



Agenda Report

Fullerton City Council

MEETING DATE: MARCH 4, 2025

TO: CITY COUNCIL / SUCCESSOR AGENCY

SUBMITTED BY: STEPHEN BISE, PUBLIC WORKS DIRECTOR

PREPARED BY: DAVID ROSEMAN, CONTRACT TRAFFIC ENGINEER
MICHAEL PLOTNIK, CITY TRAFFIC ENGINEER

SUBJECT: EUCLID STREET AND VALLEY VIEW DRIVE
INTERSECTION SIGNALIZATION RECOMMENDATION

SUMMARY

City Council consideration of a Transportation and Circulation Commission (TCC) recommendation to install a traffic signal at the Euclid Street and Valley View Drive intersection.

PROPOSED MOTION

1. Approve new traffic signal installation at the Euclid Street and Valley View Drive intersection.
2. Direct Director of Public Works to seek grant funding opportunities for traffic signal construction at Euclid Street and Valley View Drive.

ALTERNATIVE OPTIONS

- Approve the Proposed Motion
- Reject TCC recommendation and deny traffic signal installation
- Refer matter back to TCC to seek alternative safety enhancement measures for the Euclid Street and Valley View Drive intersection to include, but not limited to, enhanced intersection lighting, additional warning signage and revised striping
- Other options brought by Council.

STAFF RECOMMENDATION

Staff recommends the Proposed Motion.

CITY MANAGER REMARKS

The City Manager recommends approval.

PRIORITY POLICY STATEMENT

This item matches the following Priority Policy Statements:

- Public Safety
- Infrastructure and City Assets.

FISCAL IMPACT

The Fiscal Year 2024-25 Capital Improvement Program has a \$550,000 appropriation for Project 46621 – New Traffic Signals & Rectangular Rapid Flashing Beacons Installation Program in the Capital Projects Fund (Fund 74) design and construction. However, staff would seek grant funding for this project after initial engineering design if City Council approves the Proposed Motion.

Traffic signal approval, design and construction requires significant engineering effort, time and cost. The City Traffic Engineer estimates the proposed project would take two to three years to complete and cost approximately \$550,000. Staff cannot determine full project components and exact project costs until completing the engineering design. Caltrans design requirements, utility conflicts, required ADA upgrades, traffic signal operations and inflation could impact project components and costs.

Staff anticipates initial engineering design work would use \$45,000 of the \$550,000 budgeted in Project 46621 for New Traffic Signals & Rectangular Rapid Flashing Beacons Installation Program. Staff would complete the initial engineering design and then submit engineering design plans and refined estimated project costs to various grant funding agencies. Staff would return to City Council with appropriation requests to accept any grant funding awarded (or lack thereof).

BACKGROUND AND DISCUSSION

Residents in the Euclid Street / Valley View Drive area expressed traffic safety concerns regarding the intersection centered around crash rates, the speed of traffic on Euclid Street, lack of gaps on Euclid Street traffic during peak traffic flows, poor visibility of conflicting traffic and difficulty making turns into and out of the neighborhoods. The City traffic engineering division conducted studies, implemented striping and signage modifications, installed speed feedback signs, trimmed landscaping and monitored operations and crash statistics at the intersection in response to resident concerns. Euclid Street traffic flow characteristics remain unaffected despite these efforts.

City traffic engineering conducted a preliminary traffic safety review of the intersection and recommended conducting a full traffic signal study in late 2023. Public Works staff, Fullerton Police and area residents held a virtual community meeting a few months later to discuss intersection safety concerns and brainstorm safety enhancement measures. The discussion found the traffic signal installation option had the highest potential to reduce crash rates and address resident safety concerns. City traffic engineers then conducted a comprehensive traffic signal study. This report outlines study results.

The California Manual on Uniform Traffic Control Devices (CA MUTCD) provides guidance for traffic engineers when considering an intersection for signalization. The CA MUTCD outlines an engineering study process to evaluate physical conditions, traffic flow, pedestrian activity and crash performance against established criteria or warrants. The warrant study process does not provide an absolute yes or no answer to signalization but it enables engineers to look beyond warrants and exercise engineering judgement to evaluate unique characteristics of an intersection and traffic operations. The warrants guide engineers and officials in the decision-making process.

