

## Is this a proven signal display?

Yes, the flashing yellow arrow signal display has been used in many states across the U.S. and has become common practice in many. Research has shown that drivers make fewer mistakes when the flashing yellow arrow signal display is used. For more details on this research, please see the NCHRP Report 493 entitled "Evaluation of Traffic Signal Displays for Protected/Permissive Left-Turn Control" at the following web address:

[trb.org/publications/nchrp/nchrp\\_rpt\\_493.pdf](http://trb.org/publications/nchrp/nchrp_rpt_493.pdf)

## Why not just use "Left Turn Yield on Green"?

While both types of control allow for left turns to proceed after yielding to oncoming traffic, flashing yellow control provides the ability to restrict left turns during heavy traffic while allowing yielding during lighter traffic periods. The "Left Turn Yield on Green" signals do not allow this flexibility because left turns are always allowed whenever the adjacent through lanes have a green indication.

## Will the flashing yellow arrow be used all day, on every cycle?

An advantage of the flashing yellow arrow display is that it gives traffic engineers the ability to safely use different indications during different times of day. This means that the flashing yellow arrow or steady green arrow may not be seen every time you approach the intersection. For example, at night when traffic is light, the green arrow indication may not be used because it is not needed as you can safely cross the intersection with the flashing yellow arrow without undue delay. This can reduce wait times at a signal using this display compared to the traditional five light display or three light display.

## What are the benefits of using the flashing yellow arrow display?

### Safer & Clearer Guidance

Safety is also a key benefit to the flashing yellow arrow. No longer will the left turning driver have to look over to a signal head that is shared with the adjacent through lane, which can lead to driver confusion. With the flashing yellow arrow indication being displayed when oncoming traffic has a green indication, left turning drivers are always aware of the oncoming traffic's indication.

### Less Delay

Less delay is another benefit to the flashing yellow arrow. Currently, a protected only left turn cannot be changed to a permissive left turn movement. So, at night when the traffic is very light, drivers must stop and wait for a green arrow even though there is no oncoming traffic. With the flashing yellow arrow signal display, the protected movement can be changed to a permissive movement during low volume periods to allow drivers to turn left while yielding to oncoming traffic.

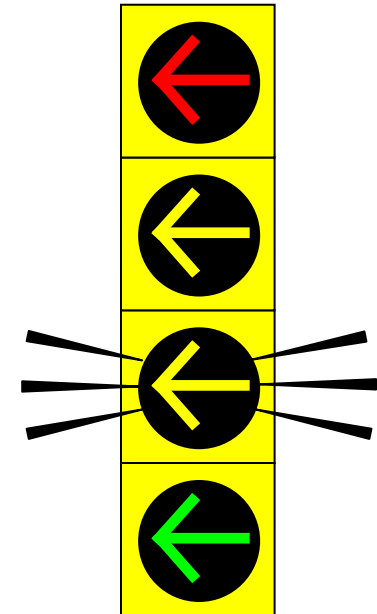
### More Flexibility

The flashing yellow arrow signal display also allows traffic engineers the flexibility to change between protected only, permissive only and protected/permissive displays to more efficiently and safely service variable traffic demands.



# FLASHING YELLOW ARROWS

## A NEW, IMPROVED LEFT-TURN SIGNAL DISPLAY



**Beaufort County  
Traffic & Transportation  
Engineering Department**

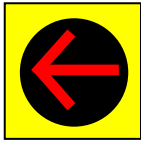
## What are the types of left turn movements?

**Protected:** Protected left turn movements display a green arrow and all conflicting movements have a red indication.

**Permissive:** Permissive left turn movements currently display a green circle and all left turning drivers must yield to oncoming traffic. This movement will be displayed as a flashing yellow arrow with the new left turn signal display.

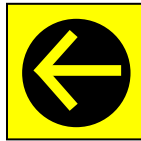
**Protected/Permissive:** This type of left turn movement displays both the protected display and permissive display at different times.

