City of Grass Valley
City Council
Agenda Action Sheet

Title: Main and South Auburn Streets Intersection Improvements

CEQA: Categorically Exempt – Section 15301 "Existing Facilities"

Recommendation: That Council provide direction to Staff on whether to retain the traffic signal at Main St and S Auburn St or revert to a stop controlled intersection.

Prepared by: Bjorn P. Jones, PE, City Engineer

Council Meeting Date: 01/14/2025 **Date Prepared:** 01/09/2025

Agenda: Administrative

Background Information: Over several meetings in August and September 2024, Council was presented with a number of Engineering design proposals to be incorporated into the upcoming street restoration project along the Main St and S Auburn St downtown corridors. One concept was to consider converting the intersection at Main and S Auburn Streets from signalization to an all-way stop control configuration.

After Council's initial consideration, a trial period of stop control (flashing red signal lights) was conducted over two full months in September and October 2024. In Staff's opinion the trial showed that the intersection not only functioned safely in a stop control arrangement, but efficiency was improved the majority of the time. Traffic flows up and down Main St experienced better metering, instead of letting a stream of vehicles through at one time. Also, the unnecessary delays created by sitting at a red light when no cross traffic is present were eliminated.

Queuing of traffic did not appear to be measurably different in a signalized or unsignalized state, likely due to the fact that when the corridor is overwhelmed during peak periods, it doesn't matter what intersection control is in place, there are simply too many vehicles for the roadway. There appeared to be very limited windows of the day when any advantages of increased efficiency from traffic signalization were evident.

This intersection and the Main St @ Bennett St intersection have both historically operated in a stop control configuration every night from 7pm to 7am, and on the weekends for many years. To Staff's knowledge, no complaints have been received over the years about these temporary stop control arrangements. During the trial period, a few residents called in to express concerns about the Auburn @ Mill intersection; one a disabled person who felt less safe navigating the crosswalk and two callers who thought the signal was broken and should be fixed. The majority of the feedback received by Engineering was overwhelmingly positive.

The one perceived drawback of a stop control configuration is lessened pedestrian protections without the dedicated crossing cycle periods. In a way, this may be true, but the crossing cycle may also provide a false sense of security at times when motorists are not acutely alert for pedestrians, especially in executing a turning movement or when rushing to get through the intersection. In a stop control configuration, the free flow of traffic is moderated, and motorists are forced to stop, evaluate the whole intersection, and then make a decision to proceed. Also, the urge to rush through the corridor, especially coming down Main St to "beat the light," is greatly diminished.

In all, Staff's recommendation would be to convert the intersection to full-time all-way stop control. This would likely involve removal of most of the existing signal facilities and installation of a single, hanging flashing red control beacon in the center of the intersection, along with the installation of stop signs. Pedestrian safety improvements would be proposed, including signage, rapid flashing beacons and enhanced area lighting. Up front costs could be tens of thousands of dollars, but long term, elimination of the upkeep and operational costs of the traffic signal would see significant savings.

The secondary consideration discussed in prior meetings was the elimination of the westerly crosswalk markings across Main St due to pedestrian safety concerns and conflicts with uncontrolled left turning traffic. If a stop control configuration is the chosen treatment, this concern is significantly lessened, and the crosswalk could remain in place. However, if Council decides to keep the intersection as signalized, Staff would strongly recommend that the decision be made to remove the westerly crossing at this time.

Staff requests that Council provide final direction on the described proposals so that they can be incorporated into the upcoming street rehabilitation project. After consideration, Engineering will finalize the design and contract documents in order to release the project for bidding. The award of a construction contract is anticipated to occur in Spring 2025, with construction to follow shortly thereafter.

Council Goals/Objectives: The intersection improvements proposed execute portions of work tasks towards achieving/maintaining Strategic Plan Goal – Transportation

Fiscal Impact: If the intersection is converted to all way stop control, one-time costs of $30-40,000 will be experienced. If signalization is maintained ongoing annual maintenance and replacement costs of approximately $15,000 will continue.

Funds Available: Yes

Account #: 300-406-63850

Reviewed by: City Manager

Attachments: N/A