

Sacramento County DOT Flashing Yellow Arrow (FYA)

DAC

November 19th, 2024

Types of Left turn Signal Operation

CA-MUTCD

- **Permissive Mode**—turns made yielding to opposing traffic and pedestrians
 - Usually a green ball but can be a flashing yellow arrow or a flashing red arrow (after stopping)
- **Protected Mode**—turns made with a left-turn green arrow
- **Protected/Permissive Mode**—both modes can occur on an approach during the same cycle.
- **Variable Left-Turn Mode**—Can change among the protected only mode and/or the protected/permissive mode and/or the permissive only mode during different periods of the day or as traffic conditions change.

Flashing Yellow Arrow California

- California DMV, California Driver Handbook

Solid Green Light



A green traffic signal light means GO. You should still stop for any vehicle, bicyclist, or pedestrian in the intersection. Only proceed if you have enough space without creating a danger to any oncoming vehicle, bicyclist, or pedestrian. Do not enter the intersection if you cannot get completely across before the traffic signal light turns red.

Green Arrow



A green arrow means GO in the direction the arrow is pointing. The green arrow allows you to make a protected turn. Oncoming vehicles are stopped by a red traffic signal light.



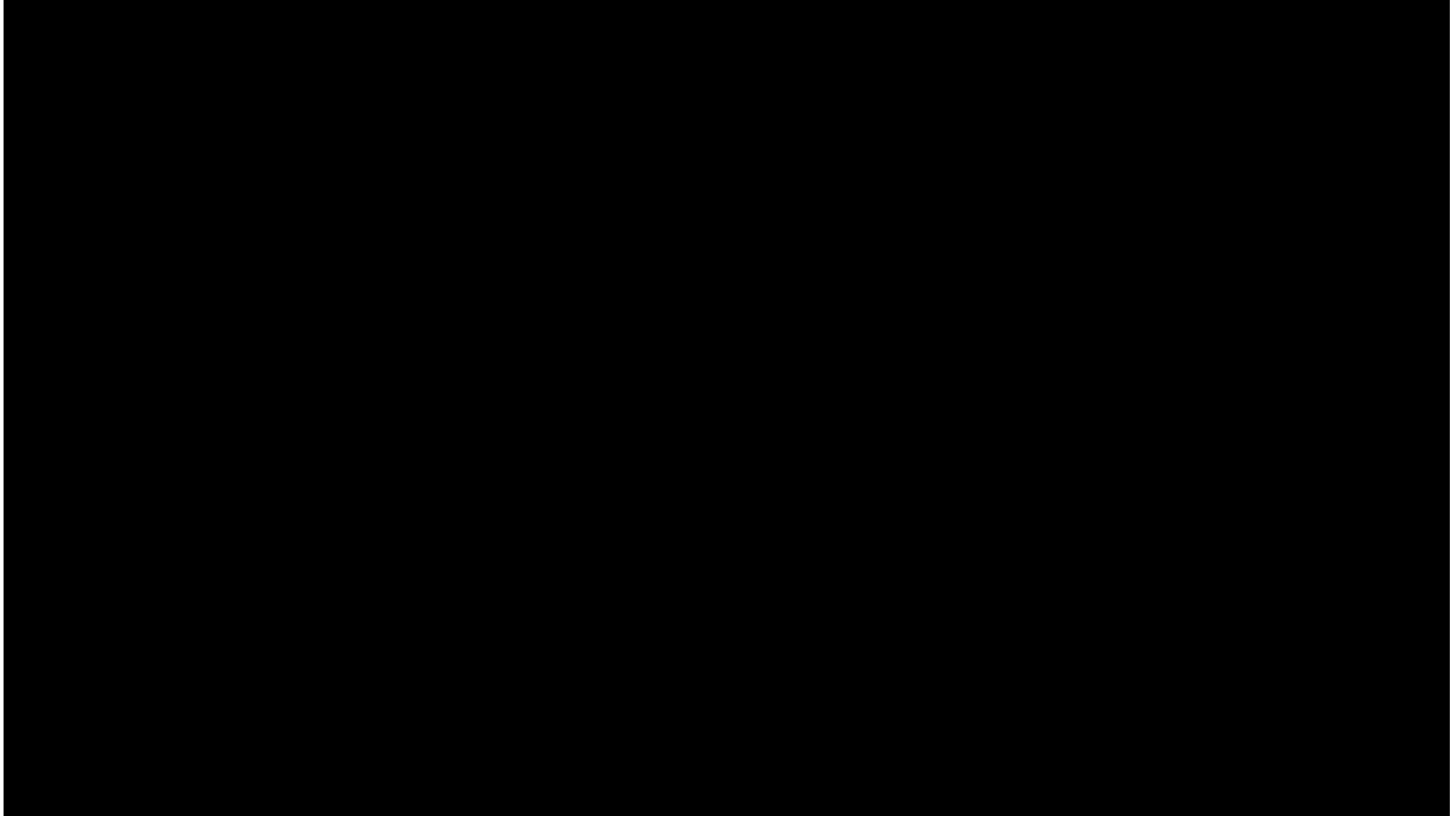
You can turn, but your turn is not protected from other traffic. Proceed to turn left after yielding to oncoming traffic and proceed with caution.

Why Use Flashing Yellow Arrow ?

- Offers more opportunities to make left turns when traffic volume is low in one or more directions.
- Can reduce emissions by 9-12% and delay by 30-50%
- Can be programmed to operate by Time of Day (TOD) or based on vehicle detection in the turn pockets.
- Still retains the function of protected left turns when needed.
- FYA operation is used throughout the United States including California.

