0%	
													100.0%	
	X	X										2	1.4%	100.0%
												0	0.0%	98.6%
40	X											1	0.7%	98.6%
	X	X										1	0.7%	97.8%
	X											2	1.4%	97.1%
	X											1	0.7%	95.7%
	X	X	X	X	X	X	X	X				8	5.8%	95.0%
	X	X										2	1.4%	89.2%
35	X	X	X	X	X	X	X	X	X	X	X	17	12.2%	87.8%
	X	X	X	X	X	X	X	X	X			11	7.9%	75.5%
	X	X	X	X	X	X	X	X				9	6.5%	67.6%
	X	X	X	X	X	X	X	X	X	X	X	14	10.1%	61.2%
	X	X	X	X	X	X	X	X	X			11	7.9%	51.1%
30	X	X	X	X	X	X						7	5.0%	43.2%
	X	X	X	X	X	X	X	X	X	X	X	13	9.4%	38.1%
	X	X	X	X	X	X	X	X	X			11	7.9%	28.8%
	X	X	X	X								4	2.9%	20.9%
25	X	X	X	X	X							10	7.2%	18.0%
	X	X	X	X	X							5	3.6%	10.8%
	X	X	X	X								5	3.6%	7.2%
	X											1	0.7%	3.6%
	X	X										2	1.4%	2.9%
20	X											1	0.7%	1.4%
													0.0%	0.0%
													0.0%	0.0%
													0.0%	0.0%
15													0.0%	0.0%
TOTAL VEHICLES											139			

UPPER LIMIT 10 MPH PACE:	35	MPH	85th PERCENTILE SPEED:	34.8	MPH
LOWER LIMIT 10 MPH PACE:	26	MPH	MEDIAN SPEED:	30.9	MPH
PERCENT OVER PACE:	12.2	%	15th PERCENTILE SPEED:	25.6	MPH
PERCENT IN PACE:	77.0	%			
PERCENT UNDER PACE:	10.8	%			

HARTZOG AND CRABLL INC.
 Consulting Traffic Engineers
 17592 Irvine Blvd., Suite 122 Tustin CA, 92690
 (714) 731-9455

Radar Speed Survey Field Sheet

AGENCY: CITY OF LAGUNA HILLS
 STREET: WILKES PLACE
 LOCATION: ALICIA PKWY TO GRISSOM RD

WEATHER: SUNNY DATE: 12-11-18
 ROAD CONDITION: DRY START TIME: 10:45 AM
 OBSERVER: CATHY BUENDIA END TIME: 12:15 PM *WKL*

DIRECTION: <u>SOUTHBOUND</u>	MPH	NUMBER OF VEHICLES					TOTAL
		5	10	15	20	25	
60							
59							
58							
57							
56							
55							
54							
53							
52							
51							
50							
49							
48							
47							
46							
45							
44							
43							
42							
41							
40							
39							
38							
37							
36	/						1
35	/						0
34	/						0
33	//						2
32	//						2
31	/						0
30	//						2
29	/						1
28	//						0
27	//						3
26	/						0
25	//						3
24	/						1
23	//						2
22	/						1
21	//						5
20	//						4
19	/						0
18	/						1
17							
16							
15							

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

DIRECTION:	MPH	NUMBER OF VEHICLES					TOTAL	CUMULATIVE TOTAL	MPH
		5	10	15	20	25			
60									60
59									59
58									58
57									57
56									56
55									55
54									54
53									53
52									52
51									51
50									50
49									49
48									48
47									47
46									46
45									45
44									44
43									43
42									42
41									41
40									40
39									39
38	/						1	1	38
37	/						0	0	37
36	/						0	0	36
35	/						0	0	35
34	/						0	0	34
33	//						0	0	33
32	//						1	1	32
31	/						1	1	31
30	//						4	4	30
29	/						2	6	29
28	//						4	4	28
27	//						4	4	27
26	/						2	2	26
25	//						3	6	25
24	/						2	3	24
23	//						0	3	23
22	/						2	3	22
21	//						7	7	21
20	//						0	4	20
19	/						0	0	19
18	/						1	2	18
17									17
16									16
15									15

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____

RADAR SPEED DISTRIBUTION SHEET



CITY OF LAGUNA HILLS

WILKES PLACE

ALICIA PKWY TO GRISSOM ROAD

DATE: 12/11/2018

SURVEY BY: C. BUENDIA

TIME: 10:45 AM - 12:15 PM

CHECKED BY: JERRY STOCK

SPEED	NUMBER OF VEHICLES					VEH.	PCT.	CUM. PCT.
	5	10	15	20	25			
60								100.0%
								100.0%
								100.0%
								100.0%
55								100.0%
								100.0%
								100.0%
								100.0%
50								100.0%
								100.0%
								100.0%
								100.0%
45								100.0%
								100.0%
								100.0%
								100.0%
40								100.0%
								100.0%
								100.0%
								100.0%
	X					1	1.9%	100.0%
						0	0.0%	98.1%
	X					1	1.9%	98.1%
35						0	0.0%	96.3%
						0	0.0%	96.3%
	X X					2	3.7%	96.3%
	X X X					3	5.6%	92.6%
	X					1	1.9%	87.0%
30	X X X X X X					6	11.1%	85.2%
	X X X					3	5.6%	74.1%
	X X X X					4	7.4%	68.5%
	X X X X					4	7.4%	61.1%
	X X					2	3.7%	53.7%
25	X X X X X X					6	11.1%	50.0%
	X X X					3	5.6%	38.9%
	X X					2	3.7%	33.3%
	X X X					3	5.6%	29.6%
	X X X X X X X					7	13.0%	24.1%
20	X X X X					4	7.4%	11.1%
						0	0.0%	3.7%
	X X					2	3.7%	3.7%
								0.0%
								0.0%
15								0.0%
TOTAL VEHICLES						54		

UPPER LIMIT 10 MPH PACE:	30	MPH			
LOWER LIMIT 10 MPH PACE:	21	MPH	85th PERCENTILE SPEED:	30.0	MPH
PERCENT OVER PACE:	14.8	%	MEDIAN SPEED:	25.0	MPH
PERCENT IN PACE:	74.1	%	15th PERCENTILE SPEED:	20.3	MPH
PERCENT UNDER PACE:	11.1	%			

ADT Traffic Volume Data

VOLUME

Wilkes Pl Bet. Alicia Pkwy & Grissom Rd

Day: Wednesday
Date: 12/12/2018

City: Laguna Hills
Project #: CA18_1262_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					465	373	0	0	838		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	2	2			4	12:00	10	6			16
00:15	1	1			2	12:15	6	3			9
00:30	0	1			1	12:30	3	7			10
00:45	0	3	0	4	0	12:45	3	22	9	25	12
01:00	0	0			0	13:00	6	21			27
01:15	0	1			1	13:15	55	12			67
01:30	0	0			0	13:30	15	4			19
01:45	0	0	1		0	13:45	3	79	6	43	9
02:00	0	0			0	14:00	6	1			7
02:15	0	0			0	14:15	3	0			3
02:30	1	0			1	14:30	3	7			10
02:45	0	1	0		0	14:45	5	17	3	11	8
03:00	0	1			1	15:00	6	6			12
03:15	0	0			0	15:15	1	6			7
03:30	0	0			0	15:30	4	5			9
03:45	0	0	1		0	15:45	5	16	1	18	6
04:00	0	0			0	16:00	6	2			8
04:15	1	1			2	16:15	5	8			13
04:30	0	0			0	16:30	8	7			15
04:45	1	2	1	2	2	16:45	5	24	7	24	12
05:00	2	0			2	17:00	4	10			14
05:15	2	1			3	17:15	7	11			18
05:30	4	0			4	17:30	9	7			16
05:45	3	11	0	1	3	17:45	6	26	2	30	8
06:00	1	0			1	18:00	6	9			15
06:15	2	1			3	18:15	2	5			7
06:30	2	2			4	18:30	2	6			8
06:45	7	12	2	5	9	18:45	5	15	8	28	13
07:00	3	2			5	19:00	0	5			5
07:15	6	3			9	19:15	1	2			3
07:30	7	4			11	19:30	5	3			8
07:45	12	28	11	20	23	19:45	3	9	10	20	13
08:00	68	29			97	20:00	2	8			10
08:15	34	3			37	20:15	2	3			5
08:30	13	5			18	20:30	1	5			6
08:45	11	126	7	44	18	20:45	3	8	6	22	9
09:00	2	7			9	21:00	4	3			7
09:15	4	5			9	21:15	0	5			5
09:30	3	1			4	21:30	0	2			2
09:45	5	14	4	17	9	21:45	2	6	1	11	3
10:00	2	1			3	22:00	1	4			5
10:15	6	6			12	22:15	1	3			4
10:30	4	6			10	22:30	1	0			1
10:45	4	16	4	17	8	22:45	1	4	0	7	1
11:00	5	8			13	23:00	1	0			1
11:15	8	3			11	23:15	0	2			2
11:30	6	2			8	23:30	2	2			4
11:45	4	23	3	16	7	23:45	0	3	2	6	2
TOTALS	236	128			364	TOTALS	229	245			474
SPLIT %	64.8%	35.2%			43.4%	SPLIT %	48.3%	51.7%			56.6%

DAILY TOTALS					NB	SB	EB	WB	Total		
					465	373	0	0	838		
AM Peak Hour	07:45	07:45			07:45	PM Peak Hour	12:45	12:30		12:45	
AM Pk Volume	127	48			175	PM Pk Volume	79	49		125	
Pk Hr Factor	0.467	0.414			0.451	Pk Hr Factor	0.359	0.583		0.466	
7 - 9 Volume	154	64	0	0	218	4 - 6 Volume	50	54	0	0	104
7 - 9 Peak Hour	07:45	07:45			07:45	4 - 6 Peak Hour	17:00	16:30			16:45
7 - 9 Pk Volume	127	48	0	0	175	4 - 6 Pk Volume	26	35	0	0	60
Pk Hr Factor	0.467	0.414	0.000	0.000	0.451	Pk Hr Factor	0.722	0.795	0.000	0.000	0.833

VOLUME

Grissom Rd Bet. Wilkes Pl & Las Bolsas

Day: Wednesday
Date: 12/12/2018

City: Laguna Hills
Project #: CA18_1262_002

DAILY TOTALS					NB	SB	EB	WB	Total			
					0	0	259	235	494			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0	12:00			3	1	4	
00:15			0	0	0	12:15			2	2	4	
00:30			0	0	0	12:30			4	0	4	
00:45			0	0	0	12:45			1	10	5	8
01:00			0	1	1	13:00			8	4	12	
01:15			0	0	0	13:15			4	16	20	
01:30			0	0	0	13:30			7	1	8	
01:45			0	0	1	13:45			4	23	2	23
02:00			1	0	1	14:00			5	3	8	
02:15			0	0	0	14:15			8	4	12	
02:30			0	0	0	14:30			4	4	8	
02:45			0	1	0	14:45			3	20	6	17
03:00			0	1	1	15:00			7	3	10	
03:15			0	0	0	15:15			2	2	4	
03:30			0	0	0	15:30			3	4	7	
03:45			0	0	1	15:45			6	18	8	17
04:00			0	0	0	16:00			4	2	6	
04:15			1	0	1	16:15			6	3	9	
04:30			0	2	2	16:30			2	5	7	
04:45			1	2	3	16:45			9	21	4	14
05:00			0	0	0	17:00			8	2	10	
05:15			0	1	1	17:15			13	4	17	
05:30			0	0	0	17:30			3	7	10	
05:45			0	1	2	17:45			11	35	8	21
06:00			0	1	1	18:00			8	1	9	
06:15			3	3	6	18:15			6	2	8	
06:30			0	4	4	18:30			4	2	6	
06:45			3	6	4	18:45			1	19	4	9
07:00			2	1	3	19:00			4	2	6	
07:15			2	5	7	19:15			1	3	4	
07:30			4	8	12	19:30			4	1	5	
07:45			10	18	6	19:45			4	13	6	12
08:00			7	5	12	20:00			4	1	5	
08:15			4	11	15	20:15			1	1	2	
08:30			4	4	8	20:30			3	1	4	
08:45			2	17	4	20:45			0	8	0	3
09:00			6	2	8	21:00			3	1	4	
09:15			3	5	8	21:15			0	0	0	
09:30			0	5	5	21:30			3	1	4	
09:45			2	11	3	21:45			2	8	1	3
10:00			2	2	4	22:00			0	1	1	
10:15			4	3	7	22:15			1	1	2	
10:30			4	4	8	22:30			1	0	1	
10:45			2	12	2	22:45			0	2	0	2
11:00			6	5	11	23:00			0	0	0	
11:15			2	4	6	23:15			0	0	0	
11:30			3	3	6	23:30			0	2	2	
11:45			3	14	1	23:45			1	1	0	2
TOTALS				81	104	185	TOTALS			178	131	309
SPLIT %				43.8%	56.2%	37.4%	SPLIT %			57.6%	42.4%	62.6%

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	259	235	494		
AM Peak Hour			07:30	07:30	07:30	PM Peak Hour			17:00	12:45	17:00
AM Pk Volume			25	30	55	PM Pk Volume			35	26	56
Pk Hr Factor			0.625	0.682	0.859	Pk Hr Factor			0.673	0.406	0.737
7 - 9 Volume	0	0	35	44	79	4 - 6 Volume	0	0	56	35	91
7 - 9 Peak Hour			07:30	07:30	07:30	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	25	30	55	4 - 6 Pk Volume	0	0	35	21	56
Pk Hr Factor	0.000	0.000	0.625	0.682	0.859	Pk Hr Factor	0.000	0.000	0.673	0.656	0.737

Collision History Data

**CITY OF LAGUNA HILLS
5-YEAR SWITRS COLLISION DATABASE
WILKES PLACE, FROM ALICIA PARKWAY TO GRISSOM ROAD
JAN. 1, 2013 - NOV. 30, 2018**

CASE ID	COLLISION DATE	COLL. TIME	COLL. PRIMARY ROAD	COLL. SECONDARY ROAD	DIST.	DIR.	INTERS.	WEATH. 1	COLL. SEVERITY	PRIM. COLL. FACT.	PCF VIOL. CAT.	PCF VIOL.	HIT AND RUN	TYPE OF COLL.	MOTOR VEHICLE INVOLVED WITH ROAD SURF.	
															WITH	SURF.
8090227	20160704	2315	ALICIA PKWY	WILKES PL	0		Y	A	4	D	0		N	A	C	A
8180551	20161113	2008	ALICIA PKWY	WILKES PL	0		Y	A	3	A	12	21453	N	D	C	A
8197315	20161122	935	ALICIA PKWY	WILKES PL	0		Y	A	4	A	12	21453	N	D	C	A

NOTES:

Weather 1	Collision Severity	Primary Collision Factor	PCF Violation Category	Hit and Run	Type of Collision
A - Clear	1 - Fatal	A - (Vehicle) Code Violation	01 - Driving or Bicycling Under Ir	F - Felony	A - Head-On
B - Cloudy	2 - Injury (Severe)	B - Other Improper Driving	02 - Impeding Traffic	M - Misdemeanor	B - Sideswipe
C - Raining	3 - Injury (Other Visible)	C - Other Than Driver	03 - Unsafe Speed	N - Not Hit & Run	C - Rear-End
D - Snowing	4 - Injury (Complaint of Pain)	D - Unknown	04 - Following Too Closely		D - Broadside
E - Fog	0 - PDO (Property Damage On	E - Fell Asleep	05 - Wrong Side of Road		E - Hit Object
F - Other		-- Not Stated	06 - Improper Passing		F - Overturned
G - Wind			07 - Unsafe Lane Change		G - Vehicle/Pedestrian
-- Not Stated			08 - Improper Turning		H - Other
			09 - Automobile ROW		-- Not Stated
	Motor Vehicle Involved With:		10 - Pedestrian ROW		
	A - Non-Collision		11 - Pedestrian Violation	Road Surface	
	B - Pedestrian		12 - Traffic Signals and Signs	A - Dry	
	C - Other Motor Vehicle		13 - Hazardous Parking	B - Wet	
	D - Motor Vehicle on Other Roadway		14 - Lights	C - Snowy or Icy	
	E - Parked Motor Vehicle		15 - Brakes	D - Slippery	
	F - Train		16 - Other Equipment	-- Not Stated	
	G - Bicycle		17 - Other Hazardous Violation		
	H - Animal		18 - Other Than Driver (or Ped)		
	I - Fixed Object		19 -		
	J - Other Object		20 -		
	-- Not Stated		21 - Unsafe Starting or Backing		
			22 - Other Improper Driving		
			23 - Pedestrian or "Other" Under the Influence		
			24 - Fell Asleep		
			00 - Unknown		
			-- Not Stated		

**CITY OF LAGUNA HILLS
5-YEAR SWITRS COLLISION DATABASE
GRISSOM ROAD, FROM WILKES PLACE TO LAS BOLSAS AVENUE
JAN. 1, 2013 - NOV. 30, 2018**

CASE ID	COLLISION DATE	COLL. TIME	COLL. PRIMARY ROAD	COLL. SECONDARY ROAD	DIST.	DIR.	INTERS.	WEATH. 1	COLL. SEVERITY	PRIM. COLL. FACT.	PCF VIOL. CAT.	PCF VIOL.	HIT AND RUN	TYPE OF COLL.	MOTOR VEHICLE INVOLVED WITH ROAD SURF.	
															WITH	SURF.
8636969	20180503	1229	GRISSOM RD	LAS BOLSAS AV	0		Y	A	0	A	8	22107	M	D	E	A

NOTES:

Weather 1	Collision Severity	Primary Collision Factor	PCF Violation Category	Hit and Run	Type of Collision
A - Clear	1 - Fatal	A - (Vehicle) Code Violation	01 - Driving or Bicycling Under Ir	F - Felony	A - Head-On
B - Cloudy	2 - Injury (Severe)	B - Other Improper Driving	02 - Impeding Traffic	M - Misdemeanor	B - Sideswipe
C - Raining	3 - Injury (Other Visible)	C - Other Than Driver	03 - Unsafe Speed	N - Not Hit & Run	C - Rear-End
D - Snowing	4 - Injury (Complaint of Pain)	D - Unknown	04 - Following Too Closely		D - Broadside
E - Fog	0 - PDO (Property Damage On	E - Fell Asleep	05 - Wrong Side of Road		E - Hit Object
F - Other		-- Not Stated	06 - Improper Passing		F - Overturned
G - Wind			07 - Unsafe Lane Change		G - Vehicle/Pedestrian
-- Not Stated			08 - Improper Turning		H - Other
			09 - Automobile ROW		-- Not Stated
			10 - Pedestrian ROW		
			11 - Pedestrian Violation	Road Surface	
			12 - Traffic Signals and Signs	A - Dry	
			13 - Hazardous Parking	B - Wet	
			14 - Lights	C - Snowy or Icy	
			15 - Brakes	D - Slippery	
			16 - Other Equipment	-- Not Stated	
			17 - Other Hazardous Violation		
			18 - Other Than Driver (or Ped)		
			19 -		
			20 -		
			21 - Unsafe Starting or Backing		
			22 - Other Improper Driving		
			23 - Pedestrian or "Other" Under the Influence		
			24 - Fell Asleep		
			00 - Unknown		
			-- Not Stated		

Motor Vehicle Involved With:

- A - Non-Collision
- B - Pedestrian
- C - Other Motor Vehicle
- D - Motor Vehicle on Other Roadway
- E - Parked Motor Vehicle
- F - Train
- G - Bicycle
- H - Animal
- I - Fixed Object
- J - Other Object
- Not Stated

Origin-Destination Study Data

Prepared by National Data and Surveying Services
Origin and Destination Study

Day: Wednesday

Date: 12/12/2018

City: Laguna Hills

Project: 18-1263

Path	7:00:00 AM	7:05:00 AM	7:45:00 AM	7:50:00 AM	8:05:00 AM	8:10:00 AM	8:15:00 AM	8:50:00 AM	8:55:00 AM	Total
2 to 1	1	1	1		3		1			7
1 to 2				2	1	2	1	1	1	8
Grand Total	1	1	1	2	4	2	2	1	1	15

Location ID	Street
1	Wilkes Place S/O Alicia Pkwy
2	Velasquez Road N/O Paseo de Valencia

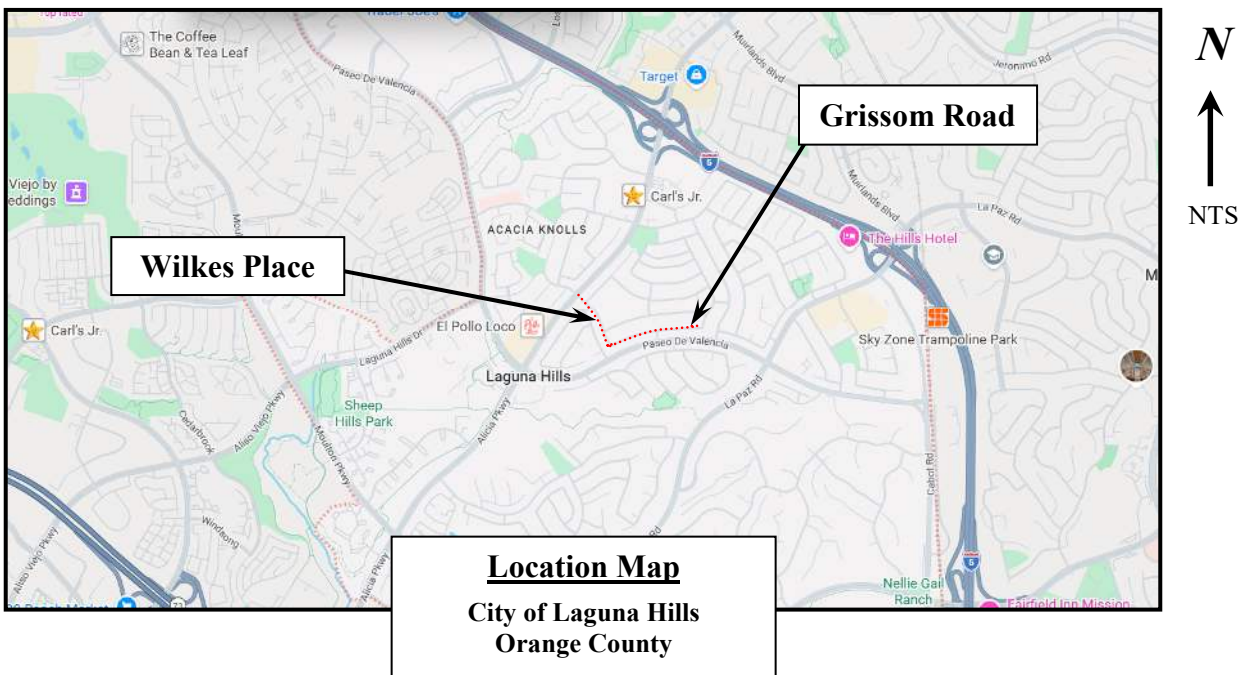
*All times correspond to vehicle origin time

**EVALUATION OF ROADWAY TRAFFIC SPEEDS & CUT-THROUGH TRAFFIC
ALONG WILKES PLACE AND ALONG GRISSOM ROAD,
FROM ALICIA PARKWAY TO LAS BOLSAS, AND
MULTIWAY STOP CONTROL FOR GRISSOM ROAD AT VELASQUEZ ROAD,
IN THE CITY OF LAGUNA HILLS, CA
MARCH 10, 2026**

INTRODUCTION

The City of Laguna Hills requested Hartzog & Crabill, Inc. (HCI) complete an evaluation of vehicular traffic speeds and cut-through traffic along Wilkes Place and along Grissom Road. The evaluation limits on Wilkes Place are from Alicia Parkway to Grissom Road, and the limits on Grissom Road are from Wilkes Place to Las Bolsas. A multiway Stop analysis for the T-intersection of Grissom Road and Velasquez Road is also to be evaluated.

These segments of Wilkes Place and Grissom Road are located west of the I-5 Freeway, between Alicia Parkway and Paseo de Valencia (*see Location Map below*). These two (2) segments are connected via a roadway bend, and are both entirely within the City of Laguna Hills jurisdiction.



BACKGROUND

Wilkes Place, from Alicia Parkway to Grissom Road, is a north-south, local roadway with single-family residential properties on both sides of the street. The roadway is primarily (36) feet wide curb-to-curb. The 2-lane roadway provides for one lane of traffic in each direction, which are divided primarily by a yellow skip centerline. The roadway has concrete curb, gutter, parkway, and sidewalk improvements on both sides. On-street parking is allowed on both sides of the street. Several roadway street lights are staggered along both sides of the roadway. The intersection with Alicia Parkway is controlled by a traffic signal. Wilkes Place has a 25 MPH Speed Limit Sign posted near Alicia Parkway. There are various School Crossing warning signs, and SLOW SCHOOL XING pavement markings, located along Wilkes Place which are applicable to the uncontrolled yellow high-visibility marked crosswalk at Barents.

Grissom Road, from Wilkes Place to Las Bolsas, is an east-west, local roadway with single-family residential properties on both sides of the street. The roadway is approximately (36) feet wide curb-to-curb. The 2-lane roadway provides for one lane of traffic in each direction, which are not divided by any centerline striping. The roadway has concrete curb, gutter, parkway, and sidewalk improvements on both sides. On-street parking is allowed on both sides of the street. Several roadway street lights are staggered along both sides of the roadway. Also, the T-intersection with Velasquez Road is controlled by a 1-Way Stop sign control that faces Velasquez Road. Grissom Road does not have posted speed limit signs.

As mentioned, the above two (2) segments are connected via a 90-degree roadway bend, which is divided by a painted, double-yellow centerline. Also, there is a Curve Ahead 15 MPH warning sign posted in advance on each approach to the roadway bend.

DATA COLLECTION

24-hour Vehicular Speed Counts

HCI coordinated the collection of 24-hour Average Daily Traffic (ADT) counts on both roadways. These counts, including speed data, were taken using a machine counter and road tubes at three (3) midpoint locations along Wilkes Place and Grissom Road, between Alicia Parkway and Las Bolsas. The locations were chosen to obtain the most ‘free flow’ traffic speeds between the project limits. The vehicular traffic data was collected on three weekdays and two weekend days (i.e., Friday - Tuesday) in order to provide average vehicular speeds occurring during the week and weekend. The first location was gathered on **Wilkes Place near Mawson Drive** with results summarized below:

Friday, February 20, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	20	27
Southbound	22	29
Both Directions	21	28
Saturday, February 21, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	20	28
Southbound	22	29
Both Directions	21	29
Sunday, February 22, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	20	27
Southbound	21	27
Both Directions	21	27
Monday, February 23, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	18	24
Southbound	20	27
Both Directions	19	26
Tuesday, February 24, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	18	24
Southbound	21	27
Both Directions	20	26

As shown above, vehicular speeds were relatively consistent in each direction. As typically expected, the 85th percentile speeds are higher than the posted speed limit of 25 MPH [average speed = 21 MPH; average 85th-percentile = 27 MPH].

Evaluation of Vehicular Traffic Speeds and Cut-Thru Traffic on Wilkes Place and Grissom Road, and Multiway Stop Control on Grissom Road at Velasquez Road, in the City of Laguna Hills, CA

DATA COLLECTION (continued)

The ADT speed-counts for the second location were gathered on **Grissom Road between Wilkes Place and Velasquez Road** with results summarized below:

Friday, February 20, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	23	28
Westbound	23	29
Both Directions	23	29
Saturday, February 21, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	24	29
Westbound	23	29
Both Directions	24	29
Sunday, February 22, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	23	29
Westbound	23	29
Both Directions	23	29
Monday, February 23, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	23	30
Westbound	23	30
Both Directions	23	30
Tuesday, February 24, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	23	29
Westbound	23	28
Both Directions	23	29

As shown above, vehicular speeds were relatively consistent in each direction for this roadway segment as well.

As typically expected, the 85th percentile speeds are higher than the applicable local speed limit of 25 MPH [average speed = 23 MPH; average 85th-percentile = 29 MPH].

Evaluation of Vehicular Traffic Speeds and Cut-Thru Traffic on Wilkes Place and Grissom Road, and Multiway Stop Control on Grissom Road at Velasquez Road, in the City of Laguna Hills, CA

DATA COLLECTION (continued)

The ADT speed-counts for the third location were gathered on **Grissom Road between Velasquez Road and Las Bolsas** with results summarized below:

Friday, February 20, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	22	28
Westbound	22	29
Both Directions	22	29
Saturday, February 21, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	23	29
Westbound	22	27
Both Directions	23	28
Sunday, February 22, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	22	28
Westbound	22	27
Both Directions	22	28
Monday, February 23, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	21	27
Westbound	22	28
Both Directions	22	28
Tuesday, February 24, 2026	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Eastbound	21	27
Westbound	22	28
Both Directions	22	28

As shown above, vehicular speeds were relatively consistent in each direction for this roadway segment as well.

As typically expected, the 85th percentile speeds are higher than the applicable local speed limit of 25 MPH [average speed = 22 MPH; average 85th-percentile = 28 MPH].

The overall collected speed-count data can be found attached in Appendix A.

DATA COLLECTION (continued)

Pedestrian Counts

In regards to pedestrian activity, field observations during our site visit confirmed a low activity of pedestrians, especially which crossed the uncontrolled roadway of Grissom Road at/near Velasquez Road.

At the City’s request, 5-Day, 12-hour (7:00AM to 7:00PM) pedestrian data was collected on the same days as the vehicular speed count data (i.e., Friday - Tuesday) at/near the T-intersection of Grissom Road and Velasquez Road. Results are shown below:

<u>Day:</u>	<u>Peds Xing Grissom Road</u>	<u>Peds Xing Velasquez Road</u>
Friday (02/20/26):	16	5
Saturday (02/21/26):	12	24
Sunday (02/22/26):	24	19
Monday (02/23/26):	10	13
Tuesday (02/24/26):	9	18
Average Pedestrians:	14	16

The 12-hour data resulted in a five-day average total of (14) pedestrians that crossed the uncontrolled roadway of Grissom Road at/near its T-intersection with Velasquez Road, which translates to approximately (1) pedestrian per hour.

Similarly, the 12-hour data resulted in a five-day average total of (16) pedestrians that crossed the Stop-controlled south leg of Velasquez Road at its T-intersection with Grissom Road, which also translates to just over (1) pedestrian per hour.

The pedestrian traffic count data can also be found attached in Appendix A.

DATA COLLECTION (continued)

Collision History

HCI also gathered the latest available raw collision history data for the City of Laguna Hills from the State of California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS), which is where local agencies such as cities report their collisions. A comprehensive 5-year traffic collision history summary report was prepared for both segments of Wilkes Place and Grissom Road. Table 1 below provides a quick view of the most recent summary of collision history that has been reported along these roadway segments.

**TABLE 1
SWITRS COLLISION SUMMARY**

Intersection	2021-22		2023		2024		2025	
	Date	Type of Coll.	Date	Type of Coll.	Date	Type of Coll.	Date	Type of Coll.
Wilkes Place and Grissom Road <i>(from Alicia Parkway to Velasquez Road)</i>	01/26/22	Rear-End		<i>None Reported</i>		<i>None Reported</i>		<i>None Reported</i>

Note: Information above is derived per the latest 5-year raw traffic collision database file gathered from CHP-SWITRS (SWITRS).

As summarized above, there has been a total of one (1) collision reported along both these roadway segments over the past (5) years of available SWITRS collision data. This one (1) collision occurred on Wilkes Place approximately 100 feet north of Grissom Road, and was categorized as a Rear-End with a parked vehicle due to improper turning. *The SWITRS traffic collision data report prepared for this segment is included in Appendix B.*

FIELD REVIEW

Roadway Signing & Striping

During our afternoon field-review, HCI staff drove and walked the Wilkes Place and Grissom Road roadway segments in both directions, in order to review the existing traffic signing & striping. As mentioned in the Background section, the 2-lane roadways provide for one lane of traffic in each direction, and only the lanes along Wilkes Place are separated by a painted yellow centerline throughout the segment. Below is a summary of our field-review findings, and list of existing signs and markings:

- The intersection of Wilkes Place and Alicia Parkway is controlled by a traffic signal.
- There is one (1) uncontrolled yellow high-visibility marked crosswalk across Wilkes Place at Barents (the southerly offset leg), with applicable SCHOOL warning signage and advance SLOW SCHOOL XING pavement markings.
- One (1) Neighborhood Watch sign posted at Mawson Drive.
- There is one (1) Curve Ahead 15 MPH warning sign posted on each approach in advance of the 90-degree bend connecting Wilkes Place and Grissom Road.
- There is a double-yellow centerline at the roadway bend.
- The intersection of Grissom Road and Velasquez Road is controlled by a 1-Way Stop only for Velasquez Road.
- There are rumble strips (i.e., white raised pavement markers staggered in 3 lines) on Grissom Road, west of Velasquez Road.
- There is one Right Turn Arrow warning sign, along with a yellow marker, at the roadway bend facing westbound Grissom Road traffic.

Please see Exhibits 1 – 4 on the following pages showing recent field-review pictures along Wilkes Place and Grissom Road, from Alicia Parkway to Velasquez Road.