City traffic engineers gathered data in fall 2024 and performed numerous on-site observations at various times of the day and night to complete the CA MUTCD warrant studies for the Euclid Street and Valley View Drive intersection. Staff found three of the nine warrants related to school zones, roadway networks and railroads not applicable and discarded. Staff gathered a variety of traffic, physical and crash data to complete the remaining six warrant studies. The data did not satisfy the pedestrian crossing warrant due to low pedestrian activity at the intersection. The study then focused on the three warrants related to traffic flow, one warrant related to coordinated traffic signal systems and one warrant related to crash experience.

Traffic Flow Studies The CA MUTCD has three traffic volume warrants setting criterion for intersection traffic volumes levels over an eight hour period, a four hour period and the peak hour within those eight and four hour periods, respectively. The traffic volume data gathered at the Euclid Street and Valley View intersection met all three traffic volume criteria, suggesting intersection makes a good candidate for a traffic signal all day, based on traffic flow.

Coordinated Signal System Warrant This warrant considers traffic signals spacing and if signalizing the intersection would improve vehicle platooning and progressive roadway operation and determining if the intersection location makes a good place for a traffic signal based on signal timing parameters. The Euclid Street and Valley View Drive intersection has over 2,000 feet to the next signalized intersection to the south and just shy of 2,000 feet to the next signalized intersection to the north and satisfies the warrant, which suggests this intersection has a good location for a traffic signal.

Crash Experience Warrant This warrant is not without controversy in the court of public opinion. An intersection must have five or more reported crashes within a twelve-month period susceptible to correction by a traffic signal to satisfy the warrant. The public does not well receive the five crash es per year limit and feels the government should do everything possible to prevent serious crashes. The crash experience warrant requires a minimum traffic flow level through the intersection and that the agency has first attempted all other safety and enforcement alternatives without success. The Euclid Street and Valley View Drive intersection has sufficient traffic volume and the City has taken all reasonable steps to improve safety to-date. Available crash data indicates six reported crashes at the intersection in the last two years with two of those six crashes, which both involved injuries, potentially preventable with a traffic signal at that location. The findings indicate the number of crashes per year does not satisfy the warrant. However, staff analysis finds the physical intersection layout with vertical and horizontal curves and random traffic arrival patterns very likely contributes to the crashes. Staff

finds it reasonable to assume that any other minor traffic control measures, short of signalization, would not result in significant reduction in the crash rate or severity of crashes at the intersection.

Staff evaluated intersection sight distance to determine safe stopping distances and found the intersection technically has sufficient motorist sight distance of conflicting traffic flows in all directions when factoring in the applicable approach speeds. However, staff also observed that some motorists misjudged approaching higher speed vehicles and made poor choices as to when to make turns on to or off Euclid Street. The horizontal and vertical curves and the random nature of the traffic arrival patterns could relate to this misjudgment.

The absence of adequate intersection lighting could also contribute to crashes. The intersection has one dedicated streetlight on the northeast corner making it relatively dark at night and during poor weather conditions. Intersection signalization would include dedicated safety lights to significantly improve lighting at night and during inclement weather.

The contract traffic engineer recommends signalizing the Euclid Street and Valley View Drive intersection based on the traffic signal study results, the intersection satisfying four CA MUTCD warrants, personal observations of the intersection and traffic flow and public input. The traffic engineer opined that traffic signal installation would improve pedestrian safety and prevent future injury crashes.

