

# FACT SHEET Intersection Control

The regulation of traffic flow through an intersection can be accomplished using a number of methods, including: roundabouts, traffic signals, and Stop/Give Way signs. Deciding the best way to control an intersection can be difficult as it requires the consideration of traffic volumes, wait/delay times, safety, crash history, cost and numerous other factors.

### Traffic Signals

Traffic signals (commonly called traffic lights) are generally installed at intersections that carry significant vehicle and pedestrian volumes throughout the day. They provide a safer environment for pedestrians and cyclists to cross busy intersections, and can help improve traffic flow at intersections where the flow on the major road is constant (i.e. few gaps between vehicles). Depending on the extent of infrastructure upgrades required to an intersection to facilitate the upgrade to traffic signals, the installation of signals can cost between \$500,000 and \$2,000,000+. Rockhampton Regional Council is responsible for the installation and maintenance of traffic signals on non-State Government roads, while the Department of Transport and Main Roads controls signalised intersections on main roads, including: the Bruce Highway, Fitzroy Street, Musgrave Street, Yeppoon Road, and Lakes Creek Road.

### How Traffic Signals Work

Traffic signals use a programmed computer installed at the intersection to control the coordination of the lights. The order in which the lights turn green and how long they remain that way are all programmed into the computer, where they may then run on either a set phase timing or adjust green times based on traffic volumes. Vehicle detector loops located under the pavement surface sense the presence of a vehicle and alert the computer that there is a vehicle. The signal from this detector loop may be used to change the signals to green, or may be used to extend the time they remain green based on the volume of traffic trying to pass through.

#### Stop and Give Way Signs

Give Way and Stop signs are installed at intersections as a means of allocating priority to traffic on one of the intersecting roads. They are not generally installed at three-way ('T') intersections where it is clear which road has priority, and they are sometimes not applied on low volume residential streets.

Stop signs are used instead of Give Way signs when the available sight distance at the intersection is deemed to be inadequate for the operating speed of approaching vehicles. The use of stop signs where available sight distance is acceptable, can lead to driver disobedience and lack of credibility of Stop signs. The application of Give Way and Stop signs is in accordance with guidelines produced by the Department of Transport and Main Roads under the Manual of Uniform Traffic Control Devices. These signs are installed in conjunction with pavement markings; however some intersections may only have stop or give way lines to control movements. You should always remain vigilant when approaching an intersection and check for control methods and approaching vehicles.

## **Uncontrolled Intersections**

Under the Queensland Road Rules, there are regulations concerning giving way at an intersection without traffic lights or a Stop sign, **S**top line, Give Way sign or **G**ive **W**ay line.

When approaching an uncontrolled four-way intersection, it is important to slow down and remember to give way to vehicles approaching from the right.

