

SCOOT Congestion Calculation

SCOOT is a method of controlling signals in the inner urban area and stands for Split Cycle Offset Optimisation Technique, where

- Split refers to the division of green time given to various vehicle and pedestrian stages of an individual junction or pedestrian crossing.
- Cycle refers to the amount of time required to service all of the stages (including the time required for amber and red lights between greens) at a signalised junction or pedestrian crossing.
- Offset refers to the time offset between signalised controls, so that signals can coordinate between each other to optimise flows and throughput.

Congestion is identified within SCOOT as occurring when a detector (placed on a link towards where the end of a normal queue at red would be) has been continually occupied for 4 seconds.

Once this has occurred it is then calculated in to a percentage using the following equation:

Number of seconds detector occupied in the cycle x 100 / Cycle time in seconds