



# Board Agenda Item 62

DATE: June 18, 2019

TO: Board of Supervisors

SUBMITTED BY: Steven E. White, Director  
Department of Public Works and Planning

SUBJECT: Stop Signs at Five Intersections in Fresno County

## RECOMMENDED ACTION(S):

**Adopt Resolution designating five intersections within Fresno County as stop intersections, authorizing additional stop signs at three intersections making them all-way stops and stop sign at two locations making them one-way stops.**

Approval of the recommended action will allow the installation of additional stop signs at three locations identified in the proposed resolution making them all-way stop intersections, improving traffic safety by requiring vehicles to stop from all approaches. In addition, allowing the installation of stop signs at two locations identified in the proposed resolution making them one-way stop intersections, improving traffic safety by requiring vehicles to stop on one approach only. This item pertains to locations in District 1, 4, and 5.

## ALTERNATIVE ACTION(S):

If the recommended action is not approved by your Board, the traffic controls at the five intersections will remain unchanged.

## FISCAL IMPACT:

There is no Net County Cost associated with the recommended action. The estimated cost for one-way and all-way stops is \$1,125 for materials and \$500 for equipment and labor that will be performed by Department of Public Works and Planning personnel. Sufficient appropriations and estimated revenues are included in the Department's - Roads Org 4510 FY 2018-19 Adopted Budget.

## DISCUSSION:

One-way and all-way stop control can be useful as a safety measure at intersections where certain traffic conditions exist. When the Department considers stop control at an intersection, it conducts an engineering study. Based upon the study, the Department will make a recommendation regarding the installation of stop signs. Criteria considered in an engineering study may include the collision history, traffic volume, traffic delays, line of sight, or any combination of the foregoing.

Studies indicate when traffic accidents, traffic volume, delays, line of sight, or any combination thereof justifies the installation of stop signs pursuant to guidelines in the California Manual on Uniform Traffic Control Devices. Furthermore, the studies would indicate whether stop sign installations would improve traffic safety at the intersections.

## **All-Way Stops**

### **Armstrong & Church Avenues**

This location pertains to District 5. The intersection is in the County's exclusive jurisdiction. Both Armstrong and Church Avenues are County maintained roads that intersect in southeast Fresno. The terrain is flat, leveled, and intersect within a rural farming area. The speed limit on both roads is 55 miles per hour (MPH).

Church Avenue has an easterly and westerly alignment consisting of two lanes of traffic. The pavement measures approximately 22 feet wide, from edge to edge. Signs and pavement markings include a painted yellow road centerline striping, Stop Ahead sign and pavement markings, Stop bar in each direction, Stop sign, and Cross Traffic Does Not Stop sign. The traffic volume is 2,800 vehicles per day (VPD).

Armstrong Avenue has a northerly and southerly alignment, and is the through road at Church Avenue. The pavement measures approximately 28 feet wide south of Church Avenue. The traffic volume is 1,300 VPD. An asphalt concrete dike borders the east and west edges of Armstrong Avenue, from Church Avenue and a point quarter mile south of Church. Pavement markings consist of yellow centerline stripes.

Between January 1, 2012 and September 30, 2017, there were six traffic accidents, with right-of-way violation as the primary cause factor (PCF) in most of the accidents, resulting in numerous injuries, with no fatalities. Four traffic accidents may have been correctable with an all-way stop installation, between April 1, 2015 and February 17, 2016. The average traffic delay on Church Avenue was over 26 seconds per vehicle.

### **Buttonwillow and South Avenues**

This location pertains to District 4. The intersection is in the County's exclusive jurisdiction. Both Buttonwillow and South Avenues are County roads that intersect north of Reedley. The terrain is flat, leveled, and intersect within a rural farming area, with few residential homes in the vicinity. An irrigation canal ditch runs parallel to the roadway on the west between South and Parlier Avenues.

Buttonwillow Avenue has a northerly and southerly alignment. The pavement measures over 32 feet wide from edge to edge. The traffic volume is between 3,700 and 4,100 VPD.

South Avenue has an easterly and westerly alignment. Traffic signs and markings consists of a painted yellow road centerline stripe, Stop Ahead sign and pavement markings, Stop bar on each approach to Buttonwillow Avenue, and Stop sign. A 45 MPH speed limit sign is posted for westbound traffic west of Buttonwillow Avenue. The pavement measures 21 feet wide and the traffic volume is 1,200 VPD.