Evaluation of Vehicular Traffic Speeds and Cut-Thru Traffic on Wilkes Place and Grissom Road, and Multiway Stop Control on Grissom Road at Velasquez Road, in the City of Laguna Hills, CA

EXHIBIT 1



WILKES PLACE (*Looking Southerly*) from Alicia Parkway



WILKES PLACE (*Looking Southerly*) from south of Barents

Evaluation of Vehicular Traffic Speeds and Cut-Thru Traffic on Wilkes Place and Grissom Road, and Multiway Stop Control on Grissom Road at Velasquez Road, in the City of Laguna Hills, CA

EXHIBIT 2



WILKES PLACE (Looking Southerly) from Mawson Drive



WILKES PLACE (Looking Southerly) at the 90-degree roadway bend at Grissom Road

EXHIBIT 3



GRISSOM ROAD (*Looking Westerly*) from east of Velasquez Road



GRISSOM ROAD (*Looking Westerly*) from west of Velasquez Road

Evaluation of Vehicular Traffic Speeds and Cut-Thru Traffic on Wilkes Place and Grissom Road, and Multiway Stop Control on Grissom Road at Velasquez Road, in the City of Laguna Hills, CA

EXHIBIT 4



GRISSOM ROAD (*Looking Westerly*) towards Wilkes Place



GRISSOM ROAD (*Looking Westerly*) at the roadway bend at Wilkes Place

CUT-THROUGH TRAFFIC

HCI staff also performed several travel runs in each direction along Wilkes Place and Grissom Road, in order to determine an approximate ‘maximum’ amount of time that it should take a vehicular driver to travel from the intersection of Wilkes Place and Alicia Parkway to the intersection of Grissom Road and Velasquez Drive, and vice versa. The runs included a range of approximately one minute to approximately one minute and a half. As such, a 2-minute time frame was determined as an appropriate ‘maximum’ time.

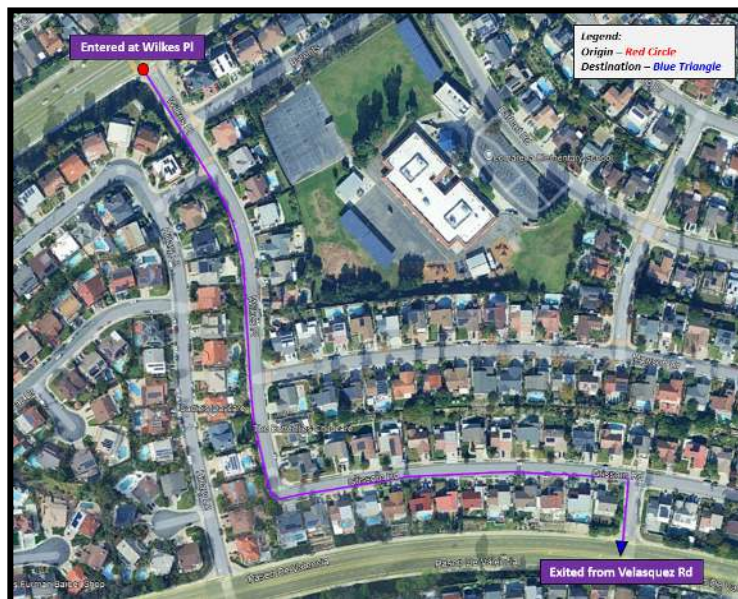
Additionally, an Origin-Destination (O&D) study (i.e., vehicle tracking survey) was also conducted on Tuesday, February 24, 2026 to quantify the amount of traffic possibly using Wilkes Place and Grissom Road as a short-cut. The study tracked vehicles entering and exiting Wilkes Place/Alicia Parkway to/from Velasquez Drive/Paseo de Valencia. The data was collected during the 12-hour period of 7:00 AM to 7:00 PM.

The study documented where the vehicle was coming from and going to, in order to determine if the vehicle is on a natural travel path, or is actually cutting-through the neighborhood. For example, a vehicle entering westbound Grissom Road from Velasquez Road/Paseo de Valencia and matches up at Wilkes Place/Alicia Parkway in a certain ‘shorter’ period of time (i.e., ‘within’ a two (2) minute time frame) is most likely a cut-through vehicle. However, if a vehicle is matched in a certain ‘longer’ period of time (i.e., ‘greater’ than a two (2) minute time frame), it is not considered as cut-through, but continuing on their natural travel route through the neighborhood.

In other words, a vehicular match that occurs and is greater than two (2) minutes reflects a vehicle that entered at one of these outer intersections, made a stop at one of the homes along Wilkes Place/Grissom Road or other adjacent street, and then resumed their natural travel path to the other outer intersection, is not considered cut-through. On the next page are aerial images depicting the two (2) travel paths on Wilkes Place/Grissom Road:

CUT-THROUGH TRAFFIC *(continued)*

- **1st Travel Path** = southbound Wilkes Place, from Alicia Parkway to the intersection of Velasquez Road at Paseo de Valencia.
- **2nd Travel Path** = northbound Velasquez Road, from Paseo de Valencia to the intersection of Wilkes Place at Alicia Parkway.



CUT-THROUGH TRAFFIC *(continued)*

The *tables attached in Appendix C* provide details of the total number of ‘matched’ vehicles for each travel path described above during the Tuesday, 12-hour period.

As shown highlighted in yellow in the tables, the matched vehicle results that were determined as cut-through vehicles are summarized below:

1st Travel Path

- (17) out of the total (33) matched southbound vehicles during the 12-hour period were at two (2) minutes or below, and determined as cut-through.

2nd Travel Path

- (10) out of the total (29) matched northbound vehicles during the 12-hour period were at two (2) minutes or below, and determined as cut-through.

During the 12-hour period from 7:00 AM to 7:00 PM, a total of (27) vehicles were determined as cut-through traffic using the two (2) travel paths along Wilkes Place and Grissom Road.

The (27) cut-through vehicles divided by the total ADT count of (738) vehicles on Wilkes Place on Tuesday, 02/24/2026, results in approximately (4%) determined as cut-through traffic in the entire day.

(See overall Origin-Destination Study collected data in Appendix C).

MULTIWAY STOP SIGN ANALYSIS

Warrant Guidelines

As is common practice with many municipal agencies, the City of Laguna Hills follows State guidelines for determining if traffic control devices, such as multi-way stop signs, should be installed. Therefore, the prevailing source used for this analysis is the State of California Manual on Uniform Traffic Control Devices (*California MUTCD*). The California MUTCD contains minimum guidelines regarding traffic volumes, collisions, speeds, visibility, and other criteria in order to satisfy the requirements, in this case, for the recommendation and installation of a multi-way (3-Way) stop at the intersection of Grissom Road and Velasquez Road.

The California MUTCD **Multi-way Stop** Applications Guidance criteria are described in the following four main parts:

- 1) As an interim measure where traffic control signals are justified;
- 2) Reported crashes – five or more in a 12-month period that are susceptible to correction by a multi-way stop installation;
- 3) Minimum traffic and pedestrian volumes, speeds, and delay; and,
- 4) Where a combination of the above criteria are all satisfied to 80 percent.

If any one, or a combination, of these criteria is met, then a multi-way stop application should be considered. If these criteria are not met, the installation of an unwarranted multi-way stop sign installation is typically not recommended.

The California MUTCD guidelines describing Right-of-Way at Intersections, STOP Sign Applications, and Multi-way Stop Applications are included in Appendix D.

MULTIWAY STOP SIGN ANALYSIS (continued)

The California MUTCD **Multi-way Stop** Applications section contains guidelines, such as minimum collisions and traffic volumes necessary for the justification of multi-way stop control. The general guidelines given for a stop sign application begin with using engineering judgment for the installation of a stop sign(s) on a street entering a through highway and where high speeds on the cross street make entry difficult, or due to restricted view, or when crash records indicate a need for control by a stop sign. Further guidance criteria found in the California MUTCD include the following important statements: *“YIELD or STOP signs should not be used for speed control... In most cases, the street carrying the lowest volume of traffic should be controlled... A STOP (R1-1) sign is not a ‘cure-all’ and is not a substitute for other traffic control devices. Often, the need for a STOP (R1-1) sign can be eliminated if the sight distance is increased by removing obstructions... A YIELD or STOP sign should not be installed on the higher volume roadway unless justified by an engineering study... Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal...”*

Collision History

The guidelines for Multi-way Stop Applications contained in the California MUTCD regarding collisions, or crashes, require a minimum of five (5) reported crashes occurring 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 (i.e., broadside, or head-on) and pedestrian-vehicle collisions. As mentioned, the latest available collision history was gathered by HCI from the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS), which is where local jurisdictions such as cities report their collisions.

MULTIWAY STOP SIGN ANALYSIS (continued)

Collision History (cont'd)

As previously shown above on Page 7, there has been a total of one (1) collision reported along these roadway segments over the past (5) years of available SWITRS collision data. This one (1) collision occurred on Wilkes Place approximately 100 feet north of Grissom Road, and was categorized as a Rear-End with a parked vehicle due to improper turning. As such, there was no recent collision history for the T-intersection of Grissom Road and Velasquez Road, so it did not meet the minimum five (5) reported crashes occurring in a 12-month period susceptible to correction by a multi-way stop installation. ***The SWITRS traffic collision data report prepared for these segments is included in Appendix B.***

Traffic Volumes

HCI collected Average Daily Traffic (ADT) vehicular approach counts to the T-intersection of Grissom Road and Velasquez Road on Tuesday, February 24, 2026, in order to account for vehicles that typically use this intersection. The ADT approach count for Grissom Road is (425) vehicles per day with the highest AM peak-hour approach volume having (61) vehicles, and (46) vehicles in the PM peak-hour. The ADT approach count for Velasquez Road is (326) vehicles with the highest AM peak-hour approach volume having (25) vehicles, and (46) vehicles in the PM peak-hour.

Table 2 (next page) provides a breakdown of the approach volumes.

The traffic volume data collected for this intersection is also included in Appendix A.

MULTIWAY STOP SIGN ANALYSIS (continued)

**TABLE 2
HIGHEST 24-HOUR INTERSECTION APPROACH VEHICLE COUNTS**

Street	Direction	ADT Volume	Directional Split	Highest Hourly Volume
Grissom Road	Eastbound	175	41%	26 (7 – 8 AM)
	Westbound	250	59%	35 (7 – 8 AM)
Velasquez Road	Northbound	326	100%	46 (2 – 3 PM)

Grissom Road is considered the ‘through’ or ‘major’ street at this residential T-intersection, since it carries higher volumes from both approaches, and drivers are not required to slow down, or even stop, before proceeding straight through the intersection. In comparison, Velasquez Road is considered the ‘minor’ street as northbound drivers on Velasquez Road are required to stop at Grissom Road and look both ways before proceeding to make a left-turn or right-turn. It is typically expected that the traffic volumes on the minor street are less than those on the major street. As can be seen from the table above, that is the case, as Velasquez Road carries approximately 43% of the entire traffic entering the intersection (Grissom Road carries 57% of entering traffic).

A part of the California MUTCD guideline criteria also calls for a reduction in the required minimum volumes when the critical approach speed (or 85th-percentile speed) on the major street exceeds 40 MPH. If that is the case, the minimum vehicular volumes to be met for a multiway stop sign installation are reduced to 70%. Based on speed-count data, the 85th percentile speed on Grissom Road is up to 29 MPH. As the 85th percentile speed limit is less than the 40 MPH limit required to reduce traffic volumes, the 70% minimum volumes for a multi-way stop sign analysis are not applicable, and the 100% minimum volumes were analyzed on the next page.

MULTIWAY STOP SIGN ANALYSIS (continued)

It is important to note that the highest hourly vehicle traffic counts shown in Table 2 above are given for the highest one-hour of traffic for each direction, and serve as a good indicator to compare with the required minimum hourly traffic volumes in the California MUTCD multi-way stop guidelines. It must also be mentioned that the average hourly minimum volumes for a multi-way stop application are to be satisfied for any eight (8) hours of an average day (not just for one hour in a day).

Table 3 below shows the California MUTCD minimum traffic volume guidelines for a Multi-way Stop Application in comparison with the highest 8-hour traffic count data collected at this intersection. Both Parts 1 and 2 of the minimum volume warrants below must be satisfied in order to fulfill the traffic volume warrant.

**TABLE 3
MULTIWAY STOP SIGN WARRANT FOR MINIMUM TRAFFIC VOLUMES
GRISSOM ROAD AT VELASQUEZ ROAD**

<p style="text-align: center;">Part 1.</p> <p>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,</p> <p style="text-align: center;">Results:</p> <p>No, average (38) vehicles per hour</p> <p>Only 13% of the required hourly traffic volume</p>	<i>and</i>	<p style="text-align: center;">Part 2.</p> <p>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,</p> <p style="text-align: center;">Results:</p> <p>No, average (29) vehicles per hour</p> <p>Only 15% of the required hourly traffic volume</p>	<i>but</i>	<p style="text-align: center;">Part 3.</p> <p>If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are (70) percent of the above values.</p> <p style="text-align: center;">Results:</p> <p>N/A. The 85th percentile speed is <u>not</u> greater than 40 MPH.</p>
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As shown above, the average hourly intersection approach traffic volumes for the highest 8-hour period did not satisfy both Parts 1 and 2 (13% major street / 15% minor street). Therefore, the minimum traffic volume warrant is not satisfied for a multiway stop.

MULTIWAY STOP SIGN ANALYSIS *(continued)*

Visibility

Impaired visibility, or restricted sight distance, due to the geometry of the T-intersection of Grissom Road and Velasquez Road, and other possible obstructions, were carefully considered during our field-review of the surrounding residential neighborhood property environment. The geometry of the intersection includes an approximate 90° angle, which is favorable for side-street sight distance. Grissom Road has a consistent, gradual decline in the westbound direction, while Velasquez Road has a gradual decline in the southbound direction. Driver sight distance was measured from the side-street approach to the T-intersection, as northbound traffic on Velasquez Road is required to stop, before proceeding to make a left-turn or right-turn onto Grissom Road. The measured distance was derived from the stopping sight distance guidelines found in the California MUTCD (*see Appendix E*). In this reference, a 25 MPH roadway speed recommends a minimum Stopping Sight Distance of 155 feet. However, the 85th percentile speed is typically higher than the posted speed limit. Therefore, a 30 MPH speed limit was used as a more conservative measure, which has a minimum sight distance of 200 feet. This distance was used when looking towards approaching, uncontrolled traffic along Grissom Road. More specifically, this stopping sight distance was field-measured from a typical ‘stopped’ vehicle location on Velasquez Road at the intersection looking towards the oncoming lanes of cross-traffic on Grissom Road. An orange cone was placed at this distance and a photograph was taken from a stopped driver’s perspective (i.e., approximately 3.5 feet in height). (*See sight distance photos in Exhibit 5 on the following page*). As shown, when looking from Velasquez Road, a driver does not have a clear line-of-sight to the minimum sight distance of 200 feet when looking west on Grissom Road if a vehicle is parked adjacent to the intersection. In addition, the City should notify the homeowner to remove the overgrown vegetation in the parkway for sight distance.

EXHIBIT 5



MULTIWAY STOP SIGN ANALYSIS (continued)

Engineering judgment should always be included in any decision regarding traffic safety improvements. Intersection lighting was found adequate as there are three (3) nearby street lights.

In regards to pedestrian and bicycle activity, our field observations confirmed a low-to-medium activity at this intersection. At the City's request, 5-Day, 12-hour (7:00AM to 7:00PM) pedestrian data was collected on the same days as the vehicular speed count data (i.e., Friday - Tuesday) at/near the T-intersection of Grissom Road and Velasquez Road. The 12-hour data resulted in a five-day average total of (14) pedestrians that crossed the uncontrolled roadway of Grissom Road at/near its T-intersection with Velasquez Road, which translates to approximately (1) pedestrian per hour. Similarly, the 12-hour data resulted in a five-day average total of (16) pedestrians that crossed the Stop-controlled south leg of Velasquez Road at its T-intersection with Grissom Road, which also translates to just over (1) pedestrian per hour. ***The overall collected traffic count data can be found attached in Appendix A.***

It was also determined that when looking from Velasquez Road, a driver does not have a clear line-of-sight to the minimum sight distance of 200 feet when looking west on Grissom Road. Installation of red curb for at least the first parking space on the south-side of Velasquez Road (approximately 25 or 30 feet on both sides) should be considered.

In addition, the City should notify homeowner to remove the overgrown vegetation in the parkway.

Based upon engineering judgment, it is determined that stopping traffic on Grissom Road at Velasquez Road is not required to enhance traffic safety at this T-intersection.

SUMMARY OF RESULTS & FINDINGS

- **Wilkes Place**, from Alicia Parkway to Grissom Road, is a north-south, local roadway with single-family residential properties on both sides. The roadway is primarily (36) feet wide, and the 2-lane roadway provides for one lane of traffic in each direction, which are divided primarily by a yellow skip centerline.
- The intersection with Alicia Parkway is controlled by a traffic signal.
- Wilkes Place has one (1) 25 MPH Speed Limit Sign posted near Alicia Parkway.
- There is one (1) uncontrolled yellow high-visibility marked crosswalk across Wilkes Place at Barents (the southerly offset leg), with applicable SCHOOL warning signage and advance SLOW SCHOOL XING pavement markings.
- One (1) Neighborhood Watch sign posted at Mawson Drive.
- There are rumble strips (i.e., white raised pavement markers staggered in 3 lines) on Wilkes Place, north of Grissom Road.

- **Grissom Road**, from Wilkes Place to Las Bolsas, is an east-west, local roadway with single-family residential properties on both sides. The roadway is approximately (36) feet wide curb-to-curb, and the 2-lane roadway provides for one lane of traffic in each direction, not divided by any centerline striping.
- The T-intersection with Velasquez Road is controlled by a 1-Way Stop sign control that faces Velasquez Road.
- There are rumble strips (i.e., white raised pavement markers staggered in 3 lines) on Grissom Road, west of Velasquez Road, and also west of Las Bolsas.
- Grissom Road does not have posted speed limit signs.
- There is one (1) Curve Ahead 15 MPH warning sign posted on each approach in advance of the 90-degree bend connecting Wilkes Place and Grissom Road.
- There is also one (1) Right Turn Arrow warning sign, along with a yellow marker, posted at the roadway bend facing westbound Grissom Road traffic.

SUMMARY OF RESULTS & FINDINGS (continued)

- The 85th percentile speeds resulted highest along Grissom Road, west of Velasquez Road, which are above the applicable local speed limit of 25 MPH [average speed = 23 MPH; average 85th-percentile = 29 MPH].
- The 12-hour pedestrian data resulted in a five-day average total of (14) pedestrians that crossed the uncontrolled roadway of Grissom Road at/near its T-intersection with Velasquez Road, which translates to approximately (1) pedestrian per hour.
- There has been a total of one (1) collision reported along both roadway segments over the past five (5) years of available SWITRS collision data. The collision occurred on Wilkes Place approximately (100) feet north of Grissom Road, and categorized as a Rear-End with a parked vehicle due to improper turning.
- Regarding cut-through traffic, during a Tuesday 12-hour period from 7:00 AM to 7:00 PM, a total of (27) vehicles were determined as cut-through traffic using the two (2) travel paths along Wilkes Place and Grissom Road. The (27) cut-through vehicles divided by the total ADT count of (738) vehicles on Wilkes Place results in approximately (4%) determined as cut-through traffic in the entire day.
- Lastly, regarding a possible multiway Stop at the intersection of Grissom Road and Velasquez Road, based upon engineering judgment, it is determined that stopping traffic on Grissom Road at Velasquez Road is not required to enhance traffic safety at this T-intersection. However, it was determined that when looking from Velasquez Road, a driver does not have a clear line-of-sight to the minimum sight distance of 200 feet when looking west on Grissom Road. Installation of red curb for at least the first parking space on the south-side (approximately 25 or 30 feet on both sides of Velasquez Road) should be considered.

RECOMMENDATIONS

In overall review of the evaluation findings, since the 85th-percentile speeds were verified as higher than the applicable 25 MPH speed limit along these roadway segments (but still considered within typical range for these types of local roadway), the following suggestions are offered for the City's consideration for addressing travel speeds on this roadway:

- Install one (1) 25 MPH Speed Limit sign on Grissom Road, just west of Velasquez Road.
- Consider installing '25' pavement markings to supplement the existing and new 25 MPH Speed Limit signs.
- Increase law enforcement presence as often as available, or as resources permit.
- Place a portable radar speed trailer near the midpoints of the roadway segments, as often as available.

In regards to the existing signing & striping along Grissom Road, it is recommended to install a yellow skip centerline (similar to the existing striping along Wilkes Place).

In regards to cut-through traffic, during a Tuesday 12-hour period from 7:00 AM to 7:00 PM, a total of (27) vehicles out of (738), or approximately 4%, were determined as cut-through traffic. A common treatment to potentially minimize cut-through traffic is to prohibit turning movements. In this case, the City may consider installing NO RIGHT TURN ON RED 7-9AM & 4-6PM signs. Although this prohibition would potentially reduce cut-through traffic, it would also apply to the local residents. Based on the percentage of cut-through traffic, this turn prohibition would disproportionately affect local residents in our opinion. As such, we advise that turn prohibitions not be implemented at this time.

Lastly, in regards to a multiway Stop at the intersection of Grissom Road and Velasquez Road, it was determined that stopping traffic on Grissom Road at Velasquez Road is not required to enhance traffic safety at this T-intersection. *(continued on next page)*

RECOMMENDATIONS *(continued)*

However, it was determined that when looking from Velasquez Road, a stopped driver does not have a clear line-of-sight to the minimum sight distance of 200 feet when looking west on Grissom Road. As such, installation of red curb for at least the first parking space on the south-side (approximately 25 or 30 feet on both sides of Velasquez Road) is recommended. *Please see our recommendations exhibit in Appendix F.*

In addition, the City should notify homeowner to remove the overgrown vegetation in the parkway on the south-side of Grissom Road, just west of Velasquez Road.

APPENDIX A

**ADT SPEED-COUNT DATA AT (3) LOCATIONS
(5 DAYS EACH LOCATION), AND
PEDESTRIAN/BICYCLE COUNT DATA AT (1) LOCATION
ADT APPROACH COUNTS AT (1) LOCATION**

SPEED

Wilkes PI N/O Mawson Dr

Day: Friday
Date: 2/20/2026

City: Laguna Hills
Project #: CA26_010013_001n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
6:00	0	3	2	2	0	0	0	0	0	0	0	0	0	7
7:00	4	3	1	3	1	1	0	0	0	0	0	0	0	13
8:00	1	4	5	2	2	0	0	0	0	0	0	0	0	14
9:00	0	10	1	3	1	0	0	0	0	0	0	0	0	15
10:00	4	4	4	3	3	0	0	0	0	0	0	0	0	18
11:00	2	7	4	2	0	0	0	0	0	0	0	0	0	15
12:00 PM	1	7	4	1	2	2	0	0	0	0	0	0	0	17
13:00	2	11	3	2	1	0	0	0	0	0	0	0	0	19
14:00	2	9	0	2	1	0	0	0	0	0	0	0	0	14
15:00	2	6	3	3	0	0	0	0	0	0	0	0	0	14
16:00	4	4	5	3	0	0	0	0	0	0	0	0	0	16
17:00	1	4	4	4	2	1	0	0	0	0	0	0	0	16
18:00	3	7	2	3	0	0	0	0	0	0	0	0	0	15
19:00	1	4	2	2	1	0	0	0	0	0	0	0	0	10
20:00	2	1	1	0	0	0	0	0	0	0	0	0	0	4
21:00	1	4	5	1	0	0	0	0	0	0	0	0	0	11
22:00	1	4	0	1	0	0	0	0	0	0	0	0	0	6
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	33	96	46	38	14	4								231
% of Totals	14%	42%	20%	16%	6%	2%								100%

AM Volumes	13	34	17	16	7	1	0	0	0	0	0	0	0	88
% AM	6%	15%	7%	7%	3%	0%								38%
AM Peak Hour	7:00	9:00	8:00	7:00	10:00	7:00								10:00
Volume	4	10	5	3	3	1								18
PM Volumes	20	62	29	22	7	3	0	0	0	0	0	0	0	143
% PM	9%	27%	13%	10%	3%	1%								62%
PM Peak Hour	16:00	13:00	16:00	17:00	12:00	12:00								13:00
Volume	4	11	5	4	2	2								19
Directional Peak Periods		AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes						
All Speeds		Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%	
		27		12%	36		16%	32		14%	136		59%	

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Wilkes PI	North Bound	15	18	20	27	30	231
Wilkes PI	South Bound	17	21	22	29	32	233

SPEED

Wilkes PI N/O Mawson Dr

Day: Friday
Date: 2/20/2026

City: Laguna Hills
Project #: CA26_010013_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
7:00	2	3	0	1	0	1	0	0	0	0	0	0	0	7
8:00	2	5	1	1	0	0	0	0	0	0	0	0	0	9
9:00	0	2	2	1	1	0	0	0	0	0	0	0	0	6
10:00	0	2	0	3	1	0	0	0	0	0	0	0	0	6
11:00	1	5	4	4	1	0	0	0	0	0	0	0	0	15
12:00 PM	0	2	4	3	4	1	0	0	0	0	0	0	0	14
13:00	1	11	4	2	3	2	0	0	0	0	0	0	0	23
14:00	1	11	8	2	1	0	0	0	0	0	0	0	0	23
15:00	1	4	10	3	3	0	0	0	0	0	0	0	0	21
16:00	1	7	6	5	1	0	0	0	0	0	0	0	0	20
17:00	0	3	5	5	2	0	0	0	0	0	0	0	0	15
18:00	1	2	7	3	2	0	0	0	0	0	0	0	0	15
19:00	0	4	9	2	2	0	0	0	0	0	0	0	0	17
20:00	0	4	3	2	1	0	0	0	0	0	0	0	0	10
21:00	1	9	2	1	0	0	0	0	0	0	0	0	0	13
22:00	0	2	1	3	2	0	0	0	0	0	0	0	0	8
23:00	0	3	0	1	0	0	0	0	0	0	0	0	0	4
Totals	11	82	68	42	26	4								233
% of Totals	5%	35%	29%	18%	11%	2%								100%

AM Volumes	5	20	9	10	5	1	0	0	0	0	0	0	0	50
% AM	2%	9%	4%	4%	2%	0%								21%
AM Peak Hour	7:00	8:00	11:00	11:00	2:00	7:00								11:00
Volume	2	5	4	4	1	1								15
PM Volumes	6	62	59	32	21	3	0	0	0	0	0	0	0	183
% PM	3%	27%	25%	14%	9%	1%								79%
PM Peak Hour	13:00	13:00	15:00	16:00	12:00	13:00								13:00
Volume	1	11	10	5	4	2								23
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
			16		7%	37		16%	35		15%	145		62%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Wilkes PI	North Bound	15	18	20	27	30	231
Wilkes PI	South Bound	17	21	22	29	32	233

SPEED

Wilkes PI N/O Mawson Dr

Day: Saturday
Date: 2/21/2026

City: Laguna Hills
Project #: CA26_010013_001n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	1	0	1	1	0	0	0	0	0	0	0	0	0	3
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
5:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:00	2	1	0	2	0	0	0	0	0	0	0	0	0	5
7:00	2	2	3	1	1	0	0	0	0	0	0	0	0	9
8:00	1	4	4	3	1	1	0	0	0	0	0	0	0	14
9:00	3	5	0	2	2	1	0	0	0	0	0	0	0	13
10:00	3	10	3	2	2	0	0	0	0	0	0	0	0	20
11:00	3	5	2	0	1	0	0	0	0	0	0	0	0	11
12:00 PM	3	2	4	3	2	0	0	0	0	0	0	0	0	14
13:00	1	5	6	1	2	0	0	0	0	0	0	0	0	15
14:00	3	7	2	7	0	0	0	0	0	0	0	0	0	19
15:00	3	6	4	0	2	0	0	0	0	0	0	0	0	15
16:00	5	7	4	2	0	0	0	0	0	0	0	0	0	18
17:00	2	6	3	2	2	1	0	0	0	0	0	0	0	16
18:00	1	5	2	0	0	0	0	0	0	0	0	0	0	8
19:00	0	2	0	1	1	0	0	0	0	0	0	0	0	4
20:00	2	3	1	2	0	0	0	0	0	0	0	0	0	8
21:00	0	1	1	1	0	0	0	0	0	0	0	0	0	3
22:00	1	3	3	0	0	0	0	0	0	0	0	0	0	7
23:00	2	4	2	1	0	0	0	0	0	0	0	0	0	9
Totals	38	83	45	31	16	3								216
% of Totals	18%	38%	21%	14%	7%	1%								100%

AM Volumes	15	32	13	11	7	2	0	0	0	0	0	0	0	80		
% AM	7%	15%	6%	5%	3%	1%								37%		
AM Peak Hour	9:00	10:00	8:00	8:00	9:00	8:00								10:00		
Volume	3	10	4	3	2	1								20		
PM Volumes	23	51	32	20	9	1	0	0	0	0	0	0	0	136		
% PM	11%	24%	15%	9%	4%	0%								63%		
PM Peak Hour	16:00	14:00	13:00	14:00	12:00	17:00								14:00		
Volume	5	7	6	7	2	1								19		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		23	11%		29	13%		34	16%		130		60%			

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Wilkes PI	North Bound	14	19	20	28	31	216
Wilkes PI	South Bound	17	20	22	29	32	229

SPEED

Wilkes PI N/O Mawson Dr

Day: Saturday
Date: 2/21/2026

City: Laguna Hills
Project #: CA26_010013_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	1	0	0	0	1	0	0	0	0	0	0	0	0	2
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
6:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
7:00	0	4	0	0	0	1	0	0	0	0	0	0	0	5
8:00	1	0	0	0	0	1	0	0	0	0	0	0	0	2
9:00	0	3	1	1	3	0	0	0	0	0	0	0	0	8
10:00	0	5	1	1	1	1	0	0	0	0	0	0	0	9
11:00	1	6	2	7	3	1	0	0	0	0	0	0	0	20
12:00 PM	1	3	9	2	1	0	0	0	0	0	0	0	0	16
13:00	1	8	6	3	2	1	0	0	0	0	0	0	0	21
14:00	2	8	1	4	1	0	0	0	0	0	0	0	0	16
15:00	1	8	2	6	0	0	0	0	0	0	0	0	0	17
16:00	1	5	4	4	1	0	0	0	0	0	0	0	0	15
17:00	0	5	5	7	0	0	0	0	0	0	0	0	0	17
18:00	0	8	2	1	1	0	0	0	0	0	0	0	0	12
19:00	2	9	2	3	2	0	0	0	0	0	0	0	0	18
20:00	1	7	3	3	0	0	0	0	0	0	0	0	0	14
21:00	0	1	2	3	2	1	0	0	0	0	0	0	0	9
22:00	0	7	4	2	1	0	0	0	0	0	0	0	0	14
23:00	0	4	0	1	0	0	0	0	0	0	0	0	0	5
Totals	13	93	46	50	21	6								229
% of Totals	6%	41%	20%	22%	9%	3%								100%

AM Volumes	4	20	6	11	10	4	0	0	0	0	0	0	0	55
% AM	2%	9%	3%	5%	4%	2%								24%
AM Peak Hour		11:00	11:00	11:00	9:00	7:00								11:00
Volume	1	6	2	7	3	1								20
PM Volumes	9	73	40	39	11	2	0	0	0	0	0	0	0	174
% PM	4%	32%	17%	17%	5%	1%								76%
PM Peak Hour	14:00	19:00	12:00	17:00	13:00	13:00								13:00
Volume	2	9	9	7	2	1								21
Directional Peak Periods All Speeds			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume		Volume		Volume		Volume		Volume		Volume		Volume	
	7	↔	37	↔	32	↔	153	↔	3%	16%	14%	67%		

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Wilkes PI	North Bound	14	19	20	28	31	216
Wilkes PI	South Bound	17	20	22	29	32	229

SPEED

Wilkes PI N/O Mawson Dr

Day: Sunday
Date: 2/22/2026

City: Laguna Hills
Project #: CA26_010013_001n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	1	2	0	1	0	0	0	0	0	0	0	0	0	4
1:00	1	3	0	0	0	0	0	0	0	0	0	0	0	4
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
6:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
7:00	1	4	0	0	0	0	0	0	0	0	0	0	0	5
8:00	0	2	0	1	1	1	0	0	0	0	0	0	0	5
9:00	8	5	0	1	0	1	0	0	0	0	0	0	0	15
10:00	0	4	0	3	2	0	0	0	0	0	0	0	0	9
11:00	3	4	2	3	0	0	0	0	0	0	0	0	0	12
12:00 PM	4	12	0	6	2	0	0	0	0	0	0	0	0	24
13:00	3	9	3	0	1	0	0	0	0	0	0	0	0	16
14:00	4	5	2	1	1	0	0	0	0	0	0	0	0	13
15:00	1	12	2	1	2	0	0	0	0	0	0	0	0	18
16:00	1	5	3	2	1	0	0	0	0	0	0	0	0	12
17:00	0	2	5	0	1	0	0	0	0	0	0	0	0	8
18:00	0	2	1	2	1	0	0	0	0	0	0	0	0	6
19:00	0	1	2	1	0	0	0	0	0	0	0	0	0	4
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	2	1	0	1	1	0	0	0	0	0	0	0	5
22:00	0	2	1	1	0	0	0	0	0	0	0	0	0	4
23:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	28	78	23	24	13	3								169
% of Totals	17%	46%	14%	14%	8%	2%								100%

