

Agenda Date: 8/15/2017 Agenda Placement: 60

NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

TO: Board of Supervisors

FROM: Steven Lederer - Director of Public Works

Public Works

REPORT BY: Michelle Melonakis, Associate Engineer - 259-8279

SUBJECT: Turning movement control at the intersections of Gateway W Rd. & Devlin Rd. and Devlin Rd. &

Airport Blvd

RECOMMENDATION

Director of Public Works requests adoption of a resolution modifying turn restrictions at Gateway Road West at Devlin Road and Devlin Road at Airport Boulevard to improve safety and traffic flow.

EXECUTIVE SUMMARY

The Department of Public Works proposes to modify the turn lane restrictions at two intersections in the Airport Industrial Area. Congestion on Highway 29 has diverted a high number of vehicles onto Devlin Rd., causing operational and safety issues on Devlin Rd. as it approaches Airport Blvd., and for turning movements from Gateway Rd. West onto Devlin Rd. Creation of two "drop" lanes (mandatory turn lanes) by modifying striping and installing "LEFT LANE MUST TURN LEFT" AND "RIGHT LANE MUST TURN RIGHT" signage is proposed to alleviate the congestion and increase safety. The right-most eastbound lane on Gateway Road West would be forced to turn right onto Devlin Rd., and the left-most through lane on southbound Devlin Rd. would be forced to turn left from only the far left turn lane onto Airport Blvd.

FISCAL IMPACT

Is there a Fiscal Impact? Yes
Is it currently budgeted? Yes

Where is it budgeted? The Roads Division budget provides funding each year for modifications and

maintenance to various traffic control signs and markings. The recommended

action will require the installation and/or modification of speed limit signs. These actions are routine and are included within the current budget.

Is it Mandatory or Discretionary? Discretionary

Discretionary Justification: The proposed item will increase roadway efficiency and safety with minimal

fiscal impact

Is the general fund affected? No

Future fiscal impact: None

Consequences if not approved: Lane configuration will remain as is, queuing and driver aggression/collisions

will potentially increase as congestion increases with growth in Airport

Industrial Area and on Hwy 29/12.

Additional Information:

ENVIRONMENTAL IMPACT

Consideration and possible adoption of a Categorical Exemption Class 1: It has been determined that this type of project does not have a significant effect on the environment and is exempt from the California Environmental Quality Act. [See Class 1 ("Existing Facilities") which may be found in the guidelines for the implementation of the California Environmental Quality Act at 14 CCR §15301; see also Napa County's Local Procedures for Implementing the California Environmental Quality Act, Appendix B.]

BACKGROUND AND DISCUSSION

The Department of Public Works proposes modifications to the turn lane restrictions at two intersections in the Airport Industrial Area (AIA). Congestion on Highway 29 is causing a high number of vehicles to use Devlin Road, which parallels Highway 29 to the west and is an alternative route from Soscol Ferry Road to Airport Blvd. Operational and safety issues have been noted as a result of this traffic volume.

A. Devlin Road Southbound at Airport Blvd.

Currently the leftmost lane on southbound Devlin Road queues (backs up) heavily during the weekday afternoon peak hour. A long queue in the left lane and freeflow conditions in the right lane is causing driver aggression, and some collisions, as drivers attempt to use the right lane to "cut in line" for the left turn. Public Works proposes to change the leftmost lane to be required to make the left turn onto Airport Blvd. This will allow the right lane to access either the center left turn lane at Airport Blvd, or proceed straight or to the right (see Attachment A). This will increase the efficiency of the signal by allowing more vehicles to turn left, and split the queue between the two through lanes. This will also help the safety issue caused by cars being stopped in the left lane but freeflow in the right lane. It will cause a higher delay for cars travelling straight or to the right through the intersection, but the number of cars making those movements in the afternoon peak hour are very low compared to the number of left turning vehicles. No operations would be impacted during other times of day.

B. Gateway Road Eastbound at Devlin Road

The major movement here during the afternoon rush hour is a right turn. Public Works proposes that the right lane be restricted to right turns only, while all other traffic (left turns and through traffic) be segregated in the left lane.

See Attachment A for a diagram of proposed changes at both Devlin and Gateway Roads. Both lanes will have signage at the beginning and end of the turn lane, and a solid white "channelizing" line to prohibit change of lanes once the turn lane starts. Typical advanced warning striping and signage will also be installed, with a new lane designation sign. This improvement will not reduce queuing completely because the queueing is caused by congestion on Highways 29 and 12, but it should increase efficiency and safety. This lane configuration should also work after the completion of Segment E of Devlin Road, and when it connects to the City of American Canyon. If there are more through movements and fewer left turns onto Airport Blvd the right lane may function as more of a through lane than an additional left turn lane. Intersection operation will be monitored periodically or with major roadway changes.

SUPPORTING DOCUMENTS

- A . Diagram of Lane Changes
- B . CEQA determination
- C. Resolution

CEO Recommendation: Approve

Reviewed By: Bret Prebula