



# Information on Traffic Signal Operations



*Why do emergency vehicles seem to always get a green light?  
What do you do if the traffic signal is dark?  
How does the traffic signal know when a car arrives?*

## Why do emergency vehicles seem to always get a green light?

Many signals in Beaufort County are equipped with an **Emergency Vehicle Preemption (EVP)** feature that allows an emergency vehicle to change the traffic signal to green for the direction it is traveling. This is done by a radio signal transmitter located on the top of the emergency vehicle. The traffic signal detects the radio signal and changes the signal indication to give the approaching emergency vehicle a green indication. Once the emergency vehicle has gone through the intersection; the traffic signal goes back to normal operations. By doing this, emergency vehicles are delayed less trying to get through the traffic signals and the possibility of being in an accident with crossing traffic is greatly reduced. Only government fire and EMS vehicles are allowed to have the radio signal transmitting devices. Private ambulances and citizens are not allowed to have the devices.



## What do you do if the traffic signal is dark?

State law requires all drivers to treat an intersection with a dark traffic signal as a four-way or multi-way stop intersection. A "dark" intersection is considered a traffic signal that the red-yellow-green are not working and the traffic signal heads are not covered.



## How does the traffic signal know when a car arrives?

Traffic signals use detectors to know when vehicles are approaching the intersection. Several different types of detection are used: in-ground loops, video and microwave. The in-ground loops are installed or cut into the pavement and detect when a vehicle has crossed over it and are the most reliable. Video detection is used where the loops have become damaged or the initial roadway is not the ultimate configuration. Microwave detection is used for temporary situations where a camera cannot be mounted to clearly see where the vehicles are on the road.

## 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)

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