AM Volumes	14	25	3	10	3	2	0	0	0	0	0	0	0	57		
% AM	8%	15%	2%	6%	2%	1%								34%		
AM Peak Hour	9:00	9:00	11:00	10:00	10:00	8:00								9:00		
Volume	8	5	2	3	2	1								15		
PM Volumes	14	53	20	14	10	1	0	0	0	0	0	0	0	112		
% PM	8%	31%	12%	8%	6%	1%								66%		
PM Peak Hour	12:00	12:00	17:00	12:00	12:00	21:00								12:00		
Volume	4	12	5	6	2	1								24		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		10			6%	40			24%	20			12%	99		

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Wilkes PI	North Bound	14	17	20	27	32	169
Wilkes PI	South Bound	16	21	21	27	30	174

SPEED

Wilkes PI N/O Mawson Dr

Day: Sunday
Date: 2/22/2026

City: Laguna Hills
Project #: CA26_010013_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	3
1:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
7:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
8:00	1	0	3	1	0	0	0	0	0	0	0	0	0	5
9:00	1	4	0	1	1	0	0	0	0	0	0	0	0	7
10:00	0	3	4	3	1	1	0	0	0	0	0	0	0	12
11:00	1	7	2	2	0	1	0	0	0	0	0	0	0	13
12:00 PM	1	6	2	1	1	0	0	0	0	0	0	0	0	11
13:00	1	8	7	4	0	0	0	0	0	0	0	0	0	20
14:00	0	5	7	3	0	0	0	0	0	0	0	0	0	15
15:00	2	5	2	1	1	0	0	0	0	0	0	0	0	11
16:00	0	6	6	1	1	1	0	0	0	0	0	0	0	15
17:00	1	3	3	1	2	0	0	0	0	0	0	0	0	10
18:00	0	8	1	4	0	0	0	0	0	0	0	0	0	13
19:00	1	2	4	1	0	0	0	0	0	0	0	0	0	8
20:00	0	1	4	1	0	0	0	0	0	0	0	0	0	6
21:00	0	6	1	2	0	0	0	0	0	0	0	0	0	9
22:00	0	2	0	1	0	0	0	0	0	0	0	0	0	3
23:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Totals	10	72	51	31	7	3								174
% of Totals	6%	41%	29%	18%	4%	2%								100%

AM Volumes	3	18	14	11	2	2	0	0	0	0	0	0	0	50
% AM	2%	10%	8%	6%	1%	1%								29%
AM Peak Hour	8:00	11:00	10:00	10:00	9:00	10:00								11:00
Volume	1	7	4	3	1	1								13
PM Volumes	7	54	37	20	5	1	0	0	0	0	0	0	0	124
% PM	4%	31%	21%	11%	3%	1%								71%
PM Peak Hour	15:00	13:00	13:00	13:00	17:00	16:00								13:00
Volume	2	8	7	4	2	1								20
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume		%	Volume		%	Volume		%	Volume		%
			10	↔	6%	31	↔	18%	25	↔	14%	108	↔	62%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Wilkes PI	North Bound	14	17	20	27	32	169
Wilkes PI	South Bound	16	21	21	27	30	174

SPEED

Wilkes PI N/O Mawson Dr

Day: Monday
Date: 2/23/2026

City: Laguna Hills
Project #: CA26_010013_001n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	1	1	1	0	1	0	0	0	0	0	0	0	0	4
6:00	1	1	2	3	1	0	0	0	0	0	0	0	0	8
7:00	9	30	4	2	1	0	0	0	0	0	0	0	0	46
8:00	18	68	8	3	2	0	0	0	0	0	0	0	0	99
9:00	7	6	2	2	5	0	0	0	0	0	0	0	0	22
10:00	8	7	1	2	2	0	0	0	0	0	0	0	0	20
11:00	4	20	4	1	0	0	0	0	0	0	0	0	0	29
12:00 PM	3	6	4	3	0	0	0	0	0	0	0	0	0	16
13:00	6	8	2	4	1	1	0	0	0	0	0	0	0	22
14:00	8	67	5	1	1	0	0	0	0	0	0	0	0	82
15:00	6	11	1	2	3	0	0	0	0	0	0	0	0	23
16:00	2	13	5	6	2	1	0	0	0	0	0	0	0	29
17:00	2	8	7	2	0	1	0	0	0	0	0	0	0	20
18:00	6	4	2	2	0	0	0	0	0	0	0	0	0	14
19:00	0	8	3	1	1	0	0	0	0	0	0	0	0	13
20:00	0	4	0	1	0	0	0	0	0	0	0	0	0	5
21:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
22:00	3	1	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	85	270	52	35	20	3								465
% of Totals	18%	58%	11%	8%	4%	1%								100%

AM Volumes	49	134	22	13	12	0	0	0	0	0	0	0	0	230
% AM	11%	29%	5%	3%	3%									49%
AM Peak Hour	8:00	8:00	8:00	6:00	9:00									8:00
Volume	18	68	8	3	5									99
PM Volumes	36	136	30	22	8	3	0	0	0	0	0	0	0	235
% PM	8%	29%	6%	5%	2%	1%								51%
PM Peak Hour	14:00	14:00	17:00	16:00	15:00	13:00								14:00
Volume	8	67	7	6	3	1								82
Directional Peak Periods		AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes						
All Speeds		Volume	%	Volume	%	Volume	%	Volume	%					
		145	↔ 31%	38	↔ 8%	49	↔ 11%	233	↔ 50%					

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Wilkes PI	North Bound	14	17	18	24	29	465
Wilkes PI	South Bound	16	19	20	27	31	286

SPEED

Wilkes PI N/O Mawson Dr

Day: Monday
Date: 2/23/2026

City: Laguna Hills
Project #: CA26_010013_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
6:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2
7:00	4	7	2	4	0	0	0	0	0	0	0	0	0	17
8:00	2	11	8	4	2	0	0	0	0	0	0	0	0	27
9:00	3	6	4	1	0	0	0	0	0	0	0	0	0	14
10:00	6	5	1	0	2	0	0	0	0	0	0	0	0	14
11:00	1	4	2	2	1	0	0	0	0	0	0	0	0	10
12:00 PM	1	5	5	4	1	0	0	0	0	0	0	0	0	16
13:00	1	10	3	2	3	0	0	0	0	0	0	0	0	19
14:00	2	20	15	5	2	0	0	0	0	0	0	0	0	44
15:00	2	12	6	4	1	0	0	0	0	0	0	0	0	25
16:00	0	9	4	2	1	0	0	0	0	0	0	0	0	16
17:00	2	7	7	5	2	0	0	0	0	0	0	0	0	23
18:00	2	11	5	3	1	0	0	0	0	0	0	0	0	22
19:00	1	6	2	1	1	0	0	0	0	0	0	0	0	11
20:00	1	3	1	1	0	0	0	0	0	0	0	0	0	6
21:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
22:00	2	5	0	0	1	0	0	0	0	0	0	0	0	8
23:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Totals	30	127	67	41	20	1								286
% of Totals	10%	44%	23%	14%	7%	0%								100%

AM Volumes	16	36	18	14	5	1	0	0	0	0	0	0	0	90		
% AM	6%	13%	6%	5%	2%	0%								31%		
AM Peak Hour	10:00	8:00	8:00	7:00	8:00	6:00								8:00		
Volume	6	11	8	4	2	1								27		
PM Volumes	14	91	49	27	15	0	0	0	0	0	0	0	0	196		
% PM	5%	32%	17%	9%	5%									69%		
PM Peak Hour	14:00	14:00	14:00	14:00	13:00									14:00		
Volume	2	20	15	5	3									44		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		44	15%		35	12%		39	14%		168		59%			

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Wilkes PI	North Bound	14	17	18	24	29	465
Wilkes PI	South Bound	16	19	20	27	31	286

SPEED

Wilkes PI N/O Mawson Dr

Day: Tuesday
Date: 2/24/2026

City: Laguna Hills
Project #: CA26_010013_001n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
6:00	1	1	1	2	1	0	0	0	0	0	0	0	0	6
7:00	10	31	5	10	2	0	0	0	0	0	0	0	0	58
8:00	20	61	9	5	0	0	0	0	0	0	0	0	0	95
9:00	5	14	3	5	2	1	0	0	0	0	0	0	0	30
10:00	3	12	5	3	0	0	0	0	0	0	0	0	0	23
11:00	3	16	1	2	1	0	0	0	0	0	0	0	0	23
12:00 PM	3	7	1	1	0	0	0	0	0	0	0	0	0	12
13:00	3	12	5	3	1	0	0	0	0	0	0	0	0	24
14:00	12	48	2	7	0	0	0	0	0	0	0	0	0	69
15:00	2	19	3	3	0	0	0	0	0	0	0	0	0	27
16:00	3	7	6	5	1	0	0	0	0	0	0	0	0	22
17:00	1	4	5	6	2	0	0	0	0	0	0	0	0	18
18:00	1	8	2	1	0	0	0	0	0	0	0	0	0	12
19:00	2	4	3	0	0	0	0	0	0	0	0	0	0	9
20:00	1	8	1	2	0	0	0	0	0	0	0	0	0	12
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Totals	73	255	53	56	10	1								448
% of Totals	16%	57%	12%	13%	2%	0%								100%

AM Volumes	44	137	24	28	6	1	0	0	0	0	0	0	0	240			
% AM	10%	31%	5%	6%	1%	0%								54%			
AM Peak Hour	8:00	8:00	8:00	7:00	7:00	9:00								8:00			
Volume	20	61	9	10	2	1								95			
PM Volumes	29	118	29	28	4	0	0	0	0	0	0	0	0	208			
% PM	6%	26%	6%	6%	1%									46%			
PM Peak Hour	14:00	14:00	16:00	14:00	17:00									14:00			
Volume	12	48	6	7	2									69			
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes					
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔		%
		153			34%	36			8%	40			9%	219			49%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Wilkes PI	North Bound	14	17	18	24	29	448
Wilkes PI	South Bound	16	20	21	27	32	290

SPEED

Wilkes PI N/O Mawson Dr

Day: Tuesday
Date: 2/24/2026

City: Laguna Hills
Project #: CA26_010013_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
5:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
6:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:00	3	6	12	2	2	0	0	0	0	0	0	0	0	25
8:00	2	8	7	3	3	0	0	0	0	0	0	0	0	23
9:00	1	9	2	1	1	0	0	0	0	0	0	0	0	14
10:00	3	4	2	2	0	0	0	0	0	0	0	0	0	11
11:00	0	4	6	1	1	0	0	0	0	0	0	0	0	12
12:00 PM	2	6	3	4	2	0	0	0	0	0	0	0	0	17
13:00	2	5	14	2	3	0	0	0	0	0	0	0	0	26
14:00	2	14	8	5	1	1	0	0	0	0	0	0	0	31
15:00	1	6	4	3	2	0	0	0	0	0	0	0	0	16
16:00	1	13	6	5	2	0	0	0	0	0	0	0	0	27
17:00	0	8	5	6	4	0	0	0	0	0	0	0	0	23
18:00	0	7	2	3	1	0	0	0	0	0	0	0	0	13
19:00	1	8	4	3	1	1	0	0	0	0	0	0	0	18
20:00	0	7	8	1	1	0	0	0	0	0	0	0	0	17
21:00	2	4	1	1	0	0	0	0	0	0	0	0	0	8
22:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	20	113	84	47	24	2								290
% of Totals	7%	39%	29%	16%	8%	1%								100%

AM Volumes	9	35	29	13	7	0	0	0	0	0	0	0	0	93		
% AM	3%	12%	10%	4%	2%									32%		
AM Peak Hour	7:00	9:00	7:00	8:00	8:00									7:00		
Volume	3	9	12	3	3									25		
PM Volumes	11	78	55	34	17	2	0	0	0	0	0	0	0	197		
% PM	4%	27%	19%	12%	6%	1%								68%		
PM Peak Hour	12:00	14:00	13:00	17:00	17:00	14:00								14:00		
Volume	2	14	14	6	4	1								31		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		48	17%		43	15%		50	17%		149		51%			

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Wilkes PI	North Bound	14	17	18	24	29	448
Wilkes PI	South Bound	16	20	21	27	32	290

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Friday
Date: 2/20/2026

City: Laguna Hills
Project #: CA26_010013_002e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
6:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
7:00	1	2	1	1	0	0	0	0	0	0	0	0	0	5
8:00	1	1	5	4	1	0	0	0	0	0	0	0	0	12
9:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
10:00	2	2	3	6	0	0	0	0	0	0	0	0	0	13
11:00	2	3	4	4	0	0	0	0	0	0	0	0	0	13
12:00 PM	2	1	3	4	1	1	0	0	0	0	0	0	0	12
13:00	1	0	1	4	1	2	0	0	0	0	0	0	0	9
14:00	0	3	5	7	0	0	0	0	0	0	0	0	0	15
15:00	0	0	5	3	2	0	0	0	0	0	0	0	0	10
16:00	0	1	4	1	2	0	0	0	0	0	0	0	0	8
17:00	1	4	4	2	1	0	0	0	0	0	0	0	0	12
18:00	1	3	2	2	0	0	0	0	0	0	0	0	0	8
19:00	1	3	0	3	0	0	0	0	0	0	0	0	0	7
20:00	1	0	2	1	0	0	0	0	0	0	0	0	0	4
21:00	0	2	1	2	0	0	0	0	0	0	0	0	0	5
22:00	0	1	2	1	0	0	0	0	0	0	0	0	0	4
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	13	29	47	48	8	3								148
% of Totals	9%	20%	32%	32%	5%	2%								100%

AM Volumes	6	10	18	18	1	0	0	0	0	0	0	0	0	53		
% AM	4%	7%	12%	12%	1%									36%		
AM Peak Hour	10:00	11:00	8:00	10:00	8:00									10:00		
Volume	2	3	5	6	1									13		
PM Volumes	7	19	29	30	7	3	0	0	0	0	0	0	0	95		
% PM	5%	13%	20%	20%	5%	2%								64%		
PM Peak Hour	12:00	17:00	14:00	14:00	15:00	13:00								14:00		
Volume	2	4	5	7	2	2								15		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		17			11%	21			14%	20			14%	90		

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	17	22	23	28	30	148
Grissom Rd	West Bound	18	24	23	29	32	158

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Friday
Date: 2/20/2026

City: Laguna Hills
Project #: CA26_010013_002w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
5:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
6:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
7:00	0	0	2	4	1	1	0	0	0	0	0	0	0	8
8:00	1	3	1	1	2	0	0	0	0	0	0	0	0	8
9:00	3	3	3	3	0	0	0	0	0	0	0	0	0	12
10:00	1	1	2	8	0	0	0	0	0	0	0	0	0	12
11:00	0	1	2	1	1	0	0	0	0	0	0	0	0	5
12:00 PM	0	1	2	10	0	2	0	0	0	0	0	0	0	15
13:00	0	1	5	4	0	1	0	0	0	0	0	0	0	11
14:00	1	3	4	2	0	0	0	0	0	0	0	0	0	10
15:00	2	0	4	6	1	0	0	0	0	0	0	0	0	13
16:00	1	3	3	7	1	0	0	0	0	0	0	0	0	15
17:00	2	2	5	6	0	0	0	0	0	0	0	0	0	15
18:00	1	3	3	0	1	0	0	0	0	0	0	0	0	8
19:00	0	1	1	3	1	0	0	0	0	0	0	0	0	6
20:00	1	0	3	1	0	0	0	0	0	0	0	0	0	5
21:00	0	3	4	1	0	0	0	0	0	0	0	0	0	8
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Totals	13	27	46	60	8	4								158
% of Totals	8%	17%	29%	38%	5%	3%								100%

AM Volumes	5	10	11	20	4	1	0	0	0	0	0	0	0	51
% AM	3%	6%	7%	13%	3%	1%								32%
AM Peak Hour	9:00	8:00	9:00	10:00	8:00	7:00								9:00
Volume	3	3	3	8	2	1								12
PM Volumes	8	17	35	40	4	3	0	0	0	0	0	0	0	107
% PM	5%	11%	22%	25%	3%	2%								68%
PM Peak Hour	15:00	14:00	13:00	12:00	15:00	12:00								12:00
Volume	2	3	5	10	1	2								15
Directional Peak Periods	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes							
All Speeds	Volume		Volume		Volume		Volume		Volume		Volume		Volume	
	16	↔	26	↔	30	↔	86	↔						
		10%		16%		19%								54%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	22	23	28	30	148
Grissom Rd	West Bound	18	24	23	29	32	158

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Saturday
Date: 2/21/2026

City: Laguna Hills
Project #: CA26_010013_002e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4
8:00	0	1	0	0	0	1	0	0	0	0	0	0	0	2
9:00	0	1	2	3	2	0	0	0	0	0	0	0	0	8
10:00	0	2	2	3	1	0	0	0	0	0	0	0	0	8
11:00	2	2	4	4	0	0	0	0	0	0	0	0	0	12
12:00 PM	1	2	2	1	0	0	0	0	0	0	0	0	0	6
13:00	1	0	2	3	1	1	0	0	0	0	0	0	0	8
14:00	3	2	2	2	0	0	0	0	0	0	0	0	0	9
15:00	1	2	3	3	1	0	0	0	0	0	0	0	0	10
16:00	0	1	2	3	1	0	0	0	0	0	0	0	0	7
17:00	0	1	3	2	0	0	0	0	0	0	0	0	0	6
18:00	0	2	2	3	0	0	0	0	0	0	0	0	0	7
19:00	0	2	1	2	1	0	0	0	0	0	0	0	0	6
20:00	0	3	0	3	0	0	0	0	0	0	0	0	0	6
21:00	0	1	0	2	3	0	0	0	0	0	0	0	0	6
22:00	0	1	0	1	1	0	0	0	0	0	0	0	0	3
23:00	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Totals	8	23	29	40	14	2								116
% of Totals	7%	20%	25%	34%	12%	2%								100%

AM Volumes	2	6	12	12	6	1	0	0	0	0	0	0	0	39		
% AM	2%	5%	10%	10%	5%	1%								34%		
AM Peak Hour	11:00	10:00	11:00	11:00	9:00	8:00								11:00		
Volume	2	2	4	4	2	1								12		
PM Volumes	6	17	17	28	8	1	0	0	0	0	0	0	0	77		
% PM	5%	15%	15%	24%	7%	1%								66%		
PM Peak Hour	14:00	20:00	15:00	13:00	21:00	13:00								15:00		
Volume	3	3	3	3	3	1								10		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		6			5%	14			12%	13			11%	83		

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	17	24	24	29	31	116
Grissom Rd	West Bound	17	24	23	29	34	136

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Saturday
Date: 2/21/2026

City: Laguna Hills
Project #: CA26_010013_002w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	2	1	0	1	0	0	0	0	0	0	0	0	0	4
7:00	0	1	2	0	2	0	0	0	0	0	0	0	0	5
8:00	0	0	1	3	2	2	0	0	0	0	0	0	0	8
9:00	0	1	5	1	1	0	0	0	0	0	0	0	0	8
10:00	1	0	2	3	2	1	0	0	0	0	0	0	0	9
11:00	0	1	4	2	0	0	0	0	0	0	0	0	0	7
12:00 PM	1	4	2	2	1	1	0	0	0	0	0	0	0	11
13:00	0	3	4	4	0	0	0	0	0	0	0	0	0	11
14:00	1	1	7	6	0	0	0	0	0	0	0	0	0	15
15:00	0	2	4	3	0	0	0	0	0	0	0	0	0	9
16:00	1	4	0	1	2	0	0	0	0	0	0	0	0	8
17:00	0	5	2	1	0	0	0	0	0	0	0	0	0	8
18:00	0	2	0	6	0	0	0	0	0	0	0	0	0	8
19:00	0	1	2	0	0	1	0	0	0	0	0	0	0	4
20:00	1	1	2	2	1	1	0	0	0	0	0	0	0	8
21:00	0	1	1	1	0	1	0	0	0	0	0	0	0	4
22:00	1	1	0	1	0	0	0	0	0	0	0	0	0	3
23:00	0	1	0	1	2	0	0	0	0	0	0	0	0	4
Totals	8	32	38	38	13	7								136
% of Totals	6%	24%	28%	28%	10%	5%								100%

AM Volumes	3	6	14	10	7	3	0	0	0	0	0	0	0	43
% AM	2%	4%	10%	7%	5%	2%								32%
AM Peak Hour	6:00		9:00	8:00	7:00	8:00								10:00
Volume	2	1	5	3	2	2								9
PM Volumes	5	26	24	28	6	4	0	0	0	0	0	0	0	93
% PM	4%	19%	18%	21%	4%	3%								68%
PM Peak Hour	12:00	17:00	14:00	14:00	16:00	12:00								14:00
Volume	1	5	7	6	2	1								15
Directional Peak Periods		AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes						
All Speeds		Volume	%	Volume	%	Volume	%	Volume	%					
		13	↔ 10%	22	↔ 16%	16	↔ 12%	85	↔ 63%					

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	24	24	29	31	116
Grissom Rd	West Bound	17	24	23	29	34	136

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Sunday
Date: 2/22/2026

City: Laguna Hills
Project #: CA26_010013_002e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	2	0	2	0	0	0	0	0	0	0	0	4
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
7:00	0	0	1	1	1	0	0	0	0	0	0	0	0	3
8:00	0	1	0	3	0	0	0	0	0	0	0	0	0	4
9:00	2	0	1	2	0	0	0	0	0	0	0	0	0	5
10:00	1	4	3	3	1	0	0	0	0	0	0	0	0	12
11:00	1	2	3	1	1	0	0	0	0	0	0	0	0	8
12:00 PM	0	2	1	2	3	0	0	0	0	0	0	0	0	8
13:00	0	0	4	4	0	0	0	0	0	0	0	0	0	8
14:00	0	3	6	3	0	1	0	0	0	0	0	0	0	13
15:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
16:00	1	0	6	0	1	1	0	0	0	0	0	0	0	9
17:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
18:00	1	1	2	1	0	0	0	0	0	0	0	0	0	5
19:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
20:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
22:00	1	0	1	0	2	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	8	17	35	26	12	2								100
% of Totals	8%	17%	35%	26%	12%	2%								100%

AM Volumes	4	8	12	12	5	0	0	0	0	0	0	0	0	41			
% AM	4%	8%	12%	12%	5%									41%			
AM Peak Hour	9:00	10:00	10:00	8:00	2:00									10:00			
Volume	2	4	3	3	2									12			
PM Volumes	4	9	23	14	7	2	0	0	0	0	0	0	0	59			
% PM	4%	9%	23%	14%	7%	2%								59%			
PM Peak Hour	16:00	14:00	14:00	13:00	12:00	14:00								14:00			
Volume	1	3	6	4	3	1								13			
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes					
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔		%
		7			7%	16			16%	13			13%	64			64%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	17	24	23	29	32	100
Grissom Rd	West Bound	16	23	23	29	33	104

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Sunday
Date: 2/22/2026

City: Laguna Hills
Project #: CA26_010013_002w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
7:00	0	1	0	0	0	1	0	0	0	0	0	0	0	2
8:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4
9:00	0	2	1	2	0	0	0	0	0	0	0	0	0	5
10:00	1	2	1	2	0	1	0	0	0	0	0	0	0	7
11:00	1	1	4	2	2	0	0	0	0	0	0	0	0	10
12:00 PM	0	2	6	3	3	0	0	0	0	0	0	0	0	14
13:00	1	2	4	1	1	0	0	0	0	0	0	0	0	9
14:00	0	0	4	4	0	0	0	0	0	0	0	0	0	8
15:00	1	0	4	2	3	0	0	0	0	0	0	0	0	10
16:00	1	1	3	1	0	1	0	0	0	0	0	0	0	7
17:00	1	1	1	0	0	0	0	0	0	0	0	0	0	3
18:00	1	1	2	2	1	0	0	0	0	0	0	0	0	7
19:00	1	2	2	0	0	0	0	0	0	0	0	0	0	5
20:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	3	0	0	0	0	0	0	0	0	0	3
22:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	9	17	39	24	12	3								104
% of Totals	9%	16%	38%	23%	12%	3%								100%

AM Volumes	3	7	9	8	4	2	0	0	0	0	0	0	0	33			
% AM	3%	7%	9%	8%	4%	2%								32%			
AM Peak Hour	1:00	9:00	11:00	9:00	11:00	7:00								11:00			
Volume	1	2	4	2	2	1								10			
PM Volumes	6	10	30	16	8	1	0	0	0	0	0	0	0	71			
% PM	6%	10%	29%	15%	8%	1%								68%			
PM Peak Hour	13:00	12:00	12:00	14:00	12:00	16:00								12:00			
Volume	1	2	6	4	3	1								14			
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes					
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔		%
		6			6%	23			22%	10			10%	65			63%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	17	24	23	29	32	100
Grissom Rd	West Bound	16	23	23	29	33	104

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Monday
Date: 2/23/2026

City: Laguna Hills
Project #: CA26_010013_002e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	3	0	0	0	0	0	0	0	0	0	3
6:00	0	1	3	2	0	0	0	0	0	0	0	0	0	6
7:00	0	0	3	4	1	1	0	0	0	0	0	0	0	9
8:00	3	2	8	10	4	0	0	0	0	0	0	0	0	27
9:00	1	0	3	1	0	0	0	0	0	0	0	0	0	5
10:00	1	0	5	3	0	0	0	0	0	0	0	0	0	9
11:00	1	1	1	3	1	0	0	0	0	0	0	0	0	7
12:00 PM	2	0	5	4	1	0	0	0	0	0	0	0	0	12
13:00	2	2	5	4	3	0	0	0	0	0	0	0	0	16
14:00	3	1	4	3	4	0	0	0	0	0	0	0	0	15
15:00	1	3	3	6	1	0	0	0	0	0	0	0	0	14
16:00	1	1	4	2	1	0	0	0	0	0	0	0	0	9
17:00	1	3	2	4	3	0	0	0	0	0	0	0	0	13
18:00	1	4	2	2	3	0	0	0	0	0	0	0	0	12
19:00	0	0	2	1	0	0	0	0	0	0	0	0	0	3
20:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
22:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	2	1	0	0	0	0	0	0	0	3
Totals	17	19	51	52	26	2								167
% of Totals	10%	11%	31%	31%	16%	1%								100%

AM Volumes	6	4	23	26	6	1	0	0	0	0	0	0	0	66		
% AM	4%	2%	14%	16%	4%	1%								40%		
AM Peak Hour	8:00	8:00	8:00	8:00	8:00	7:00								8:00		
Volume	3	2	8	10	4	1								27		
PM Volumes	11	15	28	26	20	1	0	0	0	0	0	0	0	101		
% PM	7%	9%	17%	16%	12%	1%								60%		
PM Peak Hour	14:00	18:00	12:00	15:00	14:00	23:00								13:00		
Volume	3	4	5	6	4	1								16		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		36			22%	28			17%	22			13%	81		

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	17	24	23	30	31	167
Grissom Rd	West Bound	16	24	23	30	34	169

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Monday
Date: 2/23/2026

City: Laguna Hills
Project #: CA26_010013_002w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
6:00	0	1	0	4	0	0	0	0	0	0	0	0	0	5
7:00	2	0	2	3	2	0	0	0	0	0	0	0	0	9
8:00	1	3	5	4	2	1	0	0	0	0	0	0	0	16
9:00	1	2	1	2	1	1	0	0	0	0	0	0	0	8
10:00	2	2	1	1	1	0	0	0	0	0	0	0	0	7
11:00	3	1	1	0	1	1	0	0	0	0	0	0	0	7
12:00 PM	1	1	2	2	2	0	0	0	0	0	0	0	0	8
13:00	3	5	2	3	0	2	0	0	0	0	0	0	0	15
14:00	0	1	3	5	3	0	0	0	0	0	0	0	0	12
15:00	0	3	1	2	2	1	0	0	0	0	0	0	0	9
16:00	1	7	8	6	3	0	0	0	0	0	0	0	0	25
17:00	2	2	8	1	2	0	0	0	0	0	0	0	0	15
18:00	5	3	1	2	2	0	0	0	0	0	0	0	0	13
19:00	1	1	3	4	1	0	0	0	0	0	0	0	0	10
20:00	0	1	0	2	0	0	0	0	0	0	0	0	0	3
21:00	1	0	1	2	0	0	0	0	0	0	0	0	0	4
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Totals	23	33	40	44	23	6								169
% of Totals	14%	20%	24%	26%	14%	4%								100%

AM Volumes	9	9	11	14	8	3	0	0	0	0	0	0	0	54
% AM	5%	5%	7%	8%	5%	2%								32%
AM Peak Hour	11:00	8:00	8:00	6:00	7:00	8:00								8:00
Volume	3	3	5	4	2	1								16
PM Volumes	14	24	29	30	15	3	0	0	0	0	0	0	0	115
% PM	8%	14%	17%	18%	9%	2%								68%
PM Peak Hour	18:00	16:00	16:00	16:00	14:00	13:00								16:00
Volume	5	7	8	6	3	2								25
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume		%	Volume		%	Volume		%	Volume		%
			25	↔	15%	23	↔	14%	40	↔	24%	81	↔	48%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	24	23	30	31	167
Grissom Rd	West Bound	16	24	23	30	34	169

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Tuesday
Date: 2/24/2026

City: Laguna Hills
Project #: CA26_010013_002e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
6:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:00	1	2	7	5	3	1	0	0	0	0	0	0	0	19
8:00	3	2	9	7	2	1	0	0	0	0	0	0	0	24
9:00	1	0	4	1	0	0	0	0	0	0	0	0	0	6
10:00	4	2	4	3	0	0	0	0	0	0	0	0	0	13
11:00	0	2	3	4	1	0	0	0	0	0	0	0	0	10
12:00 PM	0	1	4	3	0	1	0	0	0	0	0	0	0	9
13:00	0	3	4	5	3	1	0	0	0	0	0	0	0	16
14:00	1	3	3	8	1	0	0	0	0	0	0	0	0	16
15:00	0	1	4	2	0	0	0	0	0	0	0	0	0	7
16:00	1	3	7	3	1	0	0	0	0	0	0	0	0	15
17:00	1	3	2	3	1	1	0	0	0	0	0	0	0	11
18:00	0	1	3	2	0	0	0	0	0	0	0	0	0	6
19:00	1	4	4	3	1	0	0	0	0	0	0	0	0	13
20:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	13	30	63	51	13	5								175
% of Totals	7%	17%	36%	29%	7%	3%								100%

AM Volumes	9	8	30	22	6	2	0	0	0	0	0	0	0	77		
% AM	5%	5%	17%	13%	3%	1%								44%		
AM Peak Hour	10:00	7:00	8:00	8:00	7:00	7:00								8:00		
Volume	4	2	9	7	3	1								24		
PM Volumes	4	22	33	29	7	3	0	0	0	0	0	0	0	98		
% PM	2%	13%	19%	17%	4%	2%								56%		
PM Peak Hour	14:00	19:00	16:00	14:00	13:00	12:00								13:00		
Volume	1	4	7	8	3	1								16		
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes				
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		43			25%	25			14%	26			15%	81		

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	18	23	23	29	32	175
Grissom Rd	West Bound	17	23	23	28	31	160

SPEED

Grissom Rd Bet Wilkes Pl & Velasquez Rd

Day: Tuesday
Date: 2/24/2026

City: Laguna Hills
Project #: CA26_010013_002w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
6:00	0	1	0	1	1	0	0	0	0	0	0	0	0	3
7:00	1	3	4	6	4	1	0	0	0	0	0	0	0	19
8:00	1	2	7	3	1	0	0	0	0	0	0	0	0	14
9:00	1	2	1	4	2	0	0	0	0	0	0	0	0	10
10:00	2	4	3	4	0	0	0	0	0	0	0	0	0	13
11:00	1	0	2	3	2	0	0	0	0	0	0	0	0	8
12:00 PM	0	0	2	2	0	1	0	0	0	0	0	0	0	5
13:00	1	3	5	2	2	0	0	0	0	0	0	0	0	13
14:00	1	1	9	6	0	0	0	0	0	0	0	0	0	17
15:00	2	2	2	2	0	0	0	0	0	0	0	0	0	8
16:00	1	3	4	4	0	0	0	0	0	0	0	0	0	12
17:00	2	2	4	8	1	0	0	0	0	0	0	0	0	17
18:00	2	4	4	0	0	0	0	0	0	0	0	0	0	10
19:00	0	2	1	3	0	0	0	0	0	0	0	0	0	6
20:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	15	29	49	51	14	2								160
% of Totals	9%	18%	31%	32%	9%	1%								100%

AM Volumes	6	12	17	22	10	1	0	0	0	0	0	0	0	68
% AM	4%	8%	11%	14%	6%	1%								43%
AM Peak Hour	10:00	10:00	8:00	7:00	7:00	7:00								7:00
Volume	2	4	7	6	4	1								19
PM Volumes	9	17	32	29	4	1	0	0	0	0	0	0	0	92
% PM	6%	11%	20%	18%	3%	1%								58%
PM Peak Hour	15:00	18:00	14:00	17:00	13:00	12:00								14:00
Volume	2	4	9	8	2	1								17
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume		%	Volume		%	Volume		%	Volume		%
			33	↔	21%	18	↔	11%	29	↔	18%	80	↔	50%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	18	23	23	29	32	175
Grissom Rd	West Bound	17	23	23	28	31	160

