



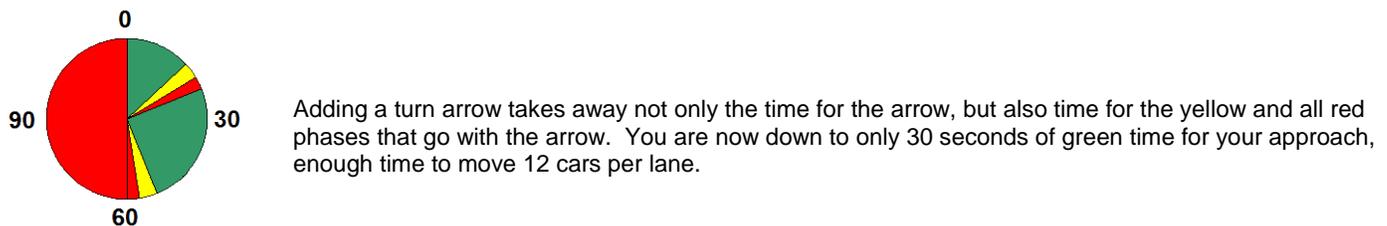
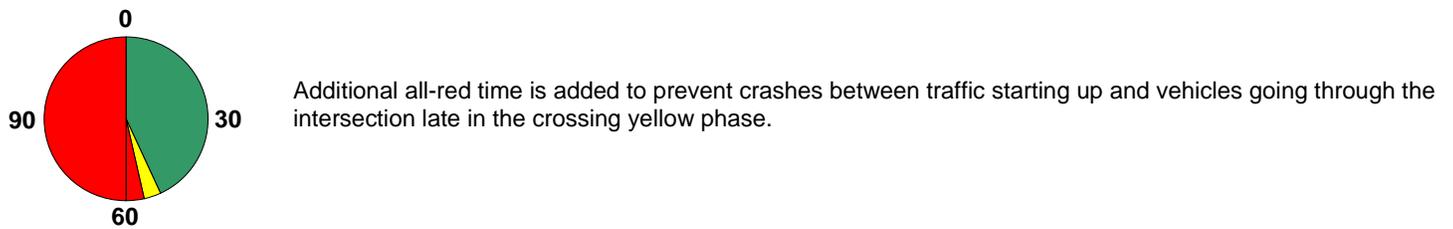
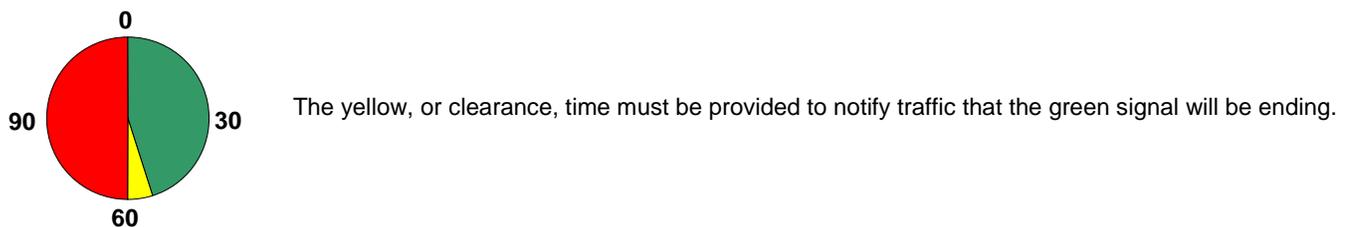
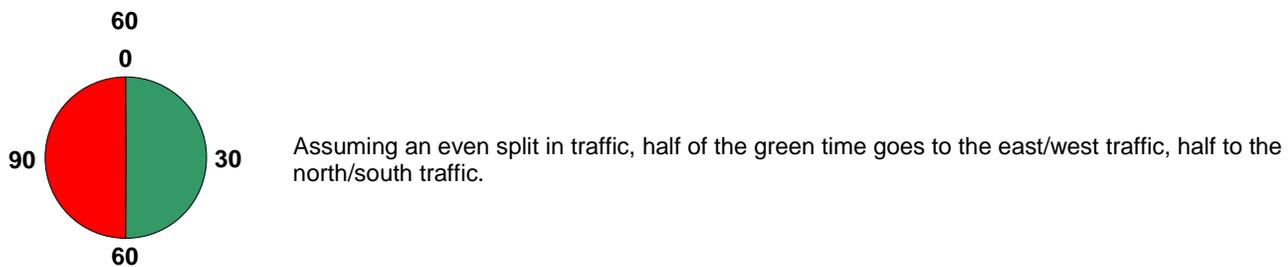
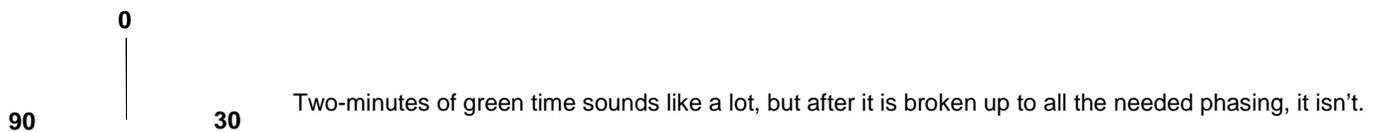
# Information on Signal Timing



