

# Information on Traffic Signal Operations



Why do emergency vehicles seem to always get a green light? What are those red and blue lights I see on some traffic signal poles? 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?

Most traffic signals in Clark 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 white strobe light located on the top of the emergency vehicle that emits a coded flash pattern. The traffic signal detects the coded flash 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 police vehicles are allowed to have the strobe emitting devices. Private ambulances and citizens are not allowed to have the devices.



#### What are those red and blue lights I see on some traffic signal poles?



To assist local police departments with enforcement motorists running red lights, traffic signals are now being equipped with tattle-tale lights which indicate when the through and left turn red indications are on. This allows law enforcement agencies to position an officer downstream of the traffic signal but be able to see when the traffic receives a red light. Red is used for the through traffic movement and blue is used for the left turning traffic movement.

#### 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 <u>not</u> 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 Clark County Department of Public Works, Traffic Management Division at (702) 455-6000 or email InTheWorks@ClarkCountyNV.gov.

NOTE: The MUTCD is used throughout the country as the standard by which traffic control decisions are made. Nevada Revised Statute 484A.430 and County Code 14.12.070 require the County to use the MUTCD for placement of all traffic control devices. The complete MUTCD can be found at: <u>https://mutcd.fhwa.dot.gov/kno\_11th\_Edition.htm</u>

April 2024