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Friday
Date: 2/20/2026

City: Laguna Hills
Project #: CA26_010013_003e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
8:00	0	2	3	1	0	0	0	0	0	0	0	0	0	6
9:00	2	2	4	1	1	0	0	0	0	0	0	0	0	10
10:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
11:00	1	2	3	1	2	0	0	0	0	0	0	0	0	9
12:00 PM	1	2	4	4	1	0	0	0	0	0	0	0	0	12
13:00	2	1	5	4	1	0	0	0	0	0	0	0	0	13
14:00	1	3	1	4	3	0	0	0	0	0	0	0	0	12
15:00	0	2	7	1	4	0	0	0	0	0	0	0	0	14
16:00	1	6	6	1	2	0	0	0	0	0	0	0	0	16
17:00	0	3	5	4	1	0	0	0	0	0	0	0	0	13
18:00	0	1	5	3	2	0	0	0	0	0	0	0	0	11
19:00	1	2	3	4	0	0	0	0	0	0	0	0	0	10
20:00	1	2	2	3	0	0	0	0	0	0	0	0	0	8
21:00	0	2	4	2	0	0	0	0	0	0	0	0	0	8
22:00	1	0	0	1	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Totals	13	36	54	36	18									157
% of Totals	8%	23%	34%	23%	11%									100%

AM Volumes	5	12	12	4	4	0	0	0	0	0	0	0	0	37		
% AM	3%	8%	8%	3%	3%									24%		
AM Peak Hour	7:00	10:00	9:00	2:00	11:00									9:00		
Volume	2	5	4	1	2									10		
PM Volumes	8	24	42	32	14	0	0	0	0	0	0	0	0	120		
% PM	5%	15%	27%	20%	9%									76%		
PM Peak Hour	13:00	16:00	15:00	12:00	15:00									16:00		
Volume	2	6	7	4	4									16		
Directional Peak Periods		AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes					
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		9			6%	25			16%	29			18%	94		

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	22	22	28	30	157
Grissom Rd	West Bound	17	22	22	29	32	175

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Friday
Date: 2/20/2026

City: Laguna Hills
Project #: CA26_010013_003w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	1	1	2	1	0	0	0	0	0	0	0	0	0	5
7:00	0	2	3	3	3	0	0	0	0	0	0	0	0	11
8:00	1	0	4	3	1	0	0	0	0	0	0	0	0	9
9:00	0	4	6	2	0	0	0	0	0	0	0	0	0	12
10:00	1	1	2	1	0	0	0	0	0	0	0	0	0	5
11:00	1	4	7	0	1	0	0	0	0	0	0	0	0	13
12:00 PM	0	4	4	8	2	0	0	0	0	0	0	0	0	18
13:00	3	2	4	3	0	1	0	0	0	0	0	0	0	13
14:00	2	3	5	6	3	0	0	0	0	0	0	0	0	19
15:00	1	3	3	5	0	0	0	0	0	0	0	0	0	12
16:00	3	1	6	1	0	0	0	0	0	0	0	0	0	11
17:00	1	4	4	4	3	0	0	0	0	0	0	0	0	16
18:00	0	2	4	4	1	0	0	0	0	0	0	0	0	11
19:00	0	1	2	1	0	0	0	0	0	0	0	0	0	4
20:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
21:00	1	2	1	2	1	0	0	0	0	0	0	0	0	7
22:00	1	2	0	0	0	2	0	0	0	0	0	0	0	5
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	16	39	57	44	16	3								175
% of Totals	9%	22%	33%	25%	9%	2%								100%

AM Volumes	4	12	24	10	5	0	0	0	0	0	0	0	0	55
% AM	2%	7%	14%	6%	3%									31%
AM Peak Hour	6:00	9:00	11:00	7:00	7:00									11:00
Volume	1	4	7	3	3									13
PM Volumes	12	27	33	34	11	3	0	0	0	0	0	0	0	120
% PM	7%	15%	19%	19%	6%	2%								69%
PM Peak Hour	13:00	12:00	16:00	12:00	14:00	22:00								14:00
Volume	3	4	6	8	3	2								19
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume		%	Volume		%	Volume		%	Volume		%
			20	↔	11%	31	↔	18%	27	↔	15%	97	↔	55%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	22	22	28	30	157
Grissom Rd	West Bound	17	22	22	29	32	175

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Saturday
Date: 2/21/2026

City: Laguna Hills
Project #: CA26_010013_003e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
7:00	0	2	0	1	0	0	0	0	0	0	0	0	0	3
8:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
9:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
10:00	0	2	2	1	0	0	0	0	0	0	0	0	0	5
11:00	3	3	3	4	1	0	0	0	0	0	0	0	0	14
12:00 PM	0	3	5	2	0	1	0	0	0	0	0	0	0	11
13:00	0	2	6	4	0	0	0	0	0	0	0	0	0	12
14:00	2	1	1	5	0	1	0	0	0	0	0	0	0	10
15:00	1	4	6	2	0	0	0	0	0	0	0	0	0	13
16:00	2	2	5	0	1	0	0	0	0	0	0	0	0	10
17:00	0	2	5	3	2	1	0	0	0	0	0	0	0	13
18:00	0	1	4	3	3	0	0	0	0	0	0	0	0	11
19:00	0	1	2	2	1	0	0	0	0	0	0	0	0	6
20:00	1	0	2	1	0	0	0	0	0	0	0	0	0	4
21:00	0	0	0	3	1	0	0	0	0	0	0	0	0	4
22:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Totals	9	25	44	34	14	3								129
% of Totals	7%	19%	34%	26%	11%	2%								100%

AM Volumes	3	9	8	9	3	0	0	0	0	0	0	0	0	32
% AM	2%	7%	6%	7%	2%									25%
AM Peak Hour	11:00	11:00	11:00	11:00	5:00									11:00
Volume	3	3	3	4	1									14
PM Volumes	6	16	36	25	11	3	0	0	0	0	0	0	0	97
% PM	5%	12%	28%	19%	9%	2%								75%
PM Peak Hour	14:00	15:00	13:00	14:00	18:00	12:00								15:00
Volume	2	4	6	5	3	1								13
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
			6		5%	23		18%	23		18%	77		60%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	22	23	29	32	129
Grissom Rd	West Bound	16	22	22	27	31	135

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Saturday
Date: 2/21/2026

City: Laguna Hills
Project #: CA26_010013_003w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
5:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
6:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
7:00	0	1	1	2	0	0	0	0	0	0	0	0	0	4
8:00	0	3	2	1	0	0	0	0	0	0	0	0	0	6
9:00	0	1	4	5	2	0	0	0	0	0	0	0	0	12
10:00	1	1	5	1	0	0	0	0	0	0	0	0	0	8
11:00	2	3	4	4	1	0	0	0	0	0	0	0	0	14
12:00 PM	0	2	2	1	0	0	0	0	0	0	0	0	0	5
13:00	1	1	8	6	1	0	0	0	0	0	0	0	0	17
14:00	0	1	4	2	0	0	0	0	0	0	0	0	0	7
15:00	1	9	3	2	0	0	0	0	0	0	0	0	0	15
16:00	0	0	3	5	0	0	0	0	0	0	0	0	0	8
17:00	0	2	4	1	1	0	0	0	0	0	0	0	0	8
18:00	3	1	1	1	1	0	0	0	0	0	0	0	0	7
19:00	2	1	1	1	1	0	0	0	0	0	0	0	0	6
20:00	0	1	0	3	0	0	0	0	0	0	0	0	0	4
21:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4
22:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
23:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
Totals	11	30	47	38	9									135
% of Totals	8%	22%	35%	28%	7%									100%

AM Volumes	4	12	17	14	3	0	0	0	0	0	0	0	0	50
% AM	3%	9%	13%	10%	2%									37%
AM Peak Hour	11:00	6:00	10:00	9:00	9:00									11:00
Volume	2	3	5	5	2									14
PM Volumes	7	18	30	24	6	0	0	0	0	0	0	0	0	85
% PM	5%	13%	22%	18%	4%									63%
PM Peak Hour	18:00	15:00	13:00	13:00	13:00									13:00
Volume	3	9	8	6	1									17
Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes							
	Volume		Volume		Volume		Volume		Volume		Volume		Volume	
	10	↔	22	↔	16	↔	87	↔	7%	16%	12%	64%		

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	22	23	29	32	129
Grissom Rd	West Bound	16	22	22	27	31	135

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Sunday
Date: 2/22/2026

City: Laguna Hills
Project #: CA26_010013_003e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	2	0	0	2	0	0	0	0	0	0	0	0	0	4
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
9:00	1	2	1	0	1	1	0	0	0	0	0	0	0	6
10:00	0	4	6	1	0	2	0	0	0	0	0	0	0	13
11:00	1	3	0	2	1	0	0	0	0	0	0	0	0	7
12:00 PM	2	2	4	1	0	0	0	0	0	0	0	0	0	9
13:00	2	3	7	7	4	0	0	0	0	0	0	0	0	23
14:00	0	2	6	2	2	0	0	0	0	0	0	0	0	12
15:00	1	0	8	2	1	1	0	0	0	0	0	0	0	13
16:00	2	2	4	4	0	0	0	0	0	0	0	0	0	12
17:00	2	3	3	4	1	0	0	0	0	0	0	0	0	13
18:00	2	1	3	0	1	0	0	0	0	0	0	0	0	7
19:00	2	1	3	2	0	1	0	0	0	0	0	0	0	9
20:00	0	3	5	2	0	0	0	0	0	0	0	0	0	10
21:00	0	0	0	4	1	0	0	0	0	0	0	0	0	5
22:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
23:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
Totals	18	26	52	36	12	5								149
% of Totals	12%	17%	35%	24%	8%	3%								100%

AM Volumes	5	9	7	6	2	3	0	0	0	0	0	0	0	32		
% AM	3%	6%	5%	4%	1%	2%								21%		
AM Peak Hour	5:00	10:00	10:00	5:00	9:00	10:00								10:00		
Volume	2	4	6	2	1	2								13		
PM Volumes	13	17	45	30	10	2	0	0	0	0	0	0	0	117		
% PM	9%	11%	30%	20%	7%	1%								79%		
PM Peak Hour	12:00	13:00	15:00	13:00	13:00	15:00								13:00		
Volume	2	3	8	7	4	1								23		
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes				
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		2			1%	32			21%	25			17%	90		

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	22	22	28	33	149
Grissom Rd	West Bound	17	22	22	27	31	132

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Sunday
Date: 2/22/2026

City: Laguna Hills
Project #: CA26_010013_003w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
6:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
7:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
8:00	0	0	2	2	1	0	0	0	0	0	0	0	0	5
9:00	0	0	1	1	1	0	0	0	0	0	0	0	0	3
10:00	1	4	5	4	1	0	0	0	0	0	0	0	0	15
11:00	0	0	2	2	0	0	0	0	0	0	0	0	0	4
12:00 PM	2	5	2	3	2	1	0	0	0	0	0	0	0	15
13:00	1	2	4	2	0	0	0	0	0	0	0	0	0	9
14:00	2	3	5	1	1	0	0	0	0	0	0	0	0	12
15:00	1	1	5	3	2	0	0	0	0	0	0	0	0	12
16:00	1	5	2	2	0	0	0	0	0	0	0	0	0	10
17:00	1	1	5	2	0	0	0	0	0	0	0	0	0	9
18:00	0	3	2	2	1	0	0	0	0	0	0	0	0	8
19:00	0	4	4	0	0	1	0	0	0	0	0	0	0	9
20:00	0	1	3	2	0	0	0	0	0	0	0	0	0	6
21:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	12	37	43	29	9	2								132
% of Totals	9%	28%	33%	22%	7%	2%								100%

AM Volumes	3	8	10	12	3	0	0	0	0	0	0	0	0	36			
% AM	2%	6%	8%	9%	2%									27%			
AM Peak Hour	1:00	10:00	10:00	10:00	8:00									10:00			
Volume	1	4	5	4	1									15			
PM Volumes	9	29	33	17	6	2	0	0	0	0	0	0	0	96			
% PM	7%	22%	25%	13%	5%	2%								73%			
PM Peak Hour	12:00	12:00	14:00	12:00	12:00	12:00								12:00			
Volume	2	5	5	3	2	1								15			
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes					
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔		%
		8			6%	24			18%	19			14%	81			61%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	17	22	22	28	33	149
Grissom Rd	West Bound	17	22	22	27	31	132

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Monday
Date: 2/23/2026

City: Laguna Hills
Project #: CA26_010013_003e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
6:00	1	1	0	1	0	0	0	0	0	0	0	0	0	3
7:00	4	2	2	2	1	0	0	0	0	0	0	0	0	11
8:00	1	8	1	5	1	0	0	0	0	0	0	0	0	16
9:00	1	1	5	2	0	0	0	0	0	0	0	0	0	9
10:00	2	3	2	2	2	0	0	0	0	0	0	0	0	11
11:00	2	1	2	1	0	0	0	0	0	0	0	0	0	6
12:00 PM	1	6	4	1	1	0	0	0	0	0	0	0	0	13
13:00	1	3	8	5	5	1	0	0	0	0	0	0	0	23
14:00	2	6	4	2	2	1	0	0	0	0	0	0	0	17
15:00	6	3	4	4	1	0	0	0	0	0	0	0	0	18
16:00	3	3	6	3	0	1	0	0	0	0	0	0	0	16
17:00	6	4	10	5	0	0	0	0	0	0	0	0	0	25
18:00	4	0	4	2	1	1	0	0	0	0	0	0	0	12
19:00	1	4	4	2	1	0	0	0	0	0	0	0	0	12
20:00	0	0	5	0	0	0	0	0	0	0	0	0	0	5
21:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
22:00	0	1	0	2	0	0	0	0	0	0	0	0	0	3
23:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Totals	35	46	65	41	15	4								206
% of Totals	17%	22%	32%	20%	7%	2%								100%

AM Volumes	11	16	13	15	4	0	0	0	0	0	0	0	0	59		
% AM	5%	8%	6%	7%	2%									29%		
AM Peak Hour	7:00	8:00	9:00	8:00	10:00									8:00		
Volume	4	8	5	5	2									16		
PM Volumes	24	30	52	26	11	4	0	0	0	0	0	0	0	147		
% PM	12%	15%	25%	13%	5%	2%								71%		
PM Peak Hour	15:00	12:00	17:00	13:00	13:00	13:00								17:00		
Volume	6	6	10	5	5	1								25		
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		27	13%		36	17%		41	20%		102		50%			

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	14	21	21	27	31	206
Grissom Rd	West Bound	15	22	22	28	30	215

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Monday
Date: 2/23/2026

City: Laguna Hills
Project #: CA26_010013_003w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
6:00	2	1	2	1	0	0	0	0	0	0	0	0	0	6
7:00	0	2	7	3	2	1	0	0	0	0	0	0	0	15
8:00	1	5	10	14	3	0	0	0	0	0	0	0	0	33
9:00	2	2	4	5	0	0	0	0	0	0	0	0	0	13
10:00	2	1	4	2	0	0	0	0	0	0	0	0	0	9
11:00	0	5	2	5	2	0	0	0	0	0	0	0	0	14
12:00 PM	1	7	4	3	0	0	0	0	0	0	0	0	0	15
13:00	5	3	3	2	1	1	0	0	0	0	0	0	0	15
14:00	0	1	7	9	4	0	0	0	0	0	0	0	0	21
15:00	5	4	1	4	2	2	0	0	0	0	0	0	0	18
16:00	6	5	5	2	1	0	0	0	0	0	0	0	0	19
17:00	2	5	2	5	0	0	0	0	0	0	0	0	0	14
18:00	2	0	4	1	1	0	0	0	0	0	0	0	0	8
19:00	1	2	2	1	0	0	0	0	0	0	0	0	0	6
20:00	1	2	1	0	1	0	0	0	0	0	0	0	0	5
21:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
22:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	30	45	61	58	17	4								215
% of Totals	14%	21%	28%	27%	8%	2%								100%

AM Volumes	7	16	31	30	7	1	0	0	0	0	0	0	0	92		
% AM	3%	7%	14%	14%	3%	0%								43%		
AM Peak Hour	6:00	8:00	8:00	8:00	8:00	7:00								8:00		
Volume	2	5	10	14	3	1								33		
PM Volumes	23	29	30	28	10	3	0	0	0	0	0	0	0	123		
% PM	11%	13%	14%	13%	5%	1%								57%		
PM Peak Hour	16:00	12:00	14:00	14:00	14:00	15:00								14:00		
Volume	6	7	7	9	4	2								21		
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes				
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		48			22%	30			14%	33			15%	104		

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	14	21	21	27	31	206
Grissom Rd	West Bound	15	22	22	28	30	215

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Tuesday
Date: 2/24/2026

City: Laguna Hills
Project #: CA26_010013_003e

East Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
6:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
7:00	1	4	4	2	0	0	0	0	0	0	0	0	0	11
8:00	2	4	2	4	1	0	0	0	0	0	0	0	0	13
9:00	3	1	0	2	1	0	0	0	0	0	0	0	0	7
10:00	1	1	2	2	1	0	0	0	0	0	0	0	0	7
11:00	5	3	2	0	0	0	0	0	0	0	0	0	0	10
12:00 PM	5	2	3	3	2	1	0	0	0	0	0	0	0	16
13:00	1	7	3	2	2	0	0	0	0	0	0	0	0	15
14:00	2	6	5	11	4	0	0	0	0	0	0	0	0	28
15:00	0	3	8	7	2	2	0	0	0	0	0	0	0	22
16:00	2	2	7	1	0	1	0	0	0	0	0	0	0	13
17:00	3	2	13	3	0	0	0	0	0	0	0	0	0	21
18:00	2	3	5	1	0	0	0	0	0	0	0	0	0	11
19:00	2	4	2	2	1	0	0	0	0	0	0	0	0	11
20:00	0	0	4	3	1	0	0	0	0	0	0	0	0	8
21:00	0	3	4	0	0	0	0	0	0	0	0	0	0	7
22:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	30	45	66	45	15	4								205
% of Totals	15%	22%	32%	22%	7%	2%								100%

AM Volumes	13	13	11	12	3	0	0	0	0	0	0	0	0	52		
% AM	6%	6%	5%	6%	1%									25%		
AM Peak Hour	11:00	7:00	7:00	8:00	8:00									8:00		
Volume	5	4	4	4	1									13		
PM Volumes	17	32	55	33	12	4	0	0	0	0	0	0	0	153		
% PM	8%	16%	27%	16%	6%	2%								75%		
PM Peak Hour	12:00	13:00	17:00	14:00	14:00	15:00								14:00		
Volume	5	7	13	11	4	2								28		
Directional Peak Periods		AM 7-9				NOON 12-2			PM 4-6			Off Peak Volumes				
All Speeds		Volume	↔		%	Volume	↔		%	Volume	↔		%	Volume	↔	
		24			12%	31			15%	34			17%	116		

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Grissom Rd	East Bound	15	22	21	27	31	205
Grissom Rd	West Bound	16	22	22	28	30	204

SPEED

Grissom Rd Bet Las Bolsas & Velasquez Rd

Day: Tuesday
Date: 2/24/2026

City: Laguna Hills
Project #: CA26_010013_003w

West Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	1	0	0	3	0	0	0	0	0	0	0	0	0	4
6:00	1	1	3	3	0	0	0	0	0	0	0	0	0	8
7:00	1	7	6	9	6	0	0	0	0	0	0	0	0	29
8:00	0	3	10	9	3	0	0	0	0	0	0	0	0	25
9:00	1	1	1	3	0	0	0	0	0	0	0	0	0	6
10:00	0	4	2	2	0	0	0	0	0	0	0	0	0	8
11:00	3	3	5	2	0	0	0	0	0	0	0	0	0	13
12:00 PM	0	6	0	2	0	0	0	0	0	0	0	0	0	8
13:00	2	9	3	3	0	0	0	0	0	0	0	0	0	17
14:00	2	4	8	8	2	0	0	0	0	0	0	0	0	24
15:00	1	3	4	3	1	0	0	0	0	0	0	0	0	12
16:00	3	1	4	5	1	0	0	0	0	0	0	0	0	14
17:00	1	4	6	2	0	0	0	0	0	0	0	0	0	13
18:00	4	3	2	4	0	0	0	0	0	0	0	0	0	13
19:00	0	1	1	1	0	0	0	0	0	0	0	0	0	3
20:00	0	1	1	1	0	0	0	0	0	0	0	0	0	3
21:00	1	1	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	21	52	58	60	13									204
% of Totals	10%	25%	28%	29%	6%									100%

AM Volumes	7	19	27	31	9	0	0	0	0	0	0	0	0	93
% AM	3%	9%	13%	15%	4%									46%
AM Peak Hour	11:00	7:00	8:00	7:00	7:00									7:00
Volume	3	7	10	9	6									29
PM Volumes	14	33	31	29	4	0	0	0	0	0	0	0	0	111
% PM	7%	16%	15%	14%	2%									54%
PM Peak Hour	18:00	13:00	14:00	14:00	14:00									14:00
Volume	4	9	8	8	2									24
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume			Volume			Volume			Volume		
			54	↔	26%	25	↔	12%	27	↔	13%	98	↔	48%

Street Name	Direction	Percentiles					ADT
		15th	50th	Average	85th	95th	
Grissom Rd	East Bound	15	22	21	27	31	205
Grissom Rd	West Bound	16	22	22	28	30	204

Peds & Bikes Study

Location: Velasquez Rd & Grissom Rd
 City: Laguna Hills

Date: 2/21/2026
 Day: Saturday

TIME	Peds								Bikes															
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	NU	SU	EU	WU
	EB	WB	EB	WB	NB	SB	NB	SB																
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
11:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	1	6	5	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	14	13	11	13	4	5	1	2	1	0	1	0	0	0	0	3	1	1	0	0	0	0	0	

Peds & Bikes Study

Location: Velasquez Rd & Grissom Rd
 City: Laguna Hills

Date: 2/22/2026
 Day: Sunday

TIME	Peds								Bikes															
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	NU	SU	EU	WU
	EB	WB	EB	WB	NB	SB	NB	SB																
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
10:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	1	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
4:15 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	4	3	2	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	14	19	11	8	2	3	9	10	1	0	2	0	0	0	0	1	0	4	0	0	0	0	0	0

Peds & Bikes Study

Location: Velasquez Rd & Grissom Rd
City: Laguna Hills

Date: 2/23/2026
Day: Monday

TIME	Peds								Bikes															
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	NU	SU	EU	WU
	EB	WB	EB	WB	NB	SB	NB	SB																
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
9:45 AM	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	1	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:30 PM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	19	20	7	6	3	4	1	2	3	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0

Peds & Bikes Study

Location: Velasquez Rd & Grissom Rd
 City: Laguna Hills

Date: 2/24/2026
 Day: Tuesday

TIME	Peds								Bikes															
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	NU	SU	EU	WU
	EB	WB	EB	WB	NB	SB	NB	SB																
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	2	2	1	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
5:15 PM	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
6:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	16	19	11	7	2	4	2	1	2	0	1	0	0	0	0	2	3	2	2	0	0	0	0	0

VOLUME

Velasquez Rd & Grissom Rd

Day: Tuesday

Date: 2/24/2026

Highest (8) Hours

City: Laguna Hills

Project #: CA26_010013_004

DAILY TOTALS					NB	SB	EB	WB	Total				
					326	0	175	250	751				
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0		0	0	0	12:00	8		5	4	17		
0:15	0		0	0	0	12:15	5		2	2	9		
0:30	0		0	1	1	12:30	4		4	2	10		
0:45	0		0	0	0	12:45	5	22	4	15	14		
1:00	0		0	0	0	13:00	3		3	4	10		
1:15	0		0	0	0	13:15	8		6	5	19		
1:30	0		0	0	0	13:30	3		3	4	10		
1:45	0		0	0	0	13:45	7	21	4	16	16		
2:00	0		0	0	0	14:00	11		4	6	21		
2:15	0		0	0	0	14:15	10		3	4	17		
2:30	0		0	0	0	14:30	11		7	9	27		
2:45	0		0	0	0	14:45	14	46	6	20	27		
3:00	0		0	0	0	15:00	10		1	5	16		
3:15	0		0	0	0	15:15	9		1	4	14		
3:30	0		0	0	0	15:30	2		4	2	8		
3:45	0		0	0	0	15:45	10	31	1	7	16		
4:00	0		0	0	0	16:00	6		5	5	16		
4:15	0		0	0	0	16:15	5		1	6	12		
4:30	0		0	0	0	16:30	8		3	7	18		
4:45	0		0	0	0	16:45	12	31	6	15	21		
5:00	0		1	2	3	17:00	9		2	2	13		
5:15	0		0	0	0	17:15	10		0	6	16		
5:30	0		0	1	1	17:30	5		3	5	13		
5:45	0		1	2	1	17:45	10	34	3	8	19		
6:00	0		0	3	3	18:00	10		2	6	18		
6:15	2		0	3	5	18:15	7		1	5	13		
6:30	0		0	3	3	18:30	1		0	2	3		
6:45	3	5	2	2	1	18:45	1	19	0	3	1		
7:00	2		1	6	9	19:00	1		1	0	2		
7:15	8		9	9	26	19:15	3		1	3	7		
7:30	5		5	10	20	19:30	1		0	1	2		
7:45	9	24	11	26	10	19:45	3	8	1	3	1		
8:00	10		8	13	31	20:00	1		2	1	4		
8:15	8		9	9	26	20:15	0		0	2	2		
8:30	6		5	1	12	20:30	0		0	2	2		
8:45	1	25	2	24	5	20:45	2	3	0	2	1		
9:00	4		1	2	7	21:00	0		0	2	2		
9:15	2		2	4	8	21:15	1		0	0	1		
9:30	6		2	1	9	21:30	0		0	0	0		
9:45	3	15	1	6	1	21:45	3	4	0	1	3		
10:00	2		5	0	7	22:00	0		0	0	0		
10:15	7		1	1	9	22:15	2		0	0	2		
10:30	4		6	4	14	22:30	0		0	0	0		
10:45	5	18	3	15	4	22:45	0	2	0	1	1		
11:00	5		0	3	8	23:00	0		0	0	0		
11:15	3		3	2	8	23:15	0		0	0	0		
11:30	6		2	4	12	23:30	0		0	0	0		
11:45	4	18	6	11	4	23:45	0		0	0	0		
TOTALS	105		86		108	299	TOTALS		221		89	142	452
SPLIT %	35.1%		28.8%		36.1%	39.8%	SPLIT %		48.9%		19.7%	31.4%	60.2%

DAILY TOTALS					NB	SB	EB	WB	Total		
					326	0	175	250	751		
AM Peak Hour	7:45		7:15	7:15	7:15	PM Peak Hour	14:00		14:00	14:00	14:00
AM Pk Volume	33		33	42	107	PM Pk Volume	46		20	26	92
Pk Hr Factor	0.825		0.750	0.808	0.863	Pk Hr Factor	0.821		0.714	0.722	0.852
7 - 9 Volume	49	0	50	63	162	4 - 6 Volume	65	0	23	40	128
7 - 9 Peak Hour	7:45		7:15	7:15	7:15	4 - 6 Peak Hour	16:30		16:00	16:00	16:30
7 - 9 Pk Volume	33	0	33	42	107	4 - 6 Pk Volume	39	0	15	21	68
Pk Hr Factor	0.825	0.000	0.750	0.808	0.863	Pk Hr Factor	0.813	0.000	0.625	0.750	0.810

APPENDIX B

**5-YEAR SWITRS
ROADWAY SEGMENT COLLISION HISTORY**

**CITY OF LAGUNA HILLS
 GRISSOM ROAD AT/NEAR WILKES PLACE
 AND ALSO
 GRISSOM ROAD AT/NEAR VELASQUEZ ROAD
 5-YEAR SWITRS COLLISION HISTORY
 JAN. 1, 2021 - DEC. 31, 2025**

CASE ID	COLL. DATE	COLL. TIME	PRIMARY ROAD	SECONDARY ROAD	DIST.	DIR.	INTERS.	WEATH. 1	COLL. SEVER.	PRIM. COLL. FACT.	PCF VIOL. CAT.	PCF VIOL.	HIT AND RUN	TYPE OF COLL.	MOTOR	ROAD
															VEHICLE INVOLVED WITH	SURF.
9403581	20220126	2225	WILKES PL	GRISSOM RD	101	N	N	A	3	A	8	22107	N	C	E	A

NOTES:

Weather 1
 A - Clear
 B - Cloudy
 C - Raining
 D - Snowing
 E - Fog
 F - Other
 G - Wind
 -- Not Stated

Collision Severity
 1 - Fatal
 2 - Injury (Severe)
 3 - Injury (Other Visible)
 4 - Injury (Complaint of Pain)
 0 - PDO (Property Damage Only)

Primary Collision Factor
 A - (Vehicle) Code Violation
 B - Other Improper Driving
 C - Other Than Driver
 D - Unknown
 E - Fell Asleep
 -- Not Stated

PCF Violation Category
 01 - Driving or Bicycling Under Influence
 02 - Impeding Traffic
 03 - Unsafe Speed
 04 - Following Too Closely
 05 - Wrong Side of Road
 06 - Improper Passing
 07 - Unsafe Lane Change
 08 - Improper Turning
 09 - Automobile ROW
 10 - Pedestrian ROW
 11 - Pedestrian Violation
 12 - Traffic Signals and Signs
 13 - Hazardous Parking
 14 - Lights
 15 - Brakes
 16 - Other Equipment
 17 - Other Hazardous Violation
 18 - Other Than Driver (or Ped)
 19 -
 20 -
 21 - Unsafe Starting or Backing
 22 - Other Improper Driving
 23 - Pedestrian or "Other" Under the Influence
 24 - Fell Asleep
 00 - Unknown
 -- Not Stated

Hit and Run
 F - Felony
 M - Misdemeanor
 N - Not Hit & Run

Type of Collision
 A - Head-On
 B - Sideswipe
 C - Rear-End
 D - Broadside
 E - Hit Object
 F - Overturned
 G - Vehicle/Pedestrian
 H - Other
 -- Not Stated

Motor Vehicle Involved With:
 A - Non-Collision
 B - Pedestrian
 C - Other Motor Vehicle
 D - Motor Vehicle on Other Roadway
 E - Parked Motor Vehicle
 F - Train
 G - Bicycle
 H - Animal
 I - Fixed Object
 J - Other Object
 -- Not Stated

Road Surface
 A - Dry
 B - Wet
 C - Snowy or Icy
 D - Slippery
 -- Not Stated

APPENDIX C

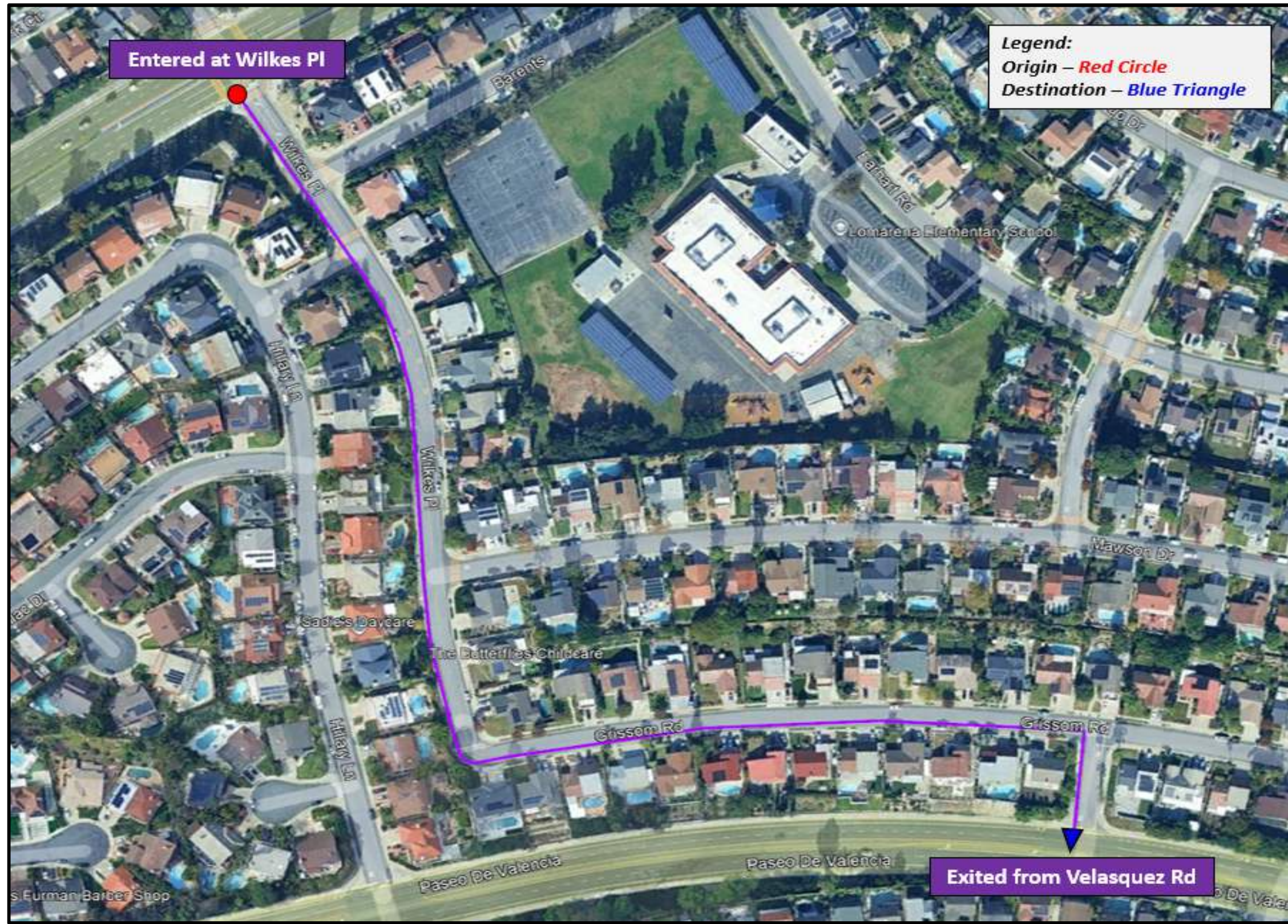
ORIGIN-DESTINATION STUDY DATA

Origin & Destination

City: Laguna Hills, CA

Date: 2/24/2026 (Tue)