Public Education

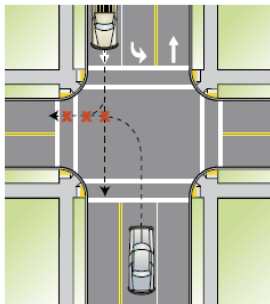
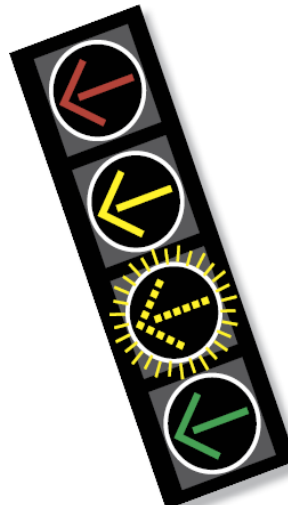
Alabama DOT FYA Video



Public Education Oregon DOT Information Brochure

Flashing Yellow Arrow Conflict Points **Flashing Yellow Arrow** Yield Before Turning

X = Conflict Points





When you are turning left and see a FYA, the traffic coming towards you has a green light and pedestrians may have a "WALK" signal. You must YIELD to these potential conflicts:

- Oncoming through traffic & bicyclists
- Oncoming right turn traffic
- Pedestrians in the crosswalk

THE FLASHING YELLOW LEFT TURN ARROW

What you need to know



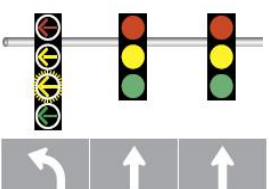
OREGON DEPARTMENT OF TRANSPORTATION
Traffic Engineering Unit
4040 Fairview Industrial Drive S.E.
Salem, Oregon 97302-1142
Phone: 503.986.3568 • Ask ODOT: 888.275.6368
<http://www.oregon.gov/ODOT/HiW/ITS>

rev 2/12 Form 734-2632

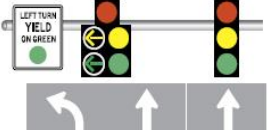

Flashing Yellow Arrow vs Traditional **The Better Left Turn Signal** **FYA Driver Responsibility**

The new **Flashing Yellow Arrow (FYA)** now indicates when left turns are allowed after yielding to other traffic, which engineers call a "permissive" turn. It replaces the traditional signal with a mixture of round and arrow lights, which has a circular green indication for the same permissive movement. ODOT, cities, and counties are replacing older five-light signals with the new flashing yellow arrow signal.

FLASHING YELLOW ARROW SIGNAL



TRADITIONAL – FIVE SECTION SIGNAL

Safer – The Federal Highway Administration has found that up to 20% fewer crashes occur with FYA than the traditional signal. Drivers have less confusion and make fewer mistakes when turning with FYA.

Efficient – Traffic delays are reduced and engineers can adjust for varying traffic volumes throughout the day to save you time and fuel.

Steady Red Arrow
A steady red arrow means STOP. Remain stopped until the signal changes except for turns allowed on red arrow.

Steady Yellow Arrow
A steady yellow arrow warns you that the signal is about to turn red. Do not enter the intersection. If you are within the intersection or can not stop safely, cautiously complete the turn to clear the intersection.

Flashing Yellow Arrow
A flashing yellow arrow means you may cautiously enter the movement indicated by the flashing yellow arrow. You must first yield to oncoming traffic, bicyclists, and crossing pedestrians. Carefully determine an adequate gap before making your turn.

Steady Green Arrow
A steady green arrow means you are permitted to proceed and make the movement indicated by the arrow.

Flashing Yellow Arrows In The Area

- City of Roseville first implemented one in 2019. They currently have fourteen with a goal to install four a year at existing locations. They choose based on feasibility, engineering judgement and citizens requests.
- City of Elk Grove initially installed FYAs at 10 locations. They are currently examining several new locations to install additional FYAs.
- City of Sacramento has multiple protected permissive left turn locations that still use the old five-section head design. They have two right turn FYAs and are planning to install left turn FYAs at several locations in the near future.

Where to Use Flashing Yellow Arrow

SACDOT Criteria

- Opposing Speed Limit less than 45 MPH
- Three or less opposing lanes (through + right)
- One left turn lane
- Meets Minimum sight distance
- Vehicle Peak Hour cross product (left turn X through)
- Five or less left turn collisions per year

SACDOT Implementation

Pilot Location

- Locations pending Board of Supervisors approval in January.
- Arden Corridor. (Implement as a group to enhance the exposure and education to drivers in a region.)
 - Arden & Professional
 - Arden & Morse
 - Arden & Bell
- Implementation to coincide with the Arden Way Complete Streets Phase 1 Project. Drivers should be more alert and likely to notice the change to protected/permissive signal operation.

SACDOT Implementation

Public Outreach and Education

- SACDOT has prepared informational packets
- The County PIO for SACDOT has prepared an educational video
- Signing will be posted on the roadway prior to activation alerting drivers that there will be a change in the signal operation.
- There will be signing at the intersection instructing drivers they must yield when the yellow arrow is flashing.
- Several news stations have recently run stories on the City of Roseville's latest installations. This type of regional exposure helps with general public education. It is intended to get news coverage of the County locations when they are ready to be turned on.

SACDOT Implementation

Operation of FYA in Sacramento County

- FYA operation will only be used where there are appropriate conditions to facilitate the safe use of the feature.
- FYA will not come on when a conflicting pedestrian movement is being served.
- FYA will be turned off at locations near school crossings during the times of school drop-off and pick-up. This is Time Of Day (TOD) operation.
- FYA operation can always be turned off to allow for Protected Only left turn operation with a simple change in timing programming if necessary.

SACDOT Implementation

Questions?

For more information contact:

Melissa Jones, Principal Civil Engineer

jonesme@saccounty.gov

916-874-4243

Doug Maas, Senior Transportation Engineer

maasd@saccounty.gov

916-875-5545