TRAFFIC SIGNALS SYSTEMS

SIGNAL TIMING

All the traffic signals in the City of La Quinta are actuated. Detectors on the approaches to traffic signals monitor and assign the right of way on the basis of changing traffic demand. These signals attempt to assign most of the available green time to the heaviest traffic movements.

If a detector is malfunctioning, the signal will dwell in green even if there is no vehicle or pedestrian present. If that occurs, the City’s Public Works Department should be notified so that the problem can be corrected.

COORDINATION OF TRAFFIC SIGNALS

The greatest benefits to the public for each dollar spent on traffic operations improvements come from the coordination of adjacent traffic signals to provide smooth movement of the traffic through groups of signals on an arterial street.

The coordination of traffic signals to facilitate smooth traffic flow (progressed movement) along a street is a proven technique. The quality of flow along a street is basically a function of the spacing of the signals along the street, the prevailing speed of traffic on the street, and the traffic signal cycle length.

The amount of traffic and the proportion of the green time given to the progressed movements are also important. The goal of coordination is to get the greatest number of vehicles through the system with the fewest stops in a comfortable manner.

When signals are coordinated, the side street traffic does have to wait sometimes over a minute in duration but once the side street enters the major street, it benefits from smooth traffic progression along the coordinated signal system.

WHICH TRAFFIC SIGNALS ARE COORDINATED?

In the past ten years, the City has coordinated the traffic signals on Highway 111, Washington Street, Jefferson Street, Eisenhower Drive, Fred Waring Drive and Miles Avenue.

SPECIAL SIGNAL FUNCTIONS

Traffic Signal Preemption

The transfer of signal control to a special signal operation is called preemption. There are three common types of preemption, based on the reason for preemption: Railroad, Emergency Vehicle, and Transit Vehicle Preemption.

Railroad Preemption

Railroad preemption is initiated when a train passes over advance detectors located on the tracks ahead of the railroad crossing. The purpose of preemption is to clear tracks of traffic stopped on them by traffic signals.

There are no traffic signals equipped with railroad preemption in the City of La Quinta but you may experience this kind of interruption of normal signal operations in other cities in Riverside County.

Emergency and Transit Vehicle Preemption

Emergency vehicle preemption can be used for any authorized emergency vehicle, but normally only for fire engines. The purpose is to obtain a green light for the emergency vehicle as soon as possible or to hold an existing green light. To obtain a green light, existing
green lights, including pedestrian intervals, are abbreviated. After the yellow change interval, a green light is given to the approach to be used by the emergency vehicle.

There are three means of signal preemption from emergency vehicles: mobile radio, siren sensor, and modulated strobe light. Light modulated output of a vehicle mounted emitter is received by a detector at a signal.

There are a number of traffic signals with this type of preemption in City of La Quinta and all new traffic signals are being provided with emergency vehicle preemption equipment.

**WHAT DO FLASHING AND DARK TRAFFIC SIGNALS MEAN?**

**Flashing Traffic Signals**

Traffic signals sometimes develop hardware problems. When they do, the controller mechanism is programmed to turn the signal over to flashing operation. According to the California Vehicle Code, when a red lens is illuminated with intermittent red flashes, a driver is required to stop before entering the crosswalk on the near side of the intersection. The driver may proceed subject to the rules applicable to making a stop at a 4-way stop controlled intersection.

**Dark Signals**

All of the traffic signals in the City are equipped with battery backup systems. However, if a traffic signal has gone dark due to power failure and the power in the batteries has been exhausted, it is considered to function the same way as a 4-way stop controlled intersection and a driver must stop before entering the intersection.

Newly constructed but yet to be activated signals often have covered or turned signal heads. These intersections are considered to remain controlled by the existing stop signs until such time as the signal is activated to either red flashing mode or full color operation.

**REQUESTS AND INQUIRIES**

If you have questions, requests or suggestions concerning traffic, please call the Public Works Department at (760) 777-7075, visit our website at [www.la-quinta.org](http://www.la-quinta.org) or submit a request using our GORequest system via the web or free downloadable app: [www.la-quinta.org/your-government/public-works/report-an-issue](http://www.la-quinta.org/your-government/public-works/report-an-issue)