ORIGIN & DESTINATION VOLUME [# OF VEHICLES]							NOTES
ORIGIN	From [Wilkes Pl & Alicia Pkwy]						
DESTINATION	To [Velasquez Rd & Paseo De Valencia]						
S No	Entered at Wilkes Pl	Exited from Velasquez Rd	Dwell Time	Direction of Travel when Entered	Vehicle Class/Model	Vehicle Colour	
1	7:23:13	7:24:19	0:01:06	EB	Jeep/Car	Black	
2	7:35:14	7:37:21	0:02:07	EB	Sedan	Dark Blue	
3	7:37:50	7:38:54	0:01:04	EB	Sedan	Grey	
4	8:10:26	8:11:18	0:00:52	EB	SUV/BMW	Grey	
5	11:28:55	11:30:11	0:01:16	EB	Jeep/Car	Black	
6	11:49:17	11:50:27	0:01:10	EB	Sedan	Black	
7	11:56:59	11:58:02	0:01:03	EB	Pickup	White	
8	12:56:52	12:57:50	0:00:58	EB	Sedan	White	
9	13:29:08	13:30:01	0:00:53	EB	SUV/Car	Black	
10	13:34:06	13:35:06	0:01:00	EB	Car	Black	
11	13:43:57	13:46:47	0:02:50	EB	Pickup	White	
12	13:51:53	13:53:00	0:01:07	EB	Pickup	Red	
13	16:01:34	16:02:46	0:01:12	EB	Sedan	Silver	
14	16:37:53	16:38:54	0:01:01	EB	Car (hatchback)	Black	
15	17:31:02	17:31:56	0:00:54	EB	Pickup	White	
16	17:45:30	17:48:49	0:03:19	EB	Car	Dark Blue	
17	7:21:40	9:40:48	2:19:08	EB	Van	White	
18	7:27:22	7:38:54	0:11:32	EB	Sedan	Black	
19	7:31:53	7:38:24	0:06:31	EB	Sedan	Black	
20	7:53:13	11:27:08	3:33:55	EB	Car	White	
21	8:01:42	8:13:54	0:12:12	EB	SUV	Grey	
22	8:47:31	12:07:46	3:20:15	EB	Van	White	
23	8:59:24	12:47:42	3:48:18	EB	Car	Black	
24	9:37:28	10:00:59	0:23:31	EB	Pickup	White	
25	9:42:07	9:52:02	0:09:55	EB	Van	White	
26	10:07:16	10:08:22	0:01:06	EB	Pickup	Silver	
27	10:24:54	14:19:21	3:54:27	EB	Sedan	Black	
28	12:09:27	12:30:03	0:20:36	EB	Pickup	White	
29	12:59:34	13:00:37	0:01:03	EB	Sedan	White	
30	15:26:34	15:40:49	0:14:15	EB	Sedan	White	
31	16:52:24	16:56:37	0:04:13	EB	Sedan	White	
32	17:31:02	17:31:56	0:00:54	EB	Pickup	White	
33	17:47:39	17:48:38	0:00:59	EB	Pickup	White	
Average Dwell Time			0:34:41				



Origin & Destination

City: Laguna Hills, CA

Date: 2/24/2026 (Tue)

ORIGIN & DESTINATION VOLUME [# OF VEHICLES]							NOTES
ORIGIN	From [Velasquez Rd & Paseo De Valencia]						
DESTINATION	To [Wilkes Pl & Alicia Pkwy]						
S No	Entered at Velasquez Rd	Exited from Wilkes Pl	Dwell Time	Direction of Travel when Entered	Vehicle Class/Model	Vehicle Colour	
1	8:27:16	8:28:25	0:01:09	WB	Pickup	Dark Grey	
2	8:43:26	8:47:17	0:03:51	WB	School Bus		
3	9:14:50	9:16:12	0:01:22	WB	Pickup	Blue	
4	10:40:46	10:41:43	0:00:57	WB	Sedan	White	
5	13:16:45	13:19:38	0:02:53	WB	School Bus		
6	14:21:15	14:22:18	0:01:03	WB	Car	Grey/Black Roof	
7	14:50:20	14:59:36	0:09:16	WB	Pickup	Golden	
8	15:02:50	15:04:33	0:01:43	WB	Car	Grey	
9	15:47:26	15:50:54	0:03:28	WB	Pickup	Black	
10	16:04:18	16:05:29	0:01:11	WB	Car	Black	
11	16:12:12	16:13:22	0:01:10	WB	Car	White/Black roof	
12	17:58:03	17:59:05	0:01:02	WB	Car	Grey/Black Roof	
13	8:09:06	9:15:24	1:06:18	WB	Sedan	Grey	
14	9:11:05	9:16:58	0:05:53	WB	Car	Red	
15	9:35:25	9:43:47	0:08:22	WB	Car	White/Black roof	
16	10:08:53	10:56:46	0:47:53	WB	Car	Sky blue	
17	10:22:49	11:25:26	1:02:37	WB	Car	Grey	
18	10:40:47	10:41:43	0:00:56	WB	Car	White	
19	11:45:53	14:43:23	2:57:30	WB	Car	White	
20	13:09:29	15:53:42	2:44:13	WB	Car	Black	
21	14:00:49	14:22:10	0:21:21	WB	Van	White	
22	14:16:30	14:41:26	0:24:56	WB	Sedan	Silver	
23	14:44:11	16:25:33	1:41:22	WB	Car	White/Black roof	
24	16:04:19	16:05:29	0:01:10	WB	Sedan	Black	
25	16:48:41	16:54:33	0:05:52	WB	Car	Black	
26	17:00:53	18:47:20	1:46:27	WB	Pickup	Black	
27	17:01:14	17:06:11	0:04:57	WB	Sedan	Black	
28	17:30:19	17:59:05	0:28:46	WB	Car	Grey	
29	18:17:22	18:22:49	0:05:27	WB	Sedan	Black	
Average Dwell Time			0:29:46				



APPENDIX D

MULTIWAY STOP SIGN WARRANT GUIDELINES

CA MUTCD

Table 2B-1 that corresponds to the mainline roadway classification (Expressway or Freeway). If a minimum size is not provided in the Freeway column, the minimum size in the Expressway column should be used. If a minimum size is not provided in the Freeway or Expressway Column, the size in the Oversized column should be used.

08 The minimum sizes for all regulatory signs facing traffic on exit and entrance ramps at all other classifications of interchanges (see Section 2E.11) should be the sizes shown in Table 2B-1 in the Conventional Road Single Lane column for single-lane ramps and in the Multi-Lane column for multi-lane ramps.

Section 2B.04 STOP Sign (R1-1) and ALL-WAY Plaque (R1-3P)

Standard:

01 **When it is determined that a full stop is always required on an approach to an intersection, a STOP (R1-1) sign (see Figure 2B-1) shall be used.**

01a **When a required stop is to apply at the entrance to an intersection from a one-way street with a roadway of 30 feet or more in width, stop signs shall be erected both on the left and the right sides of the one-way street at or near the entrance to the intersection. Refer to CVC § 21355.**

02 **Secondary legends shall not be used on STOP sign faces.**

03 **The STOP sign shall not be displayed using a changeable message sign.**

04 **At intersections where all approaches are controlled by STOP signs (see Section 2B.12), an ALL-WAY (R1-3P) supplemental plaque (see Figure 2B-1) shall be mounted below each STOP sign. The ALL-WAY plaque shall have a white legend and border on a red background.**

05 **Supplemental plaques with legends such as 2-WAY, 3-WAY, 4-WAY, or other numbers of ways shall not be used with STOP signs.**

Support:

06 The use of the CROSS TRAFFIC DOES NOT STOP (W4-4P Series) and other plaques with variations of this legend is described in Section 2C.66.

Guidance:

07 *The TRAFFIC FROM LEFT (RIGHT) DOES NOT STOP (W4-4aP) plaque or ONCOMING TRAFFIC DOES NOT STOP (W4-4bP) plaque should be used at intersections where STOP signs control all but one approach to the intersection, unless the only non-stopped approach is from a one-way street.*

Option:

08 The EXCEPT RIGHT TURN (R1-10P) plaque (see Figure 2B-1) may be mounted below the STOP sign if an engineering study determines that a special combination of geometry and traffic volumes is present that makes it possible for right-turning traffic on the approach to be allowed to enter the intersection without stopping.

Support:

09 The design and application of Stop Beacons are described in Section 4S.05.

10 **A STOP (R1-1) sign is not a "cure-all" and is not a substitute for other traffic control devices and/or other traffic calming strategies. Often, the need for a STOP (R1-1) sign can be eliminated if the sight distance is increased by removing obstructions.**

Through Highways

Option:

11 STOP (R1-1) signs may be installed either at or near the entrance to a State highway, except at signalized intersections, or at any location so as to control traffic within an intersection. Refer to CVC §§ 21352 and 21355. See Section 1A.05 for information regarding this publication.

Support:

12 Authority to place STOP (R1-1) signs facing State highway traffic is delegated to the Caltrans District Directors.

Option:

13 Local authorities may designate any highway under their jurisdiction as a through highway and install STOP (R1-1) signs in a like manner. Refer to CVC § 21354.

Standard:

14 **No local authority shall erect or maintain any STOP (R1-1) sign or other traffic control device requiring a stop, on any State highway, except by permission of Caltrans. Refer to CVC § 21353.**

Support:

15 Caltrans will grant such permission only when an investigation indicates that the STOP (R1-1) sign will benefit traffic.

SIGNING FOR RIGHT-OF-WAY AT INTERSECTIONS

Section 2B.06 General Considerations

Support:

- 01 Unsignalized intersections represent the most common form of intersection right-of-way control. Selection of control type might be impacted by specific requirements of State law or local ordinances.
- 02 Roundabouts and traffic circles are circular intersection designs and are not traffic control devices. The decision to convert an intersection from a conventional intersection to a circular intersection is an engineering design decision and not a traffic control device decision. As such, criteria for conversion from a conventional intersection to a circular intersection are not included in the MUTCD.

Guidance:

- 03 *The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and efficiency for all road users.*

Support:

- 04 Some types of right-of-way control that can exist at an unsignalized intersection in order from the least restrictive to the most restrictive are the following:
- A. No intersection control (see Section 2B.09): There are no right-of-way traffic control devices on any of the approaches to the intersection.
 - B. Yield control (see Section 2B.10): YIELD signs are placed on all approaches (for a circular intersection), ~~on opposing approaches for a four-leg intersection~~, on a single approach for a three-leg intersection, ~~or in the median of a divided highway~~. The YIELD signs are placed on the minor road.
 - C. Minor road stop control (see Section 2B.11): STOP signs are typically placed on opposing approaches (for a four-leg intersection) or on a single approach (for a three-leg intersection). The STOP signs are normally placed on the minor road. Section 2B.07 contains guidance on selecting the minor road.
 - D. All-way stop control (see Section 2B.12): STOP signs are placed on all approaches to the intersection.

Guidance:

- 05 *When selecting a form of intersection control, the following factors should be considered:*
- A. *Motor vehicle, bicycle, and pedestrian traffic volumes on all approaches; where the term units/day or units/hour is indicated, it should be the total of motor vehicle, bicycle, and pedestrian volume;*
 - B. *Driver yielding behavior with regard to all modes of conflicting traffic, including bicyclists and pedestrians;*
 - C. *Number and angle of approaches;*
 - E. *Approach speeds;*
 - E. *Sight distance available on each approach;*
 - F. *Reported crash experience; and*
 - G. *The presence of a grade crossing near the intersection.*

Standard:

- 06 **YIELD or STOP signs shall not be used for speed control.**

Support:

- 07 Appropriate traffic calming or other speed control measures are available to control vehicle speeds, such as those that do not have the potential to diminish the effectiveness of traffic control devices when used for their specified purpose.

Standard:

- 08 **Because the potential for conflicting commands could create driver confusion, YIELD or STOP signs shall not be used in conjunction with any traffic control signal operation, except in the following cases:**
- A. **If the signal indication for an approach is a flashing red at all times;**
 - B. **If a minor street or driveway is located within or adjacent to the area controlled by the traffic control signal, but does not require separate traffic signal control because an extremely low potential for conflict exists; or**
 - C. **If a channelized turn lane is separated from the adjacent travel lanes by an island and the channelized turn lane is not controlled by a traffic control signal.**

- 08a **STOP signs shall not be erected at any entrance to an intersection controlled by traffic signals. Refer to CVC § 21355(a).**

Option:

08b STOP signs may be used at a channelized turn lane if it is separated from the adjacent travel lanes moving in same direction by an island and the channelized turn lane is not controlled by a traffic control signal.

Standard:

09 STOP signs and YIELD signs shall not be installed on different approaches to the same unsignalized intersection if those approaches conflict with or oppose each other, except as provided for in Items A and B in Paragraph 3 of Section 2B.10.

10 Portable or part-time STOP or YIELD signs shall not be used except for emergency and temporary traffic control zone purposes.

11 A portable or part-time (folding) STOP sign that is manually placed into view and manually removed from view shall not be used during a power outage to control a signalized approach unless the maintaining agency establishes that the signal indication that will first be displayed to that approach upon restoration of power is a flashing red signal indication and that the portable STOP sign will be manually removed from view prior to resuming stop-and-go operation of the traffic control signal.

Option:

12 A portable or part-time (folding) STOP sign that is electrically or mechanically operated such that it only displays the stop message during a power outage and ceases to display the stop message upon restoration of power may be used during a power outage to control a signalized approach.

Support:

13 The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.

14 Section 9B.01 contains provisions regarding the assignment of priority where a shared-use path crosses a roadway.

Section 2B.07 Determining the Minor Road for Unsignalized Intersections

Guidance:

01 The selection of the minor road to be controlled by YIELD or STOP signs should be based on one or more of the following criteria:

- A. A roadway intersecting a designated through or numbered highway,
- B. A roadway with the lower functional classification,
- C. A roadway with the lower traffic volume,
- D. A roadway with the lower speed limit, and/or
- E. A roadway that intersects with a roadway that has a higher priority for one or more modes of travel.

02 When two roadways that have relatively equal volumes, speeds, and/or other characteristics intersect, the following factors should be considered in selecting the minor road for installation of YIELD or STOP signs:

- 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.

Support:

03 Refer to CVC § 21356 for the erection of YIELD signs upon the approaches to more than one of the intersecting streets.

Section 2B.08 Right-of-Way Intersection Control Considerations

Guidance:

01 Before converting to a more restrictive form of right-of-way control at an unsignalized intersection, the following alternative treatments to address safety, operational, or other concerns should be among those to be considered:

- A. Where yield or stop controlled, installing Yield Ahead or Stop Ahead signs on the appropriate approaches to the intersection;
- B. Removing parking on one or more approaches;
- C. Removing sight distance obstructions;
- D. Installing signs along the major street to warn road users approaching the intersection;
- E. Relocating the stop line(s) and making other changes to improve the sight distance at the intersection;

- F. *Installing measures designed to reduce speeds on the approaches;*
- G. *Installing an Intersection Control Beacon (see Section 4S.02) or Stop Beacon (see Section 4S.05) at the intersection to supplement STOP sign control;*
- H. *Installing a Warning Beacon (see Section 4S.03) on warning signs in advance of a stop-controlled intersection on major-street and/or minor-street approaches;*
- I. *Adding one or more lanes on a minor-street approach to reduce the number of vehicles per lane on the approach;*
- J. *Revising the geometrics at the intersection to channelize vehicular movements and reduce the time required for a vehicle to complete a movement, which could also assist pedestrians;*
- K. *Revising the geometrics at the intersection to add pedestrian median refuge islands and/or curb extensions;*
- L. *Installing roadway lighting if a disproportionate number of crashes occur at night;*
- M. *Restricting one or more turning movements on a full-time or part-time basis if alternate routes are available;*
- N. *Installing on the major street a pedestrian-actuated device: Warning Beacon (see Section 4S.03), rectangular rapid-flashing beacon (see Section 4L.01), or In-Roadway Warning Lights (see Chapter 4U), if pedestrian safety is the major concern;*
- O. *If the warrant is satisfied, installing all-way stop control;*
- P. *Installing a pedestrian hybrid beacon (see Chapter 4J) on the major street to address pedestrian safety;*
- Q. *Installing a circular intersection; and*
- R. *Employing other alternatives, depending on conditions at the intersection.*

Section 2B.09 No Intersection Control

Guidance:

- 01 *The decision not to use intersection control should be based on engineering judgment.*

Option:

- 02 The following factors may be considered:
- A. Intersection sight distance is adequate on all approaches.
 - B. All approaches to the intersection are a single lane and there are no separate turn lanes.
 - C. The combined motor vehicle, bicycle, and pedestrian volume (existing or projected) entering the intersection from all approaches averages less than 1,000 units per day or 80 units in the peak hour.
 - D. There are no marked crosswalks or bicycle lanes on any approach.
 - E. None of the approaches to the intersection are for a through highway, main road, or higher functional classification.
 - F. The angle of intersection is between 90 and 75 degrees.
 - G. The functional classification of the intersecting streets is either the intersection of two local streets or the intersection of a local street with a collector street.

Section 2B.10 Yield Control

Guidance:

- 01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs.*
- 02 *Yield control should be considered when engineering judgment indicates that all of the following conditions exist:*
- A. *Intersection sight distance is adequate on the approaches to be controlled by YIELD signs.*
 - B. *All approaches to the intersection are a single lane and there are no separate turn lanes.*
 - C. *One of the following crash-related criteria applies:*
 - D. *For changing from no intersection control to yield control, there have been two or more reported crashes in the previous 12 months that are susceptible to correction by the installation of a YIELD sign.*
 - E. *For changing from minor road stop control to yield control, there have been two or fewer reported crashes in the previous 12 months.*
 - F. *The combined motor vehicle, bicycle, and pedestrian volume entering the intersection averages less than 1,800 units per day or 140 units in the peak hour.*

G. The angle of intersection is between 90 and 75 degrees.

H. The functional classification of the intersecting streets is either the intersection of two local streets or the intersection of a local street with a collector street.

Support:

02a Refer to FHWA's List of Known Errors for errors in Paragraph 2, Items D and E text. Refer to Section 1A.04 for more details.

Option:

03 YIELD signs may be installed at an intersection when any of the following conditions apply:

- A. ~~At the second intersection of a divided highway crossing or median break functioning as two separate intersections (see Figure 2B-19). In this case, a YIELD sign may be installed at the entrance to the second intersection.~~
- B. For a channelized turn lane that is separated from the adjacent travel lanes by an island, even if the adjacent lanes at the intersection are controlled by a highway traffic control signal or by a STOP sign.
- C. At an intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.
- D. Facing the entering roadway for a merge-type movement if engineering judgment indicates that control is needed because acceleration geometry and/or sight distance is not adequate for merging traffic operation.
- E. On low-volume rural roads if engineering judgment indicates that a YIELD sign would provide adequate control.
- F. On an approach to an intersection where the only permissible movement is a right-turn movement with an intersection geometry similar to a channelized right-turn lane or an approach to a roundabout.

Guidance:

04 *The YIELD signs should be installed on opposing minor-street approaches (for a four-leg intersection) or on the minor-street approach (for a three-leg intersection). When two intersecting roadways have relatively equal volumes, speeds, and other characteristics, yield control should be installed on the approach that conflicts the most with established pedestrian crossing activity, school walking routes, or bicycle crossing activity.*

Standard:

05 **A YIELD sign shall be used to require road users to yield the right-of-way to other traffic at the entrance to a roundabout. YIELD signs at roundabouts shall be used to control the approach roadways and shall not be used to control the circulatory roadway.**

06 **YIELD signs shall not be placed in more than one of ~~on all of~~ the approaches to an intersection, except at roundabouts. Refer to CVC § 21356.**

Section 2B.11 Minor Road Stop Control

Guidance:

01 *Stop control on the minor-road approach or approaches to an intersection should be considered when engineering judgment indicates that one or more of the following conditions exist:*

- A. *A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway.*
- B. *Crash records indicate that:*
 - 1. *For a four-leg intersection, there are three or more reported crashes in a 12-month period or six or more reported crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.*
 - 2. *For a three-leg intersection, there are three or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.*
- C. *The intersection is of a lower functional classification road with a higher functional classification road.*
- D. *Conditions that previously supported the installation of all-way stop control no longer exist.*

02 *On low-volume rural roads, a STOP sign should be considered at an intersection where engineering judgment indicates that Item C in Paragraph 1 of this Section is applicable or where the intersection has inadequate sight distance for the operating vehicle speeds.*

Section 2B.12 All-Way Stop Control

Support:

- 01 The provisions in the following sections describe warrants for the recommended engineering study to determine all-way stop control. Warrants are not a substitute for engineering judgment. The fact that a warrant for a particular traffic control device is met is not conclusive justification to install or not install all-way stop control. Because each intersection will have unique characteristics that affect its operational performance or safety, it is the engineering study for a given intersection that is ultimately the basis for a decision to install or not install all-way stop control.
- 02 All-way stop controls at intersections with substantially differing approach volumes can reduce the effectiveness of these devices for all roadway users.

Guidance:

- 03 *The decision to establish all-way stop control at an unsignalized intersection should be based on an engineering study. The engineering study for all-way stop control should include an analysis of factors related to the existing operation and safety at the intersection, the potential to improve these conditions, and the applicable factors contained in the following all-way stop control warrants:*
 - A. *All-Way Stop Control Warrant A: Crash Experience (see Section 2B.13)*
 - B. *All-Way Stop Control Warrant B: Sight Distance (see Section 2B.14)*
 - C. *All-Way Stop Control Warrant C: Transition to Signal Control or Transition to Yield Control at a Circular Intersection (see Section 2B.15)*
 - D. *All-Way Stop Control Warrant D: 8-Hour Volume (Vehicles, Pedestrians, Bicycles) (see Section 2B.16)*
 - E. *All-Way Stop Control Warrant E: Other Factors (see Section 2B.17)*

Option:

- 04 The decision to install all-way stop control on site roadways open to public travel may be based on engineering judgment.

Standard:

- 05 **The satisfaction of an all-way stop control warrant or warrants shall not in itself require the installation of all-way stop control at an unsignalized intersection.**

Section 2B.13 All-Way Stop Control Warrant A: Crash Experience

Option:

- 01 All-way stop control may be installed at an intersection where an engineering study indicates that:
 - A. For a four-leg intersection, there are five or more reported crashes in a 12-month period or six or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control.
 - B. For a three-leg intersection, there are four or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control.

Section 2B.14 All-Way Stop Control Warrant B: Sight Distance

Option:

- 01 All-way stop control may be installed at an intersection where an engineering study indicates that sight distance on the minor-road approaches controlled by a STOP sign is not adequate for a vehicle to turn onto or cross the major (uncontrolled) road.

Support:

- 02 At such a location, 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.

Section 2B.15 All-Way Stop Control Warrant C: Transition to Signal Control or Transition to Yield Control at a Circular Intersection

Option:

- 01 All-way stop control may be installed at locations where all-way stop control is an interim measure that can be installed to control traffic while arrangements are being made for the installation of a traffic control signal (see Chapter 4C) at the intersection or for the installation of yield control at a circular intersection.

Section 2B.16 All-Way Stop Control Warrant D: 8-Hour Volume (Vehicles, Pedestrians, Bicycles)

Option:

- 01 All-way stop control may be installed at an intersection where an engineering study indicates:
 - A. The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the major- street approaches is at least 300 units per hour for each of any 8 hours of a typical day; and
 - B. The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the minor- street approaches is at least 200 units per hour for each of any of the same 8 hours.
- 02 If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants may be reduced to 70 percent of the values given in Items A and B in Paragraph 1 of this Section.

Section 2B.17 All-Way Stop Control Warrant E: Other Factors

Option:

- 01 All-way stop control may be installed at an intersection where an engineering study indicates that all- way stop control is needed due to other factors not addressed in the other all-way stop control warrants. Such other factors may include, but are not limited to, the following:
 - A. The need to control left-turn conflicts,
 - B. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where all-way stop control would improve traffic operational characteristics of the intersection, or
 - C. Where pedestrian and/or bicyclist movements support the installation of all-way stop control.

Section 2B.18 STOP Sign or YIELD Sign Placement

Standard:

- 01 The STOP or YIELD sign shall be installed on the near side of the intersection on the right- hand side of the approach to which it applies. When the STOP or YIELD sign is installed at this required location and the sign visibility is restricted, a Stop Ahead sign (see Section 2C.35) shall be installed in advance of the STOP sign or a Yield Ahead sign (see Section 2C.35) shall be installed in advance of the YIELD sign.
- 02 The STOP or YIELD sign shall be located as close as practicable to the intersection it regulates, while optimizing its visibility to the road user it is intended to regulate.
- 03 STOP signs and YIELD signs shall not be mounted on the same post.
- 03a If other signs are grouped with a STOP sign, except for ONE WAY (R6-1 & R6-2) signs and Street Name (D3-1) sign (refer to Sections 2B.49 & 2D.45), they shall be installed below the STOP sign.

Support:

- 03b When a Street Name sign and a ONE WAY sign are mounted on the same assembly as a STOP sign, the Street Name sign needs to be placed at the top, the ONE WAY sign directly below it, and the STOP sign at the bottom.
- 04 Section 2A.05 contains information about mounting signs back-to-back with a STOP or YIELD sign.

Guidance:

- 05 STOP or YIELD signs should not be placed farther than 50 feet from the edge of the pavement of the intersected roadway (see Drawing F in Figure 2A-3).
- 06 Supplemental plaques used in conjunction with a STOP or YIELD sign should be limited to those specified for such use in this Manual

Option:

- 07 Where drivers proceeding straight ahead must yield to traffic approaching from the opposite direction, such as at a one-lane bridge, a TO ONCOMING TRAFFIC (R1-2aP) plaque (see Figure 2B-1) may be mounted below the YIELD sign.
- 08 Where drivers must yield to traffic in a multi-lane roundabout, a TO TRAFFIC IN CIRCLE (R1-2bP) or TO ALL LANES (R1-2cP) plaque (see Figure 2B-1) may be mounted below the YIELD sign.

Support:

- 09 Figure 2A-3 shows examples of some typical placements of STOP signs and YIELD signs.

Standard:

- 09a The TO ONCOMING TRAFFIC (R1-2a) sign when used, shall be mounted on the same post and immediately below a YIELD (R1-2) sign.

Guidance:

09b The width of the R1-2a sign should be equal to the width of the YIELD (R1-2) sign.

Support:

10 Section 2A.13 contains additional information about separate and combined mounting of other signs with STOP or YIELD signs.

Guidance:

11 Stop lines that are used to supplement a STOP sign should be located as described in Section 3B.19. Yield lines that are used to supplement a YIELD sign should be located as described in Section 3B.19.

12 Where there is a marked crosswalk at the intersection, the STOP sign should be installed in advance of the edge of the crosswalk that is nearest to the approaching traffic.

13 Except at roundabouts and channelized right-turn lanes, where there is a marked crosswalk at the intersection, the YIELD sign should be installed in advance of the edge of the crosswalk that is nearest to the approaching traffic.

14 Where two roads intersect at an acute angle, the STOP or YIELD sign should be positioned at an angle, or shielded, so that the legend is out of view of traffic to which it does not apply.

15 If a raised splitter island is available on the left-hand side of a multi-lane roundabout approach, an additional YIELD sign should be placed on the left-hand side of the approach.

Option:

16 If a raised splitter island is available on the left-hand side of a single-lane roundabout approach, an additional YIELD sign may be placed on the left-hand side of the approach.

17 At wide-throat intersections or where two or more approach lanes of traffic exist on the signed approach, an additional STOP or YIELD sign may be installed on the left-hand side of the road and/or a stop or yield line may be used to improve observance of the right-of-way control. At channelized intersections or at divided roadways separated by a median or divisional island, the additional STOP or YIELD sign may be placed on a channelizing island, or in the median or on the divisional island. An additional STOP or YIELD sign may also be placed overhead facing the approach at the intersection to improve observance of the right-of-way control.

Standard:

18 More than one STOP sign or more than one YIELD sign shall not be placed on the same support facing in the same direction.

Option:

19 For a yield-controlled channelized right-turn movement onto a roadway without an acceleration lane and for an entrance ramp onto a freeway or expressway without an acceleration lane, a NO MERGE AREA (W4-5aP) supplemental plaque (see Section 2C.45) may be mounted below a Yield Ahead (W3-2) sign and/or below a YIELD (R1-2) sign when engineering judgment indicates that road users would expect an acceleration lane to be present.

Section 2B.19 Yield Here To Pedestrians Signs and Stop Here For Pedestrians Signs (R1-5 Series)

Support:

01 The R1-5 series signs are intended to mitigate the scenario that can place pedestrians at risk by blocking other drivers' view of pedestrians and by blocking the pedestrians' view of the vehicles approaching in the adjacent lanes.

Standard:

02 Yield Here to ~~(Stop Here for)~~ Pedestrians (R1-5, R1-5a, ~~R1-5b, R1-5c, R1-5d, and R1-5e~~) signs (see Figure 2B-2) shall be used if yield ~~(stop)~~ lines are used in advance of a marked crosswalk only where it crosses an uncontrolled multi-lane approach. ~~The Stop Here for Pedestrians signs shall only be used where the law specifically requires that a driver must stop for a pedestrian in a crosswalk.~~ The legend STATE LAW shall not be displayed on the R1-5 series signs.

Support:

02a The Stop Here for Pedestrian signs (R1-5b, R1-5c and R1-5e) are deleted as a stop is not required in California per CVC § 21950.

Guidance:

03 If yield ~~(stop)~~ lines and Yield Here to ~~(Stop Here for)~~ Pedestrians signs are used in advance of a crosswalk that crosses an uncontrolled multi-lane approach, the signs should be placed 20 to 50 feet in advance of the nearest edge of the crosswalk (see Section 3B.19 and Figure 3B-16).

Standard:

APPENDIX E

STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

CA MUTCD

Table 6B-2. Stopping Sight Distance as a Function of Speed on Level Roads
(Used as suggested longitudinal buffer space length or location for flagger station)

Speed*	Distance
20 mph	115 feet
25 mph	155 feet
30 mph	200 feet
35 mph	250 feet
40 mph	305 feet
45 mph	360 feet
50 mph	425 feet
55 mph	495 feet
60 mph	570 feet
65 mph	645 feet
70 mph	730 feet
75 mph	820 feet



* Posted speed, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph.

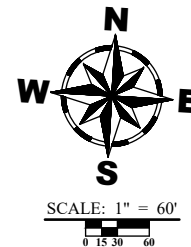
Table 6B-2(CA). Stopping Sight Distance as a Function of Speed on Downgrades
(Used as suggested longitudinal buffer space length or location for flagger station)

Speed (mph)	% Downgrade (Buffer Space)		
	- 3% (feet)	- 6% (feet)	- 9% (feet)
20	116	120	126
25	158	165	173
30	205	215	227
35	257	271	287
40	315	333	354
45	378	400	427
50	446	474	507
55	520	553	593
60	598	638	686
65	682	728	785
70	771	825	891
75	866	927	1003

*Exhibit 3-2. A Policy on Geometric Design on Highways and Streets, AASHTO, 2001, p.115

APPENDIX F

EXHIBIT SHOWING RECOMMENDATIONS



Install R2-1(25) sign & post and paint white "25" pavement marking adjacent to sign

Paint detail 1 (centerline)

Paint 50' 6" yellow stripe (centerline)

Paint detail 1 (centerline)

Wilkes Place

Grissom

Los Bolsas

Road

Join exist

Join exist

Velasquez Road

Paseo De Valencia

Install 30' red curb



SIGNING & STRIPING IMPROVEMENTS
Grissom Road at/near Velasquez Road
CITY OF LAGUNA HILLS





City of Laguna Hills Traffic Commission Staff Report

Date: March 18, 2026
To: Traffic Commissioners
From: Joe Ames, Assistant City Manager
Issue: Review of Residential Permit Parking Program Request for Camberwell Street

Recommendation: That the Traffic Commission provide direction to City Staff.

Background:

In June 2025, City staff received the attached resident-generated petition form from Mr. Curtis Van Buskirk, a resident on Camberwell Street, addressed to the City to establish residential permit parking on Camberwell Street between Hendon Street and Costeau Street.

Residential Permit Parking Program Historic Practice:

On March 22, 1994, the City of Laguna Hills City Council passed, approved, and adopted City Ordinance No. 94-4, which established the City's Residential Permit Parking Program (Laguna Hills Municipal Code Chapter 11-24). The procedures and regulations have not been changed since adoption in 1994. Chapter 11-24 includes how to establish a permit parking area, procedures regarding permit issuance, enforcement, and removal of permit parking areas.

Historically, the City has taken the approach to only restrict parking on public streets in response to specific requests for permit parking from residents. This approach aligns with the approach taken by most of the cities in Orange County.

To designate a neighborhood as a permit parking area within the City of Laguna Hills, a **City-created petition form** (emphasis added) must be submitted to the City and with the signatures of at least sixty-seven (67%) percent of the property owners supporting

the proposed permit parking area.