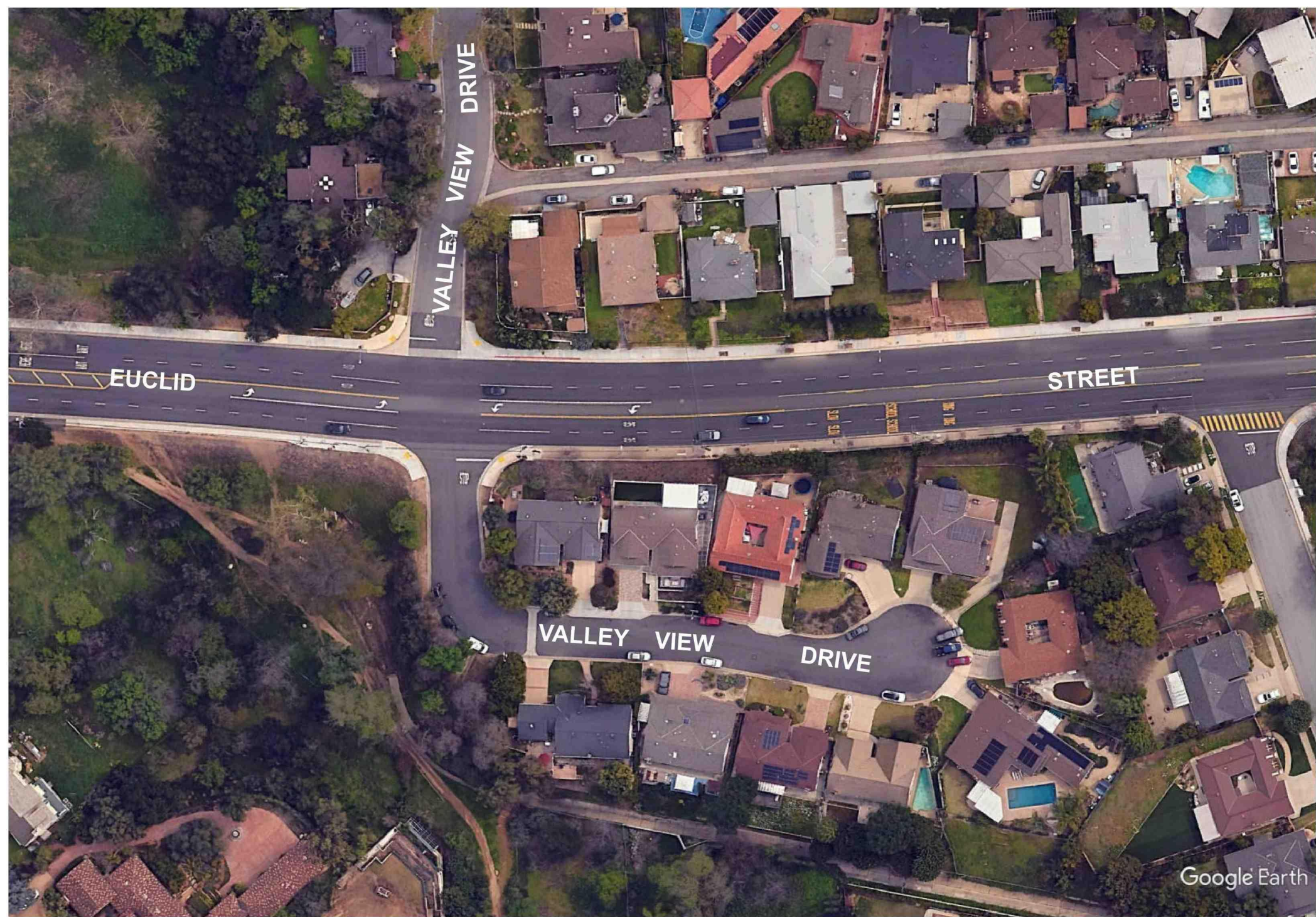
City traffic engineers and Fullerton Police met with residents in November 2024 to discuss the data collected, the traffic study results and to seek additional resident input. The residents supported the study effort, the results presented and desired a traffic signal installed as soon as practicable.

TCC voted 3 - 1 in favor of design and implementation of a new traffic signal at the intersection of Euclid Street and Valley View Drive on February 3, 2025. Staff presents that recommendation for City Council consideration.

Attachments:

- Attachment 1 - Vicinity Map
- Attachment 2 - TCC Staff Report

cc: City Manager Eric J. Levitt



EUCLID STREET & VALLEY VIEW DRIVE

Attachment 2- Vicinity Map