

# Area Traffic Control System

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1. Traffic signals: how they work?
  - Traffic signal controller
    - Functions of traffic signal controller
    - Traffic engineering terminology
  - Traffic detectors
    - Inductive loop detectors
    - Magnetometers
    - Video based detectors
    - Microwave detectors
  - Power and communication
    - Communication standards
  - Typical site plans
2. Adaptive traffic control
  - Main principles
    - Heuristic based systems
    - Optimisation based systems
      - Delay models
      - Optimisation methods
    - Bus priority & selective vehicle priority
    - Rule engines
    - Hurry calls and over-rides
  - Stand-alone
    - Vehicle Actuated
    - MOVA
  - Area traffic control system examples
    - SCOOT
    - CoSiCoSt
    - Others
3. Area Traffic Control System demo (online)