Section 11-24.050 of the Laguna Hills Municipal Code provides that the City Engineer is "authorized to establish rules and procedures and to produce signs, forms, and other materials necessary, or appropriate, to implement the provisions of this chapter." Since 1994, the rules and procedures have involved the requestor working with the City Engineer to delineate the proposed permit parking area limits and the City Engineer approving the proposed permit parking area.

Traditionally, a super-majority threshold is chosen by national, state, and county governments in order for significant actions to be approved. The implementation of a permit parking program has long-lasting and significant impacts on residents, including placing self-restrictions on residents' own ability to park on a street. Therefore, in most cities including Laguna Hills, a super-majority threshold was chosen to ensure that residents are committed to the permit parking program process.

Once a permit parking area is approved by City Council, the streets are signed by the Public Works Department as "Permit Parking Only" with the designated dates and times, or as required. Thereafter, motorists must display a decal or placard to park on the public street during the established time period(s). Typically, for a residential permit parking area, the City issues decals for each car registered to an address and issues four (4) annual "guest placards" (laminated, dashboard-displayed guest passes) for residents that choose to participate in the Residential Permit Parking Program.

The Department collects a nominal fee to cover the administration of the Program and the printing costs of the decals. Residents that choose not to participate in the Program may not park on the street during the prohibited dates and times.

Camberwell Street Permit Parking Petition Request:

The requestor cites that residents on Camberwell Street have been experiencing persistent safety, accessibility, and quality-of-life issues due to non-resident vehicle parking. City staff concurs that there may be several vehicles parking during the day and night on Camberwell Street and around Beckenham Park that are not owned by residents living around the park.

While City staff can not confirm that safety or quality-of-life issues exist due to non-resident vehicle parking, requests for the establishment of residential permit parking districts do not require demonstration of these types of impacts.

Because the petition form received from the resident was not City-created, the City Engineer communicated to the requestor that the petition area must include a larger area than requested, as the historic practice, with one exception, has been to include a larger area to prevent motorists from parking on immediate adjacent streets without parking permit restrictions. Approving only Camberwell Street between Hendon Street and Costeau Street will likely lead to displaced motorists parking vehicles on Camberwell Street north of Hendon Street or on Costeau Street. City staff is aware that Traffic Commissioners have expressed similar concerns over this aspect of implementing a residential permit parking program as a major factor in whether to recommend approval of a residential permit parking program.

In response to City staff's comments, the resident indicated he believed he could gain 67% approval from residents on Camberwell Street between Hendon Street and Costeau Street **and** on Luton Street. However, the resident's proposed petition area is still smaller than the City Engineer's recommended area.

At the February 10, 2026, City Council Regular Meeting, the same resident spoke during public comments requesting that the City Council intervene in the matter. The City Council indicated the matter would be referred to the Traffic Commission for review.

The City Engineer has re-reviewed the original request and subsequent correspondence with the requestor, and has reviewed the streets in question. The City Engineer now concludes that the residential permit parking petition area need not include Calle Carmel or Via Balboa, as the City Engineer finds it less likely that displaced motorists would park on these streets.

City staff recommends that the Traffic Commission provide direction on this issue. If a new residential permit parking area is preferred, staff recommends the City Engineer's proposed Residential Permit Parking Program petition area to include portions of Costeau Street and Camberwell Street, and all of Hendon Street and Luton Street. Alternatively, the Traffic Commission may recommend other parking controls, such as no overnight parking for any vehicles in and around Beckenham Park.

For reference, the attached map shows existing parking controls in and around Beckenham Park. This information may also be helpful as it relates to comments received about non-resident parking on Beckenham Street, also on the Traffic Commission agenda this evening.

Fiscal Impact:

The costs associated with implementing a permit parking program are within the Public Works budget.

Attachments:

1. Original Petition from Resident
2. City Engineer's Originally Proposed Camberwell Permit Parking Area
3. E-mail Correspondence with Requestor
4. List of Permit Parking Areas in Laguna Hills
5. Nearby Parking Restrictions Map

Petition to Request a Residential Permit Parking Program

City of Laguna Hills, California

Date: June 8, 2025

To:

City of Laguna Hills
City Clerk's Office
Attn: Jennifer Lee, CMC
24035 El Toro Road
Laguna Hills, CA 92653
(949) 707-2635
jlee@lagunahillsca.gov

We, the undersigned residents of Camberwell Street, Laguna Hills, CA 92653, respectfully submit this petition to formally request the establishment of a Residential Permit Parking (RPP) Program for our neighborhood.

Reason for Request:

We have experienced a significant and ongoing issue with non-resident vehicles parking on our streets, which has caused the following problems:

- Significant safety concerns for pedestrians, children and exiting vehicles. Parked vehicles create obstructed view creating "blind" corner traveling both directions. Vehicles continuously performing U-turns at intersection of Luton St and Camberwell St.
- Public nuisances and inappropriate behavior, including individuals engaging in sexual acts in vehicles, loud music past "quiet time" of 2200 hours per Laguna Hills Municipal Code § 5-24, discarding trash and litter on streets, unauthorized street vehicle repairs, vehicle fluid pollution, abandoned or overparked vehicles, driveway access obstruction, and other conduct that compromises the cleanliness, safety, and dignity of our neighborhood.
- Limited parking availability for residents and their guests
- Increased traffic congestion and reduced visibility during evening hours
- Decreased property value and overall quality of life and visual neighborhood degradation

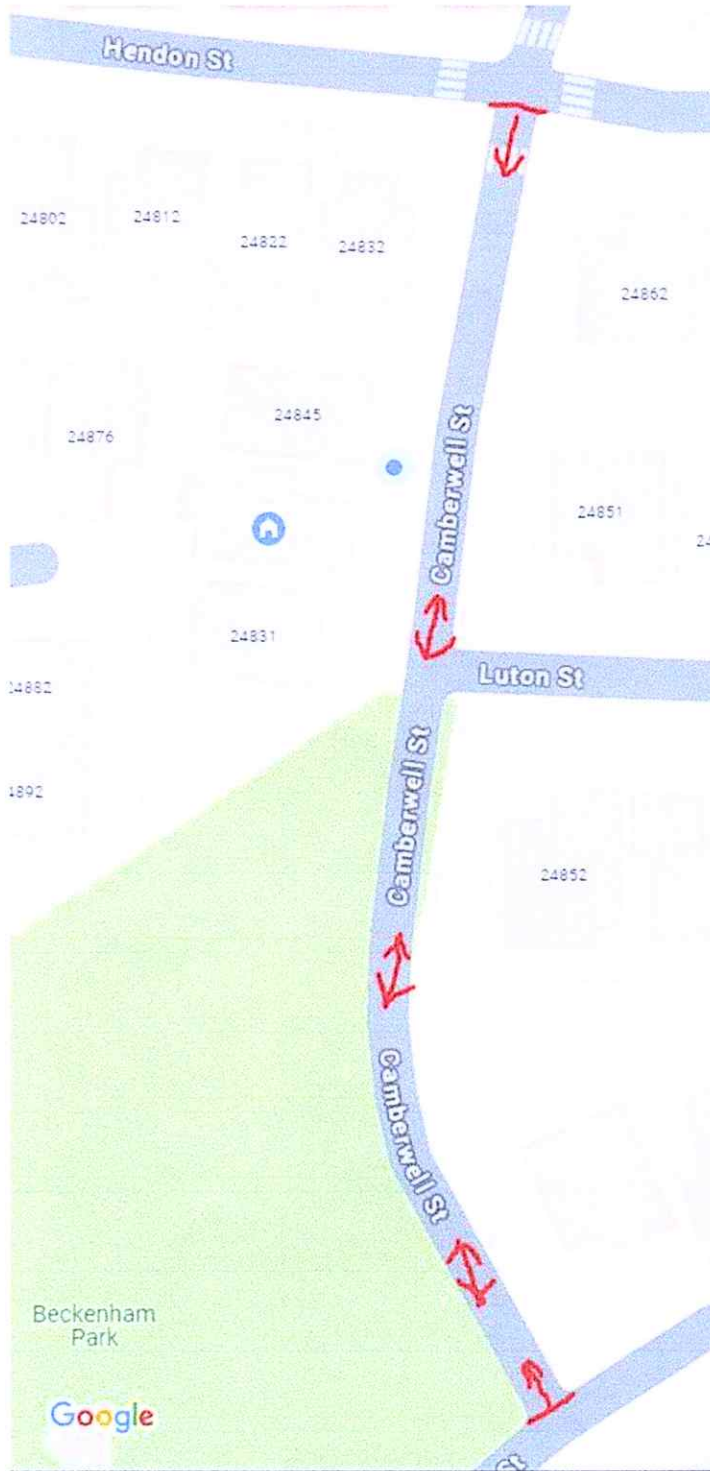
We believe that establishing a permitted parking zone will help alleviate these issues and restore the safety and accessibility of our neighborhood.

Requested Action:

We request that the City of Laguna Hills conduct a traffic and parking impact study and initiate the process for establishing a Residential Permit Parking Zone in accordance with the city's municipal code and procedures.





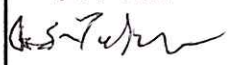
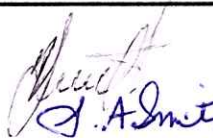
Proposed Area for Consideration:

Entirety of Camberwell Street from Hendon Street to Costeau Street.



Resident Support:

We understand the process may require a certain percentage of residents abutted to Camberwell Street in the proposed area for consideration to approve the implementation of such a program. The residents listed below support this request and are willing to participate in any required surveys, hearings, or meetings to further the request.

Name	Address	Signature	Phone/Email (optional)
Curtis Van Buskirk	24841 Camberwell Street, Laguna Hills, CA 92653		(562) 760-7513
JOHN PEDRINI CLAIRE PEDRINI	24845 Camberwell Street, Laguna Hills, CA 92653		(949) 278-5868
ALEX GALVZUSKI MABEL LEON	24831 Camberwell Street, Laguna Hills, CA 92653		(949) 584-3562
William Whiteaker	24832 Hendon Street, Laguna Hills, CA 92653		(949) 466-5078
	24862 Hendon Street, Laguna Hills, CA 92653		
	24851 Luton Street, Laguna Hills, CA 92653		
Deena Fankhauser 	24852 Luton Street, Laguna Hills, CA 92653	Deena Fankhauser David Fankhauser	949-308-0779 949-429-9225
GLYNN SMITH JUDITH SMITH	24851 Costeau Street, Laguna Hills, CA, 92653		949-795-8042 949 458 1620

Contact Information:

Primary Contact:

Name: Curtis Van Buskirk

Address: 24841 Camberwell Street, Laguna Hills, CA 92653

Phone: (562) 760-7513

Email: curtis.vanbuskirk@gmail.com

We thank you for your attention to this matter and look forward to your assistance in improving the safety and livability of our neighborhood.

Sincerely,

Residents of Camberwell Street (and abutted properties), Laguna Hills, CA



1" = 300 ft

07/28/2025



This map may represent a visual display of related geographic information. Data provided here is not a guarantee of actual field conditions. To ensure complete accuracy, please contact the responsible staff for the most up-to-date information.

From: [Curtis Van Buskirk](#)
To: [Joe Ames](#)
Cc: [Julie Comella](#)
Subject: Re: Submission of Petition for Residential Permit Parking Program – Camberwell Street
Date: Tuesday, July 29, 2025 8:16:53 PM

Dear Mr. Ames,

Thank you for your detailed response and for outlining the City’s perspective on expanding the proposed Residential Permit Parking (RPP) area.

After reviewing your recommendation and speaking further with neighbors, I would like to express our collective concern with broadening the scope of the RPP to include the additional 149 parcels identified in the attached map. While we appreciate the City’s attempt to anticipate future displacement, the fact remains that the adjacent parcels are not currently experiencing the parking issues that have led Camberwell residents to seek relief through a formal RPP program. As such, those residents have little or no current incentive to support or participate in the effort.

Expanding the boundary at this stage would likely dilute the petition’s impact and introduce unnecessary complexity, particularly since the outlined parcels are not facing the same burden. Pursuing a larger area for the sake of theoretical impacts runs the risk of weakening the current effort, which is driven by real, ongoing challenges faced specifically by residents along Camberwell Street.

It’s also worth noting that the City has approved RPPs in other neighborhoods where similar displacement concerns were likely present, yet the programs were still allowed to proceed—suggesting a precedent for more localized implementation. This reinforces the view that the need along Camberwell is distinct and actionable, even if broader conditions may eventually evolve.

We remain committed to working with the City to address this issue, but respectfully request that the focus remain on the affected parcels along Camberwell Street for the initial ballot.

I welcome a discussion over a phone call if you are available to discuss further. I would also like to understand the parameters that have been stated relative to an RPP program.

Sincerely,
Curtis Van Buskirk

Sent from my iPhone

On Jul 28, 2025, at 9:53 AM, Joe Ames <james@lagunahillsca.gov> wrote:

Dear Mr. Van Buskirk,

Thank you for your e-mail and for submitting the signed petition from the residents

with homes adjacent to Camberwell Street regarding the establishment of a Residential Permit Parking (RPP) Program. We appreciate the time and effort you and your neighbors have taken to document your concerns and formally submit this request.

While the City has approved of a singular street to be in a RPP, it has never been a collector residential street of this length with several adjacent residential streets. If permit parking were to be implemented on only Camberwell Street, it would be foreseeable that motorists would simply park on adjoining residential streets. Recently, the City's Traffic Commissioners have been concerned about this aspect of implementing a RPP as a major factor in whether to recommend approval of a RPP.

Therefore, if you and your neighbors wish to request a RPP, based upon the distribution of residents on the signed petition, City staff would recommend the attached map area with the 149 blue highlighted parcels be included in a ballot to residential property owners for establishment of a RPP. (See attached PDF.)

If you and your neighbors concur, we can schedule the mailing of the ballot.

Thank you,
Joe Ames

Joe Ames, P.E., T.E.

Assistant City Manager

City of Laguna Hills

24035 El Toro Road, Laguna Hills, CA 92653

Phone (949) 707-2655 | Fax (949) 707-2633

james@lagunahillsca.gov

<image002.jpg>

From: Curtis Van Buskirk <curtis.vanbuskirk@gmail.com>

Sent: Monday, June 23, 2025 3:41 PM

To: Julie Comella <jcomella@lagunahillsCA.gov>

Subject: Fwd: Submission of Petition for Residential Permit Parking Program – Camberwell Street

Dear Ms. Comella,

I hope this message finds you well.

Ms. Jennifer Lee kindly shared your contact information as a point of follow-up regarding my submitted request for a Residential Permit Parking study. I've attached the original petition that was previously submitted to Ms. Lee. Since then, I've received one additional signature, bringing the total to 7 out of 8 abutting properties—an 87.5% approval rate.

I will send a follow-up email with the updated petition shortly, as I am currently away from my home office.

I'd appreciate the opportunity to schedule a call at your convenience to discuss:

- Next steps in the process
- Any additional documentation or requirements needed to move forward

Thank you in advance for your time and assistance.

Warm regards,
Curtis Van Buskirk
(562) 760-7513

----- Forwarded message -----

From: **Jennifer Lee** <jlee@lagunahillsca.gov>

Date: Mon, Jun 23, 2025 at 7:31 AM

Subject: RE: Submission of Petition for Residential Permit Parking Program –
Camberwell Street

To: Curtis Van Buskirk <curtis.vanbuskirk@gmail.com>

Good morning,

I am not sure which staff member processes the petitions. Your best bet would probably be to reach out to the Administrative Assistant, Julie Comella. She can be reached at (949) 707-2651 or jcomella@lagunahillsca.gov.

Thank you,

<image001.png>	Jennifer Lee, CMC
	City Clerk, City of Laguna Hills
	PHONE (949) 707-2635
	EMAIL jlee@lagunahillsca.gov
	WEB www.lagunahillsca.gov
	ADDRESS 24035 El Toro Road, Laguna Hills, CA 92653

From: Curtis Van Buskirk <curtis.vanbuskirk@gmail.com>

Sent: Friday, June 20, 2025 1:54 PM

To: Jennifer Lee <jlee@lagunahillsCA.gov>

Subject: Re: Submission of Petition for Residential Permit Parking Program –
Camberwell Street

Good afternoon Ms. Lee

Can you let me know who on the public works team will reach out to me to discuss?

We are anxious to have this reviewed with escalating impact on the neighborhood.

Thank you in advance!

Warm regards

Curtis

Sent from my iPhone

On Jun 16, 2025, at 3:33 PM, Jennifer Lee <jlee@lagunahillsca.gov> wrote:

Good afternoon,

Thank you for your inquiry. Your email has been forwarded to the Public Works Department which administers the City's residential permit parking programs.

Thank you,

	Jennifer Lee, CMC
	City Clerk, City of Laguna Hills
	PHONE (949) 707-2635
	EMAIL jlee@lagunahillsca.gov
	WEB www.lagunahillsca.gov
ADDRESS 24035 El Toro Road, Laguna Hills, CA 92653	

From: Curtis Van Buskirk <curtis.vanbuskirk@gmail.com>

Sent: Monday, June 16, 2025 3:26 PM

To: Jennifer Lee <jlee@lagunahillsCA.gov>

Subject: Submission of Petition for Residential Permit Parking Program – Camberwell Street

Dear Ms. Lee,

I hope this message finds you well.

Please find attached a signed petition from the residents of Camberwell Street in Laguna Hills, CA, formally requesting the initiation of a Residential Permit Parking (RPP) Program for our neighborhood. As outlined in the petition, we have been experiencing persistent safety, accessibility, and quality-of-life issues due to non-resident vehicle parking.

We respectfully request that the City of Laguna Hills conduct a traffic and parking impact study and begin the process of establishing an RPP Zone, in accordance with municipal procedures.

Should you need any additional information or require participation from residents in surveys or hearings, I would be happy to coordinate.

Thank you for your time and attention to this matter.

Warm regards,
Curtis Van Buskirk
24841 Camberwell Street
Laguna Hills, CA 92653
(562) 760-7513
curtis.vanbuskirk@gmail.com

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Curtis Van Buskirk
curtis.vanbuskirk@gmail.com

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Curtis Van Buskirk
curtis.vanbuskirk@gmail.com

<CamberwellStreet_RPP_Request_20250616.pdf>
<Proposed Camberwell Permit Parking Area.pdf>

This email has been scanned for spam and viruses by Proofpoint Essentials. Click [here](#) to report this email as spam.

PERMIT PARKING DISTRICTS

Alicia Place Neighborhood – Resolution No. 2024-11-12-2

Resolution No. 24-11-12-2 established a Residential Permit Parking Area and a No Parking Zone During days and hours of street sweeping on (1) Sunburst Avenue, (2) Largo Drive, (3) Creek Drive, (4) El Capitan Lane, and (5) Marin Court.

Permit Parking 10:00 p.m. to 6:00 a.m.

Cabot Park Neighborhood- Resolution No. 94-06-14-5

1. Resolution No. 94-06-14-5 established a No Parking Anytime Zone on Rapid Falls Road, southside only, from Cabot Road to Lost Trail Drive.

No Parking Anytime

2. Resolution No. 94-06-14-5 also established a Residential Permit Parking Only Zone on (1) Pinto Court; (2) Lone Acres Lane; (3) Lost Trail Drive, from address 27391 (approximately two lots southerly of Pinto Court) to Rapid Falls Road; (4) Rapid Falls Road, from Cabot Road to address 25641 on the north side and 25622 on the south side of the street (approximately two lots westerly of Lost Trail Drive); and (5) Sundowner Drive.

Permit Parking 24hrs a day.

Christina Court Neighborhood Resolution No. 2015-08-25-2

Resolution No. 2015-08-25-2 established a Residential Permit Parking Area and a No Parking Zone during days and hours of street sweeping along the streets of (1) Cresta Court; (2) Creekview Drive; (3) Woodcreek Drive; (4) Southhampton Court; (5) Christina Court; and (6) Avenida de la Carlota south of Los Alisos Boulevard.

Permit Parking 24hrs a day.

Gordon Road Resolution No. 2007-04-10-3

1. Resolution No. 2007-04-10-3 established a No Parking Anytime Zone; (1) on the westerly side of Sierra Bonita Drive from Aliso Hills Drive to 30 feet southerly thereof and on the easterly side of Sierra Bonita Drive from La Cienega Street to Aliso Hills Drive; and (2) northerly side of La Cienega Street from Sierra Bonita Drive to 25 feet easterly thereof.

No Parking Anytime

2. Resolution No. 2007-04-10-3 established a Permit Parking Only Zone on the northerly and southerly sides of Gordon Road from 60 feet to 370 feet easterly of Moulton Parkway.

Permit Parking 24hrs a day.

Indian Hill Lane Resolution No. 2009-04-14-2

A Residential Permit Parking Area consisting of no street parking anytime on the West side of Indian Hill Lane from 425-895ft southerly of Laguna Hills Drive without a parking permit is hereby established on certain streets in the Sheep Hills Park Area southerly of Laguna Hills Drive, specifically consisting of the following streets: (1) Indian Hill Lane West side from 425-895ft southerly of Laguna Hills Drive.

Permit Parking 24hrs a day.

Laguna Hills Drive Resolution No. 2005-07-12-2

Resolution No. 2005-07-12-2 established a Permit Parking Only Zone and No Overnight Parking from 10:00 p.m. to 6:00 a.m. on the northerly side of Laguna Hills Drive from 200 feet to 1,000 feet westerly of Paseo de Valencia.

Permit Parking Only 6:01 a.m. to 9:59 p.m.

No Parking 10:00 p.m. to 6:00 a.m

Lomas Laguna Neighborhood Resolution No. 2022-02-08-1

Resolution No. 2022-02-08-1 established a Residential Permit Parking Area consisting of no overnight street parking between the hours of 10:00 p.m. to 6:00 a.m. without a parking permit on streets in the Lomas Laguna Residential Neighborhood south of Alicia Parkway, specifically consisting of the following streets: (1) Ramona Street; (2) Yolanda Street; (3) Amalia Street; (4) Carmel Street; (5) Eva Street; (6) Lupita Street; (7) Patricia Street; (8) Rosa Street; (9) Andrea Street and (10) a segment of Louisa Street defined as beginning 700 feet westerly of the centerline of Moulton Parkway to the end of the cul de sac.

Permit Parking 10:00 p.m. to 6:00 a.m.

Mandeville Neighborhood Resolution No. 2023-12-12-2

Resolution No. 2023-12-12-2 established a Residential Permit Parking Area and a No Parking Zone during days and hours of street sweeping on streets in the Mandeville Residential Neighborhood, specifically consisting of the following streets: (1) a segment of Mandeville Drive from Moulton Parkway to Los Alamitos; (2) Santa Rosa Avenue; (3) Alta Loma Court; (4) Sundance Avenue.

Permit Parking 10:00 p.m. to 6:00 a.m.

Ridgefield Neighborhood Resolution No. 2021-04-13-3

Resolution No. 2021-04-13-3 established a Residential Permit Parking Area and a No Parking Zone during the days and hours of street sweeping, consisting of no overnight street parking between the hours of 10:00 p.m. and 6:00 a.m. without a parking permit on certain streets in the Ridgefield Residential Neighborhood south of Aliso Hills Drive, specifically consisting of the following streets: (1) Sierra Bonita Drive, (2) La Cienega Street, (3) Los Cerros Drive, and (4) Rio Grande Avenue.

Permit Parking 10:00 p.m. to 6:00 a.m.

Stockport Park Neighborhood (1/3) Resolution No. 2022-05-24-2

Resolution No. 2022-05-24-2 established a Residential Permit Parking Area and No Parking Zone during the days and hours of street sweeping consisting of no overnight street parking between the hours of 10:00 p.m. and 6:00 a.m. without a parking permit on certain streets in the Stockport Park Residential Neighborhood northerly of Alicia Parkway, specifically consisting of the following streets: (1) Woolwich Street, and (2) Southport Street.

Permit Parking 10:00 p.m. to 6:00 a.m.

Stockport Park (2/3) Resolution No. 98-12-08-3

1. Resolution No. 98-12-08-3 Established a No Overnight Parking Restriction 10:00 p.m. to 6:00 a.m. on the northerly side of Stockport Street between Wilkes Place and approximately 230 feet westerly thereof, along the frontage of Stockport Park.

No Parking 10:00 p.m. to 6:00 a.m.

2. Resolution No. 98-12-08-3 also established a Residential Permit Parking Zone on Stockport Street from Wilkes Place to the westerly barricade end at address 25002 Stockport Street, except for the frontage of northerly side of Stockport Street along Stockport Park.

Permit Parking 24hrs a day.

Stockport Park (3/3) Resolution No. 2001-04-10-3

1. Resolution No. 2001-04-10-3 established a No Overnight Parking Zone from 10:00 p.m. to 6:00 a.m. on the westerly side of Wilkes Place from Woolwich Street to Beckenham Street.

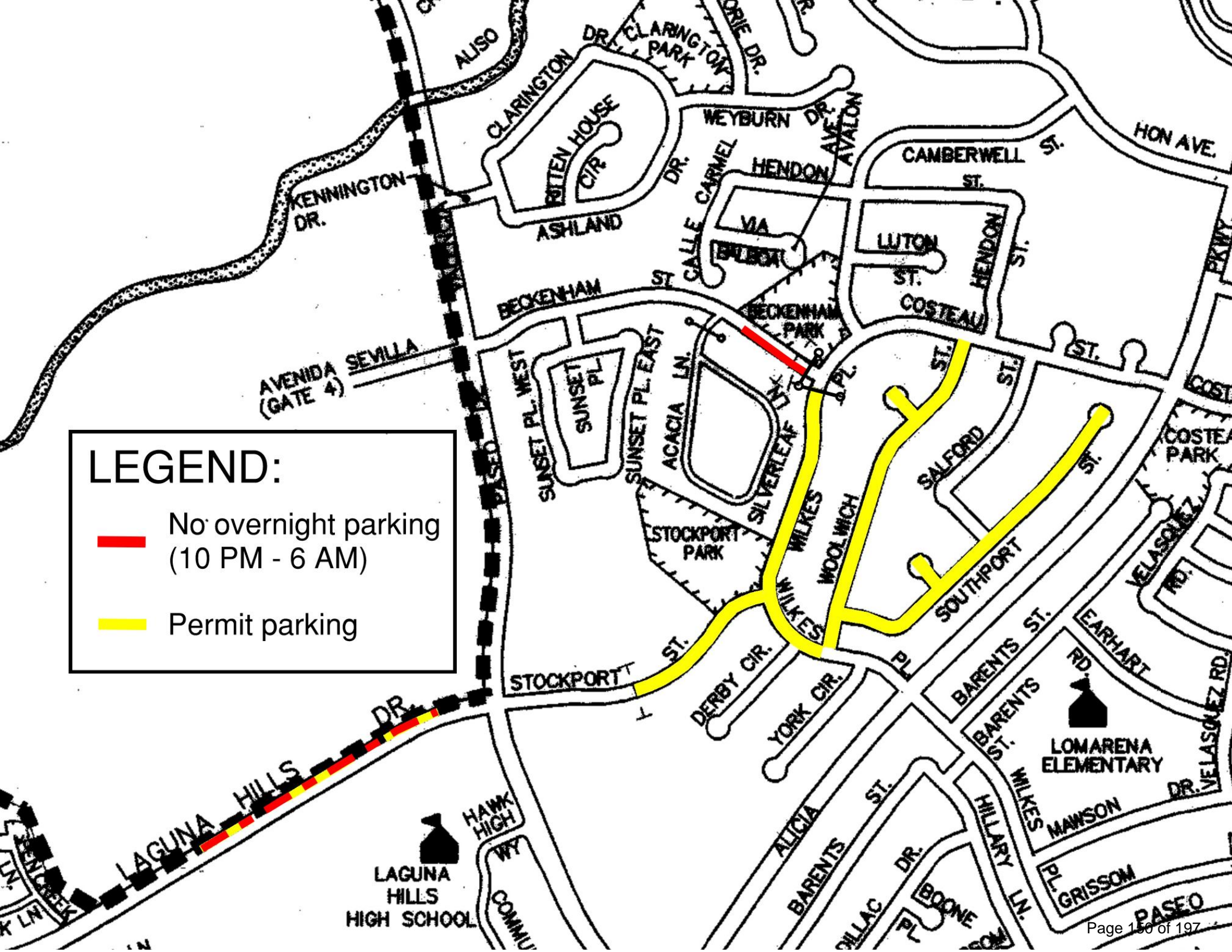
No Parking 10:00 p.m. to 6:00 a.m.

2. Resolution No. 2001-04-10-3 established a Residential Permit Parking Zone on the easterly side of Wilkes Place from Woolwich Street to Beckenham Street.

Permit Parking 24hrs a day.

LEGEND:

-  No overnight parking (10 PM - 6 AM)
-  Permit parking





City of Laguna Hills Traffic Commission Staff Report

Date: March 18, 2026
To: Traffic Commissioners
From: Samantha Vu, Assistant Engineer
Issue: Review of Parking Conditions on Beckenham Street

Recommendation: That the Traffic Commission discuss and provide direction to City Staff.

Background:

Beckenham Street is a residential collector, has a posted speed limit of 30 MPH, and has parking on both sides. Beckenham provides access to a small office complex, Beckenham Park, Sunset Place neighborhood, and Acacia Knolls gated condominium development. The Sunset Place neighborhood includes Sunset Place, Sunset Place West, and Sunset Place East which are all public streets. The gated Acacia Knolls condominium development includes Acacia Lane and Silverleaf Lane which are both private streets.

At the previous Traffic Commission Regular Meeting on January 21, 2026, two speakers made public comments regarding street and parking conditions along Beckenham Street from Paseo de Valencia to Wilkes Place. Comments concerned parking, street, and safety conditions along Beckenham. Specifically, the commenters reside in the Sunset Place neighborhood and indicated their community is affected by motorists that park on Beckenham Street who are not associated with the Sunset Place neighborhood. Please see the attached Vicinity Map of the area.

One speaker requested an overnight parking restriction along Beckenham Street. Another speaker requested permit parking within the Sunset Place neighborhood due to the spillover from Beckenham Street and other nearby apartment complexes.

During the preparation of this agenda report, City staff reviewed previous Traffic Commission agenda reports and minutes and found that similar concerns were previously discussed in 2016 resulting in some parking controls being implemented on Beckenham Drive. These parking controls are still in existence today. The agenda report and minutes are attached for reference.

Fiscal Impact:

There is no fiscal impact associated with this report.

Attachments:

1. Beckenham Vicinity Map
2. March 23, 2016, Traffic Commission Agenda Report
3. January 27, 2016, Traffic Commission Meeting Minutes
4. March 23, 2016, Traffic Commission Meeting Minutes



1" = 190 ft

Beckenham Street

03/13/2026





City of Laguna Hills

Traffic Commission

Staff Report

DATE: 3/23/16

TO: TRAFFIC COMMISSIONERS

FROM: KENNETH H. ROSENFELD, P.E.
DIRECTOR OF PUBLIC SERVICES/CITY ENGINEER

ISSUE: REVIEW OF BECKENHAM STREET PARKING CONDITIONS

RECOMMENDATION: THAT THE TRAFFIC COMMISSION RECEIVE AND FILE THIS REPORT.

SUMMARY:

Over the course of the past 18 months, staff has responded to resident concerns regarding an increase in disturbance due to overnight parking activity on Beckenham Street. The Traffic Commission has reviewed the existing parking regulations, the results of multiple night surveys of vehicle parking and considered several parking control options to address the resident's concerns. Most recently, in late fall 2015, the City Council discussed the potential creation of a Permit Parking Zone on Beckenham Street with Permits being made available only to residents of the Acacia Knolls community and the Sunset Place community to address this issue. However, after public comments on this proposal, the City Council requested an alternate approach and staff proposed the addition of a no overnight parking zone on the southerly side of Beckenham Street across the frontage of Acacia Knolls to address the disturbance complaint. This regulation was implemented as of November 30, 2015. Staff is providing the Traffic Commission the results of before and after studies of the parking impact of this regulation. As described herein, the new parking regulation on Beckenham street did not have a significant impact on night parking usage on the nearby streets of Sunset Place West, Sunset Place East, Costeau Street or Camberwell Street. Staff recommends that no further parking control options need be considered at this time and the Traffic Commission Receive and File this report.

BACKGROUND:

Beckenham Street is a two-way collector street with a 30 mph speed limit. It serves to provide access to commercial/medical offices on the north side of the street, to Beckenham Park, to Sunset Place (public street) leading to a non-fronting single family

residential neighborhood, and to Acacia Lane (private street) leading to a gated non-fronting single family residential neighborhood. Beckenham Street terminates at a fire gate barrier at the intersection with Wilkes Place. There are selective No Parking Zones on Beckenham Street associated with sight-distance restrictions and lane access. Today's agenda item has been noticed to all residents of Acacia Knolls and Sunset Place as well as the management of the Alicia Plaza and Alicia Village apartments located at the intersection of Paseo de Valencia and Stockport Street.

Beginning in 2014, a resident of the gated community known as Acacia Knolls, accessed via Beckenham Street, made regular contact with staff and Police Services about night disturbances due to the parking of vehicles on Beckenham Street behind the rear yards of the Acacia Knolls homeowners. This contact resulted in staff initiating a review of the parking controls on Beckenham Street, performing night counts of vehicle parking and the consideration of a variety of parking control options. This matter was first presented to the Traffic Commission on November 19, 2014, with a staff recommendation to take no action as the parking on Beckenham Street was done at legally allowed locations without parking supply impact to any fronting homes or businesses.

