Definition:

Traffic signal pre-emption allows public safety vehicles to intervene in the normal operation of traffic control systems, using wireless communications installed at certain intersections and an emitter that is installed on the emergency vehicle. As the emergency vehicle approaches a traffic signal with a pre-emption device installed, it is recognized by the traffic signal controller through an infrared light wave. When the signal activates the light it will interrupt the normal green-yellow-red cycle and will change the light to green in the direction you are travelling.

Purpose:

The purpose of the policy is to establish guidelines when the traffic pre-emption emitter can be used.

Traffic signal pre-emption provides the following benefits:

- Optically detects the approach of vehicles needing enhanced right of way authority.
- Requests the “green light” for the highest priority vehicle approaching the intersection up to 2500 feet away.
- Clears traffic ahead of the approaching vehicle and keeps traffic moving steadily and safely.
- Holds the “green light” until the approaching emergency vehicle is safely through the intersection.
- Leads to decreased response times and improves driver, patient and passenger safety.
Policy:

The traffic pre-emption device is to be used during emergency responses. The pre-emption device automatically is activated when the emergency lights are activated.

The traffic pre-emption device can be used on any non-emergent response to an incident scene. The pre-emption device can be manually activated by pressing the Opt-com button on the control panel.

The traffic pre-emption device can be used during any non-emergency patient transport to the hospital.

The traffic pre-emption device is not to be used for any purpose other than what is listed above, unless supervisor approval is received.

Precautions:

Use of the pre-emption device does not ensure safe passage through an intersection. Be cautious of other drivers who may not anticipate the rapid change back to yellow and red if their light just turned green.

The ambulances are equipped with filters so other drivers cannot see when the emitter is on. These filters may decrease the distance for pre-emption.

Most ambulances are equipped with a mechanism that disengages the emitter once the vehicle is in park. This is an important function so traffic flow is not stopped at an accident scene. It may be necessary to shut off the emitter if it continues to activate the light when parked at an intersection.

Many cities have traffic pre-emption devices that will work with our system. Others may not if they require a secure code to activate the system.

There are many factors that may affect the proper functioning of the system. If an angle is off on the detector it may not activate the system. If you are going too fast the system may not have time to activate either. Don't ever assume that the system will automatically work. The vehicle driver must pay close attention to intersection lights and proceed with caution. The traffic pre-emption device system is not intended to replace current driving regulations, common sense and responsibility.

Technology allows for computer downloading that may identify until specific activation. In addition it can calculate speed through the intersection. This technology may be utilized to track pre-emption utilization or suspected misuse.