Between January 1, 2014 and January 19, 2019, there were 13 traffic accidents, with right-of-way violation as the PCF in nine accidents, all of which may have been correctable with an all-way stop installation.

### **Grantland & McKinley Avenue**

This location pertains to District 1. The intersection is in the County's exclusive jurisdiction. Both Grantland and McKinley Avenues are County maintained roads that intersect west of Fresno. The terrain is flat, leveled, and intersect within a rural farming and residential area.

Grantland Avenue has a northerly and southerly alignment, which consists of two lanes of traffic. The pavement measures over 26 feet wide from edge to edge on the north leg of the intersection; however, the south leg is approximately 20 feet wide. Traffic signs and markings include a painted yellow road centerline striping, Stop Ahead sign and pavement markings, Stop bar in each approach to McKinley Avenue, Stop sign, and Cross Traffic Does Not Stop sign. A 50 MPH speed limit sign is posted on the north leg, whereas the south leg is unposted thereby defaulting to 55 MPH. The traffic volume is 3,060 VPD.

McKinley Avenue has an easterly and westerly alignment, and is the through road at Grantland Avenue. The pavement measures 32 feet wide and the traffic volume is 1,530 VPD. Pavement markings consist of yellow centerline stripes. A 50 MPH speed limit sign is posted on the east leg, whereas the west leg is unposted thereby defaulting to 55 MPH.

Between January 1, 2014 and December 31, 2018, there were 24 traffic accidents with right-of-way violation as the PCF in 16 accidents, which resulted in numerous injuries with no fatalities. In 2017 and 2018, ten traffic accidents may have been correctable with an all-way stop installation. The average traffic delay on Grantland Avenue was approximately 9 seconds per vehicle.

### **One-Way Stops**

#### **Caruthers & Walnut Avenues**

This location pertains to District 1. The intersection is in the County's exclusive jurisdiction. Both Caruthers and Walnut Avenues are County maintained roads that intersect east of the unincorporated community of Caruthers. The terrain is flat, leveled, and intersect within a rural farming area. Caruthers and Walnut Avenues are uncontrolled; the normal rule of the road applies to the assignment of rights-of-way.

Caruthers Avenue has an easterly and westerly alignment. The pavement measures over 16 feet wide from edge to edge. No traffic signs or pavement markings are present on Caruthers Avenue. The speed limit is 55 MPH and the traffic volume is 300 VPD.

Walnut Avenue has a northerly and southerly alignment, which tees into Caruthers Avenue. A T-intersection sign, END sign, and double-arrow sign are posted for the southbound approach to Caruthers Avenue. The pavement width is 15 feet, the speed limit is 55 MPH, and the traffic volume is 200 VPD.

One traffic accident was reported between January 1, 2014 and December 31, 2018 with right-of-way violation as the cause of this accident, which may have been correctable with a one-way stop installation.

#### **Rio Vista Avenue & Trimmer Springs Road**

This location pertains to District 5. The intersection is in the County's exclusive jurisdiction. Both Rio Vista Avenue and Trimmer Springs Road are County roads located east of Fresno.

Rio Vista Avenue has a northerly and easterly alignment that consists of two lanes of traffic. The pavement measures over 20 feet wide from edge to edge. Traffic signs and markings include a painted yellow road centerline striping, Yield Ahead sign and pavement markings, and a Yield sign in the northbound direction. The traffic volume is 500 VPD and the speed limit is unposted, thereby defaulting to 55 MPH.

Trimmer Springs Road has a southwesterly and northeasterly alignment, which consists of various turns and curves between Kings Canyon Road (State Route 180) and Belmont Avenue. The

pavement width is between 30 and 32 feet and the traffic volume is between 400 and 1000 VPD. Signs and pavement markings consists of a painted yellow centerline stripe, curve, and turning signs with speed advisory plaques. The speed limit on Trimmer Springs Road is 55 MPH.

Between January 1, 2013 and June 30, 2018, there were two traffic accidents with right-of-way violation as the cause in one accident, which may have been correctable with a one-way stop installation. The cause of the second accident was due to improper turning.

ATTACHMENTS INCLUDED AND/OR ON FILE:

Vicinity Map

On file with Clerk - Resolutions (5)

CAO ANALYST:

Sonia M. De La Rosa