In 2015, the resident again requested City assistance with the expressed parking concern and staff again initiated parking studies along Beckenham Street. In a report to the Traffic Commission on September 16, 2015, staff noted at that time that there are approximately 30 vehicles parked on Beckenham Street each night and that only some of this parking was likely from out of neighborhood community residents. However, information provided from residents of Acacia Knolls has confirmed that there is a need for offsite parking on Beckenham Street due to limited and controlled parking with the Acacia Knolls community.

Noting that Beckenham Street is a public street which provides a parking supply for any person, regardless of their domicile location, staff again recommended no action be taken but did provide the Traffic Commission with a menu of parking control options. These options included time limited parking controls such as two-hour parking, no overnight parking from 2:00 am to 6:00 am, no overnight parking from 10:00 pm to 6:00 am and no parking anytime. The Traffic Commission recommended to the City Council the establishment of a Permit Parking Zone for Beckenham Street for use by residents of both the Acacia Knolls neighborhood and the Sunset Place neighborhood.

The City Council addressed the proposed Beckenham Street Permit Parking Zone at the meeting of October 27, 2015, during which residents, primarily from Sunset Place, expressed concerns about the potential adverse impacts of the proposed Permit Parking Zone. The expressed concern is summarized as out of neighborhood night parking vehicles could move into Sunset Place and consume that neighborhood's limited parking supply. In consideration of these concerns, the City Council directed staff to develop an alternative parking control option, such as a no overnight parking control only across the frontage of Acacia Knolls. The City Council also encouraged the Sunset Place neighborhood to consider the benefits of Permit Parking and advise their interest in this parking option. And, the City Council requested staff review the potential use of expanded

Permit Parking on Laguna Hills Drive to address the potential need for additional parking supply in the general area.

The City Council, at the meeting of November 10, 2015, approved a Resolution to establish a No Parking Zone from 10:00 pm to 6:00 am on the south side of Beckenham Street from 165 feet east of Acacia Lane to 405 feet easterly thereof. Please see the attached vicinity map. This parking restriction removed approximately 10 parking spaces from the parking supply along Beckenham Street. The City Council requested that the parking issue subsequently be reviewed to determine if any further action was warranted. The No Parking Zone was implemented on November 30, 2015.

Staff initiated a before and after parking usage night survey on Beckenham Street for three nights before the implementation of the new No Parking Zone described above and for three nights after implementation of the new No Parking Zone. Parking usage was monitored on all nearby streets including Beckenham Street, Sunset Place West, Sunset Place East, Costeau Street and Camberwell Street. The actual parking counts, as measured by street and directional side of each street, are shown on the attachment. Staff has averaged the three-day parking counts as follows:

<u>Street Location</u>	<u>Average Parking Before</u>	<u>Average Parking After</u>
Beckenham Street North	26	36
Beckenham Street South	19	17
Sunset Place East (combined)	10	13
Sunset Place West (combined)	8	9
Costeau Street (combined)	5	7
Camberwell Street (combined)	0	0

In addition, on the night of March 8, 2016, staff counted the parked cars on Beckenham Street which revealed 33 vehicles parking on the north side of the street and 10 vehicles parking on the south side of the street, consistent with the most recent studies. As compared with summer 2015, there is more general vehicle parking occurring on Beckenham Street. Parking is more concentrated on the north side of the street, opposite the side of the residential neighborhoods. The newly placed No Parking Zone on Beckenham Street has apparently not pushed vehicle parking onto other residential streets as there has been no significant additional parking usage on these nearby streets. Vehicle parking in the area continues to occur in a legal manner and has not consumed the available parking supply. Unless new information or concerns are expressed about the newly established No Parking Zone, staff recommends no further action be taken.

Parking on the City's arterial highways is generally prohibited for traffic flow and operational purposes. There are a few exceptions to this arterial parking restriction and one exception is the Permit Parking Zone on a portion of the north side of Laguna Hills Drive westerly of Paseo de Valencia that exists for the sole benefit of the medical office uses at that corner. Please see the attached vicinity map. It is not proposed that that

Permit Parking Zone be modified. Open parking is not permitted on the north side of Laguna Hills Drive to avoid its daily use by students of Laguna Hills High School and the resultant potential undesirable mid-block student-pedestrian crossing of this arterial highway. Day time parking only is allowed on the south side of Laguna Hills Drive to accommodate student parking needs. There is no overnight parking on Laguna Hills Drive in the area easterly of Paseo de Valencia. While nightly parking on the north side of Laguna Hills Drive, beyond the existing Permit Parking Zone could be allowed, beginning 1000' westerly of Paseo de Valencia, it may not be necessary and it may be too distant to be effective to pull parking off of Beckenham Street. In the alternative, the Permit Parking Zone could be expanded or modified in favor of "first come first served" utilization of the potential parking supply with permits offered to City residents, but this alternative raises other access issues, particularly for the medical office building. No action on this parking supply option is proposed at this time.

ATTACHMENTS:

- Beckenham Vicinity Map
- Beckenham Parking Study
- Laguna Hills Drive Vicinity Map



VICINITY MAP



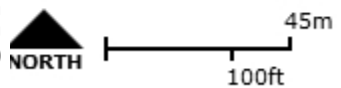
Date: 11/13/14

CITY OF LAGUNA HILLS
PARKING STUDY

	STREET / LOCATION	PHASE 1						PHASE 2					
		11-16-15 MON		11-18-15 WED		11-20-15 FRI		12-07-15 MON		12-09-15 WED		12-11-15 FRI	
		<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
1	BECKENHAM ST Paseo de Valenica to Wilkes Pl	28	18	22	19	27	20	33	18	39	17	35	16
2A	SUNSET PLACE East Loop	4	6	3	8	6	3	4	8	6	9	5	7
2B	SUNSET PLACE West Loop	4	5	5	2	4	5	5	2	7	6	6	2
3	COSTEAU STREET Beckenham to Woolwich	3	2	2	2	2	4	3	5	2	2	4	5
4	CAMBERWELL STREET Costeau to Luton St	0	0	0	0	0	0	0	0	0	0	0	0

3/23/2016 ITEM NO. 6.1

3/23/2016 ITEM NO. 6.1



Date: 01/15/16

LAGUNA HILLS DRIVE PERMIT PARKING ZONE
1000' W/O PASEO DE VALENCIA



**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION MEETING
ADJOURNED REGULAR MEETING MINUTES
JANUARY 27, 2016**

CALL TO ORDER

The Adjourned Regular Meeting of the Traffic Commission of the City of Laguna Hills, California, was called to order by Vice Chair Steven Beeuwsaert at 7:00 PM in the Laguna Hills City Council Chamber, 24035 El Toro Road, Laguna Hills, California.

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Vice Chair Beeuwsaert.

ROLL CALL OF COMMISSION MEMBERS

Present: Vice Chair Steven Beeuwsaert, Commissioner Mark Jones, Commissioner Greg Staar and Commissioner Larry Woodruff

Absent: Chair Michael Caputo

1. ELECTION OF CHAIR

Motion was made by Vice Chair Beeuwsaert to open nominations to elect a new Chair. Commissioner Mark Jones nominated Commissioner Steven Beeuwsaert. The nomination was seconded by Commissioner Larry Woodruff. There were no further nominations.

APPROVED BY A VOTE OF 4-0 (Commissioner Caputo Absent)

2. ELECTION OF VICE CHAIR

Motion was made by Chair Beeuwsaert to open nominations to elect a new Vice Chair. Commissioner Larry Woodruff nominated Commissioner Mark Jones. The nomination was seconded by Commissioner Greg Staar. There were no further nominations.

APPROVED BY A VOTE OF 4-0 (Commissioner Caputo Absent)

3. PUBLIC COMMENTS

There were no Public Comments.

**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION MEETING
ADJOURNED REGULAR MEETING MINUTES
JANUARY 27, 2016**

4. MINUTES

THE TRAFFIC COMMISSION APPROVED THE MINUTES OF THE NOVEMBER 18, 2015, REGULAR MEETING, BY M/COMMISSIONER JONES, S/COMMISSIONER STAAR.

APPROVED BY A VOTE OF 4-0 (Commissioner Caputo Absent)

5. PRESENTATIONS

There were no Presentations.

6. ADMINISTRATIVE REPORTS

6.1 BECKENHAM STREET PARKING REGULATIONS

Director of Public Services/City Engineer, Kenneth H. Rosenfield, indicated over the course of the past 18 months, staff has responded to resident concerns regarding an increase in overnight parking activity on Beckenham Street. The Traffic Commission has reviewed the existing parking regulations, the results of multiple night surveys of vehicle parking and considered several parking control options to address residents concerns. Most recently, the City Council discussed the potential creation of a Permit Parking Zone on Beckenham Street with Permits being made available only to residents of the Acacia Knolls community and the Sunset Place community. However, after public comments on this proposal, the City Council requested an alternate approach of the addition of a no overnight parking zone on the southerly side of Beckenham Street across the frontage of Acacia Knolls. Director Rosenfield indicated this regulation was implemented as of November 30, 2015, and staff performed before and after parking counts on Beckenham Street. The survey indicated the new parking regulation on Beckenham Street did not have a significant impact on night parking usage on the nearby streets of Sunset Place West, Sunset Place East, Costeau Street or Camberwell Street. Vehicle parking in the area continues to occur in a legal manner and has not consumed the available parking supply. Director Rosenfield indicated that unless new information or concerns are expressed about the newly established No Parking Zone, staff recommends that no further parking control options need to be considered at this time.

Resident Debbie Rey spoke against the No Parking regulation.
Resident Hugh Meador spoke against the No Parking regulation.

**CITY OF LAGUNA HILLS
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JANUARY 27, 2016**

**THE TRAFFIC COMMISSION RECEIVED AND FILED THE REPORT, BY
M/COMMISSIONER WOODRUFF, S/COMMISSIONER STAAR.
APPROVED BY A VOTE OF 4-0 (Commissioner Caputo Absent)**

7. INFORMATIONAL ITEMS

7.1 2016 TRAFFIC COMMISSION SCHEDULE

Staff submitted the 2016 Traffic Commission meeting schedule.

7.2 SHERIFF'S DEPARTMENT PRESENTATION

Sergeant Prince gave a verbal report updating the Traffic Commission on traffic issues in the City.

7.3 RADAR SPEED TRAILER

Staff submitted the schedule for the radar trailer.

8. COMMISSIONER COMMENTS

There were no Commissioner Comments.

7. ADJOURNMENT

There being no further business before the Traffic Commission at this session, Chair Beeuwsaert declared the meeting adjourned at 7:39 p.m. The next Regular Meeting of the Traffic Commission, scheduled for March 16, 2016, will be re-scheduled to March 23, 2016, at 7:00 PM, in the City Council Chamber, located at 24035 El Toro Road, Laguna Hills, California.

Prepared by:

Kenneth H. Rosenfield, P.E.
Director of Public Services/City Engineer

Approved By:

STEVEN BEEUWSAERT, CHAIR

**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION MEETING
ADJOURNED REGULAR MEETING MINUTES
MARCH 23, 2016**

3. PUBLIC COMMENTS

Resident David Oslinker of Laguna Village, addressed the Commission regarding street sweeping on Mill Creek Road. Mr. Oslinker requested the City post no parking signs on the days and times of street sweeping on Mill Creek Road, to allow the street sweeper to sweep the street more efficiently.

4. MINUTES

**THE TRAFFIC COMMISSION APPROVED THE MINUTES OF THE JANUARY 27, 2016, ADJOURNED REGULAR MEETING, BY M/COMMISSIONER STAAR, S/COMMISSIONER WOODRUFF.
APPROVED BY A VOTE OF 5-0**

5. PRESENTATIONS

There were no Presentations.

6. ADMINISTRATIVE REPORTS

6.1 REVIEW OF BECKENHAM STREET PARKING CONDITIONS

Director of Public Services/City Engineer, Kenneth H. Rosenfield, indicated over the course of the past 18 months, staff has responded to resident concerns regarding an increase in overnight parking activity on Beckenham Street. The Traffic Commission has reviewed the existing parking regulations, the results of multiple night surveys of vehicle parking and considered several parking control options to address residents concerns. Most recently, the City Council discussed the potential creation of a Permit Parking Zone on Beckenham Street with Permits being made available only to residents of the Acacia Knolls community and the Sunset Place community. However, after public comments on this proposal, the City Council requested an alternate approach of the addition of a no overnight parking zone on the southerly side of Beckenham Street across the frontage of Acacia Knolls. Director Rosenfield indicated this regulation was implemented as of November 30, 2015, and staff had performed before and after parking counts on Beckenham Street. The most recent survey on March 8, 2016, indicated the new parking regulation on Beckenham Street did not have a significant impact on night parking usage on the nearby streets of Sunset Place West, Sunset Place East, Costeau Street or Camberwell Street. Vehicle parking in the area continues to occur in a legal manner and has not consumed the

**CITY OF LAGUNA HILLS
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MARCH 23, 2016**

available parking supply. Director Rosenfield indicated that unless new information or concerns are expressed about the newly established No Parking Zone, staff recommends that no further parking control options need to be considered at this time.

Director Rosenfield indicated the City Council also requested staff look at extending parking on Laguna Hills Drive to address overflow parking from Beckenham Street. Director Rosenfield stated parking on the City's arterial highways is generally prohibited for traffic flow and operational purposes, but Laguna Hills Drive is one of the few exceptions. There is a Permit Parking Zone on a portion of the north side of Laguna Hills Drive westerly of Paseo de Valencia that exists for the sole benefit of the medical office uses at that corner. Open parking is not permitted on the north side of Laguna Hills Drive to avoid its daily use by students of Laguna Hills High School and the resultant potential undesirable mid-block student-pedestrian crossing of this arterial highway. Day time parking only is allowed on the south side of Laguna Hills Drive to accommodate student parking needs. There is no overnight parking on Laguna Hills Drive in the area easterly of Paseo de Valencia. While nightly parking on the north side of Laguna Hills Drive, beyond the existing Permit Parking Zone could be allowed, beginning 1000' westerly of Paseo de Valencia, it may not be necessary and it may be too distant to be effective to pull parking off of Beckenham Street. In the alternative, the Permit Parking Zone could be expanded or modified in favor of "first come, first served" utilization of the potential parking supply with permits offered to City residents, but this alternative raises other issues, particularly for the medical office building. Director Rosenfield indicated staff recommends that no action on this parking supply option be pursued at this time.

Resident Dee Dee Gollwitzer of Sunset Place, spoke in favor of permit parking on Laguna Hills Drive, and concerns about potential overflow parking onto Sunset Place, if permit parking were extended on Beckenham Street.

Resident Lou Greenleaf of Acacia Knolls, requested the City allow residents of Acacia Knolls to park on Beckenham Street, in the no overnight parking section, while Acacia Knolls performs upcoming curb, gutter and asphalt repairs.

Resident Norma Sangalang of Acacia Knolls, spoke in favor of permit parking on Beckenham Street.

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Resident Hugh Meador of Acacia Knolls, spoke in favor of permit parking on Beckenham Street.

Resident Gary Steinberg of Sunset Place, spoke in favor of permit parking on Laguna Hills Drive, and against permit parking on Beckenham Street.

Resident Nancy Yuu of Acacia Knolls, stated the parking conditions are difficult for the Acacia Knolls residents.

Debbie Rey, HOA President for Acacia Knolls, stated there are 99 units in Acacia Knolls, 25% of the units do not have driveways and Acacia Knolls only has 26 guest parking spaces. Ms. Rey spoke in favor of permit parking on Beckenham Street.

**THE TRAFFIC COMMISSION RECEIVED AND FILED THE REPORT, BY
M/COMMISSIONER WOODRUFF, S/COMMISSIONER STAAR.
APPROVED BY A VOTE OF 5-0**

**6.2 REVIEW OF HON AVENUE TO KENNINGTON DRIVE PASS-
THROUGH TRAFFIC AND TRAFFIC SPEED CONDITIONS NEAR
CLARINGTON PARK**

Director Rosenfield indicated a resident recently contacted staff with an expressed concern that the residential neighborhood northerly of Alicia Parkway (referred to as the Missions Planned Community), which is accessed via Alicia Parkway/Hon Avenue and Paseo de Valencia/Kennington Drive, was a “major cut-through” for drivers intending to avoid traffic conditions along either or both Alicia Parkway and Paseo de Valencia. There was also an expressed concern over traffic vehicle speed near Clarington Park and a request for Speed Humps. Staff initiated an evaluation of the above issues and retained the consulting firm of Hartzog and Crabill, Inc., to evaluate the field conditions. Hartzog and Crabill, Inc., initiated an Origin and Destination Study, which determined a 19% pass-through condition of traffic during the three-hour study period. The vehicular traffic speed in the report found an 85th percentile speed, the speed at which 85% of the drivers are driving at or below, to be 29 mph near Clarington Park. The 10 mile per hour pace was 20 to 29 mph covering 82% of all vehicles. The expected traffic speed on a 25 mph speed limit street has been shown to be between 32 and 34 mph. However, in this case, the traffic speed was consistent with the speed limit. The use of physical devices to address traffic conditions is addressed in the City’s Residential Streets Management Policy, which states,

**CITY OF LAGUNA HILLS
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ADJOURNED REGULAR MEETING MINUTES
MARCH 23, 2016**

relative to speed humps, that these devices will only be considered when all other traffic control options and police enforcement have been exhausted and where the prevailing speed of traffic is greater than 34 mph for two speed surveys taken one month apart. In the current evaluation, the vehicular traffic speed does not support considering physical devices. Director Rosenfield stated the survey results of a 19% pass-through condition and an 85th percentile speed of 29 mph were not unusual or inconsistent with the usage of these roadways.

**THE TRAFFIC COMMISSION RECEIVED AND FILED THE REPORT, BY M/VICE CHAIR JONES, S/COMMISSIONER STAAR.
APPROVED BY A VOTE OF 5-0**

7. INFORMATIONAL ITEMS

7.1 SHERIFF'S DEPARTMENT PRESENTATION

Sergeant Prince gave a verbal report updating the Traffic Commission on traffic issues in the City. Sergeant Prince updated the Commission on the Sheriff's response to the Beckenham Street vehicle vandalism, and reported they have increased patrols in the area. Staff selected a Deputy to fill a vacant Motor Deputy position, and pending successful completion of training, the new Motor Deputy should begin patrol in the summer. Sergeant Prince acknowledged Motor Deputy Joseph Bucaro, who has worked extra hours to help backfill the vacant Motor Deputy position. Deputy Bucaro successfully interacts with the public and is excellent with public relations, and has provided the City with a balanced traffic index rating. Sergeant Prince stated Deputy Bucaro is making a difference for the safety of our community.

7.2 RADAR SPEED TRAILER

Staff submitted the schedule for the radar trailer. Staff stated resident Mike Bland on Lost Colt Drive, requested the trailer be placed in a different location on Lost Colt Drive, and staff is accommodating Mr. Bland's request.

8. COMMISSIONER COMMENTS

Commissioner Mike Caputo

Commissioner Caputo wanted to thank Deputy Joseph Bucaro for his service.

**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION MEETING
ADJOURNED REGULAR MEETING MINUTES
MARCH 23, 2016**

Chair Steven Beeuwsaert

Chair Beeuwsaert recommended the Traffic Commission request the City Council acknowledge Deputy Joseph Bucaro for his service to the community.

7. ADJOURNMENT

There being no further business before the Traffic Commission at this session, Chair Beeuwsaert declared the meeting adjourned at 8:03 p.m.

Prepared by:

Kenneth H. Rosenfield, P.E.
Director of Public Services/City Engineer

Approved By:

STEVEN BEEUWSAERT, CHAIR



City of Laguna Hills Traffic Commission Staff Report

Date: March 18, 2026
To: Chair and Commission Members
From: Samantha Vu, Assistant Engineer
Issue: Review of Traffic Conditions on Greenfield Drive

Recommendation: That the Traffic Commission recommend that the City Engineer add Greenfield Drive to the speed-feedback radar trailer rotational deployment list and conduct another speed survey in 90 days, and that Police Services conduct increased law (speed) enforcement on Greenfield Drive.

Background:

Staff was recently contacted by a resident of the community regarding concerns of vehicular speeding on Greenfield Drive from Hidden Trail Road to the SR-73 Freeway. Please see the attached Vicinity Map. Based upon the resident’s concern and in accordance with the Residential Streets Management Policy, staff initiated a review of the requested area.

Upon receiving the request, staff contracted the services of Hartzog and Crabill, Inc. (HCI) to perform a traffic speed review, traffic volume review, and traffic collision history review for the requested area. A summary of the speed survey counts, performed by HCI, as shown in the study can be seen in Table 1 below.

Table 1: Speed Survey Summary

Speed Summary	Greenfield Drive (12.3.26 - 12.7.25)				
	WED	THURS	FRI	SAT	SUN
Average Speed (MPH)	29	29	29	29	30
85 th Percentile Speed (MPH)	34	34	35	35	36

Greenfield Drive has a posted speed limit of 30 MPH. Staff's experience has found the typical prevailing speed range for such streets to be approximately 7-8 MPH above the posted speed limit, without traffic safety concerns. The 85th percentile speeds were found to be in this range. In addition, 12-hour pedestrian data was also collected on the same day (Wednesday, December 3, 2025 between 7 AM and 7 PM) at both equestrian crossings. A total of 25 pedestrians crossed at the northern crossing and 7 pedestrians crossed at the southern crossing.

An accident history review from the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS) from January 2019 through December 2023 revealed a total of three (3) reported collisions along Greenfield Drive. One occurred in 2022 and the other 2 occurred in 2024. The collision in 2022 was categorized as Improper turning. For 2024, the collisions were categorized as Unsafe Lane Change and Traffic Signals and Signs. In general, the collision analysis requires a minimum of five (5) reported, correctible accidents within a 12-month period, and therefore does not trigger safety recommendations.

To address traffic safety concerns, the Residential Streets Traffic Management Policy outlines procedures and incremental solutions. Generally, actions to address speeding issues on residential streets will only be recommended if the prevailing speed is above 32 to 34 MPH, if unusual conditions exist on the roadway, or if there are documented speed-related traffic collisions. Although Greenfield Drive does not pose a traffic safety concern on average, the 85th percentile speeds were found to be higher than the posted speed limit. In this case, the policy recommends an incremental approach, which includes:

- Increased law enforcement
- Frequent deployment of portable radar speed-feedback trailers
- The use of traffic control devices, regulatory signs and markings, warning signs, and striping

The implementation of physical speed control devices such as speed humps and speed cushions is considered as a last use effort to resolve an identified traffic safety issue that has been documented as not being resolved by other means in the Policy. Physical speed control devices require additional criteria to be considered during assessment. According to the Residential Streets Traffic Management Policy, the following minimum criteria must be met to consider the implementation of these devices:

- a. At least 67% of the affected residents of the street and adjacent area streets support the implementation of the physical device. The streets to be used to evaluate the support for the physical device will be those that reasonably can be inferred to draw traffic to the street of concern.
- b. The prevailing speed of traffic has been documented to be greater than 34 mph for at least two radar speed surveys taken 90 days apart as part of the follow-up evaluation of all other traffic controls used to address the issue.
- c. At least 1,500 vehicles traverse the street in a 24-hour period.
- d. The location meets the approval of the Police and Fire Department related to adequate response time of safety vehicles.
- e. The grade of the street shall not exceed 6%.
- f. The street must have a length of at least 1,300 feet and be able to accommodate a minimum of three speed humps unless otherwise directed by the City Council.
- g. Other issues related to traffic engineering will be considered as deemed appropriate by the City Traffic Engineer.

Staff recommends an incremental approach be used by adding Greenfield Drive to the speed-feedback radar trailer rotational deployment list, conducting another speed survey in 90 days, and requesting that Police Services conduct increased law (speed) enforcement on Greenfield Drive.

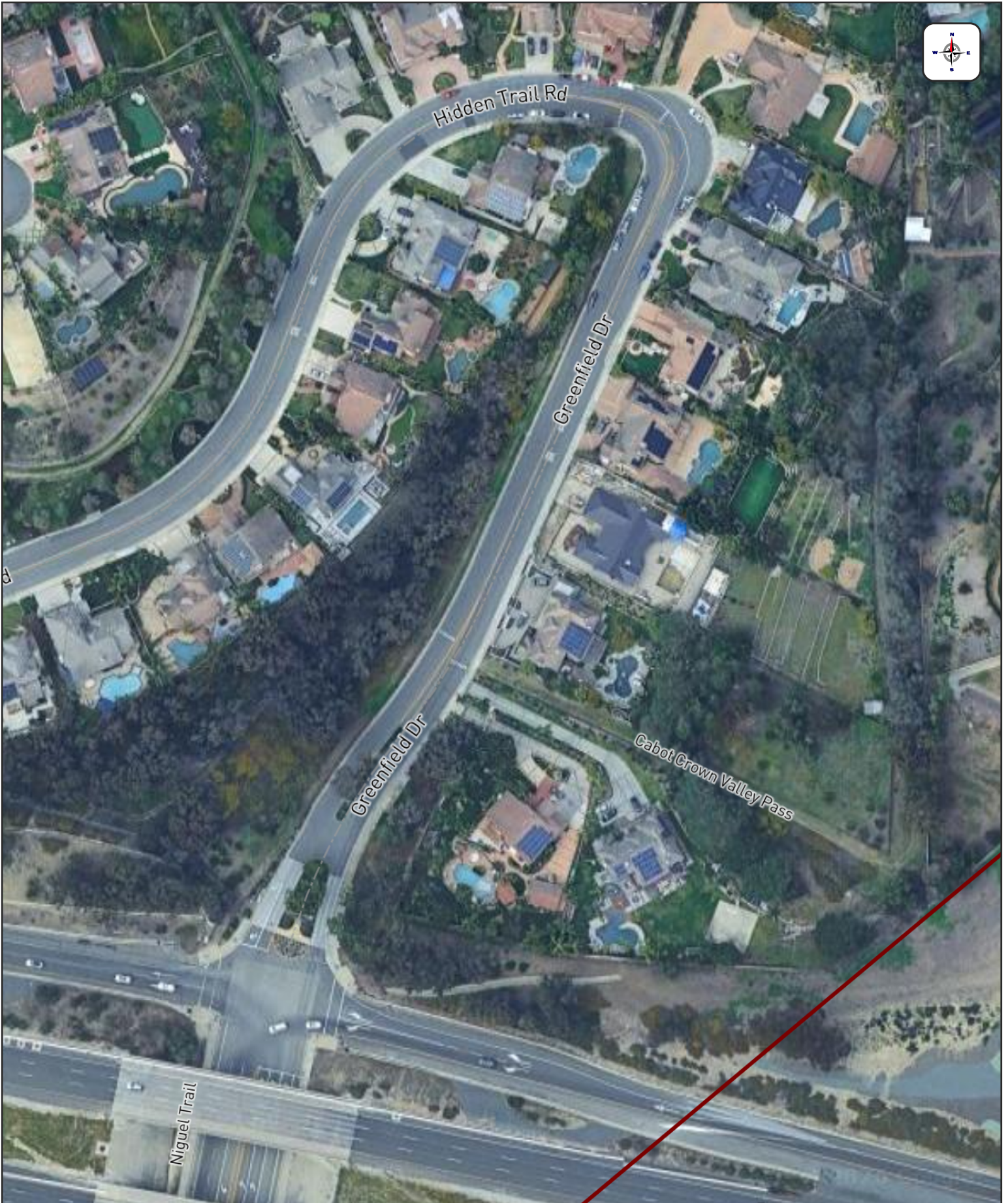
Fiscal Impact:

There is no fiscal impact associated with this report.

Attachments:

1. Vicinity Map
2. Hartzog and Crabill, Evaluation of Roadway Traffic Speeds on Greenfield Drive, from Hidden Trail Road to the SR-73 Freeway, dated January 19, 2026

Vicinity Map



1" = 120 ft

Greenfield Drive

03/13/2026

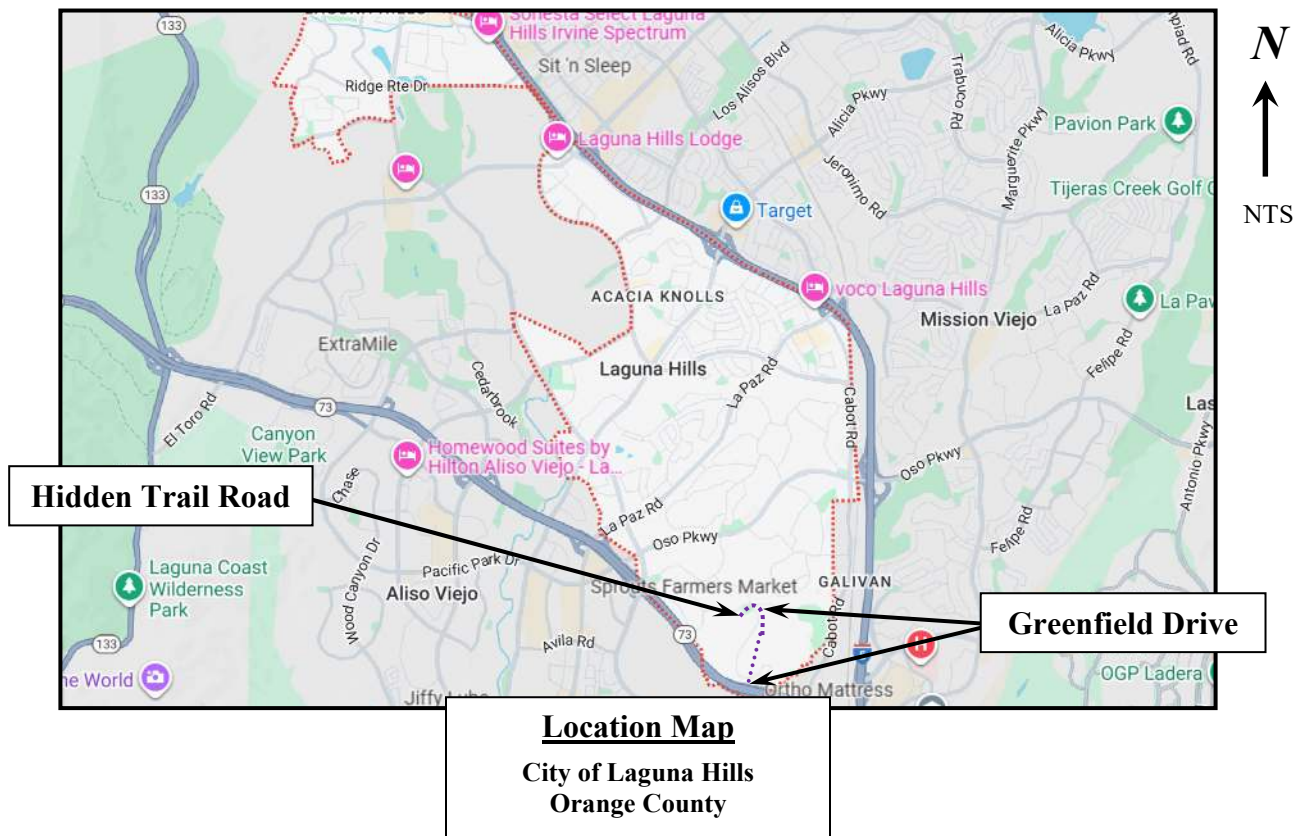


**EVALUATION OF ROADWAY TRAFFIC SPEEDS ON
GREENFIELD DRIVE, FROM HIDDEN TRAIL ROAD TO THE SR-73 FREEWAY,
IN THE CITY OF LAGUNA HILLS, CA
JANUARY 19, 2026**

INTRODUCTION

The City of Laguna Hills requested Hartzog & Crabill, Inc. (HCI) to complete an evaluation of vehicular traffic speeds along Greenfield Drive. The evaluation limits on Greenfield Drive are from Hidden Trail Road to the SR-73 Freeway.

This segment of Greenfield Drive is located west of Cabot Road and just north of the SR-73 Freeway, in the south part of the City (see *Location Map below*). The roadway segment generally runs diagonally in the north-south directions, entirely within the City of Laguna Hills jurisdiction. At the present time, the roadway southerly limit at the SR-73 Freeway is controlled by a traffic signal, while the northerly end connects to a bend that becomes Hidden Trail Road (i.e., uncontrolled at the north end of the segment).



BACKGROUND

Greenfield Drive, from Hidden Trail Road to the SR-73 Freeway, is a diagonal north-south local roadway with single-family residential properties on either side of the street. The roadway is approximately (40) feet wide curb-to-curb. The 2-lane roadway provides for one lane of traffic in each direction, which are separated by a painted double-yellow centerline stripe, as well as by two (2) raised landscaped center median islands at/near the SR-73 Freeway. At the northerly end, the centerline striping includes several yellow raised pavement markers (RPMs) as a dividing emphasis at the bend curve. The roadway primarily has rolled concrete curb, gutter improvements on both sides, along with sidewalk improvements only on the east-side. There is a wood-fenced equestrian path on the west-side of the roadway. On-street parking is allowed on both sides of the street.

Greenfield Drive has two (2) 30 MPH Speed Limit posted signs: one on each end of the roadway segment. There is a PARKING PROHIBITED posted city sign located just north of the SR-73 Freeway and facing northbound traffic.

There are two (2) Equestrian Crossings (with applicable warning signage and Yield pavement markings) across Greenfield Drive. One equestrian crossing is located at the northerly roadway bend with Hidden Trail Road, while the other equestrian crossing is located approximately 340 feet north of the SR-73 Freeway.

