



Agenda Item

City Traffic Commission

Item #: 4.4.

2/11/2026

File #: 26-0039

TO: Chair and Members of the City Traffic Commission

THRU: Larry Tay, Deputy Public Works Director/Traffic Engineer

FROM: Martin Varona, Senior Civil Engineer

1. SUBJECT

Discussion of potential operational changes to the signalized intersection of Tustin Street and Briardale-Taft Avenue

2. SUMMARY

Staff have received considerable feedback from motorists and Orange residents regarding the current operation of the signalized intersection of Tustin Street and Briardale-Taft Avenue. Staff have assessed the signal operations and developed an alternative operational strategy for consideration. This alternative would address the expressed concerns while continuing to implement the City Council-approved through movement restrictions for east and westbound traffic.

3. RECOMMENDED ACTION

Approve the implementation of a signal sequencing strategy that involves serving east and westbound traffic from Briardale Avenue in series, rather than in parallel.

4. FISCAL IMPACT

None. The estimated cost of the recommended operational change is approximately \$15,000, including labor and materials, which can be accommodated by the approved Fiscal Year 2026 budget.

5. STRATEGIC PLAN GOALS

Goal 5: Improve infrastructure, mobility, and technology

6. DISCUSSION AND BACKGROUND

Over the past several years, staff has received feedback from several road users regarding the existing traffic signal operations at the Tustin Street and Taft/Briardale Avenue intersection. Specifically, the concerns are related to the sequencing of the traffic signal.

The westbound approach of this intersection is identified as Taft Avenue and the eastbound approach is identified as Briardale Avenue, with both being considered the side street. Street signage prohibits east-west through traffic from both the Briardale Avenue and Taft Avenue approaches, which was implemented as part of a traffic calming strategy intended to reduce the amount of cut-through traffic through the adjacent residential neighborhood west of Tustin Street and approved by City Council in

1996.

As currently operated, all east and westbound movements of the intersection are served simultaneously, including right and left-turning vehicles and pedestrians from both side street approaches. The above also involves two westbound left turn lanes and one eastbound right turn lane turning onto Tustin Street during the same green interval. While the speed, volume, and accident rate are generally low, feedback from road users indicate some level of concern over the number of concurrent movements as well as pedestrian comfort.

An alternative for operating this intersection would be to “split” the service of the side street traffic, serving one direction at a time. This option would, among other things, reduce the number of movements that are permissible at any given time and, in doing so, be expected to improve driver and pedestrian comfort at the intersection.

Because serving the side street approaches one at a time, rather than together, would require redistributing some of the intersection’s total “green time”, from Tustin Street to Briardale/Taft avenues, an engineering analysis was performed to determine whether the expected benefits outweigh any potential drawbacks. The analysis indicated that motorists are expected to experience some additional delay when traveling through the intersection during morning, afternoon, and evening peak hours. However, the additional delay is very minimal. Moreover, the intersection will still be expected to meet General Plan requirements for level-of-service (intersection performance.) In fact, the intersection is expected to operate at the same level of service with or without the operation change.

Since the expected benefits of the proposed operational change outweigh the drawbacks, staff recommends “splitting” east and westbound traffic during the traffic signal cycle and serving them individually. The east and westbound through traffic movements will continue to be prohibited, consistent with the above-referenced 1996 City Council action. In addition, the proposed signal operation would involve minor changes to the traffic signal equipment, including the substitution of some of the circular “ball” indications with “arrow” indications to reinforce the prohibition of through traffic.

If approved, staff proposes to utilize the City’s on-call traffic signal maintenance contractor to implement the changes. The cost to do so is estimated around \$15,000 and can be absorbed in the approved FY 2026 budget.

7. ATTACHMENTS

- Location Map
- Performance Comparison Table
- Notification Letter