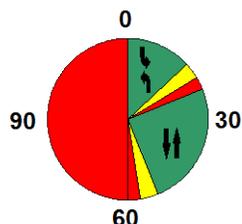
Why is the **GREEN** light on the traffic signals so short? Why is **RED** light on for so long?

## How do you time a traffic signal?

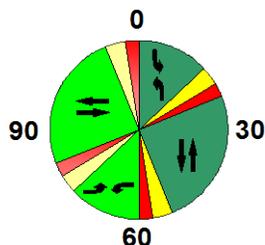
Traffic signal timing starts with knowing how much traffic is on the street. Many traffic counts are taken every year to provide data to signal timing specialists or experts. Let's use an example of a typical intersection: This intersection has leading left turns on each approach. For this example, we will use a two-minute (120 second) cycle length. A cycle length is the time from when you get a green indication until you get the next green indication.



# Information on Signal Timing



Pedestrian movements must also be accounted for when considering signal timings. The WALK interval gets people started across the street, the flashing DON'T WALK interval allows enough time for a person who just steps into the street to get all the way across at standard walking speed. The WALK and DON'T WALK intervals must be done during the through movement phase time.



As you can now see, the complete cycle length is divided up to give each direction time for the needed phases for each approach. As the cycle length is set, changing one phase can greatly impact another phase.

## Why can't you simply make the cycle longer to allow more green time?

Another component to the traffic signal timing is coordination with the adjacent four other traffic signals (one on each approach). This coordination must take into account both the departing traffic from this traffic signal and the arriving traffic from the adjacent traffic signals. To make the coordination work, all the traffic signals need to be on the same cycle length.

## How is the yellow time determined?

The yellow, or clearance, time is between 3.0 to 6.0 seconds long. It is determined based upon the posted speed of the roadway and the width of the intersection. This clearance time range is required to be used by the *Manual on Uniform Traffic Control Devices (MUTCD)*.

## What is the all-red time?

The all-red time is a phase, which is about 1 to 3 seconds, between movements to allow for the vehicles in the intersection to clear before another phase is given a green indication. The amount of time is also based on the posted speed limit on the roadway and the width of the intersection.

## Want More Information?

This flyer is for general purposes only. For more information, please contact the Beaufort County Traffic & Transportation Engineering Department at (843) 255-2940 or [click here](#)

**NOTE:** The **MUTCD** is used throughout the country as the standard by which traffic control decisions are made. The complete **MUTCD** can be found at: [http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/pdf\\_index.htm](http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/pdf_index.htm)