## What does each indication mean?



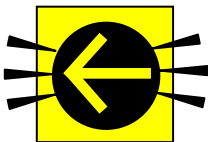
### Steady Red Arrow:

Drivers intending to turn left must stop and wait. Do not enter the intersection when the solid red arrow is being displayed.



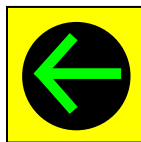
### Steady Yellow Arrow:

The left turn signal is about to change to a solid red arrow. Approaching drivers should prepare to stop or prepare to complete your left turn if you are legally within the intersection and there is no conflicting traffic present. The solid yellow arrow is always followed by a solid red arrow.



### Flashing Yellow Arrow:

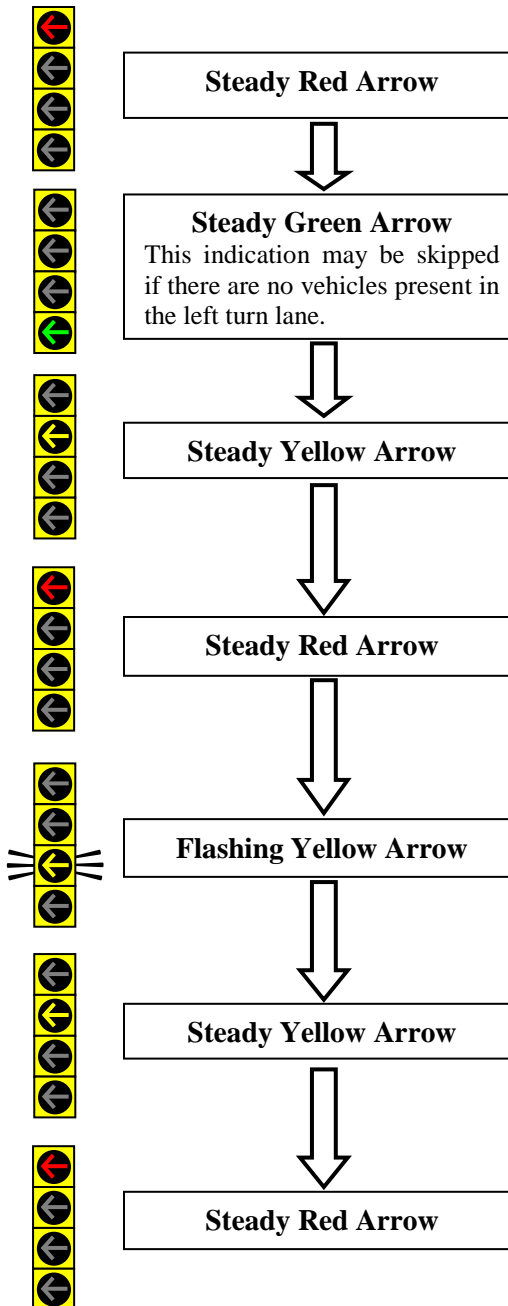
Drivers are allowed to turn left after yielding to all oncoming traffic and pedestrians in the crosswalk. Oncoming traffic has a **GREEN** light! Drivers must wait for a safe gap in oncoming traffic before turning!



### Steady Green Arrow:

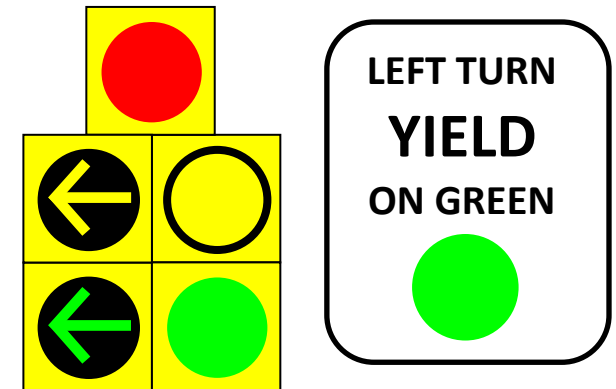
Drivers making a left turn have the right of way. Oncoming traffic has a red light.

## What is the signal display sequence?



## What will it look like driving down the road?

### Existing



### Proposed

