Do you need to determine the hazard ranking of traffic signal intersections and rail level crossings?

With our new MetroCount 5711 and 5712 Timing Analysis Roadside Units, we have completely revolutionised intersection and level crossing monitoring and hazard ranking. Instead of relying on sparse collision data to make your assessments, you can now monitor the behaviour of all drivers.

The MC5711 and MC5712 both use MetroCount’s latest two-channel technology. Installed at signal controlled intersections, pedestrian crossings and rail crossings, and readily interfaced to the signals, they record traffic data on one channel and signal changes on the other.

How the system works

The MC5711 and MC5712 gather time-stamped axle data for every vehicle on “Channel 0”, using two air tubes spaced one metre apart and approximately 200mm on the junction or crossing side of the stop line. (Note: non-metric users may use a tube spacing of three feet.)

The second channel, Channel 1, simultaneously logs the signal timing. You configure two triggers, for instance, one on the start of Yellow (ie pre Red), and one at the start of Green. As the signals change, these triggers are instantaneously transmitted and stored in Channel 1 in a simple cycle (Yellow-Red-Green).

Timing analysis with “Traffic Executive”

As with our other traffic monitoring systems, we include our world-leading Traffic Executive software package with the MC5711 and MC5712 at no extra cost, completing the system.

Using Traffic Executive’s “MCReport” traffic analysis module and MetroCount’s proven time-stamped individual axle approach, you can easily analyse the speed, vehicle type (car, van, bus, truck, etc), headway, gap, and more, of every vehicle entering the intersection, all relative to the signal phases.
MCReport's Phase Map

Signal timing is interpreted using MCReport's new “Phase Map”. The Phase Map is entirely user-controlled after the survey. You setup a Phase Map to match the surveyed intersection, then command MCReport to calculate statistics relative to it. You define and name timing channel triggers and additional fixed timing phases to your Phase Maps. For example, given a fixed yellow time of four seconds, the complete Yellow-Red-Green cycle can be deduced.

You can create and save as many Phase Maps as you need, applying common Phase Maps to other survey locations, or even hypothetical Phase Maps to examine different effects and treatments against the same data.

MCReport's Timing Analysis Reports

MCReport now includes a range of detailed timing analyses and reports for traffic signals and controlled railway crossings (timing analysis can also be applied to controlled pedestrian crossings). Vehicles can be selected in the “phase reports” by enabling and disabling phases in the Phase Map. All the normal vehicle filtering of MCReport is still available.

Supplied with...

- MetroCount Traffic Executive software
- Other survey applications where there is a detectable timing parameter can also be displayed. For instance traffic behaviour during icing conditions could be investigated with an on-road temperature switch. Other environmental conditions, such as rain or lighting level, could also be used.