There is one (1) Curve warning sign with a 15 MPH supplemental plaque located just south of Hidden Trail Road and facing northbound traffic. There is one (1) left and one (1) right Arrow warning signs with object markers posted at the roadway bend.

There are also two (2) roadway street lights staggered on either side of the roadway.

As mentioned, there is a traffic signal controlling traffic at the intersection of Greenfield Drive and the SR-73 Freeway (i.e., no other traffic controls along Greenfield Drive).

DATA COLLECTION

24-hour Vehicular Speed Counts

HCI coordinated the collection of 24-hour Average Daily Traffic (ADT) counts for this roadway segment of Greenfield Drive. The count data, which includes vehicular speed data, was taken using a machine counter with road tubes at one (1) midpoint location on Greenfield Drive, between Hidden Trail Road and the SR-73 Freeway. The location was chosen to obtain the most ‘free flow’ traffic speeds between the project limits. The vehicular traffic data was collected on three weekdays and two weekend days (i.e., Wednesday - Sunday), in order to provide average vehicular speeds occurring during the week and weekend, with results summarized below:

Wednesday, December 3, 2025	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	29	33
Southbound	29	34
Both Directions	29	34
Thursday, December 4, 2025	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	27	33
Southbound	30	34
Both Directions	29	34
Friday, December 5, 2025	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	28	33
Southbound	30	36
Both Directions	29	35
Saturday, December 6, 2025	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	28	34
Southbound	30	35
Both Directions	29	35
Sunday, December 7, 2025	<u>Average Speed (mph)</u>	<u>85th percentile Speed (mph)</u>
Northbound	29	35
Southbound	31	37
Both Directions	30	36

As shown above, vehicular speeds were relatively consistent in each direction. As typically expected, the 85th percentile speeds are higher than the posted speed limit of 30 MPH [average speed = 29 MPH; average 85th-percentile = 35 MPH]. ***The overall collected speed-count data can be found attached in Appendix A.***

DATA COLLECTION (continued)

Pedestrian and Bicycle Counts

In regards to pedestrian, bicycle, and equestrian activity, field observations confirmed a low activity, especially which actually cross Greenfield Drive at either of the two (2) equestrian crossing locations.

In addition, 12-hour pedestrian data was also collected on the same day as the vehicular count data (i.e., Wednesday, December 3, 2025 between 7am and 7pm) at both equestrian crossings, with results summarized below:

Northerly Equestrian Crossing Located at the Bend with Hidden Trail Road:

The 12-hour data resulted in a total of (25) pedestrians that crossed Greenfield Drive within the equestrian crossing location, which translates to just over two (2) pedestrians per hour.

Southerly Equestrian Crossing Located North of the SR-73 Freeway:

The 12-hour data resulted in a total of seven (7) pedestrians that crossed Greenfield Drive within the equestrian crossing location, which translates to less than one (1) pedestrian per hour.

The overall collected traffic count data can be found attached in Appendix A.

DATA COLLECTION (continued)

Collision History

HCI also gathered the latest available raw collision history data for the City of Laguna Hills from the State of California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS), which is where local agencies, such as cities, report their collisions. A comprehensive 5-year traffic collision history summary report was prepared for this segment of Greenfield Drive.

Table 1 below provides a quick view of the most recent summary of collision history that has been reported along this roadway segment.

**TABLE 1
SWITRS COLLISION SUMMARY**

Intersection	2020-21		2022		2023		2024 – Jul. 2025	
	Date	Type of Coll.	Date	Type of Coll.	Date	Type of Coll.	Date	Type of Coll.
Greenfield Drive (from Hidden Trail Road to SR- 73 Freeway)		None reported	07/07	Hit Object - 551' N		None reported	04/27/24	Broadside (W v N)
							11/08/24	Sideswipe (NL v NL)

Note: Information above is derived per the latest 5-year raw traffic collision database file gathered from CHP-SWITRS (SWITRS website).

As shown above, there have a total of three (3) collisions reported along this roadway segment over the past (5-1/2) years of available SWITRS collision data. It is noted, the 2022 collision was categorized as Improper Turning, and occurred 551 feet north of the SR-73 Freeway. The two (2) collisions in 2024 occurred at the intersection with the SR-73 Freeway and were categorized as Traffic Signals and Signs, and as Unsafe Lane Change. *The SWITRS traffic collision data report prepared for this segment is included in Appendix B.*

FIELD REVIEW

Roadway Signing & Striping

During our field-review on a recent morning, HCI staff drove and walked the Greenfield Drive roadway segment in both directions, in order to review the existing traffic signing & striping. As mentioned in the Background section, the 2-lane roadway provides for one lane of traffic in each direction, which are separated by a continuous painted double-yellow centerline stripe. At the northerly end, the centerline striping includes several yellow raised pavement markers (RPMs) as a dividing emphasis for the bend curve. There is a white right edgeline along the east-side of the bend curve serving the northbound lane. Below is a summary list of existing signs and markings:

- (Qty. 1) “Reduced Speed Ahead” regulatory sign just north of the SR-73 Freeway, and facing northbound traffic.
- (Qty. 1) There is a PARKING PROHIBITED posted City sign located north of the SR-73 Freeway and facing northbound traffic.
- (Qty. 4) “Horse Crossing” warning signs (installed at the two (2) crossings (as well as in advance), and (Qty. 2) supplemental “Horse Xing” pavement markings on each approach to the northerly equestrian crossing.
- (Qty. 4) Yield pavement markings facing both directions at both Horse Xings.
- (Qty. 1) Curve Ahead warning sign with supplemental 15 MPH plaque just south of Hidden Trail Road facing northbound traffic.
- (Qty. 2) 30 MPH speed limit signs: one near Hidden Trail Road Lane and the other north of the SR-73 Freeway.

The overall signing & striping is considered in satisfactory condition.

Please see Exhibits 1 – 4 on the following pages showing recent field-review pictures of Greenfield Drive, from Hidden Trail Road to SR-73 Freeway.

EXHIBIT 1



GREENFIELD DRIVE (*Looking Northbound*) from the SR-73 Freeway



GREENFIELD DRIVE (*Looking Northbound*) towards the Southerly Equestrian Crossing

EXHIBIT 2



GREENFIELD DRIVE (Looking Northbound) towards the Northerly Equestrian Crossing



Northerly Equestrian Crossing

GREENFIELD DRIVE (Looking Northbound) at the Bend to Hidden Trail Road

EXHIBIT 3



HIDDEN TRAIL ROAD (Looking Southbound) at the Bend to Greenfield Drive



GREENFIELD DRIVE (Looking Southerly) from Hidden Trail Road

EXHIBIT 4



Southerly Equestrian Crossing

GREENFIELD DRIVE (Looking Southbound) towards the Southerly Equestrian Crossing



GREENFIELD DRIVE (Looking Southbound) towards the SR-73 Freeway

SUMMARY OF RESULTS & FINDINGS

- **Greenfield Drive**, from Hidden Trail Road to the SR-73 Freeway, is approximately (40) feet wide curb-to-curb. The 2-lane roadway provides for one lane of traffic in each direction, which are separated by a painted double-yellow centerline stripe. At the northerly end, the centerline striping includes several yellow raised pavement markers (RPMs) as a dividing emphasis at the bend curve. On-street parking is allowed on both sides of the street.
- Greenfield Drive has two (2) 30 MPH Speed Limit posted signs: one on each end of the roadway segment.
- There are two (2) Equestrian Crossings (with applicable warning signage and Yield pavement markings) across Greenfield Drive. One equestrian crossing is located at the northerly roadway bend with Hidden Trail Road, while the other equestrian crossing is located approximately 340 feet north of the SR-73 Freeway.
- There is one (1) Curve warning sign with a 15 MPH supplemental plaque located just south of Hidden Trail Road and facing northbound traffic. There also one (1) left and one (1) right Arrow warning signs with object markers posted at the bend.
- Vehicular speeds were relatively consistent in each direction. As typically expected, the 85th percentile speeds are higher than the posted speed limit of 30 MPH [average speed = 29 MPH; average 85th-percentile = 35 MPH]. The highest ADT count on Greenfield Drive resulted in 2,201 vehicles in a 24-hour period.
- 12-hour collected data resulted in a total of (25) pedestrians that crossed Greenfield Drive within the northerly equestrian crossing location, which translates to just over two (2) pedestrians per hour.
- There has been a total of three (3) collisions reported for this roadway segment over the past (5-1/2) years. The one collision in 2022 was categorized as Improper Turning, and occurred 551 feet north of the SR-73 Freeway (i.e., within the roadway segment). The two (2) other collisions in 2024 occurred at the intersection with the SR-73 Freeway, and were categorized as Traffic Signals and Signs, and as Unsafe Lane Change, respectively.

RECOMMENDATIONS

Based on the overall evaluation findings, especially vehicular speed results recorded within the expected range for this type of roadway as well as low roadway collision history, there is no indication to support the implementation of hardscape improvements on Greenfield Drive, between Hidden Trail Road and SR-73 Freeway.

However, an incremental approach is suggested below for the City's consideration in addressing travel speeds on this roadway. Initial and follow-up steps include:

1st Steps:

- Increase law enforcement presence as often as available, or as resources permit.
- Place a portable radar speed trailer near the midpoint of the roadway segment, as often as available.

2nd Steps:

- Install '30' pavement markings adjacent to the existing speed limit signs to remind drivers of the speed limit.
- Install a white, right edgeline on both sides of the roadway dividing the parking lane from the through lane, essentially narrowing the through lanes to potentially reduce vehicle speeds.
- Install vehicle speed feedback signs, to remind drivers of the speed limit and their actual speeds.

APPENDIX A

**ADT SPEED-COUNT DATA
&
PEDESTRIAN/BICYCLE COUNT DATA**

SPEED

Greenfield Dr Bet Hidden Trail Rd & SR 73 WB Ramps

Day: Wednesday

Date: 12/3/2025

City: Laguna Hills

Project #: CA25_010131_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00	0	0	0	2	1	0	0	0	0	0	0	0	0	3
5:00	0	0	1	5	4	0	0	0	0	0	0	0	0	10
6:00	0	0	1	8	10	8	2	0	0	0	0	0	0	29
7:00	0	0	4	18	22	6	0	0	0	0	0	0	0	50
8:00	0	0	3	26	35	7	2	0	0	0	0	0	0	73
9:00	1	0	8	19	26	5	3	0	0	0	0	0	0	62
10:00	3	3	11	15	18	7	2	0	0	0	0	0	0	59
11:00	4	1	5	16	14	7	0	0	0	0	0	0	0	47
12:00 PM	1	0	5	19	31	4	1	0	0	0	0	0	0	61
13:00	0	2	13	27	18	6	0	0	0	0	0	0	0	66
14:00	1	2	6	27	33	9	2	0	0	0	0	0	0	80
15:00	0	2	8	28	22	10	4	0	0	0	0	0	0	74
16:00	1	0	6	40	41	11	1	0	0	0	0	0	0	100
17:00	0	2	13	44	16	4	1	0	0	0	0	0	0	80
18:00	0	7	9	19	7	2	0	0	0	0	0	0	0	44
19:00	1	2	5	10	16	1	1	0	0	0	0	0	0	36
20:00	1	6	3	10	9	2	1	0	0	0	0	0	0	32
21:00	0	1	3	3	0	0	0	0	0	0	0	0	0	7
22:00	0	0	1	2	0	0	0	1	0	0	0	0	0	4
23:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Totals	13	28	106	339	325	90	20	1						922
% of Totals	1%	3%	11%	37%	35%	10%	2%	0%						100%

AM Volumes	8	4	34	110	130	41	9	0	0	0	0	0	0	336
% AM	1%	0%	4%	12%	14%	4%	1%							36%
AM Peak Hour	11:00	10:00	10:00	8:00	8:00	6:00	9:00							8:00
Volume	4	3	11	26	35	8	3							73
PM Volumes	5	24	72	229	195	49	11	1	0	0	0	0	0	586
% PM	1%	3%	8%	25%	21%	5%	1%	0%						64%
PM Peak Hour	12:00	18:00	13:00	17:00	16:00	16:00	15:00	22:00						16:00
Volume	1	7	13	44	41	11	4	1						100
Directional Peak Periods All Speeds	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes				
	Volume		%	Volume		%	Volume		%	Volume		%		
	123	↔	13%	127	↔	14%	180	↔	20%	492	↔	53%		

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
North Bound	25	30	29	33	37	1040
South Bound	24	29	29	34	37	922

SPEED

Greenfield Dr Bet Hidden Trail Rd & SR 73 WB Ramps

Day: Thursday
Date: 12/4/2025

City: Laguna Hills
Project #: CA25_010131_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:00	0	0	1	0	0	1	0	0	0	0	0	0	0	2
5:00	0	0	1	3	5	0	2	0	0	0	0	0	0	11
6:00	0	0	0	7	10	3	1	2	0	0	0	0	0	23
7:00	0	1	2	20	40	11	3	0	0	0	0	0	0	77
8:00	0	1	2	23	35	3	2	1	0	0	0	0	0	67
9:00	0	1	2	29	33	13	1	0	0	0	0	0	0	79
10:00	0	0	10	16	29	8	1	0	0	0	0	0	0	64
11:00	2	2	9	38	32	6	0	0	0	0	0	0	0	89
12:00 PM	0	3	7	23	38	9	0	0	0	0	0	0	0	80
13:00	1	2	2	29	27	10	1	0	0	0	0	0	0	72
14:00	1	0	4	28	43	13	3	1	0	0	0	0	0	93
15:00	2	2	9	30	29	10	5	1	0	0	0	0	0	88
16:00	1	1	5	27	22	15	2	0	0	0	0	0	0	73
17:00	1	2	9	28	27	10	1	0	0	0	0	0	0	78
18:00	3	4	11	15	13	3	0	0	0	0	0	0	0	49
19:00	0	0	4	17	14	4	0	0	0	0	0	0	0	39
20:00	0	2	10	6	3	0	0	0	0	0	0	0	0	21
21:00	0	1	2	12	11	2	1	0	0	0	0	0	0	29
22:00	1	1	1	3	10	2	0	0	0	0	0	0	0	18
23:00	0	1	2	3	1	1	0	1	0	0	0	0	0	9
Totals	12	24	93	357	423	125	23	7						1064
% of Totals	1%	2%	9%	34%	40%	12%	2%	1%						100%

AM Volumes	2	5	27	136	185	46	10	4	0	0	0	0	0	415
% AM	0%	0%	3%	13%	17%	4%	1%	0%						39%
AM Peak Hour	11:00	11:00	10:00	11:00	7:00	9:00	7:00	6:00						11:00
Volume	2	2	10	38	40	13	3	2						89
PM Volumes	10	19	66	221	238	79	13	3	0	0	0	0	0	649
% PM	1%	2%	6%	21%	22%	7%	1%	0%						61%
PM Peak Hour	18:00	18:00	18:00	15:00	14:00	16:00	15:00	14:00						14:00
Volume	3	4	11	30	43	15	5	1						93
Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes							
	Volume		Volume		Volume		Volume		Volume		Volume		Volume	
	144	↔	152	↔	151	↔	617	↔	14%	14%	14%	58%		

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
North Bound	22	28	27	33	35	1137
South Bound	25	30	30	34	38	1064

SPEED

Greenfield Dr Bet Hidden Trail Rd & SR 73 WB Ramps

Day: Friday
Date: 12/5/2025

City: Laguna Hills
Project #: CA25_010131_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	2
1:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00	0	0	0	5	3	4	0	0	0	0	0	0	0	12
6:00	0	0	0	9	5	5	3	0	0	0	0	0	0	22
7:00	0	0	2	15	35	14	3	0	0	0	0	0	0	69
8:00	0	0	3	23	33	14	2	0	0	0	0	0	0	75
9:00	1	1	6	14	25	20	3	0	0	0	0	0	0	70
10:00	0	0	2	18	24	21	1	1	0	0	0	0	0	67
11:00	2	4	4	19	24	17	3	1	0	0	0	0	0	74
12:00 PM	0	2	6	26	25	6	0	0	0	0	0	0	0	65
13:00	1	0	8	17	31	12	1	0	0	0	0	0	0	70
14:00	0	2	6	26	34	7	4	0	0	0	0	0	0	79
15:00	1	1	6	22	35	11	1	1	0	0	0	0	0	78
16:00	1	1	2	25	37	7	3	0	0	0	0	0	0	76
17:00	0	2	17	23	23	8	1	1	0	0	0	0	0	75
18:00	1	3	10	19	21	6	1	0	0	0	0	0	0	61
19:00	0	0	5	16	12	3	0	0	0	0	0	0	0	36
20:00	0	2	7	7	5	4	1	0	0	0	0	0	0	26
21:00	2	1	8	3	9	6	1	0	0	0	0	0	0	30
22:00	0	0	0	5	2	2	0	0	0	0	0	0	0	9
23:00	0	0	0	3	2	1	0	0	0	0	0	0	0	6
Totals	9	19	92	296	386	172	28	5						1007
% of Totals	1%	2%	9%	29%	38%	17%	3%	0%						100%

AM Volumes	3	5	17	104	150	99	15	3	0	0	0	0	0	396
% AM	0%	0%	2%	10%	15%	10%	1%	0%						39%
AM Peak Hour	11:00	11:00	9:00	8:00	7:00	10:00	6:00	4:00						8:00
Volume	2	4	6	23	35	21	3	1						75
PM Volumes	6	14	75	192	236	73	13	2	0	0	0	0	0	611
% PM	1%	1%	7%	19%	23%	7%	1%	0%						61%
PM Peak Hour	21:00	18:00	17:00	12:00	16:00	13:00	14:00	15:00						14:00
Volume	2	3	17	26	37	12	4	1						79
Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes							
	Volume		Volume		Volume		Volume		Volume		Volume		Volume	
	144	↔	135	↔	151	↔	577	↔	14%	13%	15%	57%		

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
North Bound	23	29	28	33	37	1148
South Bound	26	31	30	36	39	1007

SPEED

Greenfield Dr Bet Hidden Trail Rd & SR 73 WB Ramps

Day: Saturday
Date: 12/6/2025

City: Laguna Hills
Project #: CA25_010131_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	1	1	1	0	2	0	0	0	0	0	0	5
1:00	0	0	0	1	0	1	1	0	0	0	0	0	0	3
2:00	0	0	0	1	0	0	0	1	0	0	0	0	0	2
3:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	2	1	0	0	0	0	0	0	0	3
6:00	0	0	0	3	8	1	0	0	0	0	0	0	0	12
7:00	0	0	0	5	10	6	3	0	0	0	0	0	0	24
8:00	0	0	1	10	14	14	0	1	0	0	0	0	0	40
9:00	0	0	3	16	21	10	1	0	0	0	0	0	0	51
10:00	0	2	2	18	22	6	0	0	0	0	0	0	0	50
11:00	0	0	4	17	50	16	3	0	0	0	0	0	0	90
12:00 PM	1	1	4	9	30	18	3	0	0	0	0	0	0	66
13:00	0	0	8	16	21	9	0	0	0	0	0	0	0	54
14:00	1	1	6	19	24	7	1	2	0	0	0	0	0	61
15:00	0	0	2	22	26	7	1	0	0	0	0	0	0	58
16:00	0	0	8	15	24	8	2	0	0	0	0	0	0	57
17:00	1	1	11	32	15	5	0	0	0	0	0	0	0	65
18:00	0	4	13	12	20	6	0	0	0	0	0	0	0	55
19:00	2	5	3	12	15	4	1	0	0	0	0	0	0	42
20:00	2	2	14	6	2	3	0	0	0	0	0	0	0	29
21:00	1	1	4	9	5	5	0	0	0	0	0	0	0	25
22:00	1	0	4	3	11	1	0	0	0	0	0	0	0	20
23:00	0	0	0	2	4	1	1	0	0	0	0	0	0	8
Totals	9	17	88	229	326	129	19	4						821
% of Totals	1%	2%	11%	28%	40%	16%	2%	0%						100%

AM Volumes	0	2	11	72	129	55	10	2	0	0	0	0	0	281
% AM		0%	1%	9%	16%	7%	1%	0%						34%
AM Peak Hour		10:00	11:00	10:00	11:00	11:00	7:00	2:00						11:00
Volume		2	4	18	50	16	3	1						90
PM Volumes	9	15	77	157	197	74	9	2	0	0	0	0	0	540
% PM	1%	2%	9%	19%	24%	9%	1%	0%						66%
PM Peak Hour	19:00	19:00	20:00	17:00	12:00	12:00	12:00	14:00						12:00
Volume	2	5	14	32	30	18	3	2						66
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume		%	Volume		%	Volume		%	Volume		%
			64	↔	8%	120	↔	15%	122	↔	15%	515	↔	63%

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
North Bound	23	29	28	34	38	976
South Bound	25	30	30	35	38	821

SPEED

Greenfield Dr Bet Hidden Trail Rd & SR 73 WB Ramps

Day: Sunday
Date: 12/7/2025

City: Laguna Hills
Project #: CA25_010131_001s

South Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	1	1	0	1	0	0	0	0	0	0	3
3:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	2	4	1	0	0	0	0	0	0	0	7
6:00	0	0	0	3	8	1	0	0	0	0	0	0	0	12
7:00	1	0	0	10	12	3	4	0	0	0	0	0	0	30
8:00	0	0	0	5	11	7	3	1	0	0	0	0	0	27
9:00	0	1	2	11	18	15	4	0	0	0	0	0	0	51
10:00	0	0	5	7	16	15	8	0	0	0	0	0	0	51
11:00	0	0	0	5	18	12	3	0	0	0	0	0	0	38
12:00 PM	2	0	3	7	34	21	4	1	0	0	0	0	0	72
13:00	0	0	4	10	28	8	5	0	0	0	0	0	0	55
14:00	0	1	3	8	15	12	2	0	0	0	0	0	0	41
15:00	0	0	1	11	25	15	2	0	0	0	0	0	0	54
16:00	2	0	4	8	16	9	1	3	0	0	0	0	0	43
17:00	0	6	11	13	13	6	2	1	0	0	0	0	0	52
18:00	1	4	6	17	13	5	1	1	0	0	0	0	0	48
19:00	1	1	2	6	14	2	1	0	0	0	0	0	0	27
20:00	1	6	5	11	14	1	0	0	0	0	0	0	0	38
21:00	1	2	2	5	4	3	0	0	0	0	0	0	0	17
22:00	0	1	0	2	3	1	0	0	0	0	0	0	0	7
23:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Totals	9	22	48	144	270	137	41	7						678
% of Totals	1%	3%	7%	21%	40%	20%	6%	1%						100%

AM Volumes	1	1	7	46	89	54	23	1	0	0	0	0	0	222
% AM	0%	0%	1%	7%	13%	8%	3%	0%						33%
AM Peak Hour	7:00	9:00	10:00	9:00	9:00	9:00	10:00	8:00						9:00
Volume	1	1	5	11	18	15	8	1						51
PM Volumes	8	21	41	98	181	83	18	6	0	0	0	0	0	456
% PM	1%	3%	6%	14%	27%	12%	3%	1%						67%
PM Peak Hour	12:00	17:00	17:00	18:00	12:00	12:00	13:00	16:00						12:00
Volume	2	6	11	17	34	21	5	3						72
Directional Peak Periods All Speeds	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes							
	Volume		Volume		Volume		Volume		Volume		Volume		Volume	
	57	↔	127	↔	95	↔	399	↔						
		8%		19%		14%		59%						

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
North Bound	23	30	29	35	38	803
South Bound	26	31	31	37	40	678

Pedestrian Study

Location: Horse Crossing & Hidden Trail Rd/Greenfield Dr

City: Laguna Hills

Date: 12/03/2025, (Wed)

TIME	Pedestrian Crossing Volume		TOTAL
	NB	SB	
7:00 AM	1	0	1
7:15 AM	0	0	0
7:30 AM	0	0	0
7:45 AM	1	0	1
8:00 AM	0	0	0
8:15 AM	1	0	1
8:30 AM	0	0	0
8:45 AM	0	1	1
9:00 AM	0	0	0
9:15 AM	0	0	0
9:30 AM	0	0	0
9:45 AM	0	0	0
10:00 AM	0	0	0
10:15 AM	1	0	1
10:30 AM	0	0	0
10:45 AM	0	1	1
11:00 AM	1	0	1
11:15 AM	0	0	0
11:30 AM	0	0	0
11:45 AM	0	0	0
12:00 PM	0	0	0
12:15 PM	0	0	0
12:30 PM	0	0	0
12:45 PM	1	2	3
1:00 PM	0	0	0
1:15 PM	0	0	0
1:30 PM	0	0	0
1:45 PM	0	0	0
2:00 PM	0	0	0
2:15 PM	0	1	1
2:30 PM	0	0	0
2:45 PM	1	0	1
3:00 PM	0	0	0
3:15 PM	0	0	0
3:30 PM	0	1	1
3:45 PM	0	0	0
4:00 PM	0	0	0
4:15 PM	0	0	0
4:30 PM	0	0	0
4:45 PM	0	0	0
5:00 PM	0	1	1
5:15 PM	3	2	5
5:30 PM	2	1	3
5:45 PM	0	0	0
6:00 PM	1	1	2
6:15 PM	1	0	1
6:30 PM	0	0	0
6:45 PM	0	0	0
Totals	14	11	25



Pedestrian Study

Location: Horse Crossing Greenfield Dr NO SR 73 WB Ramps

City: Laguna Hills

Date: 12/03/2025, (Wed)

TIME	Pedestrian Crossing Volume		TOTAL
	EB	WB	
7:00 AM	0	0	0
7:15 AM	0	0	0
7:30 AM	0	0	0
7:45 AM	0	0	0
8:00 AM	0	0	0
8:15 AM	0	0	0
8:30 AM	0	0	0
8:45 AM	0	0	0
9:00 AM	0	0	0
9:15 AM	0	0	0
9:30 AM	0	0	0
9:45 AM	0	0	0
10:00 AM	0	0	0
10:15 AM	0	0	0
10:30 AM	0	0	0
10:45 AM	2	2	4
11:00 AM	0	0	0
11:15 AM	0	0	0
11:30 AM	0	0	0
11:45 AM	0	0	0
12:00 PM	0	0	0
12:15 PM	0	0	0
12:30 PM	0	0	0
12:45 PM	0	0	0
1:00 PM	0	0	0
1:15 PM	0	0	0
1:30 PM	0	0	0
1:45 PM	0	0	0
2:00 PM	0	0	0
2:15 PM	2	1	3
2:30 PM	0	0	0
2:45 PM	0	0	0
3:00 PM	0	0	0
3:15 PM	0	0	0
3:30 PM	0	0	0
3:45 PM	0	0	0
4:00 PM	0	0	0
4:15 PM	0	0	0
4:30 PM	0	0	0
4:45 PM	0	0	0
5:00 PM	0	0	0
5:15 PM	0	0	0
5:30 PM	0	0	0
5:45 PM	0	0	0
6:00 PM	0	0	0
6:15 PM	0	0	0
6:30 PM	0	0	0
6:45 PM	0	0	0
Totals	4	3	7



APPENDIX B

**5-YEAR SWITRS
ROADWAY SEGMENT COLLISION HISTORY**

**CITY OF LAGUNA HILLS
GREENFIELD DRIVE, FROM HIDDEN TRAIL ROAD TO SR-73 FREEWAY
5-YEAR SWITRS COLLISION DATABASE
JAN. 1, 2020 TO AUG. 31, 2025**

CASE ID	COLL. DATE	COLL. TIME	PRIMARY ROAD	SECONDARY ROAD	DIST.	DIR.	INTERS.	WEATH. 1	COLL. SEVER.	PRIM. COLL. FACT.	PCF VIOL. CAT.	PCF VIOL.	HIT AND RUN	TYPE OF COLL.	MOTOR VEHICLE INVOLVED		DIR. B4 COLL.
															WITH	ROAD SURF.	
9496300	20220707	710	GREENFIELD DR	RT 73	551	N	N	A	0	A	8	22107	N	E	J	A	WR
9696433	20240427	1315	GREEN DR	RT 73	0		Y	A	3	A	12	21453	N	D	C	A	W v N
9761122	20241108	1417	GREENFIELD DR	RT 73	0		Y	A	4	A	7	21658	N	B	C	A	NL v NL

NOTES:

Weather 1
A - Clear
B - Cloudy
C - Raining
D - Snowing
E - Fog
F - Other
G - Wind
-- Not Stated

Collision Severity
1 - Fatal
2 - Injury (Severe)
3 - Injury (Other Visible)
4 - Injury (Complaint of Pain)
0 - PDO (Property Damage Only)

Primary Collision Factor
A - (Vehicle) Code Violation
B - Other Improper Driving
C - Other Than Driver
D - Unknown
E - Fell Asleep
-- Not Stated

Motor Vehicle Involved With:
A - Non-Collision
B - Pedestrian
C - Other Motor Vehicle
D - Motor Vehicle on Other Roadway
E - Parked Motor Vehicle
F - Train
G - Bicycle
H - Animal
I - Fixed Object
J - Other Object
-- Not Stated

PCF Violation Category
01 - Driving or Bicycling Under Influenc
02 - Impeding Traffic
03 - Unsafe Speed
04 - Following Too Closely
05 - Wrong Side of Road
06 - Improper Passing
07 - Unsafe Lane Change
08 - Improper Turning
09 - Automobile ROW
10 - Pedestrian ROW
11 - Pedestrian Violation
12 - Traffic Signals and Signs
13 - Hazardous Parking
14 - Lights
15 - Brakes
16 - Other Equipment
17 - Other Hazardous Violation
18 - Other Than Driver (or Ped)
19 -
20 -
21 - Unsafe Starting or Backing
22 - Other Improper Driving
23 - Pedestrian or "Other" Under the Influence
24 - Fell Asleep
00 - Unknown
-- Not Stated

Hit and Run
F - Felony
M - Misdemeanor
N - Not Hit & Run

Type of Collision
A - Head-On
B - Sideswipe
C - Rear-End
D - Broadside
E - Hit Object
F - Overturned
G - Vehicle/Pedestrian
H - Other
-- Not Stated

Road Surface
A - Dry
B - Wet
C - Snowy or Icy
D - Slippery
-- Not Stated



City of Laguna Hills Traffic Commission Staff Report

Date: March 18, 2026
To: Traffic Commissioners
From: Joe Ames, Assistant City Manager
Issue: Review of Radar Trailer Locations List

Recommendation: That the Traffic Commission receive and file the report.

Background:

The Traffic Commission last reviewed the radar trailer locations list at the November 7, 2022, Traffic Commission Regular Meeting. At that time, newly-appointed Public Works Director Ames reported the Public Works Department was implementing a new and improved deployment schedule.

Prior to November 2022, the radar trailer had been deployed between approximately 9:00 a.m. and 3:00 p.m., Tuesdays through Thursdays, to prevent the radar trailer from being vandalized. To current City staff's recollection, City staff was told vandalism happened one-time years ago, and the previous schedule was implemented to prevent vandalism from occurring again. However, the previous schedule created an undue burden on the Public Works Supervisor because he needed to retrieve the trailer from the City's rented storage unit every morning and return the trailer to the storage unit every afternoon prior to the end of his work shift. The previous schedule also prevented the radar trailer from being effective because it was typically absent on City roadways during the morning and evening commute hours, and on weekends.

Starting in November 2022, the practice has been to leave the radar trailer out continuously and to move locations every Monday. However, during at times during 2024 and 2025, respectively, there was a period of time when the solar/battery system and computer software failed. City staff also found the solar/battery system was incapable of sustaining power needs for the entire week, especially after prolonged

cloudy days. Fortunately, the Public Works Supervisor was able to replace the battery system and the Information Technology Administrator was able to update the computer software. The radar trailer has been in continuous service since then.

The current radar rotational list is as follows (with the posted speed limit or prima facie speed limit of that street in parathesis):

1. Linda Vista north of Alisal (25 MPH)
2. Bentley east of Valerie (25 MPH)
3. Largo west of Sunburst (25 MPH)
4. Nellie Gail east of Desert Trail (25 MPH)
5. Rapid Falls west of Sundowner (25 MPH)
6. Hidden Trail across from 27783 Hidden Trail (25 MPH)
7. Nellie Gail west of Empty Saddle (25 MPH)
8. Mustang west of Appaloosa (25 MPH)
9. Bridlewood south of Laurel Crest (25 MPH)
10. Lost Colt east of Beargrass (25 MPH)
11. San Remo Mid-Block (30 MPH)
12. Mill Creek south of Lake Forest (30 MPH)
13. Santa Vittoria Mid-Block (30 MPH)
14. Glen Canyon west of Nellie Gail (25 MPH)
15. Vista Viejo Mid-Block (30 MPH)
16. Hitching Rail Mid-Block (25 MPH)
17. Aliso Hills Drive Mid-Block (25 MPH)
18. Wilkes south of Alicia (25 MPH)
19. Mackenzie south of La Paz (25 MPH)
20. Woodbluff west of Middleridge (25 MPH)
21. Greenfield (in the median) in front of 27802 Greenfield (30 MPH)
22. Mawson east of Velasquez Rd (25 MPH)
23. Grissom in front of 25071 Grissom (25 MPH)

At the January 21, 2026, Traffic Commission Regular Meeting, Commissioner Caputo requested the radar trailer be deployed to Grissom Road as part of the rotating list of locations. Therefore, City staff added it to list as location number 23. Based on this schedule, the radar trailer will generally make an appearance on a particular street approximately twice per year.

Fiscal Impact:

None associated with the receipt of this report.

Attachments:

None