How do ramp signals work?

Perth’s Smart Freeway has modified traffic lights as ramp signals on five northbound on-ramps, between Farrington Road and Cranford Avenue. New technology will co-ordinate these ramp signals to help vehicles merge more easily and keep the freeway flowing. See over for details or visit SmartFreeways.wa.gov.au
The key to keeping the freeway flowing is to manage the total amount of traffic entering from the on-ramps. This way, we can prevent freeway congestion, queues and delays.

By installing modified traffic lights as ramp signals at selected on-ramps, we can smooth traffic flow by managing the number of motorists entering the freeway, giving each vehicle a better chance to merge without slowing down the other traffic.

How do they work?

The on-ramp traffic lights work the same way as those on suburban roads and highways, only faster.

Sensors embedded under the freeway itself constantly measure traffic flow and communicate with all the other ramp signals.

The smart technology determines how much traffic can enter the freeway by varying the red signal time. If the freeway is busy - or 'full' - the lights will stay red longer.

As the first car travels through, the signals turn yellow and then red again so only one car per lane is released to the freeway each time.

How long will I wait?

This will depend on how well the freeway is flowing at the time. During busy periods, you may wait a minute or two longer on the on-ramp but, once you enter the freeway, your journey is likely to be much quicker.

When will the ramp signals be on?

The ramp signals will operate when the freeway is busy or when there’s an unexpected build-up of traffic (ie due to an event or incident).

If you would like to know more about Smart Freeways and how they work, visit SmartFreeways.wa.gov.au